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<td>Article Type:</td>
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<td>Article 59 * Classification * One name * Pleomorphic fungi * Taxonomy</td>
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Knowledge of the relationships and so the classification of fungi has developed rapidly with increasingly widespread use of molecular techniques over the last 10-15 years, and continues to accelerate. Genera found to be polyphyletic have been restricted in use, and new generic names introduced for species which are phylogenetically distinct from the type species of particular genera. The ending of the separate naming of morphs of the same species in 2011, has also caused several changes in fungal
generic names. In order to facilitate access to all important changes, it was desirable to compile these in a single document. The present article provides a list of generic names of Ascomycota (approximately 6500 accepted names published to the end of 2016), including those which are lichen-forming, with notes and summarizes the changes since the last edition of 'Ainsworth & Bisby's Dictionary of the Fungi' in 2008. The notes include the number of accepted species, classification, type species (with location of the type material), culture availability, life-styles, distribution, and selected publications that have appeared since 2008. This work is intended to provide the foundation for updating the ascomycete component of the "Without prejudice list of generic names of Fungi" published in 2013, which will developed into a list of protected generic names, subject to the International Botanical Congress in Shenzhen in July 2017 agreeing to a modification in the rules relating to protected lists, and scrutiny by procedures determined by the Nomenclature Committee for Fungi (NCF). The previously not validly published generic names Barriopsis, Collophora, Cryomyces, Dematiopleospora, Lithophila, and Saxomyces are validated, as are two previously invalid family names, Bartaliniaceae and Wiesneriomycetaceae.

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Abstract
Knowledge of the relationships and so the classification of fungi has developed rapidly with increasingly widespread use of molecular techniques over the last 10–15 years, and continues to accelerate. Genera found to be polyphyletic have been restricted in use, and new generic names introduced for species which are phylogenetically distinct from the type species of particular genera. The ending of the separate naming of morphs of the same species in 2011, has also caused several changes in fungal generic names. In order to facilitate access to all important changes, it was desirable to compile these in a single document. The present article provides a list of generic names of Ascomycota (approximately 6500 accepted names published to the end of 2016), including those which are lichen-forming, with notes and summarizes the changes since the last edition of ‘Ainsworth & Bisby’s Dictionary of the Fungi’ in 2008. The notes include the number of accepted species, classification, type species (with location of the type material), culture availability, life-styles, distribution, and selected publications that have appeared since 2008. This work is intended to provide the foundation for updating the ascomycete component of the “Without prejudice list of generic names of Fungi” published in 2013, which will developed into a list of protected generic names, subject to the International Botanical Congress in Shenzhen in July 2017 agreeing to a modification in the rules relating to protected lists, and scrutiny by procedures determined by the Nomenclature Committee for Fungi (NCF). The previously not validly published generic names Barriopsis, Collophora, Cryomyces, Dematiopleospora, Lithophila, and Saxomyces are validated, as are two previously invalid family names, Bartaliniaceae and Wiesneriomyctaceae.

Keywords Article 59 • Classification • One name • Pleomorphic fungi • Taxonomy

Introduction
Knowledge of the taxonomy of fungi, has been changing rapidly since the last edition of Ainsworth & Bisby's Dictionary of the Fungi (Kirk et al. 2008), as a consequence of new information from DNA and protein sequence studies, and the integration of asexual and asexual morphs into a unified system. Phylogenetic affiliations and taxonomic placements of a large number of genera are being clarified, and at the same time species complexes and generic circumscriptions are being resolved. Sequences are also increasingly being obtained from genera representing fungi with ecologies not previously well-represented in the system, such as rock-inhabiting and lichenicolous fungi, or which are uncultured or unculturable. In addition, neo- and epitypifications are enabling the application of historic species and genera.
to be accommodated into molecularly based systems. Major progress towards a natural classification system is being made.

The ending of dual nomenclature for pleomorphic non-lichenized ascomycetes and basidiomycetes in 2011 (McNeill et al. 2012) has also led to a need to select the name to be adopted for pleomorphic genera. Lists of names are now being proposed for protection or suppression by working groups established under the auspices of the International Commission on the Taxonomy of Fungi (ICTF). The proposals from the working groups are being published and will then be scrutinized by the Nomenclature Committee for Fungi (NCF) and the General Committee (Art. 14.13) established by the last International Botanical Congress.

The problem is especially acute in the phylum Ascomycota, the largest in kingdom Fungi, with some 15 classes, 68 orders, 327 families, c. 6300 genera, and over 64 000 species (Kirk et al. 2008). However, 1000-1500 new taxa are introduced each year, and our understanding of the Ascomycota has been developing rapidly. Keeping track of all the changes and the incorporation of so much new knowledge is a major challenge, though some important compilations have been prepared, for example those of Hyde et al. (2013) and Wijayawardene et al. (2014) for Dothideomycetes, and Maharachchikumbura et al. (2015, 2016) for Sordariomycetes, which considered both asexually and sexually typified genera. There has also been a major attempt to produce an overall system for Ascomycota referring accepted genera down to family (Jaklitsch et al. 2016).

The long-running series Notes on Ascomycete Systematics (1986–2010) aimed to provide a current awareness system of novel taxa and changes proposed, and provided 5113 notes. This has not, however, been continued to include asexually typified genera. Here we start to redress this problem, taking the last edition of the Dictionary (Kirk et al. 2008) as our starting point. In addition to recent nomenclature changes, we include typification details of the type species of genera (including lecto-, neo- and epitypifications), information on the availability of cultures, and references to accessible sequence data. References to recently established DNA barcodes for plant pathogenic genera are also included where available.

In addition to providing an overview of current knowledge on accepted genera of ascomycetes, this work is also intended to provide the foundation for updating the ascomycete component of the “Without prejudice list of generic names of Fungi” published in 2013 (Kirk et al. 2013), which is anticipated will be developed into a list of protected generic names. This will, however, be subject to the XIXth International Botanical Congress in Shenzhen in July 2017 agreeing to a modification in the rules relating to protected lists of names supported by the 10th International Mycological Congress in 2014 (Redhead et al. 2014; Hawksworth 2015), and scrutiny by procedures determined by the Nomenclature Committee for Fungi (NCF).

Materials and Methods

Data collection

Collecting data on existing names of taxa in use was based on Kirk et al. (2008, 2013) and Species Fungorum (2016). The works of Sutton (1977, 1980) and Seifert et al. (2011) were also used for further clarification of nomenclatural issues for asexually typified genera. Previous outlines of sexually typified genera (i.e. Lumbsch and Huhndorf 2010) and asexually typified genera (i.e. Hyde et al. 2011; Wijayawardene et al. 2012, 2017) have been used to extract taxonomic placements. For the taxonomic placement of lichen-forming genera, the compilation of Lücking et al. (2016) was used.
One fungus: one name

Recent proposals on names to be selected for use in non-lichenized pleomorphic ascomycete genera were gathered from the reports of ICTF working groups (Table **).

<table>
<thead>
<tr>
<th>Taxonomic group</th>
<th>Reference</th>
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<td><strong>Diaporthales</strong></td>
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<td>Hyde et al. 2013; Wijayawardene et al. 2014; Rossman et al. 2015, 2016</td>
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<td>Rossman et al. 2013</td>
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<td><strong>Leotiomycetes</strong></td>
<td>Johnston et al. 2014</td>
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<td><strong>Magnaporthales</strong></td>
<td>Zhang et al. 2016</td>
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<tr>
<td>Miscellaneous genera</td>
<td>Rossman et al. 2016</td>
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<tr>
<td><strong>Pezizomycetes</strong></td>
<td>Healy et al. 2016</td>
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<tr>
<td><strong>Sordariomycetes</strong> – (except Diaporthales, Hypocreales, and Magnaporthales)</td>
<td>Maharachchikumbura et al. 2015, 2016; Réblová et al. 2016</td>
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<td><strong>Xylariales</strong></td>
<td>Stadler et al. 2014</td>
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Results

Validating of invalid families

**Bartaliniaceae** Wijayaw., P.M. Kirk & K.D. Hyde

Index Fungorum number: 551079

= **Bartaliniaceae** Wijayaw., Maharachch. & K.D. Hyde, **Fungal Diversity** 73: 85. 2015, Nom. inval., Art. 42.1 (Melbourne)

Type: **Bartalina** Tassi, Bulletin Labor. Orto Bot. de R. Univ. Siena 3: 4 (1900)

Description: see Senanayake et al. (2015)

Notes: Senanayake et al. (2015) introduced Bartaliniaceae but it is invalid (Art. 42.1) as the identifier cited in the protologue, (i.e. IF511183), was not issued for the name published (i.e. **Bartaliniaceae**). This identifier was issued for **Boletellus exiguus** T.W. Henkel & Fulgenzi 2008. A new identifier was obtained (i.e. 551079) thus **Bartaliniaceae** validly published.

**Wiesneriomycetaceae** Wijayaw., P.M. Kirk, K.D. Hyde

Index Fungorum number: IF550306

= **Wiesneriomycetaceae** Suetrong, Rungjindamai, Somrithipol. & E.B.G. Jones, **Phytotaxa** 176(1): 288. 2014; Nom. inval., Art. 42.1 (Melbourne)


IF 10438

Description: see Suetrong et al. (2014)

Notes: Suetrong et al. (2014) introduced **Wiesneriomycetaceae** but it is invalid (Art. 42.1) as the identifier cited in the protologue, (i.e. MB809097), was not issued for the name published (i.e. **Wiesneriomycetaceae**). This identifier was issued for **Hypogymnia papilliformis** McCune, Tchabanenko & X.L. Wei 2015. A new identifier was obtained (i.e. IF550306) thus **Wiesneriomycetaceae** is herein validly published.

Notes for genera
**Aaosopharia** Aptroot 1995, *Dacampiaceae, Pleosporales, Dothideomycetes*, one species, type: *A. arxii* (van der Aa) Aptroot, asexual morph coelomycetous, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Dacampiaceae*), Kirk et al. (2013; genus accepted), sequence available for the type: KU158145 (ITS) (unpublished).

**Abropelta** B. Sutton 1986, *Ascomycota* genera incertae sedis, one species, type: *A. fusarioides* B. Sutton, coelomycetous, sexual morph unknown, caulicolous, terrestrial, India, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: IMI 236263.

**Abrothallus** De Not. 1845 (= *Vouauxiomyces* Dyko & D. Hawksw. 1979 *fide* Rossman et al. 2016), *Abrothallaceae, Abrothallales, Dothideomycetes*, c. 40 species, type: *A. bertianus* De Not., obligately lichenicolous, parasymbiotic or parasitic on macrolichens from several families of lichen-forming fungi, sexual morph with apothecioid ascomata, asexual morph coelomycetous, some species are known only either by their asexual or sexual morph, terrestrial, worldwide, see Pérez-Ortega et al. (2011; anamorph-teleomorph connection), Pérez-Ortega et al. (2014; phylogeny), Suija et al. (2015; phylogeny, key for species on *Peltigerales*), Rossman et al. (2016; nomenclature), the species growing on *Parmeliaceae* are in urgent need of revision, preliminary molecular data suggest that current species delimitation, largely based on the host identity is inaccurate (Pérez-Ortega & Suija, data not published).

**Absconditella** Vězda 1965, *Stictidaceae, Ostropales, Lecanoromycetes*, twelve species, type: *A. sphagnorum* Vězda & Poelt, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Abyssomyces** Kohlm. 1970, *Sordariales genera incertae sedis, Sordariomycetes*, one species, type: *A. hydrozoicus* Kohlm., saprobes, asexual morph unknown, marine, Scotland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Acallomyces** Thaxt. 1903, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *A. homalotae* Thaxt., asexual morph unknown, biotrophic on Coleoptera in decaying agarics (Staphylinae), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), morphologically related to *Polyascomyces* Thaxter, cultures and sequences are unavailable, needs generic revision.

**Acanthogymnomyces** Udagawa & Uchiy. 2000, *Eoterfeziaceae, Ascomycota family incertae sedis*, one species, type: *A. terrestris* Udagawa & Uchiy., asexual morph unknown, from soil, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), sequences are unavailable, holotype of the type: CBM SUM3162.


**Acanthophiobolus** Berl., 1893, *Tubeufiaceae, Tubeufiales, Dothideomycetes*, three species, type: *A. helminthoporus* (Rehm) Berl., asexual morph unknown, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Boonmee et al. (2011, 2014; accepted as a genus in *Tubeufiaceae*), Hyde et al. (2013; accepted as a genus in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Acanthorus** Bat. & Cavalc. 1967, *Ascomycota genera incertae sedis*, one species, type: *A. maranhensis* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a
genus in *Dothideomycetes*, Wijayawardene et al. (2017) and in here we treat this genus as *Ascomycota* genera *incertae sedis* since cultures and sequences are unavailable.

*Acanthostigma* De Not., 1863, *Tubeufiaceae*, *Tubeufiales*, *Dothideomycetes*, 64 species, type: *A. perpusillum* de Not., saprobes on dead wood, widespread, asexual morph hyphomycetous, see Lumbsch and Huhndorf (2010; outline), Boonmee et al. (2011, 2014; accepted as a genus in *Tubeufiaceae*), Hyde et al. (2013; accepted as a genus in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available for three species, strains available for type: UAMH 7237.

*Acanthostigmella* Höhn., 1905, *Dothideomycetes* genera *incertae sedis*, six species, type: *A. genuflexa* Höhn., asexual morph unknown, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Tubeufiaceae*), Boonmee et al. (2011; accepted as a genus in *Tubeufiaceae*), Hyde et al. (2013) and Boonmee et al. (2014) did not accept as a genus in *Tubeufiaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

*Acanthotheciella* Höhn. 1911, *Sordariales* genera *incertae sedis*, Sordariomycetes, one species, type: *A. barbata* (Pat.) Höhn., asexual morph unknown, on dead scale insects, terrestrial, Asia, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

*Acanthothecis* Clem. 1909, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, c. 56 species, type: *A. hololeucoides* (Nyl.) Staiger & Kalb, all with ascomata, lichenized (*Trenthepohlia*), terrestrial (mainly corticolous), pantropical-subtropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rivas Plata et al. (2013; taxonomy), Lumbsch et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

*Acanthotrema* Frisch 2006, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *A. brasilianum* (Hale) Frisch, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. 2013 (genus accepted), Rivas Plata et al. (2010a, 2012; key), Sipman et al. (2012; key), sequences are available.

*Acarella* Syd. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *A. costaricensis* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

*Acarellina* Bat. & H. Maia 1960, *Ascomycota* genera *incertae sedis*, one species, type: *A. psidii* Bat. & H. Maia, coelomycetous, sexual morph unknown, epiphytes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Acaroconium* Kocourk. & D. Hawksw. 2008, *Ascomycota* genera *incertae sedis*, one species, type: *A. punctiforme* Kocourk. & D. Hawksw., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Europe, North America, see Kocourková and Hawksworth (2008; taxonomy), Wijayawardene et al. (2016, 2017; taxonomy, outline), holotype of the type: PRM 8926543, cultures and sequences are unavailable, some lichenicolous *Microsphaeropsis* species may belong to this genus.

*Acarocybe* Syd. 1937, *Ascomycota* genera *incertae sedis*, three species, type: *A. hansfordii* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Acarocybellina* Subram. 1992, *Ascomycota* genera *incertae sedis*, one species, type: *A. arenages* (Matsush.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Acaropeltis** Petr. 1937, *Ascomycota* genera *incertae sedis*, one species, type: *A. costaricensis* Petr., coelomycetous, sexual morph unknown, on living leaves, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Acarospora** A. Massal. 1852, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, c. 200 species, type: *A. schleicheri* (Ach.) A. Massal. all with ascomata, lichenized (green algae), terrestrial (mostly saxicolous or terricolous), cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Westberg et al. (2015; phylogeny), Lücking et al. (2016; classification), polyphyletic, sequence are available.

**Acarosporina** Sherwood 1977, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *A. monilifera* (Ellis & Everh.) Sherwood, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Acaulium** Sopp 1912, *Microascaceae*, *Microascales*, *Sordariomycetes*, three species, type: *A. albonigrescens* Sopp, hyphomycetous, the genus was treated as a synonym of *Scopulariopsis* Bainier 1907 (fide Seifert et al. 2011), Sandoval-Denis et al. (2016; phylogeny, reinstated the genus, new species), cultures and sequences are available.

**Acephala** Grüning & T.N. Sieber 2005, *Vibrisseaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *A. applanata* Grüning & T.N. Sieber, asexual morph unknown, from fine roots of Pinus, terrestrial, Germany, Switzerland, see Munzenberger et al. (2009; morphology, new species), ex-type strain of the type: CBS 109321.


**Acervus** Kanouse 1938, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, eight species, type: *A. aurantiacus* Kanouse, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhuang et al. (2011; morphology, taxonomy), Kirk et al. (2013; genus accepted), Ekanayaka et al. (2016; new species, China), cultures and sequences are available but lacks for the type species.

**Achaetobotrys** Bat. & Cif. 1963, *Antennariellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *A. affinis* (L.R. Fraser) Bat. & Cif., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Antennariellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


**Achorella** Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, ten species, type: *A. ametableta* (Rehm) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, worldwide,
see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Achorodothis** Syd. 1926, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *A. poasensis* Syd., asexual morph unknown, saprobes, terrestial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mycosphaerellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Achoropeltis** Syd. 1929, *Ascomycota* genera incertae sedis, one species, type: *A. modesta* Syd., coelomycetous, saprobes, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Achroidiopsidium** Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, six species, type: *A. humicola* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, from soil, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22420, CBS 868.73.

**Aciculea** Hujslová & M. Kolařík 2014, *Helotiaceae*, *Leotiomycetes*, one species, type: *A. extrema* Hujslová & M. Kolařík, hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, Europe, Antarctica, see Hujslová et al. (2014; morphology, phylogeny), holotype and ex-type of the type: PRM 922617, CBS 136258.

**Acidea** Hujslová & M. Kolářík 2014, *Helotiaceae*, *Leotiomyces*, one species, type: *A. extrema* Hujslová & M. Kolářík, hymhymycetous, sexual morph unknown, saprobes, terrestrial, aquatic, Europe, Antarctica, see Hujslová et al. (2014; morphology, phylogeny), holotype and ex-type of the type: PRM 922617, CBS 136258.

**Aciculea** Hujslová & M. Kolářík, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *A. bohemia* Hujslová & M. Kolářík, hymhymycetous, sexual morph unknown, saprobes, terrestrial and aquatic, Europe, Australia, see Hujslová et al. (2013; morphology, phylogeny), Vázquez-Campos et al. (2014), Kolářík et al. (2015; new species), holotype and ex-type of cultures of the type: PRM 859933, CBS 132721.

Acidothrix  Hujslová & M. Kolařík 2014, Amplistromataceae, Amplistromatales, Sordariomycetes, one species, type: A. acidophila Hujslová & M. Kolařík, hyphomycetous, sexual morph unknown, in highly acidic soil, terrestrial, Czech Republic, see Hujslová et al. (2014; taxonomy), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Wijayawardene et al. (2017; outline), ex-type culture available for the type: CBS 136259.

Acolium  (Ach.) Grev. 1821, Caliciaceae, Caliciaceae, Lecanoromycetes, five species, type: A. sessile (Pers.) Arnold, lichenized, see Gaya et al. (2012; taxonomy), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Acompsomyces  Thaxt. 1901, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, six species, type: A. corticariae Thaxt., asexual morph unknown, biotrophic on Coleoptera (Cryptophagidae and Lathridiidae), America, Europe, probably worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Acremoniula  G. Arnaud ex Cif. 1962, Ascomycota genera incertae sedis, five species, type: A. sarcinellae (Pat. & Har.) G. Arnaud ex Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2012; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Acrocalymma  Alcorn & J.A.G. Irwin 1987, Acrocalymmaceae, Pleosporales, Dothideomycetes, six species, type: A. medicaginis Alcorn & J.A.G. Irwin, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Zhang et al. (2012; new species, phylogeny), Kirk et al. (2013; genus accepted), Trakunyingcharoen et al. (2014; phylogeny, introduced Acrocalymmaceae), Wijayawardene et al. (2014, 2017; outline), cultures and sequences are available for the type species.

Acroconidiella  M.B. Ellis 1971 (= Zeuctomorpha Sivan. et al. 1984 fide Rossman et al. 2016), Sympoventuriaceae, Venturiales, Dothideomycetes, four species, type: A. loudetiae M.B. Ellis, hyphomycetous, sexual morph formerly known in Zeuctomorpha, widespread especially in tropical regions, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Acrocordia  A. Massal. 1854, Monoblastiaceae, Monoblastiales, Dothideomycetes, ten species, type: A. gemmata (Ach.) A. Massal., asexual morph unknown, lichenized fungi, terrestrial, temperate, placement in Monoblastiaceae supported by molecular data, see Nelsen et al. (2009, 2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures available but lacks for the type species.

Acrocordiella  O.E. Erikss 1982, Pyrenulaceae, Pyrenulales, Eurotiomycetes, one species, type: A. occulta (Romell) O.E. Erikss, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Acrocordiopsis  Borse & K.D. Hyde 1989, Salsugineaceae, Pleosporales, Dothideomycetes, two species, type: A. patilii Borse & K.D. Hyde, asexual morph unknown, saprobes, marine, worldwide, sequence are available for A. patilii and placement in residual paraphyletic

Acrodictys M.B. Ellis1961, Ascomycota genera incertae sedis, 22 species, type: A. bambuscola M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Zhao et al. (2011; Descriptions of Acrodictys and related genera from China), Hu (2011; key to aquatic Acrodictys spp.), Ma et al. (2014; new species Acrodictys nigra), Ma et al. (2016; DNA), sequences are available.


Acrodontium de Hoog 1972, Teratosphaeriae, Capnodiales, Dothideomycetes, 13 species, type: A. crateriforme (J.F.H. Beyma) de Hoog, hyphomycetous, sexual morph unknown, saprobes, cosmopolitan, see Seifert et al. (2011; morphology), Crous et al. (2014; new species), Videira et al. (2016; phylogeny), Wijayawardene et al. (2017; outline), ex-type culture of the type: CBS 144.33 = ATCC 15679.

Acrogenotheca Cif. & Bat. 1963, Dothideomycetes, genera incertae sedis, two species, type: A. pulcherrima Bat. & Cif., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Acrogynomyces Thaxt. 1931, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, six species, type specie: A. eumicri Thaxt, parasitic on African scydmaenid genus Eumicrus, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Acrophialophora Edward 1961, Chaetomiaceae, Sordariales, Sordariomycetes, six species, type: A. nainiana Edward, sexual morph unknown, pathogen, terrestrial, worldwide, thermotolerant, see Seifert et al. (2011; morphology), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), Sandoval-Denis et al. (2015; clinical), Zhang et al. (2015; DNA and type strains), ex-isotype of type: CBS 100.60, ex-type culture of type: ATCC 22555, IMI 076567.

Acrophragmis Kiffer & Reisinger 1970, Ascomycota genera incertae sedis, three species, type: A. coronata Kiffer & Reisinger, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Acroscyphus Lév. 1846, Caliciaceae, Calicibiales, Lecanoromycetes, one species, type: A. sphaerophoroides Lév., lichenized, terrestrial (saxicolous), Americas, Asia, Africa, see Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.
**Acrospeira** Berk. & Broome 1857, *Ascomycota genera incertae sedis*, one species, type: *A. mirabilis* Berk. & Broome, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Acrospermum** Tode 1790, *Acrospermaceae*, *Acrospermales*, *Dothideomycetes*, eleven species, type: *A. compressum* Tode, asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; phylogeny), Hyde et al. (2013; morphology, phylogeny), Kirk et al. (2013 genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

**Acrostalagmus** Corda 1838, *Plectosphaerellaceae*, *Glomerellales*, *Sordariomycetes*, three species, type: *A. cinnabarinus* Corda 1838, hyphomycetous, sexual morph unknown, widespread, see Wijayawardene et al. (2012, 2017; outline), Rěblová et al. (2011; DNA, phylogeny), cultures and sequences are available, needs generic revision.

**Acrostaurus** Deighton & Piroz. 1972, *Ascomycota genera incertae sedis*, one species, type: *A. turneri* Deighton & Piroz. 1972, asexual morph unknown, fungicolous, saprobes, widespread especially in tropical regions, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Actidiographium** Lar. N. Vassiljeva 2000, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, one species, type: *A. orientale* Lar & Vassiljeva, asexual morphs unknown, saprobes, terrestrial, north temperate, see Boehm et al. (2009; accepted as in *Hysteriaceae*), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mytilinidiaceae*), Wijayawardene et al. (2014; outline), holotype of type: VLA P-2938, cultures and sequences are unavailable.

**Actidium** Fr. 1815, *Mytilinidiaceae*, *Mytilinidiales*, *Dothideomycetes*, nine species, type: *A. hysteroides* Fr., asexual morphs unknown, saprobes, terrestrial, Europe, North America, see Boehm et al. (2009, 2015; accepted as a genus in *Mytilinidiaceae*), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as in *Mytilinidiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Actinocladium** Ehrenberg 1819, *Ascomycota genera incertae sedis*, eight species, type: *A. rhodosporum* Ehrenb., hyphomycetous, sexual morph unknown, pathogen of wood and bark of fallen twigs and trunk, worldwide, mainly Europe, Asia, Africa, Caribbean, see Manoharachary et al. (2010; two new species), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Actinocymbe** Höhn. 1911 (= *Limaciniella* J.M. Mend. 1925), *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, three species, type: *A. separato-setosa* (Henn.) Höhn., asexual morph unknown, parasitic, epiphyllous to hypophyllous, terrestrial, temperate to tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Actinomyxa** Syd. & P. Syd. 1917, *Dothideomycetes*, genera incertae sedis, one species, type: *A. australiensis* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013) did not accept as a genus in *Microthyriaceae*, Kirk et al. (2013; outline, genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera incertae sedis), cultures and sequences are unavailable, needs generic revision.

**Actinoplaca** Müll. Arg. 1891, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *A. strigulacea* Müll. Arg., lichenized, terrestrial (foliicolous), tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Actinotexis** Arx 1960, *Ascomycota* genera incertae sedis, one species, type: *A. mirabilis* Berk. & Broome, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Actinothecium** Flot. 1855, *Ascomycota* genera incertae sedis, five species, type: *A. caricicola* Ces. 1854, coelomycetous, sexual morph unknown, widespread, see Lumbsch and Huhndorf et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Actinothyrium** Kunze 1823, *Ascomycota* genera incertae sedis, ten species, type: *A. graminis* Kunze ex Fr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Acumispora** Matsush. 1980, *Ascomycota* genera incertae sedis, four species, type: *A. uniseptata* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Adelococcus** Theiss. & Syd. 1918, *Adelococcaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *A. alpestris* (Zopf) Theiss. & Syd., asexual morph unknown, lichenicolous, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Adelolecia** Hertel & Hafellner in Hafellner 1984, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *A. pilati* (Hepp) Hertel & Hafellner, all with ascomata, lichenized (green algae), terrestrial (saxicolous, rarely corticolous), temperate regions of both Hemispheres, Ekman et al. (2008; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

**Aderkomyces** Bat. 1961, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, c. 30 species, type: *A. couepiae* Bat. currently accepted, with ascomata, lichenized (green algae), terrestrial (folicolous or corticolous), tropical, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type species.
Adomia S. Schatz 1985, Xylariales genera incertae sedis, Sordariomycetes, one species, type: A. avicenniae S. Schatz, saprobes, on mangrove wood, saprobe, Australia, Egypt, Red Sea, Thailand, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; morphology, outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Aegeritella Balazy & J. Wisn. 1974, Trichosporonaceae, Trichosporonales, Tremellomycetes, five species, type: A. superficiais Balazy & J. Wiśn., Poland, hyphomycetous, sexual morph unknown, ectoparasite on ants, worldwide, mainly reported from Europe, Brazil, Spain, Morocco, Poland, Czech Republic, North America, Greece, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Espadaler and Santamaria (2012; review), Kirk et al. (2013; genus accepted), Wrzosek et al. (2016; new insights on phylogeny and biology), reference strain of Aegeritella tuberculata = CBS 141264 (Wrzosek et al. 2016), sequences are available from Wrzosek et al. (2016), needs generic revision.

Aequabiliella Crous 2015, Phaeomoniellaceae, Phaeomoniellales, Eurotiomycetes, coelomycetous, sexual morph unknown, one species, type: A. effusa Dam & Crous, on living leaves, pathogens, terrestrial, South Africa, see Damm et al. (2010 as Phaeomoniella effuse Damm & Crous, morphology), Crous et al. (2015; phylogeny), holotype and ex-type culture of type: CBS H-19998, CBS 120883.

Aeruginoscyphus Dougoud 2012, Hyaloscyphaceae, Helotiales, Leotiomyces, seven species, type: A. sericeus (Alb. & Schwein.) Dougoud, asexual morph unknown, saprobes, terrestrial, Europe, see Dougoud (2010; taxonomy), cultures and sequences are unavailable.

Agaricodochium X.J. Liu 1981, Ascomycota genera incertae sedis, one species, type: A. camelliae X.J. Liu, A.J. Wei & S.G. Fan, hyphomycetous, on leaves of Camellia oleosa, pathogen of Camellia oleifera, terrestrial, Zhejiang, China, see Guang-yu et al. (2008; control), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Fangyan et al. (2013; control), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Agarwalomyces R.K. Verma & Kamal 1987, Ascomycota genera incertae sedis, one species, type: A. indicus R.K. Verma & Kamal, hyphomycetous, on fruit of Lythraceae, terrestrial, India, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Aggregatorygma M.Cáceres, Aptroot & Lücking 2014, Graphidaceae, Ostropales, Lecanoromycetes, one species, type: A. triseptatum M. Cáceres, Aptroot & Lücking, lichenized, see Cáceres et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Agonimia Zahlbr. 1909, Verrucariaeae, Verrucariales, Eurotiomyces, c. 17 species, type: A. tristicula (Nyl.) Zahlbr., asexual morph unknown, lichenized, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Muggia et al. (2010; DNA), Dymytrova et al. (2011; new species), Guzow-Krzemińska et al. (2012; new species), Aptroot and Cáceres (2013; new species), Harada (2013; new species, Japan), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2015, 2016; new species, South Korea), cultures available for the type: L469 (fide Muggia et al. 2010).

Agrobeneja Subram. 1995, Ascomycota genera incertae sedis, one species, type: A. kavakapriya Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Singapore, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype MUBL 3140.

Agryriella Sacc. 1884, Ascomycota genera incertae sedis, two species, type: A. nitida (Lib.) Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Europe, see
Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Agyriellopsis Höhn. 1903, *Ascomycota* genera *incertae sedis*, three species, type: *A. caeruleoatra* Höhn., coelomycetous, sexual morph unknown, Europe see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Agyrium Fr. 1822, *Pertusariaeae*, *Pertusariales*, *Lecanoromycetes*, three species, type: *A. rufum* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Resl et al. (2015; DNA), cultures and sequences are available, need generic revision.

Ahmadia Syd. 1939, *Ascomycota* genera *incertae sedis*, one species, type: *A. pentatropidis* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Pakistan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ahtiana Goward 1986, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *A. sphaerosporella* (Müll. Arg.) Goward, all with ascomata, lichenized (green algae), terrestrial (corticolous, epixylic), western North America, see Thell et al. (2009; phylogeny), Nelsen et al. (2011; phylogeny), Miadlikowska et al. (2014; phylogeny), Divakar et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.


Aithaloderma Syd. & P. Syd. 1913, *Capnodiaeae*, *Capnodiales*, *Dothideomycetes*, 15 species, type: *A. clavatisporum* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), other recent articles such as Chomnunti et al. (2011), Hyde et al. (2013) and Wijayawardene et al. (2014) did not accept as a genus in *Capnodiaeae*, Kirk et al. (2013; outline, genus accepted), cultures and sequences are unavailable, needs generic revision.
**Aivenia** Svrček 1977, *Dermateaceae, Helotiales, Leotiomycetes*, four species, type: *A. tantula* Svrček, asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ajrekarella** Kamat & Kalani 1964, *Ascomycota* genera *incertae sedis*, one species, type: *A. polychaetriae* Kamat & Kalani, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Alanphillipsia** Crous & M.J. Wingf. 2013, *Botryosphaeriaceae, Botryosphaeriales, Dothideomycetes*, five species, type: *A. aloes* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes or possibly pathogenic, associated with leaf lesions, South Africa, see Crous et al. (2013, 2014; morphology), Wijayawardene et al. (2016, 2017; outline, morphology, phylogeny), holotype and ex-type culture of type: CBS H-21418, CPC 21298.

**Alascospora** Raja, Violi & Shearer 2010, *Dothideomycetes*, genera *incertae sedis*, one species, type: *A. evergladensis* Raja, Violi & Shearer, asexual morph unknown, saprobes, aquatic, USA, see Raja et al. (2010; morphology), Wijayawardene et al. (2014; outline), holotype of the type: ILL 40789, cultures and sequences are unavailable.

**Alatospora** Ingold 1942, *Leotiales, Helotiales, Leotiomycetes*, four species, type: *A. acuminata* Ingold, hyphomycetous, sexual morph unknown, saprobes, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Baschien et al. (2013; DNA), Kirk et al. (2013; genus accepted), Duarte et al. (2014; DNA), neotype of type: IMI 222997, available cultures of the type: NBRC 9424.

**Albertiella** Kirschst. 1936, *Cephalothecaceae, Sordariomycetes*, families *incertae sedis*, one species, type: *A. reticulata* Kirschst., asexual morph acremonium-like, saprobes, terrestrial, Europe, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures available for the type: CBS H-21418.

**Albifimbria** L. Lombard & Crous 2016, *Stachybotriaceae, Hypocreales, Sordariomycetes*, four species, type: *A. verrucaria* (Alb. & Schwein.) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, from soil, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), cultures and sequences are available.

**Albonecetria** Rossman & Samuels 1999, *Nectriaceae, Hypocreales, Sordariomycetes*, type: *A. rigidiuscula* (Berk. & Broome) Rossman & Samuels, one species, asexual morph hyphomycetous, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Zhao et al. (2011; phylogeny), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.


**Albotricha** Raitv. 1970, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, c. 19 species, type: *A. acutipila* (P. Karst.) Raitv., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Alciphila** Harmaja 2002, *Ascomycota* genera *incertae sedis*, one species, type: *A. vulgaris* Harmaja, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are unavailable, needs generic revision.
**Aldona** Racib. 1900, *Parasporidaceae, Dothideomycetes*, families *incertae sedis*, three species, type: *A. stella-nigra* Racib., asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parasporidaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Aldonata** Sivan. & A.R.P. Sinha 1989, *Parasporidaceae, Dothideomycetes*, families *incertae sedis*, one species, type: *A. pterocarpi* Sivan. & A.R.P. Sinha, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parasporidaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Alectoraria** Ach. 1810, *Parmeliaceae, Lecanorales, Lecanoromycetes*, seven species, type: *A. sarmentosa* (Ach.) Ach., with ascomata, but often absent, lichenized (green algae), terrestrial (corticolous, terricolous), widespread, see Halonen et al. (2009; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Divakar et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Aleuria** Fuckel 1870, *Pyronemataceae, Pezizales, Pezizomycetes*, 17 species, type: *A. aurantia* (Pers.) Fuckel, asexual morph unknown, on soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for the type species.

**Aleurina** Massee 1898, *Pyronemataceae, Pezizales, Pezizomycetes*, eleven species, type: *A. tasmanica* Massee, asexual morph unknown, on soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.


**Algincola** Velen. 1939, *Helotiales*, genera *incertae sedis*, three species, type: *A. quercina* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.


**Alina** Racib. 1909, *Parodiopsidaceae, Dothideomycetes*, families *incertae sedis*, one species, type: *A. Jasmini* Racib., asexual morph hyphomycetous, parasitic on living leaves of *Jasminum* spp., Buitenzorg, Indonesia, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parodiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, re-collection and revision required.
Aliquandostipite Inderb. 2001, Aliquandostipitaceae, Jahnulales, Dothideomycetes, seven species, type: A. khaoyaiensis Inderb., asexual morph unknown, saprobes, freshwater, Australia, China, Costa Rica, Egypt, Panama, Thailand, Venezuela, USA, see Schoch et al. (2009; phylogeny), Shearer et al. (2009; phylogeny), Suetrong et al. (2010; outline, phylogeny), Suetrong et al. (2011; morphology, phylogeny), Raja et al. (2011; phylogeny), Liu et al. (2015; morphology), holotype and ex-type culture of the type: UBC F13875, CBS 118232.

Alisea Dupont & E. B. G. Jones 2009, Halosphaeriaceae, Microascales, Sordariomycetes, one species (est. spp. five), type: A. longicolla Dupont & Jones, asexual morph unknown, saprobes, marine, ascomata on deep sea sunken wood, south Pacific Ocean and South China Sea, see Dupont et al. (2009; taxonomy), Jones et al. (2015; outline), Maharachchikumbura et al. (2016; outline), holotype of type: PC 0115840.

Allantonectria Earle 1901, Nectriaceae, Sordariomycetes, type: A. yuccae Earle, four species, asexual morph hyphomycetous, terrestrial, saprobes, cosmopolitan, see Grafenhan et al. (2011; DNA, phylogeny), Zheng et al. (2012; new species), Hirooka et al. (2012; monograph), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Allantoparmelia (Vain.) Essl. 1978, Parmeliaceae, Lecanorales, Lecanoromycetes, three species, type: A. alpicola (Th. Fr.) Essl., all with ascomata (but often absent), lichenized (green algae), terrestrial (saxicolous, rarely terricolous), boreal or arctic alpine in Northern Hemisphere, see Crespo et al. (2010a; phylogeny), Lumbsch and Huhndorf (2010; outline), Spribille et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; DNA, phylogeny), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.


Allantophomopsis Petr. 1925, Phacidiaceae, Phacidiales, Leotiomycetes, eight species, type: Allantophomopsis cytispora (Fr.) Petr., asexual morph unknown, saprobes, terrestrial, worldwide, see Crous et al. (2014, 2015; phylogeny), Wijayawardene et al. (2017; outline), ex-epitype culture of the type: CPC 24977.

Allantoporthe Petr. 1921, Diaporthaceae, Diaporthales, Sordariomycetes, one species, type: A. leucothoës Lar.N. Vassiljeva, asexual morph unknown, saprobes, terrestrial, North America, see Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.


Alloascoidea Kurtzman & Robnett 2013, Alloascoideaceae, Saccharomycetales, Saccharomycetes, one species, type: A. africana (L.R. Batra & Francke-Grosm.) C.P. Kurtzman & C.J. Robnett, asexual morph unknown (budding of cells and formation of true hyphae), saprophytes, from trees and associated insects, terrestrial, Europe, Africa, see Kurtzman and Robnett (2013; taxonomy), cultures and sequences are available.

Allolocalicium M.Prieto & Wedin 2016, Caliciaceae, Caliciiales, Lecanoromycetes, one species, type: A. adaequatum (Nyl.) M. Prieto and Wedin., lichenized, see Prieto and Wedin (2016; taxonomy, phylogeny), Lücking et al. (2016; classification), sequences are available.

DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2011; DNA, phylogeny), Miadlikowska et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

**Alloconiothyrium** Verkley, Göker & Stielow 2014, *Didymosphaeriaceae, Pleosporales, Dothideomycetes*, one species, type: *A. aptrootii* Verkley & Stielow, coelomycetous, sexual morph unknown, from soil, Papua New Guinea, see Verkley et al. (2014; morphology, phylogeny); Wijayawardene et al. (2016; morphology, phylogeny), holotype and ex-type culture of type species CBS H-21035, CBS 980.95.

**Alloconiothyrium** (Pat.) Syd. 1939, *Dothideomycetes* genera incertae sedis, one species, type: *A. lagerheimii* (Pat.) Syd. (=Broomella lagerheimii Pat. 1895), asexual morph coelomycetous, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Allonecte** (Pat.) Syd. 1939, *Dothideomycetes* genera incertae sedis, one species, type: *A. lagerheimii* (Pat.) Syd. (=Broomella lagerheimii Pat. 1895), assexual morph coelomyce
tous, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Alloneottiosporina** Nag Raj 1993, *Ascomycota* genera incertae sedis, two species, type: *A. carolinensis* Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: BPI 1110181.


**Allophorona** Nádv. 1942, *Ascomycota* genera incertae sedis, one species, type: *A. farinosum* Nádv., asexual morph unknown, lichenized, terrestrial, Colombia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Allophylaria** (P. Karst.) P. Karst. 1870, *Helotiaceae, Helotiales, Leotiomycetes*, six species, type: *X. sticticum* (Fr.) Wallr., asexual morph unknown, saprobes, terrestrial, China, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Allossoma** Syd. 1926, *Englerulaceae, Dothideomycetes* family incertae sedis, four species, type: *A. cestri* Syd., asexual morph hyphomycetous, epiphytic on leaves or saprobes on dead stems, North and South America, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Thambugala et al. (2014a), cultures and sequences are unavailable, needs generic revision, Holotype of type: GZU157-80.

**Allothyria** Bat. & J.L. Bezerra 1964, *Ascomycota* genera incertae sedis, one species, type: *A. serjaniae* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Allothyriopsis** Bat., Cif. & H. Maia 1959, *Ascomycota* genera incertae sedis, one species, type: *A. landolphiae* Bat., Cif. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, Ghana, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Alnecium Voglmayr & Jaklitsch 2014, Gnomoniaceae, Diaporthales, Sordariomycetes, two species, type: A. auctum (Berk. & Broome) Voglmayr & Jaklitsch, asexual morph unknown, saprobes, terrestrial, Europe, see Voglmayr and Jaklitsch (2014; taxonomy, phyloeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Alpakea Subram. & K. Ramakr. 1954, Ascomycota genera incertae sedis, four species, type: A. yuccifolia (J.G. Hall) Subram. & K. Ramakr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, Thiwan, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available.

Alpakesia Abbas, B. Sutton, Ghaffar & A. Abbas 2003, Ascomycota genera incertae sedis, one species, type: A. ghaffarii Abbas, B. Sutton & Al. Abbas, coelomycetous, sexual morph unknown, saprobes, terrestrial, Pakistan, see Wijayawardene et al. (2012, 2017; outline), holotype of the type: IMI 202284, cultures are unavailable.


Alternaria Nees 1817 (= Allewia E.G. Simmons 1990 fide Wijayawardene et al. 2014; Rossman et al. 2015), Pleosporaceae, Pleosporales, Dothideomycetes, 663 species, type: A. alternata (Fr.) Keissl., sexual morph Lewia, saprobes, plant and animal pathogens, terrestrial, worldwide. See Ostry (2008; Alternaria mycotoxins), Flors et al. (2008; cell signalling), Aly et al. (2008; cytotoxic metabolites), Pastör and Guarro (2008; infections), Avenot et al. (2008; succinate dehydrogenase mutation), Saravanakumar et al. (2008; competition for host), Wang et al. (2008; biocontrol), Andersen et al. (2008; metabolite profiling), Tabar et al. (2008; immunotherapy), Avenot et al. (2008; fungicidal resistance), Azcarate et al. (2008; toxins), Bartra et al. (2008; respiratory allergy), Craven et al. (2008; Anastomosis), Sabirov et al. (2008; nasal polyposis), Lawrence et al. (2008; pathogenicity review), Cota et al. (2008; Altenusin), Kumar et al. (2008; variability, India), Miyamoto et al. (2008; ACT-toxin biosynthesis), Véllez et al. (2008; Mannitol biosynthesis), Perello et al. (2008; Argentina, black point of wheat), Rosenzweig et al. (2008; sensitivity to azoxystrobin), Harimoto et al. (2008; AMT2 gene), Schnechel et al. (2008; environmental immunooassays), Park et al. (2008; phylogeny), Parada et al. (2008; toxin from germinating spores), Grinn-Gofroń and Strzelczak (2008; meteorological factors), Pasche and Gudmestad (2008; F129L mutation), Kumar et al. (2008; host resistance), Yuan et al. (2008; Tricycloalternaranes), Logrieco et al. (2009; pathogenicity review), Latha et al. (2009; host resistance induction), Lee et al. (2009; protein disruption study), Pogány et al. (2009; biochemistry), Kjer et al. (2009; phenolic extrolites), Mishra et al. (2009; inhibition by Cinnamomum), Kobayashi et al. (2009; hypersensitivity), Hadižadeh et al. (2009; antifungal activity), Andrew et al. (2009; phylogeny), Lin et al. (2009; pathological mechanism), Tu et al. (2009; keratitis), Avenot et al. (2009; protein mutation), Ali et al. (2009; malachite green degradation), Pedras et al. (2009; review), Siegel et al. (2009; HPLC, MS), Grinn-Gofroń and Rapiejkjo (2009; Poland), Aoki et al. (2009; mycovirus), Wight et al. (2009; biochemistry), Fawzi et al. (2009; antifungal effects), Wang et al. (2009; Cerebrosides), Gu (2009; Bioactive metabolites), Andersen et al. (2009; polyphasic taxonomy), Phuwapraissiran et al. (2009; antitumour metabolites), Yang et al. (2009; AP1 pathway study), Cho et al. (2009; virulence factors), Fernandes et al. (2009; fermentation extract activity), Wang et al. (2009; Postharvest biocontrol), Stepalska and Wolek (2009; Intradiurnal periodicity), Hedayati et al. (2009; IgE analysis), Nallathambi et al. (2009; Trichoderma effects), Gao et al. (2009; Perylene derivatives), Badali et al. (2009; drug activity), Anand et al. (2009; host resistance), Pose et al. (2009; growth factors), Kim et al. (2009; Alternaramide), Miyamoto et al. (2009; gene function), Evidente et al. (2009; Alternethanoxins), Hipolito et al. (2009; brain abscess), Kasahara et al. (2010; Solanapyrone
synthase), Mukherjee et al. (2010; infection proteomics), Wolf et al. (2010; CO₂ effects), Imazaki et al. (2010; peroxisomes), Lin and Chung (2010; signaling pathways), Ntui et al. (2010; wasabi defensin gene), Horsfield et al. (2010; fungicides), Randriamanantany et al. (2010; allergic rhinitis), Siegel et al. (2010; tenuazonic acid), Boyce et al. (2010; Phaeoehypomycosis), Kilic et al. (2010; effect on children), Lin et al. (2010; FUS3 MAPK pathway), Dellavalle et al. (2011; antifungal activity), Kuna et al. (2011; immunotherapy), Boitano et al. (2011; molecular pathogenesis), Dey et al. (2011; lipid profiling), Song et al. (2011; Abscisic acid resistance), Huang et al. (2011; bianthaquinone derivatives), Escuredo et al. (2011; meteorological factors), Joubert et al. (2011; stress adaptation), Sinha and Chattopadhyay (2011; host proteome profile), Lin et al. (2011; pathogenicity), Joubert et al. (2011; pathogenicity), Yago et al. (2011; cell signalling), Noser et al. (2011; UPLC-MS/MS), Karaoglanidis et al. (2011; QoI fungicides resistance), Zheng et al. (2012; bioactive metabolites), Doherty et al. (2012; immunology), Fleck et al. (2012; toxins in mammals), Nowicki et al. (2012; crucifers host), Chruszcz et al. (2012; allergen), Pane et al. (2012; whey compost-tea control), Matsuwaki et al. (2012; immunological pathway), Recio et al. (2012; spore fluctuation), Skjøth et al. (2012; Copenhagen), Yang and Chung (2012; stress resistance), Hu et al. (2012; Genomic characterization), Cho et al. (2012;Amr1), Fuiano et al. (2012; nasal IgE measurement), Asam et al. (2012; mycotoxin in food), Sarkar et al. (2012; Au nanoparticles), Twaroch et al. (2012; vaccine candidates), Chikara et al. (2012; host resistance), Saha et al. (2012; biochemistry), Woudenberg et al. (2013; review), Tsuge et al. (2013; toxins), Lawrence et al. (2013; phylogeny), Lou et al. (2013; metabolites review), Jia et al. (2013; host pathogen interaction), Prell et al. (2013; toxin detection in food), Müller and Korn (2013; mycotoxins in wheat), Chakraborty et al. (2013; congo red dye degradation), Mangain et al. (2013; pathogenicity), Snelgrove et al. (2014; immunology), Wijayawardene et al. (2014; nomenclature), Woudenberg et al. (2014; review), Ouda (2014; nanoparticle effect), Rossman et al. (2015; nomenclature), Templeton (2016, pathogenesis), Meena et al. (2016; mustard disease), Zhang et al. (2017; LAMP), Molecular data available for most of the species, including type species; GenBank Number NR_131316. Epitype and ex-epitype of type species IMI 254138; CBS 916.96.

**Alternariaster** E.G. Simmons 2007, *Leptosphaeriaceae, Pleosporales, Dothideomycetes*, two species, type: *A. helianthi* (Hansf.) E.G. Simmons, hyphomycetous, sexual morph unknown, pathogens, Brazil, see Alves et al. (2013; new species, morphology, phylogeny), Hyde et al. (2013; accepted as a genus in Pleosporaceae), Wijayawardene et al. (2014; outline), Woudenberg et al. (2014; phylogeny), cultures and sequences are available.


**Alveophoma** Alcalde 1952, *Ascomycota* genera *incertae sedis*, one species, type: *A. caballeroi* Alcalde, coelomycetous, sexual morph unknown, saprobes, Spain, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need further revisions.

**Alysidiella** Crous 2006, *Dothideomycetes* genera *incertae sedis*, four species, type: *A. parasitica* Crous, hyphomycetous, sexual morph unknown, pathogens, Cyprus, South Africa, Uruguay, see Cheewangkoon et al. (2010; morphology, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type culture of type: CBS H-19742, CPC 12835.
**Alysidiopsis** B. Sutton 1973, *Ascomycota genera incertae sedis*, hyphomycetous, five species, type: *A. pipsissewae* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need further revisions.

**Alyxoria** Ach. 1821, *Lecanographaceae, Arthoniales, Arthoniomycetes*, twelve species (many additional species in the tropics; revision needed), type: *A. varia* (Pers.) Ertz & Tehler, lichenized, see Ertz and Tehler (2011; taxonomy, phylogeny), Diederich et al. (2012; taxonomy, checklist), Lücking et al. (2016; classification), sequences are available.

**Amallospora** Penz. 1897, *Ascomycota genera incertae sedis*, one species, type: *A. dacrydion* Penz., hyphomycetous, sexual morph unknown, saprobes, Java, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need further revisions.


**Amarenographium** O.E. Erikss. 1982 (= *Amarenomyces* O.E. Erikss. 1981 *fide Rossman et al. 2016*), ?*Phaeosphaeriaceae, Pleosporales, Dothideomycetes*, four species, type: *A. metabeticum* (Trail) Erikss., asexual morph coelomycetous, sexual morph unknown, endophytic and saprobes, China, Saudi Arabia, Sweden, Italy, see Abdel-Wahab et al. (2012; morphology, phylogeny); Wijayawardene et al. (2016; morphology, phylogeny), Rossman et al. (2016; nomenclature), cultures and sequences are available but lacks for the type.


**Amauroascus** J. Schröt. 1893, *Onygenaceae, Onygenales, Eurotiomycetes*, 14 species, type: *A. verrucosus* (Eidam) J. Schröt., asexual morph coelomycetous, sexual morph unknown, endophytic and saprobes, China, Saudi Arabia, Sweden, Italy, see Sigler et al. (2013; DNA), cultures and sequences are available but lacks for the type.

**Amazonia** Theiss. 1913, *Meliolaceae, Meliolales, Sordariomycetes*, more than 70 species, type specie: *A. psychotriae* (Henn.) Theiss., asexual morph unknown, pathogens causing black mildew disease, terrestrial, tropical and subtropical distribution, see Hosagoudar and Archana (2009; host distribution in India), Lumbsch and Huhndorf (2010; outline), Hosagoudar et al. (2010; new species, morphology), Housagoudar and Robin (2011; new species, morphology), Hosagoudar (2013a, b; new species, morphology), LSU sequence are available for *A. acacia*.

**Amazonomyces** Bat. 1964, *Arthoniaceae, Arthoniales, Arthoniomycetes*, two species, type: *A. palmae* Bat. & Cavalc., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Amazonotheca** Bat. & H. Maia 1959, *Schizothyriaceae, Dothideomycetes family incertae sedis*, one species, type: *A. santiriae* Bat. & H. Maia, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Amazonotrema** Kalb & Lücking 2009, *Graphidaceae, Ostropales, Lecanoromycetes*, one species, type: *A. nigrum* Kalb & Lücking, asexual morph unknown, lichenized, terrestrial,
tropical, see Kalb (2009; new records), Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; classification), Lücking et al. (2016; classification), sequences unavailable.

**Ambarignomonia** Sogonov 2008, *Gnomoniaceae, Diaporthales, Sordariomycetes*, one species, type: *A. petiolorum* (Schwein.) Sogonov, asexual morph unknown, saprobes, USA, see Sogonov et al. (2008; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Ambrocisca** S.E. Carp. 1988, *Helotiales*, genera incertae sedis, *Leotiomycetes*, one species, type: *A. pseudotsugae* S.E. Carp., asexual morph unknown, on bark beetle galleries, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ambrosiella** Brader 1964, *Ceratocystidaceae, Microascales, Sordariomycetes*, seven species, type: *A. xylebori* Brader, hyphomycetous, obligate, mutualistic symbionts of ambrosia beetles, from bark beetle galleries/ mycangia in Ivory Coast, USA, Africa, Asia, Europe, USA, Japan, Taiwan, terrestrial, polyphyletic, some species belong to *Ophiostomataceae*, see Six et al. (2009; new species), Alamouti et al. (2009; phylogeny), Harrington et al. (2010; taxonomic revisions and new combinations), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Harrington et al. (2014; *Ambrosiella roeperi* sp. nov.), Maharachchikumbura et al. (2016; outline), isotype strain of type: = CBS 110.61, sequences are available at GenBank from Alamouti et al. (2009).

**Ambrosiozyma** Van der Walt 1972, *Saccharomycopsidaceae, Saccharomycetales, Saccharomycetes*, six species, type: *A. monospora* (Saito) Van der Walt 1972, yeast or yeast-like, fungal symbionts of ambrosia beetles, widespread, see Endoh et al. (2008; phylogeny), Kirk (2013; genus accepted), Kurtzman and Robnett (2013; phylogeny), ex-type strains of type: CBS 2554.

**Ameghiniella** Speg. 1887, *Helotiaceae, Helotiales, Leotiomycetes*, two species, type: *A. australis* Speg., asexual morph unknown, bark beetle galleries, terrestrial, North and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.


**Ameroconium** U. Braun & Zhurb. 2013, *Ascomycota* genera incertae sedis, one species, type: *A. hansfordii* Syd., hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, cosmopolitan, see Zhurbenko and Braun (2013; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: LE 260838, cultures and sequences are unavailable, needs generic revision.

**Amerodiscosiella** Farr 1961, *Ascomycota* genera incertae sedis, one species, type: *A. renispora* M.L. Farr 1961, coelomycetous, sexual morph unavailable, saprobes, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Amerodiscosiellina** Bat. & Cavalc. 1966, *Ascomycota* genera incertae sedis, one species, type: *A. annonacearum* Bat. & Cavalc., coelomycetous, sexual morph unavailable, saprobes, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ameromassaria** Hara 1918, *Sordariomycetes* genera incertae sedis, one species, type: *A. japonica* Hara, asexual morph unknown, pathogens, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013 genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.
Huhndorf (2010), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), cultures and sequences are unavailable, needs generic revision.

**Amerosporiopsis** Petr. 1941, *Ascomycota* genera *incertae sedis*, one species, type: *A. gaubae* Petr., coelomycetous, sexual morph unavailable, saprobes, Iran. See Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Amerosympodula** Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *A. malaysiana* Matsush., hyphomycetous, sexual morph unavailable, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Amicodisca** Svrček 1987, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, six species, type: *A. brdensis* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Han et al. (2011, 2014; new species, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.


**Amoenodochium** Peláez & R.F. Castañeda, *Ascomycota* genera *incertae sedis*, one species, type: *A. humicola* Peláez & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), holotype of the type: MA-33881, cultures and sequences are unavailable, compare with *Acanthodochium*, *Asperisporium*, *Megalodochium* and *Polythrincium*.

**Amenomyces** R.F. Castañeda, Saikawa & Hennebert, *Ascomycota* genera *incertae sedis*, one species, type: *A. catenosporus* R.F. Castañeda, Saikawa & Hennebert, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C94/192, cultures and sequences are unavailable, compare with *Alternaria*, *Embellisia* and *Parapithomyces*.

**Amorosia** Mantle & D. Hawksw. 2006, *Amorosiacaeae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. littoralis* Mantle & D. Hawksw., coelomycetous, sexual morph unknown, fungicolous, *Coleoptera* (Staphylinidae), terrestrial, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, AM292047 (ITS).

**Amorphomyces** Thaxt. 1893, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, ten species, type: *A. falagriae* Thaxt., asexual morph unknown, dioecious, biotrophic on *Coleoptera* (Staphylinidae), terrestrial, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Amorphotheca** Parbery 1969, *Amorphothecaceae*, *Leotiomycetes*, families *incertae sedis*, one species, type: *A. resinae* Parbery, asexual morph unknown, saprobes on resins, hydrocarbons, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wang et al. (2015; applications), cultures available for the type: CBS 184.54.

**Ampelomyces** Ces. ex Schltdl. 1852, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *A. quisqualis* Ces., coelomycetous, sexual morph unknown, fungicolous,
terrestrial, worldwide, see de Gruyter et al. (2009; phylogeny), Park et al. (2010; genetic variability), Wijayawardene et al. (2012, 2014, 2017; taxonomy, phylogeny, outline), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Phookamsak et al. (2014; accepted as a genus in *Phaeosphaeriaceae*), Verkley et al. (2014; phylogeny), cultures of the type: CBS 131.31, CBS 129.79.


**Amphimyces** Thaxt. 1931, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, one species, type: *A. cerylonis* Thaxt., asexual morph unknown, biotrophic on *Coleoptera* from the genus *Cerylon* (Cerylonidae), West Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Amphioporthe** Petr. 1971 (= *Amphicytostroma* Petr. 1921 fide Rossman et al. 2015), *Gnomoniaceae, Diaporthales, Sordariomycetes*, two species, type: *A. tiliae* (Sacc.) Petr., asexual morph hynophymycetous, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), Rossman et al. (2015; nomenclature), needs generic revision


**Amphisphaerella** (Sacc.) Kirschst. 1934, *Xylariales genera incertae sedis, Sordariomycetes*, twelve species, type: *A. amphisphaerioides* (Sacc. & Speg.) Kirschst., asexual morph unknown, North America, Norway, Ivory Coast, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Amphisphaerella** Gucevič 1952, *Sordariomycetes, genera incertae sedis, two species, type: A. fagi* Gucevič, sexual morph unknown, saprobes, errestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Amphisphaeria** Ces. & De Not. 1863, *Amphisphaeriaceae, Xylariales, Sordariomycetes*, 266 species, type: *A. umbrina* (Fr.) De Not., asexual morph coelomycetous, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015, morphology and phylogeny), Maharachchikumbura (2015, 2016; morphology, phylogeny), sequences are available.

**Amphisphaerina** (Cooke) Höhnel 1919, *Sordariomycetes genera incertae sedis, one species, type: A. texensis* (Cooke) Höhnel, asexual morph unknown, saprobes, terrestrial, USA, See Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.
Amphoropycnium Bat. 1963, *Ascomycota* genera *incertae sedis*, one species, type: *A. philippinense* Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Amphorotheceum P.M. McCarthy, Kantvilas & Elix 2001, *Ostropales* genera *incertae sedis*, one species, type: *A. occultum* P.M. McCarthy, Kantvilas & Elix, lichenized, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences unavailable.

Amphorocolus Petr. 1959, *Sordariomycetes* genera *incertae sedis*, one species, type: *A. polygonacearum* Petr., asexual morph unknown, terrestrial, former Yugoslavia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), needs generic revision.

Amphotrema Kalb ex Kalb 2006, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, c. 20 spp., type: *A. amplius* (Nyl.) Kalb, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Sipman et al. (2012a; key Costa Rica), Rivas Plata et al. (2012b; phylogeny), Cáceres et al. (2012), Rivas Plata and Lücking (2012; classification), Mercado-Díaz et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.


Amycosphaerella Quaedvl. & Crous 2014, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *A. africana* (Crous & M.J. Wingf.) Quaedvlieg & Crous, asexual morph unknown, pathogens, terrestrial, Australia, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), holotype and ex-type culture of the type: PERTH 05849543, CBS 110500.

Amygdalaria Trappe 1971, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, five species, type: *A. herbertianus* (J.W. Cribb) Trappe, mitotic spore mats reported by Healy et al. (2012), mycorrhizal, Australia, the Americas, see Lumbsch and Huhndorf (2010; outline), Healy et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are for several undescribed species.
Amylis Speg. 1922, Sordariomycetes genera incertae sedis, one specie, type: A. memorabilis Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Amylocarpus Cur. 1859, Helotiaceae, Helotiiales, Leotiomycetes, one species, type: A. encephaloides Curr., asexual morph unknown, drift wood, temperate marine waters, saprobe, sequence are available, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rämä et al. (2014; DNA, records in Norway), Jones et al. (2015; outline), cultures and sequences are available.

Amylora Rambold 1994, Trapeliaceae, Trapeliales, Lecanoromycetes, one species, type: A. cervinocuprea (Arnold) Rambold, lichenized, see Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, need generic revision.


Anacraspedodidymum C.R. Silva, R.F. Castañeda & Gusmão 2014, Ascomycota genera incertae sedis, two species, type: A. aquaticum C.R. Silva, R.F. Castañeda & Gusmão, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Silva et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Anamylopsora Timdal 1991, Anamylopsoraceae, Baeomyctales, Lecanoromycetes, one species, type: A. pulcherrima (Vain.) Timdal (Lecidea pulcherrima Vain.), lichenized, saxicolous, terricolous, temperate northern hemisphere, type specimen TUR-V-22644 (holotype), sequences are available for the type species, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Resl et al. (2015; phylogenetic placement).

Anaphysmene Bubák 1906, Ascomycota genera incertae sedis, two species, type: A. heraclei (Lib.) Bubák, coelomycetous, sexual morph unknown, Europe, Gautamala see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Anaptychia Körb. (1848), Physciaceae, Caliciales, Lecanoromycetes, Ascomycota; 15 species; type: A. ciliaris (L.) Körb. ex A. Massal.; lichenized; see Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Miadlikowska et al. (2014; phylogeny), Prieto and Wedin (2016; classification), Lücking et al. (2016; classification), sequences are available.

Anarhyma M.H. Pei & Z.W. Yuan 1986, Ascomycota genera incertae sedis, one species, type: A. rhododendri M.H. Pei & Z.W. Yuan, coelomycetous, sexual morph unknown, saprobes, terrestrial, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Anariste Syd. 1927, Micropeltidaceae, Microthyriales, Dothideomycetes, one species, type: A. poliothea Syd., asexual morph unknown, epiphytes, terrestrial, Costa Rica, see Hofmann (2009; review, accepted as a genus in Asterinaceae), Lumbsch and Huhndorf (2010; outline, accepted as a genus in Asterinaceae), Hongsanan et al. (2014; taxonomy, keys, transferred to Micropeltidaceae), Wijayawardene et al. (2014; outline, accepted as a genus in Micropeltidaceae), placement in Micropeltidaceae supported by morphology, syntype of type: BPI 690985, cultures and sequences are unavailable.

Anaselenosporella Heredia, R.F. Castañeda & R.M. Arias 2010, Ascomycota genera incertae sedis, two species, type: A. sylvatica Heredia, Castañeda & Arias, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Mexico, see Castañeda et al. (2010; morphology),
Wijayawardene et al. (2012, 2017; outline), holotype of the type: MUCL 45630, cultures and sequences are unavailable, compare with Selenosporella and Selenosporopsis.

**Anaseptoidium** R.F. Castañeda, Heredia & R.M. Arias 2012, *Ascomycota* genera *incertae sedis*, hyphomycetous, sexual morph unknown, one species, type: *A. mycophilum* Castañeda, Heredia & Arias, mycophilous, on synnemata of *Phaeoisaria clavulata*, terrestrial, Mexico, see Castañeda et al. (2012; morphology), Wijayawardene et al. (2017; outline), holotype of type: XAL CB1696, cultures and sequences are unavailable, compare with Septodium.

**Ancistrosporella** G. Thor. 1995, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *A. australiensis* (G. Thor) G. Thor, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

**Ancoraspora** Mig. Rodr. 1982, *Ascomycota* genera *incertae sedis*, one species, type: *A. cubensis* Mig. Rodr., hyphomycetous, sexual morph unknown, saprobes, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures or cultures and sequences are unavailable, needs generic revision.

**Andamanomyces** Hosag. 2014, *Asterinales* genera *incertae sedis*, Dothideomycetes, one species, type: *A. fragaritae* Hosag., S.P. Mathew & D. Babu, asexual morph unknown, epiphytes, biotrophic, terrestrial, India, see Hosagoudar et al. (2014; protologue, accepted as a genus in *Asterinales*), placement in *Asterinales* supported by morphology, holotype of type: TBGT 6666, cultures and sequences are unavailable.

**Andreiomyces** B.P. Hodk. & Lendemer 2013, *Andreiomycetaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *A. morozianus* (Lendemer) B.P. Hodk. & Lendemer, lichenized, see Hodkinson and Lendemer (2013; taxonomy), Lücking et al. (2016; classification), cultures available for the type: NY1377.

**Anema** Nyl. ex Forssell 1885, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, ten species, type: *A. decipiens* (A. Massal.) Forssell, with ascomata, lichenized (cyanobacteria), terrestrial (saxicolous), arid, semi-arid to warm temperate regions, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), see sequences are available.

**Angatia** Syd. & P. Syd. 1914, *Saccardiaceae*, *Ascomycota* families *incertae sedis*, five species, type: *A. eugeniae* Syd. & P. Syd., asexual morph unknown, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Angelina** Fr. 1849, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *A. rufescens* (Schwein.) Duby, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dermateaceae*), Kirk et al. (2013; genus accepted), Karakehian et al. (2014; DNA, phylogeny), culture available for the type: JK 12040101 (*fide* Karakehian et al. 2014).

**Angiactis** Aptroot & Sparrius 2008, *Arthoniales* genus *incertae sedis*, *Arthoniomycetes*, three species, type: *A. littoralis* (Kantvilas) Aptroot & Sparrius, lichenized, terrestrial, tropical, see Aptroot et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

**Angiopomopsis** Höhn. 1912, *Ascomycota* genera *incertae sedis*, one species, type: *A. lophostoma* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Java, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Kirk et al. (2013; genus accepted), lectotype of type: BPI 442755, cultures and sequences are unavailable, needs generic revision.


Angustimassarina Thambugala, Kaz. Tanaka & K.D. Hyde 2015, Amorosiaceae, Pleosporales, Dothideomycetes, three species, type: A. populi Thambugala & K.D. Hyde, asexual morph hyphomycetous, fungicolous or saprobes, terrestrial, Germany and Italy, three species, see Thambugala et al. (2015b; morphology, phylogeny), holotype and ex-type strain of type: MFLU 14-0588, MFLUCC 13-0034.

Angustospora Abdel-Aziz 2016, Testudinaceae, Pleosporales, Dothideomycetes, one species, type: A. nilensis Abdel-Aziz, asexual morph unknown, saprobes, aquatic, Egypt, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-isotype culture of the type: MFLU 15-1511, MF804.

Anhellia Racib. 1900, Myriangiaceae, Myriangiaceae, Dothideomycetes, nine species, type: A. tristis Racib., asexual morph unknown, parasitic on leaves, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Pinho et al. (2012; morphology, phylogeny), Kirk et al. (2013; genus accepted), Dissanayake et al. (2014; morphology), holotype of the type: F47931.

Aniptodera Shearer & M. A. Mill. 1977, Halosphaeriaceae, Microascales, Sordariomycetes, c. 16 species (est. spp. 20+), type: A. chesapeakensis Shearer & Mill., asexual morph unknown, saprobes, freshwater, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), ex-type strains of type: CS-97-26 = ATCC 32818, holotype of type: ILLS 36523.

Anisogramma Theiss. & Syd. 1917, Diaporthales, genera incertae sedis, Sordariomycetes, three species, type: A. virgulatum (Fr.) Theiss. & Syd., asexual morph unknown, terrestrial, saprobes, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.


Anisomyces Theiss. & Syd. 1914, Gnomoniaceae, Diaporthales, Sordariomycetes, seven species, type: A. papilloideoseptatus (Henn.) Theiss. & Syd., asexual morph unknown, saprobes?, terrestrial, tropical America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, needs generic revision.

Anisomycopsis I. Hino & Katum. 1964, Diaporthales, genera incertae sedis, Sordariomycetes, one species, type: A. rosea I. Hino & Katum., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Annellodentimyces** Matsush. 1985, *Ascomycota* genera *incertae sedis*, one species, type: *A. antennatuloidus* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Annellodochium** Deighton 1969, *Ascomycota* genera *incertae sedis*, one species, type: *A. ramulisporum* Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Annellolacinia** B. Sutton 1964, *Discosiaceae*, *Amphisphaeriales*, *Sordariomycetes*, two species, type: *A. dinemasporioides* B. Sutton, coelomycetous, sexual morph unknown, pathogens, Ghana, Sierra Leone, Trinidad, India, Australia, cultures and sequences are unavailable, see Wijayawardene et al. (2012, 2016, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI37897c.

**Annellophora** S. Hughes 1952, (Replaced synonym: *Chaetotrichum* Syd. 1927), *Ascomycota* genera *incertae sedis*, 13 species, type: *A. solani* (Syd.) S. Hughes 1952, hyphomycetous, sexual morph unknown, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Annellophorella** Subram. 1962, *Ascomycota* genera *incertae sedis*, five species, type: *A. densa* (Syd. & P. Syd.) Subram., hyphomycetous, sexual morph unknown, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequence are unavailable, needs generic revision.

**Annellophragmia** Subram. 1963, *Ascomycota* genera *incertae sedis*, one species, type: *A. coonoorensis* (Subram.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Annellospornosporella** P.R. Johnst. 1999, *Ascomycota* genera *incertae sedis*, one species, type: *A. meliolinae* P.R. Johnst., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Annellosymphodiella** Crous & Assefa 2014, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *A. juniperi* Crous & Assefa, asexual morph unknown, saprobes, terrestrial, Ethiopia, see Crous et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; outline), holotype of the type: CBS H-21706, ex-type strain of type: CPC 23276.

**Annulatascus** Ces. & De Not. 1863, *Annulataascaceae*, *Annulatacales*, *Sordariomycetes*, c. 19 species, type: *A. velatispora* K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Luo et al. (2015; taxonomy), Dayarathne et al. (2016a; DNA), holotype of type: BRIP 17373; epitype MFLU 16-2204.

**Annulohypoxylon** Y.M. Ju, J.D. Rogers & H.M. Hsieh 2005, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *A. truncatum* (Schwein.) Y.M. Ju, J.D. Rogers & H.M.
Hsieh, four species, asexual morph hyphomycetous, terrestrial, saprobes, Europe, North America, see Marincowitz et al. (2008; new species, South Africa), Hladki and Romero (2009; new species), Lumbsch and Huhndorf (2010; outline), Pereira et al. (2010; new species, Brazil), Liu et al. (2015; new species), Li et al. (2016; new species, Thailand), Maharachchikumbura et al. (2015, 2016; outline), Kuhnert et al. (2017; new species, revision), cultures and sequences are available.


**Annulemma** Sivan. 1983 (= *Exosporiella* P. Karst. 1892), *Melanosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *A. epochnii* (Berk. & Broome) Sivan., asexual morph *Exosporiella* P. Karst., saprobes, terrestrial, United Kingdom, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; morphology; nomenclature; phylogeny), Wijayawardene et al. (2016; phylogeny; coelomycetous taxa), cultures and sequences of type: are unavailable, needs generic revision.

**Anomalographis** Kalb 1992, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *A. madeirensis* (Tav.) Kalb, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline, Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. 2016 (classification), sequences are unavailable.

**Anomomorpha** Nyl. ex Hue 1891, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, eight species, type: *A. turbulenta* (Nyl) Hue, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Anopeltis** Bat. & Peres 1960, *Dothideomycetes*, genera incertae sedis, one species, type: *A. venezuelensis* Bat. & Peres, asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Capnodiaceae), Hyde et al. (2013) did not accept as a genus in Capnodiaceae, Kirk et al. (2013; outline, genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera incertae sedis), cultures and sequences are unavailable, needs generic revision.

**Anopodium** N. Lundq. 1964, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, two species, type: *A. ampullaceum* N. Lundq., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kruys et al. (2015; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for voucher E00218015 of the type: (fide Kruys et al. 2015).

**Antarctomyces** Stchigel & Guarro 2001, *Thelebolaceae*, *Thelebolales*, *Leotiomycales*, one species, type: *A. psychrotrophicus* Stchigel & Guarro, asexual morph sporothrix-like, saprobes, terrestrial, Antarctica, see Lumbsch and Huhndorf (2010; outline), Ziao et al. (2010; antifreeze proteins), Kirk et al. (2013; genus accepted), Bansal et al. (2014; antifreeze proteins), cultures and sequences are available.

**Anteaglonium** Mugambi & Huhndorf 2009, *Anteagloniaceae*, *Pleosporales*, *Dothideomycetes*, six species, type: *A. abbreviatum* (Schwein.) Mugambi & Huhndorf, asexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Mugambi and Huhndorf (2009, taxonomy), Mugambi and Huhndorf (2010; outline), Almeida et al. (2014, new species), Jayasiri et al. (2016b, new species, asexual morph of this genus and reference specimens), Hyde et al. (2013, included in to new family, Anteagloniaceae), Wijayawardene et al. (2014; outline), cultures available for the type: ANM 925aT (Mugambi and Huhndorf 2009).
Antennatula Fr. ex F. Strauss 1850, Euantennariaceae, Dothideomycetes, families incertae sedis, ten species, type: A. pinophila Fr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Antennopsis R. Heim 1952, Ascomycota genera incertae sedis, three species, type: A. gallica R. Heim & Buchli ex R. Heim, hyphomycetous, sexual morph unknown, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Antennospora Meyers 1957, Halosphaeriaceae, Microascales, Sordariomycetes, one species, type: A. caribbea Meyers, asexual morph unknown, saprobes, marine, worldwide, see Pang et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Antennulariella Woron. 1915 (=?Antennariella Bat. & Cif., Capnodendron S. Hughes 1963 fide Wijayawardene et al. 2014), Antennulariellaceae, Capnodiales, Dothideomycetes, three species, type: A. fuliginosa Woron., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Antennulariellaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, treated Antennariella Bat. & Cif. and Capnodendron S. Hughes as synonyms), Rossman et al. (2015) did not agree with Wijayawadene et al. (2014), cultures and sequences are unavailable, needs generic revision.


Anthostomaria (Sacc.) Theiss. & Syd. 1918, Sordariomycetes genera incertae sedis, one species, type: A. apogya (Nyl.) Theiss. & Syd., asexual morph unknown, lichenicolous, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), needs generic revision.


Anthracobia Boud. 1885, Pyronemataceae, Pezizales, Pezizomycetes, 20 species, type: A. melaloma (Alb. & Schwein.) Boud., scytalidium-like asexual morph has been reported, saprobes, terrestrial, on burnt soil, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hansen et al. (2013; phylogeny).

Anthracocarpon Breuss 1996, Verrucariaceae, Verrucariales, Eurotiomycetes, three species, type: A. virescens (Zahlbr.) Breuss, lichenized, see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available for voucher M. Prieto 530 of the type: (fide Prieto et al. 2012).

Anthracoderma Speg. 1888, Ascomycota genera incertae sedis, three species, type: A. hookeri Speg., coelomycetous, sexual morph unknown, South America see Wijayawardene et
al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

**Anthracothecium** Hampe ex A. Massal. 1860, *Pyrenulaceae, Pyrenales, Eurotiomycetes*, five species, type: *A. doleschallii* A. Massal., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Aptroot (2012; key), Weerakoon et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Gueidan et al. (2016; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type species.

**Antimanoa** Syd. 1930, *Ascomycota* genera *incertae sedis*, one species, type: *A. grisleae* Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Antoniomyces** Inácio 2012, *Parmulariaceae, Asterinales, Dothideomycetes*, one species, type: *A. loranthicola* Inácio, Araúz & M. Piepenbr., asexual morph unknown, hyphomycetous, terrestrial, Panama, see Inácio et al. (2012; protologue, accepted as a genus in *Parmulariaceae*), Hyde et al. (2013; review, keys), Wijayawardene et al. (2014; outline), placement in *Parmulariaceae* supported by morphology, holotype of type: PMA, cultures and sequences are unavailable, needs generic revision.

**Anungitea** B. Sutton 1973, *Xylariales* genera *incertae sedis*, 17 species, type: *A. fragilis* B. Sutton, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014, 2016; new species), cultures and sequences are available but lacks for the type species, needs generic revision.


**Anzia** Stizenb. 1861, *Parmeliaceae, Lecanorales, Lecanoromycetes*, c. 25 species, type: *A. colpodes* (Ach.) Stizenb., with ascomata, lichenized (green algae), terrestrial, tropical to subtropical, see Crespo et al. (2010a; phylogeny), Lumbsch and Huhndorf (2010; outline), Jayadal et al. (2012; new species), Kirk et al. (2013; genus accepted), Madiilikowska et al. (2014; phylogeny), Divakar et al. (2015; phylogeny), Wang et al. (2015; new species), Lücking et al. (2016; classification), sequences are available.

**Anzina** Scheid. 1982, *Ostropales* family *incertae sedis, Lecanoromycetes*, one species, type: *A. carneonivea* (Anzi) Scheid., lichenized, terrestrial, Eurasia, see Lumbsch and Huhndorf (2010; outline), Yu-liang et al. (2012; China), Kirk et al. (2013; genus accepted), Resl et al. (2015; phylogeny), Lücking et al. (2016; classification); sequences are available.

**Aoria** Cif. 1962, *Ascomycota* genera *incertae sedis*, one species, type: *A. amphistroma* Cif., coelomycetous, sexual morph unknown, Dominican Republic, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

**Aparaphysaria** Spel. (1922), *Pyronemataceae, Peziales, Pezizomycetes*, two species, type: *A. doelloi* Spel., asexual morph unknown, terrestrial, South America, Tierra del Fuego, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

**Apatelomyces** Thaxt. 1931, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, one species, type: *A. ogmoceri* Thaxt., asexual morph unknown, biotrophic only host known is *Ogmocerus* sp. (Coleoptera, Pselaphidae), Afrotropical, Liberia, see Lumbsch and Huhndorf
Apatomyces Thaxt. 1931, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: *A. laboulbenioides* Thaxt., asexual morph unknown, biotrophic only host known is *Tachys ceylonicus* Nietn. (Coleoptera, Carabidae), Filipinas, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Apatoplaca Poelt & Hafellner 1980, Teloschistaceae, Teloschistales, Lecanoromycetes, one species, type: *A. oblongula* (H. Magn.) Poelt & Hafellner, lichenized, see Vondrák et al. (2012; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Apenidiella Quaedvl. & Crous 2014, Teratosphaeriaceae, Caecidiales, Dothideomycetes, one species, type: *A. strumelloidea* (Milko & Dunaev) Quaedvlieg & Crous, hyphomycetous, sexual morph unknown, pathogens, terrestrial, Russia, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2013; morphology, phylogeny), holotype of the type: BKMF-2534, ex-type strain of type: CBS 114484.

Aphanandromyces W. Rossi 1982, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: *A. audisioi* W. Rossi, asexual morph unknown, biotrophic only host known is *Brachypterus urticae* (Coleoptera, Kateretidae), Europe, temperate to cool, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Aphanofalx B. Sutton 1986, Ascomycota genera incertae sedis, two species, type: *A. mali* B. Sutton, coelomycetous, sexual morph unknown, saprobes, Pakistan, Zambia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revisions, holotype of the type: IMI293036.

Aphanophora Réblová & Unter. 2013, Chaetothyriaceae, Chaetothyriales, Eurotiomycetes, three species, type: *A. eugeniae* (Crous & Alfenas) Réblová & Unter., hyphomycetous, sexual morph unknown, from living leaves of *Eugenia uniflora*, terrestrial, Rio Grande do Sul, see Réblová et al. (2013; taxonomy), ex-type cultures of the type: CBS 124105.

Aphanopsis Nyl. ex Sydow 1882, Aphanopsidaceae, Ascomycota family incertae sedis, two species, type: *A. terrigera* (Ach.) Nyl. ex P. Syd., lichenized, see Lumbsch and Huhndorf (2010; outline), Printzen et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Aphanostigme Syd. 1926, Pseudoperisporiaceae, Dothideomycetes families incertae sedis, 21 species, type: *A. solani* Syd., asexual morph unknown, ascomata occurring as a saprophyte or a leaf hair parasite, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Boonmee et al. (2017; morphology), cultures and sequences are unavailable, needs generic revision.

Apharia Bonord. 1864, Sordariomycetes genera incertae sedis, one species, type: *H. nigrescens* Bonord., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), needs generic revision

Aphidomyces Brain 1923, Saccharomycetales genera incertae sedis, Saccharomycetes, three species, type: no typification data, asexual morph unknown, in insects, terrestrial, worldwide, see Lumbsch and Huhndorf (2010) did not accept, Kirk et al. (2013; genus accepted), needs generic revision.

Italy, see Wijayawardene et al. (2016, 2017; taxonomy, phylogeny, outline), holotype and ex-type culture of the type: MFLU 15–3556, MFLUCC 13–0400.

**Apinisia** La Touche 1968, *Onygenaceae, Onygenales, Eurotiomycetes*, two species, type: *A. graminicola* La Touche, asexual morph unknown, saprobes, terrestrial, Europe, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), culture available for the type: CBS 721.68 (fide Untereiner et al. 2002).

**Apiocamarops** Samuels & J.D. Rogers 1987, *Boliniaeae, Bolinales, Sordariomycetes*, three species, type: *A. alba* Samuels & J.D. Rogers, asexual morphs unknown, saprobes, terrestrial, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable.

**Apiocarpella** Syd. & P. Syd. 1919, *Ascomycota* genera *incertae sedis*, eight species, type: *A. macrospora* (Speg.) Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but unpublished, needs generic revision.

**Apioclypea** K.D. Hyde 1994, *Clavicipitaceae*, *Stemmatosporales, Sordariomycetes*, six species, type: *A. livistonae* K.D. Hyde, asexual morphs unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for unidentified species.

**Apiodiscus** Petr. 1940, *Rhytismatales, genera incertae sedis, Leotiomyces*, one species, type: *A. gillis* Petr., asexual morph unknown, saprobes, terrestrial, Iran, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Apioplagiostoma** M.E. Barr 1978, *Gnomoniaceae, Diaporthales, Sordariomycetes*, three species, type: *A. populi* (E.K. Cash & Waterman) M.E. Barr, asexual morph discula-like, weak pathogens, terrestrial, temperate, Europe, North America, see Lumbsch and Huhndorf (2010; outline, accepted genus in *Valsaceae*), Sogonov et al. (2008; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Apioporthella** Petr. 1929, *Diaporthaceae, Diaporthales, Sordariomycetes*, one species, type: *A. bavarica* Petr., asexual morph unknown, saprobe, terrestrial, temperate, Europe, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Apiorhynchostoma** Petr. 1923, *Boliniaeae, Bolinales, Sordariomycetes*, five species, type: *A. apiculatum* (Sacc.) Petr., asexual morphs unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Apiosordaria** Arx & W. Gams. 1967, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, 23 species; type: *A. verruculosa* Arx & W. Gams, asexual morph unknown, saprobes, endophytes, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; genus accepted), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are and culture are available for type: CBS 244.71.

**Apiosphaeria** (Spegazzini) Höhnel 1909, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, four species, type: *A. guarantica* (Speg.) Höhn, asexual morph unknown, terrestrial, South America, Lumbsch and Huhndorf (2010; genus accepted), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), culture are available for type: CCMF 766.

**Apiosporopsis** (Traverso) Mariani 1911, *Diaporthales genera incertae sedis, Sordariomycetes*, three species, type: *A. saccardoana* Mariani (as *saccardiana*), asexual morph unknown, saprobes, endophytes, terrestrial, Dominican Republic, Europe, India, Japan, see Lumbsch
and Huhndorf (2010; outline), Osono and Masuya (2012; diversity on Betulaceae), Kirk et al. (2013; genus accepted), Keča et al. (2015; diversity on Poplars), Maharachchikumbura et al. (2015, 2016; outline), sequences are available for Apiosporopsis carpinea.

**Apiothyrium** Petr. 1947, *HypoNectriaceae, Xylariales, Sordariomycetes*, two species, type: *A. arcticum* Petr., asexual morph unknown, saprobes, terrestrial, Finland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Apiotypha** Petr. 1925, *Ascomycota* genera incertae sedis, one species, type: *A. arcticum* Petr., asexual morph unknown, saprobes, terrestrial, Phillipines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision as Kirk et al. (2008) mentioned that type material is missing.

**Apiotypa** Petr. 1925, *Ascomycota* genera incertae sedis, one species, type: *A. philippinensis* Petr., asexual morph unknown, saprobes, terrestrial, Phillipines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: IMI 261830.

**Aplanocalenia** Lücking, Sérus. & Vězda 2005, *Gomphillaceae, Ostropales, Lecanoromycetes*, one species, type: *Aplanocalenia inconspicua* (Müll. Arg.) Lücking, Sérus. & Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Aplosporella** Speg. 1880, *Aplosporellaceae, Botryosphaeriales, Dothideomycetes*, c. 70 species, type: *A. chlorostroma* Speg., asexual morph unknown coelomycetous, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Kirk et al. (2013; genus accepted), Slippers et al. (2014; phylogeny), Trakunyingcharoen et al. (2015; new species, phylogeny), Crous et al. (2016; new species, phylogeny), cultures and sequences are available.


**Apodothina** Petr. 1970, *Sordariomycetes genera incertae sedis*, one species, type: *A. pringlei* (Peck) Petr., asexual morph unknown, saprobes, from living leaves, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


**Apogaeumannomyces** Matsush. 2003, *Sordariomycetes genera incertae sedis*, one species, type: *A. perplexus* Matsush., asexual morph unknown, saprobes, from living leaves, terrestrial, Peru, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: MFC 1P446, cultures and sequences are unavailable, needs generic revision.

**Apogloeum** Petr. 1954, *Ascomycota genera incertae sedis*, one species, type: *A. concinnum* Petr., coelomycetous, sexual morph unknown, rarely reported and in case on leaves of *Lomatia polymorpha* in Tasmania, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of the type: BPI 1110296.

**Apoharknessia** Crous & S.J. Lee 2004, *Diaporthales genera incertae sedis, Sordariomycetes*, one species, type: *A. insueta* (B. Sutton) Crous & S.J. Lee, sexual morph unknown, pathogens, Mauritius, Brazil, Colombia, see Crous et al. (2011; phylogeny), Wijayawardene et al. (2012,
Apomelasmia Grove 1937, Ascomycota genera incertae sedis, eight species, type: A. urticae (Fr.) Grove, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012) and Maharachchikumbura et al. (2015, 2016) treated as a genus in Diaporthales, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Aporcellula B. Sutton 1986 [1985], Ascomycota genera incertae sedis, two species, type: A. erigerontis (Syd.) B. Sutton, coelomycetous, sexual morph unknown, saprobes, Ecuador, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, isotype of the type: IMI 288252.

Apomelasmia Grove 1937, Ascomycota genera incertae sedis, eight species, type: A. urticae (Fr.) Grove, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012) and Maharachchikumbura et al. (2015, 2016) treated as a genus in Diaporthales, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Aposphaeria Sacc. 1880, Melanommataceae, Pleosporales, Dothideomycetes, 189 species, type: A. pulviscula (Sacc.) Sacc., coelomycetous, sexual morph ? Melanomma Nitschke ex Fuckel, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Tian et al. (2015; morphology, phylogeny), Li et al. (2016; new species), cultures and sequences are available, needs generic revision.

Aposporella Thaxt. 1920, Ascomycota genera incertae sedis, three species, type: A. elegans Thaxt., hyphomycetous, sexual morph unknown, on insects, terrestrial, Africa, see Seifert et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Apostilbella R.G. Johnson, E.B.G. Jones & S.T. Moss 1987, Halosphaeriaceae, Microascales, Sordariomycetes, one species, type: A. amicta (Kohlm.) R.G. Johnson, E.B.G. Jones & S.T. Moss, asexual morph unknown, saprobes, marine, Denmark, France, Germany, Yogoslavia, USA, see Jones et al. (2009, 2015; outline, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Appendiculella Höhn. 1919, Meliolaceae, Meliolales, Sordariomycetes, c. 110 species, type: Appendiculella calostroma (Desm.) Höhn., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species, needs generic revision.
Appendispora K.D. Hyde 1994, Rousselloellaceae, Pleosporales, Dothideomycetes, two species, type: A. frondicola K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Brunei, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Didymosphaeriaceae), Hyde et al. (2013; accepted as a genus in Didymosphaeriaceae), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014b; transferred to Rousselloellaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Appendixia B.S. Lu & K.D. Hyde 2000, Xylariaceae, Xylariales, Sordariomycetes, five species, type: A. closterium (Berk. & M.A. Curtis) B.S. Lu & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Apseudocercosporella Videira & Crous 2016, Mycosphaerellaceae, Capnodiales, Dothideomycetes, one species, type: A. trigonotidis Videira, H.D. Shin & Crous, hyphomycetous, sexual morph unknown, plant pathogenic, see Videira et al. (2016; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: KUS-F20054, CBS 131890 = CPC 10864.

Aptrooria Lücking & Sipman 2007, Trypetheliaceae, Trypetheliales, Dothideomycetes, three species, type: A. terricola Lücking, Umanä & Sipman, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Trypetheliales), Aptroot and Lücking (2016; monograph), Lücking et al. (2016; classification), sequences are available.

Aquadiscula Shearer & J.L. Crane 1985, Helotiaceae, Helotiales, Leotiomycetes, two species, type: A. appendiculata Shearer & J.L. Crane, asexual morph unknown, saprobes on submerged leaf, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Aquadulciospora Fallah & Shearer 2001, Sordariomycetes genera incertae sedis, one species, type: A. rhomboidia Fallah & Shearer, asexual morph unknown, saprobes, aquatic, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: ILLS 53999, cultures and sequences are unavailable, needs generic revision.

Aqualignicola Ranghoo, K.M. Tsui & K.D. Hyde 2001, Annulatascaceae, Annulatascales, Sordariomycetes, two species, type: A. hyalina Ranghoo, K.M. Tsui & K.D. Hyde, asexual morph unknown, saprobes, fresh water, terrestrial, China, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Hu et al. (2012; new species, China), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: HKU (M) 12178, cultures and sequences are unavailable, needs generic revision.

Aquamarina Kohlm., Volkml.-Kohlm. & O.E. Erikss. 1996, Sordariomycetes genera incerte sedis, one species, type: A. speciosa Kohlm., Volkml.-Kohlm. & O.E. Erikss., asexual morph unknown, saprobes, marine, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Aquanectionia L. Lombard & Crous 2015, Nectriaceae, Hypocreales, Sordariomycetes, two species, type: A. penicilloides (Ingold) L. Lombard & Crous, asexual morph hyphomycetous, saprobes, aquatic, Jamaica, USA, see Lombard et al. (2015; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), ex-epitype of type: CBS 257.54.


saprobes, submerged wood in aquatic habitats, see Boonmee et al. (2011, 2014), Seifert et al. (2011; morphology), Wijayawardene et al. (2014; outline), Hyde et al. (2016; new species, sexual morph), cultures and sequences are available for authentic strains BCC 3520, BCC 3543 and reference strains MFLUCC16-0010, MFLUCC16-0020.

**Aquapotrium** Raja & Shearer 2008, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *A. pinicola* Raja & Shearer, saprobes, aquatic, see Koukol and Kolárová (2010; demonstrated that *Bactrodesmium gabretae* Koukol & Kolářová, which was isolated from spruce needles is closely related to *A. pinicola* Raja & Shearer, in the *Helotiales*), Lumbsch and Huhndorf (2010; outline), ex-type strain F47-1 = MYA 4213 (American Type Culture Collection), holotype: F47-1, ILL 40117


**Aquaaspera** K.D. Hyde 1995, *Sordariomycetes*, genera *incertae sedis*, *Sordariomycetes*, one species, type: *A. dimorphospora* K.D. Hyde, asexual morph unknown, saprobes, aquatic, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BRIP 21482, cultures and sequences are unavailable, needs generic revision.


**Aquaticola** W.H. Ho, K.M. Tsui, Hodgkiss & K. D. Hyde. *Annulatascaceae, Incertae sedis, Sordariomycetes*, one species, type: *A. triseptata* K.M. Tsui, Hodgkiss & K.D. Hyde, asexual morph unknown, saprobes, aquatic, Hong Kong, Australia, China, molecular data available for only three species (Dayarathne et al. 2016), placement in *Annulatascaceae* supported by molecular data, see Campbell & Shearer (2004), Luo et al. (2015), Dayarathne et al. (2016a), holotype of type species HKU(M) 2969.

**Arachniotus** J. Schröt. 1893, *Gymnoascaceae, Onygenales, Eurotiomycetes*, three species, type: *A. ruber* (Tiegh.) J. Schröt., asexual morph unknown, saprobes, from soil, Poland, see Lumbsch and Huhndorf (2010; outline), Ropars et al. (2012; DNA), Kirk et al. (2013; genus accepted), cultures available for the type: MUCL 39748, needs generic revision.

**Arachnomycyes** Massee & E.S. Salmon 1902, *Arachnomycetaceae, Onygenales, Eurotiomycetes*, ten species, type: *A. nitidus* Massee & E.S. Salmon, asexual morph unknown, saprobes, Europe, see Gueidan et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence available for the type: AB075351, needs generic revision.

**Arachnopeziza** Fuckel 1870, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, c. 15 species, type: *A. aurelia* (Pers.) Fuckel., asexual morph hyphomycetous, saprobes worldwide, common in temperate and subtropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; phylogeny), cultures and sequence are available but lacks for the type species.

**Arachnophora** Hennebert 1963, *Ascomycota* genera *incertae sedis*, three species, type: *A. fagicola* Hennebert, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Arachnospora** R.F. Castañeda, Minter & Camino 2003, *Ascomycota* genera *incertae sedis*, one species, type: *A. insolita* R.F. Castañeda, Minter & Camino, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of type: MUCL 42859, cultures and sequences are unavailable, compare with *Arachnophora* and *Iyengarina*.


**Arborillus** Munt.-Cvetk. & Gómez-Bolea 1998, *Ascomycota* genera *incertae sedis*, one species, type: *A. limonae* Munt.-Cvetk. & Gómez-Bolea, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Arborispora** K. Ando., 1986, *Ascomycota* genera *incertae sedis*, four species, type: *A. palma* K. Ando, in rainwater draining from leaves of *Quercus*: Honshu, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sexual morph unknown, cultures and sequences are unavailable.


**Archaeorhizomyces** Rosling & T.Y. James 2011, *Archaeorhizomycetaceae*, *Archaeorhizomycetales*, *Archaeorhizomycetes*, two species (but many others are predicted from the analysis of environmental sequences), type: *A. finlayi* Rosling & T.Y. James, asexual morph unknown, saprobes, from soil, terrestrial, Sweden, Lithuania, see Rosling et al. (2011; taxonomy, phylogeny), Menkis et al. (2014; new species, Lithuania, phylogeny), holotype and ex-type cultures of the type: MICH 72671, CBS 128710.

**Architrypethelium** Aptroot 1991, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, seven species, type: *A. seminudum* (Mont.) Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf 2010 (outline), Kirk et al. 2013 (genus accepted), Aptroot and Lücking (2016; monograph), Lücking et al. (2016; classification), sequences are available.

**Arctocetaria** Kärnefelt & Thell 1993, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *A. andrejevii* (Oxner) Kärnefelt & A. Thell, lichenized, terrestrial (corticolous or terricolous), Northern Hemisphere (arctic), see Thell et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf 2010 (outline), Nelsen et al. (2011; DNA, phylogeny), Kirk et al. 2013 (genus accepted), Miadlikowska et al. (2014; DNA, phylogeny), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

**Arctomia** Th. Fr. 1860, *Arctomiaceae*, *Arctomiales*, *Lecanoromycetes*, ten species, type: *A. delicatula* Th. Fr. lichenized (cyanobacteria), terrestrial (saxicolous, terricolous or corticolous), cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013;
genus accepted), Otálora and Wedin (2013; DNA, phylogeny), Miadlikowska et al. (2014 DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

**Arctomollisia** Raitv. 2008, *Dermateaceae, Helotiaceae, Leotiomycetes*, two species, type: *A. oxyparaphysata* (Rehm) Raitv., asexual morph unknown, saprobes, terrestrial, Magadan, see Raitviir (2008; taxonomy), cultures and sequences are unavailable, needs generic revision.

**Arctoparmelia** Hale 1986, *Parmeliaceae, Lecanorales, Lecanoromycetes*, five species, type: *A. centrifuga* (L.) Hale, lichenized (green algae), terrestrial (mainly saxicolous), arctic and alpine regions of Northern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; DNA, phylogeny), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

**Arcuadendron** Sigler & J.W. Carmich. 1976, *Ascomycota genera incertae sedis*, three species, type: *A. ovatum* Sigler & J.W. Carmich, hyphomycetous, sexual morph unknown, soil, India, former Yugoslavia, see Hyde et al. (2011; index), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Ex-type strain of type: = ATCC 34519, CBS 122.77, sequences are unavailable, needs generic revision.


**Arecomyces** K.D. Hyde 1996, *Hyponectriaceae, Xylariales, Sordariomycetes*, eleven species, type: *A. frondicola* K.D. Hyde, ascomycetous, asexual morph unknown, saprobes, reported only from palms, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lee et al. (2013; sesquiterpenes from *A. saccharicola*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Arecophila** K.D. Hyde 1996, *Cainiaceae, Xylariales, Sordariomycetes*, fifteen species, type: *A. gulubiicola* K.D. Hyde, ascomycetous, asexual morph unknown, saprobes, reported from South East Asia and Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lee et al. (2013; sesquiterpenes from *A. saccharicola*), Maharachchikumbura et al. (2015, 2016; outline), molecular data available for two species (*Arecophila bambusae* (AY083802, AF452038), *Arecophila* sp. HKUCC 6487 (AF452039)), no molecular data from the type materials, needs generic revision.

**Arenariomyces** Höhnk 1954, *Halosphaeriaceae, Microascales, Sordariomycetes*, five species, type: *A. trifurcatus* Höhnk, aquatic, New Zealand, see Lumbsch and Huhndorf (2010; outline), Koch (2013, new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available, needs generic revision.


**Argopericonia** B. Sutton & Pascoe 1987, *Ascomycota genera incertae sedis*, two species, type: *A. elegans* B. Sutton & Pascoe, hyphomycetous, sexual morph unknown, saprobes, saprophytes, Australia, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need further revisions, holotype of the type: VPRI13846.

**Argopsis** Th.Fr. 1857, *Lecanoromycetes genera incertae sedis*, three species, type: *A. megalospora* Th. Fr., lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a
genus in Brigantiaeaceae), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Argynna Morgan 1895, Argynnaceae, Dothideomycetes, families incertae sedis, two species, type: A. polyhedron (Schwein.) Morgan, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Argynnaceae, taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Aristastoma Tehon 1933, Ascomycota genera incertae sedis, one species, type: A. concentrica Tehon, coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Zhu et al. (2012; DNA, pathogens), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Arkoola J. Walker & Stovold 1986, Dothideomycetes, genera incertae sedis, one species, type: A. nigra J. Walker & Stovold, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Venturiaceae), Zhang et al. (2012; provisionally accepted as a genus in Venturiaceae), Hyde et al. (2013; did not accept as Venturiaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Armata W. Yamam. 1958, Dothideomycetes, genera incertae sedis, one species, type: A. macrospora (W. Yamam.) W. Yamam., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Micropeltidaceae), Hyde et al. (2013; did not accept as Micropeltidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Armatella Theiss. & Syd. 1915, Armatellaceae, Meliolales, Sordariomycetes, 20 species, type: A. litseae (Henn.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, worldwide distribution, see Hosagoudar and Archana (2009; distribution on Lauraceae), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hosagoudar et al. (2013; new species), Hongsanan et al. (2015, family placement), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Arnaudiella Petr. 1927 (=Seynesiola Speg. 1918 fide Wu et al. 2011), Microthyriaceae, Microthyriales, Dothideomycetes, 13 species, type: A. caronae (Pass.) Petr., asexual morph hyphomycetous, saprophyte, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Microthyriaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014, 2015; outline), cultures and sequences are unavailable.

Aropsiclus Kohlm. & Volkm. Kohlm. 1994, Sordariomycetes, genera incertae sedis, one species, type: A. junce (Kohlm. & Volkm.-Kohlm.) Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Arpinia Berthet 1974, Pyronemataceae, Pezizales, Pezizomycetes, four species, type: A. inops Berthet, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Arthonia Ach. 1806, Arthoniaceae, Arthoniales, Arthoniomycetes, c. 500 species, type: A. radiata (Pers.) Ach. 1808, sexual morph with mainly apothecioid ascomata, asexual morph coelomycetous, lichenized, lichenicolous and ± saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Ertz and Teher (2011; phylogeny), Sundin et al. (2012, literature review), Kirk et al. (2013; genus accepted), Frisch et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.
**Arthophacopsis** Hafellner 1998, *Arthoniales* genera incertae sedis, *Arthoniomycetes*, one species, type: *A. parmeliarum* Hafellner, lichenicolous, terrestrial, North America, Europe (including Canary Islands), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of type: Hafellner 41023 (GZU), cultures and sequences are unavailable.

**Arthopyrenia** A. Massal. [nom. cons.] 1852, *Arthopyreniaceae*, *Pleosporales*, *Dothideomycetes*, five species, type: *A. cerasi* (Schrad.) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Arthopyreniaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Lücking et al. (2016; classification), cultures and sequences are available.

**Arthotheliopsis** Vain. 1896, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *A. hymenocarpoides* Vain., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

**Arthothelium** A. Massal. 1852, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, ten species, type: *A. spectabile* Flot. ex A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Arthrinium** Kunze 1817, *Apiosporaceae*, *Xylariales*, *Sordariomycetes*, 64 species, type: *A. caricicola* Kunze & J.C. Schmidt, saprobes, pathogenic, endophytic, terrestrial, widely distribute, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2013; asexual morph, morphology, phylogeny), Maharachchikumbura et al. (2015; outline), Senanayake et al. (2015; morphology, phylogeny), Dai et al. (2016; sexual and asexual morph, morphology, phylogeny), cultures and sequences are unavailable for type species.

**Arthrobotrys** Corda 1839, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, 112 species and 08 orthographic variants, type: *A. superba* Corda, sexual morph *Orbilia*, Nematophagous, terrestrial, marine, worldwide see Han et al. (2008; extrolite profiling), Li et al. (2008; taxonomic revision), Swe et al. (2008; new species, marine), Wang et al. (2008; amino acid effect), Braga et al. (2009; predatory activity), Li et al. (2009; new species), Braga et al. (2010; in vitro predatory activity), Ranjbar-Bahadori et al. (2010; in vivo study), Silva et al. (2010; control sheep gastroenteritis), Zhang et al. (2010; phylogeny), Carvalho et al. (2011; predatory activity after freeze dry), Niu and Zhang (2011; review), Su et al. (2011; new species), Wei et al. (2011; Arthrobotrisins), Yang et al. (2011; genomics, proteomics), Zhang et al. (2011; divergence), Freire et al. (2012; effect of Fusarium extrolites), Qiao et al. (2012; description), Singh et al. (2012; biocontrol potential), Wu et al. (2012; new species), Zhang et al. (2012; metabolites study), Arias et al. (2013; developmental biology), Chen et al. (2013; trap formation), Falbo et al. (2013; characterization), Jamshidnejad et al. (2013; biocontrol activity), Liang et al. (2013; Proteomic and transcriptional analyses), Singh et al. (2013; role in plant immunity), Wang et al. (2013; mutant predatory activity), Wang et al. (2013; immunological effect of nanoparticles), Wu et al. (2013; metabolite profiling), Yang et al. (2013; chitinase encoding gene analysis), Zhang et al. (2013; genetic diversity), Braga et al. (2014; predatory activity after preservation), Liu et al. (2014; new species), Mostafanezhad et al. (2014; nematode control), Pandit et al. (2014; protease study), Zhao et al. (2014; Malate synthase gene), Liang et al. (2015; cell signalling). Molecular data available for few species, including type: KT215210. Holotype and ex – type of type: unknown. (Although, number of specimens of type: are recorded).

**Arthrobotryum** Ces. 1854, *Ascomycota* genera incertae sedis, five species, type: *A. stilboideum* Ces., coelomycetous, sexual morph unknown, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.


Arthroderma Curr. 1860, Arthrodermataceae, Onygenales, Eurotiomycetes, 41 species, type: A. curreyi Berk, asexual morph unknown, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus not accepted), sequences and culture are available for type: NCPF 0797


Arthrorhaphis Th.Fr. [nom.cons.] 1860, Arthrorhaphidaceae, order incertae sedis, Lecanoromycetes, 13 species, type: A. flavovirescens (A. Massal.) Th. Fr.; lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

Arthrorhynchus Kolen. 1857, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, three species, one additional species (A. acrandros Merola) is doubtful, type: A. nycteribiae (Peyr.) Thaxt., no asexual state, biotrophic, hosts are Nycteribiidae (Diptera: Hippoboscoidea), Eastern Hemisphere distribution, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (in review; DNA, review), sequences are available for type species.

Arthrorhrys A. Massal. 1853, Ramalinaceae, Lecanorales, Lecanoromycetes, one species, type: A. populorum Massal., with ascomata, lichenized (green algae), terrestrial (corticolous), Northern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Arthrowallemia R.F. Castañeda, Dania García & Guarro 1998, Ascomycota genera incertae sedis, two species, type: A. formosa R.F. Castañeda, Dania García & Guarro, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C95/88, sequences are unavailable, compare with Arthrocristula, Bahusakala and Parasympodiella.

Articulospora Ingold 1942, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, six species, type: *A. tetracladia* Ingold, hyphomycetous, saprobes, endophytic, aquatic, worldwide, see Seifert et al. (2011; morphology), Seena et al. (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Baschien et al. (2013; phylogeny), compare with Geniculospora and Isthmotricladia.

Artocarpomyces Subram. 1996, *Ascomycota* genera incertae sedis, one species, type: *A. paradoxa* Subram., saprobes, terrestrial, Singapore, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: MUBL 3147, cultures or cultures and sequences are unavailable, needs generic revision.


Arwidssonia Arwidssonia B. Erikss. 1974, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *A. empetri* (Rehm) B. Erikss., asexual morph unknown, plant pathogen, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Arxiella Papendorf 1967, *Dothideomycetes* genera incertae sedis, one species, type: *A. terrestris* Papendorf, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type:, needs generic revision.

Arxiomyces P.F. Cannon & D. Hawksw. 1983, *Ceratostomataceae*, *Melanosporales*, *Sordariomycetes*, one species, type: *A. vitis* (Fuckel) P.F. Cannon & D. Hawksw. (syn. *Ceratostoma vitis* Fuckel), asexual morph unknown, on bark, Europe, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.


unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ascobolus** Pers. 1792, *Ascobolaceae, Pezizales, Pezizomycetes*, more than 61 species, type: *A. pezizoides* Pers., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Doveri (2011, 2014; worldwide key), cultures and sequences are available but lacks for the type species.

**Ascocalvatia** Malloch & Cain 1971, *Onygenaceae, Onygenales, Eurotiomycetes*, one species, type: *A. alveolata* Malloch & Cain, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Doveri (2011, 2014; worldwide key), cultures available but lack for the type species.

**Ascocalyx** Naumov 1926 (= *Bothrodiscus* Shear 1907 fide Johnston et al. 2014), *Godroniaceae, Helotiales, Leotiomycetes*, four species, type: *A. abietis* Naumov, asexual morph *Bothrodiscus*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available.

**Ascocephalophora** K. Matsush. & Matsush. 1995, *Endomycetaceae, Saccharomycetales, Saccharomycetes*, one species, type: *A. petasiformis* K. Matsush. & Matsush., Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Ascochalara** Réblová 1999, *Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes*, one species, type: *A. gabretae* Réblová, asexual morph chalara-like, saprobes, Czech Republic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequence available but lack for the type species, generic placement is based on non-type species, needs generic revision.

**Ascochyta** Lib. 1830, *Didymellaceae, Pleosporales, Dothideomycetes*, c. 400 species, type: *A. pisi* Lib., coelomycetous, saprobes, pathogens, terrestrial, worldwide, see Chilvers et al. (2009; pathogens), Aveskamp et al. (2010; phylogeny), de Gruyter et al. (2009; phylogeny), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), Chen et al. (2015; taxonomy, phylogeny), cultures and sequences are available, needs generic revision as more than 1000 records are available.

**Ascochytopsis** Henn. 1905, Ascomycota incertae sedis, 5 species, type species *A. vignae* Henn. 1905, coelomycetous, presumed sexual morph *Parodiella* (Cannon and Kirk 2007), Saprobes, endophytic, pathogenic, Terrestrial and aquatic, Cosmopolitan (incl. China, Switzerland, Sudan, South Africa, Tanzania) (Schnell 1987; Farr and Rossman 2016). See Sun et al. (2011; extracellular enzyme activities), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ascochytulina** Petr. 1922, Ascomycota incertae sedis, three species, type: *A. deflectens* (P. Karst.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ascoclyvatella** Otani 1974, *Helotiaceae, Helotiales, Leotiomycetes*, eight species, type: *A. sakaii* Y. Otani, asexual morph gliomastix-like, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ascochytulina** Otani 1974, *Helotiaceae, Helotiales, Leotiomycetes*, eight species, type: *A. sakaii* Y. Otani, asexual morph gliomastix-like, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ascochytulina** Otani 1974, *Helotiaceae, Helotiales, Leotiomycetes*, eight species, type: *A. sakaii* Y. Otani, asexual morph gliomastix-like, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ascochytulina** Otani 1974, *Helotiaceae, Helotiales, Leotiomycetes*, eight species, type: *A. sakaii* Y. Otani, asexual morph gliomastix-like, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ascochytulina** Otani 1974, *Helotiaceae, Helotiales, Leotiomycetes*, eight species, type: *A. sakaii* Y. Otani, asexual morph gliomastix-like, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Ascocorticium Bref. 1891, Ascocorticaceae, Heliotiales, Leotiomycetes, eight species, type: A. albidum Bref. & Tavel, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascocoryne J.W. Groves & D.E. Wilson 1967 (= Coryne Nees 1816; = Pirobasidium Höhn. 1902; Pleurocolla Petr. 1924; = Endostilbum Malençon 1964 fide Johnston et al. 2014), Heliotiales, Leotiales, Leotiomycetes, eight species, type: A. sarcoides (Jacq.) J.W. Groves & D.E. Wilson, asexual morph Monilia, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Johnston et al. (2014; nomenclature), Zhu et al. (2016; pathogens, phylogeny), cultures and sequences are available.

Ascocraterea Kohlm. 1986, Aigialaceae, Pleosporales, Dothideomycetes, one species, type: A. manglicola Kohlm., asexual morph unknown, saprobes, in marine habitats, worldwide, see Suetrong et al. (2009; phylogeny, morphology), Schoch et al. (2009; phylogeny), Besituto et al. (2010; diversity), Zainuddin et al. (2010; antimicrobial activities), Pang et al. (2010; diversity), Sakayaroj et al. (2011b; diversity), Zhang et al. (2011; phylogeny), Boonmee et al. (2012; phylogeny), Jones et al. (2012; phylogeny, review), Lee et al. (2012; checklist), Ariyawansa et al. (2014a; phylogeny), Wanasinghe et al. (2015; phylogeny), Zhang et al. (2016; phylogeny), holotype and ex-isotype of type: J.K. 4812a (FH), J.K.4812b (IMS).


Ascodesmis Tiegh. 1876, Ascodesmidaceae, Pezizales, Pezizomycetes, six species, type: A. aurea Tiegh., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Dovieri (2011; new record from Italy), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for type species.

Ascodichaena Butin 1977 (= Polymorphum Chevall. 1822 fide Johnston et al. 2014), Ascodichaenaceae, Rhytismatales, Leotiomycetes, two species, type: A. rugosa Butin, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), culture available for type: DSM 4703.

Ascofascicula Matsush. 2003, Ascomycota genera incertae sedis, six species, type: A. talaroluteoides Matsush., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available but lacks for type species.

Ascogapha Velen. 1934, Incertae sedis, Helotiales, Leotiomycetes, one species, type: A. hederae Velen., ascomycetous, asexual morph unknown, former Czechoslovakia, on decaying trunk of Hederae helicis, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ascoidea Bref. 1891, Ascoideaceae, Saccharomycetales, Saccharomycetes, three species, type: A. rubescens Bref., asexual morph unknown (by budding of cells and formation of hyphae), saprophyte, terrestrial, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Ascolacicola Ranghoo & K.D. Hyde 1998, Sordariales genera incertae sedis, Sordariomycetes, one species, type: A. aquatica Ranghoo & K.D. Hyde, asexual morph Trichocladium unisepatum (Berk. & Broome) S. Hughes & Piroz., saprobes, aquatic, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available.

**Ascolectus** Samuels & Rogerson 1990, *Saccardiaceae*, *Ascomycota* families incertae sedis, one species, type: *A. albus* Samuels & Rogerson, asexual morph unknown, saprobes, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Ascophanus** Boud. 1869, *Thelebolaceae*, *Thelebolales*, *Leotiomyctes*, one species, type: *A. granuliformis* (P. Crouan & H. Crouan) Boud., asexual morph unknown, saprobes, terrestrial, Antarctica, see Lumbsch and Huhndorf (2010; outline), Ziao et al. (2010; antifreeze proteins), Kirk et al. (2013; genus accepted), Bansal et al. (2014; antifreeze proteins), cultures and sequences are available.

**Ascopolyergus** Möller 1901, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *A. polychrous* Möller, asexual morph unknown, saprobes, terrestrial, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Ascorhiza** Lecht.-Trinka 1931, *Sordariomycetes*, genera incertae sedis, one species, type: *A. leguminosarum* Lecht.-Trinka, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Ascorhizoctonia** Chin S. Yang & Korf 1985, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, seven species, type: *A. praecox* Chin S. Yang & Korf, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species.

**Ascoronospora** Matsush. 2003, *Pleosporales*, genera incertae sedis, *Dothideomycetes*, one species, type: *A. yakuensis* Matsush., asexual morph coronospora-like, saprobes, terrestrial, Japan, see Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Ascosacculum** J. Campb., J.L. Anderson & Shearer 2003, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, two species, type: *A. aquaticus* (K.D. Hyde) J. Campb., J.L. Anderson & Shearer, saprobes, aquatic, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.; needs generic revision.

**Ascosorus** Henn. & Ruhland 1900, *Ascomycota* genera incertae sedis, one species, type: *A. floridanus* (Ellis & G. Martin) Henn. & Ruhland, asexual morph unknown, saprobes, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ascotricha** Berk. 1838, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *A. chartarum* Berk., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cheng et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Ascotrichella** Valldos. & Guarro 1988, *Xylariales*, genera incertae sedis, *Sordariomycetes*, one species, type: *A. hawksworthii* Valldos. & Guarro, asexual morph hyphomycetous, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Ascovaginospora** Fallah, Shearer & W.D. Chen 1997, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *A. stellipala* Fallah, Shearer & W.D. Chen, saprobous, aquatic, USA, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariomycetidae*, genera incertae sedis), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: ILLS 52319, sequences are available, needs generic revision.

**Ascoyunnania** L. Cai & K.D. Hyde 2005, *Sordariomycetes* genera incertae sedis, two species, type: *A. aquatica* L. Cai & K.D. Hyde, saprobes, aquatic, China, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Ascozonus** (Renny) E.C. Hansen 1877, *Thelebolaceae*, *Thelebolales*, *Leotiomyecetes*, c. six species, type: *A. cunicularius* (Boud.) Marchal, asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but acks for the type species.

**Ashtaangam** Subram. 1995, *Ascomycota* genera incertae sedis, one species, type: *A. sundaram* Subram., hyphomycete, sexual morph unknown, saprobe, terrestrial, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Holotype MUBL 3127.

Asia, Australia, Neotropics, see Sri-Indrasutdhii et al. (2010; sexual morph), Boonyuen et al. (2011; new species, phylogeny), Hu (2011; phylogeny), Seifert et al. (2011; morphology),
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Zhang (2013; key to freshwater Canalisporium spp.), Zhao et al. (2013; accepted in review), culture and sequences are available.

Aspergillus P. Micheli ex Haller 1768 (= Chaetosartorya Subram. 1972; = Cristaspora Fort & Guarro 1984; = Dichotomomyces Saito ex D.B. Scott 1970; = Emericella Berk. 1857; = Eurotium Link 1809; = Fennelia B.J. Wiley & E.G. Simmons 1973; = Neocarpenetes Udagawa & Uchiy. 2002; = Neopetromyces Frisvad & Samson 2000; = Neosartorya Malloch & Cain 1973; = Petromyces Malloch & Cain 1973; = Phialosimplex Sigler, Deanna A. Sutton, Gibas, Summerb. & Iwen 2010; = Polypaecilum G. Sm. 1961), Aspergillaceae, Eurotiales, Eurotiomycetes, c. 360 species, type: A. glaucus (L.) Link, mostly terrestrial, but also reported from aquatic environments, mainly saprobes associated with soil, plant material and foodstuffs, but also including phytopathogenic and clinically-relevant fungi causing opportunistic mycoses (aspergillosis) and mycotoxicoses in various vertebrates including humans, cosmopolitan, monophyletic but morphologically diverse both in its sexual and asexual morphs, see Peterson (2008; phylogeny), Sigler et al. (2010; morphology as “Phialosimplex”), Varga et al. (2010a, 2010b, 2015; phylogeny, new species, mycotoxins), Houbraken and Samson (2011; phylogeny), Guarro et al. (2012; selected soilborne species), Hubka et al. (2013a, 2013b, 2015, 2016a, 2016b; phylogeny, new combinations, new species), Asgari et al. (2014; new species, sexual morph), Samson et al. (2014; polyphasic taxonomy, new species, outline), Sugui et al. (2014; new species), Crous et al. (2015; new species), Guinea et al. (2015; new species), Jurjevic et al. (2015; new section and new species), Arzanlou et al. (2016; new species), Tsang et al. (2016; new species), Visagie et al. (2017; new species), ex-neotype strain of the type: CBS 516.65, sequences are available from Peterson (2008).

Asperisporium Maubl. 1913, Mycosphaerellaceae, Capnodiales, Dothideomycetidae, Dothideomycetes, 12 species, type: A. caricae (Speg.) Maubl., hyphomycetous, saprobes, terrestrial, America, see Seifert et al. (2011; morphology), Minnis et al. (2011; phylogeny, typification), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), ex-neotype strains of type: CBS 130298.

Aspicilia A.Massal. [nom.cons.] 1852, Megasporaceae, Pertusariaceae, Lecanoromycetes, 200 species, type: A. cinerea (L.) Körb., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Nordin et al. (2010; phylogeny), Sohrabi et al. (2010; DNA), Raggio et al. (2011; survive exposure to space), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Aspiciliopsis (Müll.Arg.) M.Choisy 1929, Trapeliaceae, Trapeliaceae, Lecanoromycetes, one species; type: A. macrophthalma (Hook. f. & Taylor) B. de Lesd., lichenized, see Hodgkinson and Lendemer (2011; taxonomy), Lücking et al. (2016; classification), sequences are available.

Aspidothelium Vain. 1890, Thelenellaceae, Ostropales, Lecanoromycetes, 17 species, type: A. cinerascens Vain., lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Aspidotheliaceae), Kirk et al. (2013; genus accepted), Aptroot et al. (2014; new species), Nelsen et al. (2016; phylogeny), Lücking et al. (2016; classification), sequences are available.

Aspilaima Bat. & H. Maia 1961, Ascomycota genera incertae sedis, one species, type species A. platoniae Bat. & H. Maia 1961, Coelomycetous, Sexual morph not reported, Saprobens, Terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Aspilidea Hafellner 2001, Ostropomycetidae, incertae sedis, Lecanoromycetes, one species, type: A. myrinii (Fr.) Hafellner, lichenized (green algae), terrestrial (saxicolous), restricted to the alpine zone, see Jørgensen and Nordin (2009, DNA), Lumbsch and Huhndorf (2010;
Asterostomella McAlpine 1897, Meliolaceae, Meliolales, Sordariomycetes, more than 300 species, type species: A. solani McAlpine, asexual morph unknown, pathogens saprobes, terrestrial, worldwide, see Hosagoudar and Archana (2009; host distribution in India), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013 genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.


Asterinella Theiss. 1912, Asterinaceae, Asterinales, Dothideomycetes, c 40 species, type: A. puiggarii (Speg.) Theiss., asexual morph coelomycetous (= Asterostomula-like), epiphytes, biotrophic, terrestrial, worldwide, no molecular data, see Hofmann (2009; review, accepted as a genus in Asterinaceae), Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Wu et al. (2014; review, transferred to Asterinaceae), Wijayawardene et al. (2014; outline), Wu et al. (2014), placement in Asterinaceae supported by morphology. Holotype of type: LPS 1377, cultures and sequences unavailable.

Asterinena Bat. & Gayão 1953, Dothideomycetes genera incertae sedis, one species, type: A. puiggarii (Speg.) Theiss., asexual morph unknown, foliar epiphytes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in Dothideomycetes genera incertae sedis), Wu et al. (2014; accepted as a genus in Asterinaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Asterinothyriella Bat. & Cif. 1959, Ascomycota genera incertae sedis, three species, type: A. landolphiae Bat. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, Uganda, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asterinothryium Bat., Cif. & H. Maia 1959, Ascomycota genera incertae sedis, one species, type: A. singulatum Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013 genus accepted), cultures and sequences are unavailable.

Asteristion Leight. 1870, Graphidaceae, Ostropales, Lecanoromycetes, five species, type: A. erumpens Leight., asexual morph unknown, lichenized fungi, terrestrial, tropical, placement in Graphidaceae supported by molecular data, new synonym Phaeotrema Müll.Arg., see Medeiros et al. 2016, Lücking et al. (2014, 2016; classification), sequences are available.

Asteroctonium Syd. & P. Syd. 1903, Ascomycota genera incertae sedis, two species, type: A. saccardoii Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, China, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013 genus accepted), cultures and sequences are unavailable.

Asterodothis Theiss. 1912, Dothideomycetes genera incertae sedis, one species, type: A. solaris (Kalchbr. & Cooke) Theiss., asexual morph unknown, saprobes, terrestrial, USA, see
Lumbsch and Huhndorf (2010; outline, accepted as a genus in Asterinaceae), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014c; transferred this genus from Asterinaceae to Dothideomycetes genera incertae sedis), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Asteroglobulus** Brackel 2011, Ascomycota genera incertae sedis, one species, type: *A. gisela* Brackel, coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Europe, see Brackel (2011; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

**Asteroglobulus** Brackel 2011, Ascomycota genera incertae sedis, three species, type: *A. gisela* Brackel, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Asteroma** DC. 1815, Gnomoniaceae, Diaporthales, Sordariomycetes, more than 200 species, type specie: *M. stellaris* (Pers.) Theiss. & Syd., sexual morph Gnomoniella, Plagiostoma, pathogens associated with leaf spots, saprobes, terrestrial, worldwide distribution, see Maharachchikumbura et al. (2015; outline), sequences are available for *A. alneum*.

**Asteromassaria** Höhn. 1917, Dothideomycetes genera incertae sedis, type: *A. macrospora* (Desm.) Höhn., twelve species but could be higher, asexual morph coelomycetous, parasites, terrestrial, Europe, India, Japan, USA, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as a genus in Morosphaeriaceae), Kirk et al. (2013; genus accepted), Eriksson (2014), Wijayawardene et al. (2014; outline), holotype of type: CBS H-15119, cultures and sequences are available but lacks for the type species.

**Asteromella** Pass. & Thüm. 1880, Dothideomycetes genera incertae sedis, 265 species, type: *A. ovata* Thüm., polyphyletic, coelomycetous, sexual morph unknown, widespread, generally regarded as the microconidial or spermogonial states of Mycosphaerella species, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lectotype of *Asteromella tiliae = CBS 265.94*, reference sequences are available at GenBank = FR681903-FR681905, KC354574, JN662478, needs generic revision.

**Asteromellopsis** H.E. Hess & E. Müll. 1951, Dothideaceae, Dothideales, Dothideomycetes, one species, type species *A. insculpta* H.E. Hess & E. Müll., saprobes, anamorphic, Dothidea insulpata sexual morph reported for *A. insculpta* (Hess and Müller 1951), Switzerland, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Asteromidium** Speg. 1888, Ascomycota genera incertae sedis, three species, type: *A. imperspicuum* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Asteromyces** Moreau & M. Moreau ex Hennebert 1962, Ascomycota genera incertae sedis, one species, type: *A. cruciatus* Moreau & M. Moreau ex Hennebert, hyphomycetous, on seaweeds, sand grains, drift wood, saprobe, mostly marine temperate, see Seiffert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Gulder et al. (2012; biochemistry), Jones et al. (2015; outline), cultures and sequences are unavailable.

**Asteronectrioidea** Cant. 1949, Incertae sedis, one species, type: *A. heveicola* Cant., possibly hyphomycetous, sexual morph unknown, saprobes, Africa, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Asteronia** (Sacc.) Henn. 1895, Dothideomycetes genera incertae sedis, two species, type: *A. sweetiae* Henn., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Kirk et al. (2013; genus accepted).
Asteropororum Müll.Arg. (1884), Ascomycota genera incertae sedis, seven species, type: A. perminimum Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Asteroscutula Petr. 1948, Ascomycota genera incertae sedis, one species, type: A. sydowii Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Ecuador, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013 genus accepted), cultures and sequences are unavailable.

Asterosporium Kunze 1819, Diaporthales genera incertae sedis, seven species, type: A. asterospermum (Pers.) Hughes, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Kamiyama et al. (2009; phylogeny), Tanaka et al. (2010; taxonomy, phylogeny), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 112404.

Asterostomopora Bat. & H. Maia 1960, Ascomycota genera incertae sedis, one species, type: A. jamaicensis Bat. & H. Maia, coelomycetous, Jamaica, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asterostomopsis Bat., Cif. & H. Maia 1959, Ascomycota genera incertae sedis, one species, A. ghanaensis Bat., Cif. & H. Maia, coelomycetous, rarely reported and in case on leaves of Lawsonia inermis in Ghana and India, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), and sequences are unavailable, needs generic revision.

Asterostomula Theiss. 1916, Ascomycota genera incertae sedis, four species, type: Asterostomula loranthi Theiss., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), treated as a genus in Microthyriaceae, Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asterostomulina Bat., J.L. Bezerra & H. Maia 1964, Ascomycota genera incertae sedis, one species, type: A. phoebeicola Bat., J.L. Bezerra & Cavalc., coelomycetous, sexual morph unknown and rarely reported and in case on Phoebe rivularis, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Asterotexis Arx 1958, Asterotexiaceae, Asterotexiales, Dothideomycetes, two species, type: A. cucurbitacearum (Rehm) Arx, asexual morph unknown epiphytes, pathogens, biotrophic, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in Asteriaceae), Lumbsch and Huhndorf (2010; outline), accepted as a genus in Asterinaceae). Hyde et al. (2013; review, keys, accepted as a genus in Asterinaceae), Hongsanan et al. (2014; taxonomy, keys, accepted as a genus in Asterinaceae), Wijayawardene et al. (2014; outline, accepted as a genus in Asterinaceae), Guatimosim et al. (2015; phylogeny, DNA, transferred to a newly described family Asterotexiaceae), placement in Asterotexiaceae supported by morphology and phylogeny, syntype of type: S-F7565, type sequence KP143734 (voucher VIC 24814), HQ610510 (voucher PMA M-0141224).

Asterothyrium Müll. Arg. 1890, Gomphillaceae, Ostropales, Lecanoromycetes, 33 species; type: A. argenteum Müll. Arg., lichenized, see Flakus and Lücking (2008; new species), Lücking et al. (2016; classification), sequences are available.

Astomella Thirum. 1947, Ascomycota genera incertae sedis, one species, type: A. neolitseae Thirum., saprobes, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Astronatelia Bat. & H. Maia 1962, Ascomycota genera incertae sedis, one species, type: A. andromedae Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013 genus accepted), cultures and sequences are unavailable.

Astrophaeriella Syd. & P. Syd. 1913, Pleosporales genera incertae sedis, 5 new species, type: A. fusispora Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, widespread, see Tanaka et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Liu et al. 2011; phylogeny), Zhang et al. (2012; morphology, phylogeny), Kirk et al. (2013; genus accepted), cultures available for type: MFLUCC 10-0555

Astrothelium Eschw. 1824, Trypetheliaceae, Trypetheliales, Dothideomycetes, c. 250 species, type: A. conicum Eschw., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Nelsen et al. (2014a; phylogeny) Aptroot and Lücking (2016; monograph), Lücking et al. (2016; classification).

Asymmetricospora J. Fröhl. & K.D. Hyde, 1998, Melanommataceae, Pleosporales, Dothideomycetes, one species, type: A. calamicola J. Fröhl. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; morphology; nomenclature, phylogeny), cultures and sequences are unavailable, needs generic revision.

Asymmetrispora Thambugala & K.D. Hyde 2015, Floricolaceae, Pleosporales, Dothideomycetes, two species, type: A. tennesseensis (Mugambi, A.N. Mill. & Huhndorf) Thambugala & Hyde, asexual morph unknown, saprobes, terrestrial, USA and France, two species, see Thambugala et al. (2015b; phylogeny), holotype of type: ANM911, cultures and sequences are unavailable.

Athallia Arup, Frödén & Söchting 2013, Teloschistaceae, Teloschistales, Lecanoromycetes, 13 species, type: A. holocarpa (Hoffm.) Arup, Frödén & Söchting with ascomata, lichenized (‘Pseudotrebouxia’), (corticolous, epixylic, tericolous, saxicolous), cosmopolitan, see Arup et al. (2013, DNA), Lücking et al. (2016, classification), Vondrák et al. (2016, geographical range), sequences are available for voucher JV14428 of the type: (fide Arup et al. 2013).

Atichia Flot. 1850 (= Seuratia Pat. fide Rossman et al. 2016), Ascomycota family incertae sedis, four species, type: A. mosigii Flot., hyphomycetous, sexual morph Seuratia Pat., widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures or cultures and sequences are unavailable, needs generic revision.


Atopospora Petr. 1925, Venturiaceae, Venturiales, Dothideomycetes, two species, type: A. betulina (Fr.) Petr., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; accepted as a genus in Venturialesae), Hyde et al. (2013; accepted as a genus in Venturialesae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.
**Atractilina** Dearn. & Barthol. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *A. callicarpae* Dearn. & Barthol., hyphomycetous, sexual morph unknown, fungicolous, terrestrial, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Atractium** Link 1809, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *A. stilbaster* Link, hyphomycetous, sexual morph unknown, saprobes or isolated from drinking water, terrestrial, aquatic, worldwide, see Gräfenhan et al. (2011; phylogeny), Seifert et al. (2011; morphology), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), epitype and ex-epitype strains of type: CBS 410.67.

**Atractillum** Tode 1790, *Ascomycota* genera *incertae sedis*, one species, type: *A. ubiquitarius* Tode, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Atrocybe** Velen. 1947, *Helotiales*, genera *incertae sedis*, four species, type: *A. loricelliformis* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

**Atrosetaphiale** Matsush. 1995, *Ascomycota* genera *incertae sedis*, two species, type: *A. flagelliformis* Matsush., hyphomycetous, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Atrotorquata** Kohlm. & Volkm. 1993, *Cainiaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *Atrotorquata lineata* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, Italy, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), only *Atrotorquata spartii* has sequence: MFLU 14–0738, MFLUCC 13–0444, further sequence are necessary for confirm its placement in *Cainiaceae*.

**Auerswaldia** Sacc. 1883, *Dothideomycetes* genera *incertae sedis*, 2 new species, type: *A. examinans* (Mont. & Berk.) Sacc., asexual morph coelomycetous, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2012; phylogeny, treated as a genus in *Botryosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Botryosphaeriaceae*), Phillips et al. (2013; phylogeny, excluded from *Botryosphaeriaceae*), cultures and sequences are unavailable for type species, needs generic revision.

**Auerswaldiella** Theiss. & Syd. 1914, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, four species, type: *A. puccinioides* (Speg.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Liu et al.
(2012; accepted as a genus in *Botryosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Wijayawardene et al. (2014, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Aulacostroma** Syd. & P. Syd. 1914, *Parmulariaceae*, Asterinales, Dothideomycetes, five species, type: *A. palawanense* Syd. & P. Syd., asexual morph unknown. Epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Wijayawardene et al. (2014; outline), placement *Parmulariaceae* supported by morphology, cultures and sequences are unavailable.

**Aulaxina** Fée 1825, Graphidaceae, Ostropales, Lecanoromycetes, 13 species, type: *A. opegraphina* Fée, with ascomata, lichenized (*Trebouxia*), terrestrial (foliicolous and corticolous), tropical, see Lücking (2008; outline), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016, classification), Sanders and de los Ríos (2016; outline), sequences are available for *Aulaxina minuta* fide Grube et al. (2004) and *Aulaxina quadrangular* fide Lücking et al. (2004).

**Aulographina** Arx & E. Müll. 1960, *Teratosphaeriaceae*, Capnodiales, Dothideomycetes, two species, type: *A. pinorum* (Desm.) Arx & E. Müll., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as genus in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted as genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, transferred to *Teratosphaeriaceae*), Wijayawardene et al. (2014; outline), placement in *Teratosphaeriaceae* supported by morphology and phylogeny, holotype of type: PC 0084689.

**Aulographum** Lib. 1834, *Aulographaceae*, Asterinales, Dothideomycetes, no new species, type: *A. hederae* Lib., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for type *MFLUCC 13-0001*, CPC21373.

**Aulospora** Speg. 1909, Sordariomycetes, genera incertae sedis, 1 species, type: *A. epimyces* (Speg.) Speg., asexual morph unknown, saprobes, terrestrial, Argentina, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.


**Aurantiosacculus** Dyko & B. Sutton 1979, *Cryphonectriaceae*, Diaporthales, Sordariomycetes, three species, type: *A. eucalypti* (Cooke & Massee) Dyko & B. Sutton, coelomycetous, sexual morph unknown, folicolous, pathogens, saprobes, three species, Australia, see Crous et al. (2012; morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of the type: Reader No. 24 K.


**Auratiopycnidiella** Crous & Summerell 2012, *Diaporthales* genera incertae sedis, Sordariomycetes, one species, type: *A. tristaniopsidis* Crous & Summerell, coelomycetous, sexual morph unknown, pathogens, terrestrial, Australia, see Crous et al. (2012; morphology,

Auriculora Kalb 1988, Ramalinaceae, Lecanorales, Lecanoromycetes, one species, type: A. byssomorpha (Nyl.) Kalb, lichenized, Neotropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; classification), Lücking et al. (2016; classification), sequences are unavailable.

Aurilolum Begoude, Gryzenh. & Jol. Roux 2010, Cryphonectriaceae, Diaporthales, Sordariomycetes, asexual morph ceolomycetous, known only from the type: A. marmelostoma, pathogens, terrestrial, Cameroon, see Begoude et al. (2010; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), extype of type: CBS 124928 = CMW28290; ex-paratypes of type: CBS 124929, CBS 124930; holotype of type: PREM 60256.

Aurophora Rifai 1968, Sarcoscyphaceae, Pezizales, Pezizomycetes, one species, type: A. dochmià (Berk. & M.A. Curtis) Rifai, asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Aurosphaeria Sun J. Lee, Strobel, Eisenman, Geary, Vargas & S.A. Strobel 2009, Ascomycota genera incertae sedis, one species, type: A. flaviradians Sun J. Lee, Strobel, Eisenman, Geary, Vargas & S.A. Strobel, coelomycetous, sexual morph unknown, saprobes, terrestrial, Bolivia, see Lee et al. (2009; taxonomy), Wijayawardene et al. (2012, 2017; outline), holotype of the type: MONT 2349, cultures and sequences are available for the type: AF540495 (ITS) (fide Helms et al. 2003), sequence available.

Australiaena Matzer, H. Mayrhofer & Elix 1997, Physciaceae, Caliciales, Lecanoromycetes, one species, type: A. streimanni Matzer, H. Mayrhofer & Elix, with ascomata, lichenized (green algae), terrestrial (saxicolous), Australia, Papua-New Guinea see Lumbsch and Huhndorf (2010; outline), Gayà et al. (2012; phylogeny), Krika et al. (2016; outline), Prieto et al. (2013; phylogeny), Lücking et al. (2016, classification), Prieto and Wedin (2016; phylogeny), sequences are available for the type: AF540495 (ITS) (fide Helms et al. 2003), sequence available.

Austrella P.M. Jørg. 2004, Pannariaceae, Peltigerales, Lecanoromycetes, two species, type: A. arachnoidea P.M. Jørg., with ascomata, lichenized (Nostoc), terrestrial (corticolous), Australia, New Zealand, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016, classification), sequences are available for the type species.

Austroafricana Quaedvliet & Crous 2014, Teratosphaeriaceae, Capnodiales, Dothideomycetes, hyphomycetous, three species, type: A. associata (Crous & Carnegie) Quaedvliet & Crous, asexual morph unknown, pathogens, terrestrial, Australia, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; outline), holotype of the type: CBS-H 19833, ex-type strain of type: CPC 13119.

Austrocenangium Gamundí 1997, Helotiaceae, Helotiales, Leotiomycetes, two species, type: A. australis (Speg.) Gamundi, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Austrographa Sparrius, Elix & A.W. Archer 2010, Roccellaceae, Arthoniales, Arthoniomyces, three species, type: A. kurruminensis Sparrius, Elix & A.W. Archer,
lichenized, see Sparrius et al. (2010, 2013; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

**Austrolecia** Hertel 1984, *Catillariaceae, Lecanorales, Lecanoromycetes*, one species, type: *A. antarctica* Hertel, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Austroparmeliella** (P.M. Jørg.) P.M. Jørg. 2014, *Pannariaceae, Peltigerales, Lecanoromycetes*, two species, type: *A. arachnoidea* P.M. Jørg., with ascomata, lichenized (*Nostoc*), terrestrial (corticolous), Australia, New Zealand, see Lücking et al. (2016, classification), sequences are available for the type species.

**Austroparmelina** A. Crespo, Divakar & Elix 2010, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 15 species, type: *A. endoleuca* (Taylor) A. Crespo, Divakar & Elix, with ascomata, lichenized (green algae), terrestrial (corticolous, saxicolous), Australasia, South Africa, see Crespo et al. (2010a, b; taxonomy), Kantvilas and Divakar (2013; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Austropeltum** Henssen, Döring & Kantvilas 1992, *Sphaerophoraceae, Lecanorales, Lecanoromycetes*, one species, type: *A. glareosum* Henssen, Döring & Kantvilas, with ascomata, lichenized (green algae), terrestrial (terricolous), Tasmania and New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification).

**Austroplaca** Søchting, Frödén & Arup 2013, *Teloschistaceae, Teloschistales, Lecanoromycetes*, ten species, type: *A. ambitiosa* (Darb.) Søchting, Frödén & Arup, lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification); sequences are available.

**Austropleospora** R.G. Shivas & L. Morin 2010, *Didymosphaeriaceae, Pleosporales, Dothideomycetes*, two species, type: *A. osteospermi* R.G. Shivas & L. Morin, asexual morph coelomycetous, pathogens, terrestrial, Australia, South Africa, see Morin et al. (2010), Ariyawansa et al. (2015; phylogeny), holotype of the type: BRIP 52234, isotype BRIP 51628 (includes ex-isotype culture).

**Austroroccella** Tehler & Ertz 2013, *Roccellaceae, Arthoniales, Arthoniomyces*, one species, type: *A. gayana* (Mont.) Tehler & Ertz, sexual morph with apothecioid ascomata, asexual morph coelomycetous, lichenized, terrestrial, Chile, see Tehler et al. (2013; morphology, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.


**Austrotrema** I. Medeiros, Lücking & Lumbrsch 2017, *Graphidaceae, Ostropales, Ostropomyctidaceae, Lecanoromycetes*, three species, type: *A. bicinctulum* (Nyl.) I.Medeiros, Lücking & Lumbrsch, lichenized, see Medeiros et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Autoicomyces** Thaxt. 1908, *Ceratomycetaceae, Laboulbeniales, Laboulbeniomycetes*, 28 species, type: *A. acuminatus* (Thaxt.) Thaxt., asexual morph unknown, parasitic on Hydrophiliidae beetles, aquatic, Asia, Europe, North America, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.  

**Auxarthron** G.F. Orr & Kuehn 1963, *Onygenaceae, Onygenales, Eurotiomycetes*, 17 species, type: *A. californiense* G.F. Orr & Kuehn, asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Crous et al. (2013; new species, Portugal), Hubka et al. (2013; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available.  

**Auxarthronopsis** Rahul Sharma, Gräser & S.K. Singh 2011, *Onygenaceae, Onygenales, Eurotiomycetes*, 18 species, type: *A. californiense* G.F. Orr & Kuehn, asexual morph hyphomycetous, saprobes, terrestrial, India, see Sharma et al. (2011; taxonomy), cultures and sequences are available.  

**Avesicladiella** W.P. Wu, B. Sutton & Gange 1997, *Ascomycota* genera incertae sedis, hyphomycetous, sexual morph unknown, two species, type: *A. britannica* Wu, Sutton & Gange, saprobes, UK, China, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 372453, sequence are unavailable.  

**Avettaea** Petr. & Syd. 1927, *Ascomycota* genera incertae sedis, three species, type: *A. philippinensis* Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012, 2016, 2017; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.  

**Awasthiella** Kr.P.Singh 1980, *Verrucariaceae, Verrucariales, Eurotiomycetes*, one species, type: *A. indica* Kr. P. Singh, lichenized, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.  

**Ayria** Fryar & K.D. Hyde (2004), *Annulatascaceae, Incertae sedis, Sordariomycetes*, 2 spp., type species *A. appendiculata* Fryar & K.D. Hyde (2004), saprobes, aquatic, Costa Rica, USA, Brunei, molecular data not available for any of these species, taxonomic position is currently unknown, based on morphological characteristics it is placed in the current position, see Fryar and Hyde (2004), Raja et al. (2009), Maharachchikumbura et al. (2016), holotype of type species HKU (M) 15553.  

**Azbukinia** Lar. N. Vassiljeva 1989, *Sordariomycetes* genera incertae sedis, one species, type: *A. ferruginea* (Fuckel) Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable.  

**Azureothecium** Matsush. 1989, *Eurotiomycetidae, Eurotiomycetes*, two species, type: *A. australiense* Matsush., asexual morph unknown, saprobes, from soil, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.  

**Babjeviella** Kurtzman & M. Suzuki 2010, *Debaryomyctaceae, Saccharomycetales, Saccharomycetes*, one species, type: *B. inositovora* (Golubev & Blagod.) Kurtzman & M. Suzuki, asexual reproduction by multilateral budding and cells are short-ellipsoid to elongate, saprophytes, known from peat, rotted balsam fir (*Abies balsamea*), insect frass, unidentified tree, Russia, Canada, USA, see Kurtzman and Suzuki (2010; taxonomy), Kurtzman and Robnett (2013; phylogeny), cultures and sequences are available.  

**Bacidia** De Not. (1846), *Ramalinaceae, Lecanorales, Lecanoromycetes*, 230 species, type: *B. roSELLa* (Pers.) De Not., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Bacidina** Vězda [nom.cons.] 1991, *Ramalinaceae, Lecanorales, Lecanoromycetes*, twelve species, type: *B. phacodes* (Körb.) Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Bacidiopsora** Kalb 1988, *Ramalinaceae, Lecanorales, Lecanoromycetes*, five species, type: *B. squamulosa* (Nyl.) Kalb (*Lecidea squamulosa* Nyl.), lichenized fungi, corticolous, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

**Bacidiopsora** Vězda 1991, *Ramalinaceae, Lecanorales, Lecanoromycetes*, 12 species, type: *B. phacodes* (Körb.) Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Bacidiopsora** Kalb 1988, *Ramalinaceae, Lecanorales, Lecanoromycetes*, five species, type: *B. squamulosa* (Nyl.) Kalb (*Lecidea squamulosa* Nyl.), lichenized fungi, corticolous, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

**Bacillopeltis** Bat. 1957, *Ascomycota* genera incertae sedis, one species, type: *B. paypayrolae* Bat., coelomycetous, sexual morph unknown, saprobes, on soil, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Bactridium** Kunze 1817, *Ascomycota* genera incertae sedis, 15 species, type: *B. flavum* Kunze, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Bactrodesmiella** M.B. Ellis 1959, *Ascomycota* genera incertae sedis, two species, type: *B. masonii* (S. Hughes) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Bactrospora** A. Massal. 1852, *Arthoniales* genera incertae sedis, *Arthomycetes*, 35 species, type: *B. dryina* (Ach.) A. Massal., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Knudsen et al. (2011; new species), Kirk et al. (2013; genus accepted), Sobreira et al. (2015; new species), Lücking et al. (2016; classification), sequences are available.

**Bactrospora** A. Massal. 1852, *Arthoniales* genera incertae sedis, *Arthomycetes*, 35 species; type: *B. dryina* (Ach.) A. Massal., lichenized, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Baculifera** Marbach & Kalb 2000, *Caliciaceae, Caliciales, Lecanoromycetes*, 14 species, type: *B. orosa* Marbach. with ascomata, lichenized (green algae), terrestrial (mostly corticolous and lignicolous), tropical, see Elix and Mayrhofer (2016; outline), Lücking et al. (2016, classification), Prieto and Wedin (2016; DNA, genus accepted), sequences are available but lacks for the type.
**Baculospora** Zukal 1887, *Ascomycota* genera *incertae sedis*, one species, type: *B. pellucida* Zukal, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Bacusphaeria** Norlailatul, Alias & S. Suetrong 2016, *Tirisporellaceae*, *Tirisporellales*, *Sordariomycetes*, one species, type: *B.*, asexual morph unknown, saprobes, in brackish water, Malaysia, see Jones et al. (2015; classification), Suetrong et al. (20016; phylogeny, morphology), holotype and ex-type strain of type: MFLU 13-0617, BCC51275.

**Badarisama** Kunwar, J.B. Manandhar & J.B. Sinclair 1986, *Ascomycota* genera *incertae sedis*, one species, type: *B. sojae* Kunwar, J.B. Manandhar & J.B. Sinclair, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Badimia** Vězda [nom.cons.] 1986, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, 18 species, type: *B. dimidiata* (Bab. ex Leight.) Vězda, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.


**Baeomyces** Pers. 1794, *Baeomycetaceae*, *Baeomycetales*, *Lecanoromycetes*, nine species, type: *B. byssoides* (L.) P. Gaertn., G. Mey. & Scherb., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.


**Bagcheea** E. Müll. & R. Menon 1954, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *B. albomaculans* (Fukui) Hino & Katumoto asexual morph unknown, mild pathogens, terrestrial, temperate and tropical, Asia, See Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Bagcheea** E. Müll. & R. Menon 1954, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *B. albomaculans* (Fukui) Hino & Katumoto asexual morph unknown, mild pathogens, terrestrial, temperate and tropical, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Baggea** Auersw. 1866, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, one species, type: *B. pachyascus* Auersw., asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), neotype of type species at K herbarium (Royal Botanical Garden), *Ascom.* No. 28.
Bagliettoa A. Massal. 1853, Verrucariaceae, Verrucariales, Eurotiomycetes, 20 species, type: B. limborioides A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Bagnisimitrula S. Imai 1942, Leotiomycetes, genera incertae sedis, one species, type: B. saccardoa (Bagnis) S. Imai, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bahianora Kalb 1984, Lecideaceae, Lecideales, Lecanoromycetes, one species, type: B. poeltii Kalb, lichenized, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Bahuchashaka Subram. 1978, Ascomycota genera incertae sedis, one species, type: B. graminis (Matsush.) Subram., hypomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bahukalasa Subram. & Chandrash. 1979, Ascomycota genera incertae sedis, one species, type: B. samala Subram. & Chandrash., hypomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bahusakala Subram. 1958, Dothideomycetes genera incertae sedis, four species, type: B. olivaceonigra (Berk. & Broome) Subram., hypomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, Caribbean, North America, see Kang et al. (2010; DNA), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), cultures and sequences are available, needs generic revision.

Bahusandhika Subram. 1956, Ascomycota genera incertae sedis, four species, type: B. indica (Subram.) Subram., hypomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Bahusutrabeeja Subram. & Bhat (1977), Botryosphaeriales, Dothideomycetes, 6 species, type species B. dwaya Subram. & Bhat 1977, Hyphomycetous, Sexual morph not reported, Saprobes, Terrestrial, sometimes aquatic, Cosmopolitan (incl. India, Hong Kong and Australia) (Farr and Rossman 2016), See Shenoy et al. (2010, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Li et al. (2013; new species, key), Gao et al. (2015; New record for B. angularis from China). Molecular data available for only one species, i.e. for the type species. GenBank Number: HM171320 (28S rRNA gene), Ex-type culture of the type: GUFCC 4904 (= MTCC 9680).


Bakerophoma Died. 1916, Ascomycota genera incertae sedis, three species, type: B. sacchari Died. 1916, lichenicolous, see Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Balaniopsis P.M. Kirk 1985, Ascomycota genera incertae sedis, four species, type: B. africana (Kiffer) P.M. Kirk, hypomycetous, sexual morph unknown, saprobes, on soil, terrestrial, Africa, Australasia, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.
**Balanium** Wallr. 1833, *Ascomycota genera incertae sedis*, one species, type: *B. stygium* Wallr., hyphomycetous, sexual morph unknown, saprobes, on soil, terrestrial, Europe, see Seift et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Balansia** Speg. 1885 (≡ *Ephelis* Fr. 1849 *fide* Rossman et al. 2016), *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, 27 species, type: *B. claviceps* Speg., asexual morph unknown, saprobes, terrestrial, subtropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), cultures and sequences are available.

**Balazucia** R.K. Benj. 1968, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *B. bilateralis* R.K. Benj., asexual morph unknown, parasitic on Staphylinoidea beetles, terrestrial, Central America and Japan, see Rossi and Weir (2008; treated as a synonym of *Cucujomyces*), Lumbsch and Huhndorf (2010; outline, misspelled as *Balazusia*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Balazucia** R.K. Benj. 1968, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, four species, type: *B. bilateralis* R.K. Benj., asexual morph unknown, biotrophic on aquatic Coleoptera (Hydrophilidae), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Balladyna** Racib. 1900 (≡ *Wageria* Stevens & Dalbey. 1918), *Parodiopsidaceae*, *Dothideomycetes* family *incertae sedis*, c. 17 species, type: *B. gardeniae* Racib., asexual morph unknown, see Hosagoudar et al. (2009; morphology), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Balladynocallia** Bat. 1965, *Parodiopsidaceae*, *Dothideomycetes* family *incertae sedis*, three species, type: *B. glabra* (Hansf.) Bat. (≡ *Balladynastrum glabrum* Hansf.), asexual morph unknown, saprophytes on leaves, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Balladynopsis** Theiss. & Syd., 1917, *Parodiopsidaceae*, *Dothideomycetes* family *incertae sedis*, 17 species, type: *B. philippinensis* Syd. & P. Syd., asexual morph hyphomycetous, mostly saprophyte on leaf, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences unavailable.

**Balsamia** Vittad. 1831, *Helvellaceae*, *Pezizales*, *Pezizomycetes*, six species, type: *B. vulgaris* Vittad., asexual morph unknown, saprobes, ?from soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; DNA, phylogeny), sequences are available for voucher AH44224 of the type: (fide Crous et al. 2014).


**Bambusicularia** Klaubauf, Lebrun & Crous 2014, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, hyphomycetous, one species, type: *B. brunnea* Klaubauf, Lebrun & Crous, sexual morph unknown, pathogens, terrestrial, Japan, see Klaubauf et al. (2014; morphology,
phylogeny), Maharachchikumbura et al. (2015; outline), holotype of the type: CBS H-21839, ex-type strain of type: CBS 133599.


**Bangkok Herbarium.**

**Banhegyia** Zeller & Tóth 1960, *Dothideomycetes* genera incertae sedis, two species, type: *B. setispora* L. Zeller & Tóth, asexual morph unknown, saprobes, terrestrial, Europe, see Sanderson et al. (2009; excluded the genus Banhegyia due to differing morphology and phylogeny and synonymized Banhegiya with Mycoelaspilea), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; did not accept as a genus in *Patellariaceae* but included in key due to historical reasons), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; did not accept as a genus in *Patellariaceae*), holotype of type: BP 2835.

**Banksiamyces** G.W. Beaton 1982, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, four species, type: *B. macrocarpus* G.W. Beaton, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence (ITS) is available for an unidentified species, needs generic revision.


**Barbarosporina** Kirulis 1942, *Ascomycota* genera incertae sedis, one species, type: *B. rhytismatis* Kirulis, coelomycetous, sexual morph unknown, former USSR see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Barnettozyma** Kurtzman, Robnett & Bas.-Powers 2008, *Phaffiomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, ten species, type: *B. populi* (Phaff, Y. Yamada, Tredick & M. Miranda) Kurtzman, Robnett & Basehoar-Powers, asexual reproduction by budding, saprophytic, on soil, water, tree fluxes, insect frass in trees, animal dung, one clinical isolate, worldwide, see Kurtzman et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

**Barretomyces** Klaubauf, Lebrun & Crous 2014, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, hyphomycetous, one species, type: *B. calathae* (Soares, Rocha & Barreto) Klaubauf, Lebrun & Crous, sexual morph unknown, pathogens, terrestrial, Brazil, see
Klaubauf et al. (2014; morphology, phylogeny), Maharachchikumbura et al. (2015; outline), holotype of the type: VIC 30699, ex-type strain of type: CBMAI 1060.

**Barria** Z.Q. Yuan 1994, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *B. piceae* Z.Q. Yuan, asexual morph unknown, pathogens, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014; transferred the genus *Barria* from *Phaeosphaeriaceae* to *Didymosphaeriaceae*), Phookamsak et al. (2014; accepted as a genus in *Didymosphaeriaceae*), Wijayawardene et al. (2014; outline), sequences are unavailable, isotype of type species NY 00164027.

**Barrina** A.W. Ramaley 1997, *Coniochaetaceae*, *Coniochaetales*, *Sordariales*, four species, type: *B. polyspora* A.W. Ramaley, asexual morph Phialophora-like, saprobes, USA see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline), sequences are available.


**Barriopsis stevensiana** A.J.L. Phillips & Pennycook, *nom. nov.* MycoBank MB819573


Etymology: Named in honour of N.E. Stevens, the American mycologist and plant pathologist.

See Phillips et al. (2008) for illustrations, description and diagnosis.


**Notes:** Phillips et al. (2008) introduced *Barriopsis fusca* as a new combination based on *Physalospora fusca*, but inadvertently rendered it illegitimate (superfluous) by listing *Botryosphaeria disrupta* (Berk. & M.A. Curtis) Arx & E. Müll., as a synonym. However, this synonymy is erroneous; the dark brown, aseptate ascospores of *B. stevensiana* are distinct from the light brown (“hellbraun”) ascospores of *B. disrupta* sensu von Arx & Müller (1954), and clearly distinct from the hyaline ascospores of *Sphaeria disrupta*, the basionym of *B. disrupta* (Berkelye 1876).

**Barmaelia** Rappaz 1995, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *B. rhamnicola* Rappaz, six species, asexual morph libertella-like, terrestrial, saprobes, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Kcultures and cultures and sequences are available.

**Barsia** Gilkey 1925, *Helvellaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *B. oregonensis* Gilkey, asexual morph unknown, saprobes, from soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), sequences are available for the type species.

**Bartalinia** Tassi 1900, *Bartaliniiaceae*, *Amphisphaeriales*, *Sordariomycetes*, 17 species, type: *B. robillardoides* Tassi, saprobes, associated with leaf spots, cosmopolitan, see Marincowitz et al. (2010; new species), Wijayawardene et al. (2012, 2016, 2017; phylogeny, taxonomy,
Bartlettiella D.J. Galloway & P.M. Jørg. 1990, Lecanoromycetes genus incertae sedis one species, type: B. fragilis D.J. Galloway & P.M. Jørg., with ascomata, lichenized (green algae), lichenized, terrestrial (saxicolous), New Zealand, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016, classification), cultures and sequences are unavailable.

Barubria Vezda 1986, Pilocarpacaceae, Lecanorales, Lecanoromycetes, two species, type: B. fuscorubra (Vezda) Vezda with ascomata, lichenized (green algae), terrestrial (foliicolous), Neotropics and tropical Africa, rare see Lücking (2008; outline), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Farkas (2015; nomenclature), Lücking et al. (2016, classification), cultures and sequences are unavailable.

Basauxia Subram. 1995, Ascomycota genera incertae sedis, one species, type: B. pulchra Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype (MUBL 3126) - On rachis of Palmae, Cameroon Highlands, Malaysia (CV Subramanian, 7 May 1987), cultures and sequences are unavailable, needs generic revision.

Basavamyces Hosag. 2005, Meliolaceae, Meliolales, Sordariomycetes, two species, type: B. litseae Hosag., C.K. Biju & T.K. Abraham, asexual morph unknown, obligate parasites, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Housagoudar (2008; new species), Housagoudar and Archana (2009; key), holotype (HCIO 43453), cultures and sequences are unavailable, needs generic revision.


Bathelium Ach. 1803, Trypetheliaceae, Trypetheliales, Dothideomycetes, 16 species, type: B. mastoidium Afzel. ex Ach., lichenized, see Nelsen et al. (2014a; phylogeny), Aptroot and Lücking (2016; monograph), Lücking et al. (2016c; phylogeny), Lücking et al. (2016; classification), sequences are available.


Batistia Cif. 1958 (= Acrostoma Seifert 1987 fide Rossman et al. 2016), Batistiaceae, Ascomycota families incertae sedis, one species, type: B. annulipes (Mont.) Cif., asexual morph formerly known in Acrostoma, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Batistina Peres (1961), Ascomycota genera incertae sedis, one species, type species B. splendida Peres 1961, Coelomycetous, Sexual morph not reported, Saprobes, Terrestrial, Brazil, See Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Batistinula Arx 1960, Asterinaeae, Asterinales, Dothideomycetes, one species, type: B. gallesiae Arx, asexual morph (=Triposporium-like, fide Sivanesan 1984). Epiphytes, biotrophic, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf
Batistospora J.L. Bezerra & M.P. Herrera 1964, Ascomycota genera incertae sedis, one species, type: *B. septentrionalis* J.L. Bezerra & M.P. Herrera, asexual morph unknown, saprobes, Neotropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Battarrina (Sacc.) Clem. & Shear 1931, Bionectriaceae, Hypocreales, Sordariomycetes, one species, type: *B. inclusa* (Berk. & Broome) Clem. & Shear, asexual morph unknown, parasitic (fungicolous), terrestrial, UK, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted, Maharachchikumbura et al. (2015, 2016), holotype of type: K.


Beauveria Vuill. 1912, Cordycipitaceae, Hypocreales, Sordariomycetes, five species, type: *B. bassiana* (Bals.-Criv.) Vuill., asexual morph unknown, saprobes, terrestrial, Central and South America, see Lumbsch and Huhndorf (2010; outline), Rehner et al. (2011; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Robène-Soustrade et al. (2015; new species), Imoulan et al. (2016; new species, entomopathogens), cultures and sequences are available.

Beauveriphora Matsush. 1975, Ascomycota genera incertae sedis, one species, type: *B. sporotrichis* Matsush., hyphomycetous, sexual morph unknown, saprobes, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017, outline), cultures and sequences are unavailable, needs generic revision.

Beccopycnidium F. Stevens (1930), Ascomycota genera incertae sedis, one species, type species *B. palmicola* F. Stevens 1930, Coelomycetous, Sexual morph not reported.

Beejadwaya Subram. 1977, Ascomycota genera incertae sedis, one species, type: *B. bispora* (Matsu.) Subram., hyphomycetous, sexual morph unknown, saprobe, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017, outline), cultures and sequences are unavailable, needs generic revision, holotype: Matsushima herb. 4861; On dead leaves of *Musa paradisiaca*, Iriomote Island, Okinawa, Japan (Mar 1974, MBL 101407)

Beelia F. Stevens & R.W. Ryan 1925, Chaetothyriaceae, Chaetothyriales, Eurotiomycetes, one species, type: *B. suttoniae* F. Stevens & R.W. Ryan, asexual morph unknown, saprobes, Hawaii, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Elsinoaceae*), Kirk et al. (2013; genus accepted), Jayawardena et al. (2014; transferred to *Chaetothyriaceae*), Wijayawardene et al. (2014, outline), cultures and sequences are unavailable, needs generic revision.

Belemnospora P.M. Kirk 1981, Ascomycota genera incertae sedis, seven species, type: *B. epiphylla* P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, Asia, Australasia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Belizeana Kohlm. & Volkm.-Kohl. 1987, Dothideomycetes, genera incertae sedis, one species, type: *B. tuberculata* Kohlm. & Volkm.-Kohl., asexual morph unknown, saprobes, marine, Belize, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Elsinoaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Jones
et al. (2015; outline, accepted as a genus in Dothideales incertae sedis), cultures and sequences are unavailable, needs generic revision.

**Bellemerea** Hafellner & Cl. Roux 1984, *Lecanoromycetes* genus incertae sedis; nine species, type: *B. alpina* (Sommerf.) Clauzade & Cl. Roux., with ascomata, lichenized (green algae), terrestrial (saxicolous), Eurasia, North America, Australia, New Zealand and Antarctica, montane and boreal, arctic-alpine/antarctic regions, see Ekman et al. (2008, DNA), Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; phylogeny), Miadlikowska et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available for the type.

**Bellemereella** Nav.-Ros. & Cl. Roux 1997, *Verrucariaceae, Verrucariales, Eurotiomycetes*, four species, type: *B. trapeliae* Nav.-Ros. & Cl. Roux, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available for the type.


**Bellulicauda** B. Sutton 1967, *Ascomycota* genera incertae sedis, two species, type: *B. dialii* (Syd.) B. Sutton, coelomycetous, sexual morph unknown, saprobes, Italy, Sierra Leone, Zambia, see Wijayawardene et al. (2012, 2016, 2017; taxonomy, new species, outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of the type: IMI 21609.

**Belonioscyphella** Höhn. 1918, *Helotiaceae, Helotiales, Leotiomycetes*, four species, type: *B. hypnorum* (Syd. & P. Syd.) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Huhtinen et al. (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequence are available, needs generic revision.

**Belonopsis** (Sacc.) Rehm 1891, *Dermateaceae, Helotiales, Leotiomycetes*, seven species, type: *B. excelsior* (P. Karst.) Rehm, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), a sequence is available, needs generic revision.

**Beltrania** Penz. 1882, *Beltraniaceae, Xylariales, Sordariomycetes*, 14 species, type: *B. rhombica* Penz., saprobes, worldwide, see Kirk et al. (2013; genus accepted), Crous et al. (2015; emended the family), Maharachchikumbura et al. (2015, 2016; outline), Rajeshkumar et al (2016; taxonomy, phylogeny), cultures and sequences are available, needs generic revision.

**Beltranella** Subram. 1952, *Beltraniaceae, Xylariales, Sordariomycetes*, 21 species, type: *B. odinae* Subram., saprobes, worldwide, see Shirozu et al. (2010; new species, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2014; new species, New South Wales), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species, phylogeny), Jaklitsch et al. (2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

**Beltranioptis** Bat. & J.L. Bezerra 1960, *Beltraniaceae, Xylariales, Sordariomycetes*, nine species, type: *B. odinae* Subram., saprobes, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2014; new species, New South Wales), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.
**Benguetia** Syd. & P. Syd. 1917, *Helotiales* genera *incertae sedis*, one species, type: *B. omphalodes* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

**Beniowskia** Rabib. 1900. *Ascomycota* genera *incertae sedis*, four species, type: *B. graminis* Rabib., hyphomycetous, sexual morph unknown, pantropical, saprobes, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Benjaminiomycetes** I.I. Tav. 2000, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, four species, type: *B. melanophthalmae* (Thaxt.) I.I. Tav., asexual morph unknown, parasitic on Cryptophagidae, Latridiidae, Monotomidae, and Phalacridae beetles, terrestrial, North and South America, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable.

**Benjipalia** Subram. & Bhat 1989, *Ascomycota* genera *incertae sedis*, one species, type: *B. sundara* Subram. & Bhat, hyphomycetous, sexual morph unknown, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Berkelasma** (Sacc.) Sacc. 1891, *Hypocreales, genera incertae sedis, Sordariomycetes*, two species, type: *B. caledonica* (Pat.) Sacc., asexual morph unknown, on Myxomycetes, worldwide, see Qu et al. (2014; new species), three species have sequences, needs generic revision.

**Berkleasmium** Zobel 1854, *Pleosporales* genera *incertae sedis, Dothideomycetes*, 36 species, type: *B. concinnum* (Berk.) S. Hughes, sexual morph unknown, saprobes, terrestrial and aquatic, see McKenzie (2008; new species), Zhang et al.(2009; new species), Wongs et al.(2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Whitton et al.(2012; key to 34 *Berkleasmium* species), Hüseyin et al.(2014; new species), Tian et al. (2015; phylogeny, transferred to *Berkleasmium*), cultures and sequences are available, needs generic revision.

**Bertiella** (Sacc.) Sacc. & P. Syd. 1899, *Melanommataceae, Pleosporales, Dothideomycetes*, two species, type: *B. polyspora* Kirschst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, 2016; accepted as a genus in *Melanommataceae*, new species), Wijayawardene et al. (2014; outline), Tian et al. (2015; accepted as a genus in *Melanommataceae*), cultures and sequences are available.

**Bettzia** De Not. 1844, *Bertiaceae, Coronophorales, Sordariomycetes*, 30 species, type: *B. moriformis*, worldwide, see Lumbsch and Huhndorf (2010; outline), Mugambi and Huhndorf (2010; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available.

**Bertiella** (Sacc.) Sacc. & P. Syd. 1899, *Melanommataceae, Pleosporales, Dothideomycetes*, two species, type: *B. polyspora* Kirschst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, 2016; accepted as a genus in *Melanommataceae*, new species), Wijayawardene et al. (2014; outline), Tian et al. (2015; accepted as a genus in *Melanommataceae*), cultures and sequences are available.

**Bettsia** Skou 1972, *Ascosphaeraceae, Onygenales, Eurotiomycetes*, two species, type: *B. alvei* (Betts) Skou, asexual morph hyphomycetous, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pitt et al. (2013; new species), sequences and culture available.

**Betulina** Velen. 1947, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, two species, type: *B. hirta* Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, both species have been transferred to other genera (Index Fungorum 2017).

**Beverwykella** Tubaki., 1975, *Pleomassariaceae, Pleosporales, Dothideomycetes*, three species, type: *B. pulmonaria* (Beverw.) Tubaki, sexual morph unknown, aquatic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014; outline, accepted as a genus in *Melanommataceae*), Hyde et al. (2013; accepted as a genus in *Melanommataceae*), Kirk et al. (2013; genus accepted), Tian et al. (2015; phylogeny, transferred to *Pleomassariaceae*),
Wijayawardene et al. (2017; outline), cultures and sequences are available for authentic strains CBS 283.53, MFUCC 15–0183, reference specimen MFLU 15–1398.

**Bhadradriella** Nagaraju, Kunwar & Manohar. 2011, *Ascomycota* genera incertae sedis, one species, type: *B. hyalina* Nagaraju, Kunwar & Manohar., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Nagaraju et al. (2011; taxonomy), Wijayawardene et al. (2016; outline), holotype of the type: HCIO 50143, cultures and sequences are unavailable, needs generic revision.

**Bhadradriomyces** Sureshk., Manohar. & Kunwar 2009, *Ascomycota* genera incertae sedis, one species, type: *B. elegans* Sureshk., Manohar. & Kunwar, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Suresh Kumar et al. (2009; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: HCIO 43002, cultures and sequences are unavailable, needs generic revision.

**Bhаратheeya** D'Souza & Bhat 2002, *Ascomycota* genera incertae sedis, one species, type: *B. goanensis* (Bhat & W.B. Kendr.) D'Souza & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Bhatia** W.A. Baker & Morgan-Jones 2009, *Ascomycota* genera incertae sedis, one species, type: *B. malabarica* (Subram. & Bhat) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.


**Biatora** Fr. 1817, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, 42 species, type: *B. vernalis* (L.) Fr., usually with ascomata an often pycnidia, some species sorediate, lichenized (green algae), terrestrial (various substrata), probably cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Printzen (2014; DNA), Rodriguez Flakus and Printzen (2014; DNA), sequences are available.

**Biatorella** De Not. 1846, *Biatorellaceae*, *Lecanorales*, *Lecanoromycetes*, 30 species, type: *B. roussellii* (Durieu & Mont.) De Not., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Biatoridium** J. Lahm ex Körb. 1860, *Lichinomycetes* genera incertae sedis, two species, type: *B. monasteriense* J. Lahm ex Körb., with ascomata only, lichenized (green algae), terrestrial (corticolous), Northern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Miadlikowska et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available only for the type species (*fide* Miadlikowska et al. 2014).


et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C91/137, cultures and sequences are unavailable, compare with Catenosynnema & Speiropsis Biciliopsis Diederich 1997, ?Chaetothyriales genera incertae sedis, Eurotiomycetes, one species, type: B. leptogicola Diederich, asexual morph unknown, lichenicolous, non-lichenized, terrestrial, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Biciliopsis Subram. & Sekar 1993, Nitschkiaceae, Coronophorales, Sordariomycetes, one species, type: B. karwarensis Subram. & Sekar, asexual unknown, saprobe, terrestrial, India, see Maharachchikumara et al. (2015, 2016; outline), holotype of type: herb. FSI [sic] 3189; isotype IMI 32468, cultures and sequences are unavailable.

Bicoloromyces Heuchert, U. Braun & D. Hawksw. 2015, Ascomycota genera incertae sedis, one species, type: B. kyffinensis Heuchert, U. Braun & D. Hawksw., sexual morph unknown, on sterile lichen on rock, Antarctica, see Heuchert et al. (2015; taxonomy), holotype of type: MAF 19121, cultures and sequences are unavailable.

Biconiosporella Schaumann 1972, Sordariomycetes genera incertae sedis, one species, type: B. corniculata Schaumann, asexual morph unknown, saprobes, marine, Germany, see Jones et al. (2009, 2015; classification), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Galán et al. (2015; phylogeny, new species), cultures and sequences are available but lacks for the type:, needs generic revision.

Bicrouania Kohlm. & Volkm. 1990, Melanommataceae, Pleosporales, Dothideomycetes, one species, type: B. maritima (P. Crouan & H. Crouan) Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine aquatic, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; morphology; nomenclature; phylogeny), cultures and sequences are unavailable, needs generic revision.

Bifidocarpus Cano, Guarro & R.F. Castañeda 1994, Onygenaceae, Onygenales, Eurotiomycetes, two species, type: B. cubensis Cano, Guarro & R.F. Castañeda saprobes, terrestrial, Cuba, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 356298, cultures and sequences are unavailable, compare with Renispora and Onygena.

Biflagellospora Matsush. 1975, Ascomycota genera incertae sedis, one species, type: B. japonica Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Biflagellosporella Matsush. 1993, Ascomycota genera incertae sedis, one species, type: B. amazonensis Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Biflua Jørgen Koch & E.B.G. Jones 1989, Ascomycota genera incertae sedis, one species, type: B. physasca Jørg. Koch & Jones, asexual morph unknown, on wood associated with sand, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus
accepted), Jones et al. (2015; outline), cultures and sequences are unavailable, needs generic revision.


*Bifusepta* Darker 1963, *Rhytismataceae, Rhytismatales, Leotiomycetes*, one species, type: *B. tehoni* Darker, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; DNA, phylogeny), cultures and sequences are unavailable, needs generic revision.

*Bilimbia* De Not. 1846, *Ramalinaceae, Lecanorales, Lecanoromycetes*, six species, type: *B. hexamera* De Not., lichenized, see Ekman et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Printzen (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

*Bimeris* Petr. 1949, *Ascomycota, genera incertae sedis*, one species, type: *B. aperta* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Ecuador, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Bimuria* D. Hawksw., Chea & Sheridan 1979, *Didymosphaeriaceae, Pleosporales, Dothideomycetes*, type: *B. novae-zelandiae* D. Hawksw., Chea & Sheridan, one species, asexual morph unknown, isolated from soil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014; taxonomy), Jaklitsch et al. (2016; phylogeny), holotype of type: K(M)-IMI 229814, cultures and sequences are available.

*Bioconiosporium* Bat. & J.L. Bezerra 1964, *Ascomycota, genera incertae sedis*, two species, type: *B. baccharidis* Bat. & J.L. Bezerra, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Biophomopsis* Petr. 1931, *Ascomycota, genera incertae sedis*, three species, type: *B. brenesii* Petr., coelomycetous, sexual morph unknown, West Indies, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

*Bioscypha* Syd. 1927, *Helotiaceae, Helotiales, Leotiomycetes*, two species, type: *B. cyatheae* Syd., asexual morph hyphomycetous, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequence are unavailable, needs generic revision.

*Biosis* Petr. 1950, *Stictidaceae, Ostropales, Lecanoromycetes*, five species, type: *B. rubiacearum* (Pat.) Petr., with ascomata only, terrestrial (parasitic on leaves), tropical America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

*Bipolaris* Shoemaker 1959, *Pleosporaceae, Pleosporales, Dothideomycetes*, 121 species and 11 orthographic variants, type: *B. maydis* (Y. Nisik. & C. Miyake) Shoemaker, sexual morph *Cochliobolus*, plant and animal pathogen, saprobes, terrestrial, worldwide. See Janni et al. (2008; resistance in wheat), Motlagh and Kaviani (2008; Iran), Ghazvini and Tekauz (2008; Host-pathogen interaction), Shabana et al. (2008; pathogen control), Kihara et al. (2008; BMRI gene characterization), de Moura Nascimento and Van Der Sand (2008; restriction analysis), Pandey et al. (2008; clonal variability), Kobayashi et al. (2008; Disseminated infection), Dyer et al. (2008; bronchopulmonary mycosis), Chand et al. (2008; disease resistance screening), Antoniazzi et al. (2008; xanthan and allicin as elicitors), Persson et al. (2008; mutant host resistance), Aggarwal et al. (2008; pathogen histopathology), Jiang and
Zhang (2008; new species), Geng et al. (2008; *Echinochloa* control), Durkin et al. (2008; phaeohyphomycotic keratitis), Felle et al. (2008; host pathogen interaction), Kumar et al. (2009; host resistance), Bashir et al. (2009; keratomycosis, endophthalmitis), Naumann et al. (2009; host enzyme modification), Kamal and Mia (2009; DNA fingerprinting), Poloni et al. (2009; Morphology, physiology, virulence), Asad et al. (2009; Pakistan), Kihara et al. (2009; expression analysis), Persson et al. (2009; mechanism of resistance), El Mhadri et al. (2009; *Citrullus lanatus* host), Zhang and Li (2009; new species), Aggarwal et al. (2009; intraspecific variations), Poloni et al. (2009; vegetative incompatibility), Ifikhar et al. (2009; synthetic host screening), Saha et al. (2010; Ag nanoparticle production), Dong et al. (2010; TaPIEP1 study), Lapmak et al. (2010; L-asparaginase production), Kleczewski and Flory (2010; *Microstegium vimineum* host), Shali et al. (2010; SG2 chitinases inhibition), Kumar et al. (2009; host resistance), Bashyal et al. (2009; conidiogenesis study), Knight et al. (2010; genetic variation), Aggarwal et al. (2010; DNA fingerprinting), Martinez et al. (2010; Tanzania), Gomathinayagam et al. (2010; *Trichoderma* effect), Motlagh and Anvari (2010; genetic variation), Matusinsky et al. (2010; species specific detection), Han et al. (2010; cytology), Tomaso-Peterson and Balbalian (2010; Mississippi), Carissimi et al. (2010; *Bacillus* sp. E164 activity), Dallagnol et al. (2011; host pathogen interaction), Rosow et al. (2011; Cerebral phaeohyphomycosis), Chowdhary et al. (2011; bronchopulmonary mycosis), Kawahigashi et al. (2011; resistance gene cloning), Ishihara et al. (2011; defense response), Dallagnol et al. (2011; host physiology), Acharya et al. (2011; review), Ben-Ze’ev et al. (2011; Israel), Kumar et al. (2011; molecular and pathological characterization), Baturo-Ciesniwska (2011; Poland), Moya-Elizondo et al. (2011; population dynamics), Jiao et al. (2011; MYB73 analysis), Vu et al. (2011; Tennessee), Giri et al. (2011; phaeohyphomycosis in dog), Aggarwal et al. (2011; host defense), Aggarwal et al. (2011; SCAR marker), Ahmadpour et al. (2011; new species), Bashyal et al. (2011; host resistance components), Manamgoda et al. (2012; phylogeny), Zhang et al. (2012; host resistance), Da Cunha et al. (2012; clinical diversity), Mizuno et al. (2012; host pathogen interaction), Arunpanichlert et al. (2012; metabolite profiling), Nizam et al. (2012; transformation), Ahmadpour et al. (2012; new species), Bach et al. (2012; *Bauhinia variegata*), Yazawa et al. (2013; transcriptome analysis), Dallagnol et al. (2013; host physiology), Almaguer et al. (2013; conidial germination), Rossman et al. (2013; name conservation), Tarnowski et al. (2013; South Florida), Wang et al. (2013; metabolite as drug), Burgos et al. (2013; Philippines), Eisa et al. (2013; resistance screening), Gupta et al. (2013; fungicidal management), Manamgoda et al. (2014; review), Small et al. (2014; endophthalmitis), Mishra et al. (2014; Ag nanoparticle fungicide), Teran et al. (2014; fatal infection), Minckler et al. (2014; Bipolaris endophthalmitis), Chand et al. (2014; cell biology), Amaradasa and Amundsen (2014; Nebraska), Bencsik et al. (2014; Ophiobolin A), Meena et al. (2014; genetic evaluation of host), Eghtedari (2015; conjunctiva cyst), Fatima et al. (2015; nanoparticle synthesis), Waxman and Bergstrom (2015; New York), Kuan et al. (2015; phylogeny, genomics), Vu et al. (2016; switchgrass host), Kekuda et al. (2016; antifungal activity). Molecular data available for most of species, including type species; GenBank Number NR_138224, paratype and ex-paratype of type species CBS 136.29.

**Biporisorpore** J.D. Rogers, Y.M. Ju & Cand. 1999, *Sordariomycetes* genera incertae sedis, one species, type: *B. europaea* J.D. Rogers, Y.M. Ju & Cand., asexual morph unknown, saprobous, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Bisbyopelitis** Bat. & A.F. Vital 1957, *Ascomycota* genera incertae sedis, one species, type: *B. phoebes* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobous, terrestrial,
USA, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Biscogniauxia** Kuntze 1891, Xylariaceae, Xylariales, Sordariomycetes, 33 species, type: *B. nummularia* (Bull.) Kuntze, asexual morph unknown, saprobes, terrestrial, France, see Mugambi et al. (2009; new species, Kenya), Lumbsch and Huhndorf (2010; outline), Vasilyeva and Stephenson (2010; new species), Vasilyeva et al. (2012; new species, Thailand), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), U’Ren et al. (2016; phylogeny), cultures and sequences are available.

**Bisifusarium** L. Lombard, Crous & W. Gams 2015, Nectriaceae, Hypocreales, Sordariomycetes, seven species, type: *B. dimerum* (Penz.) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), ex-type culture of the type: CBS 108944.

**Bispora** Corda 1837, Incertae sedis, 31 species, type: *B. moniliodes* Corda = *B. antennata* (Pers.) E.W. Mason, hyphomycetous, phialophora-like synanamorph, sexual morph unknown, meristematic black fungi, saprobes on wood and leaves, widespread (temperate), producer of various enzymes possessing industrial applications, see Luo et al. (2009a, b; enzymes), Wang et al. (2010; enzyme), Dubey & Pandey (2011; new species), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Xu et al. (2013; enzymes), Hua et al. (2014; enzyme), Liu et al. (2015; enzyme), molecular data not available from the type materials, needs generic revision.

**Bisporostilbella** Brandsb. & E.F. Morris 1971, Ascomycota genera incerta sedis, one species, type: *B. fusca* Brandsb. & E.F. Morris, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Bisseomyces** R.F. Castañeda, 1985, Ascomycota genera incerta sedis, one species, type: *B. havanensis* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: C84/90-2, cultures and sequences are unavailable, compare with *Neojohnstonia*, and *Parapithomyces*.

**Bivallum** P.R. Johnst. 1991, Rhytismataceae, Rhytismatales, Leotiomyces, seven species, type: *B. zelandicum* P.R. Johnst., asexual morph unknown, saprobes, terrestrial, Australasia, Chile, Panama, see Hou and Piepenbring (2009; new species, Panama), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Blasdalea** Sacc. & P. Syd., 1902 (= Chrysogloeum Petr. 1959 fide Wijayawardene et al. 2014), Vizellaceae, Dothideomycetes family incerta sedis, one species, type: *B. disciformis* (Rehm) Sacc. & P. Syd. (= Vizella disciformis Rehm.), asexual morph coelomycetous, ring-like or linear loculus arrangement, associated with leaf spots on leaves of *Escallonia vaccinioides*, Brazil, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Rossman et al. (2016; accept the genus status), cultures and sequences are unavailable, needs generic revision.
**Blastacervulus** H.J. Swart 1988, Asterinaceae, Asterinales, Dothideomycetes, one species, type: *B. eucalypti* H.J. Swart, coelomycetous, sexual morph unknown, pathogens, terrestrial, Australia, see Cheewangkoon et al. (2009; taxonomy, phylogeny), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, accepted as a genus in Planistromellaceae), Kirk et al. (2013; genus accepted), cultures available for the type: CBS124759.

**Blastenia** A. Massal. 1852, Teloschistaceae, Teloschistales, Lecanoromycetes, eleven species, type: *B. ferruginea* (Huds.) A. Massal., lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Blasticomyces** I.I. Tav. 1985, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, three species, type: *B. lispini* (Thaxt.) I.I. Tav., asexual morph unknown, parasitic on Hydrophilidae, Sphaeridiinae and Staphylinidae beetles, asexual morph unknown, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters and Yaakop (2014; Borneo), cultures and sequences are unavailable.

**Blastobotrys** Klopotek 1967 (= Trichomonascus H.S. Jackson emend Kurtzman & Robnett 2007), Trichomonascaceae, Saccharomycetales, Saccharomycetes, 30 species, type: *B. nivea* Klopotek, asexual reproduction by budding (occasionally) or hyphomycetous, primarily saprophytic, some species cause human infections, insect frass from trees, growth on mushrooms, moss, ensiled maize, soil, air, sea water, bat liver, human infections, worldwide, Kirk et al. (2013; genus accepted), Crous et al. (2016; new species), cultures and sequences are available.

**Blastocatena** Subram. & Bhat 1989, Ascomycota genera incertae sedis, one species, type: *B. pulneyensis* Subram. & Bhat, hophymycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Blastodesmia** A. Massal. 1852, Pyrenulaceae, Pyrenulales, Eurotiomycetes, one species, type: *B. nitida* A. Massal., asexual morph unknown, lichenized, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Holotype US National Herbarium barcode 01138889 – on bark of *Fraxini*, Austria (Schuler J), cultures and sequences are unavailable.

**Blastocietea** Subram. & Bhat 1989, Ascomycota genera incertae sedis, one species, type: *B. hibisci* (Hansf.) M.B. Ellis, hophymycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Blastofusarioides** Matsush. 1996, Ascomycota genera incertae sedis, one species, type: *B. fusca* Matsush., hophymycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Blastomyces** Gilchrist & W.R. Stokes 1898 (≡ Gilchristia Cif. & Redaelli 1934; = Ajellomyces McDonough & A.L Lewis 1968; = Zymonema Beurm. & Gougerot 1909) Ajellomycetaceae, Onygenales, Eurotiomycetes, two species, (but phylogenetic studies suggest the existence of more taxa fide de Hoog et al. 2016), type species: Blastomyces dermatitidis Gilchrist & W.R. Stokes, terrestrial, pathogenic to humans, canids, felines and other animals, also reported from soil, Africa, India, North America, Blastomyces Costantin & Rolland, has been published (de Hoog et al. 2016), see Saccente & Woods (2010; clinical and laboratory aspects), Brown et al. (2013; phylogeny, new species), Kirk et al. (2013; genus accepted), ex-epitype strain of the type species = CBS 674.68, sequences available at GenBank from Peterson & Sigler (1998) and Untereiner et al. (2002).
**Blastophorella** Boedijn 1937, *Ascomycota genera incertae sedis*, one species, type: *B. smithii* Boedijn, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South East Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Blastophorum** Matsush. 1971, *Reticulascaceae, Glomerellales, Sordariomycetes*, five species, type: *B. truncatum* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, China, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2016; new species, China), cultures and sequences are unavailable, needs generic revision.

**Blastophragma** Subram. 1995, *Ascomycota genera incertae sedis*, four species, type: *B. subulatum* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Gao et al. (2015; new species), Xia et al. (2016; new species), Holotype of type: MUBL 3128 (on dead twigs from Peninsular Malaysia), cultures and sequences are unavailable, needs generic revision.

**Blennoria** Moug. & Fr. 1825, *Ascomycota genera incertae sedis*, four species, type: *B. buxi* Fr., coelomycetous, sexual morph unknown, saprobes and plant endophytes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Blennoropsis** Petr. 1920, *Ascomycota genera incertae sedis*, one species, type: *B. moravica* Petr., coelomycetous, sexual morph unknown, rarely reported and in case as saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Blennothallia** Trevis. 1853, *Collemataceae, Peltigerales, Lecanoromycetes*, four species, type: need typification, lichenized, see Otálora et al. (2013a, 2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Bleptosporium** Steyaert 1961, *Ascomycota genera incertae sedis*, four species, type: *B. monitteae* Speg. ex Steyaert, coelomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Bloxamia** Berk. & Broome 1854, *Helotiaceae, Helotiales, Leotiomycetes*, 19 species, type: *B. truncata* Berk. & Broome, hyphomycetous, sexual morph unknown, saprobes, terrestrial, fresh water, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Spooren et al. (2014; new species), Guatimosim et al. (2016; new species, DNA, phylogeny), cultures and sequences are available but lacks for the type species.

**Blumeria** Golovin ex Speer 1974 (= *Oidium* Link 1824 *fide* Braun and Cook 2012), *Erysiphaceae, Erysiphales, Leotiomycetes*, one species, type: *B. graminis* (DC.) Speer, asexual morphs hyphomycetous, biotrophic, obligate plant pathogens, terrestrial, worldwide, see Braun and Cook (2012; taxonomy), sequences of non-type material of the type are available, neotype of type: Germany, Bonn, Botanical garden Poppelsdorf, on *Triticum aestivum*, 25 June 1869, Körnicke, in herb. De Candolle (G 00122110), cultures and sequences are available.

**Blumeriella** Arx 1961 (= *Microgloeum* Petr. 1922; = *Phloeosporella* Höhn. 1924 *fide* Johnston et al. 2014), *Dermateaceae, Helotiales, Leotiomycetes*, seven species, type: *B. jaapii*
(Rehm) Arx, asexual morphs Microgloeum, Phloeospora, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available.

**Boeremia** Aveskamp, Gruyter & Verkley 2010, Didymellaceae, Pleosporales, Dothideomycetes, eleven species, type: B. exigua (Desm.) Aveskamp, Gruyter & Verkley, assexual morph coelomycetous, saprobes or plant pathogenic, widespread, see Aveskamp et al. (2010; taxonomy, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), Chen et al. (2015; phylogeny), ex-type strains of type: CBS 101207 (Boeremia exigua var. pseudolilacis), CBS 443.94 (Boeremia exigua var. heteromorpha), CBS 100167 (Boeremia exigua var. populi).

**Boerlagiomyces** Butzin 1977, Tubeufiaceae, Tubeufiales, Dothideomycetes, c. 9 species, type: B. velutinus (Penz. & Sacc.) Butzin, assexual morph coelomycetous, saprobes, aquatic, Australia, India, Indonesia, Philippines and USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences are available.

**Bogoriella** Zahlbr. 1928, Trypetheliaceae, Trypetheliales, Dothideomycetes, 29 species, type: B. subpersicina Zahlbr., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Nelsen et al. (2014a; phylogeny), Aptroot and Lücking (2016; taxonomy), Lücking et al. (2016c; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Bombardiella** Höhn. 1909, Sordariales, Sordariomycetes, one species, type: B. caespitosa Höhn., asexual morph scopulariopsis-like, saprobes, from soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

**Bombardioides** C. Moreau ex N. Lundq. 1972, Lasiosphaeriaceae, Sordariales, Sordariomycetes, four species, type: B. bombardioides (Auersw.) C. Moreau ex C. Moreau, assexual morph unknown, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks the type:.

**Bombardioidea** C. Moreau ex N. Lundq. 1972, Lasiosphaeriaceae, Sordariales, Sordariomycetes, one species, type: B. trigonispora Marchal, asexual morph scopulariopsis-like, saprobes, from soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), type species have been transferred to Chaetomium (fide Index Fungorum 2016).
**Bonanseja** Sacc. 1906, *Rhytismatales genera incertae sedis, Leotiomycetes*, one species, type: *B. mexicana* Sacc., asexual morph unknown, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Bonaria** Bat. 1959, *Dothideomycetes genera incertae sedis*, one species, type: *B. lithocarpi* (V.A.M. Mill. & Bonar) Bat., asexual morph unknown, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Bondiella** Piroz. 1972, *Mesnieraceae, Dothideomycetes families incertae sedis*, one species, type: *B. palmicola* Piroz., asexual morph unknown, saprobes, terrestrial, Tanzania, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Boothiella** Lodhi & Mirza 1962, *Chaetomiaceae, Sordariales, Sordariomycetes*, one species, type: *B. tetraspora* Lodhi & J.H. Mirza, asexual morph unknown, saprobes, from soil, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Boreoplaca** Timdal 1994, *Ophioparmaceae, Umbilicariales, Lecanoromycetes*, one species; type: *B. ultrafrigida* Timdal, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Bendiksby and Timdal (2013; phylogeny), Miądlikowska et al. (2014; taxonomy), Lücking et al. (2016; classification), holotype of the type species O-L-127, sequences are available.


**Botryochora** Torrend 1914, *Dothideomycetes genera incertae sedis*, one species, type: *B. nigra* (Torrend) Torrend, asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothioraceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Botryoderma** Papendorf & H.P. Upadhyay 1969, *Ascomycota* genera incertae sedis, four species, type: *B. lateritium* Papendorf & H.P. Upadhyay, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Botryodiplodina** Dias & Sousa da Câmara 1954, *Ascomycota* genera incertae sedis, one species, type: *B. mori* Dias & Sousa da Câmara, coelomycetous, sexual morph unknown, saprobes, terrestrial, Portugal, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Botryohypoxylon** Samuels & J.D. Rogers 1986 (= *Iledon* Samuels & J.D. Rogers 1986 fide Wijayawardene et al. 2014), one species, type: *B. nigra* (Torrend) Torrend, asexual morph coelomycetous, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Rossman et al. (2015; nomenclature), sequences are available.

**Botryola** Bat. & J.L. Bezerra 1964, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, six species, type: *B. tetrasperma* Bat. & J.L. Bezerra, asexual morph unknown, saprobes, lichenicolous, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


**Botryomonomia** Goos & Piroz. 1975, *Ascomycota* genera incertae sedis, four species, type: *B. scheeleae* Goos & Piroz., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Botryosphaeria** Ces. & De Not. 1863 (= *Fusicoccum* Corda 1829; = *Dichomera* Cooke 1878 fide Wijayawardene et al. 2014, 2016; Rossman et al. 2016), *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, eleven species, type: *B. dothidea* (Moug. Fr.) Ces. & De Not., asexual morph coelomycetous, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2012; accepted as a genus in *Botryosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Phillips et al. (2013; taxonomy, phylogeny), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy), Dissanayake et al. (2016; taxonomy), cultures and sequences are available, needs generic revision.

**Botryosporium** Corda 1831, *Sordariomycetes* genera incertae sedis, seven species, type: *B. diffusum* (Grev.) Corda, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Choi et al. (2014; pathogens, DNA), cultures and sequences are available but lacks for the type, needs generic revision.

**Botryostroma** Höhn. 1911, *Ascomycota* genera incertae sedis, two species, type: *B. inaequale* (G. Winter) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, America (tropical) see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.
**Botryozyma** Shann & M.Th. Smith emend. Lachance & Kurtzman 2013, Trigonopsidaceae, Saccharomycetales, Saccharomycetes, four species, type: *B. nematodiphila* Shann & M.T. Smith, asexual reproduction by budding (multilateral), ?saprophytic, from Panagrellus nematodes or associated with *Drosophila* flies, Northwestern USA, Italy, see Kirk et al. (2013; genus accepted), Lachance and Kurtzman (2013; re-visited, generic revision), cultures and sequences are available.

**Botrytis** P. Micheli ex Pers. 1794 (= *Botryotinia* Whetzel 1945 fide Johnston et al. 2014), Sclerotiniaceae, Helotiales, Leotiomyces, three species, type: *B. cinerea* Pers., asexual morph hyphomycetous, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available.

**Boubovia** Srřček 1977, Pyronemataceae, Pezizales, Pezizomycetes, five species, type: *B. luteola* (Velen.) Srřček, asexual morph unknown, saprobes, terrestrial, temperte, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species.

**Boudiera** Cooke 1877, Pezizaceae, Pezizales, Pezizomycetes, ten species, type: *B. areolata* Cooke & W. Phillips, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

**Boudierella** Sacc. 1895, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: *B. cana* Marchal & É.J. Marchal, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Bouvetiella** Øvstedal 1986, Lecanoromycetes genera incertae sedis, one species; type: *B. pallida* Øvstedal, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Brachiosphaera** Nawawi., 1976, Aliquandostipitaceae, Jahniales, Dothideomycetes, two species, type: *B. tropicalis* Nawawi, isolated from river foam: Peninsular Malaysia, see Seifert et al. (2011; morphology), Suetrong et al. (2011), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sexual morph unknown, cultures and sequences are available for authentic strains SS2523, E192–1.


**Brachyccephala** J.S. Monteiro, Gusmão & R.F. Castañeda 2015, Ascomycota genera incertae sedis, one species, type: *B. exotica* J.S. Monteiro, Gusmaño & Castañaeda-Ruíz, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Monteiro et al. (2015; morphology), holotype of the type: HUEFS 210446, cultures and sequences are unavailable, compare with *Acarocybellina, Brachysporiella* and *Kramabeja*.

**Brachyconidiella** R.F. Castañaeda & W.B. Kendr. 1990 Ascomycota genera incertae sedis, Dothidiomycetes, one species, type: *B. monilispora* R.F. Castañaeda & W.B. Kendr., sexual morph unknown, saprobes, terrestrial, Cuba, see Castañaeda-Ruíz & Kendrick (1990b; morphology), holotype of the type: INIFAT C88/300, sequences are available, compare with *Brachyconidiellopsis* and *Matsushimaeia*.

**Brachyconidiellopsis** Decock, R.F. Castañaeda & Adhikari 2004, Microascaceae, Microascales, Sordariomycetes, two species, type: *B. fimicola* Decock, R.F. Castañaeda & Adhikari, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline),
Maharachchikumbura et al. (2015; outline, phylogeny), holotype of the type: MUCL 44677, cultures and sequences are available.

**Brachydesmiella** G. Arnaud ex S. Hughes 1961, *Ascomycota* genera incertae sedis, eight species, type: *B. bisepatata* G. Arnaud ex S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Brachysporiellina** Subram. & Bhat 1989, *Ascomycota* genera incertae sedis, two species, type: *B. pulneyensis* Subram. & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Brachysporium** Sacc. 1886 (= Cryptadelphia Réblová & seifert 2004 fide Réblová et al. 2016), *Trichosphaeriaceae, Trichosphaeriales, Sordariomycetes*, twelve species, type: *B. obovatum* Keissl., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; nomenclature), cultures and sequences are available.

**Bradymyces** Hubka, Réblová, Selbmann & M. Kolařík 2014, *Trichomeriaceae, Chaetothyriales, Eurotiomycetes*, three species, type: *B. oncorhynchi* Hubka, Řehulka Réblová, & M. Kolařík, sexual morph unknown, cold-blooded, water vertebrates opportunist, rock-inhabiting, see Hubka et al. (2014; taxonomy, phylogeny), Réblová et al. (2016; new species), holotype and strains of the type: PRM 861507 CBS 133066 = CCF 4369 = CCFEE 6134.

**Bramhamyces** Hosag. 2009, *Dothideomycetes* genera incertae sedis, one species, type: *B. ilicis* Hosag. & Chandrapr, sexual morph unknown, epiphytes, terrestrial, India, see Hosagoudar & Chandraprabha (2009; protologue, accepted as an anamorphic genus in Asterinaeae), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes genera incertae sedis), holotype of type: HClO 48300, cultures and sequences are unavailable.

**Brasiliomyces** Viégas 1944, *Erysiphaceae, Erysiphales, Leotiomycetes*, four species, type: *B. malvastri* Viégas, asexual morphs unknown, biotrophic, obligate plant pathogens, terrestrial, Africa, Asia, South America, Hawaii, see Lumbsch and Huhndorf (2010; outline), Divaranhkoon et al. (2011; phylogeny), Braun and Cook (2012; taxonomy), Kirk et al. (2013; genus accepted), sequences of non-type material of the type species are available, holotype of type: Brazil, São Paulo Province, Mogi-Mirim, on *Malvastrum coromandelianum*, 27 Feb. 1941, A.P. Viégas (IACM 3719).

**Braunomyces** V.A. Melnik & Crous 2014, *Ascomycota* genera incertae sedis, one species, type: *B. dictyosporus* V.A. Melnik & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Vietnam, see Mel'nik and Crous (2011; taxonomy), Wijayawardene et al. (2016; outline, taxonomy), holotype of the type: HAL 2606 F, cultures and sequences are unavailable, needs generic revision.

**Brefeldiella** Speg. 1889, *Trichopeltinaceae, Dothideomycetes* family incertae sedis, four species, type: *B. brasiliensis* Speg., asexual morph unknown, epiphytes, appearance as thallus on leaf, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Trichopeltinaceae*), Wijayawardene et al. (2014; outline), need recollecting and sequencing to verify generic placement.

**Brefeldiopycnis** Petr. & Cif. 1932, *Ascomycota* genera incertae sedis, one species, type: *B. membranacea* Petr. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Brefeldochium** Verkley 2005, *Dermateaceae, Helotiales, Leotiomycetes*, one species, type: *B. pruinosum* Verkley, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline, taxonomy), cultures available for the type: CBS 160.92.

**Brenesiella** Syd. 1929, *Sordariomycetes*, genera incertae sedis, one species, type: *B. erythroxylis* Syd., asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Brettanomyces** Kufferath & van Laer 1921, *Pichiaceae, Saccharomycetales, Saccharomycetes*, six species, type: *B. bruxellensis* Kufferath & van Laer, asexual reproduction is either by multilateral budding or, rarely, by bipolar budding on a narrow base, saprophytes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Brevicatenospora** R.F. Castañeda, Minter & Saikawa 2006 *Ascomycota* genera incertae sedis, one species, type: *B. enteroproliferata* R.F. Castañeda, Minter & Saikawa, hyphomycetous, sexual morph unknown, saprobes, aquatic (fresh water), Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: INIFAT C04/111, cultures and sequences are available, compare with *Annellophora*, *Acrogenospora*, *Belemnospora*, *Sporidesmiella* and *Repetophragma*.


**Brianaria** S. Ekman & M. Svensson 2014, *Pсорaceae, Lecanorales, Lecanoromycetes*, four species, type: *B. sylvicola* (Flot. ex Körb.) S. Ekman & M. Svensson, lichenized, terrestrial, see Ekman and Svensson (2014; taxonomy), Lücking et al. (2016; classification), type specimen UPS-L-133138 (lectotype), sequences are available.
**Briancopinsia** Diederich, Ertz, Lawrey & van den Boom 2012, *Arthoniaceae, Arthoniales, Arthoniomycetes*, one species, type: *B. cytospora* (Vouaux) Diederich, Ertz, Lawrey & van den Boom, coelomycetous, sexual morph unknown, lichenicolous, non-lichenized, terrestrial, Europe, North America, see Diederich et al. (2012; morphology, phylogeny), Wijayawardene et al. (2017; outline), sequences are available.


**Brigantiaeae** Trevis. 1853, *Brigantieaeae, Teloschistales, Lecanoromycetes*, 29 species; type: *B. tricolor* (Mont.) Trevis., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Briosia** Cavara 1888, *Ascomycota* genera incertae sedis, six species, type: *B. amphilophaga* Cavara, hyphomycetous, plant pathogen, widespread, see Hyde et al. (2011’ outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted); cultures or cultures and sequences are unavailable, needs generic revision.

**Brodoa** Goward 1987, *Parmeliaceae, Lecanorales, Lecanoromycetes*, three species, type: *B. oroarctica* (Krog) Goward, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Broodingnagia** K.D. Hyde & P.F. Cannon 1999, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, two species, type: *B. nigeriensis* (Sivan. & Okpala) Hyde & Cannon, assexual morph unknown, pathogens, saprobes, terrestrial, Australia, Sierra Leone, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of *Broodingnagia nigeriensis* subsp. *corneri* IMI 390a.

**Broomella** Sacc. 1883, *Bartaliniaeeae, Xylariales, Sordariomycetes*, two species, type: *B. vitalbae* (Berk. & Broome) Sacc., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Li et al. (2015; taxonomy), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: MFLUCC 15-0023 (fide Li et al. 2015).

**Brownellia** S.Y. Kondr., Kärnefelt, Elix, A. Thell & Hur 2013, *Teloschistaceae, Teloschistales, Lecanoromycetes*, four species, type: need typification data, lichenized, terrestrial, see Kondratyuk et al. (2013, 2015b; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Bruceomyces** Rikkinen 2012, *Lecanorales* genera incertae sedis, *Lecanoromycetes*, four species, type: *B. castoris* (Rikkinen) Rikkinen, lichenized, terrestrial, see Tuovila et al. (2012; taxonomy), cultures and sequences are unavailable.

Brunneiperidium Daranagama, Camporesi & K.D. Hyde 2015, Xylariaceae, Xylariales, Sordariomycetes, asexual morph hyphomycetous, only known for B. gracilentum, saprobes, terrestrial, Italy, Europe, two species, all the species have molecular data, see Daranagama et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2016; outline), ex-type strains of type: MFLUCC 14-0011; holotype MFLU 14-0229.

Brunneocarpos Giraldo & Crous 2016, Mycocaliciaceae, Mycocaliciales, Eurotiomycetes, one species, type: B. banksiae Giraldo & Crous, asexual morph unknown, saprobes, Australia, see Crous et al. (2016; taxonomy, phylogeny), holotype and ex-type strains of type: CPC 29841.


Brunneodinemasporium Crous & R.F. Castañeda 2012, Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes, one species, type: B. brasiliense Crous & Castañeda, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Crous et al. (2012; morphology, phylogeny), Maharachchikumbura et al. (2015; classification, phylogeny), Wijayawardene et al. (2016; morphology, phylogeny), ex-type strains of type: CPC 112007; holotype CBS H-20948.


Brunneosphaerella Crous & R.F. Castañeda 2012, Chaetosphaeriales, Sordariomycetes, one species, type: B. protearum (Syd. & P. Syd.) Crous & Castañeda, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2009; morphology, phylogeny), Schoch et al. (2009; morphology, phylogeny), Crous et al. (2011; new species, morphology), Hyde et al. (2013; accepted as in Mycosphaerellaceae), Wijayawardene et al. (2014; accepted as in Mycosphaerellaceae), epitype CBS H-20335, ex-epitype CBS H-20390.

Brunneosporella Ranghoo & K.D. Hyde 2001, Papulosaceae, Diaportheomycetidae families incertae sedis, Sordariomycetes, one species, type: B. indica Nag Raj., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Nag Raj et al. (1973; morphology), cultures and sequences are available but lacks for the type species.

Brycekendrickia Nag Raj 1973, Ascomycota genera incertae sedis, one species, type: B. indica Nag Raj., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Nag Raj et al. (1973; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable.

Brycekendrickomyces Crous & M.J. Wingf. 2009, Herpotrichiellaceae, Chaetothyriales, Eurotiomycetes, one species, type: B. acaciae Crous & Wingf, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Indonesia, see Crous et al. (2009; morphology, phylogeny), holotype and ex-type strains of type: CBS H-20198, CPC 15078 = CBS 124104.

Bryobobilimbia Fryday, Printzen & S. Ekman 2014, Lecideaceae, Lecideales, Lecanoromycetes, six species, type: B. hypnorum (Lib.) Fryday, Printzen & S. Ekman, lichenized, see Fryday et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.
**Bryocaulon** Kärnefelt 1986, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *B. divergens* (Ach.) Kärnefelt, lichenized, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Bryocentria** Döbbeler 2004, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, eight species, type: *B. brongniartii* (P. Crouan & H. Crouan) Döbbeler, sexual morph unknown, saprobes, epiphytes, terrestrial, cosmopolitan, see Dobbeler (2010; new species), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Bryochiton** Döbbeler & Poelt 1978, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, four species, type: *B. monascus* Döbbeler & Poelt, asexual morph unknown, saprobes, terrestrial, Europe, see Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available for unidentified species, needs generic revision.

**Bryoclaviculus** L. Ludw., P.R. Johnst. & Steel 2013, *Leotiomyces* genera *incertae sedis*, one species, type: *B. campylopi* P.R. Johnst., asexual morph unknown, saprobes, terrestrial, New Zealand, see Johnston et al. (2013; taxonomy, DNA), holotype of the type: OTA 062197, cultures and sequences are available.

**Bryodina** Hafellner 2001, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *B. rhypariza* (Nyl.) Hafellner, with ascomata, terrestrial (bryophilous), Northern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences unavailable.

**Bryodiscus** B. Hein, E. Müll. & Poelt 1971, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *B. grimmiae* B. Hein, E. Müll. & Poelt, with ascomata, terrestrial (muscicolous), temperate, see Baloch et al. (2013; DNA), sequences are available for one species, but not the type (Baloch et al. 2013), synonym of *Sphaeropezia*, see Baloch et al. (2013).


**Bryonora** Poelt 1983, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, eleven species, type: *B. castanea* (Hepp) Poelt, with ascomata, terrestrial (bryophilous), bipolar, see Lumbsch and Huhndorf (2010; outline), sequences are available only for the type species.

**Bryopelta** Döbbeler & Poelt 1978, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *B. variabilis* Döbbeler & Poelt, asexual morph unknown, saprobes, terrestrial, Norway, Sweden, see Lumbsch and Huhndorf (2010; outline; accepted as a genus in *Dothideomycetes*), Kirk et al. (2013; genus accepted), Li et al. (2014; accepted as a genus in *Mycosphaerellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Bryoplaca** Sochting, Frödén & Arup 2013, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, three species, type: *B. sinapisperma* (DC.) Sochting, Frödén & Arup, lichenized, Northern Hemisphere and Antarctica, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.
**Bryorella** Döbbeler 1978, *Dothideomycetes* genera incertae sedis, ten species, type specie *B. acrogena* Döbbeler, asexual morph unknown, saprobes or parasitic, terrestrial, Europe (Italy, Austria, Poland, Sweden, Switzerland), See Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Li et al. (2014; taxonomy), Wijayawardene et al. (2014; outline), sequences are available, needs generic revision.

**Bryoria** Brodo & D. Hawksw. 1977, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, c. 60 species, type: *B. trichodes* (Michx) Brodo & D. Hawksw., widespread but mainly N Hemisphere, see Lumbsch and Huhndorf (2010; outline), Myllys et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Velmala et al. (2014; phylogeny), Jaklitsch et al. (2016; position), Lücking et al. (2016; classification), and sequences for many species now available, species concepts in sect. *Implexae* require revision, holotype of type: PC, sequences are available.

**Bryoscyphus** Spooner 1984, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, 19 species, type: *B. conocephali* (Boyd) Spooner, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

**Bryosphaeria** Döbbeler 1978, *Trematosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, nine species, type: *B. cinclidoti* (Racov.) Döbbeler, asexual morph unknown, terrestrial, Europe (Italy, Austria, Sweden, Yugoslavia), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Li et al. (2014; transferred to *Trematosphaeriaceae*), sequences are unavailable, needs generic revision.


**Bryothelium** Döbbeler 1998, *Dothideomycetes* genera incertae sedis, one species, type: *B. mira* Döbbeler & Melnik, asexual morph unknown, saprobes or parasitic, terrestrial, America and Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences are unavailable, needs generic revision.


**Buellia** De Not. [nom.cons.] 1846, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, 300 species, type: *B. disciformis* (Fr.) Mudd, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Gaye et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Prieto and Wedin (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Buelliastrum** Zahlbr. 1930, family incertae sedis, order incertae sedis, subclass incertae sedis, *Lecanoromycetes*, two species, type: need typification data, lichenized, China, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Buelliastrum** Zahlbr. 1930, family incertae sedis, order incertae sedis, subclass incertae sedis, *Lecanoromycetes*, two species, type: need typification data, lichenized, China, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Buelliastrum** Zahlbr. 1930, family incertae sedis, order incertae sedis, subclass incertae sedis, *Lecanoromycetes*, two species, type: need typification data, lichenized, China, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Buelliastrum** Zahlbr. 1930, family incertae sedis, order incertae sedis, subclass incertae sedis, *Lecanoromycetes*, two species, type: need typification data, lichenized, China, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Buelliastrum** Zahlbr. 1930, family incertae sedis, order incertae sedis, subclass incertae sedis, *Lecanoromycetes*, two species, type: need typification data, lichenized, China, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Buelliastrum** Zahlbr. 1930, family incertae sedis, order incertae sedis, subclass incertae sedis, *Lecanoromycetes*, two species, type: need typification data, lichenized, China, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Buelliastrum** Zahlbr. 1930, family incertae sedis, order incertae sedis, subclass incertae sedis, *Lecanoromycetes*, two species, type: need typification data, lichenized, China, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Buelliastrum** Zahlbr. 1930, family incertae sedis, order incertae sedis, subclass incertae sedis, *Lecanoromycetes*, two species, type: need typification data, lichenized, China, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Buelleria** Fink 1935, *Asterinales* genera incertae sedis, *Dothideomycetes*, eleven species, type: *B. minimula* (Tuck.) Fink, lichenicolous, Asia, see Hafellner et al. (2008; new species), Lumbsch and Huhndorf (2010; outline), Pérez-Ortega and Etayo (2010; new species), van den Boom (2010; new species), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Ertz and Diederich (2015; phylogeny, accepted s *Asterinales*), sequences are available.
morph unknown, saprobes or parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Buergenerula** Syd. 1936, *Magnoporthaceae*, *Magnosphorales*, *Sordariomycetes*, six species, type: *B. bisepata* (Rostr.) Syd., asexual morph harpophora-like and pyricularia-like, pathogen, marine and freshwater habitats, worldwide, see Jones et al. (2009, 2015; outline), Lumbsch and Huhndorf (2010; outline), Yuan et al. (2010; phylogeny), Al-Nasrawi and Hughes (2012; diversity), Kirk et al. (2013; genus accepted), Luo and Zhang (2013; phylogeny), Chen et al. (2014; mitoviruses), Hujsoľová et al. (2014; phylogeny), Klaubauf et al. (2014; phylogeny), Calado et al. (2015; diversity, ecology), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable.

**Bulbilocypnis** Matsush. 1996, *Ascomycota* genera incertae sedis, one species, type: *B. caffra* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Transvaal, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Bulbocatenospora** R.F. Castañeda & Iturr. 2000, *Ascomycota* genera incertae sedis, one species, type: *B. complanata* R.F. Castañeda, Iturr. & Decock, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Venezuela, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: MUCL 40705, cultures and sequences are unavailable, compare with *Piricauda*, *Chuppia*, *Neoarbuscula* and *Peyronelia*.

**Bulbophyllosticta** Hale 1974, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 60 species, type: *B. semilunata* (Lynge) Hale, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kirika et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Bulgaria** Fr. 1822, *Phacidiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *B. inquinans* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, northern and southern temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; phylogeny), cultures available for the type: CBS 315.71.

**Bulgariella** P. Karst. 1885, *Helotiales*, *Helotiales*, *Leotiomycetes*, four species, type: *B. pulla* (Fr.) P. Karst., asexual morph unknown, saprobes, terrestrial, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished).

**Bulgariopsis** Henn. 1902, *Helotiales*, *Helotiales*, *Leotiomycetes*, two species, type: *B. moelleriana* Henn., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Bullanockia** Crous 2016, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *B. australis* Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22879, CPC 28976.

**Bullasarpenis** Bat., J.L. Bezerra & Cavalc. 1965, *Ascomycota* genera incertae sedis, one species, type: *B. bignoniacearum* Bat., J.L. Bezerra & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Bullimyces** A. Ferrer, A.N. Mill., C. Sarmiento & Shearer 2012, *Sordariomycetidae incertae
sedis, three species, type: *B. communis* A. Ferrer, A.N. Mill., Sarmiento & Shearer, Costa Rica, see Ferrer et al. (2012; taxonomy), Cai et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype: AF281-1, ILL, cultures and sequences are available.

**Bunodophoron** A. Massal. 1861, *Sphaerophoraceae, Lecanorales, Lecanoromycetes*, 24 species, type: *B. australis* (Laurer) A. Massal., asexual morph coelomycetous, lichenized, terrestrial, mainly in the temperate rainforests of the Southern Hemisphere, rarely in high-altitude rainforests in tropical or subtropical areas, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Burenia** M.S. Reddy & C.L. Kramer 1975, *Protomycetaceae, Taphrinales, Taphrinomycetes*, three species, type: *B. cicuta* (Lindr.) M.S. Reddy & C.L. Kramer, asexual reproduction is known, plant parasitic, parasitic on Apiaceae, Europe, see see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable.

**Bussabamonies** Klaubauf, Lebrun & Crous 2014, *Magnaporthaceae, Magnaporthales, Sordariomycetes*, one species, type: *B. longisporus* (Bussaban) Klaubauf, Lebrun & Crous, hyphomycetous, sexual morph unknown, endophyte, terrestrial, Thailand, see Klaubauf et al. (2014; morphology, phylogeny), Maharachchikumbura et al. (2015; outline), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: BCC11377, CBS 125232.

**Butleria** Sacc. 1914, *Myriangiaceae, Myriangiales, Dothideomycetes*, one species, type: *B. inaghatahani* Sacc., asexual morph unknown, parasitic, terrestrial, tropical, holotype of type: PAD 1677, See Li et al. (2011; morphology), Disnayake et al. (2014; morphology), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Byssomonies** Cavalc. 1972, *Sordariomycetes genera incertae sedis*, one species, type: *B. olivaceus* Cavalc., asexual morph unknown, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), type material is not in good condition hence need to recollect and subject them to molecular analysis, Holotype of type species URM 27661 /Exs. 20057.


**Byssosacca** Arx 1971, *Myxotrichaceae, Leotiomycetes* families incertae sedis, two species, type: *B. phoebes* Syd., asexual morph unknown, parasitic on living leaves (*Phoebe tonduzii* Mez. and *Podocarpus elongate* L’Herit.), see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Tuberficiaceae*), Hyde et al. (2013) and Boonmee et al. (2014) did not accept as a genus in *Tuberficiaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Byssocoelum** Mont. 1835, *Chrysotrichaceae, Arthoniales, Arthomiomycetes*, six species, type: *B. niveum* Mont., lichenized, saxicolous or epiphytic, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Byssocinea** Syd. 1922, *Dothideomycetes genera incertae sedis*, two species, type: *B. amboinensis* Syd., asexual morph unknown, saprobes, terrestrial, Brazil and Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), da Silva (2016; taxonomy, phylogeny, accepted as a genus in *Saccardiaceae*), cultures and sequences are unavailable, needs generic revision.

**Byssolecia** Vain. 1921, *Pilocarpaceae, Lecanorales, Lecanoromycetes*, seven species, type: *B. fuscolivida* Vain., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Byssoloma** Trevis. 1853, *Pilocarpaceae, Lecanorales, Lecanoromycetes*, possibly heterogeneous, c. 50 spp., type: *B. leprieurii* Trevis., sexual morph with apothecoid
ascomata usually having a byssoid margin, asexual morph coelomycetous, rarely campylidial, lichenized, terrestrial, mainly foliolicous in tropical rainforests, see Lücking (2008; morphology), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), holotype of type: Leprieur 1366 (PC), sequences are available but lacks for the type species.

**Byssonectria** P. Karst. 1881, *Pyrenomataceae*, *Pezizales*, *Pezizomycetes*, eleven species, type: *B. obducens* P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lindemann et al. (2015; new species, DNA), cultures and sequences are available but lacks for the type; needs generic revision.

**Byssomyces** Guarro, Punsola & Cano 1987, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *B. ceratinophila* Guarro, Punsola & Cano, asexual morph unknown, saprobes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), culture available for the type: IMI 370021.

**Byssophytum** Mont. 1848, *Ascomycota* *genera incertae sedis*, one species, type: *B. sulphureum* Mont., asexual morph unknown, lichenized, terrestrial, Java, Tahiti, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Byssosphaeria** Cooke 1879, *Melanommataceae*, *Pleosporales*, *Dothideomycetes*, 25 species, type: *B. keithii* (Berk. & Broome) Cooke 1879, asexual morph *Pyrenochaeta* or *Chaetophoma*-like, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; morphology, phylogeny), cultures and sequences of type species are unavailable, needs generic revision.

**Byssotheciella** Petr. 1923, *Sordariomycetes*, *genera incertae sedis*, two species, type: *B. tiliae* Petr., asexual morph unknown, saprobes, terrestrial, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Byssothecium** Fuckel 1861, *Dothideomycetes* *genera incertae sedis*, eight species, type: *B. ciracinans* Fuckel, asexual morph coelomycetous, saprobes or parasites, terrestrial, freshwater or marine, worldwide, see Zhang et al. (2009) accepted as *Massarinaceae* but Zhang et al. (2012) showed it distinct from *Massarinaceae*, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Byssotrema** M. Cáceres, Aptroot & Lücking 2014, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *B. mirabile* M. Cáceres, Aptroot & Lücking, lichenized, see Cáceres et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

**Caccobius** Kimbr. 1967, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, c. six species, type: *C. minusculus* Kimbr., asexual morph unknown, coprophilous, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cadobius** Kimbr. 1967, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, c. six species, type: *C. minusculus* Kimbr., asexual morph unknown, coprophilous, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cadophora** Lagerb. & Melin 1927, *Dermataceae*, *Helotiales*, *Leotiomycetes*, 15 species, type: *C. fastigiata* Lagerb. & Melin, asexual morph unknown, saprobes, terrestrial, worldwide, see Navarrete et al. (2011; associated with grapevine trunk diseases), Seifert et al. (2011; morphology), Day et al. (2012; new species), Wijayawardene et al. (2012,
2017; outline), Kirk et al. (2013; genus accepted), Travadon et al. (2015; new species), cultures and sequences are available.


**Caespiototheca** S. Takam. & U. Braun 2005, *Erysiphaceae, Erysiphales, Leotiomyces*, one species, type: *C. forestalis* (Mena) S. Takam. & U. Braun, asexual morphs hyphomycetous, biotrophic, obligate plant pathogens, terrestrial, South America (Argentina), see Lumbsch and Huhndorf (2010; outline), Braun and Cook (2012; taxonomy), sequences of non-type material of the type species are available.


**Cainiella** E. Müll. 1957, *Sydowiellaceae, Diaporthales, Sordariomycetes*, four species, type: *C. johansonii* (Rehm) E. Müll., asexual morphs unknown, saprobes, terrestrial, Canada, Europe, see Lumbsch and Huhndorf (2010; outline), Kruys and Castlebury (2012; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

**Cainiomyces** Thaxt. 1901, *Laboulbeniales* genera *incertae sedis*, *Laboulbeniomycetes*, one species, type: *C. isomali* Thaxt., asexual morph unknown, saprobes, terrestrial, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Calcarispora** Marvanová & Marvan 1963, *Incertae sedis*, one species, type: *C. hiemalis* Marvanová & Marvan, hyphomycetous, sexual morph unknown, aquatic, Europe and Canada, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Calcarisporium** Preuss 1851, *Incertae sedis*, *Hypocreales, Sordariomycetes*, fifteen species, type: *C. arbuscula* Preuss, hyphomycetous, asexual morph of *Hypocreales*, saprobes, widespread (incl. Europe, Manitoba, Japan, Ghana, Thailand, Tanzania, Great Britain), see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Silder et al. (2013; Bioactive metabolites), Sun et al. (2016; *Calcarisporium cordycipiticola* sp. nov.), cultures and sequences are unavailable, needs generic revision.

**Calceispora** Matsush. 1975, *Ascomycota* genera *incertae sedis*, two species, type: *C. hachijoensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Calceomyces** Udagawa & S. Ueda 1988, *Xylariaceae, Xylariales, Sordariomycetes*, one species, type: *C. lacunosus* Udagawa & S. Ueda, asexual morph hyphomycetous, saprobes, terrestrial (collected from activated sludge), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, type material CBS 633.88 = NHL 2983.
Calenia Müll. Arg. 1890, Gomphillaceae, Ostropales, Lecanoromycetes, 30 species, type: C. depressa Müll. Arg., lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Caleniopsis Vězda & Poelt 1987, Gomphillaceae, Ostropales, Lecanoromycetes, two species, type: C. laevigata (Müll. Arg.) Vězda & Poelt, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Calentypa Petr. 1934, Sordariomycetes, genera incertae sedis, two species, type: C. maculans Petr., saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Caliciopsis Peck 1883, Coryneliaceae, Coryneliales, Eurotiomycetes, 31 species, type: C. pinea Peck, asexual morph coelomycetous (phoma-like), parasites, pathogens, see Lumbsch and Huhndorf (2010; outline), Pratibha et al. (2010; new species), Garrido-Benavent et al. (2015; new species), Crous et al. (2016; new species, phylogeny), Wood et al. (2016; DNA, phylogeny), cultures available for the type: CBS 139.64.

Calicium Pers. 1794, Caliciaceae, Caliciales, Lecanoromycetes, 30 species, type: C. viride Pers., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Prieto and Wedin (2016; classification), Lücking et al. (2016; classification), sequences are available.

Caliebaea Bat. 1962, Dothideomycetes, genera incertae sedis, one species, type: C. rutideae (Hansf.) Bat., saprobes, terrestrial, Uganda, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Callerascus Whitton, K.D. Hyde & McKenzie 2012, Ascomycota genera incertae sedis, one species, type: C. tunicacerulius Whitton, K.D. Hyde & McKenzie, asexual morph unknown, saprobes, terrestrial, Australia, see Whitton et al. (2012; taxonomy holotype of the type: IFRD 9021, cultures and sequences are unavailable, needs generic revision.

Callistospora Petr. 1955, Ascomycota genera incertae sedis, one species, type: C. gaubae Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2016, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Callome Otálor & Wedin 2014, Collemataceae, Peltigerales, Lecanoromycetes, one species, type: C. multipartita (Sm.) Otálor, P.M. Jörg. & Wedin, lichenized, see Otálor et al. (2013a, 2014; taxonomy, phylogeny), Lücking et al. (2016; classification), sequences are available.

Calloria Fr. 1836 (= Cylindrocolla Bonord. 1851; Callorina Korf 1971 fide Johnston et al. 2014), Dermateaceae, Helotiales, Leotiomyctes, five species, type: C. fusarioides (Berk.) Fr., asexual morph Cylindrocolla, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Seifert et al. (2011; morphology of asexual morph), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available but lacks for the type species.

Calloriopsis Syd. & P. Syd. 1917, Helotiales, Helotiales, Leotiomyctes, five species, type: C. gelatinosa (Sacc.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Calogaya Arup, Frödén & Søchting 2013, Teloschistaceae, Teloschistales, Lecanoromycetes, 14 species, type: C. biatorina (A. Massal.) Arup, Frödén & Søchting; lichenized, see Arup et al. (2013; taxonomy, phylogeny), Lücking et al. (2016; classification), sequences are available.
Calonectria De Not. 1867 (= Cylindrocladium Morgan 1892; Candelospora Rea & Hawley 1912) Rossman et al. 2016), Nectriaceae, Hypocrales, Sordariomycetes, type: pyrochroa (Desm.) Sacc., 248 species are listed in Index Fungorum (2016), type: C. daldiniana De Not., pathogenic to plants or isolated from soil, terrestrial, worldwide, see Lombard et al. (2010a, b, 2015a, b; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), ex-epitype of type: CBS 749.70; epitype: of the type: CBS H-15110.

Calongea Healy, Bonito & Trappe 2009, Pezizaceae, Pezizales, Pezizomycetes, one species, type: C. prieguensis (Mor.-Arr., J. Gómez & Calonge) Healy, Bonito & Trappe, asexual morph unknown, saprobes, from soil, terrestrial, Europe, see Healy et al. (2009; taxonomy), holotype of the type: MA (Fungi) 33502, cultures and sequences are available.

Calongeomyces Hawksworth & Etayo 2011, Ascomycota genera incertae sedis, one species, type: C. gibelluloides (D. Hawksw. & Etayo) D. Hawksw. & Etayo (syn. Calongia gibelluloides D. Hawksw. & Etayo), coelomycetous, sexual morph unknown, parasymbiont on Cladonia, Flavoparmelia, Pertusaria, terrestrial, southern Europe, see Hawksworth and Etayo (2011; morphology, distinction of similar lichenicolous genera), holotype of the type: (K, M) 164014, J. Etayo & A. Etayo), cultures and sequences are unavailable.

Calopadia Vězda 1986, Pilocarpaceae, Lecanorales, Lecanoromycetes, 27 species, type: C. fusca (Müll. Arg.) Vězda, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Calopadiopsis Lücking & R. Sant. 2002, Pilocarpaceae, Lecanorales, Lecanoromycetes, two species, type: C. tayabasensis (Vain.) Lücking & R. Sant., lichenized, Argentina, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Calophoma Q. Chen & L. Cai 2015, Didymellaceae, Pleosporales, Dothideomycetes, six species, type: C. clematidina (Thüm.) Q. Chen & L. Cai, coelomycetous, saprobes, pathogens, terrestrial, The Netherlands, New Zealand, Switzerland, see Chen et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), epitype and ex-epitype culture of the type: CBS H-16193, CBS 108.79.

Caloplaca Th. Fr. [nom.cons.] 1860, Teloschistaceae, Teloschistales, Lecanoromycetes, 350 species, type: C. cerina (Hedw.) Th. Fr., lichenized, see Lumbsch and Huhndorf (2010; outline), Arup et al. (2013; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Caloscypha Boud. 1885 (= Geniculodendron G.A. Salt 1974) Healy et al. 2016), Caloscyphaceae, Pezizales, Pezizomycetes, two species, type: C. fulgens (Pers.) Boud., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: AFTOL-ID 152.


Calosphaeriopsis Petr. 1941, Sordariomycetes, genera incertae sedis, one species, type: C. huberiana (Kirschst.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),
Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Calosporella** J. Schröt. 1897, Melanconidaceae, Diaporthales, Sordariomycetes, one species, type: *C. innesii* (Curr.) J. Schröt., asexual morph unknown, saprobes, terrestrial, Europe, see Voglmayr and Jaklitsch (2014; DNA, phylogeny), cultures and sequences are unavailable, ex-type and epitype of type: CBS 123810, WU 32161.

**Calostilbe** Sacc. & P. Syd. 1902 (= Calostilbella Höhn. 1919; Xenostilbum Petr. *fide* Rossman et al. 2016), Nectriaceae, Hypocreales, Sordariomycetes, two species, type: *C. striispora* (Ellis & Everh.) Seaver, asexual morph hyphomycetous, saprobes on wood and bark, commonly in tropical regions, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2015a; phylogeny); Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), lectotype of the type: NY, isotype BPI 553210, 553211.

**Calostyriopsis** Höhn. 1919, Microthyriaceae, Microthyriales, Dothideomycetes, two species, type: *C. conferta* (Theiss.) Höhn., saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Calotrichopsis** Vain. 1890, Lichinaceae, Lichinales, Lichinomycetes, three species, type: *C. insignis* Vain., lichenized, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Calvitimela** Hafellner 2001, Tephromelataceae, Lecanorales, Lecanoromycetes, ten species, type: *C. armeniaca* (DC.) Hafellner, lichenized, see Bendiksby et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.


**Calycella** (Sacc.) Sacc. 1899, Helotiaceae, Helotiales, Leotiomycetes, one species, type: *C. gelatinosa* (Sacc.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Europe, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Calycellina** Höhn. 1918 (= Chaetochara B. Sutton & Piroz. 1965 *fide* Johnston et al. 2014), Hyaloscyphaceae, Helotiales, Leotiomycetes, c. 45 species, type: *C. punctiformis* (Grev.) Höhn., asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Seifert et al. (2011; morphology of asexual morph), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available but lacks for the type:.

**Calycellinopsis** W.Y. Zhuang 1990, Dermateaceae, Helotiales, Leotiomycetes, one species, type: *C. xishuangbanna* W.Y. Zhuang, asexual morph unknown, saprobes, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type:.

**Calycidiium** Stirt. 1877, Sphaerophoraceae, Lecanorales, Lecanoromycetes, two species, type: *C. cuneatum* Stirt., lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Calycidiaceae*), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), sequences are available.
**Calycina** Nees ex Gray 1821, *Pezizellaceae, Helotiales, Leotiomycetes*, c. 30 species, type: *C. herbarum* (Pers.) Gray, asexual morph hyphomycetous, saprobes, cones scales, herbaceous stems and leaves, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Baral et al. (2013; genus accepted), Han et al. (2014; genus accepted), Baral and Rämä (2015; genus accepted), type in S herbarium, cultures and sequences are unavailable for the type of the type species, needs generic revision.

**Calypellopsis** Svrček 1986, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, six species, type: *C. reticulata* (Vacek) Svrček, asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Calyptra** Theiss. & Syd. 1918, *Dothideomycetes* genera *incertae sedis*, five species, type: *C. cordobensis* (Speg.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Calyptronectria** Speg. 1909, *Melanommataceae, Pleosporales, Dothideomycetes*, three species, type: *C. platensis* Speg., asexual morph unknown, saprobes, terrestrial, Argentina, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; taxonomy, phylogeny), cultures and sequences of type species are unavailable, needs generic revision.

**Calyptrozyma** Boekhout & Spaay 1995, *Eurotiomycetidae, genera incertae sedis*, one species, type: *C. arxii* Boekhout & Spaay, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 354.92.

**Camaroglobulus** Speer 1986, *Ascomycota* genera *incertae sedis*, one species, type: *M. caespitosa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Camarographium** Bubák 1916, *Pleosporales* genera *incertae sedis, Dothideomycetes*, seven species, type: *C. stephensii* (Berk. & Broome) Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Crous et al. (2011; new species, key), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016, 2017; outline, taxonomy, new species), cultures and sequences are available but lacks for the type species, needs generic revision.

**Camarogella** Lar. N. Vassilyeva 1997, *Boliniaceae, Boliniales, Sordariomycetes*, two species, type: *C. pugillus* (Schwein.) Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, North temperate zone, see Huhndorf and Miller (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Untereiner et al. (2013; phylogeny), Friebes and Wendelin (2014), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Camarops** P. Karst. 1873, *Boliniaceae, Boliniales, Sordariomycetes*, 20 species, type: *C. hypoxyloides* P. Karst., asexual morphs unknown, saprobes, terrestrial, worldwide, see Huhndorf and Miller (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Camaropycnis** E.K. Cash 1945, *Ascomycota* genera *incertae sedis*, one species, type: *C. libocedri* E.K. Cash, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Camarosporellum** Tassi 1902, *Ascomycota* genera *incertae sedis*, one species, type: *C. nervisequum* (Tassi) Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial,
Camarosporioides W.J. Li & K.D. Hyde 2016, Phaeospheariaceae, Pleosporales, Dothideomycetes, one species, type: C. phragmitis W.J. Li & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Germany, see Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 16-1488, MFLUCC 13-0365.

Camarosporiopsis Abbas, B. Sutton & Ghaffar 2000, Ascomycota genera incertae sedis, one species, type: C. capparis (S. Ahmad) Abbas, Sutton & Ghaffar, coelomycetous, sexual morph unknown, one species, saprobes, Pakistan, see Wijayawardene et al. (2012, 2016, 2017; taxonomy, outline), sequences are unavailable, needs generic revision.

Camarosporium Schulzer 1870, Pleosporineae genera incertae sedis, Pleosporales, Dothideomycetes, more than 100 spp., type specie C. quaternatum Schulzer, coelomycetous, sexual morph cucurbitaria-like, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2014, 2016, 2017; taxonomy, phylogeny, outline), Liu et al. (2015, taxonomy, phylogeny), Tibpromma et al. (2017; taxonomy, phylogeny), sequences are available for 11 species, needs generic revision.

Camarosporula Petr. 1954 (= Anthracostroma Petr. 1954 fide Rossman et al. 2015), one species, type: C. persoonii (Henn.) Petr., asexual morph coelomycetous, saprobes, terrestrial, Australia, see Crous et al. (2011; phylogeny), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), cultures available for the type: CBS 116258.

Camarosporum Tassi 1902, Ascomycota genera incertae sedis, one species, type: C. ampelopidis Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cameronia Kantvilas 2012, Cameroniaceae, Baeomycetales, Lecanoromycetes, two species, type: C. pertusarioides Kantvilas, lichenized, see Kantvilas (2012; taxonomy), Lumbsch et al. (2012; taxonomy), Lücking et al. (2016; classification), sequences are available.

Camillea Fr. 1849, Xylariaceae, Xylariales, Sordariomycetes, more than 41 species, type: C. leprieurii (Mont.) Mont., endophytes-saprobes, widespread and high in tropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Campoa Spec. 1921, Parmulariaceae, Dothideomycetes, families incertae sedis, two species, type: C. pulcherrima Spec., asexual morph unknown, saprobes, terrestrial, South America, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in Parmulariaceae), Wijayawardene et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Camporesia W.J. Li & K.D. Hyde 2016, Xylariaceae, Xylariales, Sordariomycetes, two species, type: C. sambuci W.J. Li & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15–3905, MFLUCC 13–0203.

Camposporidium Nawawi & Kuthub. 1988, Ascomycota genera incertae sedis, three species, type: C. cristatum Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, terrestrial, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Camposporium Harkn. 1884, Leptosphaeriaceae, Pleosporales, Dothideomycetes, 18 species, type: C. antennatum Harkn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology, accepted as a genus in Leptosphaeriaceae),
Wijayawardene et al. (2012, 2017; outline), Adamčík et al. (2015; new species), cultures available for the type: ICMP15321.

**Camptomeriphila** Crous & M.J. Wingf. 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *C. leucaenae* Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22884, CPC 27608.

**Camptomeris** Syd. 1927, *Ascomycota* genera *incertae sedis*, seven species, type: *C. calliandrae* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology). Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Camptomyces** Thaxt. 1894, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, eight species, type: *C. melanopus* Thaxt., asexual morph unknown, parasitic on Staphylinidae beetles, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Camptophora** Réblová & Unter. 2013, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *C. hylomeonis* (Crous, de Hoog & H.D. Shin) Réblová & Unter., asexual morph unknown, from living leaves of *Hylomecon vernalis*, terrestrial, South Korea, see Réblová et al. (2013; genus accepted), Madrid et al. (2016; phylogeny), holotype and ex-type culture of the type: CBS H-19907, CBS 113311.

**Camptosphaeria** Fuckel 1870, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, four species, type: *C. sulphurea* Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, need generic revision.


**Campylostelium** Müll. Arg. 1883, *Trypetheliaceae*, *Trypetheliales*, *Dothideomycetes*, six species, type: *C. puiggarii* Müll. Arg., lichenized, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Nelsen et al. (2014a; taxonomy), cultures available for the type: MPN268.


**Canariomyces** Arx 1984, *Microascales*, *Microascales*, *Sordariomycetes*, one species, type: *C. notabilis* Arx, asexual morph unknown, saprobes, terrestrial, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline, phylogeny), holotype of the type: MUCL 44677, a sequence available but unpublished.

morp unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cancellidium** Tubaki 1975, *Sordariales* genera *incertae sedis*, two species, type: *C. applanatum* Tubaki, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, Europe, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Zhao et al. (2013; China), Pratibha et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

**Candelabrum** Beverw. 1951, *Ascomycota* genera *incertae sedis*, seven species, type: *C. spinulosum* Beverw, hyphomycetous, sexual morph unknown, on decaying leaves in water, aquatic, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Candelaria** A. Massal. 1852, *Candelariaceae*, *Candelariales*, *Lecanoromycetes*, seven species, type: *C. concolor* (Dicks.) Arnold, lichenized, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Candelariella** Müll. Arg. 1894, *Candelariaceae*, *Candelariales*, *Lecanoromycetes*, 50 species; type: *C. vitellina* (Hoffm.) Müll. Arg., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Candelina** Poelt 1974, *Candelariaceae*, *Candelariales*, *Lecanoromycetes*, three species, type: *C. mexicana* (B. de Lesd.) Poelt, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Candelosynnema** K.D. Hyde & Seifert 1992, *Ascomycota* genera *incertae sedis*, one species, type: *C. ranunculosporum* K.D. Hyde & Seifert, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Candida** Berkhout 1923 (= *Lodderomyces* Van der Walt 1966), *Candidaceae*, *Saccharomycetales*, *Saccharomycetes*, 40 species, type species *C. tropicalis* var. *tropicalis* (Castell.) Berkhout, asexual reproduction by multilateral budding and formation of pseudohyphae and true hyphae, saprophytic, others pathogens or opportunistic pathogens of humans and animals, terrestrial, worldwide, phylogenetic analysis of gene sequences shows that there are about 40 species in the *Candida tropicalis* clade, the type species of the genus *Candida*, which also includes *C. albicans* and *Lodderomyces elongisporus*. Prior to DNA sequence analysis and changes in the Code of nomenclature for fungi (Melbourne Code), approximately 400 described anamorphic species were included in the genus *Candida*.

**Cannonia** Joanne E. Taylor & K.D. Hyde 1999, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *C. australis* (Speg.) Joanne E. Taylor & K.D. Hyde, asexual morph unknown, saprobes, Argentina, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Canoparmelia** Elix & Hale 1986, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 40 species; type: *C. texana* (Tuck.) Elix & Hale, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Leonardo et al. (2011; indicator for environmental pollution), Kirk et al. (2013; genus accepted), Kirika et al. (2016; phylogeny and circumscription), Lücking et al. (2016; classification), sequences are available.

**Cantharomyces** Thaxt. 1890, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 29 species, type: *C. bledii* Thaxt., asexual morph unknown, biotrophic, hosts are Dryopodidae, Hydrophilidae, Limnichidae, and Staphylinidae (Coleoptera), widespread, see Lumbsch and
Capillataspora K.D. Hyde 1989, Dothideomycetes genera incertae sedis, one species, type: C. corticola K.D. Hyde, asexual morph unknown, saprobes, collected from mangroves, see Lumbsch & Huhndorf (2009; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capillipes R. Sant. 1956, Helotiaceae, Helotiales, Leotiomycetes, one species, type: C. cavorum R. Sant., asexual morph unknown, saprobes, terrestrial, Lapland, see Lumbsch & Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capillisticus Santam. 2004, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: C. tenellus Santam., asexual morph unknown, parasitic on Hydrophilidae beetles, aquatic, Europe, see Lumbsch & Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Capitofimbria L. Lombard & Crous 2016, Stachybotriaceae, Hypocreales, Sordariomycetes, one species, type: C. compacta (R.F. Castañeda et al.) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS-H6584a, CBS 111739.

Capitotorostrum Bat. 1957, Ascomycota genera incertae sedis, one species, type: C. asteridiellae Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


Capnobotrys S. Hughes 1970, Metacapnodiaceae, Capnodiales, Dothideomycetes, c. 20 species, type: C. neesii S. Hughes, hyphomycetous, sexual morph unknown, sooty mould on living plants, terrestrial, Asia, Australasia, Europe, North America, South America, North America, see Seifert et al. (2011; morphology), Hughes and Seifert (2012; new species), Wijayawardene et al. (2012, 2017; outline), Hyde et al. (2013; accepted as a genus in Metacapnodiaceae), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capnocheirides J.L. Crane & S. Hughes 1982, Ascomycota genera incertae sedis, one species, type: C. rhododendri (Kunze) J.L. Crane & S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Capnodiaramstrum Speg. 1886, Ascomycota genera incertae sedis, one species, type: C. guaraniticum Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Capnodinula Spec. 1918, Pseudoperisporiaceae, Dothideomycetes families incertae sedis, four species, type: C. trichoea (Rehm) Spec., coelomycetous, sexual morph unknown, saprobes, terrestrial, See Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capnodium Mont. 1849 (= Polychaeton (Pers.) Lév. 1846; = Fumagospora G. Arnaud 1911 fide Chomnunti et al. 2011; Hyde et al. 2013; Wijayawardene et al. 2014), Capnodiales,
Capnodiales, Dothideomycetes, one species, type: C. citri Berk. & Desm., asexual morph coelomycetous, sooty moulds, worldwide, see Lumbsch and Huhndorf (2010; outline), Chomnunti et al. (2011, 2014; taxonomy, nomenclature), Hyde et al. (2013; accepted as a genus in Capnodiales), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), cultures and sequences are available.

Capnofrasera S. Hughes 2003, Ascomycota genera incertae sedis, one species, type: C. dendryphioides S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016, 2017; outline), cultures and sequences are unavailable thus placed in Ascomycota incertae sedis in here, needs generic revision.

Capnokyma S. Hughes 1975, Euantennariaceae, Dothideomycetes, families incertae sedis, two species, type: C. corticola S. Hughes, asexual morph unknown, saprobes, terrestrial, Australasia, South America, see Seifert et al. (2011; morphology), Hyde et al. (2013; accepted as a genus in Euantennariaceae), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Capnettia Bat. & H. Maia 1965, Monoblastiaceae, Monoblastiales, Dothideomycetes, eight species, type: C. amazonensis Bat. & H. Maia, asexual morph coelomycetous, saprobes, thallus epiphyllous, worldwide, see Nelsen et al. (2009, 2011; taxonomy), Yeshitela et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

Capricola Velen. 1947, Helotiales genera incertae sedis, one species, type: C. fuscidula Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capronia Sacc. 1883, Herpotrichiellaceae, Chaetothyriales, Eurotiomycetes, c. 60 species, type: C. sexdecimspora (Cooke) Sacc., asexual morphs hyphomycetous, parasitic (on fungi or lichens) or saprobes, terrestrial, worldwide, see Badali et al. (2008; taxonomy), Yeshitela et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Untereiner et al. (2011; phylogeny), Friebes (2012; morphology), Diederich et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Gueidan et al. (2014; phylogeny), sequences are available.

Caproniella Berl. 1896, Sordariomycetes, genera incertae sedis, two species, type: C. pleiospora (Mouton) Berl., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Caproventuria U. Braun 1998, Venturiaceae, Venturiales, Dothideomycetes, two species, type: C. hanliniana (U. Braun & Feiler) U. Braun, asexual morph hyphomycetous, saprobes, soil-borne, Africa, Asia, Europe, New Zealand, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; phylogeny, accepted as a genus in Venturiales), Hyde et al. (2013; accepted as a genus in Venturiales), Wijayawardene et al. (2014; outline), strains of the type: ATCC 9601, IFM 52023, holotype of type: Germany, ascomata formed in culture, dried culture on SNA, 1994, F. Feiler (HAL 7623 F).

Capsicumyces Gamundí, Aramb. & Giaiotti 1979, Ascomycota genera incertae sedis, one species, type: C. delicatus Gamundí, Aramb. & Giaiotti, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Capsulospora K.D. Hyde 1996, Xylariales genera incertae sedis, Sordariomycetes, nine species, type: C. frondicola K.D. Hyde, asexual morph unknown, sexual morph ascomycetes,
saprobes on dead branches, Vanuatu, Brunei, Jawa, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Carassea** S. Stenroos 2002, Cladoniaceae, Lecanorales, Lecanoromycetes, one species; type: *C. connexa* (Vain.) S. Stenroos, lichenized, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

**Carbacanthographis** Staiger & Kalb 2002, Graphidaceae, Ostropales, Lecanoromycetes, 28 species, type: *C. chionophora* (Redinger) Staiger & Kalb, lichenized, see Rivas Plata et al. 2012a, Lücking et al. (2016; classification), sequences are available.

**Carbacanthographis** Staiger & Kalb in Staiger (2002), Graphidaceae, Ostropales, Lecanoromycetes, c. 22 species, type: *C. chionophora* (Redinger) Staiger & Kalb, currently accepted, all with ascomata, two species with additional vegetative propagules (soredia and isidia), lichenized (Trentepohlia), terrestrial (mainly corticolous), tropical, see Lücking et al. (2009; new species), Tripp et al. (2010; new species), Sharma et al. (2010; key), Rivas Plata et al. (2013; DNA, phylogeny), Lumbsch et al. (2014; tribe Wirthiotremateae), Sharma and Khadilkar (2011; new species), Kukwa et al. (2013; new species), sequences are available.

**Carbomyces** Gilkey 1954, Carbomycetaceae, Pezizales, Pezizomycetes, three species; type: *C. emergens* Gilkey, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Moreno et al. (2012; re-visited, DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available for the voucher AH 39344 of the type species.

**Carbonicola** Bendiksby & Timdal (2013), Carbonicolaceae, Lecanorales, Lecanoromycetes, Ascomycota; three species; type: *C. anthracophila* (Nyl.) Bendiksby & Timdal; lichenized; temperate northern hemisphere, Australia, see Bendiksby & Timdal 2013, Lücking et al. (2016; classification), type specimen H-NYL-20375 p.p. (lectotype by Timdal 1984), sequences are available.

**Carbonea** (Hertel) Hertel 1983, Lecanoraceae, Lecanorales, Lecanoromycetes, c. 22 species, type: *C. atronivea* (Arnold) Hertel, lichenicolous or lichenized?, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Øvstedal (2012; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Carbonicola** Bendiksby & Timdal (2013), Carbonicolaceae, Lecanorales, Lecanoromycetes, Ascomycota; three species; type: *C. anthracophila* (Nyl.) Bendiksby & Timdal; lichenized; temperate northern hemisphere, Australia, see Bendiksby & Timdal 2013, Lücking et al. (2016; classification), type specimen H-NYL-20375 p.p. (lectotype by Timdal 1984), sequences are available.

**Carbosphaerella** I. Schmidt 1969, Halosphaeriaceae, Microascales, Sordariomycetes, two species, type: *C. pleosporoides* Schmidt, asexual morph unknown, saprobes, marine, Denmark, Germany, USA, Johnson et al. (1984; taxonomy), Sundari et al. (1996; morphology), Jones et al. (2015; outline), cultures and sequences are unavailable.

**Caribaemomyces** Cif. 1962, Microthyriaceae, Microthyriales, Dothideomycetes, one species, type: *C. tetrasporus* (Toro) Cif., saprobes, terrestrial, Dominican Republic, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in Microthyriaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Carinispora** K.D. Hyde 1992, Phaeosphaeriaceae, Pleosporales, Pleosporomycetidae, Dothideomycetes, two species, type: *C. nypae* K.D. Hyde, saprobes, marine habitat (collected from palm Nypa fruticans), See Lumbsch & Huhndorf (2009; outline), Kirk et al. (2013; genus accepted), only type sequence available, needs generic revision, Type material BCC 36316.

**Carnegieispora** Etayo 2009, Ascomycota genera incertae sedis, one species, type: *C. rimeliae* Etayo & Berger, coelomycetous, sexual morph unknown, parasymbiont on Parmotrema,
terrestrial, Azores, see Etayo and Berger (2009; morphology, distinction of similar lichenicolous genera), Wijayawardene et al. (2016; morphology), holotype of the type: L.I. F. Berger 18380, cultures and sequences are unavailable.

**Carneopezizzella** Svrček 1987, Helotiaceae, Helotiales, Leotiomyces, one species, type: *C. salicicola* Svrček, asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Holec et al. (2013; checklist), Kirk et al. (2013; genus accepted), cultures and sequence are unavailable, needs generic revision.

**Carneia** Bat. 1960, Ascomycota genera incertae sedis, one species, type: *C. tabebuiae* Bat. & Peres, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Carpophoromyces** Thaxt. 1931, Laboulbeniales, Laboulbeniales, Laboulbeniomycetes, one species, type: *C. cybocephali* Thaxt., asexual morph unknown, parasitic on Cybocephalidae beetles, terrestrial, Asia, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Carrismyces** R.F. Castañeda & Heredia 2000, Ascomycota genera incertae sedis, one species, type: *C. proliferatus* Castañeda & Heredia, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Mexico, see Castañeda-Ruiz & Heredia (2000; morphology), holotype of the type: XAL CB736, cultures and sequences are unavailable, compare with *Bioconosporium*, *Oncopodiella*, *Pseudopetrakia* and *Septosporium*.

**Caryophylloseptoria** Verkley et al. 2013, Mucoromycotina, Mucoromycetes, Pleosporales, Dothideomycetes, four species, type: *C. lychnidis* (Desm.) Verkley, Quaedvlieg & Crous, coelomycetous, sexual morph unknown, plant pathogenic, see Verkley et al. (2013; morphology, phylogeny), no ex-type culture available, reference material CBS H-21161, living culture CBS 109098, 109102.

**Caryospora** De Not. 1855, Caryosporaceae, Pleosporales, Dothideomycetes, six species, type: *C. putaminum* (Schwein.) De Not., saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), accepted as a genus in *Zopfiaceae*, Hyde et al. (2013; accepted as a genus in *Zopfiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in *Zopfiaceae*), Zhao and Zhao (2014; new species, China), Ariyawansa et al. (2015; new species, introduced *Caryosporaceae*), cultures and sequences are available but lacks for the type species, needs generic revision.

**Caryosorella** Kohlm. 1985, Dothideomycetes, genera incertae sedis, one species, type: *C. rhizophorae* Kohlm., asexual morph unknown, saprobes, marine aquatic, America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tian et al. (2015; morphology; nomenclature; phylogeny), cultures available for the type: JK 5302A (fide Suetrong et al. 2009).

**Caryosorella** Kohlm. 1985, Melanommataceae, Pleosporales, Dothideomycetes, one species, type: *C. rhizophorae* Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Suetrong et al. (2009; phylogeny, morphology); Jones et al. (2009, 2015; classification); Besitulo et al. (2010; diversity); Zainuddin et al. (2010; antimicrobial activities); Zhang et al. (2012; morphology); Lee et al. (2012; checklist); Hyde et al. (2013; morphology, outline); Samón-Legrá et al. (2014; diversity); Tian et al. (2015; morphology, phylogeny), holotype and ex-isotype of type: J.K. 4523a (NY), J.K.4532b (IMS).

**Casaresa** Gonz. Frag., 1920, Dermateaceae, Helotiales, Leotiomyces, one species, type: *C. sphagnorum* Gonz. Frag. aquatic hyphomycetous, see Wijayawardene et al. (2012), Kirk et al. (2013; genus accepted), sexual morph: *Mollisia casaresiae* Webster, Shearer & Spooner, see Wijayawardene et al. (2012), cultures and sequences are unavailable.

**Cashilella** Petr. 1951, Dermateaceae, Helotiales, Leotiomyces, three species, type: *C. atra* Petr., asexual morph unknown, saprobes, terrestrial, North America, New Zealand, see
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type:

**Castanedaee** W.A. Baker & Partr. 2001, Ascomycota genera incertae sedis, one species, type: *C. minor* (R.F. Castañeda) W.A. Baker & Partr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Castanediella** M. Hern.-Restr., Crous & M.J. Wingf. 2015, Xylariales genera incertae sedis, nine species, type: *C. acaciae* Crous, M. Hern.-Restr. & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Crous et al. (2015, 2016; taxonomy), Crous et al. (2016; new species, phylogeny), Hernández-Restrepo et al. (2016; new species; phylogeny), holotype of the type species and ex-type culture of the type: CBS H-22225, CPC 24869 = CBS 139896.

**Castanedomycetes** Cano, L.B. Pitarch & Guarro 2002, Onygenaceae, Onygenales, Eurotiomycetes, one species, type: *C. australiensis* Cano, L.B. Pitarch & Guarro., asexual morph unknown, saprobes, terrestrial, Australia, see Liang et al. (2009; phylogeny), cultures available for the type: IMI 370015.

**Catabotrys** Theiss. & Syd. 1915, Catabotrydaceae, Amplistromatales, Sordariomycetes, one species, type: *C. palmarum* (Pat.) Theiss. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

**Catapyrenium** Flot. 1850, Verrucariaceae, Verrucariales, Eurotiomycetes, six species, type: *C. cinereum* (Pers.) Körb., lichenized; see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2010; species in in the Iberian Peninsula and the Balearic Islands), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Catarrhospora** K.D. Hyde, S.W. Wong & E.B.G. Jones 1999, Annulatascaceae, Annulatales, Sordariomycetes, five species, type: *C. aquatica* K.D. Hyde, S.W. Wong & E.B.G. Jones, saprobes, aquatic, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Luo et al. (2015; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), Dayarathne et al. (2016a), holotype of type species HKU (M) 5239, cultures and sequences are available.

**Catarrhospora** K.D. Hyde, S.W. Wong & E.B.G. Jones 1999, Annulatascaceae, Annulatales, Sordariomycetes, five species, type: *C. aquatica* K.D. Hyde, S.W. Wong & E.B.G. Jones, saprobes, aquatic, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Luo et al. (2015; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), Dayarathne et al. (2016a), holotype of type species HKU (M) 5239, cultures and sequences are available.

**Catarrhospora** K.D. Hyde, S.W. Wong & E.B.G. Jones 1999, Annulatascaceae, Annulatales, Sordariomycetes, five species, type: *C. aquatica* K.D. Hyde, S.W. Wong & E.B.G. Jones, saprobes, aquatic, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Luo et al. (2015; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), Dayarathne et al. (2016a), holotype of type species HKU (M) 5239, cultures and sequences are available.

**Catenarina** Søchting, Søgaard, Arup, Elvebakk & Elix 2014, Teloschistaceae, Teloschistales, Lecanoromycetes, three species, type: *C. desolata* Søchting, Søgaard & Elvebakk, lichenized, see Søchting et al. (2014a; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Catenocuneiphora** Matsush. 2003, Ascomycota genera incertae sedis, one species, type: *C. mucosa* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Catenophoropsis** Nag Raj & W.B. Kendr. 1988, Ascomycota genera incertae sedis, one species, type: *C. eucalypticola* Nag Raj & W.B. Kendr., coelomycetous, sexual morph
unknown, saprobes, terrestrial, Australasia, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Catenosubulispora** Matsush. 1971, *Ascomycota* genera *incertae sedis*, one species, type: *C. honiaraensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South East Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Catenosubulispora** Matsush. 1971, *Ascomycota* genera *incertae sedis*, one species, type: *C. honiaraensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South East Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Catenulomyces** Egidi & de Hoog 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *C. convolutus* Egidi & Quaedvlieg, hyphomycetous, sexual morph unknown, rock-inhabiting, Spain, see Egidi et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014, 2017; outline), Kirk et al. (2013; genus accepted), ex-type cultures of the type species CBS 118609 = TRN9


**Catillaria** A.Massal. 1852, *Catillariaceae*, *Lecanorales*, *Lecanoromycetes*, 150 species, type: *C. chalybeia* (Borrer) A. Massal., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Catillochroma** Kalb 2007, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, seven species, type: *C. endochroma* (Fée) Kalb, lichenized, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; taxonomy), Miądlikowska et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

**Catinaria** Vain. [nom. cons.] 1922, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *C. atropurpurea* (Schär) Vězda & Poelt, lichenized, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Catinella** Boud. 1907, *Dothideomycetes* genera *incertae sedis*, one or two species, type: *C. olivacea* (Batsch) Boud., asexual morph unknown, saprobes or parasitic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence are available only for the type specie, needs generic revision.

**Catinopeltis** Bat. & C.A.A. Costa 1957, *Ascomycota* genera *incertae sedis*, one species, type: *C. recifensis* Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Catolechia** Flot. 1850, *Rhizocarpaceae*, *Rhizocarpales*, *Lecanoromycetes*, one species, type: *C. wahlenbergii* (Ach.) Flot., lichenized, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), type specimen UPS-ACH-L-244 (isotype), sequences are available.

**Catulus** Malloch & Rogerson 1978, *Dothideomycetes* genera *incertae sedis*, one species, type: *C. aquilonius* Malloch & Rogerson, asexual morph unknown, saprobes, fungicolous, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences are unavailable, needs generic revision.
Caudatispora J. Fröhl. & K.D. Hyde 1995, Chaetosphaerales genera incertae sedis, Sordariomycetes, two species, type: C. palmicola J. Fröhl. & K.D. Hyde, asexual morph unknown, terrestrial, saprobes, America (tropical), see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Sordariomycetidae, genera incertae sedis), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available but lacks for the type species.

Caudella Syd. & P. Syd. 1916, Micropeltidaceae, Dothideomycetes families incertae sedis, two species, type: C. oligotricha Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Hyde et al. (2013; accepted as a genus in Micropeltidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline) cultures and sequences are unavailable.

Caudospora Starbäck 1889, Diaporthales genera incertae sedis, Sordariomycetes, one species, type: C. taleola (Fr.) Starbäck, asexual morph unknown, terrestrial, saprobes, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cavaraella Speg. 1921, Rhytismatales genera incertae sedis, Leotiomyces, one species, type: C. micraspis (Berk. & M.A. Curtis) Speg., asexual morph unknown, saprobes, terrestrial, Cuba, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cavima Cazia Trappe 1989, Pezizaceae, Pezizales, Pezizomycetes, one species, type: C. flexiascus Trappe, asexual morph unknown, from soil, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available for voucher SOC 469 of the type species.

Cecidiomyces U. Braun & Zhurb. 2012, Ascomycota genera incertae sedis, one species, type: C. santessonii U. Braun & Zhurb, hyphomycetous, sexual morph unknown, terrestrial, lichenicolous, Australia, see Zhurbenko and Braun (2012; taxonomy), Wijayawardene et al. (2017; outline), holotype of type: UPS F-552770, cultures and sequences are unavailable.

Cecidiomycetes U. Braun & Zhurb. 2012, Ascomycota genera incertae sedis, one species, type: C. santessonii U. Braun & Zhurb, hyphomycetous, sexual morph unknown, terrestrial, lichenicolous, Europe, see Zhurbenko and Braun (2012; taxonomy), Wijayawardene et al. (2017; outline), holotype of type: UPS F-552770, cultures and sequences are unavailable.

Cecidioskyttea Etayo 2004, Cordieritidaceae, Helotiales, Leotiomyces, one species, type: C. osorioi Etayo, asexual morph coelomycetous, sexual morph stromatic and hairy and spores simples, parasymbiont on macrolichens belonging to Parmeliaceae, South America, see Etayo and Osorio (2004; morphology, distinction of similar lichenicolous genera), cultures and sequences are unavailable, holotype of the type: Hb. Osorio, H.S. Osorio & G. Geymonat 9639a.

Cecidonia Triebel & Rambold 1988, Lecideaceae, Lecideales, Lecanoromycetes, two species, type: C. umbonella (Nyl.) Triebel & Rambold, asexual morph unknown, lichenicolous, Europe, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Cejpia** Velen. 1934, *Dermateaceae, Helotiales, Leotiomyctes*, three species, type: *C. coerulea* Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type:.

**Celerioriella** Crous 2015, *Phaeonioniolaceae, Phaeonioniolales, Eurotiomyctes*, three species, type: *C. dura* (Damm & Crous) Crous, coelomcteous, sexual morph unknown, on living leaves, pathogens, terrestrial, South Africa, see Damm et al. (2010 as *Phaeomioniola dura* Damm & Crous, morphology), Crous et al. (2015, 2016; phylogeny), holotype and ex-type culture of type: CBS H-19999, CBS 120882.


**Celothelium** A.Massal. 1860, *Celotheliaceae, Phaeomioniolales, Eurotiomyctes*, eight species, type: *C. socialis* (Zenker) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Gueidan et al. (2014b; taxonomy, DNA), Chen et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Celtidia** J.D. Janse 1897, *Zopfiaceae, Pleosporales, Dothideomyctes*, one species, type: *C. duplicispora* J.D. Janse, marine habitat (root nodules of *Celtis* in Java), see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Zopfiaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cenangiopsis** Rehm 1912, *Helotiales, Helotiales, Leotiomyctes*, two species, type: *C. quercicola* (Romell) Rehm, asexual morph unknown, saprobes, terrestrial, China, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures available for the type: KL174, needs generic revision.

**Cenangium** Fr. 1818, *Helotiales, Helotiales, Leotiomyctes*, c. 30 species, type: *C. ferruginosum* Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures available for the type: KL390, needs generic revision.

**Cenangiumella** J. Fröhl. & K.D. Hyde 2000, *Helotiales, Helotiales, Leotiomyctes*, one species, type: *C. rattanicola* J. Fröhl. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Brunei, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

**Cenococcum** Moug. & Fr. 1829, *Glioniaceae, Mytilinidiales, Dothideomyctes*, nine species, type: *C. geophilum* Fr., coelomycetous, sexual morphs unknown, ectomycorrhizal, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as in *Glioniaceae*), Kirk et al. (2013; genus accepted), Peter et al. (2016; DNA, ectomycorrhizal), cultures and sequences are available.

**Cenozosia** A.Massal. 1854, *Ramalinaceae, Lecanorales, Lecanoromycetes*, one species, type: *C. inanis* (Mont.) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences unavailable.

**Cephaliothora** Thaxt. 1903, *Pezizales, genera incertae sedis*, four species, type: *C. tropica* Thaxt., hyphomycetous, sexual morph unknown, saprobes, on dung, soil, terrestrial, pantropical, temperate, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.
Cephaloascus Hanawa 1920, Cephaloascaceae, Saccharomycetales, Saccharomycetes, two species, type: *C. dispersa* Nakab., Gryzenh., Jol. Roux & M.J. Wingf., asexual reproduction by budding and blastoconidia, saprophytic, although one strain of *C. fragrans* was isolated from a human ear, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kurtzman and Robnett (2013; DNA, phylogeny), cultures and sequences are available.

Cephalophysis (Hertel) H. Kilias 1985, Teloschistaceae, Teloschistales, Lecanoromycetes, one species, type: *C. leucospila* (Anzi) H. Killas & Scheid., asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Arup et al. (taxonomy; 2013), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Cephalotheca Fuckel 1871, Cephalothecaceae, Sordariomycetes, families incertae sedis, six species, type: *C. sulfurea* Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

Cephalotrichum Link 1809, Microascales, Sordariomycetes, 31 species, type: *C. stemonitis* (Pers.) Nees, hyphomycetous, sexual morph unknown, saprobes, soil, dung terrestrial, worldwide, see Jiang et al. (2011; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), De Beer et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Sandoval-Denis et al. (2016; new species), cultures and sequences are available.

Ceramoclasteropsis Bat. & Cavalc. 1962, Dothideomycetes genera incertae sedis, one species, type: *C. coumae* Bat. & Cavalc., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Capnodiaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Ceramothyrium Bat. & H. Maia 1956, Chaetothyriaceae, Chaetothyriales, Eurotiomycetes, 34 species, type: *C. paiveae* Bat. & H. Maia, asexual morph hyphomycetous, *Stanhughesia* Constant., epiphytic, epiphyllous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Chomnunti et al. (2012; 2014 morphology, phylogeny), Kirk et al. (2013; genus accepted), Zeng et al. (2016; morphology, phylogeny), cultures and sequences of type species are unavailable, needs generic revision.

Ceratocarpia Rolland 1896, Chaetothyriaceae, Chaetothyriales, Eurotiomycetes, two species, type: *C. cactorum* Rolland, asexual morph unknown, saprobes, terrestrial, America, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tian et al. (2014; morphology; nomenclature), cultures and sequences are unavailable, needs generic revision.

Ceratocystis Ellis & Halst. 1890, Ceratocystidaceae, Microascales, Sordariomycetes, c. 70 species, type: *C. fimbriata* Ellis & Halst., asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), van Wyk et al. (2009, 2010; new species), Kajitani et al (2011; new species, pathogens), Tarigan et al. (2011; new species, Indonesia), Duong et al. (2012; new species, phylogeny), Nkuekam et al. (2012; new species), Chen et al. (2013; species associated with Eucalyptus, China), Kirk et al. (2013;
Ceratolenta Réblová 2013, Sordariomycetidae, genera incertae sedis, Sordariomycetes, eight species, type: C. caudata Réblová, asexual morph unknown, saprobes, Europe, see Réblová et al. (2013; taxonomy, phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), holotype and ex-type cultures available for the type: PRM 899854, CBS 125234.

Ceratomyces Thaxt., 1892, Ceratomycesceae, Laboulbeniales, Laboulbeniomycetes, 32 species, type: C. mirabilis Thaxt., parasitic on Hydrophilidae and Staphylinidae beetles, terrestrial and aquatic, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), culture available for type: AF431764 (SSU).

Ceratophacidium J. Reid & Piroz. 1966, Rhytismataceae, Rhytismatales, Leotiomycetes, one species, type: C. aristosporum (Bonar) J. Reid & Piroz., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceratophoma Höhn. 1917, Ascomycota genera incertae sedis, one species, type: C. rostrata (Fuckel) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceratophorum Sacc. 1880, Ascomycota genera incertae sedis, two species, type: C. helicosporium (Sacc.) Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceratoporella Höhn. 1915, Ascomycota genera incertae sedis, two species, type: C. clematidis Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, new species), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceratospermopsis Bat. 1951, Ascomycota genera incertae sedis, two species, type: need typification data, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from Meliolaceae), cultures and sequences are available but lacks for the type species, needs generic revision.

Ceratosporella Höhn. 1923, Ascomycota genera incertae sedis, 20 species (14 valid taxa as per Monteiro and Gusmao 2014), type: C. bicornis Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Seifert et al. (2011; morphology), cultures and sequences are available for type: CBS 117555.
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Monteiro and Gusmao (2014; key to species), sequence available but lacks for the type species.

*Ceratosporium* Schwein. 1832, *Ascomycota* genera *incertae sedis*, c. 14 species, type: *C. fuscescens* Schwein, widespread, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus not accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

*Ceratostomella* Sacc. 1878, *Sordariomycetidae*, genera *incertae sedis*, c. 14 species, type: *C. fuscescens* Schwein, widespread, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus not accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

*Cercidospora* Körb., 1865, *Dothideomyces* genera *incertae sedis*, more than 100 species, type: *C. ulothii* Körb., on lichens, temperate, see Lumbsch & Huhndorf (2011; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

*Cercidospora* Körb., 1865, *Dothideomycetes* genera *incertae sedis*, more than 100 species, type: *C. ulothii* Körb., on lichens, temperate, see Lumbsch & Huhndorf (2011; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

*Cercophora* Fuckel 1870, *Lasiosphaeraceae*, *Sordariales*, *Sordariomycetes*, 51 species, type: *C. mirabilis* Fuckel, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Catania et al. (2011; new species), Kirk et al. (2013; genus accepted), Kruys et al. (2015; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species), Dai et al. (2016; new species, phylogeny), cultures and sequences are available.

*Cercosperma* G. Arnaud ex B. Sutton & Hodges 1983, *Ascomycota* genera *incertae sedis*, two species, type: *C. arnaudii* B. Sutton & Hodges, hyphomycetous, sexual morph unknown, saprobes, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

*Cercospora* Fresen. 1863, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, about 3000 described species (c. 700 accepted species), and 357 orthographic variants (Mycobank), type: *C. apii* Fresen., anamorphs of plant pathogenic genera *Mycosphaerella*, saprobes, plant pathogens, terrestrial, worldwide, see To-Anun et al. (2011; phylogeny, key), Seifert et al. (2011; morphology), Groenewald et al. (2013; phylogeny), Hesami et al. (2011; phylogeny, new species), Bakhshi et al. (2015; phylogeny), Groenewald et al. (2008; sexual reproduction), To-Anun et al. (2010; new species), Nguanhom et al. (2015; phylogeny), Braun and Crous (2016; nomenclature), sequences are available for most of the species, holotype of type: *Fungi rhen. 117*.


*Cercosporidium* Earle 1901, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, 70 species, of which five are confirmed based on DNA, type: *C. euphorbiae* Tracy & Earle, hyphomycetous, sexual morph unknown, plant pathogenic, see Braun et al. (2013; morphology), Videira et al. (2017; morphology, phylogeny), resurrect the genus, and designate an epitype.

*Cerion* Massee 1901, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, two species, type: *C. coccineum* Massee & Rodway, asexual morph unknown, saprobes, terrestrial, Australia,
America (tropical), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ceriophora** Höhn. 1919, *Amphisphaeriaceae, Xylariales, Sordariomycetes*, one species, type species: *C. palustris* (Sacc.) Höhn., Europe, doubtful genus, see Kirk et al. (2008; genus accepted), Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Ceriophora** Höhn. 1919, *Amphisphaeriaceae, Xylariales, Sordariomycetes*, one species, type species: *C. palustris* (Sacc.) Höhn., Europe, doubtful genus, see Kirk et al. (2008; genus accepted), Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015; outline), cultures and sequences are unavailable.

**Ceriophora** Höhn. 1919, *Amphisphaeriaceae, Xylariales, Sordariomycetes*, one species, type species: *C. palustris* (Sacc.) Höhn., Europe, doubtful genus, see Kirk et al. (2008; genus accepted), Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015; outline), cultures and sequences are unavailable.

**Ceriophora** Höhn. 1919, *Amphisphaeriaceae, Xylariales, Sordariomycetes*, one species, type species: *C. palustris* (Sacc.) Höhn., Europe, doubtful genus, see Kirk et al. (2008; genus accepted), Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015; outline), cultures and sequences are unavailable.

**Ceriophora** Höhn. 1919, *Amphisphaeriaceae, Xylariales, Sordariomycetes*, one species, type species: *C. palustris* (Sacc.) Höhn., Europe, doubtful genus, see Kirk et al. (2008; genus accepted), Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015; outline), cultures and sequences are unavailable.

**Ceriophora** Höhn. 1919, *Amphisphaeriaceae, Xylariales, Sordariomycetes*, one species, type species: *C. palustris* (Sacc.) Höhn., Europe, doubtful genus, see Kirk et al. (2008; genus accepted), Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015; outline), cultures and sequences are unavailable.

**Ceriophora** Höhn. 1919, *Amphisphaeriaceae, Xylariales, Sordariomycetes*, one species, type species: *C. palustris* (Sacc.) Höhn., Europe, doubtful genus, see Kirk et al. (2008; genus accepted), Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015; outline), cultures and sequences are unavailable.
Cetrelia W.L. Culb. & C.F. Culb. 1968, Parmeliaceae, Lecanorales, Lecanoromycetes, c. 18 species, type: *C. cetrarioides* (Delise) W.L. Culb. & C.F. Culb., asexual morph unknown, lichenized, terrestrial or on lignum, widespread, see Lumbsch and Huhndorf (2010; outline), Crespo et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

*Cetreliopsis* M.J. Lai. 1980, Parmeliaceae, Lecanorales, Lecanoromycetes, seven species, type: *C. rhytidocarpa* (Mont. & Bosch) Lai, asexual morph unknown, lichenized, epiphytic, Australasia, see Lumbsch and Huhndorf (2010), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Ceuthodiplospora Died. 1912, Ascomycota genera incertae sedis, one species, type: *C. robiniae* (Roberge) Died., asexual morph coelomycetous, terrestrial, Czech Republic, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), sequences are unavailable, needs generic revision.

Ceuthosira Petr. 1924, Ascomycota genera incertae sedis, one species, type: *C. aesculicarpa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ceuthosporella Petr. & Syd. 1923, Ascomycota genera incertae sedis, one species, type: *C. sambuci* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chadefaudia Feldm.-Maz. 1957, Halosphaeriaceae, Microascales, Sordariomycetes, six species, type: *C. marina* Feldm.-Maz., saprobes, ?marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline of marine genera), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Chadefaudiella Faurel & Schotter 1959, Chadefaudiellaceae, Microascales, Sordariomycetes, two species, type: *C. quezelii* Faurel & Schotter, saprobes, coprophilous, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


Chaenocarpus Rebent. 1804, Xylariaceae, Xylariales, Sordariomycetes, three species, type: *C. setosus* (Roth) Rebent., asexual morph unknown, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Chaenotheca (Th. Fr.) Th. Fr. 1860, Coniothyriaceae, Coniothyriales, Coniothyriomycetes, c. 25 species, type: *C. trichialis* (Ach.) Th. Fr., asexual morph unknown, lichenized, epiphytic, widespread but mostly Northern Boreal, see Lumbsch and Huhndorf (2010, outline), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), sequences are available.

*Chaenothecopsis* Vain. 1927 (= *Catenomycopsis* Tibell & Constant. 1991), Mycocaliciaceae, Mycocaliciales, Eurotiomycetes, 27 species, type: *C. rubescens* Vain., asexual morph unknown, lichenicolous, fungicolous, saprobes, terrestrial, Europe, see Lumbsch and
Huhndorf (2010; outline), Tuovila et al. (2011; new species, Oregon), Kirk et al. (2013; genus accepted), Selva (2013; new species), Hawksworth et al. (2014; new species), Rikkinen et al. (2014; new species), cultures and sequences are available but lacks for the type:

**Chaetarthriomyces** Thaxt. 1931, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *C. flexatus* Thaxt., asexual morph unknown, parasitic on Hydrophilidae beetles, aquatic, widespread, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2014a, Netherlands), cultures and sequences are unavailable.

**Chaetasbolisia** Speg. 1918, *Didymellaceae, Pleosporales, Dothideomycetes*, seven species, type: *C. erysiphoides* Griffon & Maubl., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see de Gruyter et al. (2009; DNA, phylogeny, Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 148.94.

**Chaetendophragmia** Matsush. 1971, *Ascomycota genera incertae sedis*, six species, type: *C. triangularis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chaetendophragmiopsis** B. Sutton & Hodges 1978, *Ascomycota genera incertae sedis*, two species, type: *C. pulchra* Sutton & Hodges, hyphomycetous, sexual morph unknown, two species, saprobes, Brazil, see Sutton and Hodges (1978; morphology), Seifert et al. (2011; morphology), cultures and sequences are unavailable.

**Chaetoamphisphaeria** Hara 1918, *Sordariomycetes, genera incertae sedis*, two species, type: *C. japonica* Hara, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


**Chaetoconis** Clem. 1909, *Diaporthales, genera incertae sedis, Sordariomycetes*, one species, type: *C. polygoni* (Ellis & Everh.) Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, north temperate, see de Gruyter et al. (2009; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 405.95.

**Chaetocrea** Syd. 1927, *Dothideomycetes genera incertae sedis*, one species, type: *C. parasitica* Syd., asexual morph unknown, fungicolous associated with black areas of fungi on leaves, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; excluded from *Tubeufiaceae*), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

**Chaetocystostroma** Petr. 1920, *Ascomycota genera incertae sedis*, one species, type: *C. arundinacea* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chaetodiplis** Clem. 1931, *Ascomycota genera incertae sedis*, one species, type: *C. hirta* (Sacc.) Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chaetodiplodia** P. Karst. 1884, *Ascomycota* genera incertae sedis, nine species, type: *C. caulina* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

**Chaetodiplodina** Speg. 1911, *Ascomycota* genera incertae sedis, two species, type: *C. graminicola* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chaetomastia** (Sacc.) Berl. 1890, *Teichosporaceae*, *Pleosporales*, *Dothideomycetes*, ten species, type: *C. hirtula* (P. Karst.) Berl., asexual morph unknown, terrestrial, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Teichosporaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Chaetomella** Fuckel 1870 (= *Zoellneria* Velen. 1934 *fide* Johnston et al. 2014), *Chaetomellaceae*, *Helotiales*, *Leotiomycetes*, six species, type: *C. oblonga* Fuckel, asexual morph coelomycetous, saprobes, in soil, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species, Zambia), Johnston et al. (2014; nomenclature), cultures available for the type: BPI 843552.

**Chaetomidium** (Zopf) Sacc. 1882, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, 16 species, type: *C. fimeti* (Fuckel) Zopf, asexual morph phialophora-like, saprobes, in soil, coprophilous, worldwide, see Greif et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; genus accepted), cultures available for the type: CBS 168.71.

**Chaetomium** Kunze, in Kunze & Schmidt (1817), *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, more than 150 spp., type species *C. globosum* Kunze, in Kunze & Schmidt (1817), asexual morph hyphomycetous, saprophytic fungus that primarily resides on plants, soil, straw, and dung, potential biological control agents, worldwide, Current taxonomic placement in *Chaetomiaceae* supported by molecular data, see Zhang et al. (2012a, b), Ahmed et al. (2014), Maharachchikumbura et al (2016).

**Chaetomyces** Thaxt. 1938, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *C. pinophili* Thaxt., asexual morph unknown, parasitic on Staphylinidae beetles, terrestrial, North and South America, Rossi and Bergonzo (2008; Brazil), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Chaetonaeavia** Arx 1951, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *C. nanfeldtii* Arx, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chaetonectrioides** Matsush. 1996, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. malaysiana* Matsush., saprobes, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2015), Maharachchikumbura et al. (2015, 2016), holotype of the type: 5T121 (Matsushima Fungus Collection, Kobe), cultures and sequences are unavailable, needs generic revision.

**Chaetopellaster** Katum. 1975, *Ascomycota* genera incertae sedis, one species, type: *C. japonicus* Katum., coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Chaetophiophoma Speg. 1911, Ascomycota genera incertae sedis, one species, type: C. trematis Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetophoma Cooke 1878, Ascomycota genera incertae sedis, c. 30 species, type: C. quercifolia Cooke, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetoplaca Syd. & P. Syd. 1917, Ascomycota genera incertae sedis, one species, type: C. memecyli Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Schizothyriaceae), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in Schizothyriaceae), Wijayawardene et al. (2014; outline, accepted as a genus in Schizothyriaceae), Phookamsak et al. (2015; taxonomy, transferred to Ascomycota genera incertae sedis), cultures and sequences are unavailable, needs generic revision.

Chaetoplea (Sacc.) Clem. 1931, Leptosphaeriaceae, Pleosporales, Dothideomycetes, c. 17 species, type: C. calvescens (Fr.) Clem., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as Phaeosphaeriaceae), Phookamsak et al. (2014; morphology, accepted as Leptosphaeriaceae), Wijayawardene et al. (2014, 2016; outline, morphology of asexual morph), sequence data and cultures are unavailable.

Chaetopreussia Locq.-Lin. 1977, Sporormiaceae, Pleosporales, Dothideomycetes, one species, type: C. chadefaudii Locq.-Lin., asexual morph unknown, saprobes, terrestrial, see Lumbsch and Huhndorf (2009; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as Sporormiaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


Chaetopsis Grev. 1825, Ascomycota genera incertae sedis, seven species, type: C. wauchii Grev., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetopyrena Pass. 1881, Ascomycota genera incertae sedis, two species, type: C. poae (Niessl) Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetorostrum Zelski, Raja, A.N. Mill. & Shearer 2011, Annulatascales, Sordariomycetes, one species, type: C. quincemilense Zelski, Raja, A.N. Mill. & Shearer, asexual morph unknown, saprobes, aquatic, Peru, see Zelski et al. (2011; morphology), Maharachchikumbura et al. (2016; outline), holotype of the type: ILL 40822, cultures and cultures and sequences are unavailable.

Chaetosclerophoma Petr. 1924, Ascomycota genera incertae sedis, two species, type: C. coluteae Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Pakistan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chaetopyrena Pass. 1881, Ascomycota genera incertae sedis, two species, type: C. poae (Niessl) Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Chaetoscutula E. Müll. 1958, Pseudoperisporiaceae, Dothideomycetes families incertae sedis, one species, type: C. juniperi E. Müll., asexual morph unknown, saprobes, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Chaetoseptoria Tehon 1937, Ascomycota genera incertae sedis, one species, type: C. vignae Tehon, coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences and cultures are unavailable, needs generic revision.

Chaetosphaerella E. Müll. & C. Booth 1972 (= Oedemium Link 1824 fide Réblová et al. 2016), Chaetosphaerellaceae, Coronophorales, Sordariomycetes, 14 species, type: C. phaeostroma (Durieu & Mont.) E. Müll. & C. Booth, hyphomycetous, Chaetosphaerella sexual morph reported for E. didymium (= E. atrum) and E. minus, while Acrogenotheca sexual morph reported for E. robustum, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Réblová et al. (2016; nomenclature).

Chaetosphaeria Tul. & C. Tul. 1863, Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetidae, Sordariomycetes, more than 100 species, type: C. innumera Berk. & Broome ex Tul. & C. Tul., asexual morph complex, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Fernández et al. (2016), cultures and sequences are available, needs generic revision.

Chaetosphaerides Matsush. 2003, Ascomycota genera incertae sedis, one species, type species: C. ramichloridifera Matsush., saprobes, terrestrial, Japan, see Maharachchikumbura et al. (2015, 2016; outline, accepted as Sordariomycetidae genera incertae sedis), holotype of the type: MFC 210, sequences and cultures are unavailable.

Chaetosphaeronema Moesz 1915, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, eleven species, type: C. hispidulum (Corda) Moesz, asexual morph coelomycetous, saprobes or plant pathogenic, widespread, see de Gruyter et al. (2010; phylogeny), Hyde et al. (2013; accepted as a genus in Phaeosphaeriaceae), Quaedvlieg et al. (2013; phylogeny), Wijayawardene et al. (2012, 2017; outline) Kirk (2013; genus accepted), sequence are available.

Chaetosphaerulina I. Hino 1938, ?Dothideomycete genera incertae sedis, six species, type: C. yasudai I. Hino, asexual morph hyphomycetous, saprobes on dead wood, see Boonmee et al. (2011, 2014), cultures and sequences are unavailable.

Chaetosticta Petr. & Syd. 1925, Pseudoperisporiaceae, Dothideomycetes families incertae sedis, three species, type: C. perforata (Ellis & Everh.) Petr. & Syd., asexual morph unknown, saprobes or parasitic, terrestrial, Europe, Japan, North America and South America, see, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), no sequence data available, need adequate sequence data, needs generic revision.

Chaetotheca Zukal 1890, Trichocomaceae, Eurotiales, Eurotiomycetes, one species, type: C. fragilis Zukal, asexual morph unknown, terrestrial, on bile concretion, Austria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs phylogenetic assessment.

Chaetothersia B.A. Perry & Pfister 2008, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: C. vernalis B.A. Perry & Pfister, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), holotype of the type: FH, Perry 492, cultures and sequences are available but lacks for the type species, needs generic revision.

Chaetothyrina Theiss. 1913, Micropeltidaceae, Dothideomycetes, families incertae sedis, six species, type: C. musarum (Speg.) Theiss., asexual morph unknown, saprobes, terrestrial,
tropical, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Hyde et al. (2013; accepted as a genus in Micropeltidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Singtripop et al. (2016; new species, phylogeny), cultures available for the type: MFLUCC 15-0383.

**Chaetothyriomyces** Pereira-Carv., Inácio & Dianese 2009, Chaetothyriaceae, Chaetothyriales, Eurotiomycetes, one species, type: *C. brasiliensis* Pereira-Carv., Inácio & Dianese, asexual morph unknown, epiphytic, terrestrial, Brazil, see Pereira et al. (2009; morphology), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chaetothyriothecium** Hongsanan & K.D. Hyde 2014, Microthyriaceae, Microthyriales, Dothideomycetes, one species, type: *C. elegans* Hongsanan & K.D. Hyde, asexual morph unknown, epiphytes, Thailand, see Hongsanan et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Chaetothyrium** Speg. 1888, Chaetothyriaceae, Chaetothyriales, Eurotiomycetes, 66 species, type: *C. guaraniticum* Speg., asexual morph ceolomycetous, *Merismella* Syd., epiphytic, sooty moulds, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Liu et al. (2015; morphology, phylogeny), cultures and sequences are available for some species, needs generic revision.

**Chalara** (Corda) Rabenh. 1844, Helotiales genera incertae sedis, Leotiomycetes, c. 100 species, type: *C. fusidioides* (Corda) Rabenh., hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Kowalski and Holdenrieder (2009; pathogens), Koukol (2011; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2016; taxonomy, phylogeny), cultures and sequences are available.

**Chalarodendron** C.J.K. Wang & B. Sutton 1984, Ascomycota genera incertae sedis, one species, type: *C. fuscum* C.J.K. Wang & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Chalarodes** McKenzie 1991, Ascomycota genera incertae sedis, two species, type: *C. bisetis* McKenzie, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chalazion** Dissing & Sivertsen 1975, Pyronemataceae, Pezizales, Pezizomycetes, three species, type: *C. sociabile* Dissing & Sivertsen, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: FH, Perry 492, cultures and sequences are available but lacks for the type; needs generic revision.

**Chamaeascus** L. Holm, K. Holm & M.E. Barr 1993, Hypocreaceae, Xylariales, Sordariomycetes, one species, type: *C. arcticus* L. Holm et al., see Senanayake et al. (2015), Maharachchikumbura et al. (2015, 2016; phylogeny outline).

**Chamaeleomyces** Sigler 2010, Clavicipitaceae, Hypocreales, Sordariomycetes, two species, type: *C. granulomatis* Sigler, asexual morph unknown, reptile pathogen, terrestrial, America, see Sigler et al. (2010; taxonomy), Schmidt et al. (2012; outline), Schmidt (2015; reptile pathogens), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Chantransiopsis** Thaxt. 1914, Ascomycota genera incertae sedis, three species, type: *C. decumbens* Thaxt., coelomycetous, sexual morph unknown, entomogenous, terrestrial, Java, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chapsa A. Massal. (1860), Graphidaceae, Ostropales, Lecanoromycetes, 62 species, type: C. indica A. Massal., asexual morph unknown, lichenized fungi, terrestrial, tropical, see Mangold et al. (2009; key Australia), Rivas Plata et al. (2010a; key). Sipman et al. (2012; key, Costa Rica), Rivas Plata et al. 2012a, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted). Lücking et al. (2016; classification), sequences are available.

Characonidia Bat. & Cavalc. 1965, Ascomycota genera incertae sedis, one species, type: C. ingae Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Charcotiana Søchting, Garrido-Benavent & Arup in Søchting et al. 2014, Teloschistaceae, Teloschistales, Lecanoromycetes, one species, type: C. antarctica Søchting et al., asexual morph unknown, lichenized, saxicolous, Antartica, see Søchting et al. (2014b; phylogeny), Lücking et al. (2016; classification), sequences are available.

Charomyces Seifert 1987, Ascomycota genera incertae sedis, one species, type: C. amphimelas Seifert, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Hawaiian Island, Cuba, see Wijayawardene et al. (2012, 2017; outline). Kirk et al. (2013; genus accepted), sequences and cultures are unavailable, needs generic revision.

Charonectria Sacc. (1880), Hyponectriaceae, Xylariales, Xylariomycetidae, Sordariomycetes, two species, type: C. sceptri (P. Karst.) Lowen, temperate regions, dead leaves or lichenicolous, no sequence data, need recollection and sequence data. See See Kirk et al. (2013), Maharachchikumbura et al. (2015, 2016: phylogeny outline).


Cheiloria Lib. 1830, Ascomycota genera incertae sedis, one species, type: C. agrostidis Lib., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), isotype of the type: IMI 152241, sequence and cultures are unavailable, needs generic revision.

Cheiroidea W.A. Baker & Morgan-Jones 2009, Ascomycota genera incertae sedis, one species, type: C. triarmata (Whitton, McKenzie & K.D. Hyde) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial (on Pandanus), Mauritius, see Gams et al. (2009; morphology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: HKU(M) 13034 as Acrodictys triarmata Whitton et al. fide Whitton et al. 2009, sequence data are cultures unavailable, needs generic revision.

Cheiromycopsis Mercado & J. Mena 1988, Ascomycota genera incertae sedis, one species, type: C. echinulata Mercado & J. Mena, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), sequences and cultures are unavailable, needs generic revision.

Cheiromycina B. Sutton 1986, Ascomycota genera incertae sedis, type: C. flabelliformis B. Sutton, five species, hyphomycetous, sexual morph unknown, saprobes, lichenized, Austria, Russia, Sweden, see Diederich et al. (2008; taxonomy), Wang and Seifert et al. (2011; morphology), An et al. (2012; morphology), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of the type: IMI288326.
Cheiropolyschema Matsush. 1980, Ascomycota genera incertae sedis, two species, type: C. formosana Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, Taiwan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: MFC-6717, sequences and cultures are unavailable, needs generic revision.

Cheirospora Moug. & Fr. 1825, Helotiales, genera incertae sedis, two species, type: C. botryospora (Mont.) Berk. & Broome, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Crous et al. (2015c; morphology, phylogeny, DNA), Wijayawardene et al. (2016; morphology, phylogeny, outline), reference specimens available for type: MFLU 15–3550, cultures available: CPC 24603 = CBS 139999, CPC 24605, CPC 24607, CPC 24611.

Chevalieropsis Arnaud. 1923 (= Chevalieria Arnaud 1920), Parodiopsidaceae, Dothideomycetes genera incertae sedis, two species, type: C. ctenotricha (Pat. & Har.) G. Arnaud, asexual morph hyphomycetous, see Kirk et al. (2013; genus accepted), sequences are unavailable, need recollecting to verify generic placement.

Chiastospora Riess 1852, Ascomycota genera incertae sedis, one species, type: C. parasitica Riess, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Chikaneea B. Sutton 1973, Ascomycota genera incertae sedis, one species, type: C. holleroniae B. Sutton, hyphomycetous, sexual morph unknown, saprobes, Canada, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), sequences are unavailable.

Chimaeroscypha Raitv. 2004, Hyaloscyphaceae, Helotiales, Leotiomycetes, one species, type: C. echinatula (Raitv. & Huhtinen) Raitv., asexual morph unknown, saprobes, terrestrial, Tadzhikistan, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable.

Chiodecton Ach. 1814, Roccellaceae, Arthoniales, Arthoniomycetes, c. 24 species, type: C. sphaerale Ach., lichenized, corticolour or saxicolous, worldwide, see Ertz et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Chionomyces Deighton & Piroz. 1972, Ascomycota genera incertae sedis, seven species, type: C. meliolicola (Cif.) Deighton & Piroz., hyphomycetous, sexual morph unknown, saprobes, worldwide (tropical), see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), sequences and cultures are unavailable, needs generic revision.

Chilemela Lendemer & B.P. Hodk. 2012, Icmadophilaceae, Pertusariales, Lecanoromycetes, one species, type: C. buckii Lendemer & B.P. Hodk., asexual morph unknown, lichenized, terrestrial, South America, see Lendemer and Hodkinson (2012; taxonomy), Lücking et al. (2016; classification), sequences are available.

Chithramia Nag Raj 1988, Ascomycota genera incertae sedis, one species, type: C. elegantissima Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2016, 2017; morphology, outline), Kirk et al. (2013; genus accepted), holotype of the type: BPI 71492, sequences and cultures are unavailable, needs generic revision.

Chitonomyces Peyr. 1873, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, 98 species, type: C. melanurus Peyr., asexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Goldmann and Weir (2012; phylogeny), Kirk et al. (2013; genus accepted), Haelewaters et al. (in review; DNA, review), sequences are available for type: (SSU, LSU).

Chitonospora E. Bommer, M. Rousseau & Sacc. (1891), Phlogicylindriaceae, Xylariales, Xylariomycetidae, Sordariomycetes, single species, type: C. ammophila E. Bommer, M.

Chlamydomyces Bainier 1907, Ascomycota genera incertae sedis, two species, type: C. diffusus Bainier, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences and cultures are unavailable, needs generic revision.


Chlamydorubra K.B. Deshp. & K.S. Deshp. 1966, Ascomycota genera incertae sedis, one species, type: C. verrucosa K.B. Deshp. & K.S. Deshp., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences and cultures are unavailable, needs generic revision.

Chlamydotubeufia Boonmee & K.D. Hyde. 2011, Tubeufiaceae, Tubeufiales, Dothideomycetes, five species, type: C. huaikangplaensis Boonmee & K.D. Hyde, saprobes on decaying wood, Thailand, asexual morph hyphomycetous, see Boonmee et al. (2011, 2012; taxonomy), Hyde et al. (2013; accepted as a genus in Tubeufiaceae), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype and ex-type strains of the type: MFLUCC 10-0926, MFLU 10-0972.

Chlorencoelia J.R. Dixon 1975, Hemiphacidiaceae, Helotiales, Leotiomycetes, four species, type: C. versiformis (Pers.) J.R. Dixon, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ren and Zhuang (2014; new species, China), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.

Chloridium Link 1809, Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes, c. five new species, type: C. viride Link, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable for type species, needs generic revision.

Chloroepilichen Etayo 2010, Helotiales genera incertae sedis, Leotiomycetes, one species, type: C. rolfi Etayo, asexual morph unknown, lichenicolous, terrestrial, Southern America, see Etayo (2010; description and distinction of similar lichenicolous genera), cultures and sequences are unavailable, not reviewed, holotype of the type: UPS, R. Santesson & G. Thor P75:5.

Chloroscrypha Seaver 1931, Gelatinodiscaceae, Helotiales, Leotiomycetes, 14 species type: C. seaveri Rehm ex Seaver, asexual morph sporodochia-like (Carpenter 1976), endophytic, weak pathogen and saprobes, on leaves of Cupressaceae (rarely Taxodiaceae), widespread in temperate areas, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype in NY herbarium (NY00915009), living cultures and sequences are unavailable for the type of the type species.

Chlorosplenella P. Karst. 1885, Helotiales, genera incertae sedis, Leotiomycetes, one species, type: C. fennica (P. Karst.) Sacc. ex Clem. & Shear, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013;
genus accepted), Ren and Zhuang (2014; new species, China), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.

**Chlorosplenium** Fr. 1849, *Dermateaceae, Helotiales, Leotiomyctes*, five species, type: *C. chlora* (Schwein.) M.A. Curtis, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Chlorostroma** A.N. Mill., Lar. N. Vassiljeva & J. D. Rogers. (2007), *Xylariaceae, Xylariales*, *Xylariomyctidae, Sordariomyctes*, inhabitants of *Hypoxylon* stromata, three species, type: *C. subcubisporum* A.N. Mill. et al., no sequence data available, need further information for the asexual stage, Maharachchikumbura et al. (2016) placed the genus with conidial states not belong to nodulosporium-like or geniculosporium-like or with unknown conidial states in the *Xylariaeae*. See Miller et al. (2007), Maharachchikumbura et al. (2016; phylogeny outline).

**Chlorovibrissea** L.M. Kohn 1889, ?*Vibrisseaceae, Helotiales, Leotiomyctes*, four species type: *C. bicolor* (G.W. Beaton & Weste) L.M. Kohn, asexual morph phialophora-like (Sandoval-Leiva et al. 2014), aquatic or semi-aquatic on wood and twigs, Australasia, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Sandoval-Leiva et al. (2014; DNA), holotype in MELU herbarium, living cultures or cultures and sequences are unavailable for the type of the type species.

**Choanatiara** DiCosmo 1984, *Ascomycota* genera *incertae sedis*, two species, type: *C. lunata* DiCosmo & Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, Canada, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Choirmyces** Vittad. 1831, *Tuberaceae, Pezizales, Pezizomycetes*, type: *C. meandriformis* Vittad., asexual morph unknown, saprobes, hypogeous, terrestrial, worldwide, see Wedén et al. (2009; edible truffle *Choirmyces venosus* in Sweden), Bonito et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Moreno et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Chondroderris** Maire 1937, *Helotiales, genera incertae sedis, Leotiomyctes*, one species, type: *C. nevadensis* Maire, asexual morph unknown, saprobes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Choreospora** Constant. & R. Sant. 1987, *Ascomycota* genera *incertae sedis*, two species, type: *C. tibellii* Constant. & R. Sant., hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Chromatochlamys** Trevis. 1860, *Thelenellaceae, Ostropales, Lecanoromycetes*, three species, type: *C. muscicola* (Ach.) Trevis., lichenized, see Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Chromendothia** Lar.N. Vassiljeva 1993, *Cryphonectriaceae, Diaporthales, Sordariomyctes*, two species, type: *C. appendiculata* Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, temperate north-eastern Asia, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2016; phylogeny, outline), holotype of type: VLA P-2939, sequences are available for *C. citrina* (fide Castlebury et al. 2002).

**Chroodiscus** (Müll. Arg.) Müll. Arg. 1890, *Graphidaceae, Ostropales, Lecanoromycetes*, 14 species, type: *C. coccineus* (Leight.) Müll. Arg., lichenized (Trentepohlia or Phycopeltis), terrestrial (foliicolous), tropical, see Papong et al. (2009a; DNA), Parnmen et al. (2012;
DNA), Sipman et al. (2012; key), Rivas Plata et al. (2013; DNA), Lumbsch et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Chrysachne** Cif. 1938, *Ascomycota genera incertae sedis*, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Chrysosporia** Cif. 1938, *Ascomycota* genera incertae sedis, two species, type: *C. hyphochoria* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Ciferrina Petr. 1932, Ascomycota genera incertae sedis, one species, type: C. pulchella Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence data and cultures are unavailable, needs generic revision.

Ciferriopeltis Bat. & H. Maia 1965, Ascomycota genera incertae sedis, one species, type: C. domingensis (Petr. & Cif.) Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliella Sacc. & P. Syd. 1902, Helotiales genera incertae sedis, one species, type: C. epidendri (Rehm) Sacc. & P. Syd., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliochora Höhn. 1919, Ascomycota genera incertae sedis, two species, type: C. longiseta (Racib.) Höhn. coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliofusospora Bat. & J.L. Bezerra 1963, Sordariomycetes, genera incertae sedis, one species, type: C. oenocarpi Bat. & J.L. Bezerra, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Ciliolarina Syd. 1935, Pestalotiopsisaceae, Amphisphaeriales, Sordariomycetes, four species, type: C. mangiferae Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Allegrucci et al. (2011; morphology, new species), Wijayawardene et al. (2012, 2016, 2017; morphology, phylogeny, outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliophora Petr. 1929, Ascomycota genera incertae sedis, two species, type: C. cryptica Petr. coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ciliophorella Petr. 1940, Ascomycota genera incertae sedis, two species, type: C. insignis Petr. coelomycetous, sexual morph unknown, saprobes, terrestrial, Austria, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cilioplea Munk 1953, Dothideomycetes, genera incertae sedis, one species, type: C. coronata (Niessl) Munk, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Lophiostomataceae), Hyde et al. (2013) did not accept as a genus in Lophiostomataceae, Kirk et al. (2013; outline, genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes, genera incertae sedis), cultures and sequences are unavailable, needs generic revision.

Ciliosculum Kirschst. 1941, Hyaloscyphaceae, Helotiales, Leotiomycetes, one species, type: C. invisibile Kirschst., asexual morph unknown, saprobes, terrestrial, Gelmany, see Lumbsch
and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ciliosporella** Petr. 1927, *Ascomycota* genera incertae sedis, two species, type: *C. selenospora* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Austria, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ciposia** Marbach 2000, *Caliciaceae*, *Caliciinae*, *Leanaromycetes*, one species, type: *C. wheeleri* (R.C. Harris) Marbach, asexual morph unknown, lichenized, epiphytic, North America, see Lücking et al. (2016; classification), sequences are unavailable.

**Circinaria** Link 1809, *Megasporaceae*, *Pertusariales*, *Ostropomyctidae*, *Lecanoromycetes*, 25 species, type: *Urceolaria hoffmannii* (Ach.) Ach., lichenized, see Nordin et al. (2010; phylogeny), Sohrabi et al. (2013a; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Circinoconiopsis** A. Hern.-Gut. 2013, *Ascomycota* genera incertae sedis, one species, type: *C. amazonica* A. Hern., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Hernández-Gutiérrez (2013; morphology), holotype of the type: MG 203121, sequences and cultures unavailable.

**Circinoconis** Boedijn 1942, *Ascomycota* genera incertae sedis, one species, type: *C. paradoxa* Boedijn, hyphomycetous, sexual morph unknown, saprobes, terrestrial, East Indies, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Circinoniesslia** Samuels & M.E. Ban 1997, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. nectriae* Samuels & M.E. Barr, asexual morph unknown, saprobes or fungicolous, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BPI, Samuels 8028, cultures and sequences are unavailable, needs generic revision.

**Circinotrichum** Nees 1816, *Ascomycota* genera incertae sedis, 2 new species, type: *C. maculiforme* Nees, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; morphology, cultures available for type species CBS 122758, CPC 24566.

**Cirrenalia** Meyers & R.T. Moore 1960, *Halosphaeraceae*, *Microascales*, *Sordariomycetes*, 14 species, type: *C. macrocephala* (Kohlm.) Meyers & R.T. Moore, hyphomycetous, sexual morph unknown, saprobes, aquatic, terrestrial, worldwide, see Abdel-Wahab et al. (2010; phylogeny, key), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available MUCL 15736.


**Cirsosia** G. Arnaud 1918, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, 15 species, type: *C. manaosensis* (Henn.) G. Arnaud, asexual morph coelomycetous (= homalopeltis-like *fide* Hofmann 2009), epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; taxonomy, keys), Wijayawardene et al. (2014; outline), placement in *Asterinaceae* supported by morphology, isotype of type: K(M) 176510, cultures and sequences are unavailable, needs generic revision.

**Cirsosina** Bat. & J.L. Bezerra 1960, *Dothideomycetes*, genera incertae sedis, two species, type: *C. rhododendri* Bat. & J.L. Bezerra, asexual morph unknown, saprobes, terrestrial,
Europe, Bomeo, see Lumbrsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Cirsosioptis** Butin & Speer 1979, Parmulariaceae, Asterinales, Dothideomycetes, one species, type: *C. violacescens* Butin & Speer, asexual morph unknown, epiphytes, terrestrial, Brazil, see Hofmann (2009; review, accepted as a genus in Microthyriaceae), Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Hyde et al. (2013; did not accepted as a genus in Microthyriaceae), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes, genera incertae sedis). Wu et al. (2014; review, transferred to Parmulariaceae) placement in Parmulariaceae supported by morphology, holotype of type: ZT Myc 4325, cultures and sequences are unavailable, needs generic revision.

**Cissococcomyces** Brain 1923, Ascomycota genera incertae sedis, one species, type: *C. natalensis* Brain, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Cistella** Quél. 1886, Hyaloscyphaceae, Helotiales, Leotiomycetes, c. 45 species, type: *C. dentata* (Pers.) Quél., asexual morph unknown, erroneously linked with Phialophora-like anamorph (*Cistella rubescens = Hyphodiscus hymeniophilus*, saprobes on wood, dead herbaceous stems, fallen leaves, needles and cones, widespread, mainly in temperate zones, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; taxonomy), Baral et al. (2015; taxonomy), holotype of type: not located, for typification details see (Spooner 1987), cultures and sequences are unavailable for the type of the type species, needs generic revision.

**Citeromyces** Santa María 1957, Saccharomycetaceae, Saccharomycetales, Saccharomycetes, five species, type: *C. matritensis* (Santa María) Santa María, saprobes, terrestrial, worldwide, see Kurtzman (2011, 2012; new species), Casaregola et al. (2013; new species), cultures and sequences are available.

**Civisubramaniania** Vittal & Dorai 1986, Ascomycota genera incertae sedis, two species, type: *C. eucalypti* Vittal & Dorai hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: IMI 298300, cultures and sequences are unavailable, needs generic revision.

**Cladia** Nyl. 1870, Cladoniaceae, Lecanorales, Lecanoromycetes, c. 25 species, type: *Cladia aggregata* (Sw.) Nyl., asexual morph unknown, lichenized, terrestrial, austral or widespread, see Parmmen et al. (2010; generic delimitation), Lumbsch and Huhndorf (2010; outline, accepted as a genus in Lecanoraceae), Lumbsch et al. (2010; generic delimitation), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Cladidium** Hafellner 1984, Lecanoraceae, Lecanorales, Lecanoromycetes, one species, type: *C. thamnitis* (Tuck.) Hafellner (=Cladidium bolanderi (Tuck) B.D. Ryan), asexual morph unknown, lichenized, saxicolous, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Cladobotryum** Nees 1816, Hypocreaceae, Hypocreales, Sordariomycetes, 41 species, type: *C. varium* Nees, hyphomycetous, sexual morph unknown, pathogens, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Pöldmaa (2011; new species from tropics), Back et al. (2012; pathogenicity on mushroom), Kim and Lee (2012; pathogenicicity, Korea), Wijayawardene et al. (2012, 2017; outline), Gea and Navarro (2016; pathogenicicity), cultures and sequences are available.

**Cladochasiella** Marvanová 1997, Hyaloscyphaceae, Helotiales, Leotiomycetes, one species, type: *C. divergens* Marvanová, hyphomycetous, sexual morph unknown, saprobes, aquatic, Czech Republic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017;
Cladoonidium Bandoni & Tubaki 1985, Ascomycota genera incertae sedis, one species, type: C. articulatum Bandoni & Tubaki, hyphomycetous, sexual morph unknown, saprobes, terrestrial. Japan, Canada, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Cladographum Peyronel 1918, Ascomycota genera incertae sedis, one species, type: C. rivulorum Peyronel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable.

Cladonia P. Browne 1756, Cladoniaceae, Lecanorales, Lecanoromycetes, c. 550 species, type: C. subulata (L.) F.H. Wigg., asexual morph unknown, lichenized, terricolous or on lignum, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Lecanoraceae), Ahti (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Cladoniicola Diederich, van den Boom & Aptroot 2001, Pezizomycotina, genus incertae sedis, one species, type: C. staurospora Diederich, van den Boom & Aptroot, asexual morph unknown, lichenicolous, terrestrial, temperate, see Etayo (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Cladophialophora Borelli 1980, Herpotrichiellaceae, Chaetothyriales, Eurotiomycetes, 35 species, type: C. carrionii (Trejos) de Hoog, Kwon-Chung & McGinnis, hyphomycetous, mostly terrestrial, but also reported from mangrove environments, mainly saprobes associated with soil and plant material but a few species are lichenicolous, endophytic or plant-pathogenic, several species cause infections in animals, including humans, cosmopolitan, although the type species belongs in Herpotrichiellaceae, some species are related to other families of Chaetothyriales, see de Hoog et al. (2000, 2007; clinically-relevant species, lectotypification and phylogeny of C. carrionii), Crous et al. (2007, 2011, 2013a; new species, pathogenicity to plants), Badali et al. (2008, 2009; outline, new species), Diederich et al. (2013; lichenicolous species), Feng et al. (2013; new species), Seyedmousavi et al. (2013; pathogenicity to animals), Gueidan et al. (2014; phylogeny), Madrid et al. (2016; new species, comments about the polyphyly of the genus), Usui et al (2016; new species), ex-type strain of the type: = CBS 160.54, sequences are available at GenBank from de Hoog et al. (2007).


Cladorrhinum Sacc. & Marchal 1885, Lasiosphaeriaceae, Sordariales, Sordariomycetes, eight species, type: C. foecundissimum Sacc. & Marchal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Madrid et al. (2011; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Carmaran et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), available cultures of type: BCCM 6980.

Cladosphaera Dumort. 1822, Ascomycota genera incertae sedis, one species, type: C. cespitosa (Tode) Dumort., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Cladosporiella** Deighton 1965, *Ascomycota genera incertae sedis*, five species, type: *C. cercosporicola* Deighton, hyphomycetous, sexual morph unknown, saprobes, fungicolous, terrestrial, Africa, Asia, Caribbean, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cladosporiopsis** S.C. Ren & X.G. Zhang 2012, *Ascomycota genera incertae sedis*, one species, type: *C. ovata* S.C. Ren & X.G. Zhang, hyphomycetous, sexual morph unknown, saprobes, fungicolous, terrestrial, China, see Ren et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.


**Clandestinotrema** Rivas Plata, Lücking & Lumbsch 2012, *Graphidaceae*, *Ostropales*, *Ostropomycetidae*, *Lecanoromycetes*, 17 species, type: *C. clandestinum* (Ach.) Rivas Plata, Lücking & Lumbsch, lichenized, see Rivas Plata et al. (2012a; taxonomy), Lumbsch et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Clasteroscyphus** Bat. & Cavalc. 1963, *Ascomycota genera incertae sedis*, one species, type: *C. coumiae* Bat. & Cavalc., sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Clasterosphaeria** Sivan. 1984, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, two species, type: *C. cyperi* Sivan., asexual morph clasterosporium-like, saprobes, terrestrial, India, Malaysia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: *Clasterosphaeria cyperi* var. *cyperi* (Sivan.) Lumbsch & Huhndorf, epitype: CBS 121621.

**Clasterosporium** Schwein. 1832, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, ten species, type: *C. carici* Schwein., sexual morph clasterosporium-like, saprobes, terrestrial, worldwide, see Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision, sexual-asexual link was not confirmed.

**Clathroconium** Samson & H.C. Evans 1982, *Ascomycota genera incertae sedis*, one species, type: *C. arachnicola* Samson & H.C. Evans, hyphomycetous, sexual morph unknown, entomopathogens, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Clathrospora** H. de Hoog 1961, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *C. teleomorphica* de Hoog, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Clathrospora** Rabenh. 1857, *Diademaceae*, *Pleosporales*, *Dothideomycetes*, more than 40 species, type: *C. elynae* Rabenh., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence data available for three species, type sequence data are available: CBS 161.51; CBS 196.54, needs generic revision.
Clathrosporium Nawawi & Kuthub. 1987, Helotiales genera incertae sedis, Leotiomyces, one species, type: C. intricatum Nawawi & Kuthub., sexual morph unknown, saprobes, aerobiotic, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Claurouxia D. Hawksw. 1988, Lecanoraceae, Lecanorales, Lecanoromycetes, one species, type: C. chalybeioides (Nyl.) D. Hawksw., asexual morph unknown, lichenized, saxicolous, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Clauzadea Hafellner & Bellem. 1984, Lecideaceae, Lecideales, Lecanoromycetes, five species, type: C. monticola (Ach.) Hafellner & Bellem., asexual morph unknown, lichenized, saxicolous, widespread, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Fryday et al. (2014; systematics), Lücking et al. (2016; classification), sequences are available.

Clauzadeana Cl. Roux 1984, Lecanoraceae, Lecanorales, Lecanoromycetes, one species, type: C. instratula (Nyl.) Cl. Roux, asexual morph unknown, terrestrial, lichenized, in river foam, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.
sequence data available, holotype and ex-type living culture of the type: MFLU 10-0038, MFLUCC 10-0107 = BCC 38863 = IFRD 2170.

**Clavatisporella** K.D. Hyde 1995, *Magnaorthaceae, Magnaporthales, Sordariomycetes*, one species, type: *C. musicola* K.D. Hyde, asexual morph unknown, saprobics, Irian Jaya (Papua), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), holotype of the type: BRIP 22403, cultures and sequences are unavailable, needs generic revision.


**Cleistocystis** Sousa da Câmara 1931, *Ascomycota genera incertae sedis*, one species, type: *C. rosarum* Sousa da Câmara, coelomycetous, sexual morph unknown, saprobics, terrestrial, Portugal, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cleistothyridopteris** J.L. Bezerra & Kimbr. 1976, *Ascobolaceae, Pezizales, Pezizomycetes*, one species, type: *C. conglutinatus* J.L. Bezerra & Kimbr., asexual morph unknown, saprobics, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cleistostomium** Speer 1986, *Ascomycota genera incertae sedis*, one species, type: *C. parasiticum* Speer, coelomycetous, sexual morph unknown, saprobics, terrestrial, Brazil, see Wijayawardene et al. (2012, 2014) accepted as a genus in *Glomiaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline, accepted as Ascomycota genera incertae sedis), cultures and sequences are unavailable, needs generic revision.

**Cleistophoma** Petr. & Syd. 1927, *Ascomycota genera incertae sedis*, two species, type: *C. suberis* (Prill. & Delacr.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobics,
terrestrial, North America, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cleistosphaera** Syd. & P. Syd. 1916, *Parodiopsidaceae*, *Dothideomycetes* family *incertae sedis*, one species, type: *C. macrostegia* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, S. America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as in *Parodiopsidaceae*, key), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Cleistothelebolus** Malloch & Cain 1971, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *C. nipigonensis* Malloch & Cain, asexual morph unknown, coprophilous, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Clematidis** Tibpromma, Camporesi & K.D. Hyde 2016, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *C. italica* Tibpromma, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 14–0669, MFLUCC 15–0084.

**Clematomycetes** Thaxt. 1900, *Laboulbeniales, Laboulbeniales, Laboulbeniomycetes*, five species, type: *C. pinophili* Thaxt., asexual morph unknown, biotrophic, Asia, West Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Clibanites** (P. Karst.) P. Karst. 1871, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. paradoxa* (P. Karst.) P. Karst., asexual morph unknown, saprobes on wood, Finland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision, holotype in H.

**Clostostomum** Fr. 1825, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *C. corrugatum* (Ach.) Fr., lichenized, epiphytic, world-wide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Printzen (2014; phylogeny and relationships), Lücking et al. (2016; classification), sequences are available.

**Clohesyomyces** K.D. Hyde 1993, *Ascomycota* genera *incertae sedis*, one species, type: *C. aquaticus* K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, aquatic, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: BRIP 20092, cultures and sequences are unavailable, needs generic revision.


**Clonophoromyces** Thaxt. 1931, *Laboulbeniales, Laboulbeniales, Laboulbeniomycetes*, two species, type: *C. grenadinus* Thaxt., asexual morph unknown, biotrophic, West Indies, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2015; notes), cultures and sequences are unavailable.

**Clupeispora** A.W. Ramaley 1991, *Ascomycota* genera *incertae sedis*, one species, type: *C. angustifoliorum* A.W. Ramaley, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), holotype of the type: BPI 1102631, cultures and sequences are unavailable, needs generic revision.

**Clupeocerispora** Sousa da Câmara 1946, *Sordariomycetes* genera *incertae sedis*, one species, type: *C. rubi* Sousa da Câmara, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.
Clypeochorella Petr. 1923, Ascomycota genera incertae sedis, one species, type: *C. orientalis* (Sacc. & Penz.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeococcum D. Hawksw. 1977, *Polyccocaceae*, Trypetheliales, Dothideomycetes, eleven species, type: *C. cladonema* (Wedd.) D. Hawksw., on lichens, widespread, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Dacampicaeae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, two species, but not the type species), Jaklitsch et al. (2016; phylogeny, accepted as a genus in *Dacampicaeae*), holotype of type: PC.


Clypeolom Speg. 1881, Ascomycota genera incertae sedis, eight species, type: *C. atroareolatum* Speg., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeopatella Petr. 1942, Ascomycota genera incertae sedis, one species, type: *C. cylindrospora* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Rhodes, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeophialophora Bat. & Peres 1962, Ascomycota genera incertae sedis, one species, type: *C. erythroxyli* Bat. & Peres, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeopatella Petr. 1942, Ascomycota genera incertae sedis, one species, type: *C. monocarpa* Höhn., asexual morphs unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Clypeopatella Petr. 1942, Ascomycota genera incertae sedis, one species, type: *C. brenklei* Petr., asexual morphs unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Clypeopycnis Petr. 1925, Ascomycota genera incertae sedis, three species, type: *C. aeruginascens* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Clypeopyrenis Aptroot 1991, Pyrenulaceae, Pyrenulales, Eurotiomycetes, two species, type: *C. microsperma* (Müll. Arg.) Aptroot, asexual morph unknown, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Clypeoseptoria F. Stevens & P.A. Young 1925, Ascomycota genera incertae sedis, three species, type: *C. rockii* F. Stevens & P.A. Young, coelomycetous, sexual morph unknown, saprobes, terrestrial, Hawaii, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Guatimosim et al. (2016; morphology, phylogeny), holotype CBS H-22088, isotype VIC 42607, culture ex-type CPC 24705.

**Clypeosphaeria** Fockel 1870, *Clypeosphaeriaceae, Amphiphaeriales, Sordariomycetes*, c. 30 species, type: *C. notarisii* Fockel, asexual morph unknown, saprobes (dead wood and bark), terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable for type species, needs generic revision.

**Clypeosphaerulina** Sousa da Câmara 1939, *Sordariomycetes*, genera incertae sedis, one species, type: *C. vincae* (Sousa da Câmara) Sousa da Câmara, asexual morph unknown, saprobes, terrestrial, Portugal, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Clypeostagonospora** Punith. 1981, *Ascomycota* genera incertae sedis, one species, type: *C. muhlenbergiae* Punith., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Clypeostroma** Theiss. & Syd. 1914, *Dothideomycetes* genera incertae sedis, one species, type: *C. spilomeum* (Berk.) Theiss. & Syd., asexual morph unknown, saprobes, Australasia, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Coccidiascus** Chatton emend. Lushbaugh, Rowton & McGhee 1976, *Saccharomycetales* genera incertae sedis, *Saccharomycetes*, one species, type: *C. legeri* Chatton, asexual reproduction by budding, perhaps parasitic on *Drosophila* spp., found within the intestinal epithelial cells of *Drosophila*, possibly worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Coccidioides** G.W. Stiles 1896, *Onygenaceae, Onygenales, Eurotiomycetes*, two species, type: *C. immitis* G.W. Stiles, sexual morph unknown, saprobes, terrestrial, southern USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Coccidomyces** Buchner 1912, *Saccharomycetidae* genera incertae sedis, *Saccharomycetes*, one species, type: *C. pierantonii* Buchner, asexual morphs unknown, in insects, terrestrial, Germany, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Coccinonectria** L. Lombard & Crous 2015, *Nectriaceae, Hypocreales, Sordariomycetes*, two species, type: *C. pachysandricola* (B.O. Dodge) L. Lombard & Crous, asexual morph hyphomycetous, saprobes, France, USA, see Lombard et al. (2015; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), available cultures of the type: CBS 501.63 476.92

**Cocciscia** Norman 1870, *Dothideomycetes* genera incertae sedis, two species, type: *C. hamperi* Norman, asexual morph unknown, saprobes, Scandinavia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dacampiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Coccocarpia** Pers. 1827, *Coccocarpiaeae, Peltigerales, Lecanoromycetes*, c. 25 species, type: *C. molybdaea* Pers., asexual morph unknown, lichenized, epiphytic or epiphyllous, worldwide tropical-subtropical, see Wedin et al. (2009; systematics), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.
Coccochora Höhn. 1909, Dothideomycetes genera incertae sedis, one species, type: C. quercicola (Henn.) Höhn., asexual morph unknown, saprobes, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Coccodella Hara 1910, Phyllachoraceae, Phyllachorales, Sordariomycetes, 21 species, type: C. arundinariae Hara, asexual morph unknown, biotrophic, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures available for C. melastomatum CMU78543, C. miconiae ppMP 1342.

Coccodinium A. Massal. 1860, Coccodiniaceae, Ascomycota family incertae sedis, two species, type: C. bartschii A. Massal., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in Coccodiniaceae), cultures and sequences are unavailable, needs generic revision, Hyde et al. (2013) excluded family from Dothideomycetes.

Coccodothis Theiss. & Syd. 1914, Asterinales genera incertae sedis, Dothideomycetes, one species, type: C. sphaeroidea (Cooke) Theiss. & Syd., asexual morph unknown, epixylic, terrestrial, Georgia, see Hofmann (2009; review, accepted as a genus in Parmulariaceae), Lumbsch and Huhndorf (2010; outline), accepted as a genus in Parmulariaceae), Hyde et al. (2013; excluded from Parmulariaceae), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes, genera incertae sedis), placement in Asterinales supported by morphology, cultures and sequences are unavailable.

Coccogloeum Petr. 1955, Ascomycota genera incertae sedis, one species, type: C. microsporum Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Coccodoidea Henne. 1900, Coccoidea, Dothideomycetes families incertae sedis, two species, type: C. quercicola Henne. & Shirai, asexual morph unknown, saprobes, Japan, India, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in Coccoidea, morphology), cultures and sequences are unavailable, needs generic revision.

Cocconia Sacc. 1889, Parmulariaceae, Asterinales, Dothideomycetes, 25 species, type: C. placenta (Berk. & Broome) Sacc., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013;
accepted as a genus in Parmulariaceae), Wijayawardene et al. (2014; outline), placement in Parmulariaceae supported by morphology, unknown, cultures are sequences unavailable.

**Coccostromella** Petr. 1968, Botryosphaeriaceae, Botryosphaeriales, Dothideomycetes, one species, type: *C. puttemansii* (Henn.) Petr., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline, accepted as Dothideaceae), Hyde et al. (2013; accepted as a genus in Dothideaceae), Thambugala et al. (2014; excluded from Dothideaceae and placed Botryosphaeriaceae), Wijayawardene et al. (2014; outline, taxonomy), cultures and sequences are unavailable, needs generic revision.

**Coccotrema** Müll. Arg. 1888, Coccotremataceae, Lecanorales, Lecanoromycetes, 16 species, type: *C. antarcticum* Müll.Arg., asexual morph unknown, lichenized, terricolous, saxicolous or epiphytic, world-wide in arctic and subantarctic areas, see Lumbsch and Huhndorf (2010), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Cochliomyces** Speg. 1912, Euceratomycetaceae, Laboulbeniales, Laboulbeniomycetes, two species, type: *C. argentinensis* Speg., asexual morph unknown, biotrophic, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Cocoicola** K.D. Hyde 1995, Phaeochoraceae, Phyllachorales, Sordariomycetes, five species, type: *C. cylindrospora* (C. Booth & D.E. Shaw) K.D. Hyde, saprobes, worldwide, see Lumbsch and Huhndorf (2010), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Codinaea** Maire 1937, Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes, c. 80 species, type: *C. monocarpa* Höhn., hyphomycetous, sexual morphs unknown, saprobes, terrestrial, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Carneiro de Almeida et al. (2014; new species, Brazil), Crous et al. (2014, 2015; new species), Granados et al. (2014; new species, Costa Rica), Maharachchikumbura et al. (2015, 2016; outline), Xia et al. (2015; new species, China), Barbosa et al. (2016; new species, Brazil), Oliveira et al. (2016; new species, Brazil, aquatic), cultures and sequences are available.

**Codonmyces** Calatayud & Etayo 1999, Ascomycota genera incertae sedis, one species, type: *C. lecanorae* Calat. & Etayo, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: VAB (lich.) 15404, cultures and sequences are unavailable, needs generic revision.

**Coelodictyosporium** Thambugala & K.D. Hyde 2015, Lophiostomataceae, Pleosporales, Dothideomycetes, two species, type: *C. pseudodictyosporium* (Qing Tian, Camporesi & K.D. Hyde) Thambugala & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Italy, all species has sequence data, see Thambugala et al. (2015b; phylogeny); Wijayawardene et al. (2016; morphology, phylogeny), holotype of type: MFLU 14–0737, ex-type strains of type: MFLUCC 13–0451.

**Coelopogon** Brusse & Kärnefelt 1991, Parmeliaceae, Lecanorales, Lecanoromycetes, two species, type: *C. abraxas* Brusse, lichenized, south temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Coenogonium** Ehrenb. ex Nees 1820, Coenogoniaceae, Ostropales, Lecanoromycetes, 90 species, type: *C. linkii* Ehrenb., lichenized, see Baloch et al. (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; DNA), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Colemaniella** Agnihothr. 1974, Ascomycota genera incertae sedis, one species, type: *C. ossoorii* Agnihothr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see
Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Colensoniella** Hafellner 1979, *Patellariaceae, Patellariales, Dothideomycetes*, one species, type: *C. torulispora* (W. Phillips) Hafellner, asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tian et al. (2014; morphology; nomenclature), cultures and sequences are unavailable, needs generic revision.

**Coleodictyospora** Charles 1929, *Ascomycota genera incertae sedis*, one species, type: *C. cubensis* Charles, hypomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Coleophoma** Höhn. 1907, *Dermateaceae, Helotiales, Leotiomycetes*, more than 35 species, type: *C. crateriformis* (Durieu & Mont.) Höhn., coelomycetous, sexual morph unknown, pathogenic, saprobes or endophytic on a wide host range, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2016), holotype of type: FH 00304449.

**Coleoseptoria** Petr. 1940, *Ascomycota genera incertae sedis*, one species, type: *C. ephedrae* (Auersw.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Germany, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Coleosperma** Ingold 1954, *Dermateaceae, Helotiales, Leotiomycetes*, one species, type: *C. lacustre* Ingold, assexual morph unknown, saprobes, aquatic, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Coleroa** Rabenh. 1850, *Venturiaceae, Venturiales, Dothideomycetes*, eight species, type: *C. chaetomium* (Kunze) Rabenh., assexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; morphology, phylogeny), Hyde et al. (2013; accepted as in *Venturiaceae*, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence data available for *Coleroa robertiani* CBS 458,64.

**Colipila** Baral & Guy García 2012, *Helotiales genera incertae sedis, Leotiomyces*, two species, type: *C. masduguana* Baral & Guy García, asexual morph unknown, saprobes, cosmopolitan, see Baral et al. (2012; taxonomy, phylogeny), holotype of the type: M-014088, cultures and sequences are available.

**Colispora** Marvan’Ová 1988, *Sarcosomataceae, Pezizales, Pezizomycetes*, three species, type: *C. elongata* Marvanová, hypomycetous, sexual morph unknown, saprobes, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences and cultures available for *Colispora elongata* (F-08382 fide Baschien et al. 2013), needs generic revision.

**Collema** F.H.Wigg. [nom.cons.] 1780, *Collemataceae, Peltigerales, Lecanoromycetes*, 40 species, type: *C. lactuca* (Weber) Weber ex F.H. Wigg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Collematospora** Jeng & Cain 1976, *Trichosphaeriales, Trichosphaeriales, Sordariomycetes*, one species, type: *C. venezuelensis* Jeng & Cain, asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirby et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Collembolispora** Marvanová & Pascoal 2003, *Helotiales genera incertae sedis, Leotiomyces*, two species, type: *C. barbata* Marvanová, Pascoal & Cássio, hypomycetous,
sexual morph unknown, saprobes, aquatic, Portugal, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2012; new species, DNA, morphology), holotype and ex-type strains of the type: IMI 389661, UMB-088.01.

**Collemopsisidium** Nyl. 1881, Xanthopyreniaceae, Collemopsidiales, Dothiodeomyceta incertae sedis, +40 spp. (but the number could be higher), type: *C. iocarpum* (Nyl.) Nyl., molecular data suggest that the number of marine species has been largely underestimated (Pérez-Ortega et al. 2016), asexual morph coelomycetous, lichen-forming fungi, associated with cyanobacteria, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016, classification), Pérez-Ortega et al. (2016, phylogeny), lectotype of type: H-NYL 42858.

**Colletoconis** de Hoog & Aa 1978, Ascomycota genera incertae sedis, one species, type: *C. aecidiophila* (Speg.) de Hoog, Aa & U.P. Singh, coelomycetous, sexual morph unknown, saprobes, fungicolous, Argentina, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Colletogloeum** Petr. 1953, Mycosphaerellaceae, Capnodiales, Dothideomycetes, one species, type: *C. sissoo* (Syd.) B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Crous et al. (2009; taxonomy, phylogeny), Wijayawardene et al. (2012, 2016, 2017; outline), Zhao and Zhao (2012; new species, China), cultures and sequences are available for unidentified species, needs generic revision.

**Colletotrichum** Corda. 1831 (= Glomerella Spauld. & H. Schrenk 1903 fide Réblová et al. 2015), Glomerellaceae, Glomerellales, Sodariomycetes, more than 100 spp., type: *C. lineola* Corda, coelomycetous sexual morph *Glomerella*, pathogens, endophytes, saprobes, terrestrial and aquatic worldwide, many species have molecular data including the epitype or neotype, sequence data available for accepted species, see Hyde et al. (2009a,b, 2014; phylogeny, species number), Cannon et al. (2012; phylogeny), Crouch (2014), Damm et al. (2012a,b, 2013, 2014; species complexes, phylogeny), Weir et al. (2012), Liu et al. (2015), ex-epitype strains of type: CBS 125337, epitype of type: CBS H-20362.

**Collodiscula** I. Hino & Katum. 1955 (= Acanthodochium Samuels et al. 1987 fide Réblová et al. 2016), Xylariaceae, Xylariales, Sordariomycetes, one species, type: *C. japonica* I. Hino & Katum., asexual morph hyphomycetous (*Acanthodochium*), saprobes, Japan, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch and Voglmayr (2012; phylogeny) Wijayawardene et al. (2012, 2017; outline), Stadler et al. (2013; one name), Li et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline, one name), Réblová et al. (2016; nomenclature), cultures and sequences are available for type: *Collodiscula japonica* fide Jaklitsch and Voglmayr (2012).

**Collophorina** Damm & Crous, gen. nov. MBxxxx

≡ Collophora Persoonia 24: 64. 2010. nom. illeg., [ICN (Melbourne) Art. 53.1], non Collophora Mart. 1830 (Apocynaceae).

**Leotiomyces** genera incertae sedis, seven species, coelomycetous, sexual morph unknown, endophytes, saprobes, plant pathogens, Baleares, Pacific Northwest regions, South Africa, Germany, Iran, see Damm et al. (2010; morphology, phylogeny), Gramaje et al. (2012; new species, phylogeny), Wijayawardene et al. (2012, 2017; outline), Xie et al. (2013; new species)

Type: *Collophorina rubra* (Damm & Crous) Damm & Crous

See Damm et al. (2010) for illustrations, description and diagnosis.


Other species included:
MycoBank MBxxxx

Collophorina africana (Damm & Crous) Damm & Crous, *comb. nov*.
MycoBank MBxxxx

Collophorina capensis (Damm & Crous) Damm & Crous, *comb. nov*.
MycoBank MBxxxx

Collophorina hispanica (Gramaje, Armengol & Damm) Damm & Crous, *comb. nov*.
MycoBank MBxxxx

Collophorina paarla (Damm & Crous) Damm & Crous, *comb. nov*.
MycoBank MBxxxx

Collophorina pallida (Damm & Crous) Damm & Crous, *comb. nov*.
MycoBank MBxxxx

Collophorina rubra (Damm & Crous) Damm & Crous, *comb. nov*.
MycoBank MBxxxx

Notes: The genus *Collophora* Damm & Crous is invalid, being a later homonym of the plant genus *Collophora* Mart. 1830. It is therefore validated here as *Collophorina* gen. nov. Species of the genus are associated with black spots and dark brown to black streaking of the xylem tissues of woody plant hosts, and can cause wood necrosis (Gramaje et al. 2012; Arzanlou et al. 2016) and it was also collected from air samples (Fischer et al. 2016).

Collostroma Petr. 1947, Ascomycota genera incertae sedis, one species, type: *C. gelatinosum* Petr., coelomycetous, sexual morph unknown, saprobes, Austria, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Colonomyces R.K. Benj. 1955, Euceratomycetaceae, Laboulbeniales, Laboulbeniomycetes, two species, type: *C. appendiculatus* R.K. Benj., asexual morph unknown, biotrophic, USA, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Colpoma Wallr. 1833, Rhytismataceae, Rhytismatales, Leotiomyces, 14 species, type: *C. quercinum* (Pers.) Wallr., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, available cultures for type: Lantz 368 (UPS).

Columnnodomus Petr. 1941, Ascomycota genera incertae sedis, one species, type: *C. microsporus* Petr. coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lantz et al. (2011; phylogeny), Lee et al. (2016; antifungal properties), cultures and sequences are unavailable.

Columnothyrium Bubák 1916, Ascomycota genera incertae sedis, one species, type: *C. myriospermum* (C. Massal.) Bubák, coelomycetous, sexual morph unknown, saprobes,
Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Comatospora** Piroz. & Shoemaker 1971, *Ascomycota* genera incertae sedis, one species, type: *C. suttonii* Piroz. & Shoemaker, coelomycetous, sexual morph unknown, saprobes, Canada, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Jhonston et al. (2014; nomenclature), Wijayawardene et al. (2016; outline, one name, morphology), available specimens for type: BRIP 14753, cultures and sequences are unavailable, needs generic revision.

**Combea** De Not. 1846, *Opegraphaceae, Arthoniales, Arthoniomycetes*, two species, type: *C. mollusca* (Ach.) Nyl., lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Roccellaceae*), Kirk et al. (2013; genus accepted), Ertz and Tehler (2011; taxonomy, placed in *Opegraphaceae*), Lücking et al. (2016; classification), sequences are available.

**Comesella** Speg. 1923, *Dothideomycetes* genera incertae sedis, one species, type: *C. anomala* (Berk. & M.A. Curtis) Speg., asexual morph unknown, saprobes, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Comesia** Sacc. 1884, *Helotiales* genera incertae sedis, three species, type: *C. felicitatis* (P. Crouan & H. Crouan) Sacc., asexual morph unknown, saprobes, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Comminutispora** A.W. Ramaley 1996 (= *Hyphospora* A.W. Ramaley 1996 *fide* Wijayawardene et al. 2014; Rossman et al. 2015), *Dothideomycetes* genera incertae sedis, one species, type: *C. agavacearum* A.W. Ramaley, asexual morph hyphomycetous (*Hyphospora*), saprobes, USA, see Lumbsch and Huhndorf (2010; outline; accepted as *Planistromellaceae*), Wijayawardene et al. (2014; outline, nomenclature), Rossman et al. (2015; nomenclature), holotype of the type: BPI 802958, cultures and sequences are unavailable, needs generic revision.

**Comocephalum** Syd. 1939, *Ascomycota* genera incertae sedis, one species, type: *C. vismiae* Syd., coelomycetous, sexual morph unknown, saprobes, Equador, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Comoclathris** Clem. 1909, *Pleosporaceae, Pleosporales, Dothideomycetes*, 26 species, type: *C. lanata* Clem., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline; accepted as a genus in *Diademaceae*), Hyde et al. (2013; accepted as *Diademaceae*) Wijayawardene et al. (2014; outline; accepted as as a genus in *Diademaceae*), Ariyawansa et al. (2015; morphology, accepted as *Pleosporaceae*), Li et al. (2016; new species, Russia), holotype of the type: COLO 62872, sequences are available.

**Comoletra** Clem. 1909, *Pleosporaceae, Pleosporales, Dothideomycetes*, two species, type: *C. moniliformis* C. Walker, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology, accepted as a genus in *Otideaceae, Peziales*), Wijayawardene et al. (2012; outline, accepted as a genus in *Pyronemataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; transferred to *Ascomycota* genera incertae sedis), cultures and sequences are unavailable, needs generic revision.
Compositrema Rivas Plata, Lücking & Lumbsch 2012, Graphidaceae, Ostropales, Lecanoromycetes, four species, type: *C. cerebriforme* J.E. Hern. & Lücking, lichenized, see Rivas Plata et al. (2012b), Kraichak et al. (2014), Lücking et al. (2016; classification), sequences are available.

Compsocladium I.M. Lamb 1956, Ramalinaceae, Lecanorales, Lecanoromycetes, two species, type: *C. archboldianum* I.M. Lamb, lichenized, see Lumbsch and Huhndorf (2010; classification), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Compsomyces Thaxt. 1894, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, seven species, type: *C. verticillatus* (Thaxt.) Thaxt., assexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Condylostyla Nawawi 1976, Ascomycota genera incertae sedis, four species, type: *C. spumigena* Nawawi, hyphomycetous, saprobes, on decaying leaves, aquatic, Brazil, Malaysia, Poland, Puerto Rico, Republic of Cameroon, Venezuela, Vietnam, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Fiuza et al. (2015a; first record from Amazon), sequence data available for one species, compare with Angulospora, isotype of type: IMI 193709.

Coniambigua Etayo & Diederich 1995, Ascomycota genera incertae sedis, one species, type: *C. phaeographidis* Etayo & Diederich, hyphomycetous, sexual morph unknown, lichenico, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2016, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: MA (Lich.), Etayo 4215, sequence data of type species is unavailable.


Conidiacoscius Holterm. 1898, Saccharomycetes genera incertae sedis, one species, type: *C. paradoxus* Holterm., asexual morphs unknown, terrestrial, Java, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Conidiophora Rêblová & L. Mostert 2007, Togniniaceae, Togniniales, Sordariomycetes, one species, type: *C. tympanoides* (M.E. Barr) Rêblová & L. Mostert, asexual morph unknown, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), holotype of the type: holotype of Romellia tympanoides, NY.

Coniospora Höhn. 1918 (= Schizoparme Shear 1923; Pilidiella Petr. & Syd. 1927 fide Alvarez et al. 2016), Schizoparmaceae, Diaporthales, Sordariomycetes, 29 species, type: *C. pulchella* Höhn., coelomycetous, sexual morph Schizoparme, saprobes, pathogens, terrestrial, widespread, see Crous et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), Alvarez et al. (2016; revision, nomenclature, treated
Schizoparme and Pilidiella as synonyms), Wijayawardene et al. (2016; morphology, phylogeny), cultures and sequences are available.

**Coniobrevicolla** Réblová 1999, *Trichosphaeriaceae, Trichosphaeriales, Sordariomycetes*, one species, type: *C. larsenii* Réblová, asexual morph unknown, terrestrial, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Coniocarpon** DC. 1805, *Arthoniaceae, Arthoniales, Arthoniomycetes*, five species, type: *C. cinnabarinum* DC., lichenized, see Sundin et al. (2012; taxonomy), Frisch et al. (2014a; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Coniocessia** Dania García, Stchigel, D. Hawksw. & Guarro 2006, *Coniocessiaceae, Xylariales, Sordariomycetes*, five species, type: *C. nodulisporioides* (D. Hawksw.) Dania García, Stchigel, D. Hawksw. & Guarro, asexual morph hyphomycetous (nodulisporium-like), terrestrial, saprobes, coprophilous, terrestrial, saprobes, coprophilous, from soil, Jordan, Iran, Spain, see Lumbsch and Huhndorf (2009; outline), Asgari and Zare (2011; new species, DNA), Senanayake et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: IMI 204247 (as *Coniochaeta nodulisporioides* D. Hawksw.), sequence data and cultures available.

**Coniochaeta** (Sacc.) Cooke 1887, *Coniochaetaceae, Coniochaetales, Sordariomycetes*, 78 species, type: *C. ligniaria* (Grev.) Cooke, asexual morph lecythophora-like, terrestrial, aquatic, saprobes, coprophilous, widespread, see Damm et al. (2010; South Africa, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; phylogeny), ex-type cultures are unavailable but none-type cultures are available.

**Coniolariella** Dania García, Stchigel & Guarro 2006, *Xylariales, Xylariales, Sordariomycetes*, eight species, type: *C. limonispora* (Ellis & Everh.) Checa, Arenal & J.D. Rogers, asexual morph rhinocladiella-like, saprobes, worldwide, see Checa et al. (2008; new species), Lumbsch and Huhndorf (2010; outline), Zare et al. (2010; new species, morphology), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), type: of holotype IRAN 12363F (as *Coniochaeta gamsii* Asgari & Zare), sequence data available.

**Conioscypha** Höhn. 1904 (= *Conioscyphascus* Réblová & Seifert 2004 fide Maharachchikumbura et al. 2016; Réblová et al. 2016), *Conioscyphaceae, Conioscyphales, Sordariomycetes*, 12 species, type: *Conioscypha lignicola* Höhn., sexual morph *Conioscyphascus*, saprobes, terrestrial, worldwide, see Réblová and Crous et al. (2014; new species, DNA), Zelski et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Réblová et al. (2016; phylogeny), cultures and sequences are available.

**Conioscyphopsis** Goh & K.D. Hyde 1998, *Ascomycota genera incertae sedis*, one species, type: *C. australiensis* Goh & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Coniothyrina** Syd. & P. Syd. 1912, *Ascomycota genera incertae sedis*, one species, type: *C. agavicola* (Speg.) Syd., coelomycetous, sexual morph unknown, saprobes, subtropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Coniothyrium** Corda 1840, *Coniothyriaceae, Pleosporales, Dothideomycetes*, c. 50 species, type: *C. palmarum* Corda, coelomycetous, terrestrial, pathogens, saprobes, worldwide, see de Gruyter et al. (2013; phylogeny, generic concept), Crous et al. (2013, 2016; new species), Hyde et al. (2013; morphology), Verkley et al. (2014; phylogeny), Wijayawardene et al. (2016; morphology, phylogeny), cultures and sequences are available, reference culture for type: CBS 400.71.
**Coniozyma** Crous 2008, *Dothideomycetes* genera *incertae sedis*, one species, type: *C. leucospermi* (Crous & Denman) Crous, coelomycetous, terrestrial, pathogens, saprobes, South Africa, see Marincowitz et al. (2008; morphology), Wijayawardene et al. (2017; outline), holotype and ex-type cultures of the type: PREM 55348, CBS 114035 = STE-U 2852.

**Conjunctospora** Udagawa & Uchiy. 1999, *Ascomycota* genera *incertae sedis*, one species, type: *C. vesiculifera* Udagawa, Uchiy. & Kamiya, hyphomycetous, sexual morph unknown, saprobes, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: CBM, Uchiyama SUM3064, cultures and sequences are unavailable, needs generic revision.


**Connersia** Malloch 1974, *Pseudeurotiaceae*, *Leotiomycetes* family *incertae sedis*, one species, type: *C. rilstonei* (C. Booth) Malloch, asexual morph unknown, saprobes, British Isles, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), available cultures of the type: CBS 537.74, AFTOL-ID 1264.


**Conoplea** Pers. 1797, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, eleven species, type: *C. sphaerica* (Pers.) Pers., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Marincowitz et al. (2008; DNA), Rivera-Orduña et al. (2011; DNA), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.


**Conostroma** Moesz 1921, *Ascomycota* genera *incertae sedis*, three species, type: *C. didymum* (Fautrey & Roum.) Moesz (current name: *Colpoma quercinum* (Pers.) Wallr. fide Species Fungorum 2017), coelomycetous, sexual morph unknown, saprobes, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Zhao and Zhao (2012; new species, China), cultures and sequences are unavailable, needs generic revision.

**Conotremopsis** Vězda 1977, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *C. weberiana* Vězda, lichenized, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Consetiella** Hol.-Jech. & Mercado 1982, *Ascomycota* genera *incertae sedis*, one species, type: *C. solida* (Berk. & M.A. Curtis) Hol.-Jech. & Mercado, hyphomycetous, sexual morph unknown, saprobes, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Constantinomyces** Egidi & Onofri 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, four species, type: *C. virgultus* Egidi & Onofri, hyphomycetous, sexual morph unknown, rock-inhabiting, Spain, see Egidi et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype of the type: CBS 117930 = TRN 79.

**Cookeina** Kuntze 1891, *Sarcoscyphaceae, Pezizales, Pezizomycetes*, 13 species, type: *C. tricholoma* (Mont.) Kuntze, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Cookella** Sacc. 1878, *Cookellaceae, Dothideomycetes* family incertae sedis, seven species, type: *C. microscopica* Sacc., asexual morph unknown, parasites, fungicolous, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Cooksonomyces** H.J. Swart & D.A. Griffiths 1974, *Ascomycota* genera incerta sedis, one species, type: *C. banksiae* H.J. Swart & D.A. Griffiths, coelomycetous, sexual morph unknown, saprobes, Australia, see Kirk et al. (2008), however Kirk et al. (2013) did not accept, cultures and sequences are unavailable.


**Coppinsia** Lumbsch & Heibel 1998, *Trapeliaceae, Trapeliales, Lecanoromycetes*, one species, type: *C. minutissima* Lumbsch & Heibel, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Coprobolus** Cain & Kimbr. 1970, *Thelebolaceae, Thelebolales, Leotiomycetes*, one species, type: *C. poculiformis* Cain & Kimbr., asexual morph unknown, coprophilous, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Copromyces** N. Lundq. 1967, *Sordariaceae, Sordariales, Sordariomycetes*, one species, type: *C. bisporus* N. Lundq., asexual morph unknown, coprophilous, terrestrial, Sweden, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Coprotiella** Jeng & J.C. Krug 1976, *Thelebolaceae, Thelebolales, Leotiomycetes*, one species, type: *C. gongylospora* Jeng & J.C. Krug, asexual morph unknown, coprophilous, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Coprotus** Korf & Kimbr. 1967, *Thelebolaceae, Thelebolales, Leotiomycetes*, 29 species, type: *C. sexdecimsporus* (P. Crouan & H. Crouan) Kimbr. & Korf, asexual morph unknown, cup-fungus, saprobes or plant pathogenic, widespread, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Corallicola** Volkm.-Kohlm. & Kohlm. 1992, *Halosphaeriaceae, Microascales, Sordariomycetes*, one species, type: *C. nana* Volkm.-Kohlm. & Kohlm., asexual morph unknown, saprobes, marine, Belize, see Lumbsch and Huhndorf (2010; outline), Kirk et al.

Corallomyces Cryptobii Thaxt. 1904 (= Rhizostilbella Wolk 1914 fide Rossman et al. 2016), Nectriaceae, Hypocreales, Sordariomycetes, type: C. heinseni Thaxt., three species, asexual morph hyphomycetous, terrestrial, saprobes, associated with diseased plants, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Grafenhan et al. (2011; DNA, phylogeny), Herrera et al. (2013; new species, revision), Kirk et al. (2013; genus accepted), Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), cultures and sequences are available.

Corallomycetella Jenn. 1904, (= Rhizostilbella Wolk 1914 fide Rossman et al. 2016), Nectriaceae, Hypocreales, Sordariomycetes, type: C. heinseni Jenn., three species, asexual morph hyphomycetous, terrestrial, saprobes, associated with diseased plants, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Grafenhan et al. (2011; DNA, phylogeny), Herrera et al. (2013; new species, revision), Kirk et al. (2013; genus accepted), Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2016; nomenclature), cultures and sequences are available.

Corallonectria C. Herrera & P. Chaverri 2013, Nectriaceae, Hypocreales, Sordariomycetes, one species, type: C. jatrophae (Möller) C. Herrera & P. Chaverri, asexual morph hyphomycetous, terrestrial, saprobes, associated with diseased plants, cosmopolitan, see Herrera et al. (2013; new species, revision), Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Cordana Preuss 1851, Cordanaeae, Cordanales, Sordariomycetes, eight species, type: C. paucisepata Preuss, hyphomycetous, saprobes or plant pathogenic, widespread, sequence data available for all species, see Kirk (2013; genus accepted), Hernández-Restrepo et al. (2014, 2015; phylogeny), Zelski et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), ex-type strains of type: IMI 232041a; holotype of type: CBS H-21148.

Cordierites Mont. 1840, Helotiaceae, Helotiales, Leotiomyctetes, three species, type: C. guianensis Mont., asexual morph unknown, saprobes, worldwide, see Kirk (2013; genus accepted), Lumbsch and Huhndorf (2010; outline), Peterson and Pfister (2010; DNA, phylogeny), cultures and sequences are available.

Coremiella Bubák & Krieg. 1912, Ascomycota genera incertae sedis, one species, type: C. cystopodoides Bubák & Krieg., hyphomycetous, sexual morph unknown, saprobes, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence data available for unidentifed species, needs generic revision.

Coreomyces Thaxt. 1903, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, 21 species, type: C. corisae Thaxt., asexual morph unknown, biotrophic, worldwide, see Lee and Na (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

CoreomyctOPSIS Thaxt. 1920, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: C. oedipus Thaxt., asexual morph unknown, biotrophic (on termites), West Indies, USA, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Coreothromycetes Thaxt. 1892, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, 82 species, type: Coreothromycetes cryptobii Thaxt., asexual morph unknown, biotrophic, West Indies, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Coreothrostroma Kleb. 1933, Ascomycota genera incertae sedis, one species, type: C. laricis Kleb., coelomycetous, sexual morph unknown, saprobes, Europe, see Kirk et al. (2013; genus accepted), sequence data available for unidentified species, needs generic revision.

Cornicularia (Schreb.) Ach. 1794, Parmeliaceae, Lecanorales, Lecanoromycetes, one species, type: C. tristis (Weber ex F.H. Wigg.) Hoffm., lichenized, see Lumbsch and
Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Corniculariella** P. Karst. 1884, *Dermataceae, Helotiales, Leotiomycetes*, one species, type: *C. abietis* P. Karst., coelomycetous, sexual morph unknown, saprobes, worldwide, see Oliveira et al. (2010; new species, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence data available for *Corniculariella brasiliensis* but type species lack sequences, needs generic revision.


**Cornucopiella** Höhn. 1915, *Ascomycota* genera incertae sedis, two species, type: *C. mirabilis* Höhn., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cornuntum** Velen. 1947, *Helotiales* genera incertae sedis, one species, type: *C. fagineum* Velen., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Cornutispora** Piroz. 1973, *Ascomycota* genera incertae sedis, five species, type: *C. limaciformis* Piroz., coelomycetous, sexual morph unknown, lichenicolous, worldwide, see Etayo (2010; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cornutostilbe** Seifert 1990, *Ascomycota* genera incertae sedis, five species, type: *C. medusa* Seifert, hyphomycetous, sexual morph unknown, from soil, saprobes, Indonesia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: BO 14356.


**Coronatomyces** Dania García, Stchigel & Guarro 2004, *Sordariaceae, Sordariomycetes*, one species, type: *C. cubensis* Dania García, Stchigel & Guarro, asexual morph unknown, saprobes, terrestrial, Cuba, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type culture of type: IMI 385316, FMR 7132.

**Coronellaria** (P. Karst.) P. Karst. 1870, *Dermataceae, Helotiales, Leotiomycetes*, four species, type: *C. delitschiana* (Auersw.) P. Karst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Coronopapilla Kohlm. & Volkm.-Kohlm. 1990, Zopfiaceae, Pleosporales, Dothideomycetes, two species, type: C. avellina Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Jones et al. (2009, 2015; classification), Suetrong et al. (2009; morphology), Alias et al. (2010; diversity), Besituto et al. (2010; diversity), Lee et al. (2012; checklist, Malaysia), Zhang et al. (2012; morphology), Hyde et al. (2013; morphology, outline), Wijayawardene et al. (2014b; outline), holotype and ex-isotype strain of type: J.K.5144a (IMS), J.K.5144b (IMS 330805).

Coronophora Fuckel 1864, Coronophoraceae, coronophorales, Sordariomycetes, five species, type: C. gregaria Fuckel, asexual morph unknown, saprobes, terrestrial, Europe, see Mugambi and Huhndorf (2010; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline; phylogeny), available cultures of type: ANM1555 (fide Mugambi and Huhndorf 2010).

Coronophorella Höhn. 1909, Scortechiniaceae, Coronophorales, Sordariomycetes, one species, type: C. chaetomioides (Penz. & Sacc.) Höhn., asexual morph unknown, saprobes, Indonesia, see Kirk et al. (2008; treated as a synonym of Nitschkia), Mugambi and Huhndorf (2010; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), available cultures of type: GKM1099 (fide Mugambi and Huhndorf 2010).

Coronoplectrum Brusse 1987, Lecanorales genera incertae sedis, Lecanoromycetes, one species, type: C. namibicum Brusse, lichenized, see Thell et al. (2012; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.


Corticiruptor Wedin & Hafellner 1998, Lecanoromycetes genera incertae sedis, Lecanoromycetes, two species, type: C. abeloneae (P.M. Jørg.) Wedin & Hafellner, asexual morphs unknown, lichenicolous, terrestrial, Europe, see Etayo and Sancho (2008; new species), Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable.

Corticorygma M. Cáceres, Feuerstein, Aptroot & Lücking 2014, Graphidaceae, Ostropales, Lecanoromycetes, one species, type: C. stellatum M. Cáceres, Feuerst., Aptroot & Lücking, lichenized, see Cáceres et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

Corylomyces Stchigel, M. Calduch & Guarro 2006, Sordariales genera incertae sedis, Sordariomycetes, type: one species, C. selenosporus Stchigel, M. Calduch & Guarro, asexual morph unknown, saprobes, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2016; outline), holotype and ex-type of type: ILLS 57506, FMR 8279.

Corylomycetes R.K. Benj. 1994, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, 82 species, type: C. cryptobii Thaxt., asexual morph unknown, biotrophic, West Indies, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Corynascella Arx & Hodges 1975, Chaetomiaceae, Sordariales, Sordariomycetes, seven species, type: C. humicola Arx & Hodges, asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Brink et al. (2012; DNA), Maharachchikumbura et al. (2015, 2016; outline), sequence data available for C. inaequalis (CBS 331.75, CBS 284.82 fide Brink et al. 2012), type species lack cultures and sequence data.

D.K. Agarwal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, temperate regions, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Corynecestis** Brusse 1985, *Lichinaceae, Lichinales, Lichinomycetes*, one species, type: *C. capensis* Brusse, lichenized, South Africa, see Tehler and Wedin (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Corynecystis** Brusse 1985, *Lichinaceae, Lichinales, Lichinomycetes*, one species, type: *C. capensis* Brusse, lichenized, South Africa, see Tehler and Wedin (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

**Corynelia** Ach. 1823, *Coryneliaceae, Coryneliales, Eurotiomycetes*, nine species, type: *C. uberata* Fr., asexual morph unknown, terrestrial, parasitic on members of the plant family *Podocarpaceae*, Africa, Central and South America, Japan, Oceania, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wood et al. (2016; phylogeny, new species, proposal of the subclass *Coryneliomycetidae*), epitype: PREM 61207.

**Coryneliella** Har. & P. Karst. 1890, *Ascomycota genera incertae sedis*, one species, type: *C. consimilis* Har. & P. Karst., asexual morph unknown, saprobes, terrestrial, Mauritius, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Coryneliopsis** Butin 1972, *Coryneliaceae, Coryneliales, Eurotiomycetes*, two species, type: *C. cupulifera* Butin, asexual morph unknown, terrestrial, always associated with members of *Cyttaria* Berk. which parasitize *Nothofagus* spp., Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wood et al. (2016; morphotaxonomy), cultures and sequences are unavailable, needs generic revision.

**Coryneliospora** Fitzp. 1942, *Coryneliaceae, Coryneliales, Eurotiomycetes*, two species, type: *C. fructicola* (Pat.) Fitzp., asexual morph unknown, terrestrial, parasitic on fruits of *Rapanea* Aubl. and *Myrsine* L., China, India, New Guinea, South Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wood et al. (2016; morphotaxonomy), cultures and sequences are unavailable, needs generic revision.

**Corynespora** Güssow 1906 (= *Corynesporasca* Sivan. 1996 *fide* Rossman et al. 2015), *Corynesporascaceae, Pleosporales, Dothideomycetes*, more than 130 species, type: *C. mazei* Güssow, sexual morph *Corynesporasca*, saprobes, widespread, see Lumbsch and Huhndorf (2009; outline, sexual morph), Zhang et al. (2009; phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Rossman et al. (2015; nomenclature), sequences are available for two species, type sequence data are not available, needs generic revision.

**Corynesporina** Subram. 2009, *Ascomycota genera incertae sedis*, one species, type: *C. elegans* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Gams et al. (2009; taxonomy), Seifert et al. (2011; morphology), Zhang et al. (2012a, b; new species), Ma et al. (2012; new species), Xia et al. (2014; new species; key to species), cultures and sequences are unavailable.

**Corynesporopsis** P. M. Kirk 1981, *Ascomycota genera incertae sedis*, 15 species, type: *C. quercicola* (Borowska) P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Castaneda et al. (2010; new species), Seifert et al. (2011; morphology), Ma et al. (2010, 2010; new species, China), Wijayawardene et al. (2012, 2017; outline), Hernández-Restrepo et al. (2014; new species), Xia et al. (2013; new species),
Kirschner (2015; new species), Xia et al. (2014; new species), cultures and sequences are available but lacks for the type species.

*Coryneum* Nees 1816 (= *Pseudovalsa* Ces. & De Not. 1863 *fide* Rossman et al. 2015), *Pseudovalsaeeae, Diaporthales, Sordariomycetes*, c. 30 species, type: *C. umbonatum* Nees, sexual morph *Pseudovalsa*, pathogens, saprobes, terrestrial, temperate regions, see Wijayawardene et al. (2012, 2016, 2017; outline, morphology, new species), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), cultures and sequences are unavailable.


*Cosmaroidea* Sacc. 1880, *Ascomycota* genera incertae sedis, one species, type: *C. bizzozeriana* Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Cosmospora* Rabenh. 1862, *Nectriaceae, Hypocreales, Sordariomycetes*, c. 50 species, type: *C. coccinea* Rabenh., asexual morph acremonium-like, on fruiting bodies and stromata of other fungi or isolated from soil, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), lectotype of the generic type: BPI, designated by Rossman et al. (1999), cultures and sequences are available.

*Costanetoa* Bat. & J.L. Bezerra 1963, *Ascomycota* genera incertae sedis, one species, type: *C. caryotae* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Crandallia* Ellis & Sacc. 1897, *Ascomycota* genera incertae sedis, four species, type: *C. juncicola* Ellis & Sacc., coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Marincowitz et al. (2008; new species), Wijayawardene et al. (2012, 2017; outline), Rossman et al. (2016; new combinations for pathogens), cultures and sequences are unavailable, needs generic revision.


*Craspedodidymum* Hol.-Jech. 1972, *Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes*, twelve species, type: *C. elatum* Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Ma et al. (2011; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Mel’nik et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.


*Crassoascus* Checa, Barrasa & A.T. Martínez 1993, *Clypeosphaeriaceae, Xylariales, Sordariomycetes*, two species, type: *C. fusisporus* Checa, Barrasa & A.T. Martínez asexual morph unknown, saprobes, terrestrial, Argentina, Spain, see Lumbsch and Huhndorf (2010;
Crassochea Růžička 1999, Chaeosphaerellaceae, Coronophorales, Sordariomycetes, two species, type: C. nigra (Sacc.) Růžička, asexual morph unknown, saprobes, terrestrial, Argentina, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype of the type: MA-Fungi 26331, cultures and sequences are unavailable, needs generic revision.

Cratiria Marbach 2000, Caliciaceae, Caliciales, Lecanoromycetes, 20 species, type: C. lauri-cassiae (Fée) Marbach, lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Cratamatymyces Viégas 1944, Dothideomycetes genera incertae sedis, one species, type: C. eupatori Viégas, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Creodiplodina Petr. 1957, Ascomycota genera incertae sedis, one species, type: C. fusicpora Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Creographa A. Massal. 1860, Graphidaceae, Ostropales, Lecanoromycetes, 30 species, type: C. brasiliensis A. Massal., lichenized, see Rivas Plata et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Creonecete Petr. 1949, Ascomycota genera incertae sedis, one species, type: C. biparasitica Petr., coelomycetous, sexual morph unknown, fungicolous (on Uredo), terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Creoseptoria Petr. 1937, Ascomycota genera incertae sedis, one species, type: C. watzlii Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Caucasus, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Creosphaeria Theiss. 1910, Xylariaceae, Xylariales, Sordariomycetes, two species, type: C. sassafras (Schwein.) Y.M. Ju, F. San Martín & J.D. Rogers, asexual morph unknown, saprobes, terrestrial, Argentina, Spain, see Lumbsch and Huhndorf (2010; outline), Raja et al. (2011; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Sir et al. (2016; DNA), cultures and sequences are available.

Creothryilla Bat. & C.A.A. Costa 1957, Ascomycota genera incertae sedis, one species, type: C. sideroxyfoliae Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cresponea Egea & Torrente 1993, Roccellaceae, Arthoniales, Arthoniomycetes, 21 species; type: C. premnea (Ach.) Egea & Torrente, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015, phylogeny), Lücking et al. (2016; classification, accepted as a genus in Opegraphaceae), sequences are available.

Cresporthaphis M.B. Aguirre 1991, Trichosphaeriaceae, Trichospherales, Sordariomycetes, two species, type: C. wienkampii (J. Lahm ex Hazsl.) M.B. Aguirre, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Harda (2014; new species; morphology), cultures and sequences are unavailable, needs generic revision.
Críbropeltis Tehon 1933, Ascomycota genera incertae sedis, one species, type: *C. citrullina* Tehon, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Criella (Sacc.) Henn. 1900, Rhytismataceae, Rhytismatales, Leotiomycales, one species, type: *C. austrocaledonica* (Crié) Sacc. & P. Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Crinigeria I. Schmidt 1985, Ascomycota genera incertae sedis, one species, type: *C. maritima* I. Schmidt, asexual morph unknown, marine, temperate, on wood, saprobes, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Crinitospora B. Sutton & Alcorn 1985, Stilbosporaceae, Diaporthales, Sordariomycales, one species, type: *C. pulchra* B. Sutton & Alcorn, coelomycetous, sexual morph unknown, saprobes, Australia, Thailand, see Kirk et al. (2013; genus accepted), Crous et al. (2014; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), epitype and ex-epitype culture of type: CBS H-21729, CBS 138014.

Criserosphaeria Speg. 1912, Helotiaceae, genera incertae sedis, Leotiomycales, one species, type: *C. phyllostictoides* Speg., asexual morph unknown, saprobes, terrestrial, Argentina, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cristula Chenant. 1920, Ascomycota genera incertae sedis, one species, type: *C. integra* Chenant., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011) did not accept the genus, Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cristulariella Höhn. 1916 (= Nervostrum Narumi & Y. Harada 2006 fide Johnston et al. 2014), Sclerotiniaceae, Helotiaceae, Leotiomycales, five species, type: *C. depraedans* (Cooke) Höhn., hyphomycetous, sexual morph *Nervostrum*, pathogens, terrestrial, world wide, see Lumbsch and Huhndorf (2010; outline, sexual morph), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Cho et al. (2016; DNA, pathogens), cultures and sequences are available.

Crocellina Tehler & Ertz 2014, Roccellaceae, Arthoniales, Arthoniomycales, one species, type: *C. cinerea* (Müll. Arg.) Tehler & Ertz, lichenized, see Ertz et al. (2014; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available.

Crociereaes Fr. 1849, Helotiaceae, Helotiaceae, Leotiomycales, five species, type: *C. gramineum* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, widespread (esp. north temperate), see Lumbsch and Huhndorf (2010; outline), Whitton et al. (2012; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for type species, needs generic revision.

Crocodia Link 1833, Lobariales, Peltigerales, Lecanoromycetes, five species; type: *C. aurata* (Ach.) Link, lichenized, see Galloway and Elix (2013; taxonomy), Moncada et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Crocyenia (Ach.) A. Massal. [nom.cons.] 1860, Ramalinaceae, Lecanorales, Lecanoromycetes, three species, type: *L. gossypina* (Sw.) Ach., lichenized, tropical, see Ekman et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Crotone Theiss. & Syd. 1915, Dothideomycetes genera incertae sedis, one species, type: *C. drimydis* (Lév.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturaceae*), Kirk et al.
Cruentotrema Rivas Plata, Papong, Lumbsch & Lücking 2012, Graphidaceae, Ostropales, Lecanoromycetes, five species, type: C. cruentatum (Mont.) Rivas Plata, Lumbsch & Lücking, asexual morph unknown, lichenized, terrestrial, tropical, placement in Graphidaceae supported by molecular data, see Sipman et al. 2012 (key), Rivas Plata et al. (2012a; taxonomy), Lumbsch et al. (2014, 2016), Kalb et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

Crumenella P. Karst. 1890, Helotiaceae, Helotiales, Leotiomyctes, one species, type: C. myricae (P. Karst.) P. Karst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequencea are unavailable, needs generic revision.


Crustodiplodina Punith. 1988, Ascomycota genera incertae sedis, one species, type: C. integra Chenant., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Crustospathula Aptroot 1998, Ramalinaceae, Lecanorales, Lecanoromyctes, three species, type: C. cartilaginea Aptroot, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Crustospathula Aptroot 1998, Ramalinaceae, Lecanorales, Lecanoromyctes, four species, type: C. cartilaginea Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Crutarndina Parnmen, Lücking & Lumbsch 2012, Graphidaceae, Ostropales, Lecanoromycetes, one species, type: C. petractoides (P.M. Jørg. & Brodo) Parnmen, Lücking & Lumbsch, lichenized, see Parnmen et al. (2012; taxonomy), Lücking et al. (2016; classification), sequences are available.

Antarctica; = CCFEE 534 (NCBI accession numbers: DQ028269 (ITS), DQ066713 (SSU)), taxonomic species delimitation supported by molecular data.

Additional species: *C. minteri* Selbmann, de Hoog, Mazzaglia, Friedmann & Onofri, MB500194. For diagnosis see Studies in Mycology 51: 21 (2005); *C. montanus* Isola & Zuconi, MB802901 and *C. funiculosus* Selbmann & de Hoog, MB802893, described from the Alps (Selbmann et al., 2014). These last two taxa were invalidly published, since the holotypes are missing in the original publication [ICN (Melbourne) Art. 40]; the two species are here validated as follows:

*Cryomyces montanus* Isola & Zuconi sp. nov., MB819850. For diagnosis see Fungal Diversity 65(1): 177 (2014). Holotype: CBS 135221. From rock, Val de la Mare, Passo dello Stelvio, Italy; = CCFEE 5476. Culture preserved in liquid nitrogen and in dried condition (NCBI accession numbers: KC315849 (ITS), GU250352 (SSU), GU250394 (LSU), GU250434 (mtSSU)), taxonomic species delimitation supported by molecular data.

*Cryomyces funiculosus* Selbmann & de Hoog sp. nov., MB819849. For diagnosis see Fungal Diversity 65(1): 175 (2014). Holotype: CBS 134687. From rock, Colle delle Pisse, Monte Rosa, Italy; = CCFEE 5554. Culture preserved in liquid nitrogen and in dried condition (NCBI accession number: KC315848 (ITS)), taxonomic species delimitation supported by molecular data.

*Cryphonectria* (Sacc.) Sacc. & D. Sacc. 1905, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *N. parasitica* D. Sacc., asexual morphs coelomycetous, saprobes, terrestrial, worldwide, see Gryzenhout et al. (2009; new species, revision), Lumbsch and Huhndorf (2010; outline), Braganca et al. (2011; new species), Maharachchikumbura et al. (2015, 2016; taxonomy, phylogeny, outline), cultures and sequences are available.

*Cryptandromyces* Thaxt. 1912, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 13 species, type: *C. geniculatus* Thaxt., asexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

*Cryptascoma* Ananthap. 1988, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *C. bisetula* Ananthap., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

*Cryptendoxyla* Malloch & Cain 1970, *Cephalothecaceae*, *Sordariomycetes*, families incertae sedis, one species, type: *C. hypophloia* Malloch & Cain, asexual morph hypymycetous (chalara-like), from soil, on human as pathogen, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Lyškova et al. (2014; DNA, human pathogen), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), living cultures and sequence data available CBS 796.84, CBS 508.70, CBS 138.78.

*Cryptothionia* Frisch & G. Thor 2010, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, c. 15 species, type: *C. polillensis* (Vain.) Frisch & G. Thor, lichenized, widespread tropical, see Frisch and Thor (2010; taxonomy), Menezes et al. (2013; taxonomy, key), Kirk et al. (2013; genus accepted), Frisch et al. (2014; systematics), Lücking et al. (2016; classification), sequences are available but lacks for the type.

*Cryptoascus* Petri 1909, *Sordariomycetes* genera incertae sedis, two species, type: *C. oligosporus* Petri, saprobes or pathogens, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

*Cryptoceuthospora* Petr. 1921, *Ascomycota* genera incertae sedis, two species, type: *C. moravica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Cryptocline** Petr. 1924, *Dermateaceae, Helotiales, Leotiomyces*, 15 species, type: *C. effusa* Petr., coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cryptocoryneopsis** B. Sutton 1980, *Ascomycota* genera incertae sedis, one species, type: *C. umbraculiformis* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of the type: IMI 234264a.

**Cryptocoryneum** Fuckel 1870, *Pleosporales incertae sedis*, Dothideomycetes, 20 species, type: *C. fasciculatum* Fuckel, hyphomycetous, dictyosporium-like, sexual morph unknown, saprobes, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), da Silva et al. (2015; morphology), Hashimoto et al. (2016; morphology, phylogeny), holotype of the type: PRM 155688, type species lacks cultures, seven species have sequence data.

**Cryptodictyon** A. Massal. 1860, *Lecideaceae, Lecidea, Lecanoromycetes*, two species, type: *P. holleana* Mont. & Bosch, lichenized, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Cryptodiscus** Corda 1838, *Stictidaceae, Ostropales, Lecanoromycetes*, nine species; type: *C. pallidus* (Pers.) Corda, lichenized, see Baloch et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Cryptohymenium** Samuels & L.M. Kohn 1987, *Dermateaceae, Helotiales, Leotiomyces*, one species, type: *C. pycnidiocephorum* Samuels & L.M. Kohn, asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cryptolechia** A. Massal. 1853, *Gyalectaceae, Ostropales, Lecanoromycetes*, 13 species, type: *C. carneolutea* (Turner) A. Massal., with ascomata, lichenized (*Trentepohlia*), terrestrial (corticolous or rarely lignicolous), mainly tropical, rarely noted in the Northern Hemisphere see Mangold (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kalb et al. (2012; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016, classification), sequences are available of material determined to the genus level (*fide* Mangold 2008).

**Cryptoleptosphaeria** Petr. 1923, *Diaporthales* genera incertae sedis, one species, type: *C. moravica* Petr., asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Cryptometrion** Gryzenh. & M.J. Wingf. 2010, *Cryphonectriaceae, Diaporthales, Sordariomycetes*, one species, type: *C. aestuescens* Gryzenh. & M.J. Wingf., asexual morphs coelomycetous, pathogens, terrestrial, North Sumatra, Indonesia, see Gryzenhout et al. (2010; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; taxonomy, phylogeny, outline), holotype and culture ex-type of the type: CMW 22535.
Cryptomyella Höhn. 1925, Ascomycota genera incertae sedis, one species, type: C. pteridis (Kalchbr.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptomyces Grev. 1825, Cryptomycetaceae, Rhytismatales, Leotiomyces, one species, type: C. wauchii Grev., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Cryptomyicina Höhn. 1917, Sordariomycetes, genera incertae sedis, one species, type: C. pteridis (Rebent.) Höhn., asexual morph ? Cryptomyella, saprobes, terrestrial, North Temperate, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cryptonieslia Scheuer 1993, Niessliaceae, Hypocreales, Sordariomycetes, one species, type: C. setulosa Scheuer, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), living cultures or cultures and sequences are unavailable, needs generic revision.

Cryptopezia Höhn. 1919, Helotiales genera incertae sedis, one species, type: C. mirabilis Höhn., asexual morph unknown, saprobes, terrestrial, Samoa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), living cultures or cultures and sequences are unavailable, needs generic revision.


Cryptophiale Piroz. 1968, Ascomycota genera incertae sedis, 18 species, type: C. kakombensis Piroz., hypomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology, accepted as a genus in Chaetosphaeriaceae, Chaetosphaeriales), Whitton et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptophialoidea Kuthub. & Nawawi 1987, Ascomycota genera incertae sedis, three species, type: C. secunda (Kuthub. & B. Sutton) Kuthub. & Nawawi, hypomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, Malaysia, see Delgado et al. (2012; new species, Cuba), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), living cultures or cultures and sequences are unavailable, needs generic revision.

Cryptosphaerella Sacc. 1882, Scortechiniaeae, Coronophorales, Sordariomycetes, c. 15 species, type: C. nitschkei (Auersw.) Sacc., asexual morph unknown, saprobes, terrestrial, Cuba, Malaysia, see Lumbsch and Huhndorf (2010; outline), Mugambi and Huhndorf (2010; DNA, phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are available (fide Mugambi and Huhndorf 2010).

Cryptosphaeria Ces. & De Not. 1863, Diatrypaceae, Xylariales, Sordariomycetes, c. 13 species, type: C. millepunctata Grev., asexual morph unknown, saprobes, terrestrial, teperate, see Lumbsch and Huhndorf (2010; outline), Trouillas et al. (2015; new species, USA, DNA, Phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are available (fide Trouillas et al. 2015).

Cryptosporella Sacc. 1877 (= Disculina Höhn. 1916 fide Rossman et al. 2015), Diaporthales genera incertae sedis, Sordariomycetes, c. 26 species, type: C. hypodermia (Fr.) Sacc., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010;
Cryptosporium Kunze 1817, *Ascomycota* genera incertae sedis, 25 species, type: *C. atrum* Kunze, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptostroma P.H. Greg. & S. Waller 1952, *Ascomycota* genera incertae sedis, one species, type: *C. corticale* (Ellis & Everh.) P.H. Greg. & S. Waller, hyphomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cryptothecia Stirt. 1877 nom. cons., *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, c. 65 species, type: *C. subnidulans* Stirt., asexual morph unknown, lichenized, epiphytic and foliicolous, widespread, pantropical to subtropical, see Ertz et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Friusch et al. (2014; phylogeny: genus *Myriostigma* reinstated for the *Cryptothecia candida* group), Jagadeesh Ram and Sinha (2016; world key), Lücking et al. (2016; classification), sequences are available.

Cryptothele Th. Fr. 1866, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, six species, type: *C. permiscens* (Nyl.) Th. Fr., asexual morph unknown, lichenized, saxicolous, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Cryptovalsa Ces. & De Not. ex Fuckel 1870, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, 24 species, type: *C. protracta* (Pers.) De Not., asexual morph coelomycetous, saprobes, pathogens, worldwide, see Lumbsch and Huhndorf (2010; outline; as *Sordariomycetes*, genera incertae sedis), Trouillas et al. (2010; pathogens), Senanayake et al. (2015; outline), Li et al. (2016; coelomycetous asexual morph), Maharachchikumbura et al. (2016; outline), cultures and sequences are available.

Cryptumbellata Udagawa & Uchiy. 1999, *Ascomycota* genera incertae sedis, one species, type: *C. terricola* Udagawa & Uchiy., hyphomycetous, sexual morph unknown, saprobes, terrestrial, China, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: INIFAT C85/154, cultures and sequences are unavailable, needs generic revision.

Ctenomyces Eidam 1880, *Arthrodermataceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *C. serratus* Eidam, asexual morph hyphomycetous, saprobes, terrestrial, common on keratinous substrates, especially feathers, also occurring in soil and on dung, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Guarro et al. (2012; morphology), van den Brink et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), de Hoog et al. (in press; phylogeny, outline), ex-neotype strain of the type: = CBS 187.61, sequences are available from de Hoog et al. (in press).

Ctenosporium R. Kirschner 2006, *Ascomycota* genera incertae sedis, one species, type: *C. pectinatum* R. Kirschner, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Panama, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Cubasina R.F. Castañeda 1986, *Ascomycota* genera incertae sedis, two species, type: *C. albofusca* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: INIFAT C85/154, cultures and sequences are unavailable, needs generic revision.
**Cucujomyces** Speg. 1917, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, 20 species, type: need typification, asexual morph unknown, biotrophic, worldwide, see Rossi and Weir (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Cucullosporella** K.D. Hyde & E.B.G. Jones 1986, *Halosphaeriaceae, Microascales, Sordariomycetes*, one species, type: *C. mangrovei* (K.D. Hyde & E.B.G. Jones) K.D. Hyde & E.B.G. Jones, asexual morph unknown, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Cucurbitaria** Gray 1821, *Cucurbitariaceae, Pleosporales, Dothideomycetes*, type: *C. berberidis* (Pers.) Gray, asexual morph coelomycetous, with *Pyrenochaeta*-like asexual morph, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Doilom et al. (2013; taxonomy, typification), Hyde et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), ex-epityp type strains of type: CB1 = CBS 130007 = MFLUCC11-0384; Epitype of type: MFLU 12-0111.

**Cucurbitopsis** Bat. & Cif. 1957, *Sordariomycetes*, genera incertae sedis, one species, type: *C. ramulorum* Bat., Nascim. & Cif., asexual morph unknown, saprobes, pathogens, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable.

**Cudonia** Fr. 1849, *Cudoniaceae, Rhytismatales, Leotiomycetes*, nine species, type: *C. circinans* (Pers.) Fr., asexual morph unknown, saprobes, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (*fide* Wang et al. 2006), cultures available for type: AFTOL-ID 353 (*fide* Lutzoni et al. 2004).

**Cudoniella** Sacc. 1889, *Helotiaceae, Helotiales, Leotiomycetes*, 31 species, type: *C. queletii* (Fr.) Sacc., asexual morph hyphomycetous (*Tricladium?*), saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hustad and Miller (2011; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available, type lacks sequence data.

**Cudoniopsis** Speg. 1925, *Sclerotiniaceae, Helotiales, Leotiomycetes*, one species, type: *C. pusilla* Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Culbersonia** Essl. 2000, *Physciaceae, Caliciales, Lecanoromycetes*, two species; type: *C. americana* Essl., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are unavailable.

**Culicospora** R.H. Petersen 1960, *Ascomycota genera incertae sedis*, two species, type: *C. aquatica* R.H. Petersen, hyphomycetous, sexual morph unknown, saprobes, aquatic, Newfoundland, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Culicinaeomyces** Couch, Romney & B. Rao 1974, *Ascomycota genera incertae sedis*, two species, type: *C. clavisporus* Couch, Romney & B. Rao, hyphomycetous, sexual morph unknown, on mosquitoes, aquatic, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence data available for *Culicinaeomyces bisporalis* Sigler, Frances & C. Panter (*fide* Lee et al. 2001), type lacks sequence data.

**Cumulospora** I. Schmidt 1985, *Lulworthiaceae, Lulworthiales, Sordariomycetes*, one species, type: *C. marina* I. Schmidt, hyphomycetous, sexual morph unknown, saprobes, marine,
worldwide, see Abdel-Wahab et al. (2010; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Curreya** Sacc. 1883 *Cucurbitariaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *C. conorum* (Fuckel) Sacc., asexual morph coelomycetous, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Doilom et al. (2013; accepted as a genus in *Cucurbitariaceae*), Hyde et al. (2013; accepted as a genus in *Cucurbitariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), ex-holotype type strains of type: S F8461.

**Curucispora** Matsush. 1981, *Ascomycota* genera incertae sedis, three species, type: *C. ponapensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Curvatrispora** V.V. Sarma & K.D. Hyde 2001, *Sordariomycetes*, genera incertae sedis, one species, type: *C. singaporensis* V.V. Sarma & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Singapore, see Sarma and Hyde (2001; morphology), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

**Curvicladiella** Decock & Crous 2006, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *C. cignea* (Decock & Crous) Decock & Crous, asexual morph hyphomycetous, saprobes, terrestrial, French Guiana, see Crous et al. (2006; morphology, DNA, phylogeny), Wijayawardene et al. (2012, 2017; outline), Lombard et al. (2015; taxonomy, DNA, phylogeny), Maharachchikumbura et al. (2016; outline), holotype and ex-type cultures of the type: MUCL 40269, CPC 1595 = CBS 109167.

**Curvularia** Boedijn 1933 (= *Pseudocochliobolus* Tsuda, Ueyama & Nishih. 1978 fide Wijayawardene et al. 2014; Rossman et al. 2015), *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, more than 100 species, type: *C. lunata* (Wakker) Boedijn, asexual morph hyphomycetous, pathogenic or saprobes on plant or humans, terrestrial, worldwide, see Seifert et al. (2011; morphology), Manamgoda et al. (2012, 2014; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Ariyawansa et al. (2015; taxonomy, phylogeny), Rossman et al. (2015; nomenclature), sequence data available for more than 50 species, ex-neotype strains of type: CBS 730.96.

**Curvulariopsis** M.B. Ellis 1961, *Ascomycota* genera incertae sedis, one species, type: *C. cymbisperma* (Pat.) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, Ecuador, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cuspidatispora** Shearer & Bartolata 2006, *Sordariales* genera incertae sedis, *Sordariomycetes*, one species, type: *C. xiphiago* Shearer & Bartolata, asexual morph unknown, saprobes, aquatic, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: ILL, Shearer A184-1, cultures and sequences are available.

Cyanoannulus Raja, J. Campb. & Shearer 2003, *Annulatascaceae, Annulatales, Sordariomycetes*, one species, type: *C. petersenii* Raja, J. Campb. & Shearer, see Cai et al. (2014; phylogeny), Boonyuen et al. (2012; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: R044-1, ILL 86218, cultures and sequences are available.

Cyanochryta Höhn. 1915, *Nectriaceae, Hypocreales, Sordariomycetes*, one species, type: *C. cyanogena* (Speg.) Höhn, coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cyanocephalidis E. Müll. & M.L. Farr 1971, *Saccardiaceae, Pezizomycotina, families incertae sedis*, two species, type: *C. occidentalis* E. Müll. & M.L. Farr, asexual morph unknown, saprobes, terrestrial, sub tropical regions, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cyanoconeia Samuels & P. Chaverri 2009, *Nectriaceae, Hypocreales, Sordariomycetes*, two species, type: *C. cyanostoma* (Sacc. & Flageolet) Samuels & P. Chaverri, asexual morph hypromycetous, saprobes, terrestrial, French Guiana, see Samuels et al. (2009; morphology), Schroers et al. (2011; DNA, phylogeny), Lombard et al. (2015; taxonomy, DNA, phylogeny), Maharachchikumbura et al. (2016; outline), cultures and sequences are available.

Cyanocephala Petr. 1949, *Ascomycota genera incertae sedis*, one species, type: *C. iranica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Iran, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs a revision.

Cyanocephalidium Groenh. 1951, *Pezizomycotina genera incertae sedis*, one species, type: *C. granulosa* Groen., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as in *Pyrenotrichaceae*), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences unavailable, needs a revision.

Cyanocephalidium Groenh. 1951, *Pezizomycotina genera incertae sedis*, one species, type: *C. granulosa* Groen., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as in *Pyrenotrichaceae*), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences unavailable, needs a revision.
Cyberlindnera Minter 2009, Phaffiomycetaceae, Saccharomycetales, Saccharomycetes, 30 species, type: C. americana (Wickerham) Minter, asexual reproduction is by multilateral budding and formation of pseudohyphae and true hyphae, saprophytic, one species is an opportunistic human and animal pathogen, see Minter (2009; taxonomy), cultures and sequences are available.

Cyclaneusma DiCosmo, Peredo & Minter 1983, Leotiomycetes genera incertae sedis, two species, type: C. minus (Butin) DiCosmo, Peredo & Minter, asexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), cultures and sequences are available.

Cyclodonus Höhn. 1909, Phyllachoraceae, Phyllachorales, Sordariomycetes, three species, type: C. umbellulariae Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cyclomarsonina Petr. 1965, Ascomycota genera incertae sedis, one species, type: C. cedrelae (T.S. Ramakr. & K. Ramakr.) Petr., sexual morph unknown, saprobes, terrestrial, India, see coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cyclopeltella Petr. 1953, Parmulariaceae, Asterinales, Dothideomycetes, one species, type: C. orbicularis Petr., epiphytes, terrestrial, Phillipines, see Petrak (1953; morphology), Wijayawardene et al. (2012, 2014; outline, reduced under Cyclopeltis), Hyde et al. (2013; accepted as Microsclerotiniaceae), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), cultures and sequences are unavailable, needs generic revision.

Cycloschizon Henn. 1902, Parmulariaceae, Asterinales, Dothideomycetes, c. 13 species, type: C. brachylaenae (Rehm) Henn., assexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), placement in Parmulariaceae supported by morphology, cultures and sequences are unavailable.

Cyclostomella Pat. 1896, Parmulariaceae, Asterinales, Dothideomycetes, four species, type: C. disciformis Pat., epiphytes, terrestrial, worldwide, no molecular data, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Cyclostrebla Theiss. 1914 nom. cons. prop., Dothideomycetes, genera incertae sedis, nine species, type: C. miconiae (P. Syd.) Theiss., asexual morph unknown, saprobes, terrestrial, worldwide, Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; nomenclature), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Cyclotheca Theiss. 1914 nom. cons. prop., Dothideomycetes, genera incertae sedis, nine species, type: C. uliginosum (Berk.) Theiss., coelomycetous, sexual morph thyridaria-like (see Sutton (1977, 1980; morphology), sexual morph of Cyclothymium juglandis as Thyridaria rubronotata (Berk. & Br.) Sacc.), saprobes, terrestrial, worldwide, see Damm et al. (2008; phylogeny), de Gruytter et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, morphology, phylogeny), cultures and sequences are available.

Cylindrocarpostylus R. Kirschner & Oberw. 1999, Nectriaceae, Hypocreales, Sordariomycetes, one species, type: C. gregarius (Bres.) R. Kirschner & Oberw., hyphomycetous, sexual morph unknown, in bark beetle galleries, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cylindrodendrum Bonord. 1851, Nectriaceae, Hypocreales, Sordariomycetes, three species, type C. album Bonord., sexual morph unknown, saprobes, pathogenic or isolated from soil, marine, fresh-water and terrestrial, worldwide, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lombard et al. (2012, 2015), Maharachchikumbura et al. (2015, 2016; outline), ex-epitype of the type: CBS 301.83 = ATCC 46842 = IMI 255534; isotype specimens CBS H-3483A = CBS H-3483B = CBS H-3483C.

Cylindrogloeum Petr. 1941, Ascomycota genera incertae sedis, one species, type: C. arcticum Petr., coelomycetous, sexual morph unknown, saprobes, Lapland, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


Cylindrophoma (Berl. & Voglino) Höhn. 1978, Ascomycota genera incertae sedis, one species, type: C. smilacina (Desm.) Höhn., coelomycetous, sexual morph unknown, saprobes, Italy, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cylindroseptoria Quaedvl., Verkley & Crous 2013, Dothideaceae, Dothideales, Dothideomycetes, two species, type: C. ceratoniae Quaedvlieg, Verkley & Crous, saprobes, terrestrial, Spain, see Quaedvlieg et al. (2013; morphology, DAN, phylogeny), Wijayawardene et al. (2014; outline, phylogeny), holotype and ex-type strains of the type: CBS H-21301, CBS 471.69.

Cylindrosporella Höhn. 1916, Gnomoniaceae, Diaporthales, Sordariomycetes, three species, type: C. carpini (Lib.) Höhn., saprobes, terrestrial, Spain, see Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision. cultures and cultures and sequences are unavailable.

Cylindrosympodioides Crous & M.J. Wingf. 2016, Venturiales genera incertae sedis, Dothideomycetes, one species, type: C. brabejum Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22594, CPC 25934.


Cylindrothyrium Maire 1907, Ascomycota genera incertae sedis, one species, type: C. subericola Maire, coelomycetous, sexual morph unknown, saprobes, France, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Cylindroxyphium** Bat. & Cif. 1963, *Ascomycota* genera incertae sedis, one species, type: *C. virginianum* Bat. & Cif., coelomycetous, sexual morph unknown, saprobes, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cymostachys** L. Lombard & Crous 2016, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *C. fabispora* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22433, CBS 136180.

**Cyniclomyces** van der Walt & D.B. Scott 1971, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *C. guttulatus* (C.P. Robin) van der Walt & D.B. Scott, asexual reproduction is by multilateral budding, saprophyte, stomach and intestines of rabbits and certain other herbivores, worldwide, see Lumbsch and Huhndorf (2010; outline), Kurtzman and Robnett (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available.

**Cyphelium** Ach. 1815, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, seven species, type: *C. tigillare* (Ach.) Ach., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; taxonomy), sequences are available.

**Cyphellophora** G.A. de Vries 1962, *Cyphellophoraceae*, *Chaetothyriales*, *Eurotiomycetes*, 25 species, type: *C. laciniata* G.A. de Vries, hyphomycetous, sexual morph unknown, saprobes, terrestrial, southern USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Réblová et al. (2013; new species), Feng et al. (2014; new species), Gao et al. (2015; new species), Crous et al. (2016; new species), Madrid et al. (2016; new species), cultures and sequences are available.

**Cyphellophoriella** Crous & A.J. Sm. 2015, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *C. pruni* Crous & A.J. Sm., hyphomycetous, saprobes, USA, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22255, CPC 25120.

**Cyrtidium** Vain. 1921, *Ascomycota* genera incertae sedis, one species, type: *C. naevium* Vain., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline; accepted as *Dothideomycetes* genera incertae sedis), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014) excluded from *Dothideomycetes*, cultures and sequences are unavailable, needs generic revision.

**Cyrtidula** Minks 1876, *Ascomycota* genera incertae sedis, one species, type: no typification data, asexual morph unknown, saprobes, Italy, see Lumbsch and Huhndorf (2010; outline; accepted as *Dothideomycetes* genera incertae sedis), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014) excluded from *Dothideomycetes*, cultures and sequences are unavailable, needs generic revision.

**Cyrtopsis** Vain. 1921, *Ascomycota* genera incertae sedis, one species, type: *C. fumosa* Vain., asexual morph unknown, saprobes, Italy, see Lumbsch and Huhndorf (2010; outline;
accepted as *Dothideomycetes* genera *incertae sedis*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014) excluded from *Dothideomycetes*, cultures and sequences are unavailable, needs generic revision.

**Cystocoleus** A. Massal. 1849, *Cystocoleaceae, Capnodiales, Dothideomycetes*, one species; type: *C. ebeneus* (Dillwyn) Thwaites, lichenized, lichenicolous, terrestrial, see Muggia et al. (2008; taxonomy), Nelsen et al. (2009; taxonomy, phylogeny), Lumbersch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tian et al. (2014; morphology; nomenclature), Lücking et al. (2016; classification), sequences are available.

**Cystodendron** Bubák 1914, *Heloriales* genera *incertae sedis*, *Leotiomycetes*, two species, type: *C. dryophilum* (Pass.) Bubák, hyphomycetous, sexual morph unknown, saprob, Europe, see Grunig et al. (2009; DNA), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Selçuk et al. (2014; Turkey), cultures and sequences are available for unidentified species, needs generic revision.

**Cystodium** Fée 1837, *Ascomycota* genera *incertae sedis*, one species, type: need typification, assexual morph unknown, saprob, Italy, see Lumbsch and Huhndorf (2010; outline; accepted as *Dothideomycetes* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014) excluded from *Dothideomycetes*, cultures and sequences are unavailable, needs generic revision.


**Notes:** *Setoidium* was originally described as *Oidium* subgen. *Setoidium* R.T.A. Cook, A.J. Inman & C. Billings, typified by *Oidium japonicum* Syd. (Cook et al. 1997), this subgenus was subsequently raised to genus status by Braun and Cook (2012), but no binomial in *Setoidium* was given to the type species. *Oidium japonicum* is the asexual morph of *C. wrightii* (Braun and Cook 2012) and under unitary nomenclature, the genus *Setoidium* should be considered as synonym of *Cystotheca*. In addition, two names in *Setoidium* which lack a *Cystotheca* sexual state are known. The generic affinity of *S. castanopsidis* Meeboon & S. Takam. has been proven by means of molecular sequence data, justifying the reallocation of this species to *Cystotheca*. However, the combination *S. murrayae* (Hosag., U. Braun & Rabin) U. Braun & R.T.A. Cook was only based on morphological similarity and has not yet been confirmed by sequence data, precluding a reallocation to *Cystotheca* in the current state. The respective synonymy and a new combination are introduced as follows:

**Cystotheca wrightii** Berk. & M.A. Curtis, Proc. Amer. Acad. Arts 4:130. 1860


**Cystotheca castanopsidis** (Meeboon & S. Takam.) Meeboon & S. Takam., comb. nov.

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Cystotricha Berk. & Broome 1850, Helotiales genera incertae sedis, Leotiomyces, two species, type: C. striola Berk. & Broome, coelomycetous, sexual morph unknown, saprobes, British Isles, see Wu et al. (1998), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Cystotrichiopsis Abbas, B. Sutton & Ghaffar 2001, Ascomycota genera incertae sedis, coelomycetous, sexual morph unknown, one species, type: C. salvadorae Abbas, Sutton & Ghaffar, saprobes, Pakistan, see Abbas et al. (2001; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: UCMH 759 (IMI 322594), cultures and sequences are unavailable, genus need revision.

Cytodiscula Petr. 1931, Ascomycota genera incertae sedis, coelomycetous, sexual morph unknown, one species, type: C. carnea Petr., saprobes, Madeira, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytogloeum Petr. 1925, Ascomycota genera incertae sedis, one species, type: C. tiliae Petr., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytomelanconis Naumov 1951, Melanconidaceae, Diaporthales, Sordariomycetes, one species, type: C. systema-solare Naumov, asexual morph coelomycetous, saprobes, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Cytonaema Höhn. 1914, Ascomycota genera incertae sedis, two species, type: C. spinella (Kalchbr.) Höhn., coelomycetous, asexual morph unknown, saprobes, Europe, see Marincowitz et al. (2008; morphology, new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytoplacosphaeria Petr. 1920, Ascomycota genera incertae sedis, two species, type: C. rimosa Petr., coelomycetous, asexual morph unknown, saprobes, Hong Kong, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytoplea Bizz. & Sacc. 1885, Roussoellaceae, Pleosporales family incertae sedis, Dothideomycetes, five species, type: C. arundinacea (Sacc.) Petr. & Syd., coelomycetous, asexual morph rousoella-like, saprobes, Europe, see Wijayawardene et al. (2012, 2014, 2016; outline, morphology, nomenclature), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Cytosphaera Died. 1916, Ascomycota genera incertae sedis, two species, type: C. mangiferae Died., coelomycetous, asexual morph unknown, saprobes, Asia, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Cytospora Ehrenb. 1818 (= Valsa Fr. 1825; = Valsella Fuckel 1870; = Leucostoma (Nitschke) Höhn. 1917; = Valseuttypella Höhn. 1919; = Leucocyotospora (Höhn.) Höhn. 1927 fide Rossman et al. 2015), Valsaceae, Diaporthales, Sordariomycetes, c. 120 species, type: C. chrysoesperma (Pers.) Fr., coelomycetous, sexual morph Valsa, saprobes, pathogens, worldwide, see Fotouhifar et al. (2010; phylogeny), Fan et al. (2015; morphology, pathogens, China), Liu et al. (2015; new species), Rossman et al. (2015; nomenclature), Yang et al. (2015; pathogens, China), Crous et al. (2016; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

Cytosporella Sacc. 1884, Ascomycota genera incertae sedis, 32 species, type: C. sycina (Sacc.) Sacc., coelomycetous, sexual morph unknown, saprobes, temperate regions, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Cytostagonospora** Bubák 1916, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, three species, type: *C. photiniicola* Bubák, coelomycetous, sexual morph unknown, saprobes, temperate regions, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2013; DNA, phylogeny), cultures and sequences are available for *Cytostagonospora martiniiana* (CBS 135102), type lacks sequence data, needs generic revision.

**Cyttaria** Berk. 1842, *Cyttariaceae, Cyttariaceae, Leotiomycetes*, type: *C. darwinii* Berk., asexual morph unknown, saprobes, temperate regions, see Lumbsch and Huhndorf (2010; outline), Peterson and Pfister (2010; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Cyttariella** skottsbergii Palm, *Ascomycota genera incertae sedis*, one species, type: *C. skottsbergii* Palm, coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, cultures and sequences are unavailable, needs generic revision.

**Dacampia** A. Massal. 1853, *Dacampiaceae, Dothideomycetes*, families *incertae sedis*, 14 species, type: *D. hookeri* (Borrer) A. Massal., lichenicolous, or saprobes, terrestrial, Europe, see Halici et al. (2008, 2009; new species), Brackel (2010; new species), Zhurbenko (2012; new species), Hyde et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), Ertz et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, available cultures for type: Hafellner 81840 (GZU), Hafellner 75980 (GZU), Hafellner 74269 (GZU) (*fide* Ertz et al. 2015), *Dacryoma* Samuels 1988, *Nectriaceae, Hypocreales, Sordariomycetes*, two species, type *D. album* Samuels, sexual morph unknown, saprobes on palms, terrestrial, Indonesia Peru, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016), holotype of the type: BO, isotype NY.

**Dactylospora** Körb. 1855, *Dactylosporaceae, Eurotiomycetes, incertae sedis*, c. 50 species, type: *D. floerkei* Körb., asexual reproduction by small lateral lobules and sexual by apothecia (rarely developed), lichenized, terricolous, circumpolar, arctic-alpine Northern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, for the type: AFTOL 225 (*fide* Miadlikowska et al. 2006).
or marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Diederich et al. (2013), Pang et al. (2014), sequence data available for for species, ex-type cultures and holotype unavailable.

**Dactylosporium** Harz 1871, *Ascomycota* genera *incertae sedis*, two species, type: *D. macropus* (Corda) Harz, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Daldinia** Ces. & De Not. 1863 (= *Annellosporium* M.L. Davey 2010; = *Versiomyces* Whalley & Watling 1989 *fide* Réblová et al. 2016), *Xylariaceae*, *Xylariales*, *Sordariomycetes*, c. 40 species, type: *D. concentrica* (Bolton) Ces. & De Not., asexual morph hyphomycetous, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Sri-Indrasutdi et al. (2010; new species), Kirk et al. (2013; genus accepted), Stadler et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; nomenclature), Kuhnert et al. (2017; new species, revision), cultures and sequences are available.

**Dangeardiella** Sacc. & P. Syd. 1899, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *D. macrospora* (J. Schröt.) Sacc. & P. Syd., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; transferred to *Pleosporales*, genera *incertae sedis*), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Danielozyma** Kurtzman & Robnett 2014, *Metschnikowiaceae*, *Saccharomycetales*, *Saccharomycetes*, two species, type: *D. ontarioensis* (Kurtzman & Robnett) Kurtzman & Robnett, asexual reproduction by multilateral budding and from formation of pseudohyphae and true hyphae, saprophyte, in insect frass from various tree species, see Kurtzman and Robnett (2014; taxonomy), cultures and sequences are available.


**Dasyscyphella** Tranzschel 1898, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *D. cassandrae* Tranzschel, asexual morph unknown, saprobes, terrestrial, Asia, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Dasysphaeria** Speg. 1912, *Sordariomycetes*, genera *incertae sedis*, one species, type: *D. andicola* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline), cultures and sequences are unavailable, needs generic revision.

**Dasysticta** Speg. 1912, *Ascomycota* genera *incertae sedis*, two species, type: *D. sapindophila* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Davidgallowaya** Aptroot 2007, *Parmeliaceae*, *Lecanorales*, Lecanoromycetidae, one species, type: *D. cornitispora* Aptroot, asexual morph, unknown, terrestrial, New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Arne et al. (2012; review, phylogeny, taxonomy), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Thailand, have sequence data, see de Beer et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Davisella** Petr. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *D. elymina* (Davis) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Davisomyces** Darker 1967, *Rhytismataceae, Rhytismatales, Leotiomyces*, ten species, type: *D. ampla* (Davis) Darker, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for *Davisomyces medusa* BPI842078 (fide Ganley et al. 2004).


**Dawsicola** Döbbeler 1981, *Helotiiales* genera *incertae sedis*, one species, type: *D. neglecta* Döbbeler, asexual morph unknown, saprobes, endophytes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for *Dawsicola medusa* BPI842078 (fide Ganley et al. 2004).

**Dawsomyces** Döbbeler 1981, *Dothideomycetes* genera *incertae sedis*, two species, type: *D. mirabilis* Döbbeler, asexual morph unknown, saprobes, endophytes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Dawsophila** Döbbeler 1981, *Dothideomycetes* genera *incertae sedis*, two species, type: *D. pygmaea* Döbbeler, asexual morph unknown, saprobes, endophytes, terrestrial, New Guinea, New Zealand, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Deakozyma** Kurtzman & Robnett 2014, *Trichomonascaceae, Saccharomycetales, Saccharomycetes*, one species, type: *D. indianensis* Kurtzman & Robnett, asexual reproduction by multilateral budding and from formation of pseudohyphae and true hyphae, saprophyte, rotting wood, insect eggs, Indiana, Michigan, USA, see Kurtzman and Robnett (2014; taxonomy), cultures and sequences are unavailable.

**Dearnessia** Bubák 1916, *Ascomycota* genera *incertae sedis*, one species, type: *D. apocyni* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Canada, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Debaryomyces** Loder & Kreger-van Rij 1952, *Debaryomycetaceae, Saccharomycetales, Saccharomycetes*, 15 species, type: *D. indianensis* Kurtzman & Robnett, asexual reproduction by multilateral budding and some species may also form poorly developed pseudohyphae, saprophytic, but several of the species are opportunistic pathogens of humans, soil, sea and fresh water, high osmotic foods such as cheese and sausages, bees, tree exudates, spoiled sake, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Decaisnella** Fabre, 1878, *Pleosporales* genera *incertae sedis, Dothideomycetes*, 13 species, type: *D. spectabilis* Fabre, asexual morph unknown, terrestrial and marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes* genera *incertae sedis*), sequences are available only one species, need recollection to verify generic placement.
Decorospora Inderb., Kohlm. & Volkm.-Kohlm. 2002, Pleosporaceae, Pleosporales, Dothideomycetes, one species, type: D. gaudefroyi (Pat.) Inderb., Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Pleosporaceae), Wijayawardene et al. (2014; outline), Jones et al. (2015; outline), cultures and sequences are available.

Degelia Arv. & D.J. Galloway 1981, Pannariaceae, Peltigerales, Lecanoromycetes, 22 species, type: D. gayana (Mont.) Arv. & D.J. Galloway, most species produce asci in apothecia, two produce vegetative propagules (soredia), lichenized, epiphytic or on mossy rocks, Southern hemisphere, in humid regions, see Wedin et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Spribille & Muggia (2013; phylogeny), Ekman et al. (2014; phylogeny, Degelia is heterogeneous and excluded the section Amphiloma as the genus Pectenia), Lücking et al. (2016; classification), need generic revision.

Degeliella P. M. Jørg 2004, Pannariaceae, Peltigerales, Lecanoromycetes, two species, type: D. rosulata (P.M. Jørg. & D.J. Galloway) P.M. Jørg., asexual morph unknown, lichenized, epiphytic or on mossy rocks, Gondwana distribution, Australia (Tasmania), southernmost South America, See Lumbsch and Huhndorf (2010; outline), Ekman et al. (2014; phylogeny, non-monophyly of the genus), Lücking et al. (2016; classification), sequence available for voucher Galloway 840b (BG) of the type (unpublished).

Deichmannia Alstrup & D. Hawksw. 1990, Ascomycota genera incertae sedis, one species, type: M. caespitosa Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Deightoniella S. Hughes 1952, Pyriculariaceae, Magnaporthales, Sordariomycetes, 20 species, type: D. africana S. Hughes, hyphomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Klaubauf et al. (2014; phylogeny), Maharachchikumbura et al. (2016; outline), Zhang et al. (2016; nomenclature), cultures and sequences are available for Deightoniella roumeiguei (CBS 128780), needs generic revision.

Dekkera Van der Walt 1964, Pichiaceae, Saccharomycetales, Saccharomycetes, five species, type: D. bruxellensis Van der Walt, saprophytic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Delastria Tul. & C. Tul. 1843, Pezizaceae, Pezizales, Pezizomycetes, one species, type: D. rosea Tul. & C. Tul., asexual morph unknown, hypogeous, Europe (southem), Northern America, see Lumbsch and Huhndorf (2010; outline), Alvarado et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Delitschia Auersw. 1866, Delitschiaceae, Pleosporales, Dothideomycetes, 52 species, type: D. didyma Auersw., asexual morph unknown, commonly occurs as coprophilous and saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; morphology and phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), holotype of the type: L 1950, cultures available for type: UME 31411.

Delortia Pat. & Gaillard 1888, Ascomycota genera incertae sedis, one species, type: D. palmicola Pat. & Gaillard, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Delphinella (Sacc.) Kuntze, Dothideaceae, Dothideales, Dothideomycetes, eight species, type: *D. strobiligena* (Desm.) Sacc. ex E. Müll. & Arx, asexual morph unknown, saprobes or pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Dothioraceae), Kirk et al. (2013; genus accepted), Thambugala et al. (2014b; accepted as a genus in Dothideaceae), Wijayawardene et al. (2014; outline), holotype of type: PC 0084688.

Delphinoella Sacc. 1899, Sordariomycetes genera incertae sedis, one species, type: *D. insignis* Sacc. & Trotter, asexual morph unknown, saprobes, terrestrial, Canada, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Delphinoina Kuntze 1891, Ascocchiaceae, Rhytismatales, Leotiomycetes, two species, type: *D. lusitanica* (Pass. & Thüm.) Kuntze, asexual morph unknown, saprobes, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Delponia Penz. & Sacc. 1901, ? Stictidaeaceae, Ostropales, Lecanoromycetes, one species, type: *D. pulchella* Penz. & Sacc., saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline: doubtful position), cultures and sequences are unavailable, needs generic revision.

Deltopyxis Baral & G. Marson 2012, Ascomycota genera incertae sedis, one species, type: *D. triangulispora* Baral & G. Marson, saprobes, terrestrial, Luxembourg, see Baral and Marson (2012; taxonomy), a sequence is available.


Dematoscypha Svrček 1977 (= Schizocephalum Preuss 1852; Haplographium Berk. & Broome 1859 fide Johnston 2014), Hyaloscyphaceae, Helotiales, Leotiomycetes, four species, type: *D. dematicola* (Berk. & Broome) Svrček, asexual morph hyphomycetous, saprobes, Europe, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), Johnston et al. (2014; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequence data available for Haplographium delicatum.

Dencioeiopsis Korf 1971, Helotiales, Helotiales, Leotiomycetes, two species, type: *D. johnstonii* (Berk.) Korf, asexual morph unknown, saprobes, terrestrial, USA, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dendriscosticta Moncada & Lücking 2013, Lobariaeaceae, Peltigerales, Lecanoromycetes, five species, type: *D. wrightii* (Tuck.) Moncada & Lücking, lichenized, see Moncada et al. (2013a; taxonomy), Lücking et al. (2016; classification), sequences are available.

Dendroleclathra Voglmayr & G. Delgado 2001, Ascomycota genera incertae sedis, one species, type: *Dendroleclathra caeruleofusca* Voglmayr & G. Delgado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Dendrodomus  Bubák 1915, Ascomycota genera incertae sedis, one species, type: D. annulatus Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dendrographa  Darb. 1895, Roccellaceae, Arthoniales, Arthoniomycetes, six species, type: D. leucophaea (Tuck.) Darb., lichenized, corticolous and saxicolous, worldwide, see Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; phylogeny and taxonomy), Kirk et al. (2013; genus accepted), sequences are available.

Dendrophoma  Sacc. 1880, Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes, c. 100 species, type: D. cytisporoides Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2008; treated as a synonym of Dinemasporium), Crous et al. (2012; reinstated the genus, DNA, phylogeny), Liu et al. (2015; new species), Maharachchikumbura et al. (2016; outline), epitype and ex-epitype of the type: CBS H-12004, CBS 223.95.

Dendrosphaera  Pat. 1907, Trichocomaceae, Eurotiales, Eurotiomycetes, one species, type: D. eberhardtii Pat. asexual morph hyphomycetous, terrestrial, probably mycorrhizal, Asia, see Houbraken et al. (2011; morphotaxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs phylogenetic assessment.

Dendrospora  Ingold 1943, Ascomycota genera incertae sedis, ten species, type: D. erecta Ingold, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North temperate, subtropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Duarte et al. (2014; DNA), cultures and sequences are available, needs generic revision.

Dendrosporium  Plakidas & Edgerton ex J.L. Crane 1972, Ascomycota genera incertae sedis, three species, type: D. lobatum Plakidas & Edgerton ex J.L. Crane, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Dendryphiella  Bubák & Ranoj. 1914, Dictyosporiaceae, Pleosporales, Dothideomycetes, nine species, type: D. interseminata (Berk. & Ravenel) Bubák, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2014, 2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

Dendryphion  Wallr. 1833, Torulaceae, Pleosporales, Dothideomycetes, 66 species, type: D. comosum Wallr., hyphomycetous, sexual morph unknown, saprobes, worldwide, see Kirk et al. (2013; genus accepted), Crous et al. (2015; phylogeny), sequences are available for five species, needed generic placement.

Dendryphiosphaera  Lunghini & Rambelli 1978, Ascomycota genera incertae sedis, four species, type: D. taiensis Lunghini & Rambelli, hyphomycetous, sexual morph unknown, Ivory coast, pantropical, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Deniquelata  Ariyaw. & K.D. Hyde 2013, Didymosphaeriaceae, Pleosporales, Dothideomycetes, one species, type: D. barringtoniae Ariyawansa & K.D. Hyde, asexual morph unknown, pathogens, terrestrial, Thailand, see Ariyawansa et al. (2013, 2014; morpholology, DNA, phylogeny), Hyde et al. (2013; phylogeny), Wijayawardene et al. (2014; outline, phylogeny), holotype and ex-type of the type: MFLU 12-0303, MFLUCC 12-0257.

Dennisiella  Bat. & Cif. 1962, Coccodiniaceae, Dothideomycetes family incertae sedis, seven species, type: D. babingtonii (Berk.) Bat. & Cif., asexual morph microxyphium-like, saprobes,
Dennisiodiscus Svrček 1976, Dermateaceae, Helotiales, Leotiomycetes, ten species, type: D. prasinus (Quél.) Svrček, asexual morph unknown, saprobes, terrestrial, Europe, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

Dennisiospis Subram. & Chandrash. 1977, Thelebolaceae, Thelebolales, Leotiomycetes, two species, type: D. octospora Subram. & Chandrash., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Dennisographium Rifai 1977, Ascomycota genera incertae sedis, two species, type: D. episphaeriae Rifai, hyphomycetous, sexual morph unknown, Java, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Denticularia Deighton 1972, Ascomycota genera incertae sedis, seven species, type: D. modesta (Syd.) Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Denticulircinomyces R.F. Castañeda & W.B. Kendr. 1990, Ascomycota genera incertae sedis, one species, type: D. occidentalis R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of the type: INFAT C88/114.

Dexria Naras. 1970, Ascomycota genera incertae sedis, one species, type: D. lecanii (Zimm.) Naras., hyphomycetous, sexual morph unknown, on Lecanium viride, India, Indonesia, Java, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Dermapteromyces Thaxt. 1931, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, three species, type: D. ctenophorus Thaxt., asexual morph unknown, biotrophic, America (tropical), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, compare with Cryptumbellata, Hansfordia and Redbia.

Dermatocarpon Eschw. 1824, Verrucariaceae, Verrucariales, Eurotiomycetes, c. 20 species, type: D. miniatum (Cook) Nannf., asexual morph coelomycetous, terrestrial, lichenized, on rocks and soil, cosmopolitan, see Amtoft (2008; new species, regional monograph, Ozark highlands, USA), Gueidan et al. (2009; phylogeny, outline), Prieto et al. (2012; phylogeny), Şenkardeşler et al. (2014; lectotypification), Lücking et al. (2016; classification), sequences
of the type material of the type are unavailable, but sequences of non-type material are available from Gueidan et al. (2007).

**Dermatodothella** Viégas 1944, *Polystomellaceae*, Dothideomycetes families incertae sedis, one species, type: *D. multiseptata* Viégas, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, as *Dothideomycetes*, genera incertae sedis), Ariyawansa et al. (2013; morphology, accepted as *Polystomellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Dermatodothis** Racib. ex Theiss. & Syd. 1914, Dothideomycetes genera incertae sedis, six species, type: *D. javanica* Racib., asexual morph unknown, saprobes, terrestrial, Asia, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), nomenclature, new comb., cultures and sequences are available.

**Dermea** Fr. 1825 (= *Sphaeronaema* Fr. 1815; = *Foveostroma* DiCosmo 1978 fide Johnston et al. 2014), Dermateaceae, Helotiales, Leotiomycetes, c. 25 species, type: *D. cerasi* (Pers.) Fr., assexual morphs *Sphaeronaema* and *Foveostroma*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Johnston et al. (2014; nomenclature, new comb.), cultures and sequences are available.

**Dermiscellum** Hafellner, Mayrhofer, & Poelt 1979, Chorioactidaceae, Caliciales, Lecanoromycetes, one species, type: *D. catawbense* (Willey) Hafellner & Poelt, asexual morph is coelomycetous, lichenized, saxicolous, North America, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; taxonomy), cultures and sequences are unavailable, needs generic revision.

**Descalsia** A. Roldán & Honrubia 1989, Ascomycota genera incertae sedis, one species, type: *D. cruciata* A. Roldán & Honrubia, hyphomycetous, sexual morph unknown, aquatic, isolated from Spanish streams, South western Europe, Spain, Northwest Portugal, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype strain of type: = IMI 328087, sequences are unavailable, needs generic revision.

**Desertella** Mouch. 1979, Ascomycota genera incertae sedis, two species, type: *D. globulifera* Mouch., hyphomycetous, sexual morph unknown, from soil, submerged wood in river, Egypt, USA, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, unverified sequences are available (KR230020-KR230041), needs generic revision.

**Desmazierella** Lib. 1829 (= *Verticicladium* Preuss 1851 fide Healy et al. 2016), Chorioactidaceae, Pezizales, Pezizomycetes, two species, type: *D. acicola* Lib., asexual morph *Verticicladium*, saprobes, terrestrial, India, see Pfister et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Martinović et al. (2016; DNA, phylogenetic structure), cultures and sequences are available.

**Desmazierella** Lib. 1829 (= *Verticicladium* Preuss 1851 fide Healy et al. 2016), Chorioactidaceae, Pezizales, Pezizomycetes, two species, type: *D. acicola* Lib., asexual morph *Verticicladium*, saprobes, terrestrial, India, see Pfister et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Martinović et al. (2016; DNA, phylogenetic structure), cultures and sequences are available.

hyphomycetous, saprobes, terrestrial, India, see Schoch et al. (2009; new species, phylogeny), Crous et al. (2010, 2012; new species, DNA), Frank et al. (2010; new species, DNA, phylogeny), Li et al. (2012; new species, China), Egidi et al. (2014; new species, DNA, phylogeny), cultures and sequences are available.


**Diaboliumbilicus** I. Hino & Katum. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *D. mirabilis* I. Hino & Katum., assexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Diacrochordon** Petr. 1955, *Sordariomycetes* genera *incertae sedis*, six species, type: *D. rehmii* Petr. 1955, asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Ariyawansa et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Diadema** Shoemaker & C.E. Babc. 1989, *Diademaceae*, *Pleosporales*, *Dothideomycetes*, nine species, type: *D. tetramerum* Shoemaker & C.E. Babc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Ariyawansa et al. (2014; generic placement), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Diademosa** Shoemaker & C.E. Babc. 1992, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *D. californiana* (M.E. Barr) Shoemaker & C.E. Babc., asexual morph unknown, saprobes on herbaceous, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014; generic placement), Wijayawardene et al. (2014; outline), sequences unavailable, needed generic placement.

**Diademospora** B.E. Soderstr. & Bååth 1979, *Ascomycota* genera *incertae sedis*, one species, type: *D. ramigera* B.E. Söderstr. & Bååth, hyphomycetous, sexual morph unknown, from forest soil, coniferous, Sweden, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), ex-type strain of type: = CBS 427.76, IMI 203569, ATCC 42210, needs generic revision.

**Dialaceniopsis** Bat. 1959, *Ascomycota* genera *incertae sedis*, one species, type: *D. landolphiæ* Bat., coelomycetous, sexual morph unknown, from *Landolphia ugandensis*, Uganda, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Dialhypocrea** Speg. 1919, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *D. puiggariâna* Speg., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2014), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable.

**Diamantinia** A.N. Mill., Læssøe & Huhndorf 2003, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *D. citrina* A.N. Mill., Læssøe & Huhndorf, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline),
Maharachchikumbura et al. (2015, 2016; outline), holotype and extype cultures of type: SP, Buck 26886.

**Diandromyces** Thaxt. 1918, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, two species, type: *D. chilenus* Thaxt., asexual morph unknown, biotrophic, Chile, Ecuador, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species, Ecuador), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Dianesia** (F. Stevens) Inácio & P.F. Cannon 2002, *Dothideomycetes* genera incertae sedis, one species, type: *D. palmae* (F. Stevens) Inácio & P.F. Cannon, saprobes, terrestrial, Cost Rica, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), Jayasiri et al. (2016a, re-described type), sequences are unavailable, needs generic revision.

**Diaphorographis** A.W. Archer & Kalb 2009, *Graphidaceae, Ostropales, Lecanoromycetes*, two species, type: *D. queenslandica* Kalb & A.W. Archer, asexual morph unknown, lichenized, terrestrial, tropical, see Kalb et al. (2009; taxonomy), Lumbsch and Huhndorf 2010 (outline), Rivas Plata et al. (2012a; taxonomy), Kirk et al. 2013 (genus accepted), sequences are unavailable.

**Diaphoromyces** Thaxt. 1926, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *D. marginatus* (Thaxt.) Thaxt., asexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Diaporthe** Nitschke 1870 (= *Phomopsis* (Sacc.) Bubák 1905 fide Maharachchikumbura et al. 2016; Rossman et al. 2015), *Diaporthaceae, Diaporthales, Sordariomycetes*, more than 125 species, type: *D. eres* Nitschke, asexual morph coelomycetous, endophytes, pathogens, saprobes, associate with wide host range, worldwide, see Udayanga et al. (2011, 2014; review, nomenclature, phylogeny), Gomes et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2015; nomenclature), Crous et al. (2016; taxonomy, phylogeny), holotype and culture ex-epitype of type: BPI 892912, AR5193.

**Diaporthella** Petr. 1924, *Diaporthaceae, Diaporthales, Sordariomycetes*, four species, type: *D. aristata* (Fr.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, North America, Eastern Asia, see Lumbsch and Huhndorf (2010; outline), Gomes et al. (2013; DNA), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the cultures.

**Diariumella** B. Sutton 1980, *Ascomycota* genera incertae sedis, three species, type: *D. setulosa* B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, Canada, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 103785, cultures and sequences are available, genus need revision.

**Diatractium** Syd. & P. Syd. 1921, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, two species, type: *D. cordiae* (F. Stevens) Syd. & P. Syd., asexual morph unknown, pathogens, terrestrial, Central and South America, see Palmateer et al. (2008; DNA, pathogens), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are available.

**Diatrypasimilis** J.J. Zhou & Kohlm. 2016, *Diatrypaceae, Xylariales, Sordariomycetes*, one species, type: *D. australiensis* J.J. Zhou & Kohlm., asexual morph unknown, saprobes, on mangroves, Central and South America, see Palmateer et al. (2008; DNA, pathogens), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline; taxonomy), Index Fungorum(2017; validate the genus), cultures and sequences are available.

**Diatype** Fr. 1849 (= *Libertella* Desm. 1830 fide Réblová et al. 2016), *Diatrypaceae, Xylariales, Sordariomycetes*, cf. 60 species, type: *D. disciformis* (Hoffm.) Fr., asexual morph *Libertella*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Liu
et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline; taxonomy), Senanayske et al. (2015; phylogeny, outline), Réblová et al. (2016; nomenclature), cultures and sequences are available.

**Diatrypella** (Ces. & De Not.) De Not. 1863, *Diatrypaceae, Xylariales, Sordariomycetes*, c. 35 species, type: *D. verruciformis* (Ehrh.), asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline; taxonomy), Mehrabi et al. (2015; Iran), Senanayske et al. (2015; phylogeny, outline), Crous et al. (2016; new species, phylogeny), de Almeida et al. (2016; new species, phylogeny), cultures and sequences are available.


**Dibeloniella** Nannf. 1932, *Dermateaceae, Helotiales, Leotiomycetes*, one species, type: *Dibeloniella vossii* (Rehm) Nannf., asexual morph phialophora-like., saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Dicarpella** Syd. & P. Syd. 1921, *Melanconidaceae, Diaporthales, Sordariomycetes*, four species, type: *D. lignicola* Manohar., Kunwar & D.K. Agarwal, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline; taxonomy), cultures and sequences are available.

**Dicephalospora** Spooner 1987, *Sclerotiniaceae, Helotiales, Leotiomycetes*, four species, type: *D. calochroa* (Syd.) Spooner, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Liu et al. (2016; DNA, new species), cultures and sequences are available.

**Dichelostroma** Bat. & Peres 1963, *Ascomycota genera incertae sedis, Sordariomycetes*, one species, type: *D. powellii* Bat. & Peres, coelomycetous, sexual morph unknown, on rotten wood of *Pinus contorta*, Canada, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), data inadequate, cultures and sequences are unavailable.

**Dichlaena** Durieu & Mont. 1849, *Aspergillaceae, Eurotiales, Eurotiomycetes*, four species, type: *D. lentisci* Durieu & Mont., asexual morph hypomycteous, saprobes, terrestrial, USA, see Houbraken and Samson (2011), cultures and sequences are unavailable, needs phylogenetic assessment.

**Dicholobodigitus** G.P. White & Illman 1988, *Ascomycota genera incertae sedis, Sordariomycetes*, one species, type: *D. niger* G.P. White & Illman, hypomycteous, sexual morph unknown, on rotten wood of *Pinus contorta*, Canada, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Dichosporidium** Pat. 1903, *Roccellaceae, Arthoniales, Arthoniomycetes*, eight species, type: *D. glomeratum* (Pat.) Pat., asexual morph unknown, lichenized, widespread (tropical), corticolous (occasionally saxicolous), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.
**Dichotomophthora** Mehrl. & Fitzp. ex P.N. Rao 1966, *Ascomycota* genera incertae sedis, four species, type: *D. portulacae* Mehrl. & Fitzp. ex P.N. Rao, hyphomycetous, sexual morph unknown, on living leaves and stems of *Portulacca oleracea*, Hawaii, USA, widespread (esp. tropical), see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Dichotomophthoropsis** M.B. Ellis 1971, *Ascomycota* genera incertae sedis, two species, type: *D. nymphaearum* (F.V. Rand) M.B. Ellis, hyphomycetous, sexual morph unknown, plant pathogen, India, USA, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), reference strain of *Dichotomophthoropsis nymphaearum* = ATCC 64770, ATCC 204261-204266, sequences are unavailable, needs generic revision.

**Dichotophora** Whitton, K.D. Hyde & McKenzie 2012, *Ascomycota* genera incertae sedis, two species, type: *D. setiramosa* Whitton, McKenzie & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Whitton et al. (2012; outline), Wijayawardene et al. (2017; outline), holotype of the type: IFRD 9016, cultures and sequences are unavailable, needs generic revision.

**Diclonomyces** Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, three species, type: *D. eumicrophilus* Thaxt., asexual morph unknown, biotrophic, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Dicranidion** Harkn. 1885, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, four species, type: *D. fragile* Harkn., asexual morph unknown, saprobes, terrestrial, USA, see Kirk et al. (2013; genus accepted), data inadequate, cultures and sequences are available.

**Dictyoarthrinium** S. Hughes 1952, *Apiosporaceae*, *Xylariales*, *Sordariomycetes*, six new species, type: *D. quadratum* S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread (tropical), see Kirk et al. 2008, Somrithipol (2007; morphology, key to species), Seifert et al. (2011; outline), Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), Crous and Groenewald (2013; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable for type species, needs generic revision.

**Dictyoasterina** Hansf. 1947, *Dothideomycetes* genera incertae sedis, one species, type: *D. conopharyngiae* Hansf., asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; accepted as genus in *Venturiaceae*), Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes*, genera incertae sedis), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Dictyocatenulata** Finley & E.F. Morris 1967, *Lecanoromycetes* genera incertae sedis, one species, type: *D. alba* Finley & E.F. Morris, hyphomycetous, sexual morph unknown, saprobes, Karnataka, India, widespread, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), An et al. (2012; phylogenetic revision), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Dictyochaeta** Speg. 1923, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, c. 80 species, type: *D. fuegiana* Speg., hyphomycetous, sexual morph unknown, saprobes, terrestrial/aquatic, widespread, see Seifert et al. (2011; outline), Hyde et al. (2011; outline), Li et al. (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Silva and Gusmão (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for type species, needs generic revision.
**Dictyocporus** J.C. Krug & R.S. Khan 1991, *Pyronemataceae, Pezizales, Pezizomycetes*, one species, type: *C. nipigonensis* Malloch & Cain, asexual morph unknown, coprophilous, terrestrial, Mexico, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Dictyococcus** Sivan., W.H. Hsieh & Chi Y. Chen 1998, *Myriangiaceae, Myriangiales, Dothideomycetes*, one species, type: *D. hyrangeae* Sivan., W.H. Hsieh & Chi Y. Chen, asexual morph unknown. Epiphytes, terrestrial, Taiwan, no molecular data, see Hofmann (2009; review, accepted as a genus in Parmulariaceae), Lumbsch and Huhndorf (2010; outline, accepted as a genus in Parmulariaceae), Hyde et al. (2013; review, keys, accepted as a genus in Parmulariaceae), Dissanayake et al. (2014; taxonomy, accepted as a genus in Myriangiaceae), Wijayawardene et al. (2014; outline, accepted as a genus in Myriangiaceae), placement in Myriangiaceae supported by morphology, holotype of type: IMI 371179, cultures and sequences unavailable.

**Dictyodesmium** S. Hughes 1951, *Ascomycota* genera incertae sedis, four species, type: *D. ulnicola* (Ellis & Kellerm.) S. Hughes, hyphomycetous, sexual morph unknown, on living leaves of *Ulmus fulva*, USA; France, see Hyde et al. (2011; outline, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Dictyodochium** Sivan. 1984, *Dothideomycetes* genera incertae sedis, one species, type: *D. prinsepiae* Sivan., asexual morph unknown, saprobes, terrestrial, Africa, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as Dothideomycetes, genera incertae sedis), data inadequate, cultures and sequences are unavailable.


**Dictyonella** Höhn. 1909, *Saccariaceae, Ascomycota* families incertae sedis, seven species, type: *D. eysiphoidea* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), data inadequate, cultures and sequences are unavailable.

**Dictyopetella** Bat. & I.H. Lima 1959, *Micropeltidaceae, Microthyriales, Dothideomycetes*, two species, type: *D. domingensis* (Petr. & Cif.) Bat. & I.H. Lima, asexual morph unknown, saprobes, terrestrial, tropical see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Micropeltidaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Dictyopelitis** Theiss. 1913, *Dothideomycetes* genera incertae sedis, six species, type: *D. vulgaris* (Racib.) Theiss., asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline, as a genus in Micropeltidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as Dothideomycetes, genera incertae sedis), data inadequate, cultures and sequences are unavailable.

**Dictyophrynella** Bat. & Cavalc. 1964, *Ascomycota* genera incertae sedis, one species, type: *D. bignoniacearum* Bat. & Cavalc., hyphomycetous, sexual morph unknown, lichenicolous, Brazil, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Dictyopolyschema** M.B. Ellis 1976, *Ascomycota* genera incertae sedis, one species, type: *D. pirozynskii*, hyphomycetous, sexual morph unknown, saprobes on dead twigs of *Picea*, Great
The natural text representation of the document is as follows:

Dictyoporthae Petr. 1955, Melanconidaceae, Diaporthales, Sordariomycetes, three species, type: D. ahmadii Petr., asexual morph unknown, saprobes, terrestrial, Pakistan, Taiwan, see Voglmayr and Jaklitsch (2008; DNA, transferred Dictyoporthae acerophila M.E. Barr to Prosthecium), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), data inadequate, cultures and sequences are available (Jide Voglmayr and Jaklitsch 2008).

Dictyosporales M.B. Ellis 1976, Ascomycota genera incertae sedis, one species, type: D. ziziphi M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: (DAOM), isotype: HAL 1645 F, cultures and sequences are unavailable.

Dictyosporella Abdel-Aziz 2015, Annulatascales, Annulatales, Sordariomycetes, one species, type: D. aquatic D. Abdel-Aziz, asexual morph unknown, saprobes, aquatic, Egypt, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22127, MD1302.

Dictyostomiopelta Viégas 1944, Dothideomycetes, genera incertae sedis, one species, type: D. manihoticola Viégas, asexual morph unknown, saprobes, terrestrial, USA, see Crous et al. (2017; holotype), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Dictyothyriella Spec. 1924, Dothideomycetes genera incertae sedis, one species, type: D. bauhiniae (Rehm) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, Cape Horn, see Lumbsch and Huhndorf (2010; outline, as a genus in Micropeltidaeae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes, genera incertae sedis), cultures and sequences are unavailable.

Dictyothyrina Theiss. 1913, Dothideomycetes genera incertae sedis, one species, type: D. secunda (Sacc.) Theiss., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Micropeltidaeae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes, genera incertae sedis), cultures and sequences are unavailable.

Dictyothyrium Theiss. 1912, Dothideomycetes genera incertae sedis, two species, type: D. chalybeum (Rehm) Theiss., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline, as a genus in Micropeltidaeae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes, genera incertae sedis), cultures and sequences are unavailable.

Diddensiella Péter, Dlauchy & Kurtzman 2012, Trichomonascaceae, Saccharomycetales, Saccharomycetes, three species, type: D. caesifluorescens G. Péter, Dlauchy & Kurtzman,
asexual reproduction is by multilateral budding, saprophytic, rotten wood and forest litter, worldwide, see Péter et al. (2012; taxonomy), sequences are available.

**Didonia** Velen. 1934, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, five species, type: needs typification, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Didymascella** Maire & Sacc. 1903, *Hemiphalacidaceae, Helotiales, Leotiomycetes*, five species, type: *D. oxycedri* Maire & Sacc., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for *Didymascella thujina*.

**Didymascus** Sacc. 1896, *Rhytismatales* generas incertae sedis, *Leotiomycetes*, one species, type: *D. metkineffi* Sacc., asexual morph unknown, saprobes, terrestrial, Siberia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Didymella** Sacc. 1880, *Didymellaceae, Pleosporales, Dothideomycetes*, c. 100 species, type: *D. exigua* (Niessl) Sacc., asexual morph coelomycetous, saprobes, pathogens, terrestrial, worldwide, see de Gruyter et al. (2009; phylogeny), Aveskamp et al. (2010; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline); Hyde et al. (2013; accepted as a genus in *Didymellaceae*, taxonomy), Wijayawardene et al. (2014; outline), Chen et al. (2015; phylogeny, new species, taxonomy), Liu et al. (2015; new species), cultures and sequences are available.


**Didymellopsis** (Sacc.) Clem. & Shear 1931, *Xanthopyreniaceae, Didymellopsis, Dothideomycetes*, five species, type: *D. latitans* (Nyl.) Sacc. ex Clem. & Shear, asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, family placed as Ascomycota family incertae sedis), Kirk et al. (2013; genus accepted), Zhurbenko et al. (2015; new species), holotype of type: H–NYL 42670.

**Didymobotryum** Sacc. 1886, *Ascomycota* generas incertae sedis, one species, type: *D. rigidum* (Berk. & Broome) Sacc., hiphomycetous, sexual morph unknown, saprobes, terrestrial, North America, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012; outline, under Magnaportheaceae), Maharachchikumbura et al. (2015, 2016; outline, treated as Ascomycota incertae sedis), cultures available for type: JCM 8837.

**Didymochaelina** Bat. & J.L. Bezerra 1965, *Ascomycota* generas incertae sedis, one species, type: *D. galactiae* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes, terrestrial, Jamaica, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Didymochorea** Höhn. 1918, *Dothideomycetes* generas incertae sedis, one species, type: *D. betulina* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Jamaica, see Wijayawardene et al. (2012, 2014; outline, listed under Mycosphaerellaceae and Dothideomycetes, generas incertae sedis respectively), cultures and sequences are unavailable, needs generic revision.

**Didymocoryne** Sacc. & Trotter 1913, *Helotiales* generas incertae sedis, *Leotiomycetes*, type: *D. striata* (Ellis & Everh.) Sacc. & Trotter, asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; reduced *D. solitaria* (Rehm) Sacc. & Trotter under
*Ascocoryne albida* (Berk.) Seifert, cultures and sequences are unavailable, needs generic revision.

**Didymocrea** Kowalski 1965, *Didymosphaeriaceae, Pleosporales, Dothideomycetes*, one species, type: *D. sadasivanii* (T.K.R. Reddy) Kowalski, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genera in *Didymosphaeriaceae*), Ariyawansa et al. (2014; accepted as a genera in *Didymosphaeriaceae*, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures available for type: CBS 438.65.

**Didymocyrtilum** Vain. 1921, *Dothideomycetes* genera *incertae sedis*, two species, type: need typification, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Didymocyrtilis** Vain. 1921, *Dothideomycetes* genera *incertae sedis*, two species, type: *D. consimilis* Vain., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Didymolepta** Munk 1953, *Dothideomycetes* genera *incertae sedis*, two species, type: *D. winteriana* (Sacc.) Munk, asexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Didymopleella** Munk 1953, *Dothideomycetes* genera *incertae sedis*, four species, type: *Didymopleella cladii* (P. Larsen & Munk) Munk, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Didymosphaeria** Fuckel (1870) [1869-70], *Didymosphaeriaceae*, Massarineae, *Pleosporales, Dothideomycetes*, 25 species, type: *D. futilis* (Berk. & Broome) Rehm, asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014a, b; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

**Didymosporina** Höhn. 1916, *Ascomycota* genera *incertae sedis*, one species, type: *D. aceris* (Lib.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2016; outline, morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Didymostilbe** Henn. 1902, *Stachybotriaceae, Hypocreales, Sordariomycetes*, eight species, type: *D. coffeeae* Henn., hyphomycetous, saprobes, terrestrial, Asia, see Kirk et al. (2013; did not accept as valid genus), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Bionectriaceae*), Lombard et al. (2016; phylogeny), cultures and sequences are available, needs generic revision.

**Didymothozetia** Rangel 1915, *Ascomycota* genera *incertae sedis*, one species, type: *D. mimosaensis* Rangel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Diedickea** Syd. & P. Syd. 1913, *Ascomycota* genera *incertae sedis*, three species, type: *D. singularis* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Digitodochium** Tubaki & Kubono 1989. Ascomycota genera incertae sedis, one species, type: *D. rhodoleucum* Tubaki & Kubono, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Digitomyces** Mercado, M. Calduch & Gené 2003. Ascomycota genera incertae sedis, one species, type: *D. verrucosus* (Tzean & J.L. Chen) Mercado, M. Calduch & Gené, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.


**Digitoramispora** R.F. Castañeda & W.B. Kendr. 1990. Ascomycota genera incertae sedis, three species, type: *D. caribensis* R.F. Castaneda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C89/167, cultures and sequences are unavailable, compare with **Acrodictys**, **Acrodictyopsis**, **Cheiroidea** and **Cryptocoryneopsis**.

**Digitosarcinella** S. Hughes 1984, **Englerulacea**, Dothideomycetes, families incertae sedis, three species, type: *D. caseariae* S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Digitothyrea** P. P. Moreno & Egea 1992, **Lichinaceae**, Lichinales, Lichinomycetes, three species, type: *D. rotundata* (Büdel, Henssen & Wessels) P.P. Moreno & Egea, asexual morph unknown, lichenized, Africa, Central America, saxicolous, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Dilophospora** Desm. 1840 (= **Lidophia** J. Walker & B. Sutton 1974 *fide* Rossman et al. 2016), Dothideomycetes genera incertae sedis, c. two species, type: *D. graminis* Desm., coelomycetous, sexual morph formerly named in *Lidophia*, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

**Diluvicola** K.D. Hyde, S.W. Wong & E.B.G. Jones 1998, **Annulatascales**, Annulatascales, Sordariomycetes, type: *D. capensis* K.D. Hyde, S.W. Wong & E.B.G. Jones, asexual morph unknown, saprobes, fresh water, Brunei, see, Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; accepted as a genus in *Annulatascales*), cultures and sequences are unavailable, needs generic revision.

**Dimastigosporium** Faurel & Schotter 1965, Ascomycota genera incertae sedis, two species, type: *D. musimonum* Faurel & Schotter, coelomycetous, sexual morph unknown, saprobes, terrestrial, Sahara, India, see Yadav and Bhat (2009; new species, India), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
*Dimelaena* Norman 1852, *Caliciaceae, Calicaria, Lecanoromycetes*, c. ten species, type: *D. oreina* (Ach.) Norman, asexual morph unknown, lichenized, lichenicolous, saxicolous, on siliceous or basaltic rocks, world-wide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Knudsen et al. (2013; key), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny; showed that *Dimelaena* is non-monophyletic as currently circumscribed), cultures available for the type: MP31 (fide Prieto and Wedin 2016).

*Dimeriella* Spieg. 1908, *Parodiopsidaceae, Dothideomycetes* families *incertae sedis*, one species, type: *D. hirtula* Spieg., asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

*Dimerina* Theiss. 1912, *Ascomycota* genera *incertae sedis*, c. ten species, type: *D. strychni* (Henn.) Theiss., asexual morph unknown, saprobes, terrestrial, Sahara, India, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Dimerium* (Sacc. & P. Syd.) McAlpine 1903, *Parodiopsidaceae, Dothideomycetes* families *incertae sedis*, type: *D. pulvereum* (Spieg.) Theiss., see Hyde et al. (2013; accepted as a genus in *Parodiopsidaceae*), Kirk et al. (2013; did not accept as a valid genus), data inadequate, needs generic revision.


*Dimerosporiella* Spieg. 1908, *Bionectriaceae, Hypocreales, Sordariomycetes*, seven species, type *D. paulistana* Spieg., on living leaves, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype LPS, cultures and sequences are unavailable.

*Dimidiographa* Ertz & Tehler 2011, *Roccelliograceaceae, Arthoniales, Arthoniomycetes*, three species, type: *D. loandensis* (Nyl.) Ertz, Bungartz & Tehler, sexual morph with lirelliform ascomata, coelomycetous, lichenized, terrestrial, tropical, see Ertz and Tehler (2011; taxonomy, phylogeny), Lücking et al. (2016; classification), sequences are available for three species.

*Dimorphiopsis* Crous 2013, *Lophiostomataceae, Pleosporales, Dothideomycetes*, one species, type: *D. brachystegiae* Crous, coelomycetous or hyphomycetous, sexual morph unknown, Zambia, see Crous et al. (2013; morphology, DNA), Wijayawardene et al. (2014, 2016; outline, morphology, phylogeny), holotype and ex-type strains of the type: CBS H-21430, CPC 22679, 22680 = CB 136422.

*Dimorphiseta* L. Lombard & Crous 2016, *Stachybotriaceae, Hypocreales, Sordariomycetes*, one species, type: *D. terrestris* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22442, CBS 127345.

*Dimorphomyces* Thaxt. 1893, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, 27 species, type: *Dimorphomyces denticulatus* Thaxt., asexual morph unknown, parasites, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species), cultures and sequences are unavailable, needs generic revision.

*Dimorphosphora* Tubaki 1958, *Helotiaceae, Helotiaceae, Leotiomycetes*, one species, type: *D. foliicola* Tubaki, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, needs generic revision.
**Dimorphotricha** Spooner 1987, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, one species, type: *D. australis* Spooner, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Dinemasporium** Lév. 1846, *Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes*, 35 species, type: *D. graminum* (Lib.) Lév., coelomycetous, sexual morph unknown, saprobes, worldwide, see Crous et al. (2012, 2014; new species, morphology, phylogeny), Hashimoto et al. (2015a; morphology, phylogeny), Liu et al. (2015; morphology, phylogeny), Wijayawardene et al. (2016, 2017; morphology, outline), isotype, epitype and ex-epitype strain of the type: K(M) 175981, CBS H-20952, CBS 828.84.

**Dingleya** Trappe 1979, *Tuberaceae, Pezizales, Pezizomycetes*, six species, type: *D. verrucosa* Trappe, asexual morph unknown, pathogens, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

**Dioicomyces** Thaxt. 1901, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, 32 species, type: *D. anthici* Thaxt., asexual morph unknown, patasites, terrestrial, worldwide, see Santamaria (2002; revision), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Bernardi et al. (2014; Ecuador), cultures and sequences are available for unidentified species, needs generic revision.

**Diorygma** Eschw. 1824, *Graphidaceae, Ostropales, Lecanoromycetes*, 71 species, type: *D. hieroglyphica* (Pers.) Staiger & Kalb, asexual morph unknown, lichenized, terrestrial, tropical, see Archer (2009; key, Australia), Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2012; DNA, phylogeny), Rivas Plata et al. (2012a; taxonomy), Kirk et al. 2013 (genus accepted), Feuerstein et al. (2014; key), Lumbsch et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type.

**Diphymyces** I.I. Tav. 1985, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, 32 species, type: *D. appendiculatus* (Thaxt.) I.I. Tav., asexual morph unknown, patasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Rossi and Santamaria (2010; new species), Kirk et al. (2013; genus accepted), Haelewaters et al. (2014; new species), cultures and sequences are available for unidentified species, needs generic revision.

**Diplacella** Syd. 1930, *Gnomoniaceae, Diaporthales, Sordariomycetes*, 32 species, type: *D. paulliniae* (Gonz. Frag. & Cif.) Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for unidentified species, needs generic revision.

**Diplocarpa** Masse 1895, *Cordieritidaceae, Helotiales, Leotiomycetes*, one species, type: *D. curreyana* Masse, asexual morph unknown, fungicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dermataceae*), Kirk et al. (2013; genus accepted), Pärtel et al. (2014; DNA, phylogeny, treated as a genus in *Cordieritidaceae*), cultures and sequences are available, cultures available for type: KL317.

**Diplocarpon** F.A. Wolf 1912 (= *Entomosporium* Lév. 1857; = *Bostrichonema* Ces. 1867; = *Marssonina* Magnus 1906; = *Entomopeziza* Kleb. 1914 fide Johnston et al. 2014), *Dermataceae, Helotiales, Leotiomycetes*, seven species, type: *D. rosae* F.A. Wolf, asexual morph *Entomosporium; Marssonina*, pathogens, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available.

**Diplochorina** Gutner 1933, *Dothideomycetes genera incertae sedis*, one species, type: *D. naumovii* Gutner, asexual morph unknown, saprobes, terrestrial, USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available for unidentified species, needs generic revision.
**Diplocodiella** G. Arnaud ex M.B. Ellis 1976, *Ascomycota* genera incertae sedis, one species, type: *D. scalaroides* G. Arnaud ex M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Diplococccium** Grove 1885, *Helotiales* genera incertae sedis, 6 new species, type species *D. spicatum* Grove, hyphomycetous, sexual morph *Helminthosphaeria*, saprobes, terrestrial, widespread, see Shenoy et al. (2010; phylogeny, polyphylectic), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Hernández-Restrepo et al. (2012, new species, key), Isitua et al. (2012, on gold jewelry) Ma et al. (2012a, new species), Ma et al. (2012b, new record from China), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), da Silva et al. (2014; new species), de Almeida (2015, new species), Maharachchikumbura et al. (2016; outline, accepted as a genus in *Helminthosphaeraceae*), cultures available for type species CBS 162.47, CBS 852.73.

**Diplodia** Fr. 1834, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, 23 species, type: *D. mutila* (Fr.) Mont., holomorph, asexual morph coelomycetous, endophytes, pathogens, saprobes, associated with cankers, dieback and fruit rot, worldwide, see Phillips et al. (2008, 2013; morphology, phylogeny), Liu et al. (2012; morphology, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Alves et al. (2014; morphology, phylogeny), Wijayawardene et al. (2016; morphology, phylogeny), holotype and culture ex-type of type: BPI 599153 and CBS 136014.

**Diplodinis** Clem. 1931, *Ascomycota* genera incertae sedis, one species, type: *D. rostrupi* (Vestergr.) Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, Scandinavia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Diplodinula** Tassi 1902, *Ascomycota* genera incertae sedis, one species, type: need typification, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Diplogelasinospora** Cain 1961, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, three species, type: *D. princeps* Cain, asexual morph unknown, saprobes, terrestrial, Asia, North America, see Cai et al. (2006; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as genus in *Lasiosphaeriaceae*), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species, DNA), Maharachchikumbura et al. (2016; outline, accepted as a genus in *Chaetomiaceae*), cultures and sequences are available.

**Diplogrenium** Müll. Arg. 1891, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *D. austriensis* Müll. Arg., lichenized, Australia, epiphytic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; treated as a synonym of *Opegrapha*), sequences are unavailable.

**Diploia** A. Massal. 1852, *Caliciales*, *Caliciaceae*, *Lecanoromycetes*, four species, type: *D. canescens* (Dicks.) A. Massal., asexual morph unknown, lichenized, corticolous, worldwide, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Bungartz et al. (2016: generic concept, key to all species; discussed the distinction from *Diplotomma*, but showed both are distinct), Lücking et al. (2016; classification), Prieto and Wedin (2016; taxonomy), sequence are available for voucher MAF 8656 of the type.

phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype of type: BCC-Lich 4120.

*Diplomyces* Thaxt. 1895, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *D. actobianus* Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

*Diplonaevia* Sacc. 1889, *Dermateaceae, Helotiales, Leotiomyces*, 23 species, type: *D. caricum* (Auersw.) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Diploöspora* Grove 1916, *Clavicipitaceae, Hypocreales, Sordariomycetes*, one species, type: *D. rosea* Grove, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

*Diploplenodomus* Died. 1912, *Ascomycota* genera *incertae sedis*, two species, type: *D. malvae* Died. ex Died., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Diplopodomyces* W. Rossi & Balazuc 1977, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *D. callipodos* W. Rossi & Balazuc, asexual morph unknown, parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Santamaria et al. (2014; new species), cultures and sequences are unavailable.

*Diploschistella* Vain. 1926, *Gomphillaceae, Ostropales, Lecanoromycetes*, four species, type: *D. urceolata* Vain., lichenized, pantropical, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

*Diploschistes* Norman 1852, *Graphidaceae, Ostropales, Lecanoromycetes*, c. 33 species, type: *D. scruposus* (Schreb.) Norman, asexual morph coelomycetous, lichenized (young states sometimes parasitic), on rocks, soil or over mosses and other lichens, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Santamaria et al. (2013; new species), cultures and sequences are available, needs generic revision.

*Diplosporonema* Höhn. 1917, *Ascomycota* genera *incertae sedis*, one species, type: *D. delastrei* (Lacroix) Höhn. ex Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Diplotomma* Flot. 1849, *Caliciaceae, Caliciales, Lecanoromycetes*, 30 species, type: *D. alboatrum* (Hoffm.) Flot., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

*Diplozythiella* Died. 1916, *Ascomycota* genera *incertae sedis*, one species, type: *D. bambusina* Died., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Dipodascopsis* Batra & P. Millner emend. Kurtzman, Albertyn & Basehoar-Powers 2007, *Lipomyctaceae, Saccharomycetales, Saccharomycetes*, three species, type: *D. uninucleata* (Biggs) L.R. Batra & Millner, asexual reproduction by multilateral budding and pseudohyphae may be present, saprophytic, soil, wood, fruit fly, Canada, USA, Europe, see...
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kurtzman and Robnett (2013; DNA, phylogeny), sequences are available.

**Dipodascus** de Lagerheim 1892, *Dipodascaceae*, *Saccharomycetales*, *Saccharomycetes*, ten species, type: *D. albidus* Lagerh., asexual reproduction present (arthroconidia, chlamydospores may be formed), saprophytic, insects, insect galleries in pine trees, fluxes from trees, mushroom gills, cacti, worldwide, see Nagahama et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Dipodomyces** Thaxt. 1931, *Labouleniaceae*, *Labouleniales*, *Labouleniomycetes*, two species, type: *D. monstruosus* Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Diporotheca** C.C. Gordon & C.G. Shaw 1961, *Diporothecaceae*, *Ascomycota* families incertae sedis, two species, type: *D. rhizophila* C.C. Gordon & C.G. Shaw, asexual morph unknown, saprobes, terrestrial, aquatic, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of type: WSP 48900, cultures and sequences are unavailable.

**Dipyrgis** Clem. 1909, *Ascomycota* genera incertae sedis, one species, type: data inadequate asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Dirina** Fr. 1825, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, 24 species, type: *D. ceratoniae* (Ach.) Fr., asexual morph unknown, lichenized, saxicolous and corticolous, worldwide (coastal regions of mediterranean and subtropical climates), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tehler et al. (2013; phylogeny and taxonomy); Lücking et al. (2016; classification, but recording only 13 species), sequences are available.

**Dirinaria** (Tuck.) Clem. 1909, *Caliciaceae*, *Calicariae*, *Lecanoromycetes*, 35 species; type: *D. picta* (Sw.) Clem. & Shear, lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

**Dirinastrum** Müll.Arg. 1893, *Caliciaceae*, *Teloschistales*, *Lecanoromycetes*, three species; type: *D. australiensi* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Bungartz et al. (2011; phylogeny), Lücking et al. (2016; classification, treated as a genus in *Roccellaceae*), sequences are unavailable.

**Diromma** Ertz & Tehler 2014, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *D. dirinellum* (Nyl.) Ertz & Tehler, sexual morph with apothecioid ascomata, asexual morph unknown, lichenized, terrestrial, Mediterranean and Canary Islands, see Ertz et al. (2014; morphology, phylogeny), Lücking et al. (2016; classification), lectotype and ex-type strain of type: Dufour (H-NYL4756).

**Discina** (Fr.) Fr. 1849, *Discinaeae*, *Pezizales*, *Pezizomycetes*, 20 species, type: *D. perlata* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Discinella** Boud. 1885, *Helotiales*, *Helotiales*, *Leotiomycetes*, twelve species, type: *D. boudieri* (Quél.) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Disciotis** Boud. 1885, *Morchellaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *D. venosa* (Pers.) Arnould, asexual morph unknown, saprobes, terrestrial, worldwide, see Andersen et al. (2001), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),
Methven et al. (2013; DNA, phylogeny), Carris et al. (2016; mitosporic stage; DNA, phylogeny), cultures and sequences are available.

**Discocainia** J. Reid & A. Funk 1966. **Rhytismataceae, Rhytismatales, Leotiomycesetes**, type: *D. treleasei* (Sacc.) J. Reid & A. Funk, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Li et al. (2014; new species, Japan), cultures and sequences are available.

**Discocolla** Prill. & Delacr. 1894. **Ascomycota genera incertae sedis**, one species, type: *D. pyrina* Prill. & Delacr., hypymocetous, sexual morph unknown, saprobes, terrestrial, North temperate, see Seifert et al. (2011), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Discogloeum** Petr. 1923, **Ascomycota genera incertae sedis**, one species, type: *D. veronicarum* (Ces.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Discomyccella** Höhn. 1912. **Helotiatales genera incertae sedis, Leotiomycesetes**, one species, type: *D. tjibodensis* Höhn., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Discomycteoidae** Matsush. 1993. **Ascomycota genera incertae sedis**, one species, type: *D. aequatorialis* Matsush., hypymocetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Discorehmania** Kirschst. 1936. **Helotiatales, Helotiatales, Leotiomycesetes**, five species, type: *Discorehmania eburnea* Kirschst., asexual morph unknown, saprobes, terrestrial, North America, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Discosia** Lib. ex Durieu & Mont. 1849. **Sporocadaceae, Xylariales, Sordariomycetes**, six species, type: *D. strobilina* Lib., coelomycetous, sexual morphs unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012, 2016, 2017; taxonomy, outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Sénanyake et al. (2015; new species, phylogeny), Jaklitsch et al. (2016; phylogeny), cultures and sequences are available.


**Discosphaerina** Höhn. 1917. **Hyponecristaceae, Xylariales, Sordariomycetes**, eleven species, type: *D. discophora* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

**Discosporina** Höhn. 1927, **Ascomycota genera incertae sedis**, one species, type: *D. deplanata* (Höhn.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Discothecia** Syd. & P. Syd. 1917. **Ascomycota genera incertae sedis**, one species, type: *D. bakeri* (Syd. & P. Syd.) Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes,
terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Discozythia** Petr. 1922, *Ascomycota* genera *incertae sedis*, one species, type: *D. bakeri* (Syd. & P. Syd.) Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Disstitimus** E.G. Simmons, McGinnis & Rinaldi 1987, *Ascomycota* genera *incertae sedis*, one species, type: *D. exedrus* E.G. Simmons, McGinnis & Rinaldi, hyphomycetous, sexual morph unknown, on human, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Dissoconium** de Hoog, Oorschot & Hijwegen 1983, *Dissoconiaecae*, *Capnodiales*, *Dothideomycetes*, type: *D. aciculare* de Hoog, Oorschot & Hijwegen, hyphomycetous, sexual morph mycosphaerella-like, saprobes, pathogens, terrestrial, worldwide, see Crous et al. (2009; taxonomy, phylogeny), Seifert et al. (2011; morphology), Hyde et al. (2013; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2014; outline, phylogeny), cultures and sequences are available.


**Distolomyces** Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *D. fijianus* Thaxt., asexual morph unknown, parasites, terrestrial, Asia, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Distopyrenis** Aptroot 1991, *Pyrenulaecae*, *Pyrenulales*, *Eurotiales*, eight species, type: *D. americana* Aptroot, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

**Distorinula** F. San Martín, P. Lavín & Esqueda 1999, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *D. mexicana* F. San Martín, P. Lavín & Esqueda, asexual morph unknown, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: FSM, Esqueda 3693, cultures and sequences are unavailable.

**Distothelia** Aptroot 2005, *Trypetheliaceae, Trypetheliales, Dothideomycetes*, three species; type: *D. isthmospora* Aptroot, lichenized, see Lumbsch and Huhndorf (2010; outline), Aptroot & Lücking (2016; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

**Ditopella** De Not. 1863, *Gnomoniaceae, Diaporthales, Sordariomycetes*, two species, type: *D. fusiispora* De Not., asexual morph unknown, saprobes, terrestrial, Europe, see Mejia et al. (2008, 2011; DNA, phylogeny), Sogonov et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for *D. ditopa*.

**Ditopellina** J. Reid & C. Booth 1967, *Valsaceae, Diaporthales, Sordariomycetes*, one species, type: *D. saccardoana* (Traverso & Spessa) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Ditopellopsis** J. Reid & C. Booth 1967, *Gnomoniaceae, Diaporthales, Sordariomycetes*, four species, type: *D. clethrae* J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, North America, see Mejia et al. (2008, 2011; DNA, phylogeny), Sogonov et al. (2008; DNA, transferred *Ditopellopsis racemula* (Cooke & Peck) M.E. Barr to *Gnomoniopsis*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for unidentified *Ditopellopsis* sp.

**Diutina** Khunnamwong, Lertwattanasakul, Jindamorakot, Limtong & Lachance 2015, *Saccharomycetales* genera *incertae sedis*, *Saccharomycetes*, eight species, type: *D. rugosa* (Anderson) Khunnamwong, Jindamorakot, Limtong & Lachance, asexual reproduction by multilateral and pseudohyphae are produced, sexual reproduction unknown, saprophytic, but some species are common clinical isolates, rice leaf, bee, soil, soybean factory, clinical, worldwide, see Khunnamwong et al. (2015; taxonomy), sequences are available.

**Diversimorbus** S.F. Chen & Jol. Roux 2013, *Cryptonecrtiacaeae, Diaporthales, Sordariomycetes*, one species, type: *D.metrosideri* S.F. Chen bis & Jol. Roux, with coelomycetous asexual morph, saprobes, terrestrial, South Africa, have sequence data, see Chen et al. (2013; morphology, phylogeny), Maharachchikumbura et al. (2015; outline), holotype of the type: PREM 60741, ex-type strain of type: CMW37322.

**Divinia** Cif. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *D. diatricha* Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Dominican Republic, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Dixoymyces** I.I. Tav. 1985, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, two species, type: *D. perpendicularis* (Thaxt.) I.I. Tav., asexual morph unknown, parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Dolabra** C. Booth & W.P. Ting 1964, *Chaetothyriomycetidae* genera *incertae sedis*, *Eurotiomycetes*, one species, type: *D. nepheliae* C. Booth & W.P. Ting, asexual morph coelomycetous (*fide* Rossman et al. 2010), saprobes, pathogens, terrestrial, Malaysia, see Lumbsch and Huhndorf (2010; outline, as Dothideomycetes, genera *incertae sedis*), Rossman et al. (2010, 2012; *Eurotiomycetes* genera *incertae sedis*, DNA, phylogeny, asexual morph), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Dolic首批carpus** R. Sant. 1949, *Roccellaceae, Arthoniales, Arthoniomycetes*, two species, type: *D. chilensis* R. Sant., asexual morph unknown, lichenized, saxicolous and epiphytic, Chile and Saint Helena, see Aptroot (2008; taxonomy), Ertz and Tehler (2011; phylogenetic position), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.
**Doliomyces** Steyaert 1961. *Bartaliniaceae, Xylariales, Sordariomycetes*, two species, type: *D. senegalensis* (Speg.) Steyaert, sexual morph unknown, saprobes, terrestrial, India, South America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as in *Amphisphaeriaceae*), Wijayawardene et al. (2016; placed in *Bartaliniaceae* based on morphology), cultures and sequences are unavailable.

**Domingoella** Petr. & Cif. 1932, *Ascomycota* genera *incertae sedis*, four species, type: *D. asterinarum* Petr. & Cif., hynophyaceous, sexual morph unknown, on fungi, terrestrial, Pantropical, Australasia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Donadinia** Bellem. & Mel.-Howell 1990, *Sarcosomataceae, Pezizales, Pezizomycetes*, four species, type: *D. helvellloides* (Donadini, Berthet & Astier) Bellem. & Mel.-Howell, sexual morph unknown, saprobes, terrestrial, worldwide, see Zhang and Pang (2009; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline, phylogeny), Sandoval-Denis et al. (2016; phylogeny), cultures and sequences are available.

**Doratomyces** Corda 1829, *Microascales, Microascales, Sordariomycetes*, two species, type: *D. neesii* Corda, sexual morph unknown, saprobes, terrestrial, worldwide, see Zhang and Pang (2009; DNA, phylogeny), Kirk et al. (2012, 2014; outline, accepted as *Dothioraceae, and Dothideomycetes, genera incertae sedis* respectively), Kirk et al. (2013; genus accepted), González-Menéndez et al. (2016; DNA), Hyde et al. (2013) and Thambugala et al. (2014) excluded from *Dothioraceae*, cultures and sequences are available.

**Dothichiza** Lib. ex Roum. 1880, *Dothideomycetes*, genera *incertae sedis*, 15 species, type: *D. populea* Sacc. & Briard, sexual morph unknown, saprobes, terrestrial, worldwide, see Zalar et al. (2008; DNA, phylogeny), Wijayawardene et al. (2012, 2014; outline, accepted as *Dothioraceae, and Dothideomycetes, genera incertae sedis* respectively), Kirk et al. (2013; genus accepted), González-Menéndez et al. (2016; DNA), Hyde et al. (2013; review, keys, excluded from *Parmulariaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Parmulariaceae*), placement in *Parmulariaceae* supported by morphology, cultures and sequences are unavailable.

**Dothidasteroma** Höhn. 1909, *Parmulariaceae, Dothideomycetes* families *incertae sedis*, five species, type: *D. pterygota* (Berk. & Broome) Höhn., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Parmulariaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Parmulariaceae*), Hyde et al. (2013; review, keys, excluded from *Parmulariaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Parmulariaceae*), placement in *Parmulariaceae* supported by morphology, cultures and sequences are unavailable.

**Dothidasteromella** Höhn. 1910, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. sepulta* (Berk. & M.A. Curtis) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hyde et al. (2013) did not accept as a genus in *Asterinaceae*, Kirk et al. (2013; outline, genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes, genera incertae sedis*), cultures and sequences are unavailable, needs generic revision.

**Dothidea** Fr. 1818, *Dothideaceae, Dothideales, Dothideomycetes*, around 500 spp. (the actual number of species could be less than 100), type: *D. sambuci* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Thambugala et al. (2014b; morphology, phylogeny), Wijayawardene et al. (2014; outline), ex-type strains of type: DAOM 231303, epitype of type: GZU 78–2002.

**Dothidella** Speg. 1880, *Polystomellaceae, Dothideomycetes* families *incertae sedis*, two species, type: *D. australis* Speg., sexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.
**Dothideodiplodia** Murashk. 1927, *Ascomycota genera incertae sedis*, one species, type: *D. agropyri* Murashk., coelomycetous, sexual morph unknown, saprobes, terrestrial, USSR, see Wijayawardene et al. (2012, 2017; outline, morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Dothidotthia** Höhn. 1918, *Dothidotthiaceae*, *Pleosporales*, *Dothideomycetes*, c. ten species, type: *D. symphoricarpi* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, temperate, see Phillips et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, phylogeny), epitype of the type: and ex-epitype BPI 871823, CPC 12929 = CBS 119687.

**Dothiopeltis** E. Müll. 1957, *Leptopeltidaceae*, *Dothideomycetes* families *incertae sedis*, cf. one species, type: *D. arunci* E. Müll., asexual morph idriella-like, saprobes, terrestrial, Switzerland, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Leptopeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


**Dothioropsis** Riedl 1974, *Ascomycota genera incertae sedis*, one species, type: *D. corni* Riedl, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Mel'nik and Minter (2006; UK), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Dothistroma** Hulbary 1941, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *D. pini* Hulbary, coelomycetous, sexual morph mycosphaerella-like, plant pathogenic, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Braun et al. (2014; morphology and typification), epitype CBS H-12211, culture ex-epitype CMW 10951 = CBS 116487.

**Dothivalsaria** Petr. 1966, *Dothideomycetes* genera *incertae sedis*, one species, type: *D. megalospora* (Auersw.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as genus in *Massariaceae*), Hyde et al. (2013; did not accept as a genus in *Massariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are available.

Drechslerella Subram. 1964, Orbiliaceae, Orbiliales, Orbiliomycetes, two species, type: D. acrochaeta (Drechsler) Subram., sexual morph unknown, parasitic, terrestrial, worldwide, see Castillo et al. (2010; biocontrol), Kirk et al. (2013; genus accepted), Liu et al. (2014; genomic studies), cultures and sequences are available.

Drepanomyces Thaxt. 1931, Ceratomycetaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: D. malayanus Thaxt., asexual morph unknown, parasitic, terrestrial, Sumatra, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Drepanopeziza (Kleb.) Höhn. 1917 (= Gloeosporium Desm. & Mont. 1849; Gloeosporidiella Petr. 1921 fide Rossman et al. 2016), Dermateaceae, Helotiales, Leotiomycetes, five species, type: D. ribis (Rehm ex Kleb.) Höhn., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Drudeola Kuntze 1891, Ascomycota genera incertae sedis, one species, type: D. sarraceniae (Peck & Cooke) Kuntze, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Drumopama Subram. 1957, Ascomycota genera incertae sedis, one species, type: D. girisa Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dryosphaera Jørgen Koch & E.B.G. Jones 1989, Ascomycota genera incertae sedis, three species, type: D. navigans Jørg. Koch & E.B.G. Jones asexual morph unknown, on wood associated with sand, marine, temperate and tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), cultures and sequences are unavailable.

Dualomyces Matsush. 1987, Ascomycota genera incertae sedis, two species, type: D. asterinarum Petr. & Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dubitatio Specg. 1882, Dothideomycetes genera incertae sedis, one species, type: D. dubitationum Specg., asexual morph coelomycetous, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Massariaceae), Hyde et al. (2013) excluded from Massariaceae, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Dubujiana D.R. Reynolds & G.S. Gilbert 2005, Dothideomycetes genera incertae sedis, one species, type: D. glandulifera D.R. Reynolds & G.S. Gilbert, asexual morph coelomycetous, saprobes, terrestrial, Australia, see Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Duebenia Fr. 1849, Dermateaceae, Helotiales, Leotiomycetes, five species, type: D. rufa Fr., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dufourea Ach. 1809, Teloschistaceae, Teloschistales, Lecanoromycetes, 23 species, type: D. flammea (L. f.) Ach., lichenized, see Arup et al. (2013; taxonomy), Kondratyuk et al. (2014b; taxonomy), Lücking et al. (2016; classification), sequences are available.

Dumontinia L.M. Kohn 1979, Sclerotiniaceae, Helotiales, Leotiomycetes, five species, type: D. tuberosa (Bull.) L.M. Kohn, asexual morph unknown, saprobes, terrestrial, temperate, see
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.

**Duosporium** K.S. Thind & Rawla 1961, *Ascomycota* genera incertae sedis, one species, type: *D. cyperi* K.S. Thind & Rawla, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, China, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Duplicaria** Fuckel 1870, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *D. empetri* (Pers.) Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zou et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Li et al. (2015; DNA, Seashells), cultures and sequences are available but type lacks DNA.

**Duplicariella** B. Erikss. 1970, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, one species, type: *D. phyllodoces* B. Erikss., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Duradens** Samuels & Rogerson 1990, *Sordariomycetes* genera incertae sedis, one species: *D. lignicola* Samuels & Rogerson, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Clypeosphaeriaceae*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, excluded from *Clypeosphaeriaceae* and placed in *Sordariomycetes*, genera incertae sedis), cultures and sequences are unavailable, needs generic revision.

**Durandiella** Seaver 1932, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, ten species, type: *D. fraxini* (Schwein.) Seaver, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Durirotheca** Læssøe, Srikitik., Luangsa-ard & M. Stadler 2013, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, four species, type: *D. depressa* Læssøe & Srikitikulchai, asexual morph nodulisporium-like, saprobes, terrestrial, Thailand, see Læssøe et al. (2013; morphology, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Li et al. (2016; new species, DNA), holotype and ex-type cultures of the type: BBH 18222, BBC 23016.

**Dussiella** Pat. 1890, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *D. tuberiformis* (Berk. & Ravenel) Pat., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Dwayaangam** Subram. 1978, *Orbiliaceae*, *Orbiliales*, *Orbiliomycetes*, seven species, type: *D. quadridens* (Drechsler) Subram., sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Dwayabeeja** Subram. 1958, *Ascomycota* genera incertae sedis, three species, type: *D. sundara* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Dwayaloma Subram. 1957, *Ascomycota* genera *incertae sedis*, two species, type: *D. trina* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dwayalomella Brisson, Piroz. & Pauzé 1975, *Ascomycota* genera *incertae sedis*, one species, type: *D. vaccinii* Brisson, Piroz. & Pauzé, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


Dwibeja Subram. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *D. sundara* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Dwiroopa Subram. & Muthumary 1986. *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *D. ramya* Subram. & Muthumary, coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Dwiroopella Subram. & Muthumary 1986, *Ascomycota* genera *incertae sedis*, one species, type: *D. sundara* Subram. & Muthumary, coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


Dyplolabia A. Massal. 1854, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *D. afzelii* (Ach.) A. Massal., asexual morph unknown, lichenized, terrestrial, tropical, see Rivas Plata et al. (2012a; taxonomy), Lumbsch and Huhndorf 2010 (outline), Kirk et al. 2013 (genus accepted), Kalb et al. (2016; taxonomy), Lüking et al. (2016; classification), sequences are available.


Dyrithium M.E. Barr 1994, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *D. lavidum* (Fr.) M.E. Barr, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.
Dysrhynchis Clem. 1909, Perisporiopsidaceae, Dothideomycetes families incertae sedis, Dothideomycetes, seven species, type: D. pulchella (Sacc.) Clem., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Parodiopsidaceae), Hyde et al. (2013; accepted as a genus in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Ebollia Minter & Caine 1980, Ascomycota genera incertae sedis, one species, type: E. valdiviensis (Speg.) Minter & Caine, coelomycetous, sexual morph unknown, saprobes, terrestrial, Chile, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), needs generic revision.

Ebullia K.L. Pang 2015, Halosphaeriaceae, Microascales, Sordariomycetes, one species, type: E. octonae (Kohlm.) K.L. Pang, asexual morph unknown, saprobes, marine, Brunei, Hawaiian Islands, India, Taiwan, sequence data available, see Chu et al. (2015), Maharachchikumbura et al. (2016; outline), holotype of type: J.K. 4474a = 01271926, NYBG.

Echinocymbium Brusse 1987, Ramalinaceae, Lecanorales, Lecanoromycetes, one species, type: E. speciosum Brusse, asexual morph coelomycetous, lichenized, saxicolous, South Africa, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Echidnodes Theiss. & Syd. 1918, Asterinaceae, Asterinales, Dothideomycetes, 34 species, type: E. linearis (Syd. & P. Syd.) Syd., asexual morph unknown. Epiphytes, terrestrial, worldwide, no molecular data, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Hongsanan et al. (2014; taxonomy), Wijayawardene et al. (2014; outline), placement in Asterinaceae supported by morphology, cultures and sequences are unavailable, needs generic revision.

Echidnodella Theiss. & Syd. 1918, Asterinaceae, Asterinales, Dothideomycetes, c. 17 species, type: E. liturae (Cooke) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and hunduf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in Echidnodes), Hongsanan et al. (2014; phylogeny), cultures and sequences are unavailable for type species, needs generic revision.

Echinoaschotheca Matsush. 1995, Phaeotrichaceae, Phaeotrichales, Dothideomycetes, one species, type: E. duplooformis Matsush., asexual morph unknown, saprobes, terrestrial, Pakistan, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as genus in Phaeotrichaceae), Hyde et al. (2013; accepted as genus in Phaeotrichaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Echinobotryum Corda 1831, Microascales, Microascales, Sordariomycetes, one species, type: E. atrum Corda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Echinocatena R. Campb. & B. Sutton 1977, Ascomycota genera incertae sedis, one species, type: E. arthrinioides R. Campb. & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 199279, cultures and sequences are unavailable, genus need revision.

Echinochondrium Samson & Aa 1975, Ascomycota genera incertae sedis, one species, type: E. pulchrum Samson & Aa, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Echinoconidiophorurn** Pereira-Carv. & Dianese 2009, *Ascomycota* genera incertae sedis, one species, type: *E. cerradense* Pereira-Carv. & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Echinodiscus** Etayo & Diederich 2000, *?Cordieritidaceae*, *Helotiales*, *Leotiomyces*, two species, type: *E. lesdainii* (Vouaux) Etayo & Diederich, asexual morph unknown, lichenicolous, non-lichenized, Eurasia, see Zhurbenko (2009; morphology, new species), Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable but lacks for th type species.

**Echinomyces** Rappaz 1987, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *E. obesa* (Syd.) Rappaz, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Echinoplaca** Fée 1825, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, c. 40 species, type: *E. epiphylla* Fée, asexual morph unknown, lichenized, widespread (tropical), foliicolous (but a few species are corticolous), see Lücking et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.


**Echinula** Graddon 1977, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *E. asteriadiformis* Graddon, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Ecteinomyces** Thaxt. 1903, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *E. trichopterophilus* Thaxt., asexual morph unknown, parasites, terrestrial, America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2014; the Netherlands), cultures and sequences are unavailable.

**Ectendomeliola** Hosag. & D.K. Agarwal 2006, *Ascomycota* genera incertae sedis, two species, type: *E. walsurae* Hosag. & D.K. Agarwal, asexual morph produced from the hyphae, on living leaves, terrestrial, worldwide, see Hosagoudar and Archana (2010; new species, India), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from *Meliolaceae*), holotype of the type: HCIO 45237, cultures and sequences are unavailable.

**Edenia** M.C. González, Anaya, Glenn, Saucedo & Hanlin 2007, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *E. gomezpompae* M.C. González, Anaya, Glenn, Saucedo & Hanlin, asexual morph unknown, endophytes, human pathogens, terrestrial, Pakistan, Quintana Roo, see Crous et al. (2009; DNA, phylogeny), Hyde et al. (2013; outline, accepted as a genus in *Pleosporaceae*), Cui et al. (2013; DNA, human
pathogens), Sun et al. (2013; new species, endophytic), Wijayawardene et al. (2014; outline, accepted as a genus in Pleosporaceae), Ariyawansa et al. (2015; phylogeny, excluded from Pleosporaceae and placed in Phaeosphaeriaceae), Pili et al. (2015; endophytes, Kenya, DNA), Keilor Rojas-Jimenez et al. (2016; endophytes, DNA, Costa Rica), holotype of the type: MEXU 25346, cultures and sequences are available.

**Edrudia** W. P. Jord. 1980, Lecanoraceae, Lecanorales, Lecanoromycetes, one species, type: *E. constipans* (Nyl.) W.P. Jord., asexual morph unknown, lichenized, saxicolous, California, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Edwardiella** Henssen 1986, Lichinaeae, Lichinales, Lichinomycetes, one species, type: *E. mirabilis* Henssen, asexual morph unknown, lichenized, saxicolous, Marion Island, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.


**Effetia** Bartoli, Maggi & Persiani 1984, Sordariaeae, Sordariales, Sordariomycetes, one species, type: *E. craspedoconidica* Bartoli, Maggi & Persiani, asexual morph virgariella-like, from soil, terrestrial, Ivory Coast, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline, nomenclature), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: horto botanico Roma105S, cultures and sequences are unavailable.

**Eiglera** Hafellner 1984, Eigleraceae, Acarosporales, Lecanoromycetes, two species, type: *E. flavida* (Hepp) Hafellner, asexual morph unknown, lichenized, saxicolous, Europe, North America, see Lumbsch and Huhndorf (2010; accepted as a genus in Hymeneliaceae, Pertusariales), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; the phylogenetic placement of *Eiglera* outside of the *Hymeneliaceae*, sister to *Acarosporales*, needs to be confirmed, which would justify the reinstitution of the family *Eigleraceae* belonging to the *Acarosporales*), Lücking et al. (2016; classification), sequences are available.


**Eiona** Kohlm. 1968, Ascomycota genera incertae sedis, asexual morph unknown, one species, type: *E. tunicata* Kohlm., on wood often associated with sand, temperate, no sequence data, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), cultures and sequences are unavailable, needs generic revision.

**Elachopeltella** Bat. & Cavalc. 1964, Ascomycota genera incertae sedis, two species, type: *E. sapindacearum* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Elaeodema** Syd. 1922, Ascomycota genera incertae sedis, two species, type: *E. cinnamomi* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Sutton (1977; nomenclature), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Elaphomyces** Nees 1820, *Elaphomycetaceae, Elaphomycetales, Eurotiomycetes*, apparently polyphyletic, c. 78 species, type: *E. granulatus* Fr., terrestrial, hypogeous, forming mycorrhizas with conifers and broad-leaved trees, cosmopolitan, see Zhang and Minter (2011; new species), Castellano et al. (2011, 2012a, 2012b, 2016; new species, phylogeny), Paz et al. (2012; new species), Buyck et al. (2016; phylogeny), cultures and sequences are available.


**Elattopycnis** Bat. & Cavalc. 1964, *Ascomycota* genera incertae sedis, one species, type: *E. protii* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Eleutherascus** Arx 1971, *Ascodesmiaceae, Pezizales, Pezizomycetes*, four species, type: *E. lectardii* (Nicot) Arx, asexual morph unknown, saprobes, terrestrial, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available for type: CBS 626.71.

**Eleutheromyces** Höhn. 1908, *Ascomycota* genera incertae sedis, one species, type: *E. mycophila* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Elixia** Lumbsch 1997, *Elixiaecae, Umbilicariales, Lecanoromycetes*, two species; type: *E. flexella* (Ach.) Lumbsch, lichenized, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; taxonomy), Kirk et al. (2013; genus accepted), Międlińska et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available, type specimen UPS-ACH-L-1286 (syntype).

**Ellitevera** Deighton 1969, *Ascomycota* genera incertae sedis, one species, type: *E. pulchrum* Samson & Aa, hypomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Elliottinia** L.M. Kohn 1979, *Sclerotiniaceae, Helotiales, Leotiomyces*, one species, type: *E. kernerii* (Wettst.) L.M. Kohn, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), cultures available for the type: KL402, specimen voucher TU:104529.

**Ellisembia** Subram. 1992, *Sordariomycetes* genera incertae sedis, 61 species and 02 varieties, type: *E. coronata* (Fückel) Subram., sexual reported for *E. adscendens* (Berk.) Subram., saprobes, lichenicolous (e.g. *E. lichenicola*), terrestrial, aquatic, worldwide, see Ma et al. (2008; new species), Ma et al. (2010; new species), McKenzie (2010; new species), Ma et al. (2011; new species), Seifert et al. (2011; phylogeny), Rajeshkumar et al. (2012; new species), Delgado (2013; new species), Ren et al. (2013; new species), Xia et al. (2015; new species),
Santa Izabel et al. (2013; new combinations), cultures and sequences are available for few species (not from type material) but lacks for the type.

**Ellisembiopsis** T.S. Santa Izabel & Gusmão 2013, *Ascomycota* genera *incertae sedis*, two species, type: *E. brasiliensis* T.S. Santa Izabel & Gusmão, hypomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, China, see Santa Izabel et al. (2013; morphology), holotype of the type: HUEFS 155102, cultures and sequences are unavailable.

**Elmerinula** Syd. 1934, *Dothideomycetes* genera *incertae sedis*, one species, type: *E. capnoïdes* Syd., asexual morph unknown, saprobes, terrestrial, Phillipines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


**Elotespora** R.F. Castañeda & Heredia 2010, *Ascomycota* genera *incertae sedis*, one species, type: *E. mexicana* R.F. Castaneda & Heredia, hypomycetous, sexual morph unknown, saprobes, terrestrial, Mexico, see Castañeda-Ruiz et al. (2010b; morphology), Seift et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: XAL CB883, cultures and sequences are unavailable, compare with *Artocarpomyces*, *Colemaniella* and *Glomerobolus*.

**Elsinoë** Racib. 1900 (= *Phaceloma* de Bary 1874 *fide* Wijayawardene et al. 2014; Rossman et al. 2015), *Elsinoaceae*, *Myriangiales*, *Dothideomycetes*, c. 30 species (known by cultures), type: *E. canavaliae* Racib., asexual morph coelomycetous (*Phaceloma*), pathogens, saprobes, terrestrial, Phillipines, see Lumbsch and Huhndorf (2010; outline), Wang et al. (2009; pathogens), Chung (2011; pathogens), Cheewangkoon et al. (2009; phylogeny), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Rossman et al. (2015, 2016; nomenclature, new combinations), Crous et al. (2016; new species, phylogeny), cultures and sequences are available.

**Elytroderma** Darker 1932, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, one species, type: *E. deformans* (Weir) Darker, asexual morph unknown, endophytes, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available for unidentified species.

**Emarcea** Duong, Jeewon & K.D. Hyde 2004, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *E. castanopsidica* Duong, Jeewon & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, Taiwan, see Li et al. (2009; new species, Taiwan), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2015; new species; DNA), Maharachchikumbura et al. (2015, 2016; outline), isotypes of the type: MRC DLA 008, HKUM 17498, CMU H224410, PDD 78748, ex-type cultures of the type: CBS and HKUCC 10344.


**Embryonispora** G.Z. Zhao 2014, *Pezizomycotina*, genera *incertae sedis*, one species, type: *E. bambusicola*, G.Z. Zhao, *****, sexual morph unknown, saprobes, terrestrial, China, see Zhao et al. (2013; taxonomy), cultures and sequences are unavailable.

**Emericellopsis** J.F.H. Beyma 1940, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, twelve species, type: *E. terricola* J.F.H. Beyma, asexual morph hypomycetous, endophytes, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Grum-
Grzhimaylo et al. (2013; new species), Kirk et al. (2013; genus accepted), Hyde et al. (2016; new species, hyphomycetous asexual morph), sequences are available.

**Emilmuelleria** Arx 1986, Chaetomiaceae, Sordariiales, Sordariomycetes, one species, type: *E. spirotricha* (R.K. Benj.) Arx, asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Emodomelanella** Divakar & A. Crespo 2010, Parmeliaceae, Lecanorales, Lecanoromycetes, one species, type: *E. masonii* (Essl. & Poelt) Divakar & A. Crespo, asexual morph unknown, lichenized, saxicolous, Asian endemic (mainland China, India, Nepal and Taiwan), see Crespo et al. (2010a; phylogeny and taxonomy), Lücking et al. (2016; classification), sequences are available.

**Enantioptera** Descals 1983, Ascomycota genera incertae sedis, two species, type: *E. tetralata* Descals, hypomycetous, sexual morph unknown, in river foam, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Enarthromyces** Thaxter 1896, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: *E. indicus* Thaxter, asexual morph unknown, parasites, saprobes, terrestrial, Asia, Africa, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Encephalographa** A. Massal. 1854, Melaspilaceae, Eremitiales, Dothideomycetes, one species, type: *E. cerebrina* (DC.) A. Massal., asexual morph unknown, lichenized, saxicolous, Europe (southern), see Lumbsch and Huhndorf (2010; outline, doubtful position in Arthoniomycetes), Kirk et al. (2013; genus accepted), Ertz and Diederich (2015; phylogenetic position), Lücking et al. (2016; classification), sequences and cultures are available; the placement of all species but *E. elisae* in *Encephalographa* should be reassessed.

**Enchnoa** Fr. 1849, Calosphaeriales genera, incertae sedis, Sordariomycetes, one species, type: *E. lanata* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Nitschkiaceae), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Calosphaeriales* genera, *incertae sedis*), cultures and sequences are unavailable.

**Enchylium** (Ach.) Gray 1821, Helotiales, Lecanoromycetidae, Lecanoromycetes, nine species, type: *[to be added]*, lichenized, see Otálora et al. (2013a, 2014; taxonomy, phylogeny), Lücking et al. (2016; classification), sequences are available.

**Encoelia** (Fr.) P. Karst. 1871, Cenangiaceae, Helotiales, Leotiomycetes, 40 species, type: *E. furfuracea* (Roth) P. Karst., asexual morph unknown, endophytes, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel (2014, 2016; morphology, ultrastructure, DNA, phylogeny), cultures and sequences are available.

**Encoeliopsis** Nannf. 1932, Melangiaceae s. l., Helotiales, Leotiomycetes, four species, type: *E. rhododendri* (Ces. ex Rabenh.) Nannf., asexual morph unknown, endophytes, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Helotiales*), Kirk et al. (2013; genus accepted), Pärtel (2016; DNA, phylogeny), cultures available for type: KL118.

**Endobotrya** Berk. & M.A. Curtis 1874, Ascomycota genera incertae sedis, one species, type: *E. elegans* Berk. & M.A. Curtis, coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline, morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Endobotryella** Höhn. 1909, Ascomycota genera incertae sedis, one species, type: *E. oblonga* (Fuckel) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Endocalyx** Berk. & Broome 1876, Apiosporaceae, Xylariales, Sordariomycetes, one species, type: *E. thwaitesii* Berk. & Broome, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Capdet and Romero (2010; Argentina), Seifert et al. (2011; morphology), Wijayawardene et al. (2012; outline, accepted as Ascomycota genera incertae sedis), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Endocarpon** Hedw. 1788, Verrucariaceae, Verrucariales, Eurotiomycetes, c. 70 species, type: *E. pusillum* Hedw., asexual morph coelomycetous, terrestrial and aquatic (maritime and freshwater), lichenized, occurring on rocks, soil and bark, cosmopolitan, see Gueidan et al. (2009; phylogeny, outline), Aptroot et al. (2008; regional monograph, Costa Rica), Yang and Wei (2008; new species), Giavarini and Fox (2009; regional monograph, Great Britain), Prieto et al. (2012; phylogeny), Joshi and Hur (2013a, b; new species), Lücking et al. (2016; classification), sequences are available.

**Endocena** Cromb. 1877, Icmadophilaceae, Pertusariales, Lecanoromycetes, one species, type: *E. informis* Cromb., asexual morph unknown, lichenized, terricolous, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Endococcus** Nyl. 1855, Dothideomycetes genera incertae sedis, 34 species, type: *E. rugulosus* (Borr ex Leight.) Nyl., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; outline, genus accepted), Kocourkova and Knudsen (2011; new species), Zhurbenko et al. (2012; new species), a culture and sequence is available, needs generic revision.

**Endocelium** Syd. 1937, Ascomycota genera incertae sedis, one species, type: *E. costaricanum* Syd., asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Endoconidia** Tsuneda, Hambl. & Currah 2004, Dothideaceae, Dothideales, Dothideomycetes, one species, type: *E. populi* Tsuneda, Hambl. & Currah, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, needs generic revision.

**Endoconidiophora** Münch 1907, Ceratocystidaceae, Microascales, Sordariomycetes, one species, type: *E. coerulescens* Münch, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012; outline, accepted as Ascomycota genera incertae sedis), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Endoconospora** Gjaerum 1971, Ascomycota genera incertae sedis, two species, type: *E. cerasii* Gjaerum, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Norway, India, see Wijayawardene et al. (2012; outline, accepted as Ascomycota genera incertae sedis), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Endocoryneum** Petr. 1922, ?Didymellaceae, Pleosporales, Dothideomycetes, two species, type: *E. loculosum* (Sacc.) Petr., asexual morph unknown, saprobes, terrestrial, Norway, India, see Wijayawardene et al. (2012, 2016; outline, accepted as Ascomycota genera incertae sedis and Didymellaceae respectively), Kirk et al. (2013; genus accepted), cultures and sequences are available for *D. festucae* Wijayaw. et al. (MFLUCC 14–0461), needs generic revision.

**Endodothiora** Petr. 1929, Dothideaceae, Dothideales, Dothideomycetes, one species, type: *E. sydowiana* Petr., asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch
and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

**Endogenospora** R.F. Castañeda, O. Morillo & Minter 2010, *Ascomycota* *genera incertae sedis*, type: *E. aspectabilis* R.F. Castaneda, O. Morillo & Minter, hyphomycetous, sexual morph unknown, one species, saprobes, terrestrial, Venezuela, see Castañeda-Ruiz et al., (2010c; morphology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: INIFAT C09/74, cultures and sequences are unavailable, compare with *Ascoconidium*, *Sporoschisma* and *Sporoschismopsis*.


**Endomelanconiopsis** E.I. Rojas & Samuels 2008, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, two species, type: *E. endophytica* E.I. Rojas & Samuels, coelomycetous, saprobes, terrestrial, South America, see Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Phillips et al. (2013; taxonomy, new species, phylogeny), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Endomelanconium** Petr. 1940, *Ascomycota* *genera incertae sedis*, four species, type: *E. pini* (Corda) Petr., coelomycetous, sexual morph unknown, endophytes, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016, 2017; morphology; outline), cultures and sequences are unavailable.


**Endomyces** Reess 1870, *Saccharomycetales* *genera incertae sedis*, *Saccharomycetes*, four species, type: *E. decipiens* (Tul. & C. Tul.) Reess, asexual reproduction is by pseudohyphae or septate hyphae or blastoconidia, parasite of mushrooms, grow on various mushrooms, worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Endophoma** Tsuneda & M.L. Davey 2011, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *E. elongata* Tsuneda & M.L. Davey, coelomycetous, sexual morph unknown, saprobes (soil of bat cave), terrestrial, Canada, see Tsuneda et al. (2011; taxonomy, DNA, phylogeny), Chen et al. (2015; phoma-like taxa in *Didymellaceae*), holotype, and ex-type of the type: UAMH 11216.

**Endophragmiopsis** M.B. Ellis 1966, *Ascomycota* *genera incertae sedis*, one species, type: *E. piroynskii* M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Endoplacodium** Petr. 1949, *Ascomycota* *genera incertae sedis*, one species, type: *E. nigrescens* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Iran, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Endoramularia** Petr. 1923, *Ascomycota* *genera incertae sedis*, one species, type: *E. ulmi* Petr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Endoscypa** Syd. 1924. *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *E. perforans* Syd., asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available PDD:102231 (unpublished), needs generic revision.

**Endosporoideus** W.H. Ho, Yanna, K.D. Hyde & Goh 2005. *Ascomycota* genera *incertae sedis*, one species, type: *E. pedicellatus* W.H. Ho, Yanna, K.D. Hyde & Goh, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Hong Kong, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are unavailable, needs generic revision.

**Endostilbum** Malençon 1964. *Ascomycota* genera *incertae sedis*, one species, type: *E. cerasi* (Bourdot & Galzin) Malençon, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Morocco, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are unavailable, needs generic revision.

**Endothia** Fr. 1849. *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *E. gyrosa* (Schwein.) Fr., asexual morphs unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Endotryblidium** Petr. 1959. *Patellariaceae*, *Patellariales*, *Dothideomycetes*, one species, type: *E. insculptum* (Cooke) Petr., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaeae*), Kirk et al. (2013; genus accepted), Untereiner et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Endoxyla** Fuckel 1871. *Boliniaeae*, *Boliniales*, *Sordariomycetes*, ten species, type: *E. operculata* (Nitschke) Sacc., asexual morphs unknown, saprobes, terrestrial, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Untereiner et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Endoxylina** Romell 1892. *Sordariomycetes* genera *incertae sedis*, seven species, type: *E. stellulata* Romell, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Vasilyeva (2010; new species; Russia), Kirk et al. (2013; genus accepted), Untereiner et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Endoxythia** Petr. 1959. *Ascomycota* genera *incertae sedis*, one species, type: *E. moravica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, former Yugoslavia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Enerthidium** Syd. 1939. *Ascomycota* genera *incertae sedis*, one species, type: *E. canarii* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Wijayawardene et al. (2012, 2016; outline, morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Engelhardtiella** A. Funk 1973. *Ascomycota* genera *incertae sedis*, one species, type: *E. alba* A. Funk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Englerodothis** Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, three species, type: *E. kilimanjarocharica* (Henn.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in Parmulariaceae), Lumbsch and Huhndorf (2010; outline, accepted as a genus in Parmulariaceae). Hyde et al. (2013; review, keys, excluded from Parmulariaceae), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes, genera *incertae sedis*), cultures and sequences unavailable.

**Engleromyces** Henn. 1900, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *E. goetzei* Henn., asexual morph unknown, saprobes, terrestrial, Africa, Asia, see Lumbsch and Huhndorf (2010; outline), Whalley et al. (2010; new species. China), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Englerula** Henn. 1904, *Englerulaceae*, *Dothideomycetes* families *incertae sedis*, six species, type: *E. macarangae* Henn., asexual morph coelomycetous, saprobes, epiphytic, terrestrial, Africa, India, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Englerulaceae), Dai et al. (2014; morphology), cultures and sequences are unavailable, needs generic revision.

**Enigmotrema** Lücking (2012), *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *E. rubrum* Lücking, lichenized, see Sipman et al. (2012; taxonomy), Lücking et al. (2013; phylogeny), Lücking (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Enridescalsia** R.F. Castañeda & Guarro 1998, *Ascomycota* genera *incertae sedis*, one species, type: *E. speciosa* R.F. Castaneda & Guarro, hyphomycetous, sexual morph unknown, saprobes, aquatic (fresh water), Cuba, see see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C95/96, cultures and sequences are unavailable, compare with Xylomyces and Gonatobotrys.

**Enterocarpus** Locq.-Lin. 1977, *Microascales*, *Microascales*, *Sordariomycetes*, two species, type: *E. uniporus* Locq.-Lin., asexual morph unknown, coprophilous, terrestrial, Sahara, Italy, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Enterodictyon** Müll. Arg. 1892, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *E. indicum* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Enterographa** Fée 1824, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, ± 60 species, type: *E. crassa* (DC.) Fée, sexual morph with punctiform or rounded to lirelliform ascomata, lichenized, rarely lichenicolous, terrestrial, world-wide with a preference for (sub)tropical regions, see Ertz and Tehler (2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015, phylogeny), Lücking et al. (2016; classification), sequences are available.

**Enthallopycnidium** F. Stevens 1925, *Ascomycota* genera *incertae sedis*, one species, type: *E. gouldiae* F. Stevens, coelomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Entoderma** Hanula, Andreaidis & M. Blackw. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *E. colletosporium* Hanula, Andreaidis & M. Blackw., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Entodesmium  Riess 1854, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, eight species, type: *E. rude* Riess, sexual morph unknown, saprobes, terrestrial, temperate, see Schoch et al. (2009; DNA, phylogeny), Hyde et al. (2013; outline, accepted as a genus in Phaeosphaeriaceae), Phookamsak et al. (2014; accepted as a genus in *Phaeosphaeriaceae*, phylogeny), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; new species, Russia, DNA, phylogeny), cultures available for the type: CBS 650.86.

Entoleuca  Syd. 1922, Xylariaceae, Xylariales, Sordariomycetes, three species, type: *E. callimorpha* Syd., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Entonaema  Möller 1901, Xylariaceae, Xylariales, Sordariomycetes, six species, type: *E. liquecens* Möller, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Eoaleurina  Korf & W.Y. Zhuang 1986, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: *E. folicola* (Henn.) Korf & W.Y. Zhuang, asexual morph unknown, saprobes, terrestrial, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Eopyrenula  R.C. Harris 1973, Dacampiaceae, Dothideomycetes, families incertae sedis, three species, type: *E. leucoplaica* (Wallr.) R.C. Harris, sexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; outline, accepted as a genus in *Dacampiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in *Dacampiaceae*), cultures and sequences are unavailable.

Eopyrenula  R.C. Harris 1973, Pyrenulaceae, Pyrenulales, Eurotiomycetes, six species, type: *E. leucoplaica* (Wallr.) R.C. Harris, asexual morph unknown, lichenized, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Eosphaeria  Höhn. 1917, Lasiosphaeriaceae, Sordariales, Sordariomycetes, one species, type: *E. uliginosa* (Kunze) Höhn., asexual morph hyphomycetous, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Eoterfezia  G.F. Atk. 1902, Eoterfeziaceae, Ascomycota families incertae sedis, type: *E. parasitica* G.F. Atk., six species, asexual morph unknown, terrestrial, saprobes, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Epaphroconidia  Calat. & V. Atienza 1995, Ascomycota genera incertae sedis, one species, type: *E. hawksworthii* Calat. & V. Atienza, coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Spain, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ephebe  Fr. (1825), Lichinaceae, Lichinales, Lichinomycetes, Ascomycota; 13 species; type: *Ephebe lanata* (L.) Vain.; lichenized; see.

Ephebe  Fr., 1825. Lichinaceae, Lichinales, Lichinomycetidae, 13 species, type: *E. lanata* (L.) Vain., asexual morph unknown, lichenized, terrestrial, corticolous, see Lumbsch and Huhndorf (2010; outline). Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

unknown, saprobes, terrestrial, Antarctica, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ephelis** Fr. 1849, *Clavicipitaceae*, *Hypocreales*, Sordariomycetes, six species, type: *E. mexicana* Fr., sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Hernández-Restrepo et al. (2016; DNA, new species), cultures and sequences are available.

**Epibelas** Fr. 1849, *Clavicipitaceae*, *Hypocreales*, Sordariomycetes, six species, type: *E. mexicana* Fr., sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Hernández-Restrepo et al. (2016; DNA, new species), cultures and sequences are available.

**Epibelas** Fr. 1849, *Clavicipitaceae*, *Hypocreales*, Sordariomycetes, six species, type: *E. mexicana* Fr., sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Hernández-Restrepo et al. (2016; DNA, new species), cultures and sequences are available.

**Epibelas** Fr. 1849, *Clavicipitaceae*, *Hypocreales*, Sordariomycetes, six species, type: *E. mexicana* Fr., sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Hernández-Restrepo et al. (2016; DNA, new species), cultures and sequences are available.

**Epibelas** Fr. 1849, *Clavicipitaceae*, *Hypocreales*, Sordariomycetes, six species, type: *E. mexicana* Fr., sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Hernández-Restrepo et al. (2016; DNA, new species), cultures and sequences are available.
Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

*Epidermophyton* Sabour. 1907, *Arthrodermataceae*, *Onygenales*, *Eurotiomycetes*, one species: *E. floccosum* (Harz) Langeron & Milochn., hyphomycetous, terrestrial, on human skin, one of the main etiological agents of dermatophytosis worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), neotype strain of the type: = CBS 230.76, sequences are available from de Hoog et al. (in press).

*Epigloea* Zukal 1889, *Epigloeaceae*, *Ascomycota* families *incertae sedis*. 13 species, type: *E. bactrospora* Zukal, on algae, Europe, Antarctica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Epilichen* Clem. 1909, *Rhizocarpaceae*, *Rhizocarps*, *Lecanoromycetes*, three species; type: *E. scabrosus* (Ach.) Clem., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable, type specimen UPS-ACH-L-130 (isotype).

*Epinephroma* Zhurb. 2012, *Ascomycota* genera *incertae sedis*, two species; type: *E. kamchatica* Zhurb. & Step., coelomycetous, lichenicolous, terrestrial, Russia, see Zhurbenko et al. (2012; morphology), cultures and sequences are unavailable, needs generic revision.

*Epiphloea* Trevis 1880, *Heppiaceae*, *Lecanorales*, *Lecanoromycetes*, two species; type: *E. terrena* (Nyl.) Trevis., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Yang et al. (2014; molecular, evolutionary study unpublished), cultures and sequences are unavailable.

*Episclerotium* L.M. Kohn 1984, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species; type: *E. sclerotiorum* (Rostr.) L.M. Kohn, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Episphaerella* Petr. 1924, *Pseudoperisporiaceae*, *Dothideomycetes*, families *incertae sedis*. six species, type: *E. manihotis* (Nyl.) Petr., asexual morph unknown, saprobes, terrestrial, USA, Africa, China, see Lumbsch and Huhndorf (2010; outline), Zhao and Zhao (2012; new species, China), Hyde et al. (2013; outline, accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in *Pseudoperisporiaceae*), cultures and sequences are available for *Episphaerella dodonaeae* PDD:104466 (unpublished).


*Epistigme* Syd. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *E. nidulans* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

*Epithamnomilia* Zhurb. 2012, *Ascomycota* genera *incertae sedis*, two species; type: *E. karatygini* Zhurb., asexual morph unknown, lichenicolous, terrestrial, South Africa, see Zhurbenko (2011; morphology, key), cultures and sequences are unavailable, needs generic revision.

*Epithythium* (Sacc.) Trotter 1931, *Ascomycota* genera *incertae sedis*, two species; type: *E. resinae* (Sacc. & Berl.) Trotter, coelomycetous, sexual morph unknown, saprobes, terrestrial,
South Africa, see Wijayawardene et al. (2012, 2016, 2017; outline, morphology), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are unavailable, needs generic revision.

**Eremascus** Eidam 1877, *Eremascaceae, Onygenales, Eurotiomycetes*, two species, type: *E. albus* Eidam, asexual morph absent in the type species, but hyphomycetous in *E. terrestris* Asthana & Mahmud (Asthana & Mahmud 1944), terrestrial, saprobes, usually xerophilic, occurring on substrates with low water and high carbohydrate content, such as dried fruits, honey, jams, mustard and others, also reported from soil, Argentina, Australia, India, Western Europe, see Gueidan et al. (2008; phylogeny), Pitt and Hocking (2009; morphology, food spoilage), Wynns (2015; phylogeny, proposal of a segregate genus), material of the type species is lost (Harrold 1950) and neotypification is necessary, DNA sequences of non-type strains of *E. albus* are available from Berbee and Taylor (1992), Gueidan et al. (2008) and Wynns (2015).

**Eremastrella** S. Vogel, 1955 *Psoraceae, Lecanorales, Lecanoromycetes*, two species, type: *E. tobleri* S. Vogel, asexual morph unknown, lichenized, terrestrial, see Ekman, and Blaalid, (2011; molecular sequence), Lumbsch, and Huhndorf, (2011; list), Kirk et al. (2013; genus accepted), sequences are available.


**Eremomycetes** Malloch & Cain 1971, *Eremomycetaceae, Dothideomycetes* genera *incertae sedis*, two species, type: *E. bilateralis* Malloch & Cain, asexual morph hyphomycetous, saprobes, terrestrial, North America, Netherlands, see Malloch and Sigler (1988; asexual morph, morphology), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for type, needs generic revision.

**Eremothecella** Syd. & P. Syd. 1917. *Arthoniaceae, Arthoniales, Arthoniomyctidae*, type: *E. calamicola* Syd. & P. Syd., eleven species, asexual morph unknown, lichenized, terrestrial, Australia, Netherlands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cáceres and Aptooot (2014; taxonomy), Lücking et al. (2016; classification), molecular and culture data unavailable.

**Eremothecium** Borzi emend. Kurtzman 1995, *Saccharomycetaceae, Saccharomycetales, Saccharomycetes*, six species, type: *E. cymbalariae* Borzí, asexual reproduction is by budding cells are absent or present, and when present, budding is multilateral on a narrow base, enteroarthric conidia are infrequently produced by one species, pseudohyphae and true hyphae are generally present, plant pathogens, cotton, hazel nuts, tomatoes, mustard, insects, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Erikssonia** Penz. & Sacc. 1898, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, five species, type: *E. pulchella* Penz. & Sacc., sexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.
**Erikssonopsis** M. Morelet 1971, *Helotiaceae, Helotiales, Leotiomycetes*, one species, type: *E. ericae* (Fr.) M. Morelet, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Eriocercospora** Deighton 1969, *Dothideomycetes* genera *incertae sedis*, two species, type: *E. balladynae* (Hansf.) Deighton, hyphomycetous, sexual morph unknown, saprobes, mycoparasites, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Erioderma** Fée 1825, *Pannariaceae, Peltigerales, Lecanoromycetes*, 40 species, type: *E. polycarpum* Fée, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Eriomycopsis** Speg. 1911, *Ascomycota* genera *incertae sedis*, 13 species, type: *E. bomplandi* Speg., hyphomycetous, sexual morph unknown, fungicolous, terrestrial, worldwide, see Seifert et al. (2011), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Eriocephalia** (Sacc.) Rehm 1892, *Arachnopezizaceae, Helotiales, Leotiomycetes*, 30 species, type: *E. caesia* (Pers.) Rehm, asexual morph unknown, saprobes, terrestrial, Europe, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Eriosphearia** Sacc. 1875, *Trichosphaeriaceae, Trichosphaeriales, Sordariomycetes*, six species, type: *E. vermicularia* (Nees) Sacc., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Eriosporella** Petr. 1947, *Ascomycota* genera *incertae sedis*, *Dothideomycetes*, two species, type: *E. calami* (Niessl) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Thailand, see Wijayawardene et al. (2012, 2014; outline), Kirk et al. (2013; genus accepted), Dai et al. (2014; new species, DNA, phylogeny), cultures and sequences are available for *Eriosporella bambusicola* D.Q. Dai et al. (ex-type MFLUCC 11-0436), needs generic revision.

**Eriosporopsis** Petr. 1947, *Ascomycota* genera *incertae sedis*, one species, type: *E. albida* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Eriothyrium** Speg. 1887, *Ascomycota* genera *incertae sedis*, one species, type: *E. dubiosum* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Erispora Pat. 1922, Ascomycota genera incertae sedis, one species, type: E. parasitica Pat., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, holotype is lost (fide Rossman et al. 1999).

Ernakulamia Subram. 1996, Ascomycota genera incertae sedis, one species, type: E. cochinensis (Subram.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South East Asia, see Capdet and Romero (2010; Argentina), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Erysiphe R. Hedw. ex DC. 1805 Fr. 1829 emend. Braun & Takamatsu 2000, Erysipheae, Erysiphales, Leotiomyctes, 378 species in Erysiphe and 72 species in Pseudoidium, type: E. polygoni DC., hyphomycetous asexual morphs, biotrophic, obligate plant pathogens, terrestrial, worldwide, see Braun and Cook (2012; taxonomy), Takamatsu et al. (2015a, b; phylogeny), lectotype of type: G 00122108, sequences of non-type material of the type species are available.

Erythrocarnon Zukal 1886, Ceratostomataceae, Melanosporales, Sordariomycetes, six species, type: E. microstomum Zukal, asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Erythrodeecton G. Thor 1991, Roccellales, Arthoniales, Arthomyctetes, three species; type: E. granulatum (Mont.) G. Thor, lichenized, see Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011, phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Erythrogleum Petr. 1953, Diaporthales genera incertae sedis, Sordariomycetes, two species, type: E. hymenaeae Gonz. Frag. & Cif. ex Petr., coelomycetous, sexual morph unknown, biotrophic, terrestrial, Costa Rica, South and Central America, see Crous et al. (2012; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), epitype and ex-epitype of the type: CBS H-20937, CPC 18819 = CBS 132185.


Eschatogonia Trevis. 1853, Ramalinaceae, Lecanorales, Lecanoromycetes, seven species; type: E. montagnei Trevis., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), isotype of the type: UPS-L-129880, sequences are unavailable.

Escovopsisoides H.C. Evans & J.O. Augustin 2012, Hypocreaceae, Hypocreales, Sordariomycetes, one species, type: E. nivea H.C. Evans & J.O. Augustin, asexual morph hyphomycetous, on nest of leaf-cutting ants, terrestrial, Brazil, see Augustin et al. (2012; morphology, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), holotype IMI 501181; isotype DOA627-VIC 31754, cultures and sequences are available.

Escovopsis J.J. Muchovej & Della Lucia 1990, Hypocreaceae, Hypocreales, Sordariomycetes, one species, type: E. weberi J.J. Muchovej & Della Lucia, hyphomycetous, sexual morph unknown, on nest of attine ants, terrestrial, worldwide, see Augustin et al. (2012; morphology, DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Masiulionis et al. (2015; new species), Meirelles et al. (2015; new species), cultures and sequences are available.
**Esdipatilia** Phadke 1981, *Ascomycota genera incertae sedis*, one species, type: *E. indica* Phadke, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: AMH4616, cultures and sequences are unavailable, needs generic revision.

**Esphandiariomyces** Ershad 1985, *Sordariomycetes*, genera incertae sedis, one species, type: *E. insignis* (Petr.) Ershad, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Esslingeriana** Hale & M.J. Lai 1980, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *Esslingeriana idahoensis* (Essl.) Hale & M.J. Lai, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Esteya** J.Y. Liou, J.Y. Shih & Tzean 1999, *Ascomycota* genera incertae sedis, one species, type: *E. vermicola* J.Y. Liou, J.Y. Shih & Tzean, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Taiwan, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Etayoia** Diederich & Ertz 2014, *Phaeococcomycetaceae*, *Lichenostigmatales*, *Arthoniomyces*, one species, type: *E. trypethelii* (Flaks & Kukwa) Diederich & Ertz, both sexual and asexual morphs stromatic, lichenicolous, non-lichenized, on corticolous lichens, worldwide, see Ertz et al. (2014; morphology, phylogeny), cultures and sequences are available.


**Euacanthe** Theiss. 1917, *Scortechiniaeae*, *Coronophorales*, *Sordariomycetes*, two species, type: *E. usambarensis* (Rehm) Theiss., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Mugambi and Huhndorf (2010; DNA), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for *Euacanthe foveolata* (GKM1221 fide Mugambi and and Huhndorf 2010), treated as a synonym of *Acanthonitschkea* Speg. in Species Fungorum (2016).

**Euantennaria** Speg. 1918, *Euantennariaceae*, *Dothideomycetes* families incertae sedis, six species, type: *E. tropicicola* Speg., saprobes, parasitic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Eubelonis** Höhn. 1926, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *E. albosanguinea* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Eucalyptostroma** Crous & M.J. Wingf. 2016, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *E. eucalypti* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22871, CPC 28764.

**Eucantharomyces** Thaxt. 1895, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, 26 species, type: *E. atrani* Thaxt., asexual morph unknown, parasites, saprobes, terrestrial,
 worldwide, see Rossi and Ponziani (2008; new species), Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

**Eucasphaeria** Crous 2007, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *E. capensis* Crous, asexual morph coelomycetous, saprobes, terrestrial, South Africa, see Crous et al. (2007; morphology, DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Azeem et al. (2015; DNA), Crous et al. (2016; new species, phylogeny), holotype and the ex-type strains of the type: CBS-H19764, CPC 12796 = CBS 120028.

**Euceramia** Bat. & Cif. 1962, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, one species, type: *E. palmicola* Bat. & Cif., asexual morph unknown, epiphytic, epiphyllous, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Euceratomyces** Thaxt. 1931, *Euceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *E. terrestris* Thaxt., asexual morph unknown, parasites, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species), cultures and sequences are unavailable, needs generic revision.

**Eudarluca** Spec. 1908, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, c. five species, type: *E. australis* Spec., asexual morph unknown, hyperparasitic associated with rust species (but not necessarily parasitic), terrestrial, worldwide, all species have sequence data, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phokamsak et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), isotype of the type: S-F11420, cultures and sequences are available.

**Eudimeriolum** Spec. 1912, *Pseudoperisporiaceae*, *Dothideomycetes* families incertae sedis, eight species, type: *E. elegans* Spec., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Euepixylon** Füisting 1867, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *E. udum* (Pers.) Læssøe & Spooner, asexual morph unknown, saprobes, terrestrial, Europe, Eastern Russia, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, Kirk et al. (2013) did not list as a valid genus.


**Euhaplomyces** Thaxt. 1901, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *E. ancyrophori* Thaxt., asexual morph unknown, parasites, saprobes, terrestrial, worldwide, see Rossi and Ponziani (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Eumela** Syd. 1925, *Pseudoperisporiaceae*, *Dothideomycetes*, families incertae sedis, one species, type: *E. choicoccae* Syd., asexual morph unknown, saprobes, terrestrial, Central America, all species have sequence data, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Euononomicymyces** Thaxt. 1901, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, two or three species, type: *E. californicus* Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Rossi and Ponziani (2008; new species), Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.
Euopsis Nyl. 1875, Lichinaceae, Lichinales, Lichinomycetes, two species, type: E. granatina (Sommerf.) Nyl., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available. 

Eupelte Syd. 1924 (=Mauродothina G. Arnaud ex Piroy. & Shoemaker 1970: Pirozynskia Subram. 1972.fide Rossman et al. 2016), Dothideomycetes genera incertae sedis, four species, type: E. amicta Syd., asexual morph (= sporidesmium-like, fide Sivanesan 1984), epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in Asterinaceae), Lumbsch and Huhndorf (2010; outline, accepted as a genus in Asterinaceae), Hongsanan et al. (2014; taxonomy, treated as a doubtful genus in Asterinaceae), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes, genera incertae sedis), Rossman et al. (2016; nomenclature), holotype of type: IMI 240625, cultures and sequences are unavailable, needs generic revision. 

Eupenidiella Quaedvlieg & Crous 2014, Teratosphaeriaceae, Capnodiales, Dothideomycetes, one species, type: E. venezuelensis (Crous & U. Braun) Quaedvl. & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Venezuela, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (phylogeny, nomenclature), holotype, ex-type strain of the type: CBS H-19934, CBS 106.75. 

Euphorionymyces Thaxt. 1931, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, 14 species, type: E. bilateralis Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Lee et al. (2007; taxonomic notes, Korea), Rossi and Ponziani (2008; new species), Lumbsch and Huhndorf (2010; outline), Lee and Na (2011; new species, South Korea), cultures and sequences are unavailable. 

Eupropolella Höhn. 1917, Dermateaceae, Helotiales, Leotiomyces, seven species, type: E. vaccinii (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision. 

Euryachora Fuckel 1870, Mycosphaerellaceae, Capnodiales, Dothideomycetes, five species, type: E. sedi (Link) Fuckel, asexual morph placosphaeria-like, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision. 

Eurytheca De Seynes 1878, Myriangiaceae, Myriangiales, Dothideomycetes, one species, type: E. monspeliensis De Seynes, asexual morph unknown, saprobes, terrestrial, Trinidad, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Dissanayake et al. (2014; morphology), Wijayawardene et al. (2014; outline), holotype of the type: F11411. 

Eusynaptomyces Thaxt. 1931, Ceratomycetaceae, Laboulbeniales, Laboulbeniomycetes, five species, type: E. borealis Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Rossi and Carolina Proaño Castro (2009; compare with Rhachomyces), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable. 

Euteratosphaeria Quaedvl. & Crous 2014, Teratosphaeriaceae, Capnodiales, Dothideomycetes, one species, asexual morph unknown, pathogens, terrestrial, Indonesia, have sequence data, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (phylogeny, nomenclature), holotype of the type: CBS H-19705, ex-type strain of type: CBS 118496. 

Eutiarosporella Crous 2015, Botryosphaeriaceae, Botryosphaeriales, Dothideomycetes, seven species, type: E. tritici (B. Sutton & Marasas) Crous, coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, cosmopolitan, see Crous et al. (2015; taxonomy, phylogeny), Thynne et al. (2015; new species, pathogens), Li et al. (2016; new species,
phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: PREM 60866, CMW 38423.

**Eutypa** Tul. & C. Tul. 1863, *Diatrypaceae, Xylariales, Sordariomycetes*, c. 35 epithets, type: *E. lata* (Pers.) Tul. & C. Tul., asexual morph coelomycetous, saprobes, pathogenic, terrestrial, widely distribute, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; morphology, phylogeny, new species), Dai et al. (2016; morphology, phylogeny, new species), de Almeida et al. (2016; new species), cultures and sequence are available, but lacks for type materials, need generic revision.

**Eutypella** (Nitschke) Sacc. 1875, *Diatrypaceae, Xylariales, Sordariomycetes*, two species, type: *E. cerviculata* (Fr.) Sacc., asexual morph unknown, saproples, pathology, terrestrial, worldwide, see Carmañán et al. (2009; Argentina), Lumbsch and Huhndorf (2010; outline), Trouillas et al. (2010, 2011; new species, Australia), Fournier and Lechat (2011; new species), Isaka et al. (2011; endophytes, active compounds), Chacón et al. (2013; Panama, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Almeida et al. (2016; new species, Brazil), Jurc et al. (2016; pathogens), cultures and sequences are available.

**Euzodiomyces** Thaxt. 1900, *Euceratomyctaceae, Laboulbeniales, Laboulbeniomycetes*, two species, type: *E. lathrobi* Thaxt., asexual morph unknown, parasites, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Evaniomus** Caball. 1941, *Ascomycota* genera incertae sedis, one species, type: *E. valentinus* Caball., coelomycetous, sexual morph unknown, saprobes, terrestrial, Spain, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Evaniomus** (Ach.) Nyl. 1860, *Parmeliaceae, Lecanorales, Lecanoromycetes*, ten species, type: *E. prunastri* (L.) Ach., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Eversnia** Ach. 1809, *Parmeliaceae, Lecanorales, Lecanoromycetes*, one species, type: *E. trull*a (Ach.) Nyl., lichenized, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Eversnia** J.L. Crane & Schokn. 1977, *Ascomycota* genera incertae sedis, one species, type: *E. subopaca* (Cooke & Ellis) J.L. Crane & Schokn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Evlachovaea** B.A. Borisov & Tarasov 1999, *Ascomycota* genera incertae sedis, one species, type: *E. kintrischica* B.A. Borisov & Tarasov, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Russia, see Rocha and Luz (2009; fungicides), Wijayawardene et al. (2012, 2017; outline), Humber et al. (2013; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Exarmidium** P. Karst. 1873, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, nine species, type: *E. hysteriforme* P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Excipularia** Sacc. 1884, *Ascomycota* genera *incertae sedis*, two species, type: *E. fusiispora* (Berk. & Broome) Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Russia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Exiliseptum** R.C. Harris 1986, *Dothideomycetes*, genera *incertae sedis*, two species, type: *E. ocellatum* (Müll. Arg.) R.C. Harris, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Trypetheliaceae*), Hyde et al. (2013; excluded from *Trypetheliaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), cultures and sequences are unavailable, needs generic revision.

**Exochalara** W. Gams & Hol.-Jech. 1976, *Leotiomyces* genera *incertae sedis*, two species, type: *E. longissima* (Grove) W. Gams & Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, Europe, see Réblová et al. (2011; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available: (CBS 393.82 and CBS 980.73 *fide* Réblová et al. 2011).

**Exophiala** J.W. Carmich. 1966, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, polyphyletic, (the core of the genus belongs in *Herpotrichiellaceae*, but some species are related to other families of *Chaetothyriales*, such as *Chaetothyriaceae* and *Trichomeriaceae*), c. 41 species, type: *E. salmonis* J.W. Carmich., predominantly terrestrial, although some species occur in freshwater or sea environments, mostly saprobes associated with soil and plant material, but also occurring as endophytes or as opportunistic pathogens in a wide spectrum of animal hosts, including humans, certain species are common in harsh habitats such as rock surfaces or areas contaminated with aromatic hydrocarbons, cosmopolitan, see Zeng and de Hoog (2008; diagnostics of selected species), Crous et al. (2007a, 2007b, 2011; new species), Gueidan et al. (2008, 2014; phylogeny), Seyedmousavi et al. (2013; pathogenicity to various animals), Zupančič et al. (2016; species in indoor enviroments), Isola et al. (2013, 2016; species associated with polluted habitats and rock surfaces), Maciá-Vicente et al. (2016; new endophytic species), Madrid et al. (2016; phylogeny, some species from soil and river sediments). ex-type strain of the type species = CBS 157.67, sequences are available at GenBank from Untereiner & Naveau (1999) and de Hoog et al. (2011).

**Exophoma** Weedon 1926, *Ascomycota* genera *incertae sedis*, one species, type: *E. magnoliae* Weedon, coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Sutton (1977; nomenclature), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Exosporella** Höhn. 1912, *Ascomycota* genera *incertae sedis*, one species, type: *E. symploci* Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Java, see Seifert et al.
Exosporiella P. Karst. 1892 (= Anomalemma sivan. 1983 fide Wijayawardene et al. 2014; Rossman et al. 2015), Melanommataceae, Pleosporales, Dothideomycetes, one species, type: E. fungorum (Fr.) P. Karst., sexual morph Anomalemma Sivan., saprobes or fungicolous, terrestrial, commonly occur on Corticium species in Europe, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012; 2014; 2016; outline, nomenclature), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), Tian et al. (2015; morphology; nomenclature, phylogeny), cultures and sequences are unavailable for both sexual and asexual morphs, needs generic revision.

Exosporium Link 1809, Ascomycota genera incertae sedis, one species, type: E. tiliae Link, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Java, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are unavailable, needs generic revision.

Exosporidiella Ganie, Azam & A.H. Wani 2012, Ascomycota genera incertae sedis, one species, type: Exosporidiella phoenicis Ganie, Azam & A.H. Wani, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Ganie et al. (2012; morphology), holotype of the type: HClO 50058, cultures and sequences are unavailable, needs generic revision.

Extrawettsteinina M.E. Barr, Pleosporaceae, Pleosporales, Dothideomycetes, four species, type: E. minuta M.E. Barr, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in Pleosporaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; morphology, taxonomy), cultures or cultures and sequences are unavailable.

Extremus Quaedvl. & Crous 2014, Teratosphaeriaceae, Capnodiales, Dothideomycetes, hyphomycetous, two species, sexual morph unknown, rock-inhabiting, terrestrial, Antarctica, Spain, have sequence data, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), holotype of the type: CBS 118292, ex-type strain of type: CBS 118292.

Fabrella Kirschst. 1941, Hemiphacidiaceae, Helotiales, Leotiomycetes, one species, type: F. tsugae (Farl.) Kirschst., asexual morph unknown, saprobes, pathogens, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Fairmaniella Petr. & Syd. 1927, Ascomycota genera incertae sedis, one species, type: F. leprosa (Fairm.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2016; outline, morphology, taxonomic notes), Kirk et al. (2013; genus accepted), holotype of the type: IMI 57994, cultures and sequences are unavailable, needs generic revision.

Falcliformispora K.D. Hyde 1992, Trematosphaeriaceae, Pleosporales, Dothideomycetes, three species, type: F. lignatilis K.D. Hyde, asexual morph unknown, saprobes on mangrove wood or pathogenic on human, Mexico, Senegal, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in Trematosphaeriaceae), Kirk et al. (2013; genus accepted), Ahmed et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), holotype of type species BRIP 16972, cultures and sequences are available.

Falcocladium S.F. Silveira, Alfenas, Crous & M.J. Wingf. 1994, Falcocladiales, Sordariomycetes, four species, type: F. multivesiculatum S.F. Silveira, Alfenas, Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Cruz and Gusmão (2009; diversity), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Jones et al.
(2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: PREM 51541, cultures and sequences are available.

**Fanniomycetes** T. Majewski 1972, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *F. ceratophorus* (Whisler) T. Majewski, asexual morph unknown, parasites, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Farasanispora** Abdel-Wahab, Bahkali & E.B.G. Jones 2016, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *F. avicenniae* Abdel-Wahab, Bahkali & E.B.G. Jones, asexual morph unknown, saprobes, terrestrial, pantropical, see Li et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22559, MF 1207.

**Farriella** Norman 1884, *Ascomycota* genera *incertae sedis*, one species, type: *F. distans* Norman, asexual morph unknown, saprobes, terrestrial, Norway, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Farrowia** D. Hawksw. 1975, *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, four species, type: *F. longicollis* (Krzemien. & Badura) D. Hawksw., asexual morph botryotrichum-like, on cellulosic substrata, Europe, Asia and North America, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, lectotype of type: BPI-A 1212.


**Fassia** Dennis 1964, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, eight species, type: *F. scabrosa* Dennis, asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.


**Favostrama** B. Sutton & E.M. Davison 1983, *Ascomycota* genera *incertae sedis*, one species, type: *F. crypticum* B. Sutton & E.M. Davison, coelomycetous, sexual morph unknown,
saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 266341, cultures and sequences are unavailable, genus need revision.

**Feigeana** Mies, Lumbsch & Tehler 1995, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *F. socotrana* Mies, Lumbsch & Tehler, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

**Felipes** Frisch & G.Thor 2014, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *F. leucopellaes* (Ach.) Frisch & G. Thor, lichenized, see Frisch et al. (2014a; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Felisberia** Viégas 1944, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, seven species, type: *F. melastomacearum* (Speg.) Viégas, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Fellhanera** Vězda 1986, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, 97 species, type: *F. fuscatula* (Müll. Arg.) Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Fellhaneropsis** Sérs. & Coppins 1996, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, seven species, type: *F. myrtillicola* (Erichsen) Sérs. & Coppins, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Feltgeniomycetes** Dieder. 1990, *Ascomycota* genera *incertae sedis*, five species, type: *F. luxemburgensis*, hyphomycetous, lichenicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: Diederich 8477 (LG: holotype; IMI 335016, UPS, herb. Diederich: isotypes), cultures and sequences are unavailable, needs generic revision.

**Fenestella** Tul. & C. Tul. 1863, *Fenestellaceae*, *Dothideomycetes* families *incertae sedis*, c. two species, type: *F. princeps* Tul. & C. Tul., asexual morph unknown, saprobes or biotrophic or hemibiotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Fenestellaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Phookamsak and Hyde (2015; taxonomy), cultures and sequences are unavailable.

**Fenestroconidia** Calatayud & Etayo 1999, *Ascomycota* genera *incertae sedis*, one species, type: *F. caloplacae* Calat. & Etayo, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: VAB (lich.) 15301, cultures and sequences are unavailable, needs generic revision.

**Ferrarisia** Sacc. 1919, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, ten species, type: *F. philippina* Sacc., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Parmulariaceae), Wijayawardene et al. (2014; outline), placement in Parmulariaceae is supported by morphology, cultures and sequences are unavailable.

**Ferrara** Lücking, Sérs. & Vězda 2005, *Gomphillaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *F. hyalina* (Lücking) Lücking, Sérs. & Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Fibrillithecis** Frisch 2006, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, 16 species, type: *F. vernicosa* (Zahlbr.) Frisch, asexual morph unknown, lichenized fungi, terrestrial, tropical, placement in Graphidaceae supported by molecular data, see Rivas Plata et al. (2010a; key), Rivas Plata et al. (2012a; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.
**Filiariomyces** Shanor 1952, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, two species, type: *F. forficulae* Shanor, asexual morph unknown, parasites, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Filocupula** Y.J. Yao & Spooner 1996, *Pezizales* genera incertae sedis, two species, type: *F. subperculata* (Döbbeler & P. James) Y.J. Yao & Spooner, asexual morph unknown, parasites, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Filiiella** Videira & Crous 2016, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, one species, type: *F. pastinacea* (P. Karst.) Videira & Crous, hyphomycetous, sexual morph unknown, plant pathogenic, see Videira et al. (2016; morphology, phylogeny), cultures and sequences are available.

**Filospora** Nawawi 1976, *Helotiaceae, Helotiales, Leotiomyces*, six species, type: *F. aquatica* Nawawi, hyphomycetous, sexual morph unknown, saprobic, terrestrial, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Baschien et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.


**Filmetariella** N. Lundq. 1964, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, one species, type: *F. rabenhorstii* (Niessl) N. Lundq., asexual morph unknown, saprobic, terrestrial, Europe, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Finkia** Vain. 1929, *Lichinaceae, Lichinales, Lichinomycetes*, one species, type: *F. portoricensis* Vain., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

**Fischerula** Mattir. 1928, *Morchellaceae, Pezizales, Pezizomycetes*, two species, type: *F. macrospora* Mattir., asexual morph unknown, ectomycorrhizal, saprobic, terrestrial, Italy, USA, see Lumbsch and Huhndorf (2010; outline, accepted as *Morchellaceae*), Trappe et al. (2010; DNA, phylogeny), Alvarado et al. (2011; DNA, phylogeny, accepted as a genus in *Helvellaceae*), Healy et al. (2013; DNA, phylogeny, ectomycorrhizal), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; accepted as a genus in *Morchellaceae*), cultures and sequences are available.

**Fissuricella** Pore, D'Amatao & Ajello 1977, *Trichosporonaceae, Tremellales, Tremellomycetes*, one species, type: *F. filamenta*, non-filamentous (yeast forming), arthroconidial present, sexual morph unknown, often associated with superficial trichosporonosis, but few cases of disseminated trichosporonosis were reported, human body and bovine mastitis, considered rare, worldwide, ITS sequence data available for ex-type strains, (note 2) the type: is considered a synonym of *Trichosporon asteroides* (see Guého et al. 1994), (note 4) clinical Trichosporon species were reviewed by Taj-Aldeen et al. (2009), Kirk et al. 2013 (genus accepted), ex-type strain of basionym (*Prototheca filamenta*) of type: CBS 7623 = ATCC 22432 = JCM 9196 = 45-681-69; Ex-type strains of synonym (*Parenomycyes asteroides*) of type: CBS 2481 = IFM 48559 = IGC 3471 = JCM 2937 = UAMH 7656 = PYCC 3471.

**Fissurina** Fée 1824, *Graphidaceae, Ostropales, Lecanoromycetes*, over 150 species, type: *F. dumastii* Fée, asexual morph unknown, lichenized, terrestrial, mostly tropical, see Archer...

Fitzpatrickella  Benny, Samuelson & Kimbr. 1985, Coryneliaceae, Coryneliales, Eurotiomycetes, one species: F. operculata Benny, Samuelson & Kimbr., asexual morph coelomycetous, saprobes, Germany, see Crous et al. (2015; classification), sequences are available.

Flabellocladia  Nawawi 1985, Ascomycota genera incertae sedis, four species, type: F. gigantea, hyphomycetous, from foam, aquatic, worldwide, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Fiuza and Gusmão (2013; morphology), Kirk et al. (2013; genus accepted), Holotype and ex: Schumach., asexual morph coelomycetous, saprobes, Germany, see Crous et al. (2015; morphology, DNA, phylogeny), Hyde et al. (2013; accepted as agenus in Aigialaceae), Wijayawardene et al. (2014; outline), holotype and ex-type of the type: MFLU 11-1143, MFLUCC 10-0886.

Flabellospora  Alas. 1968, Ascomycota genera incertae sedis, six species, type: F. crassa, hyphomycetous, on submerged plant material, aquatic, worldwide, see Patil et al. (2010; morphology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Flagellospora  Aptroot 1995, Amphisphaeriaceae, Xylariales, Sordariomycetes, one species, type: F. polytrichospora (Lucas & Sousa de Câmara) Aptroot, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), type: Flambinidium unguis, Neotropical, aquatic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype and ex-type of the type: MFLUCC 10-0886, MFLU 10-1143, type culture of the type: MFLUCC 10-0551.

Flagellosphaeria  Aptroot 1995, Xylariaceae, Verrucariales, Sordariomycetes, one species, type: F. papillata O.E. Erikss., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2016; classification), sequences are available.


**Flavocetraria** Kärnefelt & A. Thell 1994, *Parmeliaceae, Lecanorales, Lecanoromycetes*, three species, type: *F. cucullata* (Bellardi) Kärnefelt & A. Thell, asexual morph, unknown, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Flavoparmelia** Hale 1986, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 40 species, type: *F. caperata* (L.) Hale, asexual morph unknown, lichenized, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Flavoplaca** Arup, Sochting & Frödén 2013, *Teloschistaceae, Teloschistales, Lecanoromycetes*, 27 species, type: *F. citrina* (Hoffm.) Arup, Frödén & Sochting, asexual morph unknown, lichenized, terrestrial, widely distributed, see Arup et al. (2013; taxonomy), Helici et al. (2014; taxonomy, molecular), Helici (2015; new records), Vondrak and Malicek (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Flavopunctelia** (Krog) Hale 1984, seven species, *Parmeliaceae, Lecanorales, Lecanoromycetes*, type: *F. flaventior* (Stirt.) Hale, asexual morph unknown, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; phylogeny, molecular), Divakar et al. (2015; evolutionary study of family), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Flavographa** A.Massal. 1860, *Graphidaceae, Ostropales, Lecanoromycetes*, one species, type: *F. leprieurii* (Mont.) A. Massal., lichenized, see Rivas Plata et al. (2013; taxonomy, reinstated the genus), Lücking et al. (2016; classification), sequences are available.

**Flavosclulomyces** B. Sutton 1978, *Ascomycota* genera *incertae sedis*, two species, type: *F. floridensis* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, Ivory Coast, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: IMI 215981c, cultures and sequences are unavailable, genus need revision.

**Fluctua** Marbach 2000, *Caliciaceae, Caliciales, Lecanoromycetes*, one species, type: *F. megapotamica* (Malme) Marbach, lichenized, see Lücking et al. (2016; classification), sequences are unavailable.


**Fluviostroma** Samuels & E. Müll. 1980, *Trichosphaeraceae, Trichosphaeriales, Sordariomycetes*, one species, type: *F. wrightii* Samuels & E. Müll., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline). Kirk et
al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fodinomyces** Vázquez-Campos & Neilan 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *F. uranophilus* X. Vázquez-Campos, hyphomycetous, sexual morph unknown, from soil, terrestrial, Australia, see Vázquez-Campos et al. (2014; morphology, DNA, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS 136962.

**Foliocryphia** Cheew. & Crous 2009, *Cryphonectriaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *F. eucalypti* Cheew. & Crous, coelomycetous, sexual morph unknown, pathogens, terrestrial, Australia, see Cheewangkoon et al. (2009; morphology, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type cultures of type: CBS H-20299, ex-type CPC 12494 = CBS 124779.

**Follmannia** C.W. Dodge 1967, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *F. rufa* C.W. Dodge, lichenized, see Arup et al. (2013; reinstated the genus), Lücking et al. (2016; classification), sequences are available.

**Follmanniella** Peine & B. Werner 1995, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *F. scutellata* Peine & B. Werner, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

**Fonsecaea** Negroni 1936, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, eight species, type: *F. pedrosoi* (Brumpt) Negroni, hyphomycetous, mostly terrestrial, in soil and on plant material, but also reported from aquatic environments, most species are pathogenic to animals, ranging from crustaceans to humans, America, Asia, Europe and Africa, see Vicente et al. (2008, 2012; environmental reservoirs, new species), Najafzadeh et al. (2010, 2011a, 2011b; phylogeny, new species, molecular epidemiology), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Seyedmousavi et al. (2013; pathogenicity to animals), de Azevedo et al. (2015; new species), ex-neotype strain of the type: = CBS 271.37, sequences are available at GenBank from de Hoog et al. (2004).

**Fontanospora** Dyko 1978, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *F. eccentrica* (R.H. Petersen) Dyko, hyphomycetous, sexual morph unknown, saprobes, aquatic, USA, see Baschien et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available.


**Fouragea** Trevis. 1880, *Opegraphaceae*, *Arthoniales*, *Arthoniomycetes*, three species, type: *F. filicina* (Mont.) Trevis., lichenized, see Frisch et al. (2014a; reinstated), Lücking et al. (2016; classification), sequences are available.

**Foveostroma** DiCosmo 1978, *Ascomycota* genera *incertae sedis*, six species, type: *F. drupacearum* (Lév.) DiCosmo, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Frachiaea** Sacc. 1873, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, three species, type: *F. heterogenea* Sacc., asexual morph unknown, lichenicolous, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Mugambi and Huhndorf (2010; DNA), Vasilyeva et al. (2010; new species), Maharachchikumbura et al. (2015, 2016; outline),
cultures and sequences are available for *Fracchiaea broomeana* (SMH347 *fide* Mugambi and Huhndorf 2010).

**Fragosphaeria** Shear 1923, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, four species, type: *F. purpurea* Shear, asexual morph hyphomycetous, from soil, pathogens (human), worldwide, see Yaguchi et al. (2006; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Maharachchikumbura et al. (2015, 2016; outline), cultures available for type: CBS 133.34 *fide* Yaguchi et al. (2006).

**Fragosphaeria** Shear 1923, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, four species, type: *F. purpurea* Shear, asexual morph hyphomycetous, from soil, pathogens (human), worldwide, see Yaguchi et al. (2006; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Maharachchikumbura et al. (2015, 2016; outline), cultures available for type: CBS 133.34 *fide* Yaguchi et al. (2006).

**Fragosphaeria** Shear 1923, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, four species, type: *F. purpurea* Shear, asexual morph hyphomycetous, from soil, pathogens (human), worldwide, see Yaguchi et al. (2006; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Maharachchikumbura et al. (2015, 2016; outline), cultures available for type: CBS 133.34 *fide* Yaguchi et al. (2006).

**Fragosphaeria** Shear 1923, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, four species, type: *F. purpurea* Shear, asexual morph hyphomycetous, from soil, pathogens (human), worldwide, see Yaguchi et al. (2006; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Maharachchikumbura et al. (2015, 2016; outline), cultures available for type: CBS 133.34 *fide* Yaguchi et al. (2006).


**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Fremineavia** Nieuwl. 1916, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *Fremineavia berkeleyi* (Berl.) Nieuwl., asexual morph unknown, saprobes, North America, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.
**Frutidella** Kalb 1994, *Ramalinaceae, Lecanorales, Lecanoromycetes*, two species, type: *F. caesioatra* (Schaer.) Kalb, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Fujimyces** Minter & Caine 1980, *Ascomycota* genera *incertae sedis*, two species, type: *F. oödes* (Bayl. Ell.) Minter & Caine, coelomycetous, sexual morph unknown, saprobes, terrestrial, British Isles, see Bendiksby & Timdal et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI35344, cultures and sequences are unavailable, needs generic revision.

**Fulgidea** Bendiksby & Timdal 2013, *Umbilicariaceae, Umbilicariales, Lecanoromycetes*, two species, type: *F. oligospora* (Timdal) Bendiksby & Timdal, lichenized, see Bendiksby and Timdal (2013; taxonomy), Lücking et al. (2016; classification), sequences are available. holotype of type species: O-L-767.

**Fulgigomyces** Morgan-Jones & Kamal 1984, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, two species, type: *F. macrosporus*, asexual morph hyphomycetous, saprobes (symptoms on leaves similar to sooty mould), terrestrial, India, (Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: AUA, IMI 248960, GPU (KA 69), cultures and sequences are unavailable, needs generic revision.

**Fulvia** Cif. 1954, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, one species, type: *F. fulva* (Cooke) Cif., hyphomycetous, sexual morph unknown, on *Lycopersicon esculentum*, plant pathogenic, see Videira et al. (2016; morphology, phylogeny), holotype BPI 426698, for epitypification see Videira et al. (2017).


**Fulvoflamma** Crous 2006, *Helotiales* genera *incertae sedis*, *Leotiomyces*, *Leotiomyces*, one species, type: *F. eucalypti* Crous, coelomycetous, sexual morph unknown, saprobes, endophytes, terrestrial, Spain, see Crous et al. (2006; DNA, morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type strains of the type: CBS H-18045, 1243 = CBS 118549.

**Fulvophyton** Ertz & Tehler 2011, *Roccellaraphaceae, Arthoniales, Arthoniomycetes*, nine species, type: *F. stalactinum* (Nyl.) Ertz & Tehler, sexual morph with punctiform or shortly lirellate ascomata, lichenized, terrestrial, tropical, see Ertz and Tehler (2011; morphology, phylogeny), Tehler et al. (2013, one new combination), Lücking et al. (2016; classification), sequences are available.

**Fumagopsis** Speg. 1911, *Ascomycota* genera *incertae sedis*, two species, type: *F. triglifioides*, hyphomycetous, sexual morph unknown, saprobes or plant pathogenic on plant leaves, terrestrial, known from Argentina and India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: in LPS, cultures and sequences are unavailable, needs generic revision.

**Fumiglobus** D.R. Reynolds & G.S. Gilbert 2006, *Capnodiales, Capnodiales, Dothideomycetes*, 15 species, type: *F. ficinus* (Bat., Nascim. & Cif.) D.R. Reynolds & G.S. Gilbert, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2014; outline), Bose et al. (2014; DNA, new species), cultures and sequences are available, needs generic revision.

**Funbolia** Crous & Seifert 2011, *Dothideomycetes* genera *incertae sedis*, one species, type: *F. dimorpha* Crous & Seifert, hyphomycetous, sexual morph unknown, saprobes, terrestrial,
USA, see Crous et al. (2011; morphology, DNA), Wijayawardene et al. (2012, 2014; outline), holotype and ex-type strains of the type: CBS H-20577, CPC 14170.

**Funiliomyces** Aptroot 2004, *Amphiliaeaceae, Xylariales*, Sordariomycetes, one species, type: *F. bisepatus* Aptroot, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. et al. (2013, 2016; outline), Kirk et al. (2013; genus accepted), sequences are available for the type: AY772015 (LSU) (fide Aptroot 2004).

**Furcaspora** Bonar 1965, *Ascomycota* genera incertae sedis, two species, type: *F. pinicola* Bonar, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, Australia, see Crous et al. (2007; new species, DNA, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI35344, ex-type cultures and sequences are available for *Furcaspora eucalypti* Crous & Verkley (CPC 12556 = CBS 119111 fide Crous et al. 2007), needs generic revision.

**Fusamen** (Sacc.) P. Karst. 1890, *Ascomycota* genera incertae sedis, two species, type: *F. fungicola* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Fusariella** Sacc. 1884, *Ascomycota* genera incertae sedis, 19 species, type: *F. atrovirens*, asexual morph hyphomycetous, on plants, leaf litter, dung and in soil, terrestrial, worldwide, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished), needs generic revision.

**Fusarium** Link 1809 (= *Gibberella* Sacc. 1877 fide Maharachchikumbura et al. 2016; see Lombard et al. 2015 for all synonyms), *Nectriaceae, Hypocreales, Sordariomycetes*, c. 120 species, type: *F. sambucinum* Fuckel, hyphomycetous, sexual morph *Gibberella*, terrestrial, pathogens, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Lombard et al. (2015; phylogeny, taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Fuscidea** V.Wirth & Vězda 1972, *Fuscideaeaeae, Umbilicariales, Lecanoromycetes*, 35 species, type: *F. aggregata* (Flot.) V. Wirth & Vězda, lichenized, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; taxonomy), Kirk et al. (2013; genus accepted), Międlińska et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Fuscoderma** (D.J. Galloway & P.M. Jørg.) P.M. Jørg. & D.J. Galloway 1989, *Pannariaceae, Peltigerales, Lecanoromycetes*, five species, type: *F. applanatum* (D.J. Galloway & P.M. Jørg.) P.M. Jørg. & D.J. Galloway, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Fuscolachnum** J.H. Haines 1989, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, seven species, type: *F. pteridis* (Alb. & Schwein.) J.H. Haines, asexual morph unknown, saprobes, epiphytes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Fuscopannaria** P.M. Jørg. [nom. cons. prop.] 1994, *Pannariaceae, Peltigerales, Lecanoromycetes*, 58 species, type: *F. leucosticta* (Tuck.) P.M. Jørg., lichenized, see Ekman et al. (2014; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Fuscophialis** B. Sutton 1977, *Ascomycota* genera incertae sedis, four species, type: *F. brasiliensis* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil,
Cuba, Mauritius, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type; cultures and sequences are unavailable, genus need revision.

**Fuscoscypha** Svreck 1987, *Hyaloscyphaceae, Helotiaceae, Leotiomyces*, one species, type: *F. acicularum* (Velen.) Svřekč, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Fusichalara** S. Hughes & Nag Raj 1973, *Ascomycota genera incertae sedis*, two species, type: *F. dimorphospora* S. Hughes & Nag Raj, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012; outline), treated as a genus in *Chaetosphaeriaceae*, Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; excluded from *Chaetosphaeriaceae* and placed in *Ascomycota genera incertae sedis*), cultures and sequences are unavailable, needs generic revision.

**Fusicladiella** Höhn. 1919, *Ascomycota genera incertae sedis*, five species, type: *F. aronici* (Sacc.) Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology) and Wijayawardene et al. (2012; treated as *Mycosphaerellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Fusicladium** Bonord. 1851, *Sympoventuriaceae, Venturiales, Dothideomycetes*, c. 75 species, type: *P. virescens* Bonord., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Braun (2009; new species), Seifert et al. (2011; morphology), Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), cultures are available.

**Fusicolla** Bonord. 1851, *Nectriaceae, Hypocreales, Sordariomycetes*, eight species, type: *F. betae* Bonord., hyphomycetous, holomorph, diverse substrates and hosts, terrestrial and aquatic, worldwide, see Gräfenhan et al. (2011; DNA, phylogeny) Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species, phylogeny), cultures and sequences are available.


**Fusticeps** Webster & R.A. Davey 1980, *Ascomycota genera incertae sedis*, five species, type: *F. bullatus* Webster & R.A. Davey, hyphomycetous, sexual morph unknown, on plant litter in water, aquatic, Tropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Chuaseeharonnachai et al. (2014; key), holotype of type: IMI 245198, cultures and sequences are unavailable, needs generic revision.

**Gaemanniella** Petr. 1952, *Ascomycota genera incertae sedis*, one species, type: *G. singularis* Petr., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Gaeumannomyces Arx & D.L. Olivier 1952, Magnaporthaceae, Magnaporthales, Sordariomycetes, c. 13 species, type: G. graminis (Sacc.) Arx & D.L. Olivier, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Luo et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Gaillardiella Pat. 1895, Bertiaceae, Coronophorales, Sordariomycetes, one species, type: Gaillardiella pezizoides Pat., asexual morph unknown, saprobes, terrestrial, South America, see Mugambi and Huhndorf (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline, phylogeny), cultures available for the type: GKM1245 (fide Mugambi and Huhndorf 2010).

Galactomyces Redhead & Malloch 1977, ?Dipodascaceae, Saccharomycetales, Saccharomycetes, five species, type: G. geotrichum (E.E. Butler & L.J. Petersen) Redhead & Malloch, asexual reproduction is present, saprophytic, soil, rotted fruit and other plant parts, tree exudates, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Galeoscypha Srček & J. Moravec 1989, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: G. pileiformis (Srček) Srček & J. Moravec, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Galiella Nannf. & Korf 1957, Pezizales, Pezizomycetes, eight species, type: G. rufa (Schwein.) Nannf. & Korf, asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Galicola Tibpromma, Camporesi & K.D. Hyde 2015, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, one species, type: Galicola pseudophaeosphaeria Tibpromma, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Ariyawansa et al. (2015; taxonomy, phylogeny), cultures available for type: MFLUCC 14-0524.

Gampsonema Nag Raj 1975, Ascomycota genera incertae sedis, one species, type: G. exile (Tassi) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gamsia M. Morelet 1969, Microascales, Microascales, Sordariomycetes, three species, type: G. dimera (W. Gams) M. Morelet, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Sandoval-Denis et al. (2016; DNA, phylogeny), cultures and sequences are available for G. simplex (CBS 546.69 fide Sandoval-Denis et al. 2016) and G. aggregata (CBS 251.69 fide Sandoval-Denis et al. 2016), needs generic revision.

Gamsylella M. Scholler, Hagedorn & A. Rubner 1999, Orbiliaceae, Orbiliales, Orbiliomycetes, type: G. arcuata (Schuer & J. Webster) M. Scholler, Hagedorn & A. Rubner, cf. six species, hyphomycetous, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Gangiophora Subram. 1992, Ascomycota genera incertae sedis, one species, type: G. casuarinae (Matsush.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Taiwan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gangliostilbe Subram. & Vittal 1976, Ascomycota genera incertae sedis, one species, type: G. indica Subram. & Vittal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017;
Garnaudia  

Borowska 1977, Ascomycota genera incertae sedis, three species, type: G. elegans  

Borowska, hypymycetous, synanamorph selenosposrella-like, on wood, bark and dead leaves, terrestrial, Cuba, Poland, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: WA 20592, cultures and sequences are unavailable, needs generic revision.

Gassicurtia  

Feé 1825, Caliciaceae, Caliciinales, Lecanoromycetes, 27 species, type: G. coccinea  

Feé, lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; taxonomy), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

Gaubaea  

Petr. 1942, Ascomycota genera incertae sedis, two species, type: G. insignis  

Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, central Asia, see Wijayawardene et al. (2012, 2016, 2017; outline, morphology), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Geastrumia  

Bat. 1960, Ascomycota genera incertae sedis, one species, type: G. polystigmaticus  

Bat. & M.L. Farr, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Geisleria  

Nitschke 1861, Stictidaceae, Ostropales, Lecanoromycetes, one species, type: G. sychnogonoides  

Nitschke, lichenized, see Aptroot et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

Gelasinospora  

Dowding 1933, Sordariaceae, Sordariales, Sordariomycetes, one species, type: G. tetrasperma  

Dowding, asexual morph unknown, saprobes, terrestrial, Ivory Coast, see Lumbsch and Huhndorf (2010; outline), Nygren et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available for type: ATCC 11345 (fide Hausner et al. 1993).

Gelatinipulvinella  


Hosoya & Y. Otani, asexual morph hypymycetous, saprobe, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), holotype of the type: TNS-F-52070.

Gelatinocrinis  

Matsush. 1995, Ascomycota genera incertae sedis, one species, type: G. roseus  

Matsush., hypymycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gelatinodiscus  

Kanouse & A.H. Sm. 1940, Helotiaceae, Helotiales, Leotiomycetes, two species, type: G. flavidus  

Kanouse & A.H. Sm., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gelatinomyces  

N. Sanoamuang, W. Jitjak, S. Rodtong & A.J.S. Whalley 2013, Leotiomycetes genera incertae sedis, one species, type: G. siamensis  

N. Sanoamuang, W. Jitjak, S. Rodtong & A.J.S. Whalley, asexual morph hypymycetous, saprobes, terrestrial, Thailand, see Sanoamuang et al. (2013; morphology, DNA, phylogeny), holotype and ex-type cultures of the type: K(M) 188078, CBS 135071, close to Leotiomycetes in phylogenetic analyses.

Gelatinopsis  

Rambold & Triebel 1990, Helotiaceae, Helotiales, Leotiomycetes, cf. eight species, type: G. geoglossi  

Ellis & Everh., Rambold & Triebel, asexual morph unknown, saprobes, lichenicolous, terrestrial, worldwide, see Navarro-Rosinés et al. (2008; new species), Kocourková and Knudsen (2009; new species), Lumbsch and Huhndorf (2010;
Gelatinopycnis Dyko & B. Sutton 1979, Ascomycota genera incertae sedis, one species, type: G. hartigiana (Allesch.) Dyko & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gelatinosporium Peck 1873, Ascomycota genera incertae sedis, one species, type: G. betulinum Peck, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gelineostroma H.J. Swart 1988, Rhytismatales genera incertae sedis, Leotiomyces, one species, type: Gelineostroma athrotaxis H.J. Swart, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gelingia Alstrup & D. Hawksw. 1990, Helicogoniaceae, Phacidiales, Leotiomyces, one species, type: G. associata (Th.Fr.) Alstrup & D. Hawksw., asexual morph unknown, on lichens, terrestrial, Arctic, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Odontotremales). Kirk et al. (2013; genus accepted), Suija et al. (2014; phylogeny), Jaklitsch et al.(2016; position), holotype of type: UPS, cultures and sequences are unavailable, needs generic revision.

Geminispora Pat. 1893, Pyllachoraceae, Phyllachorales, Sordariomycetes, two species, type: G. mimosae Pat., sexual morph unknown, saprobes, terrestrial, East Africa, Seychelles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Gemoarcus K. Ando 1993, Ascomycota genera incertae sedis, three species, type: G. pachysporus K. Ando, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gemmiaspora D. Hawksw. & Halici 2007, Verrucariaceae, Verrucariales, Eurotiomycetes, one species, type: G. lecanorae (Werner) D. Hawksw. & Halici, coelomycetous, Syria, Turkey and Uzbekistan, see Lumbsch and Huhndorf (2010; outline), Jaksch et al. (2016; position), holotype of type: BC and epitype ERC- MGH 02274, cultures and sequences are unavailable, needs generic revision.

Gemmina Raitv. 2004, Hyaloscyphaceae, Helotiales, Leotiomyces, one species, type: G. gemmarum (Boud.) Raitv., asexual morph unknown, saprobes, epiphytes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gemmulina Descals & Marvanová 1999, Ascomycota genera incertae sedis, one species, type: G. botryosa (Descals) Descals & Marvanová, asexual morph hyphomycetous, has a yeast-like phase, from foam in streams, aquatic, Canada and United Kingdom, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type: IMI 254853, cultures and sequences are unavailable, needs generic revision.

Genea Vittad. 1831, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: G. pileiformis (Svrček) Svrček & J. Moravec, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Alvarado et al. (2014, 2016; new species, phylogeny), Kaounas et al. (2016; new species), cultures and sequences are available.

Nilsson, sexual morph unknown, saprobes, aquatic, worldwide, see Wijayarawardene et al. (2012, 2017; outline), Duarte et al. (2012; DNA), Kirk et al. (2013; did not accept as a valid genus), cultures and sequences are available, needs generic revision.

**Geocoryne** Korf 1978, *Leotiaceae, Helotiaceae, Leotiomyces*, two species, type: *G. variispora* Korf, asexual morph unknown, saprobe, terrestrial, India, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Geodina** Denison 1965, *Sarcoscyphaceae, Pezizales, Pezizomyces*, one species, type: *G. guanacastensis* Denison, asexual morph unknown, saprobe, terrestrial, Costa Rica, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Geoglossum** Pers. 1794, *Geoglossaceae, Geoglossales, Geoglossomycetes*, two species, type: *G. glabrum* Pers., asexual morph unknown, saprobe, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.


**Geopora** Harkn. 1885, *Pyronemataceae, Pezizales, Pezizomyces*, c. 20 species, type: *G. cooperi* Harkn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Frank et al. (2011; new species), Kirk et al. (2013; genus accepted), Lluvia et al. (2014; new species), cultures and sequences are available.

**Geopyxis** (Pers.) Sacc. 1889, *Pyronemataceae, Pezizales, Pezizomyces*, one species, type: *G. carbonaria* (Alb. & Schwein.) Sacc., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Geosmithia** Pitt 1979, *Hypocreales* genera *incertae sedis*, six species, type: *G. lavendula* (Raper & Fennell) Pitt, sexual morph unknown, saprobes, terrestrial, Ecuador, see Kolařík et al. (2010, 2011, 2015; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wu et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Geotrichum** Link 1809, ?*Dipodascaceae, Saccharomycetales, Saccharomycetes*, three species, type: *G. candidum* Link, asexual morph present, saprophytic, soil, rotted fruit and other plant parts, tree exudates, worldwide, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Gibbago** E.G. Simmons 1986, *Dothideomycetes* genera *incertae sedis*, one species, type: *G. triantherae* E.G. Simmons, sexual morph unknown, pathogens, terrestrial, USA, see Wijayarawardene et al. (2012, 2014; outline), Akhta et al. (2013; pathogens, Pakistan), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Gibbera** Fr. 1825, *Dothideomycetes* genera *incertae sedis*, c. 28 species, type: *G. triantherae* E.G. Simmons, sexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in
*Venturiaceae*, Hyde et al. (2013; excluded from *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera incertae sedis), cultures and sequences are available.

**Gibberidea** Fuckel 1870, *Dothideomycetes* genera incertae sedis, one species, type: *G. visci* Fuckel, sexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Gibbosporina** Elvebakk, Hong & P.M. Jørg. 2016, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, 13 species, type: *G. boninensis* (Kurok.) Elvebakk & P.M. Jørg., lichenized, see Elvebakk et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Gibellia** Sacc. 1885, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *G. dothideoides* Sacc. & Berl., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.


**Gibellulopsis** Bat. & H. Maia 1959, *Plectosphaerellaceae*, *Glomerellales*, *Sordariomycetes*, two species, type: *G. plicis* Bat. & H. Maia, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Han et al. (2013; new species, China), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for *Gibellula leioxus*.

**Gigantospora** B.S. Lu & K.D. Hyde 2003, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *G. gigaspora* B.S. Lu & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Gilkeya** M.E. Sm., Trappe & Rizzo 2007, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *G. compacta* (Harkn.) M.E. Sm. & Trappe, asexual morph unknown, biotrophic, terrestrial, worldwide, see Gladdish et al. (2010; DNA), Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

**Gilletiella** Sacc. & P. Syd. 1899, *Dothideomycetes* genera incertae sedis, one species, type: *G. chusqueae* (Pat.) Sacc. & P. Syd., asexual morph coelomycetous (ascochyta-like), saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Gillotia** Sacc. & Trotter 1913, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *G. orbicularis* (Syd. & P. Syd.) Sacc. & Trotter, asexual morph asteromella-like, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mycosphaerellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


**Giulia** Tassi 1904, *Ascomycota* genera incertae sedis, one species, type: *G. tenuis* (Sacc.) Tassi ex Sacc. & D. Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Glaphyriopsis** B. Sutton & Pascoe 1987, *Ascomycota* genera incertae sedis, two species, type: *G. brumnea* B. Sutton & Pascoe, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Glarea** Bills & Paláez 1999, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *G. lozoyensis* Bills & Peláez, sexual morph unknown, saprobes, terrestrial, Spain, see Wijayawardene et al. (2012; outline, listed as a genus in *Dermateaceae*), Chen et al. (2013; DNA, phylogeny, accepted as a genus in *Helotiaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are available for type: ATCC 20868.

**Glaucotrema** Rivas Plata & Lumbsch 2012, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *G. glaucophaenum* (Kremp.) Rivas Plata & Lumbsch, lichenized, see Rivas Plata et al. (2012b; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Glaxoa** P.F. Cannon 1997, *Pleosporales* genera incertae sedis, one species, type: *G. pellucida* P.F. Cannon, asexual morph unknown, saprobes, terrestrial, UK, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Tubeufiaceae*), Boonmee et al. (2014; accepted as genus in *Pleosporales* genera incertae sedis), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, cultures and sequences are unavailable.

**Glaziella** Berk. 1880, *Glaziellaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *G. vesiculosa* Berk., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Glioannellodochium** Matsush. 1989, *Ascomycota* genera incertae sedis, one species, type: *Glioannellodochium australiense* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: Matsushima, MFC-8A230, cultures and sequences are unavailable, needs generic revision.

**Glioblasterocladium** Matsush. 1989, *Ascomycota* genera incertae sedis, one species, type: *G. australiense* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: Matsushima, MFC-8A329, cultures and sequences are unavailable, needs generic revision.

**Gliocephalis** Matr. 1899, *Pyxidiophoraceae*, *Pyxidiophorales*, *Laboulbeniomycetes*, two species, type: *G. hyalina* Matr., asexual morph unknown, parasitic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (fide Jacobs et al. 2005).


**Gliomastix** Guég. 1905, *Bionectriaceae, Hypocreales, Sordariomycetes*, c. 25 species, type: *G. chartarum* (Cooke) Guég., hyphomycetous, sexual morph unknown, saprobes, in soil, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Summerbell et al. (2011; revision, phylogeny), Whitten et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Globsa** Bat. & H. Maia 1962, *Dothideomycetes* genera *incertae sedis*, one species, type: *G. toddaliae* Bat. & H. Maia, asexual morph unknown, saprobes, in soil, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Summerbell et al. (2011; revision, phylogeny), Whitten et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Globobotrys** L. Lombard & Crous 2016, *Stachybotriaceae, Hypocreales, Sordariomycetes*, one species, type: *G. sansevieriicola* (Crous & M.J. Wingf.) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Tanzania, see Lombard et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22220, CBS 138872.


**Globoconidia** Etayo 2008, *Bionectriaceae, Hypocreales, Sordariomycetes*, one species, type: *G. coehensis* Etayo, asexual morph unknown, lichenicolous, terrestrial, South America, see Etayo (2008; morphology, distinction of similar lichenicolous genera), holotype of the type: COL Etayo 15859, sequences are unavailable.

**Globoconidia** D. Hawksw. 1990, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *G. jamesii* D. Hawksw., lichenicolous, terrestrial, Australia (Tasmania), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: NSW LI4339, sequences are unavailable.

**Globulina** Speg. 1889, *Dothideomycetes* genera *incertae sedis*, one species, type: *G. toddaliae* Bat. & H. Maia, asexual morph unknown, saprobes, terrestrial, Uganda, see
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Gloeandromyces** Thaxt. 1931, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, five species (est. spp. 5+), type: *G. streblae* (Peyr.) Thaxt., asexual morph unknown, biotrophic, hosts are *Streblidae* (*Diptera: Hippoboscoidea*), neotropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters (unpublished data), Haelewaters et al. (2015a; DNA), Haelewaters et al. (2017b; most recent species description), ribosomal sequence data available but not for the type.

**Gloeodiscus** Dennis 1961, *Dothideomycetes* genera *incertae sedis*, one species, type: *G. nigrorufus* (Berk.) Dennis, asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.


**Gloeopeziza** Zukal 1891, *Helotiaceae, Helotiales, Leotiomycetes*, c. eight species, type: *G. rehmii* Zukal, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Gloeosporidiella** Petr. 1921, *Ascomycota* genera *incertae sedis*, one species, type: *G. ribis* (Lib.) Petr., coelomycetous, asexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012; 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Gloeosporidium** Petr. 1921, *Gnomoniaceae, Diaporthales, Sordariomycetes*, two species, type: *G. moravica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012; 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; 2016; outline), cultures and sequences are unavailable.

**Gloeosporiella** Cavara 1892, *Ascomycota* genera *incertae sedis*, one species, type: *G. rosicola* Cavara, hyphomycetous, asexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012; 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Gloiolesphaera** Höhn. 1902, *Ascomycota* genera *incertae sedis*, two species, type: *G. globuligera* Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012; 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Glomerella** Norman 1869, *Verrucariaceae, Verrucariales, Eurotiomycetes*, one species, type: *G. subtilis* Norman, lichenized, terrestrial, Norway, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Glomerulophoron** Frisch, Ertz & G.Thor 2015, *Arthoniaceae, Arthoniales, Arthoniomycetes*, two species, type: *G. mauritiae* Frisch, Ertz & G. Thor, lichenized, see Frisch et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Gloniella** Sacc. 1883, *Hysteriaceae, Hysteriales, Dothideomycetes*, twelve species, type: *G. sardoa* Sacc. & Traverso, asexual morph unknown, saprobes, terrestrial/aquatic, cosmopolitan, see Boehm et al. (2009, overview of genus) Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Hysteriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences are unavailable, needs generic revision.

**Glioniopsis** De Not. 1847, *Hysteriaceae, Hysteriales, Dothideomycetes*, seven species, type: *G. decipiens* De Not., asexual morph coelomycetous (aposphaeria-like *fide* Lohman 1933a), saprobes, terrestrial, see Boehm et al. (2009, overview of genus) Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence data indicate this genus is polyphyletic (*fide* Boehm et al. 2009).

**Glonium** Muhl. ex Fr. 1823, *Glioniaceae, Myxilinidiales, Dothideomycetes*, c. 13 species, type: *G. stellatum* Müh., asexual morph asteromella-like, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Glioniaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

**Glutinium** Fr. 1849, *Ascomycota* genera *incertae sedis*, two species, type: *G. exasperans* Fr., hyphomycetous, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Glyphis** Ach. 1814, *Graphidaceae, Ostropales, Lecanoromycetes*, seven species, type: *G. cicatricosa* Ach., lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Glypholecia** Nyl. 1853, *Acarosporaceae, Acarosporales, Lecanoromycetes*, one species; type: *G. candidissima* Nyl., lichenized, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Glyphopeltis** Brusse 1985, *Psoraceae, Lecanorales, Lecanoromycetes*, one species, type: *G. eburina* Brusse, lichenized, Mediterranean Europe, South Africa, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Glyphopsis** Aptroot 2014, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *G. aurantiodesca* Aptroot, lichenized, see Aptroot (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

**Gnomonia** Ces. & De Not. 1863, *Gnomoniaceae, Diaporthales, Sordariomycetes*, c. 70 species, type: *G. vulgaris* Ces. & De Not., asexual morph unknown, saprobes, terrestrial, Europe, see Mejia et al. (2008; DNA, phylogeny), Sogonov et al. (2008; new species, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for the type.
Gnomoniella Sacc. 1881, Gnomoniaceae, Diaporthales, Sordariomycetes, c. 70 species, type: *G. tubaeformis* (Tode) Sacc., asexual morph unknown, saprobes, terrestrial, Europe, see Sogonov et al. (2008; DNA, phylogeny), Singh et al. (2009; new species, India), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for the type.  

Godronia Moug. & Lév. 1846 (= Sphaeronaema Fr. fide Johnston et al. 2014), Helotiaceae, Godroniaceae, Leotiomycetes, c. 30 species, type: *G. muehlenbeckii* Moug. & Lév., asexual morph unknown, saprobes, terrestrial, worldwide, see Robideau et al. (2008; DNA), de Gruyter et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available but lacks for type, needs generic revision.  

Godroniopsis Diehl & E.K. Cash 1929 (= Sphaeronaema Fr., fide Johnston et al. 2014), Helotiaceae, Helotiales, Leotiomycetes, three species, type: *G. quernea* (Schwein.) Diehl & E.K. Cash, asexual morph ?Sphaeronaema, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.  


Gomphillius Nyl. 1855, Gomphillaceae, Ostropales, Lecanoromycetes, six species, type: *G. calycioides* (Delise ex Duby) Nyl., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.  

Gonatobrys Corda 1839, Ceratostomataceae, Melanosporales, Sordariomycetes, type: *G. simplex* Bonord., hyphomycetous, sexual morph unknown, fungicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision, Index Fungorum (2016) listed Gonatobrys as a synonym of Melanospora Corda.  

Gonatobryum Sacc. 1880, Ascomycota genera incertae sedis, four species, type: *G. fuscum* (Sacc.) Sacc., hyphomycetous, sexual morph unknown, fungicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for *Gonatobryum apiculatum* (unpublished) but lacks for type, needs generic revision.  

Gonatophragmium Deighton 1969, Acrosermaceae, Acrosporales, Dothideomycetes, 15 species, type: *G. mori* (Sawada) Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Berger et al. (2014; new species, lichenicolous, Austria), Crous et al. (2014; new species, DNA), cultures and sequences are available, needs generic revision.  

Gonatorrhodum Corda 1839, Ascomycota genera incertae sedis, one species, type: *G. speciosum* Corda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Gondwania Søchting, Frödén & Arup 2013, Teloschistaceae, Teloschistales, Lecanoromycetes, four species, type: G. cribrosa (Hue) Søchting, Frödén & Arup, lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Goniopila Marvanová & Descals 1985, Ascomycota genera incertae sedis, one species, type: G. monticola (Dyko) Marvanová & Descals, hyphomycetous, sexual morph unknown, saprobes, aquatic, USA, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for type: CCM F-11686, needs generic revision.

Goosia B. Song 2003, Englerulaceae, Dothideomycetes family incertae sedis, one species, type: G. melastomatis B. Song, asexual morph unknown, parasitic, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Dai et al. (2014; morphology), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.


Goosiomycyces N.K. Rao & Manohar. 1989, Ascomycota genera incertae sedis, one species, type: G. digitatus N.K. Rao & Manohar., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gordonomyces Crous & Marinc. 2011, Pleosporales, genera incertae sedis, Dothideomycetes, one species, type: G. mucovaginatus Crous & Marinc., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2011; morphology, DNA), Wijayawardene et al. (2012, 2014, 2016; outline, morphology, phylogeny), holotype and ex-type strains of the type: PREM 59592, CMW 22212.

Gorgadesia Tav. 1964, Roccellaceae, Arthoniales, Arthoniomycetes, one species, type: G. mira Tav., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Gorgomyces M. Gönczöl & Révay 1985, Leotiomyces genera incertae sedis, two species, type: G. hungaricus J. Gönczöl & Révay, hyphomycetous, sexual morph unknown, nematophagous, aquatic, Hungary, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Baschien et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), ex-type culture of the of the type: CCM F-12696.

Gorgoniceps (P. Karst.) P. Karst. 1871, Helotiaceae, Helotiales, Leotiomyces, three species, type: G. aridula (P. Karst.) P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Gossypiothallon Aptroot 2014, Arthoniales genera incertae sedis, Arthoniomycetes, one species, type: G. appendisporum Aptroot, lichenized, see Aptroot (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

Govindua Bat. & H. Maia 1960, Dothideomycetes, genera incertae sedis, one species, type: G. shoreae Bat. & H. Maia, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Wu et al. (2011; transferred to Asterinaceae), Hyde et al. (2013) and Hongsanan et al. (2013) did not accept as Asterinaceae, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in Dothideomycetes genera incertae sedis), cultures and sequences are unavailable, needs generic revision.
**Gowardia** Halonen, Myllys, Velmala & Hyvärinen 2009, *Parmeliaceae, Lecanorales, Lecanoromycetes*, two species, type: *G. nigricans* (Ach.) Halonen, Myllys, Velmala & Hyvärinen, lichenized, see Myllys et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Gracilistibella** Seifert 2000, *Biolectriaceae, Hypocreales, Sordariomycetes*, four species, type: *G. clavulata* (Mont.) Seifert, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Graddonia** Dennis 1955, *Helotiales* genera incertae sedis, *Leotiomycetes*, seven species, type: *G. coracina* (Bres.) Dennis, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dermataceae*), Hustad and Miller (2011; DNA, phylogeny), Raja et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures available for type: ILLS60491.


**Grahamiella** Spooner 1981, *Helotiales, Helotiales, Leotiomycetes*, three species, type: *G. dryadis* (Nannf. ex L. Holm) Spooner, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Grallomyces** F. Stevens 1918, *Ascomycota* genera incertae sedis, one species, type: *G. portoricensis* F. Stevens, hyphomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Grandigallia** M.E. Barr, Hanlin, Cedeño, Parra & R. Hern. 1987, *Shiraiaceae, Pleosporales, Dothideomycetes*, one species, type: *G. dictyospora* M.E. Barr, Hanlin, Cedeño, Parra & R. Hern., asexual morph unknown, saprobes, terrestrial, Venezuela., see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes, genera incertae sedis*), Ariyawansa et al. (2013; accepted as a genus in *Shiraiaceae*), Hyde et al. (2013; accepted as a genus in *Shiraiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


**Granulopyrenis** Aptroot 1991, *Pyrenulaceae, Pyrenulales, Eurotiomycetes*, six species, type: *G. antillensis* Aptroot, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Graphidastra** (Redinger) G. Thor 1991, *Roccellaceae, Arthoniales, Arthoniomycetes*, four species, type: *G. multiformis* (Mont. & Bosch) G. Thor, lichenized, see Lumbsch and
Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

**Graphiopsis** Trail 1889, Cladosporiaceae, Capnodiales, Dothideomycetes, one species, type: *G. chlorocephala* (Fresen.) Trail, hyphomycetous, terrestrial, Asia, Europe, North America, New Zealand, see Braun et al. (2008; nomenclature), Crous et al. (2009; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), ex-neotype strain of type: CBS 121523 = CPC 11969, neotype of type: HAL 1924 F.

**Graphiometria** Fuckel 1870, Ascomycota genera incertae sedis, six species, type: *G. fresenii* Fuckel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Graphis** Adans. 1763, Graphidaceae, Ostropales, Lecanoromycetes, c. 500 species, type: *G. scripta* (L.) Ach., asexual morph unknown, lichenized, terrestrial, mostly tropical, see Lücking et al. (2008, 2009, 2016; key, Costa Rica, classification), Archer 2009 (key, Australia), Lumbsch and Huhndorf 2010 (outline), Kirk et al. 2013 (genus accepted), Barcenas Peña et al. (2014; key), Rivas Plata et al. (2012a; taxonomy), Kraichak et al. (2015; taxonomy), sequences are available.

**Graphium** Corda 1837, Graphiaceae, Microascales, Sordariomycetes, three species, type: *G. penicillioides* Corda, hyphomycetous, sexual morph unknown, saprobes or from soil terrestrial, worldwide, see Cruywagen et al. (2010; new species, South Africa), Paciura et al. (2010; new species, China), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Kolařík et al. (2015; new species; Costa Rica), Wu et al. (2015; new species, China), Maharachchikumbura et al. (2015, 2016; outline), ex-type strain of the type: JCM 1049 (*fide* Okada et al. 2000).

**Graphostroma** Piroz. 1974, Graphostromataceae, Xylariales, Sordariomycetes, one species, type: *G. platystoma* (Schwein.) Piroz., asexual morph hyphomycetous (nodulisporium-like), saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Koukol et al. (2014; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures available for the type: AFTOL-ID 1249 (*fide* Zhang et al. 2006).

**Graphyllum** Clem. 1901, Hyseryales genera incertae sedis, eleven species, type: *G. chloës* Clem., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Diademaceae*), Hyde et al. (2013) did not accept as *Diademaceae*, Kirk et al. (2013; genus accepted), Almeida et al. (2014; DNA, new species, phylogenetic analyses showed that *G. caracolínense* D.A.C. Almeida et al. belongs to *Hysterialles*), Wijayawardene et al. (2014; accepted as a genus in *Dothideomycetes*, genera incertae sedis), cultures and sequences are available only for *G. caracolínense*, needs generic revision.

**Greineria** Scribn. & Viala 1887, Diaporthales genera incertae sedis, three species, type: *G. fuliginea* Scribn. & Viala, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, phylogeny), Tanghirasunun et al. (2014; DNA, phylogeny), cultures and sequence available for *G. saprophytica* (MFLUCC 12-0298 *fide* Tanghirasunun et al. 2014).


**Gregatothecium** L. Lombard & Crous 2016, Stachybrotiaceae, Hypocreales, Sordariomycetes, one species, type: *G. humicola* L. Lombard & Crous, hyphomycetous,
sexual morph unknown, saprobes, terrestrial, Papua New Guinea, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22445, CBS 205.96.

**Gregorella** Lumbsch 2005, Arctomiaceae, Arctomiales, Lecanoromycetes, one species, type: *G. humida* (Kullh.) Lumbsch, asexual morph coelomycetous, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Miądlikowska et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Gremmeniella** M. Morelet 1969 (= Brunchorstia Erikss 1891 fide Johnston et al. 2014), Godroniaceae, Helotiales, Leotiomyces, three species, type: *G. abietina* (Lagerb.) M. Morelet, asexual morph *Brunchorstia*, pathogens, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Laflamme and Smerlis (2012; DNA, new species, Canada), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available.

**Griggsia** F. Stevens & Dalbey 1919, Dothideomycetes genera incertae sedis, one species, type: *G. cyaethea* F. Stevens & Dalbey, asexual morph unknown, saprobes, terrestrial, West Indies, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Grimmicola** Döbbeler & Hertel 1983, Helotiaceae, Helotiales, Leotiomyces, one species, type: *G. parasiticus* Döbbeler & Hertel, asexual morph unknown, saprobes, terrestrial, Marion Island, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Griphosphaerioma** Höhn. 1918 (= Labridella Brenckle 1929 fide Maharachchikumbura et al. 2015; Wijayawardene et al. 2016), Amphiphaeriaceae, Xylariales, Sordariomycetes, two species, type: *G. symphoricarpi* (Ellis & Everh.) Höhn. ex Petr., asexual morphs *Labridella*, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, nomenclature), Wijayawardene et al. (2016; taxonomy, nomenclature), Rossman et al. (2016) proposed to protect *Labridella* over *Griphosphaerioma*, cultures and sequences are unavailable.

**Groenewaldozyma** Kurtzman 2016, Trichomonomasaceae, Saccharomycetales, Saccharomyces, three species, type: *G. auringiensis* (Santa María) Kurtzman, saprophytic, worldwide, see Kurtzman (2016; taxonomy), cultures and sequences are available.


**Grosmannia** Goid. 1936, Ophiostomataceae, Ophiostomatales, Sordariomycetes, one species, type: *G. penicillata* (Grosmann) Goid., holomorph, asexual morph hyphomycetous, associated with bark beetles, terrestrial, worldwide, see Masuya et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Duong et al. (2012; new species, phylogeny), Linnakoski et al. (2012; new species), Kirk et al. (2013; genus accepted), Andoa et al. (2016; DNA, phylogeny), Linnakoski et al. (2016; DNA, phylogeny), cultures available for the type: CMW43738 (fide Linnakoski et al. 2016).

**Groveolopsis** Boedijn 1951, Ascomycota genera incertae sedis, six species, type: *G. pandani* (Höhn.) Boedijn, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Grosvesia** Dennis 1960, Helotiaceae, Helotiales, Leotiomyces, one species, type: *G. parasiticus* Döbbeler & Hertel, asexual morph unknown, saprobes, terrestrial, Venezuela, see
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Guanomyces** M.C. González, Hanlin & Ulloa 2000, *Chaetomiaceae, Sordariales, Sordariomyces*, one species, type: *G. polythrix* M.C. González, Hanlin & Ulloa, asexual morph unknown, saprobes, terrestrial, Mexico, Trinidad, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept as a valid genus), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available (see Gonzalez et al. 2000).

**Gudelia** Henssen 1995, *Gloeohippiaeaceae, Lichinales, Lichinomycetes*, one species, type: *G. mexicana* Henssen, lichenized, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.


**Guelichia** Spé. 1886. *Ascomycota genera incertae sedis*, six species, type: *G. paradoxa* Spé., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012; outline, accepted as a genus in *Turbufiaceae*), Kirk et al. (2013; genus accepted), Boonmee et al. (2014) and Wijayawardene et al. (2014) did not accept as a genus in *Turbufiaceae*, cultures and sequences are unavailable, needs generic revision.

**Guestia** G.J.D. Sm. & K.D. Hyde 2001, *Xylariaceae, Xylariales, Sordariomyces*, one species, type: *G. gnetoproposporia* G.J.D. Sm. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Guilliermondia** Boud. 1904, *Sordariaceae, Sordariales, Sordariomyces*, one species, type: *G. saccoboloides* Boud., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


**Gyalecta** Ach. 1808, *Gyalectaceae, Ostropaes, Lecanoromycetes*, 50 species, type: *G. cupularis* (Hedw.) Schäer., lichenized, terrestrial (corticolous, saxicolous, terricolous), mainly temperate, see Baloch et al. (2010, 2013; taxonomy), Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; DNA), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; DNA), Aptroot and Moon (2015; new species), Resl et al. (2015; DNA), Lücking et al. (2016; classification), sequences are available but lacks for the type.
**Gyalectaria** Lumbsch, Kalb & Schmitt 2010, *Coccotremataceae, Pertusariales, Lecanoromycetes*, three species, type: *G. jamesii* (Kantvilas) I. Schmitt, Kalb & Lumbsch, lichenized, terrestrial (corticolous), Chile, New Guinea, North America, Tasmania, from lowland to subalpine, see Schmitt et al. (2010; taxonomy), Resl et al. (2015; DNA), Lücking et al. (2016; classification), sequences are available.

**Gyalectidium** Müll. Arg. 1881, *Gomphillaceae, Ostropales, Lecanoromycetes*, 52 species, type: *G. filicum* Müll. Arg., lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Gyalideopsis** Věžda [nom. cons.] 1966, *Gomphillaceae, Ostropales, Lecanoromycetes*, 50 species, type: *G. lecideopsis* (A. Massal.) Lettau ex Věžda, lichenized, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Gyalolechia** A. Massal. 1852, *Teloschistaceae, Teloschistales, Lecanoromycetes*, 30 species, type: *G. aurea* (Schaer.) A. Massal., lichenized, see Arup et al. (2013; taxonomy), Kondratyuk et al. (2014a; taxonomy), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification), sequences are available.

**Gymnascella** Peck 1884, *Gymnoascales, Onygenales, Eurotiomycetes*, 14 species, type: *G. aurantiaca* Peck, asexual morphs unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.


**Gymnascus** Baran. 1872, *Gymnoascales, Onygenales, Eurotiomycetes*, eight species, type: *G. reessii* Baran., asexual morphs unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Gymnoderma** Nyl. 1860, *Cladoniaceae, Lecanorales, Lecanoromycetes*, three species, type: *G. coccocarpum* Nyl., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Gymnographopsis** C.W. Dodge 1967, *Graphidaceae, Ostropales, Lecanoromycetes*, two species; type: *G. chilena* C.W. Dodge, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. 2013 (genus accepted), Rivas Plata et al. (2012a; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

**Gymnocyphon** B.C. Zhang & Minter 1989, *Discinaceae, Pezizales, Pezizomycetes*, three species, type: *G. australiana* B.C. Zhang & Minter, asexual morphs unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Gymnoxyphium** Cif., Bat. & I.J. Araújo 1963, *Ascomycota* genera incertae sedis, six species, type: *G. malum* Bat., Nascim. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Gynonectria** Döbbeler 2012, *Hypocreales* genera incertae sedis, six species, type: *G. intraspora* Döbbeler, asexual morph unknown, saprobes, terrestrial, South America, see Döbbeler (2012; outline), cultures and sequences are unavailable, needs generic revision.

**Gyeroeryella** Kol 1928 *Heliotiales* genera incertae sedis, nine species, type: *G. tatrica* Kol, hypomyxomatous, sexual morph unknown, saprobes, pathogens, saprobes, aquatic, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Baschien et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures unavailable for the type; ex-type strains available for *G. entomobryoides* (CBS268.63 *fide* Baschien et al. 2013), *G. tricapillata* (CBS 451.64 *fide* Baschien et al. 2013).

**Gypsoplaca** Timdal 1990, *Gypsoplaceae*, Lecanorales, Lecanoromycetes, one species, type: *G. macrophylla* (Zahlbr.) Timdal, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Gyrocollema** Vain. 1929, *Lichinaceae*, Lichinales, Lichinomycetes, two species, type: *G. scyphuliferum* Vain., with ascomata, lichenized (Nostoc), terrestrial (saxicolous), North and Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

**Gyrographa** Ertz & Tehler 2015, *Roccellaceae*, Arthoniales, Arthoniomyctes, three species, type: *G. gyrocarpa* (Flot.) Ertz & Tehler, sexual morph with knot-like or clustered-gyrose to lirelliform ascomata, asexual morph coelomycetous, lichenized, terrestrial, worldwide, see Ertz et al. (2015; taxonomy, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

**Gyromitra** Fr. 1849, *Discinaceae*, Pezizales, Pezizomycetes, 20 species, type: *G. esculenta* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Methven et al. (2013; DNA, phylogeny), cultures available for the type: AFTOL-ID 5017.

**Gyronactis** Ertz & Tehler 2015, *Roccellaceae*, Arthoniales, Arthoniomyctes, two species, type: *G. asiatica* Ertz & Tehler, sexual morph with apothecioid ascomata, asexual morph coelomycetous, lichenized, terrestrial, tropical, see Ertz et al. (2015; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available.

**Gyrophthorax** Hafellner & Sancho 1990, *Ascomycota* genera incertae sedis, two species, type: *G. perforans* Hafellner & Sancho, asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Gyrostroma** Naumov 1914, *Diaporthales* genera incertae sedis, one species, type: *Gy. sinuosum* Naumov, sexual morph unknown, saprobes, terrestrial, Europe, see Hirooka et al. (2012; morphology, accepted as a genus in *Diaporthales*, genera incertae sedis), Wijayawardene et al. (2012; accepted as a genus in *Hypocreales*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Diaporthales*, genera incertae sedis), cultures and sequences are unavailable for the type; thus *Gyrostroma s. str.* uncertain, needs generic revision.

**Gyrothrix** Corda 1842, *Ascomycota* genera incertae sedis, c. 22 species, type: *G. podosperma* (Corda) Rabenh., hypomyxomatous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Rambelli et al. (2011; morphology), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Gyrotrema** A. Frisch 2006, *Graphidaceae, Ostropales, Lecanoromycetes*, five species, type: *G. sinuosum* (Sipman) Frisch, with ascomata, lichenized (green algae), terrestrial (corticolous), Central and South America see Rivas Plata (2008; outline), Kalb (2009; outline), Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; outline); Cáceres et al. (2014; DNA), Kraichak et al. (2014; DNA), Lücking et al. (2016, classification), sequences are available but lacks for type.

**Hadronema** Syd. & P. Syd. 1909, *Ascomycota* genera incertae sedis, four species, type: *H. orbiculare* Syd. & P. Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, China, UK see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hadrospora** Boise 1989, *Trematosphaeriaceae, Pleosporales, Dothideomycetes*, one species, type: *H. fallax* (Mouton) Boise, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeosphaeriaeaceae*), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; accepted as a genus in *Trematosphaeriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Hadrosporium** Syd. 1938, *Ascomycota* genera incertae sedis, two species, type: *H. fraserianum* Syd., hyphomycetous, saprobes, terrestrial, Australasia, New Zealand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hadrotrichium** Fuckel 1865, *Xylariales* genera incertae sedis, *Sordariomycetes*, one species, type: *H. phragmitis* Fuckel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for *H. pyrenaicum* (YMJ 320 *fide* Hsieh et al. 2005).

**Haematomma** A. Massal. 1852, *Haematommaceae, Lecanorales, Lecanoromycetes*, c. 40 species, type: *H. vulgare* A. Massal., with ascomata, lichenized (*Pseudotrebuxia*), terrestrial (corticolous, lignicolous or saxicolous), cosmopolitan, but most diverse in the tropics, see Brodo et al. (2008; outline and chemistry), Ekman et al. (2008; DNA), Kalb et al. (2008; DNA), Lumbsch et al. (2008; DNA), Stocker-Wörgötter et al. (2010; chemistry, mycobionts), Lumbsch and Huhndorf (2010; outline), Miądlikowska et al. (2014; DNA), Lücking et al. (2016; classification), sequences are available but lacks for the type.

**Haematomyxa** Sacc. 1884, *Ascomycota* genera incertae sedis, two species, type: *H. vinosa* (Cooke & Ellis) Sacc., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hagleromyces** Sousa, Morais, Lachance & Rosa 2014, *Saccharomycetaceae, Saccharomycetales, Saccharomycetes*, one species, type: *H. auroranensis* Sousa, asexual reproduction by multilateral budding, saprophytic, from water tanks (phytotelmata) of *Bromelia karatas* in the cerrado ecosystem of Aurora do Tocantins, Brazil, see Sousa et al. (2014; taxonomy), cultures and sequences are available.

**Haglundia** Nannf. 1932, *Dermataceae, Helotiaceae, Leotiomyces*, seven species, type: *H. perelegans* Haglund ex Nannf., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Halbania** Racib. 1889, *Asterinaeae*, *Asterinales*, *Dothideomycetes*, three species, type: *H. cyaathearum* Racib., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Asterinaeae*), Hongsanan et al. (2014; taxonomy, keys), Wijayawardene et al. (2014; outline), placement in *Asterinaeae* supported by morphology, holotype of type: ZT Myc 1488, cultures and sequences are unavailable.


**Halegrapha** Rivas Plata & Lücking 2011, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, eight species, type: *Ha. chimaera* Rivas Plata & Lücking, asexual morph unknown, lichenized, terrestrial, tropical, Lücking et al. (2011a; taxonomy), Lücking et al. (2016; classification), sequences are available.


**Haleomyces** D. Hawksw. & Essl. 1993, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, one species, type: *H. oropogonicoa* D. Hawksw. & Essl., lichenicolous, terrestrial, Mexico, asexual morph unknown, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; outline), holotype of type: K(M)-IMI 3551875.

**Haligena** Kohlm. 1961, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *H. elaterophora* Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype of type: IMI 297765.

**Halodiatrype** Dayarathne & K.D. Hyde 2016, *Diatrypaceae*, *Xylariales* *Sordariomycetes*, three species, type: *H. salinicola* Dayarathne & K.D. Hyde, saprobes, found on decaying wood at mangrove stands, Thailand, see Dayarathne et al. (2016b; taxonomy, phylogeny), holotype of type: MFLU 15-0179.

**Haloguignardia** Cribb & J. W. Cribb 1956, *Lulworthiaceae, Lulworthiales, Sordariomycetes*, five species, type: *H. decidua* Cribb & J.W. Cribb, asexual morph unknown, endophytes or parasites, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.


**Halokirschsteiniothelia** Boonmee & K.D. Hyde 2012, *Dothideomycetes* genera incertae sedis, type: *H. maritima* (Linder) Boonmee & K.D. Hyde, asexual morph unknown, saprobes, marine, USA, see Boonmee et al. (2012; taxonomy, phylogeny; treated as a genus in *Mytiliniidaeae*), Hyde et al. (2013; did not accept a genus in *Mytiliniidaeae*), Wijayawardene et al. (2014; listed as *Dothideomycetes* genera incertae sedis), cultures available for the type: CBS 221.60.


**Halonecctria** E.B.G. Jones 1965, *Biomeccriaceae, Hypocreales, Sordariomycetes*, one species, type: *H. milfordensis* E.B.G. Jones, asexual morph unknown, marine, on wood, mostly temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Haloplaca** Arup, Søchting & Frödén 2013, *Teloschistaceae, Teloschistales, Lecanoromycetes*, three species, type: *H. britannica* (R. Sant.) Arup, Frödén & Søchting, lichenized (with green algae), saxicolous, corticolous, lignicolous, lichenicolous, terrestrial, United Kingdom, Greece, Morocco, Turkey, see Vondrák et al. (2012; DNA as *Caloplaca suesae* s. l.), Arup et al. (2013, DNA), Lücking et al. (2016; classification), sequences are available for all species KC179292 (ITS) (fide Arup et al. 2013).


**Halysiozymes** E.G. Simmons 1981, *Ascomycota* genera *incertae sedis*, one species, type: *H. saxatilis* E.G. Simmons, hyphomycetous, epiphyte, free living, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hamatocanthoscypha** Svrček 1977, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *H. laricinios* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures available for the type: TNS-F13530.

**Halinliniomycetes** Raja & Shearer 2008, *Sordariomycetes* genera *incertae sedis*, one species, type: *H. hyaloapicalis* Raja & Shearer, asexual morph unknown, freshwater, northern and southern Florida, see Raja and Shearer (2008; taxonomy), Raja et al. (2009b; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype: R037-3, ILL 40116, cultures and sequences are unavailable.

**Hanseniaspora** Zikes 1912 (= Kloeckera Janke 1928), *Saccharomycodaceae*, *Saccharomycetales*, *Saccharomyces*, 15 species, type: *H. valbyensis* Klöcker, asexual reproduction is by bipolar budding on a broad base (bud-fission), saprophytic, in soil, fresh water, sea water, rotting plants, fruit, fruit juices, fruit flies, grape must, beer, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Hansfordia** Hughes 1951, *Ascomycota* genera *incertae sedis*, seven species, type: *H. ovalispora* S. Hughes, hyphomycetous, saprobes, terrestrial, marine, China, UK, Spain, and India, see Seifert et al. (2011; morphology), Cheng et al. (2011), Wijayawardene et al. (2012; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hansfordiella** Hughes 1951, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, eight species, type: *H. asterinearum* S. Hughes, hyphomycetous, saprobes, on fungi, terrestrial, wide spread, see see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017;
Hansfordiellopsis Deighton 1960, Dothideomycetes genera incertae sedis, one species, type: H. aburiensis Deighton, hyphomycetous, sexual morph unknown, saprobes, lichenicolous, terrestrial, Africa, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: IMI 4778, cultures and sequences are unavailable.

Hansfordiopeltis Bat. & C.A.A. Costa (1956), Ascomycota genera, incertae sedis, incertae sedis, five species, type: H. congoensis Bat. & C.A.A. Costa, coelomycetous, saprobes, terrestrial, Congo and Brazil, see Wijayawardene et al. (2012, 2017), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hansfordiopeltis M.L. Farr 1986, Ascomycota genera incertae sedis, one species, type: H. amazonensis M.L. Farr, coelomycetous, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hansfordiopsis Bat. 1959, Dothideomycetes genera incertae sedis, one species, type: H. phaeospora (Hansf.) Bat., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microperlidaeaceae), Hyde et al. (2013; did not accept as a genus Microperlidaeaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, Dothideomycetes genera incertae sedis), holotype of the type: PDD 6788 (as Microthyriella phaeospora Hansf.), cultures and sequences are unavailable.

Hapalocystis Auersw. ex Fuckel 1863, Sydowiellaceae, Diaporthales, Sordariomyces, four species, type: H. berkeleyi Auersw. ex Fuckel, asexual morphs coelomycetous (phoma-like), saprobes, terrestrial, Europe, North America, see de Silva et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Liu et al. (2016; DNA, phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), cultures available for the type: AR 3851 (fide de Silva et al. 2009).

Hapalosphaeria Syd. 1908, Ascomycota genera incertae sedis, one species, type: H. deformans (Syd.) Syd., coelomycetous, pathogens, terrestrial, Germany, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision

Haplaripiosis Oudem. 1903, Ascomycota genera incertae sedis, two species, type: H. fagicola Oudem., hyphomycetous, saprobes, terrestrial, India, Holland, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision

Haplobasidion Erikss. 1889, Ascomycota genera incertae sedis, three species, type: H. thalictri Erikss., hyphomycetous, saprobes, pathogens, terrestrial, Sweden, Asia, Malaysia, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision

Haplodina Zahlbr. 1930, Roccellaceae, Arthoniales, Arthoniomycetes, three species, need typification, lichenized, terrestrial (corticolous, saxicolous), China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

Haplographium Berk. & Broome 1859, Hyaloscyphaceae, Helotiaceae, Leotiomycetes, 15 species, type: H. delicatum Berk. & Broome, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; outline), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for type species FMR 11585, TNS-F17834.

Haplolepis Syd. 1925, Ascomycota genera incertae sedis, three species, type: H. polyadelpha Syd., coelomycetous, saprobes, terrestrial, Sri Lanka, Africa, see Wijayawardene et al. (2012,
Haplopora Trevis. 1857, *Lecanoromycetes* genus *incertae sedis*, one species, type: *H. fraudulentum* Trevis., lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Haplopora** Thaxt. 1893, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, three species, type: *H. californicus* Thaxt., asexual morph unknown, biotrophic, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Haplopeltis** Bat., J.L. Bezerra & Cavalc. 1963, *Microphylaceae*, *Microphyrciales*, *Dothideomycetes*, one species, type: *H. hyleensis* Bat., J.L. Bezerra & Cavalc., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Microphylaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Haplophycos** Theiss. 1916, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, ten species, type: *H. oahuensis* Theiss., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Haptocara** Drechsler 1975, *Ascomycota* genera *incertae sedis*, one species, type: *H. latirostrum* Drechsler, hypomycetous, saprobes, insect-trapping, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Haraea** Sacc. & P. Syd. 1913, *Ascomycota* genera incertae sedis, one species, type: *E. dingleyae* S. Hughes & Piroz., asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*). Kirk et al. (2013; genus accepted). Maharachchikumbura et al. (2015, 2016; outline), holotype and ex-type culture of the type: DAOM 167533, MAFF 411026.

**Harknessia** Cooke 1881, *Harknessiaceae*, Diaporthales, Sordariomycetes, c. 50 species, holomorph with wuestneia-like sexual morphs, pathogens, saprobes, terrestrial, worldwide, have sequence data, see Crous et al. (2012: morphology, phylogeny). Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Wijayawardene et al. (2012, 2016, 2017; morphology, phylogeny), cultures and sequences are available.

**Harknessiella** Sacc. 1889, *Dothideomycetes* genera incertae sedis, one species, type: *H. purpurea* (W. Phillips & Harkn.) Sacc., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Harmoniella** V.N. Boriss. 1981, *Ascomycota* genera incertae sedis, one species, type: *H. chrysoscephalus* V.N. Boriss, hyphomycetous, saprobes, terrestrial, Ukraine, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Harpidium** Körb. 1855, Lichinaceae, Lichinales, Lichinomycetes, three species, type: *H. rutilans* Körb., with ascomata and conidia, lichenized (with green algae), terrestrial (saxicolous), Eurasian mountains, North America, South Africa, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Harpographium** Sacc. 1880, *Ascomycota* genera incertae sedis, five species, type: *H. fasciculatum* Sacc., hyphomycetous, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Harposporium** Lohde 1874 (= *Podocrella* Seaver 1928; *Atricordyceps* Samuels 1983; *Polyrhina* Sorokîn 1876 *fide* Quandt et al. 2014; Maharachchikumbura et al. 2015), *Ophiocordycipitaceae*, Hypocreales, Sordariomycetes, two species, type: *H. anguillulæ* Lohde, hyphomycetous, sexual morph unknown, parasitic on nematodes, terrestrial, temperate, see Kuo et al. (2008; taxonomy, DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline, phylogeny), Spatafora et al. (2015; new species), cultures available for the type: ARSEF 5593 (*fide* Chaverri et al. 2005).


**Hassea** Zahlbr. 1902, *Dothideomycetes* genera incertae sedis, one species, type: *H. bacillosa* (Nyl.) Zahlbr., asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Hawksworthiana U. Braun 1988, Ascomycota genera incertae sedis, one species, type: *H. peltigericola* (D. Hawksw.) U. Braun, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, UK, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hegermila Raity. 1995, Hyaloscyphaceae, Helotiales, Leotiomycetes, four species, type: *H. andina* (Pat.) Raity., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Heliomusa Nelsen, Lücking & Rivas Plata 2010, Graphidaceae, Ostropales, Lecanoromycetes, three species, type: *H. sipmanii* (Aptroot, Lücking & Rivas Plata) Nelsen, Lücking & Rivas Plata, lichenized, see Nelsen et al. (2010; taxonomy), Lücking et al. (2016; classification), sequences are available.

Heleiomyces Kohlm., Volkm.-Kohlm. & O.E. Erikss. 1996, Pleosporales genera incertae sedis, Dothideomycetes, one species, type: *H. barbatula* Kohlm., Volkm.-Kohlm. & O.E. Erikss., asexual morph unknown, tropical, marine on maritime sedge, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Jones et al. (2015; outline), cultures and sequences are unavailable, needs generic revision.


Heldeococcus C.A. Jörg. 1922, Bionectriaceae, Hypocreales, Sordariomycetes, four species, type: *H. aurantiacum* C.A. Jörg., isolated from soil, marine or freshwater, Asia and Europe (see Lumbsch and Huhndorf 2010; outline), Grum-Grzhimaylo et al. (2013), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), ex-type of the type: CBS 201.35, slides of holotype of the type: C. NY (few remaining ascomata were broken).

Helophoma B. Sutton 1980, Ascomycota genera incertae sedis, one species, type: *H. rhamnigena* (Fautrey) B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence are unavailable.

Helonias Petr. 1931, Sordariomycetes genera incertae sedis, one species, type: *H. concinnum* Petr., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


Helicasus Kohlm. 1969, Morosphaeriaceae, Pleosporales, Dothideomycetes, six species, type: *H. kanaloanus* Kohlm., asexual morph unknown, saprobes, terrestrial, aquatic,
worldwide, see Amnuaykanjanasin et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Zhang et al. (2013a, b, 2014; new species, phylogeny), Wijayawardene et al. (2014; outline), cultures available for the type: F1R2B2 (fide Amnuaykanjanasin et al. 2009).

**Helicobolomyces** Matzer 1995. *Arthoniaceae, Arthoniales, Arthoniomycetes*, one species, type: *H. lichenicola* Matzer, with conidiomata, lichenized (with green algae) or lichenicolous, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Helicodochium** S. Monteiro, R.F. Castañeda, A.C. Cruz & Gusmão 2014, *Ascomycota* genera *incertae sedis*, one species, type: *H. amazonicum* J.S. Monteiro, R.F. Castañeda, A.C. Cruz & Gusmão, hyphomycetous, sexual morph unknown, lignicolous, terrestrial, Brazil, see Monteiro et al. (2014; taxonomy), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable.

**Helicofilia** Matsush. 1983, *Ascomycota* genera *incertae sedis*, one species, type: *H. madrasensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, UK, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: MFC-11630, cultures and sequences are unavailable, needs generic revision.

**Helicogermslita** Lodha & D. Hawksw. 1983, *Xylariaceae, Xylariales, Sordariomycetes*, one species, type: *H. celastri* (S.-V. Kale & S.V.S. Kale) Lodha & D. Hawksw., asexual morphs unknown, on twigs, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013; genus accepted), Jaklitsch et al. (2016; position), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: HCIO 29374.

**Helicogonium** W.L. White 1942, *Saccharomycetales* genera *incertae sedis, Saccharomycetes*, 19 species, type: *H. jacksonii* W.L. White, asexual reproduction is present or absent, and when present, produce phialides directly on the hyphae, or form small phialide-bearing penicilli, mycoparasitic, Europe, North America, see Baral and Kutorga (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

**Helicogosia** Hol.-Jech. 1991, *Ascomycota* genera *incertae sedis*, one species, type: *H. paradoxo* Hol.-Jech., hyphomycetous, saprobes, terrestrial, Czechoslovakia, see see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Heliacoma** Corda 1837, *Tubeufiaceae, Tubeufiales, Dothideomycetes*, type: *H. muelleri* Corda, hyphomycetous, saprobes, terrestrial, worldwide, see Boonme et al. (2011, 2014; taxonomy, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Tubeufiaceae*), available cultures for the type: CBS 964.69 (fide Tsui et al. 2006).
**Helicomycetes** Link 1809, *Tubefiaceae, Tubefiales, Dothideomycetes*, c. 15, type: *H. roseus* Link, hyphomycetous, saprobes, aero-aquatic, worldwide, see Boonmee et al. (2011, 2014; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Tubefiaceae*), Wijayawardene et al. (2014; outline), available cultures for the type: AFTOL-ID 1613, CBS 283.51 (*fide* Scoch et al. 2006; Tsui and Berbee 2006).

**Helicoön** Morgan 1892, *Dothideomycetes* genera *incertae sedis*, one species, type: *H. sessile* Morgan, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Hyde et al. (2013; did not accept as a genus *Micropeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, *Dothideomycetes* genera *incertae sedis*), holotype of the type: PDD 6788 (as *Microthyriella phaeospora* Hansf.), cultures and sequences are unavailable.

**Helicorhoidion** S. Hughes 1958, *Ascomycota* genera *incertae sedis*, six species, type: *H. botryoideum* (Cooke) S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Asia, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Helicosingula** P.S. van Wyk, Marasas, Baard & Knox-Dav. 1985, *Ascomycota* genera *incertae sedis*, one species, type: *H. leucadendri* P.S. van Wyk, Marasas, Baard & Knox-Dav., hyphomycetous, pathogen, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Helicosporium** Nees 1816, *Tubefiaceae, Tubefiales, Dothideomycetes*, c. 15, type: *H. vegetum* Nees, hyphomycetous, saprobes, terrestrial, worldwide, see Zhao et al. (2007; new species), Cruz et al. (2009; new species, Brazil), Dharkar et al. (2010; new species, India), Boonmee et al. (2011, 2014; taxonomy, phylogeny), Seifert et al. (2011; morphology), Hyde et al. (2013; accepted as a genus in *Tubefiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), available cultures for the type: BCC 3332 (*fide* Tsui and Berbee 2006).

**Helicothyrium** I. Hino & Katum. 1961, *Ascomycota* genera *incertae sedis*, one species, type: *H. ryukyuense* I. Hino & Katum., coelomycetous, pathogen, Japan, see Wijayawardene et al. (2012; 2017, outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Helicoumbisia** Lunghini & Rambelli 1979, *Ascomycota* genera *incertae sedis*, one species, type: *H. coronata* Lunghini & Rambelli, hyphomycetous, saprobe, terrestrial, Ivory Coast, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Helioccephala** V. Rao, K.A. Reddy & de Hoog 1984, *Ascomycota* genera *incertae sedis*, type: *H. proliferans* V. Rao, K.A. Reddy & de Hoog, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision, compare with *Holubovaniella, Gonatobotrys* and *Uncispora*.

**Heliscella** Marvanová (1980), *Ascomycota* genera *incertae sedis*, two species, type: *H. stellata* (Ingold & V.J. Cox) Marvanová, hyphomycetous, saprobe, terrestrial, former Czechoslovakia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Heliscina** Marvanová 1980, *Ascomycota* genera, *incertae sedis*, two species, type: *H. campanulata* Marvanová, hyphomycetous, saprobes, aquatic, former Czechoslovakia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Helminthascus** Tranzschel 1898, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *H. arachnophthorius* Tranzschel, asexual morphs unknown, on insects, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Helminthocarpon** Fée 1837, *Arthoniales* genera incertae sedis, *Arthoniomyctetes*, one species, type: *H. leprevostii* Fée, lichenized, terrestrial (corticolous, saxicolous), tropical, see Kirk et al. (2013; genus accepted), Bungartz et al. (2013; outline), Lücking et al. (2016; classification), sequences are available.

**Helminthopelitis** Sousa da Cámara 1950, *Dothideomycetes*, genera incertae sedis, one species, type: *H. almeidaeana* Sousa da Cámara, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, *Microthyriaceae*), Hyde et al. (2013) did not accept as a genus in *Microthyriaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera incertae sedis), cultures and sequences are unavailable.

**Helminthosphaeria** Fuckel 1870, *Helminthosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, c. 20 species, type: *H. clavariarum* (Desm.) Fuckel, asexual morph diplococcium-like, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miller et al. (2014; new species, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Bell and Mahoney (2016; new species), culture available for the type: SMH4609 (*fide* Huhndorf et al. 2004).

**Helminthosporiella** Hern.-Restrr., G.A. Sarria & Crous 2016, *Massarinaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *H. stilbacea* (Moreau) Hern.-Restrr., G.A. Sarria & Crous, hyphomycetous, saprobes, terrestrial, Colombia, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

**Helminthosporiomyces** G.F. Sepúlveda, Pereira-Carv. & Dianese 2009, *Ascomycota* genera incertae sedis, one species, type: *H. cerradensis* G.F. Sepúlveda, Pereira-Carv. & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Pereira-Carvalho et al. (2009; taxonomy), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Helminthosporium** Link 1809, *Dothideomycetes*, genera incertae sedis, c. 40 species, type: *H. velutinum* Link, hyphomycetous, sexual morph unknown, saprobes, lignicolous, terrestrial, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012; outline, listed under *Massarinaceae*), Hyde et al. (2013) did not accepte as a genus in Massarinaceae, Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes*, genera incertae sedis), Zhu et al. (2016; DNA, new species), cultures and reference specimen available for the type: MFLUCC 15-0243, HKAS 84015 (*fide* Zhu et al. 2016).

**Helocarpus** Fr. 1860, *Helocarpaceae*, *Lecanoromycetes* family incertae sedis, three species; type: *H. crassipes* Th. Fr., lichenized, see Lumbsch and Huhndorf (2010; outline), Miądlikowska et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Helochora** Sherwood 1979, *Ascomycota* genera incertae sedis, one species, type: *H. hypertropha* Sherwood, asexual morph unknown, saprobes, terrestrial, India, UK, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013) Wijayawardene et al. (2014) did not regard as a *Dothideomycetes*, cultures and sequences are unavailable, needs generic revision.

**Helodiniomycetes** F. Picard 1913, *Ceratomyctaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *H. elegans* F. Picard, asexual morph unknown, biotrophic, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.
Helvella L. 1753, Helvellaceae, Pezizales, Pezizomycetes, c. 60 species, type: H. mitra L., asexual morph unknown, saprobic, from soil, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hwang et al. (2015; DNA, phylogeny), Landerosa et al. (2015; phylogeny), Zhao et al. (2015; DNA, phylogeny), cultures and sequences are available but lacks for the type.

Hemibeltrania Piroz. 1963, Ascomycota genera incertae sedis, eleven species, type: H. cinnamomi (Deighton) Piroz., hyphomycetous, sexual morph unknown, saprobic, terrestrial, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Hemicorynespora M.B. Ellis 1972, Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes, twelve species, type: H. deightonii M.B. Ellis, hyphomycetous, sexual morph unknown, saprobic, terrestrial, widespread, see Seifert et al. (2011; morphology), Whiton et al. (2012; new species), Jiao et al. (2012; new species), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Hemicorynesporella Subram. 1992, Ascomycota genera incertae sedis, one species, type: H. guadalcanalensis (Matsush.) Subram., hyphomycetous, sexual morph unknown, saprobic, terrestrial, Guadalcanal, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hemidothis Syd. & P. Syd. 1916, Ascomycota genera incertae sedis, one species, type: H. miconiae Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobic, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hemiglossum Pat. 1890, Leotiomyces, genera incertae sedis, two species, type: H. yunnanense Pat., asexual morph unknown, saprobic, terrestrial, China, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hemigraphyphra (Müll. Arg.) R. Sant. ex D. Hawksw. 1975, Parmulariaceae, Dothideomycetes families incertae sedis, eight species, type: H. asteriscus (Müll. Arg.) R. Sant. ex D. Hawksw., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Wijayawardene et al. (2014; outline), placement in Parmulariaceae supported by morphology, cultures and sequences are unavailable, needs generic revision.

Hemileucoglossum S. Arauzo 2014, Geoglossaceae, Geoglossales, Geoglossomycetes, four species, type: H. littorale (Rostr.) S. Arauzo, asexual morph unknown, saprobic, terrestrial, China, Japan, see Hustud and Miller (2014; taxonomy, phylogeny), cultures available for the type: C: 35673.

Hemimyriangium J. Reid & Piroz. 1966, Myriangiaceae, Myriangiales, Dothideomycetes, one species, type: H. betulae J. Reid & Piroz., asexual morph unknown, saprobic, terrestrial, Sweden, see Lumbsch and Huhndorf (2010; outline), Dissanayake et al. (2014; morphology), the genus was not accepted in Kirk et al. (2013).

Hemiphaericaspora Hui, Ren, Chen, Li, Zhang & Niu 2014, Debaromyctaceae, Saccharomycetales, Saccharomycetes, two species, type: H. nanyangensis F.L. Hui, Y.C. Ren, L. Chen, Z.H. Li, L. Zhang, Q.H. Niu, asexual reproduction is by multilateral budding, saprophytic, frass of beetle larvae, South Africa, China, see Hui et al. (2014; taxonomy), sequences are unavailable.
**Hemisphaeropsis** Petr. 1947, *Ascomycota genera incertae sedis*, one species, type: *H. magnoliae* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hemisynnema** Subram. (1995) [1992], *Ascomycota genera incertae sedis*, one species, type: *H. malaysianum* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hemithecium** Trevis. 1853, *Graphidaceae, Ostropales, Lecanoromycetes*, c. 50 species, type: *H. balbisii* (Fée) Trevis., asexual morph unknown, lichenized, tropical, see Archer 2009 (key, Australia), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rivas Plata et al. (2012a; taxonomy), Lücking et al. (2014, 2016; classification), sequences are available.

**Hendersoniella** (Sacc.) Tassi 1900, *Ascomycota genera incertae sedis*, one species, type: *H. epixyla* Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hendersonina** E.J. Butler 1913, *Ascomycota genera incertae sedis*, one species, type: *H. sacchari* E.J. Butler, coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hendersoniopsis** Höhn. 1918, *Ascomycota genera incertae sedis*, one species, type: *H. thelebola* (Sacc.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hendersoniulina** Tassi 1902, *Ascomycota genera incertae sedis*, one species, type: need typification, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Henicospora** P.M. Kirk & B. Sutton 1980, *Ascomycota genera incertae sedis*, six species, type: *H. minor* P.M. Kirk & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Monteiro et al. (2014; Brazil), cultures and sequences are unavailable, needs generic revision.

**Henningsiella** Rehm 1895, *Schizothyriaceae, Dothideomycetes*, families incertae sedis, two species, type: *H. quitensis* Rehm, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, accepted as *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Henrica** B. de Lesd. 1925, *Verrucariaceae, Verrucariales, Eurotiomycetes*, three species, type: *G. reessii* Baran., asexual morphs unknown, lichenized, terrestrial, Europe, North America, see Savić and Tibell (2008; taxonomy, revision), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Henrica** B.de Lesd. 1921, *Verrucariaceae, Verrucariales, Eurotiomycetes*, four species, type: *H. ramulosa* B. de Lesd., lichenized, Europe, North America, see Lumbsch and Huhndorf
Kirk et al. (2016; new species), biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Heppia** Nägeli 1854, *Lichinaceae, Lichinales, Lichinomycetes*, seven species, type: *H. adglutinata* A. Massal., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.


**Heptameria** Rehm & Thüm. 1879, *Dothideomycetes*, genera incertae sedis, two species, type: *H. elegans* Rehm & Thüm., asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Heracleicola** Tibpromma, Camporesi & K.D. Hyde 2015, *Didymellaceae, Pleosporales, Dothideomycetes*, one species, type: *H. premilicurensis* Tibpromma, Camporesi & K.D. Hyde, saprobes, Italy, see Ariyawansa et al. (2015; morphology, phylogeny), cultures available for type: MFLUCC 14-0518.

**Herbampulla** Scheuer & Nogradsek 1993, *Magnaporthaceae, Magnaporthales, Sordariomycetes*, one species, type: *H. crassirostris* Scheuer & Nogradsek, asexual morph unknown, saprobes, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Hercospora** Fr. 1825, *Diaporthales* genera incertae sedis, *Sordariomycetes*, one species, type: *H. tiliae* (Pers.) Tul. & C. Tul., asexual morph unknown, saprobes, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), holotype and ex-type of the type: BPI 748440, AR3526 (Castlebury et al. 2002).

**Hermatomyces** Speg. 1911, *Lophiotremataceae, Pleosporales, Dothideomycetes*, eleven species, type: *H. tucumanensis* Speg., saprobes, terrestrial, Africa, Asia, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Doilom et al. (2016; new species, phylogeny), Hyde et al. (2016; new species), Tibpromma et al. (2016; new species), cultures and sequences are available.

**Herpomyces** Thaxt. 1902, *Herpomyctaceae, Laboulbeniales, Laboulbeniomycetes*, 25 species (est. spp. 25+), type: *H. chaetophilus* Thaxt., asexual morph unknown, biotrophic, dioecious, hosts are Blattodea, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haelewaters et al. (2015a; DNA), sequences are available for type: (SSU, ITS, LSU), GenBank accession number for ITS of *Herpomyces chaetophilus*: KT800039

**Herposira** Syd. 1938, *Ascomycota* genera incertae sedis, one species, type: *H. velutina* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Herpothallon** Tobler 1937, *Arthoniaceae, Arthoniales, Arthoniomycetes*, 46 species, type: *H. sanguineum* (Vain.) Tobler, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

**Herpotrichia** Fuckel 1868, *Melanommataceae, Pleosporales, Dothideomycetes*, 101 species, type: *H. herpotrichoides* (Fuckel) P.F.Cannon, asexual morph ceolomycetous, parasitic or
Herrerozymes R.F. Castañeda & W.B. Kendr. 1991, Ascomycota genera incertae sedis, one species, type: *H. catenosporus* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: INIFAT C91/47, cultures and sequences are unavailable, compare with *Exochalara*, *Chloridium* and *Montillochaetes*, cultures and sequences are unavailable, needs generic revision.

Herteliana P. James 1980, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *H. taylorii* (Salwey) P. James, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Hertelidea Printzen & Kantvilas 2004, *Stereocaulaceae*, *Lecanorales*, *Lecanoromycetes*, six species, type: *H. botryosa* (Fr.) Printzen & Kantvilas, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Hertella Henssen 1985, *Placynthiaceae*, *Peltigerales*, *Lecanoromycetes*, *Ascomycota*; three species; type: *H. subantarctica* Henssen, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

Hesperomyces Thaxt. 1891, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, eleven species (est. spp. 11+), type: *H. virescens* Thaxt., no asexual state, biotrophic, hosts are *Biphyllidae*, *Coccinellidae*, *Myctophagidae* (Coleoptera), and *Anthocoridae* (*Hemiptera: Heteroptera*), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Seifert et al. (2011; morphology), Silva et al. (2011; Amazon forest), Cort (2012; distribution), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and Sequences are unavailable, neotype of type: CBS H-15402.

Heterocephalum Thaxt. 1903, *Ascomycota* genera incertae sedis, two species, type: *H. aurantiacum* Thaxt., hyphomycetous, sexual morph unknown, coprophilous, saprobes, terrestrial, worldwide, see Matei and Fendrihan (2008; Antarctica), Puangsombat et al. (2010; Thailand), Seifert et al. (2011; morphology), Silva et al. (2011; Amazon forest), Cort (2012; distribution), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lahlali et al. (2014; resistance to clubroot), sequences are available for most of the species.

Heteroconium Petr. 1949, *Dothideomycetes* genera incerta sedis, 20 species, type: *H. citharexyl* Petr., hyphomycetous, sexual morph unknown, saprobes, endophytes, terrestrial, worldwide, see Ruiz et al. (2008; new species), Zhang et al. (2010; new species), Seifert et al. (2011; morphology), Ma et al. (2012a, b; new species), Ren et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lahalali et al. (2014; resistance to clubroot), sequences are available for most of the species.

Heterocephelium Vain. 1927, *Lecanographaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *H. leucampyx* (Tuck.) Vain., lichenized, see Lumbsch and Huhndorf (2010; outline), Tibell and Frisch (2010; Africa), Kirk et al. (2013; genus accepted), Pandit (2015; India), Lücking et al. (2016; classification), sequences are available.

Heteroderma Trevis. 1868, *Physciaceae*, *Caliciaceae*, *Lecanoromycetes*, 90 species, type: *H. speciosa* (Wulfen) Trevis., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al.
(2012; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

**Heteroepichloë** E. Tanaka, C. Tanaka, Gafur & Tsuda 2002, **Clavicipitaceae**, **Hypocreales**, **Sordariomycetes**, type: *H. bambusae* (Pat.) E. Tanaka, C. Tanaka, Gafur & Tsuda, asexual morphs unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, nomenclature), cultures and sequences are available

**Heteromycetida** Mül. Arg. 1889, **Cladoniaceae**, **Lecanorales**, **Lecanoromycetes**, one species, type: *H. rubescens* Mül. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

**Heterophoma** Q. Chen & L. Cai 2015, **Didymellaceae**, **Pleosporales**, **Dothideomycetes**, five species, type: *H. sylvestris* (Sacc.) Q. Chen & L. Cai, coelomycetous, saprobes, ?pathogens, terrestrial, cosmopolitan, see Chen et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), neotype and ex-neotype culture of the type: HMSA 246700, CBS 874.97.

**Heteroplacidium** Breuss 1996, **Verrucariaceae**, **Verrucariales**, **Eurotiomycetes**, twelve species, type: *H. imbricatum* (Nyl.) Breuss, lichenized; see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Heteroseptata** E.F. Morris 1972, **Ascomycota** genera incertae sedis, one species, type: *H. bacillospora* E.F. Morris, sexual morph unknown, saprobes, terrestrial, Costa Rica, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Heterosphaeria** Grev. 1824 (= *Heteropatella* Fuckel fide Johnston et al. 2014), **Helotiales**, **Leotiales**, **Leotiomyctes**, seven species, type: *H. patella* (Tode) Grev., asexual morph hyphomycetous, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature; new combinaion), cultures and sequences are unavailable, needs generic revision.

**Heterosphaeriopsis** Hafellner 1979, **Dothideomycetes** genera incertae sedis, one species, type: *H. fulvodisca* (Pat.) Hafellner, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Holotype of type: (FH, Sweden).cultures and sequences are unavailable, needs generic revision.

**Heterospora** (Boerema, Gruyter & Noordel.) Gruyter, Verkley & Crous 2012, **Leptosphaeriaceae**, **Pleosporales**, **Dothideomycetes**, two species, saprobes, worldwide, have sequence data, see de Gruyter et al. (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), ex-epitype strains of type: CBS 448.68; epitype CBS H-16386.

**Heuflera** Bail 1860, **Ascomycota** genera incertae sedis, type: *Heuflera betulae* Bail, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Heufleridium** Müll. Arg. 1883, **Pyrenulales** genera incertae sedis, **Eurotiomycetes**, two species, type: *H. pentagastricum* (Müll. Arg.) Müll. Arg., asexual morphs unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Hexacladium** D.L. Olivier 1983, **Ascomycota** genera incertae sedis, one species, type: *H. corynephorum* D.L. Olivier, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Hexagonella  F. Stevens & Guba ex F. Stevens 1925, Schizothyriaceae, Dothideomycetes, families incertae sedis, two species, type: H. peleae F. Stevens & Guba ex F. Stevens, asexual morph unknown, saprobic, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, accepted as Schizothyriaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Heydenia  Fresen. 1852, Pyrenomataceae, Pezizales, Pezizomycetes, four species, type: H. alpina Fresen., hiphymycetous, sexual morph unknown, saprobic, terrestrial, North temperate, see Seifert et al. (2011; morphology), Leuchtmann and Clemенкон (2012; DNA, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; did not accept as a valid genus), cultures available for the type: 0732 (fide Leuchtmann and Clemенкон 2012).

Heyderia  Link 1833, Cenangiaceae, Helotiiales, Leotiomycetes, six species, type: H. abietis (Fr.) Link, asexual morph unknown, saprobic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Hemiphtacidiaceae), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny, accepted as a genus in Cenangiaceae), cultures available for the type: KL20 (fide Pärtel et al. 2016).

Hidakaea  I. Hino & Katum. 1955, Dothideomycetes genera incertae sedis, two species, type: H. peleae F. Stevens & Guba ex F. Stevens, asexual morph unknown, saprobic, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Wu et al. (2010; placed in Hypocreales genera incertae cedis), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as Dothideomycetes genera incertae sedis), cultures and sequences are unavailable, generic reversion is essential as it has different opinions.

Hiemsia  Svrček 1969, Pyrenomataceae, Pezizales, Pezizomycetes, two species, type: H. pseudoampezzana (Svrček) Svrček, asexual morph unknown, saprobic, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


Himantormia I.M. Lamb 1964, Parmeliaceae, Lecanorales, Lecanoromycetes, two species, type: H. lugubris (Hue) I.M. Lamb, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Hinoa  Hara & I. Hino 1961, Ascomycota genera incertae sedis, two species, type: H. sasae (Hara & I. Hino) Hara & I. Hino, ?coelomycteous, sexual morph unknown, saprobic, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hippocrepidea  Sérus. 1997, Gomphillaceae, Ostropales, Lecanoromycetes, one species, type: H. nigra Sérus., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Hirudinaria  Ces., 1856, Ascomycota genera incertae sedis, two species, type: H. mespili Ces., hyphomycetous, sexual morph unknown, saprobic, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hispidicarpaceae  Nakagiri 1993, Hispidicarpomycetales, Spathulosporales, Sordariomycetes, one species (probably more than this), type: H. galaxauricola Nakagiri,
spermatiophores or asexual morph hyphomycetous, biotrophic on marine red alga, Japan, see Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2016; outline, the family accepted as in Spathulosporales), cultures and sequences are unavailable, holotype of the type: IFO H-12135 and paratype IFO H-12136, needs generic revision since have different opinions.


**Histeridomyces** Thaxt. 1931, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, six species, type: *H. ramosus* Thaxt., asexual morph unknown, biotrophic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Histoplasma** Darling 1906, *Ajellomycetaceae, Onygenales, Eurotiomycetes*, seven species, type: *H. capsulatum* Darling, hyphomycetous, sexual morph unknown, on humans and animals, bat guano, terrestrial, Africa, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Hobsoniopsis** D. Hawksw. 2001, *Ascomycota genera incertae sedis*, one species, type: *H. santessoniii* (Lowen & D. Hawksw., sexual morphs unknown, lichenicolous, Europe, terrestrial, see Seifert et al. (2011; morphology), cultures and sequences are available, holotype of type: UPS.

**Hoehneliella** Bres. & Sacc. 1902, *Ascomycota genera incertae sedis*, two species, type: *H. perplexa* Bres. & Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Austria, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hoffmannoscypha** Stielow, Göker & Klenk 2012 [2013], *Pyronemataceae, Pezizales, Pezizomycetes*, one species, type: *H. pellita* (Sacc.) Stielow, Göker & Klenk, asexual morph unknown, saprobes, terrestrial, Europe, see Stielow et al. (2013; taxonomy, phylogeny), epitype of the type: M-0156529 (holotype of *Peziza pellita*), cultures and sequences are available.

**Holmiella** Petrini, Samuels & E. Müll. 1979, *Patellariaceae, Patellariales, Dothideomycetes*, two species, type: *H. sabina* (De Not.) Petrini, Samuels & E. Müll., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Patellariaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yachareon et al. (2015; accepted as a genus in Patellariaceae), cultures and sequences are unavailable, needs generic revision.

**Holmiodiscus** Svrček 1992, *Helotiaceae, Helotiales, Leotiomycetes*, one species, type: *H. filipendulae* Svrček, asexual morph unknown, saprobes, terrestrial, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures unavailable for the type.

**HolocrYPHia** Gryzenh. & M.J. Wingf. 2006, *Cryphonectriaceae, Diaporthales, Sordariomycetes*, one species, type: *H. eucalypti* (M. Venter & M.J. Wingf.) Gryzenh. & M.J. Wingf., asexual morph unknown, pathogens, terrestrial, Australia, New Zealand, South Africa, see Lumbsch and Huhndorf (2010; outline), Chen et al. (2013; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: PREM 56211, cultures and sequences are available.

**Holubovaea** Mercado 1983, *Ascomycota genera incertae sedis*, two species, type: *H. roystoneicola* Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba,
see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Holwaya** Sacc. 1889 (= *Crinula* Fr. 1821 *fide* Johnston et al. 2014), *Bulgariaceae*, *Helotiales*, *Leotiomycteces*, two species, type: *H. ophiobolus* (Ellis) Sacc., asexual morph *Crinula*, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Jhonston et al. 2014; nomenclature, living cultures and sequences are available for sexual morph (*fide* Wang et al. 2006).


**Homaromyces** Crous & M.J. Wingf. 2012, *Homortomycteces*, *Dothideomycetes* family incertae sedis, two species, saprobes, South Africa, Italy, have sequence data, see Crous et al. (2012; morphology, phylogeny), Wijayawardene et al. (2014, 2016; morphology, phylogeny), ex-epitype strains of type: CPC 19800; epitype CBS H-21049.

**Homostegia** Fuckel 1870 [1869-70], *Dothideomycetes*, genera incertae sedis, type: *H. adusta* Fuckel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Homothecium** A. Massal. 1853, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, five species, type: *H. opulentum* (Mont.) A. Massal., lichenized, see Kirk et al. (2013; genus accepted), Ekman et al. (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.


**Hoornnsmania** Crous 2007, *Cladosporiaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *H. pyrina* Crous, hyphomycetous, sexual morph unknown, hyperparasitic on *Neonectria ditissima*, terrestrial, France, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), holotype of the type: CBS H-19769, cultures and sequences are unavailable.

**Hormiactis** Preuss 1851, *Ascomycota* genera incertae sedis, five species, type: *H. alba* Preuss, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Sri Lanka, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hormiokrypsis** Bat. & Nasmic. 1957, *Ascomycota* genera incertae sedis, one species, type: *H. libocedri* Bat. & Nasm., coelomycetous, sexual morph unknown, sooty mould on plants, terrestrial, Australasia, North America, Oceania, see Seifert et al. (2011; morphology, accepted as a genus in *Metacapnodiaceae*), Wijayawardene et al. (2012, 2014; outline, accepted as a genus in *Metacapnodiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Hormiscioideus** M. Blackw. & Kimbr. 1979, *Ascomycota* genera incertae sedis, one species, type: *H. filamentosus* M. Blackw. & Kimbr., hyphomycetous, sexual morph unknown, on insects, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Hormisciomyces Bat. & Nascim. 1957, Euantennariaceae, Dothideomycetes families incertae sedis, eight species, type: H. prepusus Bat. & Nascim., sooty mould, terrestrial, Australasia, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Hormocephalum Syd. 1939, Ascomycota genera incertae sedis, five species, type: H. ecuadorense Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Sri Lanka, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hormocladium Höhn. 1923, Ascomycota genera incertae sedis, one species, type: H. ecuadorense Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


Hormographis Guarro, Punsola & Arx 1986, Ascomycota genera incertae sedis, one species, type: H. ramirezi Guarro, Punsola & Arx, hyphomycetous, sexual morph unknown, from soil, terrestrial, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Hormonema Lagerb. & Melin 1927, Dothideaceae, Dothideales, Dothideomycetes, six species, type: Hormonema dematioides Lagerb. & Melin, saprobes, human pathogen, terrestrial, Spain, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), Crous et al. (2015; new species, DNA), ?polyphyletic, needs generic revision and epitypification.

Hormosphaeria Lév. 1863, Arthoniales genera incertae sedis, Arthoniomycetes, one species, type: H. tessellata Lév., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Hortaea Nishim. & Miyaji 1984, Teratosphaeriaceae, Capnodiales, Dothideomycetes, two species, type: H. werneckii (Horta) Nishim. & Miyaji, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; new species, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014; outline, phylogeny), Hyde et al. (2013; accepted as a genus in Teratosphaeriaceae), Egidi et al. (2014; phylogeny), Quaedvlieg et al. (2014; phylogeny), cultures available for the type: CBS 117931= TRN122 (fide Egidi et al. 2014).

Hosseusia Gyeln. 1940, Pannariaceae, Peltigerales, Lecanoromycetes, one species, type: H. gertrudiana Gyeln., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences unavailable.


Huangshania O.E. Erikss. 1992, Triblidiaeae, Triblidiales, Ascomycota orders incertae sedis, two species, type: H. verrucosa O.E. Erikss., asexual morph unknown, saprobes,
terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Hueidea** Kantvilas & P.M. McCarthy 2003, *Fusiclaveae, Umbilicariales, Lecanoromycetes*, one species, type: *H. australiensis* Kantvilas & P.M. McCarthy, lichenized, see Lücking et al. (2016; classification), sequences are unavailable.

**Hughesinia** J.C. Lindq. & Gamundí 1970, *Ascomycota genera incertae sedis*, one species, type: *H. chusqueae* J.C. Lindq. & Gamundí, hyphomycetous, sexual morph unknown, from soil, terrestrial, Chile, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Humaria** Fuckel 1870, *Pyronemataceae, Pezizales, Pezizomycetes*, c. 16 species, type: *H. hemisphaerica* (F.H. Wigg.) Fuckel, asexual morph unknown, saprobes, terrestrial, North temperate, see Palmer et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Gaitnies et al. (2016; DNA), Klavina et al. (2016; DNA, mycorrhization), cultures and sequences are available.


**Humicolopsis** Cabral & S. Marchand 1976, *Helotiales genera incertae sedis, Leotiomycetes*, one species, type: *H. cephalosporioides* Cabral & Marchand, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.


**Hyalacrotes** (Korf & L.M. Kohn) Raitv. 1991, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, two species, type: *H. laricionis* (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Hyalobelemnospora** Matsush. 1993, *Ascomycota genera incertae sedis*, one species, type: *H. amazonica* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Peru, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: BP 98968, cultures and sequences are unavailable, needs generic revision.

**Hyalocephalotrichum** Nagaraju, Kunwar, Sureshk. & Manohar. 2011, *Ascomycota* genera *incertae sedis*, one species, type: *Hyalocephalotrichum indicum* Nagaraju, Kunwar, Sureshk. & Manohar., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see holotype of the type: HCIO 50144, cultures and sequences are unavailable, needs generic revision.

**Hyalocladium** Moustafa 1977 [1976], *Ascomycota* genera *incertae sedis*, one species, type: *H. moubasheri* Moustafa, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Kuwait, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hyalocrea** Syd. & P. Syd. 1917, *Dothideomycetes* genera *incertae sedis*, four species, type: *H. epimyces* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Hyalodendriella** Crous 2007, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *H. betulae* Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Netherlands, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype and ex-type strains of the type: CBS H 19895, CBS 261.82.

**Hyaloderma** Spec. 1884, *Sordariomycetes*, genera *incertae sedis*, one species, type: *H. imperspicuum* Spec., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Hyaloderma** Spec. 1918, *Ascomycota* genera *incertae sedis*, one species, type: *H. gardeniae* (Keissl.) Spec., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hyalodictyum** Woron. 1916, *Ascomycota* genera *incertae sedis*, one species, type: *H. colchicum* Woron., coelomycetous, sexual morph unknown, saprobes, terrestrial, former USSR, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hyalohelicomina** T. Yokoy. 1974, *Ascomycota* genera *incertae sedis*, one species, type: *H. deutziae* (T. Yokoy.) T. Yokoy., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hyalomeliolina** F. Stevens 1924, *Perisporiopsidaceae*, *Dothideomycetes*, families *incertae sedis*, two species, type: *H. guianensis* F. Stevens, asexual morph unknown, saprobes, terrestrial, central and south America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Parodiopsidaceae*), Hyde et al. (2013; accepted as a genus in *Perisporiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Perisporiopsidaceae*), cultures and sequences are unavailable.

**Hyalopeziza** Fückel 1870, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *H. patula* (Pers.) Fückel, asexual morph phialophora-like, saprobes, ?lichenicolous, terrestrial, worldwide, see Huhtinen et al. (2008; new species, Alaska), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are available but lacks for the type.
**Hyalopleiochaeta** R.F. Castañeda, Guarro & Cano 1996, *Ascomycota* genera *incertae sedis*, one species, type: *H. delicata* R.F. Castañeda, Guarro & Cano, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: INIFAT C94/140, cultures and sequences are unavailable, compare with *Camposporium*.

**Hyalorhblilia** Baral & G. Marson 2001, *Orbiliaceae*, *Orbiliales*, Orbiliomycetes, 13 species, type: *H. berberidis* (Velen.) Baral, asexual morph? hyphomycetous, saprobes, terrestrial, widespread, see Lumbsch and hunduf (2010; outline), Guo et al. (2014; new species), cultures and sequences are available but lacks for type species, needs generic revision.

**Hyalorhinochladia** H.P. Upadhyay & W.B. Kendr. 1975, *Ophiostomataceae*, *Ophiostomatales*, Sordariomycetes, one species, type: *H. minuta-bicolor* (R.W. Davidson) H.P. Upadhyay & W.B. Kendr., hyphomycetous, saprobes, worldwide, see Lu et al. (2009; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type:.


**Hyaloscolecostroma** Bat. & J. Oliveira 1967, *Dothideomycetes* genera *incertae sedis*, one species, type: *H. rondoniense* Bat. & J. Oliveira, asexual morph unknown, lichenicolous, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; outline, genus accepted), Wijayawardene et al. (2014; outline), culture and sequence are unavailable, needs generic revision.

**Hyaloscypha** Boud. 1885, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, c. 45 species, type: *H. vitreola* (P. Karst.) Boud., asexual morph hyphomycetous in *H. albohyalina* var. *spiralis* and *H. albohyalina* var. *monodictys*, saprobes, terrestrial, worldwide, see Baral et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are available for the type: M220 (fide Baral et al. 2009).


**Hyalosphaera** F. Stevens 1917, *Dothideomycetes* genera *incertae sedis*, four species, type: *H. miconiae* F. Stevens, asexual morph unknown, saprobes, terrestrial, North and Central America, see Alves et al. (2010; new species, Costa Rica), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence data available for unidentified *Hyalosphaera* species, needs generic revision.

**Hyalosynnema** Matsush. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *H. multisepatum* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, Taiwan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hyalothelus** Spec. 1908, *Dothideomycetes*, genera *incertae sedis*, one species, type: *H. dimerosperma* Spec., asexual morph unknown, saprobes, terrestrial, South America, see Alves et al. (2010; new species, Costa Rica), Lumbsch and Huhndorf (2010; outline, accepted
as a genus in *Elsinoaceae*), Li et al. (2011; excluded from Elsinoaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence data available for unidentified *Hyalosphaera* species, needs generic revision.

**Hyalothyridium** Tassi 1900. *Ascomycota* *genera incertae sedis*, one species, type: *H. viburnicola* Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hyalotiella** Papendorf 1967. *Bartaliniaceae*, *Amphisphaeriales*, *Sordariomycetes*, four species, type: *H. transvalensis* Papendorf, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), Li et al. (2015; new species); Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; outline), sequence data and cultures available but lacks for the type; needs generic revision.


**Hydnocystis** Tul. & C. Tul. 1845. *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *H. arenaria* Tul. & C. Tul., asexual morph unknown, hypogeous, terrestrial, Japan, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished) but lacks for the type.

**Hydnotrya** Berk. & Broome 1846, *Discinaceae*, *Pezizales*, *Pezizomycetes*, c. 15 species, type: *H. tulasnei* (Berk.) Berk. & Broome, asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Stielow et al. (2010; DNA), Kirk et al. (2013; genus accepted), Li et al. (2013; DNA, phylogeny, new species), Methven et al. (2013; DNA, phylogeny), cultures available for the type: BB70 (766) (*fide* Stielow et al. 2010).

**Hydnotryopsis** Gilkey 1916, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, two species, type: *H. setchellii* Gilkey, asexual morph unknown, hypogeous, terrestrial, North America, see Smith et al. (2007; DNA, phylogeny), Brock et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Stielow et al. (2010; DNA), Kirk et al. (2013; genus accepted), cultures available for the type: RBG Kew K(M)99871 (*fide* Brock et al. 2009), src870 (*fide* Smith et al. 2007).

**Hydraeomyces** Thaxt. 1896. *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *H. halipi* (Thaxt.) Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Hydrocina** Scheuer 1991, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *H. chaetocladia* Scheuer, asexual morph unknown, saprobes, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Baschien et al. (2013; DNA, phylogeny), Kirk et al. (2013;
Hymenobia Nyl. 1854, Ascomycota genera incertae sedis, one species, type: H. insidiosa Nyl., asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf.
(2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, Holotype or ex-type of type species unavailable, needs generic revision.

**Hymenobolus** Durieu & Mont. 1845, *Helotiales* genera *incertae sedis*, *Leotiomyctes*, three species, type: *H. agaves* Durieu & Mont., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hymenopsis** Sacc. 1886, *Ascomycota* genera *incertae sedis*, 13 species, type: *H. trochiloides* (Sacc.) Sacc., sexual morph unknown, saprobes, fungicolous, terrestrial, worldwide, see Schmidt et al. (2010; extrolites), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are available, holotype and ex-type of type species unavailable, needs generic revision.

**Hymenoscyphus** Gray 1821, *Helotiaceae*, *Helotiales*, *Leotiomyctes*, c. 170 species, type: *H. fructigenus* (Bull.) Gray, asexual morph ?hyphomycetous, pathogens, saprobes, terrestrial, North and South America, see Lumbsch and Huhndorf (2010; outline), Quezol et al. (2011; cryptic species), Kirk et al. (2013; genus accepted), Baral et al. (2014; nomenclature), Gross et al. (2014; pathogens), Zheng and Zhuang (2014; new species, China), cultures and sequences are available.


**Hyperdermium** J.F. White, R.F. Sullivan, Bills & Hywel-Jones 2000, *Cordycipitaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *H. caulium* (Berk. & M.A. Curtis) Chaverri & K.T. Hodge, asexual morph unknown, pathogens or saprobes, terrestrial, Central and South America, see Chaverri et al. (2008; recombined), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are available, holotype of type: K(M) 120327 (as *Corticium caulium* Berk. & M.A. Curtis).

**Hyperphyscia** Müll. Arg. 1894, *Physciaceae*, *Caliciculas*, *Lecanoromycetes*, nine species, type: *H. synthalea* (C. Knight) Müll. Arg., lichenized, worldwide, see Charak et al. (2009; effect of coal mines), Kinalioglu (2010; Turkey), Esslinger et al. (2012; new species), Young (2013; Russia), Estrabou et al. (2014; Argentina), Lücking et al. (2016; classification), Cultures and sequences are available.

**Hyphochlaena** Cif. 1962, *Ascomycota* genera *incertae sedis*, one species, type: *H. caespitosa* Cif., sterile mycelium, sexual morph unknown, saprobes, terrestrial, Dominican Republic, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

**Hyphoconis** Egidi & Quaedvlieg 2014, *Dothideomycetes* genera *incertae sedis*, one species, type: *H. sterilis* Egidi & Quaedvlieg, hyphomycetous, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 118321 = TRN278.

**Hyphодiscосioides** Lodha & K.R.C. Reddy 1974, *Ascomycota* genera *incertae sedis*, five species, type: *H. jaipurensis* Lodha & K.R.C. Reddy, hyphomycetous, saprobes, pathogen, terrestrial, Argentina, Australia, Brazil, Cuba, Czechoslovakia, India, Japan, Mexico, Nigeria, Poland, Russia, Taiwan, Thailand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are available but lacks for the type species, Holotype and ex-type of type species RUBL 730, needs generic revision.

**Hyphodiscosisoides** Matsush. 1993, *Ascomycota* genera *incertae sedis*, one species, type: *H. tambopataensis* Matsush., hyphomycetous, saprobes, terrestrial, Peru, see Seifert et al. (2011;
morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, Holotype and ex-type of type species MFC 1P-449, needs generic revision.

**Hyphodiscus** Kirschst. 1907 (= *Catenuifera* Hosoya 2002 *fide* Johnston et al. 2014), *Hyaloscyphaceae, Helotiaceae, Leotiomyces*, seven species, type: *H. gregarius* Kirschst., asexual morph *Catenuifera* (hyphomycetous), saprobes, North temperate, see Huhtinen et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Hosoya et al. (2011; DNA, phylogeny, new species), Pärtel and Põldmaa (2011; new species), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature; new combinations). Cultures and sequences are available but lacks for the type species, Holotype and ex-type of type species unavailable.

**Hyphopeziza** J.G. Han, Hosoya & H.D. Shin 2014, *Hyaloscyphaceae, Helotiaceae, Leotiomyces*, one species, type: *H. pygmaea* (Mouton) J.G. Han, Hosoya & H.D. Shin, asexual morph unknown, saprobes, terrestrial, worldwide, see Han et al. (2014; taxonomy), Cultures and sequences are unavailable, Holotype and available cultures of the type species Mouton 473 (BR), KUS F51564.

**Hyphopichia** von Arx & van der Walt 1976, *Debaryomycesaceae, Saccharomycetales, Saccharomyces*, nine species, type: *H. burtonii* (Boidin, Pignal, Lehodey, Vey & Abadie) von Arx & van der Walt, asexual reproduction is by multilateral budding, saprophytic, on pollen, alfalfa silage, grain, various fruits, human skin, sputum, decaying insect infested wood, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Hyphopolynema** Nag Raj 1977, *Ascomycota* genera *incertae sedis*, six species, type: *H. tropicale* Nag Raj, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Brazil, Colombia, India, USA, UK, see Pinho et al. (2011; morphology, new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Cultures and sequences are unavailable.

**Hyphoscypha** Velen. 1934, *Helotiaceae* genera *incertae sedis*, *Leotiomyces*, one species, type: *H. loricata* Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

**Hyphostereum** Pat. 1892, *Ascomycota* genera *incertae sedis*, one species, type: *H. pendulum* Pat., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hyphothyrium** B. Sutton & Pascoe 1989, *Ascomycota* genera *incertae sedis*, one species, type: *H. pallidum* B. Sutton & Pascoe, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable.

**Hypobryon** Döbbeler 1983, *Dothideomycetes*, genera *incertae sedis*, seven species, type: *H. poeltii* (Döbbeler) Döbbeler, asexual morph unknown, on hepatics, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable, needs generic revision.

**Hypocenomyce** M. Choisy 1951, *Ophioparmaceae, Umbilicariales, Lecanoromycetes*, four species, type: *H. scalaris* (Ach. ex Lilj.) M. Choisy, lichenized, worldwide, see Romanova (2009; Novosibirsk), Björk (2010; USA), Bendiksby and Timdal (2013, phylogeny, taxonomy), Stepanchikova et al. (2013; Russia), Miądlikowska et al. (2014; Poland), Lücking et al. (2016; classification), Cultures and sequences are available, holotype and ex-type of type species unavailable.

**Hypocline** Syd. 1939, *Ascomycota* genera *incertae sedis*, one species, type: *H. pennisetii* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Dominican Republic, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

**Hypocopra** (Fr.) J. Kickx f. 1867, *Xylariaceae, Xylariales, Sordariomycetes*, c. 35 species, type: *H. mordaria* (Fr.) J.J. Kickx., asexual morph unknown, terrestrial, saprobes, mainly coprophilous, world wide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jayanetti et al. (2014; applications), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species.

**Hypocrela** Sacc. 1878 (=Aschersonia Mont. fide Maharachchikumbura et al. 2015, 2016; Rossman et al. 2016), *Clavicipitaceae, Hypocreales, Sordariomycetes*, 43 species, type: *H. discoidea* (Berk. & Broome) Sacc., asexual morph Aschersonia, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, nomenclature), Rossman et al. (2016; nomenclature), Cultures and sequences are available.

**Hypocreodendron** Henn. 1897 (=Discoxylaria J.C. Lindq. & J.E. Wright 1964 fide Réblová et al. 2016), *Xylariaceae, Xylariales, Sordariomycetes*, one species, type: *H. sanguineum* Henn., hyphomycetous, sexual morph of Discoxylaria, saprobes, Argentina, Mexico, see Lumbsch and Huhndorf (2010; outline), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Réblová et al. (2016; nomenclature), Daranagama et al. (2017; morphology, taxonomy, key, sexual-asexual link), sequence data available for one species *D. myrmecophila*.

**Hypocreopsis** P. Karst. 1873, *Hypocreaceae, Hypocreales, Sordariomycetes*, three species, type: *H. lichenoides*, asexual morph hyphomycetous, saprobes and/or pathogens, terrestrial, Atlantic coast of Europe, Eastern USA, South-Eastern Australia, New Zealand, see Lumbsch and Huhndorf (2010; outline), Grundy et al. (2012; molecular analysis), Jayanetti et al. (2014; applications), Maharachchikumbura et al. (2015, 2016; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available.

**Hypoderma** De Not. 1847, *Rhytismataceae, Rhytismatales, Leotiomycetes*, one species, type: *H. rubi* (Pers.) DC., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Lantieri et al. (2011; phylogeny, new species), Lantz et al. (2011; DNA, phylogeny), Wang et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Cultures and sequences are available, lectotype ‘Hb. Pers. mis Chaill.

**Hypodermella** Tubeuf 1895, *Rhytismataceae, Rhytismatales, Leotiomycetes*, three species, type: *H. laricis* Tubeuf, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

**Hypodermellina** Höhn. 1917, *Rhytismatales genera incertae sedis, Leotiomycetes*, one species, type: *H. ruborum* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

**Hypodermina** Höhn. 1916, *Ascomycota genera incertae sedis*, one species, type: *H. nervisequa* (Link) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hypoflavia** Marbach 2000, *Caliciaceae, Caliciales, Lecanoromycetes*, three species, type: *H. vellozianae* (Kalb) Marbach, lichenized, Brazil, Thailand, Chile, see Lumbsch and Huhndorf (2010; outline), Giralt and Clerc (2011; identification), Lücking et al. (2016; classification), Cultures and sequences are unavailable.

**Hypogloeum** Petr. 1923, *Ascomycota genera incertae sedis*, one species, type: *H. euonymi* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hypogymnia** (Nyl.) Nyl. 1896, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 90 species, type: *H. physodes* (L.) Nyl., lichenized, worldwide, see Hauck (2008; metal homeostatis), McCune (2008; new species), Ranković et al. (2008; antimicrobial activity), McCune and Schoch (2009; new species), Solhaug et al. (2009; morphology), Lumbsch and Huhndorf (2010; outline), Wei et al. (2010; new species), McCune (2011; new species), Międzikowska et al. (2011, phylogeny), Balabanova et al. (2012; biomonitoring), Goward et al. (2012; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available. Holotype and ex-type of type species unavailable.

**Hypohelion** P.R. Johnst. 1990 (= Leptostroma Fr. 1815 fide Johnston et al. 2014), *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, three species, type: *H. scirpinum* (DC.) P.R. Johnst., asexual morph *Leptostroma*, saprobes, north temperate, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Wang et al. (2014; DNA, phylogeny), Cultures and sequences are available, cultures available for type: Lantz 394 (UPS) (fide Lantz et al. 2011), Holotype and ex-type of type species unknown.

**Hypomyces** (Fr.) Tul. 1870, *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, more than 150 species, type: *H. lactifluorum*, asexual morph hyphomycetous, fungicolous, worldwide, see Jaklitsch et al. (2008; new species), Lumbsch and Huhndorf (2010; outline), Pöldmaa (2011; new species, red pigment), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequence data available, holotype of type: CBS H-19806 (as Sphaeria lactifluorum Schw., Syn. Fung. 1190-44 Herb.), ex-type strains are unavailable for type species.


**Hypospilina** (Sacc.) Traverso 1913, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *H. bifrons* (DC.) Traverso, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are unavailable, needs generic revision.

**Hypotarzetta** Donadini 1985, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *H. insignis* (Berthet & Riousset) Donadini, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are available, holotype and ex-type of type species unavailable.

**Hypotrichyna** (Vain.) Hale 1974, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 260 species, type: *H. brasiliiana* (Nyl.) Hale, lichenized, worldwide, see Sipman et al. (2009; review), Yáñez-Ayabaca and Eliasaro (2009; new species), Lumbsch and Huhndorf (2010; outline), Flakus et al. (2012; new species), Divakar et al. (2013, phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available.

**Hypotrichynicola** Etayo 2002, *Ascomycota* genera incertae sedis, one species, type: *H. rubra* Etayo, asexual morph unknown, lichenicolous, terrestrial, South America, see Lumbsch and
Huhndorf (2010; outline), Cultures and sequences are unavailable, holotype of the type: COL Etayo 16515.

**Hypoxylon** Bull. 1791 (= **Nodulisporium** Preuss 1849 *fide* Réblová et al. 2016), **Xylariaceae**, **Xylariales**, **Sordariomycetes**, c. 140 species, type: *H. fragiforme* (Pers.) J. Kickx f., asexual morph unknown, terrestrial, saprobes, mainly coprophilous, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; nomenclature), cultures and sequences are available, needs generic revision as the genus comprises more than 1000 species epithets (Index Fungorum 2017).

**Hypostroma** Huhndorf 1992, **Hypostromataceae**, **Pleosporales**, **Dothideomycetes**, two species, type: *H. saxicola* Huhndorf, asexual morph unknown, saprobes, terrestrial, worldwide, see Mugambi and Huhndorf (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Hypostromataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Cultures and sequences are available, cultures available for the type: SMH 5005 (*fide* Mugambi and Huhndorf 2009), holotype of type species NY, Harris 26462, needs generic revision.

**Hysteridiu**m P. Karst. 1905, **Ascomycota** genera **incertae sedis**, one species, type: *H. phragmitis* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hysterium** Tode 1791, **Hysteriaceae**, **Hysteriales**, **Dothideomycetes**, 14 species, type: *H. pulicare* (Lightf.: Fr.) Pers., asexual morph unknown, saprobes, terrestrial, worldwide, see Boehm et al. (2009, overview of genus), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Cultures and sequences are available, cultures available for type species CBS 123377, holotype of type: CBS H-5484.

**Hysterobrevium** E. Boehm & C.L. Schoch 2010, **Hysteriaceae**, **Hysteriales**, **Dothideomycetes**, four species, type: *H. mori* (Schwein.) E.W.A. Boehm & C.L. Schoch, asexual morph coelomycetous (aposphaeria-like), saprobes, terrestrial, worldwide, see Boehm et al. (2009; overview), Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), Cultures and sequences are available, holotype and ex-type of type: BPI878733, CBS 123336.

**Hysterocarina** H. Zogg 1949, **Hysteriaceae**, **Hysteriales**, **Dothideomycetes**, one species, type: *H. paulistae* H. Zogg, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable, needs generic revision.

**Hysterodifractum** D.A.C. Almeida, Gusmão & A.N. Mill. 2014, **Hysteriaceae**, **Hysteriales**, **Dothideomycetes**, one species, type: *H. partisporum* D.A.C. Almeida, Gusmão & A.N. Mill, asexual morph unknown, saprobes, terrestrial, Brazil, see: Almeida et al. (2014; taxonomy), Cultures and sequences are available, holotype of type: HUEFS:42865

**Hysterodiscula** Petr. 1942, **Ascomycota** genera **incertae sedis**, one species, type: *H. kalniae* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hysteroglonium** Rehm ex Lindau 1896, **Hysteriaceae**, **Hysteriales**, **Dothideomycetes**, two species, type: *H. ovatum* ( Cooke) Lindau, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable, needs generic revision.

**Hysterographium** Corda 1842, **Dothideomycetes** genera **incertae sedis**, two species, type: *H. elongatum* (Wahlenb.) Corda, asexual morph unknown, saprobes, terrestrial, worldwide, see Boehm et al. (2009a, b; taxonomy, DNA, phylogeny), Mugambi and Huhndorf (2009; DNA,
phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; key to distinguish from other hysteriaceous genera), Kirk et al. (2013; genus accepted), Logesh et al. (2013; new species, India), Wijayawardene et al. (2014; outline), Cultures and sequences are available, needs generic revision.

**Hysteronaevia** Nannf. 1984, Dermateaceae, Helotiales, Leotiomycetes, twelve species, type: *H. holoschoeni* (De Not.) Nannf., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Hysteropatella** Rehm 1890, Patellariaceae, Patellariales, Dothideomycetes, three species, type: *H. prostii* (Duby) Rehm, asexual morph unknown, saprobes, terrestrial, Switzerland, see Lumbsch and Huhndorf (2010; outline, accepted as genus in Hysteriaceae), Kirk et al. (2013; genus accepted), Hyde et al. (2013) did not accept as a genus in Hysteriaceae, Yacharoen et al. (2015; accepted as a genus in Patellariaceae), Cultures and sequences are available, cultures available for the type species H.B. 9934b.

**Hysteropeltella** Petr. 1923, Schizothyriaceae, Dothideomycetes family incertae sedis, one species, type: *H. moravica* Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Hysteropezizella** Höhn. 1917, Dermateaceae, Helotiales, Leotiomycetes, 19 species, type: *H. subvelata* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Hysteropsis** Rehm 1887, Dothideomycetes genera incertae sedis, four species, type: *H. culmigena* Rehm, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Hysteropycnis** Hilitzer 1929, Ascomycota genera incertae sedis, one species, type: need typification, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Hysterostegiella** Höhn. 1917, Dermateaceae, Helotiales, Leotiomycetes, ten species, type: *H. fenestrata* (Roberge ex Desm.) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, holotype and ex-type of type species unavailable, needs generic revision.

**Hysterostomella** Speg. 1885, Parmulariaceae, Dothideomycetes families incertae sedis, 40 species, type: *H. guaranitica* Speg., asexual morph unknown. Epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable.

**Hyweljonesia** R.G. Shivas, Y.P. Tan, Marney & Abell 2016, Teratosphaeriaceae, Capnodiales, Dothideomycetes, one species, type: *H. queenslandica* R.G. Shivas, Y.P. Tan, Marney & Abell, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: BRIP 61322b.

**Ialomitzia** Gruia 1964, Ascomycota genera incertae sedis, one species, type: *I. cavernicola* Gruia, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Icamadophila* Trevis. [nom.cons.] 1852, *Icamadophilaceae*, *Pertusariales*, *Lecanoromycetes*, eight species, type: *I. aeruginosa* (Scop.) Trevis., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available.

*Idiocercus* B. Sutton 1967, *Ascomycota* genera *incertae sedis*, two species, type: *I. pirozynskii* B. Sutton, coelomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, Australia, Tanzania, Sierra Leone, see Wijayawardene et al. (2012, 2017; outline), Cultures and sequences are unavailable, holotype of the type species IMI 107154a.

*Idiomyces* Thaxt. 1893, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, one species, type: *I. peyritschii* Thaxt., asexual morph unknown, biotrophic, terrestrial, Europe, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


*Igneocumulus* A.W. Ramaley 2003, *Ascomycota* genera *incertae sedis*, ten species, type: *I. yuccae* A.W. Ramaley, asexual morph hyphomycetous (lecythophora-like), saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, holotype of type species UC 1713843, needs generic revision.

*Ijuhya* Starbäck 1899, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, 14 species, type: *I. vitrea* Starbäck, asexual morph acremonium-like, saprobes, terrestrial, worldwide, see Lechat and Courtecuisse (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Lechat and Fournier (2017; new species), cultures and sequences are available, needs generic revision.


*Illosporium* Mart. 1817, *Hypocreales* genera *incertae sedis*, *Sordariomycetes*, 18 species, type: *I. carneum* Fr., asexual morph hyphomycetous, lichenicolous, USA and Europe, see Pindi (2012; marine), Kossowska and Szczepańska (2013; Poland), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are available.

*Ilyomyces* F. Picard 1917, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomyces*, two species, type: *I. mairei* F. Picard, asexual morph unknown, biotrophic, terrestrial, Europe, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

*Ilyonectria* P. Chaverri & C. Salgado 2011, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, 22 species, type: *I. destructans* (Zinssm.) Rossman, L. Lombard & Crous, root pathogenic or saprobes, cosmopolitan, see Chaverri et al. (2011; phylogeny), Cabral et al. (2012; new species), Lombard et al. (2015; phylogeny), Cultures and sequences are available, Ex-type of type species CBS 264.65.

see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Imaia** Trappe & Kovács 2008, *Morchellaceae, Pezizales, Pezizomycetes*, two species, type: *I. gigantea* (S. Imai) Trappe & Kovács, asexual morph unknown, ectomycorrhizal, saprobes, terrestrial, North American, East Asia, see Kovacs et al. (2008; DNA, taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Cultures and sequences are available, Holotype and ex-type of type species unavailable.


**Imicles** Shoemaker & Hambl. 2001, *Ascomycota genera incertae sedis*, six species, type: *I. leptospora* (Sacc. & Roum.) Shoemaker & Hambl., hyphomycetous, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, compare with *Sporidesmium*, needs generic revision.

**Immernaria** Rambold & Pietschm. 1989, *Lecideaceae, Lecideales, Lecanoromycetes*, eight species; type: *I. athroocarpa* (Ach.) Rambold & Pietschm., lichenized, Asia, Africa, Europe, Australia, see Lumbsch and Huhndorf (2010; outline), Valadbeigi et al. (2011; new species), Kirk et al. (2013; genus accepted), Pandit (2014; India), Zhang et al. (2015; China), Gasparian et al. (2016; Armenia), Lücking et al. (2016; classification), Cultures and sequences are available.

**Immersidiscosia** Kaz. Tanaka, Okane & Hosoya 2011, *Sporocadaceae, Xylariales, Sordariomycetes*, one species, type: *I. eucalypti* (Pat.) Kaz. Tanaka, Okane & Hosoya, sexual morph unknown, saprobes, terrestrial, France, Japan, Tunisia, see Tanaka et al. (2011; morphology, phylogeny), Jaklitsch et al. (2016; phylogeny), Cultures and sequences are available, holotype of the type species in FH, ex-type strain unavailable.

**Immersiella** A.N. Mill. & Huhndorf 2004, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, two species, type: *I. immersa* (P. Karst.) A.N. Mill. & Huhndorf, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type species SMH2589, SMH4104, holotype and ex-type of type species unavailable.


**Immersisphaeria** Jaklitsch 2007, *Xylariales genera incertae sedis, Sordariomycetes*, one species, type: *I. eichleriana* (Bres.) Jaklitsch, asexual morph unknown, pathogens, terrestrial, South Africa, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Daranagama et al. (2016; accepted in Xylariales), cultures and sequences are unavailable.

**Immothia** M.E. Barr 1987, *Dothideomycetes genera incertae sedis*, one species, type: *I. hypoxylon* (Ellis & Everh.) M.E. Barr, asexual morph coniothyrium-like, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Imshaugia** F.C. Mey. 1985, *Parmeliaceae, Lecanorales, Lecanoromycetes*, seven species, type: *I. aleurites* (Ach.) S.L.F. Mey., lichenized, boreal and temperate regions of the Northern Hemisphere and from cool-montane regions in the Southern Hemisphere, see Hauck et al.
Inaequalispora L. Lombard & Crous 2016, Stachybotriaceae, Hypocreales, Sordariomycetes, one species, type: *I. prestonii* (M.C. Tulloch) L. Lombard & Crous, hyphomycetous, sexual morph unknown, from forest soil, terrestrial, Malaysia, see Lombard et al. (2016; taxonomy, phylogeny), Kharpukhaeva and Mukhortova (2016; Baikal), Lücking et al. (2016; classification), sequences are available.

Incertomyces Egidi & Zucconi 2014, Dothideomycetes genera incertae sedis, two species, type: *I. perditus* Egidi & Zucconi, hyphomycetous, sexual morph unknown rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), Cultures available for the type: CBS 136105 = CCFEE 5385.

Incricipulum Baral 1985, Hyaloscyphaceae, Helotiales, Leotiomyces, six species, type: *I. ciliare* (Schrad.) Baral, asexual morph unknown, saprobes, terrestrial, temperate, see Hosoya et al. (2010; new species, Japan, DNA), Lumbsch and Huhndorf (2010; outline), Cultures and sequences are available.

Incruipila Raitv. 1970, Hyaloscyphaceae, Helotiales, Leotiomyces, ten species, type: *I. aspidi* (Lib.) Raitv., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Cultures and sequences are unavailable, needs generic revision.

Induratia Samuels, E. Müll. & Petrini 1987, Xylariaceae, Xylariales, Sordariomycetes, one species, type: *I. apiospora* Samuels, E. Müll. & Petrini, asexual morph unknown, saprobes, New Zeland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013). Daranagama et al. (2017 morphology, taxonomy, key), sequences are unavailable, needs generic revision.


Ingaderia Darb. 1897, Opegraphaceae, Arthoniales, Arthoniomycetes, three species, type: *I. pulcherrima* Darb., lichenized, Chile, Europe, see Lumbsch and Huhndorf (2010; outline),
Ertz and Tehler (2011; phylogeny), Notov (2014; outline), Lücking et al. (2016; classification), sequences are available.

Ingvariella Guderley & Lumbsch 1997, Stictidaceae, Ostropales, Lecanoromycetes, one species, type: *I. bispora* (Bagl.) Guderley & Lumbsch, lichenized, arid and semi-arid area, see Lumbsch and Huhndorf (2010; outline), Fernández-Brime et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Inifatiella R.F. Castañeda, Ascomycota genera incertae sedis, one species, type: *I. nectandrae* R.F. Castañeda, coelomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Inocyclus Theiss. & Syd. 1915, Parmulariaceae, Dothideomycetes families incertae sedis, eight species, type: *I. psychotriae* (Syd. & P. Syd.) Theiss. & Syd, assexual morph unknown, epiphytes, pathogens, biotrophic, terrestrial, worldwide, see Hofmann (2009; review, placed in Parmulariaceae), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; review, keys), Wijayawardene et al. (2014; outline), Guatimosim et al. (2015; phylogeny), Cultures and sequences are available.

Inoderma (Ach.) Gray 1821, Arthoniaceae, Arthoniales, Arthoniomycetes, three species, type: *I. byssaceum* (Weigel) Gray, lichenized, temperate Europe, North America, Eastern Siberia, Japan, and eastern Africa (Uganda), see Frisch et al. (2015; phylogeny, key, description), Lücking et al. 2016 (classification), sequences are available.

Invercalariopsis J.L. Crane & Schokn. 1983, Ascomycota genera incertae sedis, one species (probably more described as synasexual morphs of *Helicoma, Monodictys* or *Xenosporium*), type: *I. nigra* J.L. Crane & Schokn., hyphomycetous, sexual morph unknown (probably Tubeufia), saprobes, on rotten submerged wood, America and Africa, see Hyde et al. (2011; checklist), Kirk et al. (2013; valid genus), cultures and sequences are unavailable, holotype of type: ILLS 43047.


Involucropyrenium Breuss 1996, Verrucariaceae, Verrucariales, Eurotiomycetes, nine species, type: *I. walteri* (Kremp.) Breuss, lichenized, Europe, North America, Asia, see Sun et al. (2008; China), Prieto et al. (2010; key, description), Prieto et al. (2012; phylogeny), Breuss (2016; nomenclature), Lücking et al. (2016; classification), sequences are available, holotype of type species unavailable.

Involurocypha Raitv. 2002, Dermataceae, Helotiales, Leotiomycetes, ten species, type: *I. involucrata* (B. Erikss.) Raitv., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, holotype of the type species TAA165831, needs generic revision.

Iodophanus Korf 1967, Pezizaceae, Pezizales, Pezizomycetes, 16 species, type: *I. carneus* (Pers.) Korf, asexual morph unknown, coprophilous, terrestrial, worldwide, see Schmitt et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, type material of type species CBS H-6320.

Iodosphaeria Samuels, E. Müll. & Petrini 1987, Amphisphaeriaceae, Xylariales, Sordariomycetes, three species, type: *I. phyllophila* (Mouton) Samuels, E. Müll. & Petrini, asexual morph hyphomycetous (selenospora-like and ceratosporium-like), saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus
accepted), Maharachchikumbura et al. (2015, 2016; outline), Li et al. (2015; new species, DNA, phylogeny), cultures and sequences are available, holotype of the type: PDD 47872.


**Iona** Sp. 1871, *Hymenellaceae*, *Hymenellales*, *Lecanoromycetes*, seven species, type: *I. chrysophana* (Körb.) Th. Fr., lichenized, worldwide, see Thüs and Schultz (2009; key), Kinaloğlu (2010; Turkey), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Międzikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

**Ionomastigion** Peres 1961, *Ascomycota* genera *incertae sedis*, one species, type: *I. notatum* Peres & L. Xavier, coelomycetous, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, compare with *Asterostomella*, holotype of type: IMUR 20676, needs generic revision.

**Iopala** Poelt 1977, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *I. sphalera* Poelt, lichenized, Himalayas, see Lumbsch and Huhndorf (2010; outline), Arup et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); cultures and sequences are available, holotype of type species (see MBT#158202).

**Iraniella** Petr. 1949, *Sordariomycetes* genera *incertae sedis*, one species, type: *I. rechingeri* Petr., asexual morph unknown, saprobes, terrestrial, Iran, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are unavailable, needs generic revision.

**Irenopsis** F. Stevens 1927, *Meliolaceae*, *Meliolales*, *Sordariomycetes*, 75 species, type: *I. tortuosa* (G. Winter) F. Stevens, asexual morph produced from the hyphae, saprobes, pathogens, terrestrial, worldwide, see Hosagoudar and Archana (2010; new species, India), Hosagoudar and Sabeena (2010; new species, India), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pinho et al. (2013, 2014; new species, Brazil, DNA, phylogeny), Hosagoudar et al. (2014; new species, Andaman Islands), Hongsanan et al. (2015; new species, taxonomy), Maharachchikumbura et al. (2015, 2016; outline), Rodriguez et al. (2015; new species), Cultures and sequences are available, holotype and ex-type of type species unavailable.

**Iridinea** Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, two species, type: need typification, asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, data inadequate, needs generic revision.

**Irpicomyces** Deighton 1969, *Ascomycota* genera *incertae sedis*, *Leotiomycetes*, three species, type: *I. schifffnerulae* Deighton, hyphomycetous, sexual morph unknown, on leaves or twigs, Malaysia and Japan, see Watanabe (2010; illustrations), Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, holotype of type species IMI 54929b.

**Irydyonia** Racib. 1900, *Rhytismatales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *I. filicis* Racib., asexual morph unknown, saprobes, Java, see Lumbsch and Huhndorf (2010; outline), holotype and ex-type of type species unavailable, needs generic revision.

classification), sequences are available, lectotype and ex-type strain of type: Ertz 13024.

**Isaria** Pers. 1794. Cordycipitaceae, Hypocreales, Sordariomycetes, c. 13 species, type: *I. farinosa* (Holmsk.) Fr., hyphomycetous, entomogenous, worldwide, see Jiang et al. (2008; metabolite properties), Meyer et al. (2008; Florida), Zimmermann (2008; biology, ecology), Avery et al. (2009; *in vitro* infection), Zhang et al. (2009; extrolites), Ali et al. (2010; enzyme evaluation), Kim et al. (2010; thermotolerance), Ma et al. (2010; extrolites), Hoy et al. (2010; *Diaphorina citri* control), Asai et al. (2011; Tenuipyrene ), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, epitype and ex-type of: CBS-H6586, CBS 111113.

**Isariella** Henri. 1909. Ascomycota genera incertae sedis, two species, type: *I. auerswaldiae* Henri., hyphomycetous, saprobes, terrestrial, Brazil, Dominican Replublic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), compare with *Atractilina*, sequences are unavailable, holotype of type species SF40445, needs generic revision.

**Ischnostroma** Syd. & P. Syd. 1914. Ascomycota genera incertae sedis, one species, type: *I. merrillii* Syd. & P. Syd., coelomycetous, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), compare with *Trachythrium*, sequences are unavailable, needs generic revision.

**Isia** D. Hawksw. & Manohar. 1978. Sordariales genera incertae sedis, Sordariomycetes, two species, type: *I. neocaledoniensis* (C. Moreau) D. Hawksw. & Manohar, on plant material, Asia and Pacific, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are unavailable, needs generic revision.

**Isomunkia** Theiss. & Syd. 1915. Dothideomycetes genera incertae sedis, one species, type: *I. pulvinula* (Pat.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, Ecuador, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Isothea** Fr. 1849. Phyllachoraceae, Phyllachorales, Sordariomycetes, two species, type: *I. rhytismoides* (Bab.) Fr., asexual morph unknown, from living leaves, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are unavailable, needs generic revision.

**Isthmoconidium** Etayo & Berger 2013, Ascomycota genera incertae sedis, one species, type: *I. bacidicola* Etayo & F. Berger, coelomycetous, sexual morph unknown, parasymbiont on *Bacidia*, terrestrial, Caribbean, see Etayo and Berger (2013; morphology, distinction of similar lichenicolous genera), sequences are unavailable, holotype of the type species LI, F. Berger 22323 & S. La Greca.

**Isthmolongispora** Matsush. 1971, Ascomycota genera incertae sedis, eleven species, type: *I. intermedia* Matsush., hyphomycetous, saprobes, aquatic and terrestrial, Argentina, Australia, Brazil, China, Cuba, Hungary, Japan, Malaysia, Papua New Guinea, Peru, Portugal, Scotland, Taiwan, United Kingdom, Venezuela and West Indies, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), compare with *Isthmophragmospora* and *Wiesneriomycetes*, cultures and sequences are available, holotype of type: MFC-3052, needs generic revision.

**Isthmophragmospora** Kuthub. & Nawawi 1992, Ascomycota genera incertae sedis, two species, type: *I. verruculosa* Kuthub. & Nawawi, hyphomycetous, sexual morph unknown, saprobes, on submerged rotten angiosperms twigs, on submerged decaying leaves in a black water stream, Malaysia and Brazil, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Monteiro et al. (2014; new species), sequences are unavailable, holotype of type: IMI 344358.

**Isthmospora** F. Stevens 1918, Ascomycota genera incertae sedis, three species, type: *I. spinosa* F. Stevens, hyphomycetous, sexual morph unknown, saprobes, terrestrial,
Pantropical, see Seifert et al. (2011; morphology, accepted as a genus in Microthyriaceae), Wijayawardene et al. (2012, 2014; outline, accepted as a genus in Microthyriaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

_Isthmosporella_ Shearer & J.L. Crane 1999, Dothideomycetes genera incertae sedis, one species, type: _I. pulchra_ Shearer & J.L. Crane, asexual morph unknown, saprobes, fresh water, USA, see Lumbsch and Huhndorf (2010; outline, placed in Phaeosphaeriaceae), Zhang et al. (2012; placed in Pleosporales), Hyde et al. (2013; accepted in Phaeosphaeriaceae), Phookamsak et al. (2014; excluded from Phaeosphaeriaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as Dothideomycetes), sequences are unavailable, holotype of type: ILLS 53086, needs generic revision.

_Isthmoticladia_ Matsush. 1971, Ascomycota genera incertae sedis, three species, type: _I. laeensis_ Matsush., hyphomycetous, saprobes, aquatic and terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), compare with Aricululospora, holotype of type: MFC-2803, cultures are available, needs generic revision.

_Ityorhoptrum_ P.M. Kirk 1986, Ascomycota genera incertae sedis, four species, type: _I. verruculosum_ (M.B. Ellis) P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Whitton et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Mel’nik et al. (2014; key species), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

_Ivanpisutia_ S.Y. Kondr., L. Lőkös & Hur 2015, Lecanorales genera incertae sedis, Lecanoramycetes, one species, type: _I. oxneri_ S.Y. Kondr., Lőkös & Hur, lichenized, Russia, see Kondratyuk et al. (2015; outline), Lücking et al. (2016; classification), Cultures and sequences are unavailable, holotype of type: KoLRI 020233.

_Iwisoniella_ E.B.G. Jones 1991, Halosphaeriaceae, Microascales, Sordariomycetes, one species, type: _I. rotunda_ E.B.G. Jones, asexual morph unknown, marine on wood, Great Britain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), Cultures and sequences are unavailable, holotype of type species IMI 271838.

_Iyengarina_ Subram. 1958, Ascomycota genera incertae sedis, three species, type: _I. elegans_ Subram., hyphomycetous, sexual morph unknown, saprobes, lignicolous, India, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type: MUBL 2015 (Madras, India) (?IMI 113126)

_Jacobsonia_ Boedijn 1935, Helotiaceae, Helotiales, Leotiomycetes, one species, type: _J. glauca_ Boedijn, asexual morph unknown, saprobes, terrestrial, Sumatra, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures are unavailable, holotype of type species (see MBT#191503).

_Jaffuelia_ Speg. 1921, Pseudoperisporiaceae, Dothideomycetes, families incertae sedis, one species, type: _J. chilensis_ Speg., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Dothioraceae), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; transferred to Pseudoperisporiaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

_Jafnea_ Korf 1960, Pyronemataceae, Pezizales, Pezizomycetes, four species, type: _J. fusicarpa_ (W.R. Gerard) Korf, saprobes, terrestrial, north temperate, Australia, Tasmania, see Antonín and Moravec (2010; Czech Republic), Lumbsch and Huhndorf (2010; outline), Gates and Van Vooren (2016; new species), cultures and sequences are available.
**Jahniella** Petr. 1921, *Ascomycota genera incertae sedis*, three species, type: *J. bohemica* Petr., coelomycetous, saprobe, pathogen, terrestrial, Czechoslovakia, France, Germany, Russia, Ukraine, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), compare with *Septoria*, sequences are unavailable, holotype of type: IMI 204129, needs generic revision.

**Jahnula** Kirschst. 1936, *Aliquandostipitaceae*, Jahnulales, Dothideomycetes, 16 species, type: *J. aquatica* (Plöttnér & Kirschst.) Kirschst., asexual morph unknown, saprobes, aquatic, worldwide, see Raja et al. (2008; new species), Sivichai and Boonyuen (2010; new species), Sivichai et al. (2011; anamorph), Jones et al. (2012; phylogeny), cultures and sequences are available, GenBank Number: NR_120015 (*Jahnula bipileata*), holotype and ex-type of type species unavailable.


**Janetia** M.B. Ellis 1976, *Ascomycota genera incertae sedis*, 22 species, type: *J. euphorbiae* M.B. Ellis, hypymycetous, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Silva et al. (2016; morphology and phylogeny), compare with *Sporidesmium* and *Stenjehughesia*, cultures and sequences are available but lacks for the type species, holotype of type: IMI 163941, needs generic revision.

**Japewia** Tønsberg 1990, *Ramalinaceae*, Lecanorales, Lecanoromycetes, three species, type: *J. tornoënsis* (Nyl.) Tønsberg, lichenized, cool temperate Northern Hemisphere, see Czarnota (2009; Carpathians), Lumbsch and Huhndorf (2010; outline), Kantvilas (2011; Australia), Coppins (2013; Slovenia), Kirk et al. (2013; genus accepted), Allen and Lendemer (2015; key), Lücking et al. (2016; classification), cultures and sequences are available.


**Jarxia** D. Hawksw. 1989, *Naetrocymbaceae*, Pleosporales, Dothideomycetes, two species, type: *J. thelenua* (Müll. Arg.) D. Hawksw., on twigs, terrestrial, Caribbean, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Naetrocymbaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Jaklitsch et al. (2016; position), sequences are unavailable, holotype of type species G.

proposed), Lücking et al. (2016; classification), Cultures and sequences are available, holotype of type species KoLR1, Hur 041679.

**Jattaea** Berl. 1900, *Calosphaeriaceae, Calosphaeriales, Sordariomycetes*, twelve species, type: *J. algeriensis* Berl., asexual morph hyphomycetous (phialophora-like *fide* Damm et al. 2008), from living leaves, terrestrial, worldwide, see Marincowitz et al. (2008; new species), Lumbsch and Huhndorf (2010; outline), Réblová et al. (2011; taxonomy, revision, new species), Kirk et al. (2013; genus accepted), Réblová et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available; GenBank Number: NR_135946, verified culture for type species STE-U 6201 (*fide* Damm et al. 2008).

**Javaria** Boise 1984, *Astrosphaeriellaceae, Pleosporales, Dothideomycetes*, two species, type: *J. samuelsii* Boise, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; morphology, phylogeny), Kirk et al. (2013; genus accepted), Tian et al. (2015; morphology, nomenclature, phylogeny), sequences are unavailable, holotype of type: MUBL 3124.

**Javonarxia** Subram. ex Subram. 1995, *Ascomycota* genera *incertae sedis*, two species, type: *J. triseptata* Subram. ex Subram., hyphomycetous, sexual morph unknown, saprobes, on twigs, Malaysia, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of the type: HCIO 51502.

**Jenmania** W.Wächt. 1897, *Lichinaceae, Lichinales, Lichinomycetes*, two species, type: *J. goebelli* W. Wächt., lichenized, British Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, holotype of the type: KLU 300009.

**Jerainum** Nawawi & Kuthub. 1992, *Ascomycota* genera *incertae sedis*, one species, type: *J. triquetrum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Pratibha (2013; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype of type species unknown.

**Jerainum** Nawawi & Kuthub. 1992, *Ascomycota* genera *incertae sedis*, one species, type: *J. triquetrum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Pratibha (2013; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype of type species unknown.

**Jerainum** Nawawi & Kuthub. 1992, *Ascomycota* genera *incertae sedis*, one species, type: *J. triquetrum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, on submerged rotten twigs, Malaysia, see Hyde et al. (2011; checklist), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type species unknown.

**Jerainum** Nawawi & Kuthub. 1992, *Ascomycota* genera *incertae sedis*, one species, type: *J. triquetrum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, on submerged rotten twigs, Malaysia, see Hyde et al. (2011; checklist), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type species unknown.

**Jerainum** Nawawi & Kuthub. 1992, *Ascomycota* genera *incertae sedis*, one species, type: *J. triquetrum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, on submerged rotten twigs, Malaysia, see Hyde et al. (2011; checklist), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type species unknown.

**Jerainum** Nawawi & Kuthub. 1992, *Ascomycota* genera *incertae sedis*, one species, type: *J. triquetrum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, on submerged rotten twigs, Malaysia, see Hyde et al. (2011; checklist), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, holotype of type species unknown.

**Josefpoeltia** S.Y.Kondr. & Kärnefelt 1997, *Teloschistaceae, Teloschistales, Lasiosphaeriaceae*, three species, type: *J. boliviensis* S.Y. Kondr. & Kärnefelt, lichenized, Peru, Chile, see Gaya et al. (2008; phylogeny), Arup et al. (2013, taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species MIN (2732).


**Jugulospora** N. Lundq. 1972, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, two species, type: *J. rotula* (Cooke) N. Lundq., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, cultures available for the type species ATCC 38359, type material of type species CBS H-13717.

**Julella** Fabre 1879, *Thelenellaceae, Ostropales, Lecanoromycetes*, c. 20 species, type: *J. buxi* Fabre, asexual morph unknown, saprobes, lichenized, worldwide, see Lumbsch and Huhndorf (2010; phylogeny), Nelsen et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014b; phylogeny), cultures and sequences are available, holotype of type: S F599, needs generic revision.

**Jumillera** J.D. Rogers, Y.M. Ju & F. San Martín 1997, *Lopadostomataceae, Xylariales, Sordariomycetes*, eight species, type: *J. mexicana* J.D. Rogers, Y.M. Ju & F. San Martín, asexual morph libertella-like, with geniculosporium-like synanamorph, saprobes, Rio Grande do Sul, Hawaiian Island, Mexico, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Daranagama et al. (2017 morphology, taxonomy, key), sequences are unavailable, placement in *Lopadostomataceae* needs to be confirmed by molecular data.


**Junctospora** Minter & Hol.-Jech. 1981, *Ascomycota* genera incertae sedis, one species, type: *J. pulchra* Minter & Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species IMI 243573, needs generic revision.

Kabatia Bubák. 1904, *Ascomycota* genera *incertae sedis*, ten species, type: *K. latemarenensis* Bubák, coelomycetous, pathogen, terrestrial, Armenia, Canada, China, Czechoslovakia, Germany, Italy, Japan, Poland, Russia, Spain, Scotland, Switzerland, Turkey, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), compare with *Leptothryium*, sequences are unavailable, holotype of type: IMI 213594, needs generic revision.

Kabatiella Bubák 1907, *Aureobasidiasporae*, *Dothideales*, *Dothideomycetes*. 18 species, type: *K. microsticta* Bubák, hyphomycetous, sexual morph unknown, saprobes, pathogen, terrestrial, worldwide, see Simon et al. (2009; DNA), Seifert et al. (2011; morphology), Bai et al. (2012; pathogens), Bills et al. (2012; new species), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Kabatiella Bubák 1907, *Dothideales* genera *incertae sedis*, *Dothideomycetes*. c. 15 species, type: *K. microsticta* Bubák, hyphomycetous, saprobes, pathogen, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), compare with *Aureobasidium*, cultures and sequences are available but lacks for the type species, needs generic revision.


Kacosphaeria Speg. 1887, *Calosphaeriaeae*, *Calosphaeriales*, *Sordariomycetes*, one species, type: *Kacosphaeria antarctica* Speg., asexual morph unknown, from living leaves, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

Kaernefeltia Thell & Goward 1996, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *K. californica* (Tuck.) A. Thell & Goward, lichenized, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Herrera-Campos et al. (2016; Mexico), Lücking et al. (2016; classification), cultures and sequences are available.


Kainomyces Thaxt. 1901, *Loboulbeniaceae*, *Loboulbeniales*, *Loboulbeniomycetes*, three species, type: *K. isomali* Thaxt., asexual morph unknown, biotrophic, terrestrial, Western Africa, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Kalaallitia Alstrup & D. Hawksw. 1990, *Dacampiaceae*, *Dothideomycetes* families *incertae sedis*, one genus, type: *K. reactiva* Alstrup & D. Hawksw., on lichens, Europe, see Etayo and Sancho (2008; synonym of *Opegrapha*, *Roccellaceae*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), cultures and sequences are unavailable, holotype of type: C.

Kalamarospora G. Delgado 2010 [2011], Ascomycota genera incertae sedis, one species, type: *K. multiflagellata* G. Delgado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: BPI 879811A.

Kalapuya M.J. Trappe, Trappe & Bonito 2010, Morchellaceae, Pezizales, Pezizomycetes, two species, type: *K. brunnea* M.J. Trappe, Trappe & Bonito, asexual morph unknown, epigean, saprobes, mycorrhizal, terrestrial, Italy, USA, see Trappe et al. (2010; DNA, phylogeny), Jaklitsch et al. (2016; accepted as a genus in *Morchellaceae*), cultures and sequences are available.

Kalbiana Henssen 1988, Verrucariales genera incertae sedis, Eurotiomycetes, one species, type: *K. brasiliensis* Henssen, lichenized, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Kalbographa Lücking 2007, Graphidaceae, Ostropales, Lecanoromycetes, five species, type: *K. caracasana* (Müll. Arg.) Lücking, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Kalb et al. (2009; Thailand), Plata et al. (2012a; placed in family), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are available, holotype of type species unavailable.

Kalchbrenneriella Diederich & M. S. Christ. 2002, Ascomycota genera incertae sedis, one species, type: *K. cyanescens* (Kalchbr.) Diederich & M.S. Christ., hyphomycetous, sexual morph unknown, lichenicolous, non-lichenized, terrestrial, Europe, North America and Papua New Guinea, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Joshi et al. (2016; India), sequences are unavailable.

Kaleidosporium Van Warmelo & B. Sutton 1981, Ascomycota genera incertae sedis, one species, type: *K. fenestratum* (Ellis & Everh.) Van Warmelo & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; morphology), cultures and sequences are unavailable.

Kallicchroma Kohlm. & Volkm.-Kohlm. 1993, Bionectriaceae, Hypocreales, Sordariomycetes, type: *K. tethys* (Kohlm. & E. Kohlm.) Kohlm. & Volkm.-Kohl., two species, asexual morph unknown, saprobes, terrestrial, aquatic, temperate and tropical regions of the Atlantic, Indian and Pacific Oceans and east coast of Australia, see Dethou et al. (2009; Thailand), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), Abdel-Wahab et al. (2016; new species, phylogeny), cultures and sequences are available.

Kallistoskypha Pfister, Agnello, Lantieri & LoBuglio 2013, Caloscyphaceae, Pezizales, Pezizomycetes, one species, type: *K. incarnata* (Duvernoy & Maire) Pfister, Agnello, Lantieri & LoBuglio, on soil associated with *Eucalyptus*, Mediterranean region, see Pfister et al. (2013; proposed genera), sequences are unavailable.

Kalmusia Niessl 1872 (= Dendrothyrium Verkley et al. 2013 fide Ariyawansa et al. 2014; Wijayawardene et al. 2014), Didymosphaeriaceae, Pleosporales, Dothideomycetes, 15 species, type: *K. ebuli* Niessl, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genera in *Didymosphaeriaceae*), Ariyawansa et al. (2014; taxonomy, phylogeny), Wijayawardene et al.
(2014, 2016; phylogeny, taxonomy, outline, nomenclature), Zhang et al. (2014; neotypified *Kalmusia ebuli*), Liu et al. (2015; new species, Italy), Tanaka et al. (2015; phylogeny), cultures and sequences are available, neotype and ex-neotype culture for type: BJFC 200201, CBS 123120 (fide Zhang et al. 2014).


**Kananascus** Nag Raj 1984, *Trichosphaeriaceae*, *Trichosphaeriales*, *Sordariomycetes*, three species, type: *K. verrucisporus* Nag Raj, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable, holotype of type species HO 445410.

**Kanvilasia** P.M. McCarthy, Elix & Sérus. 2000, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *K. hians* P.M. McCarthy, Elix & Sérus., lichenized, Australia, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable, holotype of type species HO 445410.

**Kapooria** J. Reid & C. Booth 1989, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *K. musarum* (J.N. Kapoor) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Karschia** Körb. 1865, *Asterinales* genera *incertae sedis*, *Dothideomycetes*, four species, type: *K. talcophila* (Ach.) Körb., asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes*, genera *incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Lichenotheliaceae*), Ertz and Diederich (2015; phylogeny), cultures and sequences are available.

**Karstenella** Harmaja 1969, *Karstenellaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *K. vernalis* Harmaja, saprobes, terrestrial, Europe (Finland) and North America (New Mexico), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pfister et al. (2013; genus accepted), cultures and sequences are available, holotype of type species unavailable.

**Karstenia** Fr. 1885, *Rhytismatales* genera *incertae sedis*, *Leotiomyetes*, ten species, type: *K. sorbina* (P. Karst.) P. Karst., asexual morph unknown, saprobes, Europe, USA, see Lumbsch and Huhndorf (2010; outline), Baral (2015; new combination), sequences are unavailable, holotype of type species unavailable, needs generic revision.


**Karstenula** Speg. 1879, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 16 species, type: *K. rhodostoma* (Alb. & Schwein.) Speg., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted in
Didymosphaeriaceae), Hyde et al. (2013; accepted in Didymosphaeriaceae), Ariyawansa et al. (2014; taxonomy, accepted in Didymosphaeriaceae, phylogeny), Wijayawardene et al. (2014; outline), Tanaka et al. (2015; DNA, phylogeny), holotype of the type species PH 01048835 (holotype of Sphaeria rhodostoma), cultures available for type species CBS 690.94, CBS 691.94.

Kashiwadia S.Y.Kondr., L.Lőkös & Hur 2014, Physciaceae, Caliciales, Lecanoromycetes, one species, type: K. orientalis (Kashiw.) SY Kondr., L. Lőkös et J.-S. Hur, lichenized, eastern Asia, see Kondratyuk et al. (2014c; taxonomy, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Kastanostachys L. Lombard & Crous 2016, Stachybotriaceae, Hypocreales, Sordariomycetes, one species, type: K. aterrima (Fuckel) L. Lombard & Crous, asexual morph hyphomycetous, from forest soil, terrestrial, Czech Republic, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), epitype and ex-epitype culture of the type: PRM 934970, CBS 101310.

Kathistes Malloch & M. Blackw. 1990, Kathistaceae, Ophiostomatales, Sordariomycetes, type: K. calyculata Malloch & M. Blackw., three species, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences and cultures are available, holotype strain of the type species TRTC 51145.

Katamotoa Kaz. Tanaka & Y. Harada 2005, Lentitheciaceae, Pleosporales, Dothideomycetes, one species, type: K. bambusicola Kaz. Tanaka & Y. Harada, asexual morph unknown, saprobes, terrestrial, Japan, see Tanaka et al. (2009, 2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type species HHUF 28661, JCM 13131.

Kazachstania Zubkova 1971, Saccharomycetaceae, Saccharomycetales, Saccharomycetes, 35 species, type: K. viticola Zubcova, asexual reproduction is by multilateral budding, saprophytic, but a few species are opportunistic pathogens of mammals, in soil, maize silage, waste water, soft drinks, fermented foods, tree fluxes, feces, infected mammals, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available (unpublished), holotype of type species HHUF 28661, CBS 101310.

Keinstirschia J. Reid & C. Booth 1989, Diaporthales incertae sedis, Sordariomycetes, one species, type: K. megalosperma (Kirschst.) J. Reid & C. Booth, terrestrial, saprobes, Germany, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type species (see MBT#133497), needs generic revision.

Keissleriella Höhn. 1919, Lentitheciaceae, Pleosporales, Dothideomycetes, c. 34, type: K. aesculi (Höhn.) Höhn., asexual morph dendrophoma-like, saprobes, terrestrial, worldwide, Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as a genus in Lentitheciaceae), Kirk et al. (2013; genus accepted), Hyde et al. (2013; outline, accepted as a genus in Lentitheciaceae), Crous et al. (2014; new species, The Netherlands), Ariyawansa et al. (2015; new species), Liu et al. (2015; new species, Italy), Tanaka et al. (2015; new species, phylogeny), Thambubugala et al. (2016; new species, Italy), cultures and sequences are available.

Keissleriomycyes D. Hawksw. 1981, Ascomycota genera incertae sedis, one species, type: K. sansteadeans (Keissl.) D. Hawksw., lichenicolous, Europe, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species W 1921/185.

Kellermania Ellis & Everh. 1885 (= Planistromella A.W. Ramaley 1993 fide Wijayawardene et al. 2014; Rossman et al. 2015), Planistromellaceae, Botryosphaeriales, Dothideomycetes, type: K. yuccigena Ellis & Everh., coelomycetous, sexual morph Planistromella, saprobes, terrestrial, worldwide, see Minnis et al. (2012; taxonomy, phylogeny), Wijayawardene et al.

Kensinjia J. Reid & C. Booth 1989, *Melanconidaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *K. umbrina* (Jenkins) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Kephartia R.C. Harris & Lendemer 2013, *Ascomycota* genera *incertae sedis*, two species, type: *K. crystalligera* R.C. Harris & Lendemer, asexual morph unknown, lichenized, terrestrial, USA, see Lendemer et al. (2013; taxonomy), sequences are unavailable, holotype of type: NY(26883).

Kernia Nieuwl. 1916, *Microascales*, *Microascales*, *Sordariomycetes*, five species, type: *K. nitida* (Sacc.) Nieuwl., asexual morph unknown, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype material of type: CBS H-13743, needs generic revision.

Kerniomyces Toro 1939, *Schizothyriaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *K. costi* Toro, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.


Kielavia Viégas, J. Reid & C. Booth 1989, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *K. obscura* Viégas, asexual morph unknown, epiphytes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable, Holotype of type species IACM.

Kiliophora Kuthub. & Nawawi 1993, *Ascomycota* genera *incertae sedis*, three species, type: *K. fusicora* Kuthub. & Nawawi, hyphomycetous, sexual morph unknown, saprobes, foliginicolous, Ivory Coast, Malaysia and Vietnam, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hidayat et al. (2014; phylogeny, placed in *Amphisphaeriacae*), Rajeshkumar et al. (2016; family needs revision), Cultures and sequences are available, holotype of type species IMI 355816.


Kionocephala P.M. Kirk 1986, *Ascomycota* genera *incertae sedis*, one species, type: *K. catenulata* (M.B. Ellis) P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, lignonicolous, UK, Russia, Cuba, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.
**Kionochaeta** P.M. Kirk & B. Sutton 1986, *Chaetosphaeriaceae, Chaetosphaerales, Sordariomycetes*, seven species, type: *K. ramifera* (Matsush.) P.M. Kirk & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species, holotype of the type: IMI188783.

**Kirschsteiniothelia** D. Hawksw. 1985 (= *Dendryphiopsis* S. Hughes 1953 fide Wijayawardene et al. 2014; Rossman et al. 2015), *Kirschsteiniotheliaceae, Dothideomycetes* family *incertae sedis*, 19 species, type: *K. aethiops* (Berk. & Curtis) D. Hawksw., asexual morph *Dendryphiopsis*, on wood, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes* genera *incertae sedis*), Boonmee et al. (2012; phylogeny), Hyde et al. (2013; accepted as a genus in *Kirschsteiniotheliaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Rossman et al. (2015; nomenclature), Jaklitsch et al. (2016; position), cultures and sequences are available, holotype of type species K(M), genus remains polyphyletic.

**Kirstenboschia** Quaedvlieg, Verkley & Crous 2013, *Ascomycota* genera *incertae sedis*, one species, type: *K. diospyri* Quaedvl., Verkley & Crous, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Quaedvlieg et al. (2013; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of the type: CBS H-21326, CBS 134911.


**Klasterskya** Petr. 1940, *Ophiostomataceae, Ophiostomatales, Sordariomycetes*, one species, type: *K. acuum* (Mouton) Petr., asexual morph hyalorhinocladiella-like, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Kleidiomyces** Thaxt. 1908, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *K. furcillatus* (Thaxt.) Thaxt., asexual morph unknown, biotrophic, terrestrial, America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Kluveromyces** van der Walt 1971, *Saccharomycetaceae, Saccharomycetales*, Saccharomyces, eight species, type: *K. marxianus* (E.C. Hansen) van der Walt, asexual reproduction is by multilateral budding, saprophytic, sea water, *Drosophila* spp., mushrooms, tree fluxes, cacti, dairy products, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Kmetia** Bres. & Sacc. 1902, *Ascomycota* genera *incertae sedis*, one species, type: *K. exigua* Bres. & Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Kmetiopsis** Bat. & Peres 1960, *Ascomycota* genera *incertae sedis*, one species, type: *K. hymenaeae* Bat. & Peres, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Knemiothyrium** Bat. & J.L. Bezerra 1960, *Ascomycota* genera *incertae sedis*, one species, type: *K. weldenii* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes,
terrestrial, Jamaica, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Kodonospora** K. Ando 1993, *Ascomycota* genera incertae sedis, one species, type: *K. tetracolumnaris* K. Ando, hyphomycetous, sexual morph unknown, saprobic, on leaves, Japan, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), sequences are unavailable, holotype of type: TNS F-176499.

**Koerberia** A. Massal. 1854, *Koerberiaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *K. biforis* A. Massal., lichenized, Europe, Asia, USA,?, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Placynthiaceae*), Kirk et al. (2013; genus accepted), Spribille and Muggia (2013, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

**Koerberiella** Stein 1879, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, two species, type: *K. wimmeriana* (Körb.) Stein, lichenized, Europe, North America, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Schmull et al. (2011; phylogeny), Lücking et al. 2016 (classification), cultures and sequences are available, holotype of type species unavailable.

and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; genus accepted), cultures and sequences are available.


**Kolletes** Kohlm. & Volkm.-Kohlm. 2005, *Ascomycota* genera incertae sedis, one species, type: *K. undulatus* Kohlm. & Volkm.-Kohlm., hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; not accepted as valid genus), cultures and Cultures and sequences are unavailable, holotype of the type: IMS, Kohlmeyer 5728, needs generic revision.

**Komagataella** Y. Yamada, Matsuda, Maeda & Mikata 1995, *Pichiaceae*, *Saccharomycetales*, *Saccharomyces*, six species, type: *K. pastoris* (Guilliermond) Y. Yamada, M. Matsuda, K. Maeda & Mikata, asexual reproduction is by multilateral budding, saprophytic, fluxes from various trees and from rotted wood, worldwide, see Kurtzman (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Kompuloscypha** Pfister 1989, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, four species, type: *K. chudei* (Pat. ex Le Gal) Pfister, saprobes, on leaves, fruits and twigs, tropical and subtropical, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Konkenia** Hara 1913, *Sordariomycetes* genera incertae sedis, two species, type: *K. bambusae* Hara, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Konradia** Racib. 1900, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *K. bambusina* Racib., asexual morph unknown, saprobe, terrestrial, Java, Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Kontospora** A. Roldán, Honrubia & Marvanová 1990, *Ascomycota* genera incertae sedis, one species, type: *K. halophila* A. Roldán, Honrubia & Marvanová, hyphomycetous, sexual morph unknown, saprobes, aquatic, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Koorchaloma** Subram. 1953, *Trichosporaceae*, *Trichosporiales*, *Sordariomycetes*, nine species, type: *K. madreeya* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread (panropical), see Allegrucci et al. (2011; key to species), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable for type species, needs generic revision.
**Koorchalomella** Chona, Munjal & J.N. Kapoor 1958, *Ascomycota* genera *incertae sedis*, one species, type: *K. oryzae* Chona, Munjal & J.N. Kapoor, hypomycetous, sexual morph unknown, saprobases, terrestrial, India, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Koordersiella** Höhn. 1909 (= *Hansfordiellopsis* Deighton 1960; *Ascohansfordiellopsis* D. Hawksw. 1979 *fide* Rossman et al. 2016), *Dothideomycetes* genera *incertae sedis*, three species, type: *K. javanica* Höhn., asexual morph unknown, lichenicolous, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.


**Korfiaella** D.C. Pant & V. P. Tewari 1970, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *K. Karnika* D.C. Pant & V.P. Tewari, saprobases, on conifer needles, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


Kramasamuha Subram. & Vittal 1973, Ascomycota genera incertae sedis, one species, type: K. sibika Subram. & Vittal, hyphomycetous, sexual morph unknown, saprobes, on leaves, widespread, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Kraurogymnocarpa Udagawa & Uchiy. 1999, Gymnoascaceae, Onygenales, Eurotiomycetes, two species, type: K. lenticulispora Udagawa & Uchiy., asexual morphs unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available, needs generic revision.

Kravtzevia Schwarzman 1961, Sordariomycetes genera incertae sedis, three species, type: K. halimodendri Schwarzman, asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Kregervanrija Kurtzman 2006, Pichiaceae, Saccharomycetales, Saccharomycetes, three species, type: K. fluxuum (Phaff & E.P. Knapp) Kurtzman, asexual reproduction multilateral budding, saprophytic, on tree fluxes, apples, apple juice, wine and other fermented beverages, pickle brines, Europe and North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Kreiseliella U. Braun 1991, Ascomycota genera incertae sedis, one species, type: K. typhae (Vasyag.) U. Braun, coelomycetous, terrestrial, folicolous, leaf-spotting, Asia (Kazakhstan), see Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of type species AA (Kazakhstan, South Kazakhstan Region, Shymkent, Tokursaj, 28 km away from Makhtaly, on Typha latifolia, 30 Jul. 1960, M.P. Vasyagina), cultures and sequences are unavailable, needs generic revision.

Kretschmariella Fr. 1849, Xylariaceae, Xylariales, Sordariomycetes, more than 50 species, type: K. clavus (Fr.) Sacc., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Daranagama et al. (2017 morphology, taxonomy, key), sequences are available but lacks for the type species.

Kretszchmariella Viégas 1944, Xylariaceae, Xylariales, Sordariomycetes, one species, type: K. culmorum (Cooke) Y.-M. Ju & J. D. Rogers, asexual morph present, saprobes, Thaiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Daranagama et al. (2017 morphology, taxonomy, key), sequences are unavailable.

Kriegeriella Höhn. 1918, Dothideomycetes genera incertae sedis, four species, type: K. mirabilis Höhn., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline, placed in Pleosporaceae), Wu et al. (2011; classification), Zhang et al. (2012; placed in Microthyriaceae), Hyde et al. (2013; classification), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014; classification), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, generic revision is essential.

Krishnamyces Hosag. 2003, Ascomycota genera incertae sedis, one species, type: K. indica Hosag., hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see
Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Krogia** Timdal 2002, *Ramalinaceae, Lecanorales, Lecanoromycetes*, three species, type: *K. coralloides* Timdal, lichenized, Asia, Africa, see Timdal (2009; new species), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type species O L21909.

**Krosinia** P.M. Jørg. 2002, *Pannariaceae, Peltigerales, Lecanoromycetes*, four species, type: *K. crystallifera* P.M. Jørg., lichenized, Asia, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2015; China), Magain and Sérusiaux (2015; nomenclature), Lücking et al. 2016 (classification), Cultures and sequences are available, holotype of type species US Hale 43843.

**Kruphaiomyces** Thaxt. 1931, *Laboulbeniales, Laboulbeniomycetes*, one species, type: *K. trochoidei* Thaxt., asexual morph unknown, biotrophic, terrestrial, Fiji, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Kuehniella** G.F. Orr 1976, *Onygenaceae, Onygenales, Eurotiomycetes*, two species, type: *K. racovitzae* (Lagarde) G.F. Orr, asexual morph unknown, saprobes, terrestrial, Northern America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Kullhemia** P. Karst. 1878, *Dothideomycetes* genera incertae sedis, three species, type: *K. moriformis* (Ach.) P. Karst., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


**Kundalinella** Hande & Subhedar 2001, *Ascomycota* genera incertae sedis, one species, type: *K. raedella* Hande & Subhedar, asexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Kuraishia** Y. Yamada, Maeda & Mikata 1994, *Pichiaceae, Saccharomycetales, Saccharomycetes*, seven species, type: *K. capsulata* (Wickerham) Y. Yamada, K. Maeda & Mikata, asexual reproduction is by multilateral budding, saprophytic, on insect frass, rotted wood, soil, mushroom, worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Kurssanovia** Kravtzev 1955, *Sordariomycetes* genera incertae sedis, three species, type: *K. vassiljevskii* Kravtzev, asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accept), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Kurtzmaniella** Lachance & Starmer 2008, *Debaryomycetaceae, Saccharomycetales, Saccharomycetes*, twelve species, type: *K. cleridarum* Lachance & Starmer, in asexual reproduction cells produced by asexual reproduction are ovoid to ellipsoid and form by multilateral budding, saprophytic, one species is an opportunistic human pathogen, cactus flowers, mushrooms, tree fluxes, beetles, rotted wood, insect frass, apple cider, rotted fruit, olives, soil, seawater, human feces, sputum, worldwide, see Lumbsch and Huhndorf (2010; outline), Lachance et al. (2013; DNA), sequences are available.
Kusanobotrys Henn. 1904, Dothideomycetes genera incertae sedis, three species, type: *K. bambusae* Henn., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Kylindria DiCosmo, S.M. Berch & W.B. Kendr. 1983, Reticulascaceae, Glomerellales, Sordariomycetes, nine species, type: *K. triseptata* (Matsush.) DiCosmo, S.M. Berch & W.B. Kendr., hypomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Zhang et al. (2010; new species, China), Réblová et al. (2011; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for type species.

Kypomyces I.I. Tav. 1985, Laboulbeniales, Laboulbeniomycetes, 14 species, type: *K. ansatus* (Thaxt.) I.I. Tav., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Kyphophora B. Sutton 1991, Ascomycota genera incertae sedis, one species, type: *K. avicenniae* B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Laboulbenia Mont. & C.P. Robin 1853, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, c. 625 species, type: *L. rougetii* Mont. & C.P. Robin, asexual morph unknown, biotrophic, hosts are diverse, including Acari, Blattodea, Coleoptera (Carabidae, Chrysomelidae, Curculionidae, Erotylidae, Gryinidae, Staphylinidae, and others), Diptera, Hemiptera, Hymenoptera (Formicidae), and Orthoptera (Gryllotalpidae), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Haellewaters et al. (2015a; DNA), Rossi et al. (2016; morphology), Wang et al. (2016; morphology), cultures and sequences are available but lacks for the type species, needs generic revision.

Laboulbeniopsis Thaxt. 1920, Laboulbeniomycetes genera incertae sedis, one species, type: *L. termitarius* Thaxt., asexual morph unknown, parasitic on termites, terrestrial, North America, Caribbean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Labrocarpus Pérez-Ortega & Etayo 2010, Asterinales genera incertae sedis, Dothideomycetes, one species, type: *L. canariense* (D. Hawksw.) Etayo & Pérez-Ortega, asexual morph unknown, lichenicolous on *Pertusaria* species, parasymbiont, Canary Islands, Madeira, mainland Spain and Portugal, Italy and Greece, see Pérez-Ortega and Etayo (2010; genus proposed), Ertz and Diederich (2015, phylogeny), cultures and sequences are available, holotype of type: IMI 259313.

Laburniella Wanasinghe, Camporesi, E.B.G. Jones & K.D. Hyde 2016, Didymosphaeriaceae, Pleosporales, Dothideomycetes, four species, type: *L. muriformis* Wanasinghe, E. Camporesi, E.B.G. Jones & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Europe, Russia, see Wanasinghe et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of type: MFLU 16-0230, MFLUCC 16-0290.

Labyrinthha Malcolm, Elix & Owe Larsson 1995, Lecideaceae, Lecideales, Lecanoromycetes, one species, type: *L. implexa* Malcolm, Elix & Owe-Larss., lichenized, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type species CHR 470232.

Labyrinthomyces Boedijn 1939, Tuberaceae, Pezizales, Pezizomycetes, two species, type: *L. stennisii* Boedijn, truffles, ectomycorrhizal, terrestrial, Australia, see Trappe et al. (2008;
dessert truffles), Vellinga et al. (2009; distribution pattern), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Lacazia** Taborda, V.A. Taborda & McGinnis 1999, *Onygenales*, genera incertae sedis, Eurotiomycetes, two species, type: *L. loboi* Taborda, V.A. Taborda & McGinnis, asexual morph unknown, on humans and animals, terrestrial, neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Lacellina** Sacc. 1913, *Ascomycota* genera incertae sedis, three species, type: *L. graminicola* (Berk. & Broome) Petch, hyphomycetous, sexual morph unknown, on plants, widespread (pantropical), see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Lacellinopsis** Subram. 1953, *Ascomycota* genera incertae sedis, three species, type: *L. sacchari* Subram., hyphomycetous, sexual morph unknown, saprobes, on leaves (grasses) and litter, widespread (pantropical), see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cultures and sequences are unavailable, needs generic revision.

**Lachancea** Kurtzman 2003, *Saccharomycetaceae*, Saccharomyceae, Saccharomycetes, ten species, type: *L. thermotolerans* (Filippov) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, tree fluxes, rotted wood, alpechin, fruit, fruit flies, spoiled beverages, soil, seawater near mangroves, worldwide, see Lumbsch and Huhndorf (2010; outline), sequences are available.

**Lachnellula** P. Karst. 1884, *Hyaloscyphaceae*, Helotiales, Leotiomycetes, c. 40 species, type: *L. chrysophthalma* (Pers.) P. Karst., sexual morph unknown, saprobes, pathogen, terrestrial, widespread (temperate), see Lumbsch and Huhndorf (2010; outline), Whitton et al. (2012; morphology), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for type species, needs generic revision.

**Lachnellula** P. Karst. 1884, *Lachnaceae*, Helotiales, Leotiomycetes, 25 species, type: *L. chrysophthalma* (Pers.) P. Karst. L., asexual morph unknown, some species pathogenic (canker), others saprobes on bark, wood or resin of conifers, widespread, temperate and tropical areas, see Hosoya et al. (2010; cultures, phylogeny), Kirk et al. (2013; genus accepted), Shumacher et al. (2015; distribution), cultures and sequences are available, needs generic revision.

**Lachnodochium** Marchal 1895, *Ascomycota* genera incertae sedis, one species, type: *L. candidum* Marchal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Lachnum** Retz. 1769, *Lachnaceae*, Helotiales, Leotiomycetes, c. 50 species, type: *L. agaricinum* Retz., asexual morph unknown, saprobes on ferns, bamboo culms, herbs, herbaceous stems, cones, cupules, wood or leaves of palms, coniferous or broadleaved trees, cosmopolitan, see Nagao (2008; Japan), Hosoya et al. (2010; phylogeny, cultures), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Laciniocladium** Petri 1917, *Ascomycota* genera incertae sedis, one species, type: *L. candidum* Marchal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Laciniocladium** Petri 1917, *Ascomycota* genera incertae sedis, one species, type: *L. castaneae* Petri, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see
Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Lacrystospora* Aptroot 1991, *Requienellaceae, Xylariales, Sordariomycetes*, one species, type: *L. parasitica* Aptroot, asexual morph unknown, lichenicolous, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: herb. Aptroot, Aptroot and Hensen 12613.

*Lacunospora* Cailleux 1969, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, two species, type: *L. stercoraria* Cailleux, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

*Laetinaevia* Nannf. 1932, *Dermateaceae, Helotiaceae, Leotiomycetes*, c. 15 species, type: *L. lapponica* (Nannf.) Nannf., asexual morph unknown, saprobes, terrestrial, Europe, N America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Baral and Rama (2015; DNA), cultures and sequences are available but lacks for type species, needs generic revision.


*Lagenulopsis* Fitzp. 1942, *Coryneliaceae, Coryneliales, Eurotiomycetes*, one species, type: *Lagenulopsis bispora* Fitzp., asexual morph unknown, saprobes, terrestrial, Northern America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wood et al. (2016; phylogeny, taxonomy), cultures and sequences are available.

*Laehmia* Körb. 1861, *Laehmiaceae, Lahmiiales, Incertae sedis*, one species, type: *Laehmia kunzei* Körb., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species unavailable.

*Lahmiomyces* Cif. & Tomas. 1953, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *L. piceae* Cif. & Tomas., asexual morph unknown, saprobes, terrestrial, Italy, see Lumbsch and Huhndorf (2010; outline), cultures and sequence are unavailable, needs generic revision.


*Lambertella* Höhn., 1918, *Rustroemiacae, Heliotiales, Leotiomycetes*, c. six species, type: *L. corni-maris* Höhn., asexual morph helicodendron-like, terrestrial, aquatic, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Zhao et al. (2013; Japan), Kirk et al. (2013; genus accepted), Galán et al. (2015; phylogeny), sequence data available for ten species, holotype and extype of type species unavailable.

*Lambertellinia* Korf & Lizoń 1994, *Sclerotiniaceae, Helotiaceae, Leotiomycetes*, one species, type: *L. scutuloides* Korf & Lizoń., asexual morph unknown, saprobes, terrestrial, Norway, see Lumbsch and Huhndorf (2010; outline, listed as *Lambertellinia* Korf & Lizoń), Kirk et al. (2013; genus accepted), cultures and sequence are unavailable, holotype of type species CUP (JA 2252), needs generic revision.

*Lambiella* Hertel 1984, *Xylographaceae, Trapeliaceae, Lecanoromycetes*, twelve species, type: *L. psephota* (Tuck.) Hertel, lichenized, see Spribille et al. (2014, phylogeny), Resl et al. (2015, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.
**Lambinonia** Sérus. & Diederich 2005, *Ascomycota genera incertae sedis*, one species, type: *L. strigulata* (Elenkin & Woron.) Sérus. & Diederich, hyphomycetous, sexual morph unknown, lichenicolous, non-lichenized, on foliicolous lichens, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable.

**Lambro** Racib. 1900, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *L. insignis* Racib., asexual morphs unknown, saprobes, terrestrial, Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequence are unavailable, needs generic revision.

**Lamproconium** (Grove) Grove 1937, *Lamproconiaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *L. desmaziери* (Berk. & Broome) Grove, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), Norphanphouen et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2016; taxonomy), cultures and sequences are available, holotype of type: CBS H-13785, needs generic revision.

**Lamprospora** De Not. 1864, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, c. 60 species, type: *L. miniata* (P. Crouan & H. Crouan) De Not., parasitic on mosses, worldwide, see Eckstein and Eckstein (2009; Germany), Mann (2009; laccase production), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pradhan et al. (2013; India), Egertova et al. (2015; Czech), cultures and sequences are available, holotype of the type: CBS H-14139.

**Lanatosphaera** Matzer 1996, *Dothideomycetes genera incertae sedis*, two species, type: *L. porinicola* Matzer, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of the type species GZU, Matzer 1422 & Pelzmann, needs generic revision.

**Lanceispora** Nakagiri, Okane, Tad. Ito & Katum. 1997, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *L. amphibia* Nakagiri, Okane, Tad. Ito & Katum., asexual morph unknown, endophytic, saprophytic, subtropical, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Amphisphaeriaeaceae*), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2016; outline), cultures and sequences are available, holotype and ex-type of the type: IFO H-12218, NBRC 32918.


**Lanzia** Sacc. 1884, *Rutstroemiaceae*, *Helotiales*, *Leotiomycetes*, 55 species, type: *L. flavorúfa* (Sacc.) Sacc., asexual morph unknown, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Johnston and Park (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are available but lacks for the type species, holotype of type species unavailable.

**Laecoín** J.C. David 1997, *Ascomycota genera incertae sedis*, one species, type: *L. paradoxus* (Syd. & P. Syd.) J.C. David, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014; outline, accepted as a genus in *Mycosphaerellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline, transferred to *Ascomycota genera incertae sedis*), cultures and sequences are unavailable, needs generic revision.

**Lapidomyces** de Hoog & Stielow 2014, *Teratosphaeriacae*, *Capnodiales*, *Dothideomycetes*, one species, type: *L. hispanicus* de Hoog & Stielow, hyphomycetous, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy, phylogeny), Quadvdvlieg
et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 118355 = TRN500.

**Lappodochium** Matsush. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *Lappodochium langeniforme* Matsush., hyphomycetous, sexual morph unknown, on soil, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Laquearia** Fr. 1849, *Rhytismatales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *L. sphaeratus* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2017; outline), holotype of the type species: Lumbsch and Huhndorf (2010; outline), Huhndorf (2016; classification), but lacks for the type species, needs generic revision.

**Lareunionomyces** Crous & M.J. Wingf. 2016, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *L. syzygii* Crous & M.J. Wingf., hyphomycetous, saprobes, terrestrial, France, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type species CBS H-22623, CPC 26531.

**Laricina** Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *L. mollis* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Larissia** Raitv. 2008, *Incertae sedis*, *Helotiales*, *Leotiomycetes*, one species, type: *L. pyrolae* Raitv., asexual morph unknown, saprobes, terrestrial, Russia, see Raitviv (2008; taxonomy), the genus was not listed in any recent outlines or checklists, cultures and sequences are unavailable, holotype of type species TAA-182408.

**Lasallia** Mérat 1821, *Umbilicariaceae*, *Umbilicariales*, *Lecanoromycetes*, 17 species, type: *L. pustulata* (L.) Mérat, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

**Lasiobelonium** Ellis & Everh. 1897, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, c. 20 species, type: *L. subflavidum* Ellis & Everh., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and hunduf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for type species, needs generic revision.

**Lasiobertia** Sivan. 1978, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *L. africana* Sivan., asexual morph unknown, saprobes, terrestrial, Ghana, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lack for the type species, holotype of the type: IMI 38816.

**Lasiobolium** Malloch & Cain 1971, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, seven species, type: *L. spirale* Malloch & Cain, asexual morph unknown, saprobes, on dung, North America, see Doveri et al. (2013; key, Italy), Hansen et al. (2013; polyphyletic genus), cultures and sequences are available.

**Lasiobolus** Sacc. 1884, *Ascodesmidaceae*, *Pezizales*, *Pezizomycetes*, eleven species, type: *L. pilosus* (Fr.) Sacc., coprophilous, sexual morph unknown, saprobes, on herbivore dung, worldwide, see Güngör et al. (2008; proposed family), Chang and Wang (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type: CBS H-13792.

**Lasiobotrys** Kunze 1823, *Venturiales* genera *incertae sedis*, one species, type: *Lasiobotrys lonicerae* (Fr.) Kunze, asexual morph unknown, saprobes, terrestrial, ulocladium-like, see Lumbsch and Huhndorf (2010; outline), accepted as a genus in *Venturiales*, Hyde et al. (2013) did not accept as a genus in *Venturiales*, Zhang et al. (2012; accepted as a genus in
Venturiales genera incertae sedis, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


Lasiodiplodiella Zambett 1955, Ascomycota genera incertae sedis, three species, type: L. triflorae (B.B. Higgins) Zambett., coelomycetes, sexual morph unknown, widespread, see Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species unavailable.

Lasioloma R.Sant. 1952, Pilocarpaceae, Lecanorales, Lecanoromycetes, nine species, type: L. arachnoideum (Kremp.) R. Sant., lichenized, Asia, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Lasiomollisia Raitv. & Vesterh. 2006, Hyaloscyphaceae, Helotiales, Leotiomycetes, one species, type: L. phalaridis Raitv. & Vesterh., asexual morph unknown, saprobes, terrestrial, Sweden, cultures and sequences are unavailable, holotype of the type: TAA (M), Hanson 2003-147.

Lasionectria (Sacc.) Cooke 1884, Bionectriaceae, Hypocreales, Sordariomycetes, twelve species, type: L. mantuana (Sacc.) Cooke, asexual morph acremonium-like, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lechat and Fournier (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Lasiosphaerella Sivan. 1975, Chaetosphaeriales genera incertae sedis, Sordariomycetes, twelve species, type: L. dennisii Sivan., asexual morph acremonium-like, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline, accepted as Sordariomycetidae, genera incertae sedis), Huhndorf and Miller (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016) outline, cultures and sequences are available, needs generic revision.

Lasiosphaeriopsis D. Hawksw. & Sivan. 1980, Nitschkeaceae, Corinophorales, Sordariomycetes, seven species, type: L. salisburyi D. Hawksw. & Sivan, asexual morph unknown, lichemicolous, widespread, terrestrial, see Lumbsch & Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: K(M)-IMI 80468.

Lasiosphaeris Clem. 1909 (= Lasiadelphia Réblová & W. Gams 2011 fide Maharachchikumbura et al. 2015, 2016; Réblová et al. 2015), Sordariales genera incertae sedis, Sordariomycetes, three species, type: L. hispida (Tode) Clem., asexual morph hyphomycetous, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline),
Kirk et al. (2013; genus accepted), Miller et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Rébelová et al. (2015; nomenclature), cultures available for the type: TL6019, SMH 3336 (Miller and Huhndorf 2004).

**Lasiothyrium** Theiss., Syd. & P. Syd. 1917, *Pseudoperisporiaceae, Dothideomycetes*, families *incertae sedis*, five species, type: *L. melioides* (Berk. & Ravenel) Theiss., Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Mapook et al. (2016; transferred to *Pseudoperisporiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Lasistictella** Sherwood 1986, *Rhytismatales* genera *incertae sedis*, *Leotiomyces*, one species, type: *L. bambusae* Sherwood, asexual morph unknown, saprobes, terrestrial, worldwide, see Serrato-Diaz et al. (2011; DNA), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Lasionia** Petr. & Syd. 1913, *Ascomycota* genera *incertae sedis*, one species, type: *L. obscura* V. Rao, K.A. Reddy & de Hoog, hyphomycetous, sexual morph unknown, saprobes, terrestial, Argentina, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Lasmeniella** Petr. & Syd. 1927, *Ascomycota* genera *incertae sedis*, 13 species, type: *L. guaranitica* (Speg.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Lasseria** Dennis 1960, *Incertae sedis, Helotiales, Leotiomyces*, one species, type: *L. chrysophthalma* Dennis, asexual morph unknown, saprobes, terrestrial, Argentina, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), living cultures and sequences are unavailable, needs generic revision.


**Lateriramulosa** Matsush. 1971, *Ascomycota* genera *incertae sedis*, five species, type: *L. unii-infalata* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Laterispora** Uecker, W.A. Ayers & P.B. Adams 1982, *Ascomycota* genera *incertae sedis*, one species, type: *L. brevirama* Uecker, W.A. Ayers & P.B. Adams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017, outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Lathagriunt** (Ach.) Gray 1821, *Collemataceae, Peltigerales, Lecanoromycetes*, ten species, type: *L. nigrescens* (Huds.) Gray, lichenized, North America, Europe, Russia,?, see Otálora et al. (2013a, 2014; phylogeny, review), Lücking et al. (2016; classification), Cultures and sequences are available, holotype of type species ?.
**Lathraeodiscus** Dissing & Sivertsen 1989, *Pyronemataceae, Pezizales, Pezizomycetes*, one species, type: *L. arcticus* Dissing & Sivertsen, on soil with mosses with *Octospora, Lamprosopora, Geopora*, high arctic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species C, isotype TRH.

**Latorua** Crous 2015, *Latoruaceae, Pleosporales, Dothideomycetes*, one species, type: *L. caligans* (Bat. & H.P. Upadhyay) Crous, hophymycetous, saprobes, Brazil, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22267, CBS 576.65.

**Lauderlindsaya** J.C. David & D. Hawksw. 1989, *Verrucariaceae, Verrucariales, Eurotiomycetes*, three species, type: *L. borrerei* (Tul.) J.C. David & D. Hawksw., some species lichenicolous, some species lichenized, Europe, Japan, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; genus accepted), cultures and sequences are unavailable, lectotype of type species K-Borrer.

**Lauroomyces** R.F. Castañeda 1990, *Leotiomycetes, genera incertae sedis*, five species, type: *L. pulcher* R.F. Castañeda & W.B. Kendr., hophymycetous, sexual morph unknown, saprobes, terrestrial, North America, see Crous et al. (2009; DNA, phylogeny), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species, Thailand, accepted as *Ascomycota incertae sedis*), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Lautitia** S. Schatz 1984, *Phaeosphaeriaceae, Pleosporales, Dothideomycetes*, one species, type: *Lautitia danica* (Berl.) S. Schatz, asexual morph unknown, parasites, marine, Denmark, France, UK, USA, see Jones et al. (2009; review), cultures and sequences are unavailable, holotype and ex-type unavailable.


**Lawalreea** Diederich 1990, *Ascomycota genera incertae sedis*, one species, type: *L. lecanorae* Diederich, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: LG (66/14656), needs generic revision.

**Lazarenkoa** Zerova 1938, *Incertae sedis, Incertae sedis, Dothideomycetes*, three species, type: *L. selaginellae* Zerova, asexual morph unknown, saprobes, terrestrial, Siberia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


**Lazuardia** Rifai 1988, *Pyronemataceae, Pezizales, Pezizomycetes*, one species, type: *L. lobata* (Berk. & M.A. Curtis) Rifai, asexual morph unknown, hypogeous, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for type: AAU 43756 (Perry et al. 2007), holotype of type species unavailable.
Lecanactis Körb. [nom. cons.] 1855, Roccellaceae, Arthoniales, Arthoniomycetes, 25 species, type: *L. abietina* (Ehrh. ex Ach.) Körb., lichenized, worldwide, see Ertz et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available, holotype of type species unavailable.

Lecania A.Massal. 1853, Ramalinaceae, Lecanorales, Lecanoromycetes, 50 species, type: *Lecania fuscella* (Schaer.) A. Massal., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

Lecanicillium W. Gams & Zare 2001, Cordycipitaceae, Hypocreales, Sordariomycetes, 26 species, type: *L. lecanii* (Zimm.) Zare & W. Gams, hyphomycetous, entomogenous, fungicolous and in soil, see Goettal et al. (2008; disease management), Zare and gams (2008; phylogeny), Vandermeer et al. (2009; hyperparasitism), Kouvelis et al. (2008; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, neotype and ex-neotype of type: IMI 331550, CBS 102067.

Lecanidiella Sherwood 1986, Patellariaceae, Patellariales, Dothideomycetes, one species, type: *L. contorta* Sherwood, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), holotype of the type: CBS, Aptroot 38022, cultures and sequences are unavailable, needs generic revision.

Lecaniocola Brain 1923, Ascomycota genera incertae sedis, one species, type: *L. parasitica* (Linder) Brain, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

Lecanographa Egea & Torrente 1994, Lecanographaceae, Arthoniales, Arthoniomycetes, 37 species, type: *L. lycena* (Sm.) Egea & Torrente, sexual morph with rounded to lirelliform ascomata, lichenized, rarely lichenicolous, terrestrial, rather world-wide with a preference for coastal habitats with a Mediterranean or Desert type climate, see Ertz and Tehler (2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available, holotype and ex-neotype of type: CBS, CBS brain 102067, cultures and sequences are available, needs generic revision.

Lecanora Ach. 1809, Lecanoraceae, Lecanorales, Lecanoromycetes, 550 species, type: *L. allophana* Nyl., lichenized, worldwide, see Brand (2008; new species), Laundon (2010; new species), Lumbsch and Huhndorf (2010; outline), Pérez-Ortega et al. (2010; phylogeny), Ranković et al. (2011; Antioxidant, antimicrobial and anticancer activity), Kirk et al. (2013; genus accepted), Zhao et al. (2015; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Lecanosticta Syd. 1922 (= Eruptio M.E. Barr 1996 fide Wijayawardene et al. 2014; Rossman et al. 2015), Mycosphaerellaceae, Capnodiales, Dothideomycetes, seven species, type: *L. pini* Syd., hyphomycetous, sexual morph formerly named in *Eruptio*, pathogens, see Quaedvlieg et al. (2012; morphology, phylogeny), Wijayawardene et al. (2014, 2016; taxonomy, phylonymy), cultures and sequences are available, epitype and ex-epitype of type: CBS H-21113, CBS 133791.

Lecanostictopsis B. Sutton & Crous 1997, Ascomycota genera incertae sedis, four species, type: *L. kamatii* (Ullasa) B. Sutton & Crous, coelomycetous, sexual morph unknown, saprobes, terrestrial, France, India, South Africa, see Wijayawardene et al. (2012, 2016; outline, morphology), cultures and sequences are unavailable, holotype of the type: IMI 147817.

Lecidea Ach. 1803, Lecideaceae, Lecideales, Lecanoromycetes, 100 species, type: *L. fuscoatra* (L.) Ach., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline),
Schmull et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

**Lecidella** Körb. 1855, Lecanoraceae, Lecanorales, Lecanoromycetes, 80 species, type: *Lecidella viridans* (Flot.) Körb., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; new species), Kantvilas and Elix (2013; review), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

**Lecideopsella** Höhn. 1909, Schizothyriaceae, Dothideomycetes, families incertae sedis, c. eleven species, type: *L. gelatinoa* Höhn., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Schizothyriaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Phookamsak et al. (2016; new species, taxonomy), cultures and sequences are available.

**Lecidomata** P.F. Cannon 2012, Plectosphaerellaceae, Glomerellales, Sordariomycetes, two species, type: *L. colletotrichoides* (J.E. Chilton) P.F. Cannon, coelomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Cannon et al. (2012; taxonomy, phylogeny), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, lectotype and cultures of the type species ISC 217496, CBS 109728.

**Lecythiomyces** Doweld 2013, Sordariomycetes genera incertae sedis, three species, type: *L. aeruginea* (Zukal) Doweld, asexual morph unknown, saprobes, terrestrial, Austria, see Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Lecythothecium** Réblová & Winka 2001, Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes, four species, type: *L. duriligni* Réblová & Winka, asexual morph hyphomycetous (sporidesmium-like), terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type of the type: PRM 842977, CBS 101317.

**Leeina** Petr. 1923, Ascomycota genera incertae sedis, one species, type: *L. philippinensis* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leifidium** Wedin 1993, Sphaerophoraceae, Lecanorales, Lecanoromycetes, one species, type: *L. tenerum* (Laurer) Wedin, asexual morph unknown, lichenized, terrestrial, Australia, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus
accepted), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

**Leightoniella** Henssen 1965, *Pannariaceae, Peltigerales, Lecanoromycetes*, one species, type: *L. zeylanensis* (Leight.) Henssen, lichenized, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Weerakoon et al. (2016, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.


**Leimonis** R.C. Harris 2009, *Pilocarpaceae, Lecanorales, Lecanoromycetes*, one species, type: *L. erraticus* (Körb.) R.C. Harris & Lendemer, asexual morph unknown, lichenized, terrestrial, North America, see Harris (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

**Leioderma** Nyl. 1888, *Pannariaceae, Peltigerales, Lecanoromycetes*, one species, type: *L. pycnophorum* Nyl., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ekman et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), sequences and cultures are available.

**Leioerreuma** Eschw. 1824, *Graphidaceae, Ostropales, Lecanoromycetes*. 15 species, type: *L. hepaticum* Eschw., asexual morph unknown, lichenized, terrestrial, North America, see Lendemer and Knudsen (2008; new species), Moon et al. (2008; new species), Dubey et al. (2010; new species), Joshi et al. (2013; Taiwan), Kirk et al. (2013; genus accepted), McDonald et al. (2013; DNA), Lücking et al. (2014, 2016; taxonomy), Poengsungnoen et al. (2014; new species), Wang et al. (2015; China), sequences and cultures are available.


**Leiotheicum** Samson & Mouch. 1975, *Aspergillaceae, Eurotiales, Eurotiomycetes*, two species, type: *Leiotheicum ellipsosideum* Samson & Mouch., saprobic, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Houbranken and Samson (2011; DNA), Kirk et al. (2013; genus accepted), Marin-Felix et al. (2014; new species, phylogeny), cultures and sequences are available.

**Lemalis** Fr. 1825, *Helotiales* genera incertae sedis, *Leotiomycetes*, three species, type: *L. alismatis* (Pers.) Fr., asexual morph unknown, saprobic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), living cultures or cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

**Lembosia** Lév. 1845, *Asterinaeaceae, Asterinales, Dothideomycetes*, 257 species, type: *L. tenella* Lév., asexual morph unknown, epiphytes, biotrophic, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Asterinaeaceae*), Hongsanan et al. (2014; taxonomy, DNA, keys), Wijayawardene et al. (2014; outline), Guatimosim et al. (2015; phylogeny, DNA), most species do not have molecular data, needs generic revision.
**Lembosiella** Sacc. 1891, *Aulographaceae, Dothideomycetes*, families incertae sedis, one species, type: *L. polyspora* (Pat.) Sacc., asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; accepted as a genus in *Aulographaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Aulographaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Lembosina** Theiss. 1913, *Aulographaceae, Dothideomycetes*, families incertae sedis, 21 species, type: *L. aulographoides* (E. Bommer, M. Rousseau & Sacc.) Theiss., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hyde et al. (2013; accepted as a genus in *Aulographaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Aulographaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Lembosioptis** Theiss. 1918, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, one species, type: *L. andromedae* (Tracy & Earle) Theiss., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hyde et al. (2013; accepted as a genus in *Aulographaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; transferred to *Mycosphaerellaceae* from *Asterinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Lembuncula** Cif. 1954, *Ascomycota* genera incertae sedis, one species, type: *L. pothoidei* Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, Santo Domingo, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Lemmopsis** (Vain.) Zahlbr. 1906, *Lichinaceae, Lichinales, Lichinomycetes*, three species, type: *L. arnoldiana* (Hepp) Zahlbr., asexual morph unknown, lichenized, terrestrial, Europe, see van den Boom and Brand (2008; Netherlands), Lumbsch and Huhndorf (2010; outline), Motiejūnaitė (2012; Lithuania), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Lemonniera** De Wild. 1894, *Helotiales* genera incertae sedis, *Leotiomyces*, seven species, type: *L. aquatica* De Wild., hyphomycetous, sexual morph unknown, saprobes, aquatic, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Lemphohlemma** Körb. 1855, *Lichinaceae, Lichinales, Lichinomycetes*, 35 species, type: *L. compactum* (Wallr.) Körb., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2012; DNA, phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available but lack for the type species.

**Lentomitella** Höhn. 1906, *Sordariomycetidae*, genera incertae sedis, seven species, type: *L. vestita* (Sacc.) Höhn., saprobes, terrestrial, temperate, see Huhndorf et al. (2008; new species, DNA, phylogeny), Marinowitz et al. (2008; new species, South Africa), Raja and Shearer (2009; compare with *Hanliniomyces*), Réblóvá and Stepanek (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Réblóvá et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), sequence data and cultures available but lacks for the type species.


**Leotia** Pers. 1797, *Leotiaceae*, *Helotiales*, *Leothiomyces*, four species, type: *L. lubrica* (Scop.) Pers., asexual morph unknown, lichenized, terrestrial, worldwide, see Palmer et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, type specimen of type species CBS H-13841.

**Lepidocollema** Vain. 1890, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *L. carassense* Vain., lichenized, Brazil, Solomon Islands, see Lumbsch and Huhndorf (2010; outline), Elvebakk (2016; new species), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species unavailable.

**Lepidopterella** Shearer & J.L. Crane 1980, *Incertae sedis*, *Argynnaceae*, *Dothideomycetes*, two species, type: *L. palustris* Shearer & J.L. Crane, asexual morph unknown, saprobes, aquatic, USA, see Shearer et al. (2009; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Argynnaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Peter et al. (2016; DNA, comparison), cultures available for the type species CBS 459.81 (*fide* Peter et al. 2016).

**Lepidosphaeria** Parg.-Leduc 1970, *Testudinaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *L. nicotiae* Parg.-Leduc, asexual morph unknown, saprobes, aquatic, USA, see Kruys and Wedin (2009; DNA), Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Testudinaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, type specimen and cultures available for type species CBS H-7282, CBS 559.71 (*fide* Kruys and Wedin 2009).

**Lepisticola** W. Gams 2009, *Ascomycota* genera incertae sedis, one species, type: *L. capitata* (Costantin & Matr.) W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, Europe, see Gams et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

**Leprantha** Dufour ex Körb. 1855, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *need typification*, lichenized, see Lücking et al. (2016; classification), sequences are unavailable.

**Lepraria** Ach. 1803, *Stereocaulaceae*, *Lecanorales*, *Lecanoromycetes*, 74 species, type: *L. incana* (L.) Ach., sterile, terrestrial (various substrata), cosmopolitan, see Lendemer (2010a, b; new species; 2011; DNA, new species; 2012; DNA; 2013; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Flakus and Kukwa (2011; new species), Flakus et al. (2011; new species), Bungartz et al. (2013; new species), Elix (2013; new species), Lendemer and Hodkinson (2013; DNA, phylogeny), Miadlikowska et al. (2014, DNA), sequences are available.

**Leprieuria** Læssøe, J.D. Rogers & Whalley 1989, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *L. bacillum* (Mont.) Læssøe, J.D. Rogers & Whalley, asexual morph
geniculosporium-like, saprobes, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stadler et al. (2013), Daranagama et al. (2017 morphology, taxonomy, key), sequences are unavailable.

**Leprieurinella** Bat. & H. Maia 1961, Ascomycota genera incertae sedis, one species, type: *L. ingae* Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leptocaulon** Nyl. 1879, Leprocaulaceae, Leprocaulales, Lecanoromycetes, 17 species, type: *L. nanum* Nyl., coelomycetous, lichenized, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lendemer and Hodkinson (2013; new species), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Leptodiscella** Papendorf 1969, Ascomycota genera incertae sedis, three species, type: *L. africana* (Papendorf) Papendorf, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, Spain, South Africa, see Seifert et al. (2011; morphology), Madrid et al. (2012; new species, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, for the type: CBS 400.65, type specimen of type species CBS H-720.

**Leptodontidium** de Hoog 1979, Helotiales genera incertae sedis, Leotiomyces, eleven species, type: *L. elatius* (F. Mangenot) de Hoog, sexual morph unknown, saprobes, terrestrial, Europe, North America, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are
available, holotype and cultures for the type species CBS H-7283, CBS 329.53 (Sogonov et al. 2005).

**Leptogidium** Nyl. 1873, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, three species, type: *L. dendriscum* (Nyl.) Nyl., lichenized, Europe, North America, see Muggia et al. (2011b; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

**Leptogium** (Ach.) Gray 1821, *Collemataceae*, *Peltigerales*, *Lecanoromycetes*, 70 species, type: *L. lacerum* (Sw.) Gray, lichenized, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Schultz et al. (2015; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, holotype of type species unavailable.

**Leptographium** Lagerb. & Melin 1927, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, 68 species, type: *L. lundbergii* Lagerb. & Melin, asexual morph unknown, hyphomycetous, saprobes, worldwide, see Zhou et al. (2008; new species), Seifert et al. (2011; morphology), Duong et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Paciura et al. (2010; new species), Beer et al. (2013; new species), Kirk et al. (2013; genus accepted), Huang and Chen (2014; new species), Romón et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), Yin et al. (2014; new species), cultures and sequences are available.

**Leptoguignardia** E. Müll. 1955, *Phyllostictaceae*, *Botryosphaeriales*, *Dothideomycetes*, three species, type: *L. onobrychidis* E. Müll., asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Botryosphaeriales*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014, 2017; outline, accepted as a genus in *Phyllostictaceae*), cultures and sequences are unavailable, type specimen of type species CBS H-13858, needs generic revision.

**Leptokalpion** Brumm. 1977, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, two species, type: *L. albicans* Brumm., asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leptomassaria** Petr. 1914, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *L. simplex* (Nitschke ex G.H. Otth) Petr., asexual morph unknown, saprobes, Europe and Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Daranagama et al. (2017 morphology, taxonomy, key), sequences are unavailable, placement in *Xylariaceae* needs to be confirmed by molecular data.

**Leptomelanconium** Petr. 1923, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *L. asperulum* (Moesz) Petr., coelomycetous, sexual morph teratosphaeria-like, saprobes, terrestrial, North temperate, see Crous et al. (2009; transferred *L. australiensis* to *Teratosphaeria*), Zhao and Zhao (2012; new species), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; outline, taxonomy, accepted as a genus in *Teratosphaeriaceae*), cultures and sequences are unavailable but lacks for the type species.

**Leptomeliola** Höhn. 1919, *Perisporiopsidaceae*, *Dothideomycetes family incertae sedis*, nine species, type: *L. hyalospora* (Lév.) Höhn., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Stenroos et al. (2010; symbiosis with bryophytes, DNA), Silvério et al. (2011; taxonomy, South America), Hyde et al. (2013; accepted in *Perisporiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type species.

**Leptopeltis** Höhn. 1917, *Leptopeltidaceae*, *Dothideomycetes genera incertae sedis*, one species, type: *L. filicina* (Lib.) Höhn., asexual morph leptothyrium-like, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in *Leptopeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene
et al. (2014; outline), cultures and sequences are unavailable, available specimen of type: CBS H-13860, needs generic revision.

**Leptoperidia** Rappaz 1987, *Diatrypaceae, Xylariales, Sordariomycetes*, two species, type: *L. macropunctata* (Rehm) Rappaz. asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, available specimen of type: CBS H-6460, needs generic revision.

**Leptophylosticta** I.E. Brezhnev 1939, *Ascomycota* genera incertae sedis, two species, type: *L. lychnitis* I.E. Brezhnev, coelomycetous, sexual morph unknown, saprobes, terrestrial, former USSR, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leptorhaphis** Körb. 1855, *Naetrocymbaceae, Dothideomycetes* genera incertae sedis, 15 species, type: *L. oxyspora* (Nyl.) Körb., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted in *Naetrocymbaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Leptosacca** Syd. 1928, *Sordariomycetes* genera incertae sedis, two species, type: *L. lumae* Syd., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type species (see MBT# 199061), needs generic revision.

**Leptosillia** Höhn. 1928, *Valsaceae, Diaporthales, Sordariomycetes*, one species, type: *L. notha* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Leptosphaerella** Speg. 1909, *Sordariomycetes* genera incertae sedis, seven species, type: *L. fagaricola* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Leptosphaeria** Ces. & De Not. 1863, *Leptosphaeriaceae, Pleosporales, Dothideomycetes*, 148 species, type: *L. doliolum* (Pers.) Ces. & De Not., asexual morph coelomycetous, saprobes or parasitic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; taxonomy, phylogeny), Hyde et al. (2013, 2016; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014, 2017; outline), Ariyawansa et al. (2015; taxonomy, phylogeny), cultures and sequence are available, available specimen for type: CBS H-13880.

**Leptosphaerulina** McAlpine 1902, *Didymellaceae, Pleosporales, Dothideomycetes*, 30 species, type: *L. australis* McAlpine, asexual morph hyphomycetous (pithomyces-like), saprobes, terrestrial, worldwide, see de Gruyter et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Crous et al. (2011; DNA, phylogeny, on *Proteaceae*), Zhang et al. (2012; DNA, phylogeny), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2013; new species with asexual morphs), Wijayawardene et al. (2014; outline), Chen et al. (2015; phylogeny), cultures and sequences are available, available specimen and cultures for type species CBS H-13980, CBS 311.51 (fide Zhang et al. 2012).

**Leptospora** Rabenh. 1857, *Dothideomycetes* genera incertae sedis, 15 species, type: *L. porphyrogonae* (Tode) Rabenh., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted in *Naetrocymbaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline),
Hyde et al. (2016; new species), cultures and sequences are available, holotype of type species unavailable, needs generic revision.

**Leptosporella** Penz. & Sacc. 1897, *Chaeosphaeriales* genera *incertae sedis, Sordariomycetes*, twelve species, type: *L. gregaria* Penz. & Sacc., asexual morph unknown, saprobes, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Huhndorf and Miller (2011; morphology, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Dai et al. (2016; morphology, phylogeny, new species), cultures and sequences are available but lacks for type material, needs generic revision.

**Leptostromella** (Sacc.) Sacc. 1884, *Ascomycota* genera *incertae sedis*, two species, type: *L. septorioides* Sacc. & Roum., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leptothyrella** Sacc. 1885, *Ascomycota* genera *incertae sedis*, ten species, type: *L. mougeotiana* Sacc. & Roum., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

**Leptothyrella** Höhn. 1915, *Ascomycota* genera *incertae sedis*, one species, type: *L. rubi* (Duby) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Switzerland, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species unavailable, needs generic revision.

**Leptothyrium** Kunze 1823, *Ascomycota* genera *incertae sedis*, two species, type: *L. lunariae* Kunze, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leptotrochila** P. Karst. 1871 (= *Sporonema* Desm. 1874 fide Johnston et al. 2014), *Dermataceae, Helotiaceae, Leotiomycetes*, 15 species, type: *L. radians* (Desm.) P. Karst., asexual morphs formerly named in *Sporonema*, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequence are unavailable, needs generic revision.

**Leptoxypodium** Speg. 1918, *Capnodiales, Capnodiales, Dothideomycetes*, five species, type: *L. graminum* (Pat.) Speg., asexual morph unknown, sooty moulds, terrestrial, cosmopolitan, see Cheewangkoon et al. (2009; DNA, phylogeny), Chomnunti et al. (2011; taxonomy, new species), Crous et al. (2011; new species), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Yang et al. (2014; DNA, new species), Kajale et al. (2015; associated with insects), Park et al. (2015; pathogens), cultures and sequences are available, needs generic revision.

**Letendreaea** Sacc. 1880, *Didymosphaeriaceae, Pleosporales, Dothideomycetes*, one species, type: *L. eurotioides* Sacc. asexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2013, 2014; taxonomy, DNA, phylogeny), Hyde et al. (2013; accepted in *Didymosphaeriaceae*), Wijayawardene et al. (2014; outline), Bolanos et al. (2015; phylogeny), cultures available for the type species CBS 212.31 (fide Kodsueb et al. 2016).

**Letendreaeopsis** K.F. Rodrigues & Samuels 1994, *Dothideomycetes* genera *incertae sedis*, one species, type: *L. palmarum* K.F. Rodrigues & Samuels, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Tubeufiaceae*), Hyde et al. (2013; not accepted in *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; not accepted in *Tubeufiaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.
**Letharia** (Th. Fr.) Zahlbr. 1892, Parmeliaceae, Lecanorales, Lecanoromycetes, three species, type: *L. vulpina* (L.) Hue, asexual morph unknown, lichenized, terrestrial, worldwide, see McCune and Altermann (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type species unavailable.

**Lethariella** (Motyka) Krog 1976, Parmeliaceae, Lecanorales, Lecanoromycetes, ten species, type: *L. intricata* (Moris) Krog, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

**Letrouitia** Hafellner & Bellem. 1982, Letrouitiaceae, Teloschistales, Lecanoromycetes, 16 species, type: *L. domingensis* (Pers.) Hafellner & Bellem., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Gays et al. (2012; DNA, phylogeny), Joshi et al. (2013; Vietnam), Kirk et al. (2013; genus accepted), Shi et al. (2015; Cambodia), cultures available for type species AFTOL-ID 102 (*fide* Spatafora et al. 2006).


**Leucangium** Quél. 1883, Morchellaceae, Pezizales, Pezizomycetes, one species, type: *L. ophthalmosporum* Quél., asexual morph unknown, saprobes, hypogeous, worldwide, see Trappe (2009; North America), Lumbsch and Huhndorf (2010; outline), Sbissi et al. (2010; phylogeny, comparison), Trappe et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

**Leucocarpia** Vězda 1969, Verrucariaceae, Verrucariales, Eurotiomycetes, one species, type: *L. biatorella* (Arnold) Vězda, asexual morph unknown, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leucoconiella** Bat., H. Maia & Peres 1960, Ascomycota genera incertae sedis, type species *L. paraguayensis* Bat., H. Maia & Peres, asexual morph unknown, saprobes, terrestrial, Paraguay, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leucoconis** Theiss. & Syd. 1918, Ascomycota genera incertae sedis, one species, type: *L. erysiphina* (Syd. & P. Syd.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leucoconella** A. Massal. 1860, Graphidaceae, Ostropales, Lecanoromycetes, type: *L. compunctum* (Ach.) A. Massal., asexual morph unknown, lichenized, terrestrial, pantropical, see Mangold et al. (2009; key, Australia), Rivas Plata et al. (2010a; key), Sipman et al. (2012; key, Costa Rica), Joshi et al. (2010, 2013; Korea, India), Lumbsch and Huhndorf (2010; outline), Lücking and Breuss (2012; new combination), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type species, needs generic revision.

**Leucoderma** Kalb 2015, Physciaceae, Calicariales, Lecanoromycetes, ten species, type: *L. leucomelos* (L.) Kalb, lichenized, see Mongkolsuk et al. (2015; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, holotype of type species GB, Arvidsson & Arvidsson 4158 (as *Heteroderma fertilis* Moberg).

**Leucodiaporthe** Lar.N. Vassiljeva 2007, Diaporthaceae, Diaporthales, Sordariomycetes, four species, type: *L. acerina* M.E. Barr & Lar.N. Vassiljeva, asexual morphs unknown,
saprobes, terrestrial, North temperate zone, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: VLA P-2941.

**Leucochodium** Syd. & P. Syd. 1917, *Ascomycota* genera *incertae sedis*, type: *L. pipturi* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leucoglossum** S. Imai 1942, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, two species, type: *L. durandii* (Teng) S. Imai, asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline, accepted as *Leotiomyces*), Arauzo and Iglesias (2014; new species), Fedosova and Kovalenko (2015; DNA, phylogeny, Russia), cultures and sequences are available but lacks for the type species, needs generic revision.

**Leuconeurospora** Malloch & Cain 1970, *Pseudeurotiales*, *Leotiomyces* family *incertae sedis*, three species, type: *L. pulcherrima* (G. Winter) Malloch & Cain, asexual morph unknown, saprobes, terrestrial, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, type specimen and cultures available for type species CBS H-14009, CBS 343.76.

**Leucoscypha** Boud. 1885, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, two species, type: *L. leucotricha* (Alb. & Schwein.) Boud., asexual morph unknown, hypogeous, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Leucosphaerina** Arx 1987, *Hypocreales* genera *incertae sedis*, *Hypocreales*, *Sordariomycetes*, two species, type: *L. indica* (Arx, Mukerji & N. Singh) Arx, asexual morph hyphomycetous, terrestrial, saprobes, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Bionectriaceae*), Giraldo et al. (2012; phylogeny), cultures and sequences are available, cultures available for type: CBS 123.78.

**Leucothecium** Arx & Samson 1973, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, three species, type: *L. emdenii* Arx & Samson, asexual morph unknown, saprobes, on marine and river sediments, Spain, see Gueidan et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted in *Onygenaceae*), Kirk et al. (2013; genus accepted), Giraldo et al. (2014; DNA, phylogeny), cultures and sequences are available, available specimen and cultures for the type: CBS H-7299 CBS 576.73 (fide Gueidan et al. 2008).

**Leucovibrissa* (A. Sánchez) Korf 1990, *Vibrissaceae*, *Helotiales*, *Leotiomyces*, one species, type: *L. obconica* (Kanouse) Korf, asexual morph unknown, from fine roots of *Pinus*, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leuiliisinea** Matsush. 1985, [as *Leuiliisinea*], *Ascomycota* genera *incertae sedis*, two species, type: *L. bambusicola* Matsush., hyphomycetous, sexual morph unknown, saprobes, lignicolous, Australia, Peru and Taiwan, see Hyde et al. (2011; outline, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Leveillella** Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, one species, type: *L. drimydis* (Lév.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, Chile, see Hofmann (2009; review, accepted in *Asterinaeaceae*), Lumbsch and Huhndorf (2010; outline, accepted in *Asterinaeaceae*), Hongsanan et al. (2014; taxonomy, excluded from *Asterinaeaceae*), Wijayawardene et al. (2014; outline, accepted in *Dothideomycetes*), Cultures and sequences are unavailable, type specimen of type species PC 0084470.

**Leveillina** Theiss. & Syd. 1915, *Dothideomycetes* genera *incertae sedis*, two species, type: *L. arduinae* (Kalchbr. & Cooke) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, Africa, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus
accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


**Libartania** Nag Raj 1979, *Helotiaceae, Helotiaceae, Leotiomycetes*, two species, type: *L. laserpiti* (Bres.) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

**Liberomyces** Pažoutová, M. Kolařík & Kubátová 2012, *Sordariomycetes* genera incertae sedis, two species, type: *L. salicipilus* Pažoutová, M. Kolařík & Kubátová, coelomycetous, sexual morph unknown, endophytes, terrestrial, Czech Republic, see Pazoutova et al. (2012; morphology, DNA), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type species PRM 921954, CCF 4020.

**Libertasomyces** Crous & Roets 2016, *Pleosporales* genera incertae sedis, *Dothideomycetes*, two species, type: *L. myopori* Crous & Roets, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, New Zealand, see Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22617, CPC 27354.

**Libertiella** Speg. & Roum. 1880, *Ascomycota* genera incertae sedis, six species, type: *L. malmedyensis* Speg. & Roum., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Motiejūnaitė et al. (2011; record from Lithuania), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), current generic concept is uncertain, cultures and sequences are unavailable, needs generic revision.

**Lichenobactridium** Diederich & Etayo 1995, *Ascomycota* genera incertae sedis, one species, type: *L. pertusariae* Diederich & Etayo, hyphomycetous, sexual morph unknown, lichenicolous, non-lichenized, terrestrial, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species LG, Diederich 9219.

**Lichenochora** Hafellner 1989, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, five species, type: *L. thallina* (Cooke) Hafellner, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Etayo and Navarro-Rosines (2008; new species), Zhurbenko (2008; new species, Italy), Halc et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Etayo (2011; new species), Hafellner and Zimmermann (2012; new species), Etayo et al. (2013; new species), Kirk et al. (2013; genus accepted), Zhurbenko (2103; new species), Lender et al. (2016; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: K.

**Lichenocoronium** Petr. & Syd. 1927, *Lichenocoriaceae, Lichenocoriniales, Dothideomycetes*, five species, type: *L. lichenicola* (P. Karst.) Petr. & Syd., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, worldwide, see Lawrey et al. (2011; new species), Wijayawardene et al. (2012, 2014, 2016; outline, taxonomy), Hyde et al. (2013; taxonomy), cultures and sequences are available but lacks for the type species, needs generic revision.

species), Kirk et al. (2013; genus accepted), Pérez-Vargas et al. (2013; new species), Muggia et al. (2015; phylogeny), Wijayawardene et al. (2016; outline, morphology, phylogeny), Cultures and sequences are available, lectotype of type species ANGUC.

**Lichenohendersonia** Calatayud & Etayo 2001. *Ascomycota genera incertae sedis*, three species, type: *L. squamarinae* Calat. & Etayo, sexual morph unknown, parasymbiont on different lichens, terrestrial, Northern Hemisphere, see Wijayawardene et al. (2016; morphology), sequence data and cultures unavailable, holotype of the type: IMI 363556.

**Lichenopeltella** Höhn. 1919, *Trichothyriaceae, Dothideomycetes*, families *incertae sedis*, c. 31 species, type: *L. maculans* (Zopf) Höhn., asexual morph unknown, saprobic, lichenicolous, terrestrial, worldwide, see Pérez-Ortega and Spribille (2009; new species), Brackel (2010; new species), Etayo (2010; new species), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaeae*), Zhurbenko (2010; new species), Flakus and Kukwa (2012; new records in Bolivia), van den Boom and Giralt (2012; records in Portugal), Hyde et al. (2013; accepted as a genus in *Aulographaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; transferred to *Mycosphaerellaceae* from *Asterinaeae*), Wijayawardene et al. (2014; outline), Zhurbenko and Pino-Bodas (2015; new species, New Zealand), cultures and sequences are unavailable.

**Lichenopeziza** Zukal 1884, *Ascomycota genera incertae sedis*, one species, type: *L. bryophile* Zukal, asexual morph unknown, saprobic, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), current generic concept is uncertain, cultures and sequences are unavailable, needs generic revision.

**Lichenopuccinia** D. Hawksw. & Hafellner 1984, *Ascomycota genera incertae sedis*, one species, type: *L. poeltii* D. Hawksw. & Hafellner, sexual morphs unknown, terrestrial, lichenicolous, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of type species K(M)-IMI 281393.

**Lichenopyrenis** Calat., M.J. Sanz & Aptroot 2001, *Pleomassariaceae, Pleosporales, Dothideomycetes*, one species, type: *L. galligena* Calat., M.J. Sanz & Aptroot, asexual morph unknown, lichenicolous, terrestrial, Spain, Canada, Japan, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as a genus in *Pleomassariaceae*), Hyde et al. (2013; accepted as a genus in *Pleomassariaceae*), Wijayawardene et al. (2014; outline), Cultures and sequences are unavailable, holotype of the type species MA (Lich.) 12715.

**Lichenostella** Etayo and Calat. 1999, *Ascomycota genera incertae sedis*, one species, type: *L. hypotrichynae* Etayo & Calat., hyphomyceteous, sexual morph unknown, lichenicolous, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Lichenosticta** Zopf 1898, *Ascomycota genera incertae sedis*, one species, type: *L. podeticola* Zopf, coelomyceteous, sexual morph unknown, lichenicolous, terrestrial, North temperate, see Wijayawardene et al. (2012, 2017; outline). Kirk et al. (2013; genus accepted), current generic concept is uncertain, cultures and sequences are unavailable, needs generic revision.

**Lichenostigma** Hafellner 1983, *Phaeococcomycetaceae, Lichenostigmatales, Arthoniomyctes*, type: *L. maureri* Hafellner, asexual morph hyphomycetous, lichenicolous, terrestrial, worldwide, see Pérez-Ortega and Calatayud (2009; new species, Spain), Fernández-Brime et al. (2010; new species), Knudsen and Kocourkova (2010; new species), Lumbsch and Huhndorf (2010; outline), Valadbeigi and Brackel (2011; new species), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2013; new species), Ertz et al. (2014; new species; phylogeny), Cultures and sequences are available, current generic concept is uncertain, cultures available for type species Diederich 1730, Diederich 17337, Diederich 17326, Diederich 17337 (*fide* Ertz et al. 2014).
**Lichenothelia** D. Hawksw. 1981, *Lichenotheliaceae, Lichenotheliales, Dothideomycetes*, 29 species, type: *L. scopularia* (Nyl.) D. Hawksw., asexual morphs pycnidial or hyphomycetous, on rock or lichenicolous, terrestrial, widespread, some species may belong in *Lichenostigma* Häfllner, see Lumbsch & Huhndorf (2011; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; genus accepted), Muggia et al. (2015; phylogeny), Jaklitsch et al. (2016; position), cultures and sequences are available, isotypes of type species BM and K(M) [Anzi, Lich. Langob. 35].

**Lichenoverruculina** Etayo 2011, *Sordariomycetes* genera incertae sedis, one species, type: *L. sigmatospora* (Speg.) Etayo & Sharuddin, asexual morph unknown, lichenicolous on *Heterodermia*, terrestrial, South America, see Etayo and Sharuddin (2011; genus proposed), cultures and sequences are unavailable, holotype of the type species J. Puiggari 124 (LPS-1715).

**Lichina** C. Agardh [nom.cons.] 1817, *Lichinaceae, Lichinales, Lichinomycetes*, nine species, type: *L. pygmaea* (Lightf.) C. Agardh, lichenized, marine, west-european coast, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Lichinella** Nyl. 1873, *Lichinaceae, Lichinales, Lichinomycetes*, 30 species, type: *L. stipatula* Nyl., lichenized, North America, Europe, Asia, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Lichinodium** Nyl. 1875, *Lichinaceae, Lichinales, Lichinomycetes*, four species, type: *L. sirospioideum* Nyl., lichenized, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Licopolia** Sacc., Syd. & P. Syd. 1900, *Dothideomycetes* genera incertae sedis, two species, type: *L. franciscana* Sacc., Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Brazil, Kenya, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Lignincola** Höhnk 1955, *Halosphaeriaceae, Microascales, Sordariomycetes*, five species, type: *L. laevis* Höhnk, asexual morph unknown, saprobes, marine, worldwide, see Jones et al. (2009, 2015; classification), Alias et al. (2010; diversity), Jones (2010; diversity), Abdel-Wahab (2011; diversity), Liu et al. (2011a; morphology), Pang et al. (2011; monograph), Sakayaroj et al. (2011a,b; phylogeny, diversity), Lee et al. (2012; checklist), Pang and Jheng (2012; checklist), Pang et al. (2013b; genetic variation), Alsheikh-Hussain et al. (2014, review), Overy et al. (2014; natural product), Réblová et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, neotype of type species J.K. 4459a.


**Lillicoa** Sherwood 1977, *Stictidaceae, Ostropales, Lecanoromycetes*, one species, type: *L. palicoureae* (Seaver & Whetzel) Sherwood, saprobes, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Limaciniaseta** D.R. Reynolds 1988, *Capnodiales*, *Dothideomycetes*, one species, type: *L. californica* D.R. Reynolds, asexual morph unknown, saprobes, terrestrial, USA, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Limacinula** Höhn. 1907, *Coccosidiniaceae*, *Chaetothyriales*, *Eurotiomycetes*, c. 16 species, type: *L. samoënsis* Höhn., aerial surface of living plants, epifoliar fungus, tropical, see Lumbsch and Huhndorf (2010; outline). Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Limnaomyces** Thaxt. 1900, *Laboulbeniales*, *Laboulbeniomycticates*, three species, type: *L. tropisterni* Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Lindauella** Rehm 1900, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, two species, type: *L. pyrenocarpoidea* Rehm, asexual morph unknown, from living leaves, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

**Lindgomyces** K. Hiray., Kaz. Tanaka & Shearer 2010, *Lindgomyctaceae*, *Pleosporales*, *Dothideomycetes*, eleven species, type species: *L. ingoldianus* (Shearer & K.D. Hyde) K. Hirayama, Kaz. Tanaka & Shearer, asexual morph unknown, saprobes, aquatic, China, Japan, USA, see Hirayama et al. (2010; morphology, phylogeny), Raja et al. (2011, 2013; morphology, phylogeny), Zhang et al. (2014; morphology, phylogeny), Crous et al. (2015a; morphology, phylogeny), Li et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type species ILLS 52289, ATCC 200398.

**Lindquistomyces** Aramb., E. Müll. & Gamundí 1982, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *L. antarcticus* (Speg.) Aramb., E. Müll. & Gamundí (Art. 33.3; Invalid), asexual morph unknown, saprobes, terrestrial, Argentina, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Lindra** I. M. Wilson 1956, *Lulworthiaceae*, *Lulworthiales*, *Sordariomycetes*, five species, type: *L. inflate* I.M. Wilson, asexual morph hyphomycetous, saprobes, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; review), sequences are available, holotype of type: IMI 62909.

**Lineostroma** H.J. Swart 1988, *Didymosphaeriaceae, Pleosporales, Dothideomycetes*, one species, type: *L. banksiae* (Cooke) H.J. Swart, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Jayasiri et al. (2016a; classification), cultures and sequences are unavailable, available specimen for type: CBS H-5512, needs generic revision.


**Linocarpon** Syd. & P. Syd. 1917, *Xylariales* genera incertae sedis, Sordariomycetes, 42 species, type: *L. pandani* Syd. & P. Syd., asexual morph phialophora-like, saprobes, pathogen, endophytes, terrestrial, worldwide, see Lumbsch and Hunduf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures available for type: HKUM16278, HKUM16279.

**Linochora** Höhn. 1910, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, five species, type: *L. leptospermi* Höhn., coelomycetous, sexual morph unknown, from living leaves, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of species unknown, needs new generic revision.

**Linochorella** Syd. & P. Syd. 1912, *Ascomycota* genera incertae sedis, one species, type: *L. striiformis* Syd. & P. Syd., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, South Africa, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs new generic revision.

**Linodochium** Höhn. 1909, *Ascomycota* genera incertae sedis, two species, type: *L. hyalinum* (Lib.) Höhn., hypomyxomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology, accepted as a genus in *Helotiaceae*), Wijayawardene et al. (2017; outline), Kirk et al. (2013; did not accept), cultures and sequences are unavailable, needs new generic revision.

**Linopelis** I. Hino & Katum. 1961, *Schizothyriaceae, Dothideomycetes* family incertae sedis, two species, type: *L. ryukyuensis* I. Hino & Katum., asexual morph unknown, saprobes, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs new generic revision.

**Lipomyces** Lodder & Kreger-van Rij 1952 (= *Myxozyuma* van der Walt, Weijman & von Arx 1981), Lipomycetaceae, *Saccharomycetaceae, Saccharomycetales*, 20 species, type: *L. starkeyi* Lodder & Kreger, asexual reproduction is by multilateral budding, saprophytic, predominantly from soil, but not uncommon in tree frass from bark beetles, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Yamazaki and Kawasaki (2014; new species, DNA), sequences are available.

**Lirellodisca** Aptroot 1998, *Patellariaceae, Patellariales, Dothideomycetes*, one species, type: *L. pyrenulispora* Aptroot, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), cultures and sequences are unavailable, holotype of the type species CBS, Aptroot 38022, needs new generic revision.

**Lirula** Darker 1967, *Rhytismataceae, Rhytismatales, Leotiomycetes*, three species, type: *L. nerviseca* (DC.) Darker, asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA, phylogeny), Fan et al. (2012; new
species, China, DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

Listeromyces Penz. & Sacc. 1901, Ascomycota genera incertae sedis, one species, type: L. insignis Penz. & Sacc., hyphomycetous, sexual morph unknown, saprobes, lignicolous, Asia, Oceania, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lithoglypha Brusse 1988, Acarosporaceae, Acarosporales, Lecanoromycetes, one species, type: L. aggregata Brusse, lichenized, South Africa, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Lithographa Nyl. 1857, Xylographaceae, Tracheliales, Lecanoromycetes, ten species, type: L. petraea (Nyl.) Nyl., lichenized, North and South America, Australia, see Resl et al. (2015; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Lithogyalideopsis Lücking, Sérus. & Vězda 2005, Gomphillaceae, Ostropales, Lecanoromycetes, four species, type: L. poeltii (Vězda) Lücking, Sérus. & Vězda, lichenized. see Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Lithophila Selbmann & Isola, MB811675. For diagnosis see Fungal Diversity 76: 88 (2016). Trichomeriacaeae, Chaetothyriales, Eurotiomycetes, rock-inhabiting fungus, monospecific; sexual morph unknown; type species Lithophila guttulata Selbmann & Isola, MB811676. For diagnosis see Fungal Diversity 76: 90 (2016). Holotypus: CBS 139723. From marble stone, Cortile della Pigna (Vatican City State); = CCFEE 5907 (NCBI accession numbers: KP791773 (ITS), KR781061 (LSU)), taxonomic species delimitation supported by molecular data. Lithophila Selbmann & Isola (2016), introduced as a genus of Trichomeriacaeae, is a later homonym of Lithophila Sw., Prodr, 14, 1788, a name previously and validly published for a genus of Amaranthaceae.

Notes: Lithophila Selbmann & Isola is illegitimate and unavailable for use [ICN (Melbourne) Art. 53.1]; it is here renamed Lithohypha Selbmann & Isola nom. nov., MB819853. For diagnosis see Fungal Diversity 76: 88 (2016). The type species is here renamed Lithohypha guttulata (Selbmann & Isola) Selbmann & Isola comb. nov., MB819854.

Lithopythium Bornet & Flahault 1891, Ascomycota genera incertae sedis, three species, type: L. gangliforme Bornet & Flahault, asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lithothelium Müll. Arg. 1885, Pyrenulaceae, Pyrenulales, Eurotiomycetes, eight species, type: L. cubanum Müll. Arg., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Valadbeigi and Sipman (2010; Iran), Weerakoon et al. (2012; DN, phylogeny), Kirk et al. (2013; genus accepted), Gueidan et al. (2016; phylogeny), cultures and sequences are available but lacks for the type species, needs generic revision.

Livia Velen. 1947, Helotiales genera incertae sedis, Leotiomycetes, one species, type: L. aurea Velen., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Lizonia (Ces. & De Not.) De Not. 1863, Pseudoperisporiaceae, Dothideomycetes family incertae sedis, one species, type: L. empirigonia (Auersw.) De Not., asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Stenroos
et al. (2010; DNA), Hyde et al. (2013; accepted in Pseudoperisporiaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, type specimen of type CBS H-14093.

**Limonaea** Egea & Torrente 1991, Opegraphaceae, Arthoniales, Arthoniomyctes, four species, type: *L. occulta* Egea & Torrente, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Arthoniales), Ertz and Tehler (2014; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available, holotype of type: MUB 13619.

**Limonella** Hafellner & Nav.-Ros. 1993, Helotiales genera incertae sedis, Leotiomyctes, one species, type: *L. scabridula* (Müll. Arg.) Nav.-Ros, & Hafellner, asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Suija et al. (2015; phylogeny), Pärtil et al. (2016; DNA, phylogeny), cultures and sequences are available, needs generic revision.

**Lobaria** (Schreb.) Hoffm. 1796, Lobariaceae, Peltigerales, Lecanoromycetes, 60 species, type: *L. pulmonaria* (L.) Hoffm., lichenized, seen Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Moncada et al. (2013a; classification), Międzikowska et al. (2014; phylogeny), Cornejo and Scheidegger (2015; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

**Lobariella** Yoshim. 2002, Lobariaceae, Peltigerales, Lecanoromycetes, 35 species, type: *L. crenulata* (Hook.) Yoshim., lichenized, neotropical distribution, see Lumbsch and Huhndorf (2010; outline, accepted as a synonym of *Lobaria*), Moncada et al. (2013a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Lobarina** Nyl. ex Cromb. 1894, Lobariaceae, Peltigerales, Lecanoromycetes, 15 species, type: *L. scrobiculata* (Scop.) Nyl., lichenized, Northern Hemisphere and in oceanic areas of Africa, Australia, New Zealand and South America, see Moncada et al. (2013a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Lobatopedis** P.M. Kirk 1979, Ascomycota genera incertae sedis, five species, type: *L. folicola* P.M. Kirk, hypromycetous, sexual morph unknown, saprobes, on leaf litter, widespread, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Heredia et al. (2014; new species), cultures and sequences are unavailable, needs generic revision, holotype of type species IMI 222919.

**Lobothallia** (Clauzade & Cl.Roux) Hafellner 1991, Megasporaceae, Pertusariales, Lecanoromycetes, nine species, type: *L. alphoplaca* (Wahlenb.) Hafellner, lichenized, Asia, Europe, North America, see Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Lockerbia** K.D. Hyde 1994, Sordariales genera incertae sedis, Sordariomyctes, two species, type: *L. palmicola* K.D. Hyde, asexual morph unknown, freshwater, Australia, Florida, see Raja and Shearer (2008; new species), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: BRIP 21334.

**Loculistema** F. Patt. & Charles 1910, Clavicipitaceae, Hypocreales, Sordariomyctes, one species, type: *L. bambusae* F. Patt., & Charles & Veihmeyer, asexual morph hyphomycetous, terrestrial, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: BPI 632466.

**Loculohypoxylon** M.E. Barr 1976, Teichosporaceae, Pleosporales, Dothideomycetes, one species, type: *L. grandinum* (Berk. & Ravenel) M.E. Barr, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013;
accepted as a genus in *Teichosporaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.  


**Lodderomycetes** van der Walt 1971, *Debaryomycetaceae*, *Saccharomycetales*, Saccharomycetes, c. 40 species, type: *L. elongisporus* (Recca & Mrak) van der Walt, asexual reproduction is by multilateral budding, saprophytic, but some species are common human and animal pathogens, clinical isolates, soil, plant debris, beetles, water, yeast cake, worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.  


**Loflammia** Vězda 1986, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *L. flammea* (Müll. Arg.) Vězda, lichenized, Australia, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.  

**Loflammniopsis** Lücking & Kalb 2000, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *L. brasiliensis* Lücking & Kalb, lichenized, Brazil, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type species Kalb & Kalb 27140.  

**Logilvia** Vězda 1986, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *L. gilva* (Müll. Arg.) Vězda, lichenized, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.  

**Lohwagia** Petr. 1942, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, three species, type: *L. intermedia* (Speg.) Petr., asexual morph unknown, from living leaves, terrestrial, central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.  

**Lojkania** Rehm 1905, *Fenestellaceae*, *Dothideomycetes* family incertae sedis, ten species, type: *L. hungarica* Rehm, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Fenestellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Phookamsak and Hyde (2015; taxonomy), cultures and sequences are available but lacks for the type species, needs generic revision.  

**Lolia** Abdel-Aziz & Abdel-Wahab 2011, *Lindgomycetaceae*, *Pleosporales*, *Dothideomycetes*, two species, type species *Lolia aquatica* Abdel-Aziz & Abdel-Wahab, asexual morph coelomycetous, saprobes, aquatic, Egypt, see Abdel-Aziz and Abdel-Wahab (2011; taxonomy, phylogeny), Hyde et al. (2013; accepted in *Lindgomycetaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2014; outline), Abdel-Aziz (2016; new species, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type species IMI 398675, MF644.  

**Loliomyces** Maire 1937, *Ascomycota* genera incertae sedis, one species, type: *L. temulenti* Maire, hyphomycetous, saprobes, Morocco, see Seifert et al. (2011; taxonomy),
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Lollipopania**  Inderb. 2001, *Diaporthales* genera incertae sedis, *Sordariomycetes*, one species, type: *L. minuta* Inderb., asexual morph unknown, saprobes, terrestrial, Thailand, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Lomaantha** Subram. 1954, *Ascomycota* genera incertae sedis, three species, type: *L. pooga* Subram., hyphomycetous, sexual morph unknown, saprobes, dead wood and culms, India and China, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Ma et al. (2011; new species, revision), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Lomachashaka** Subram. 1956, *Ascomycota* genera incertae sedis, one species, type: *L. kera* Subram., hyphomycetous, saprobes, Western Africa, India, see Yadav and Bhat (2009; new species, India), Seifert et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Longicollum** Zelski, F.R. Barbosa, Raja, A.N. Mill. & Shearer 2011, *Annulatascaceae*, *Annulatacales*, *Sordariomycetes*, one species, type: *L. biappendiculatum* Zelski, F.R. Barbosa, Raja, A.N. Mill. & Shearer, asexual morph unknown, saprobes, aquatic, USA, South America, see Zelski et al. (2011; taxonomy), cultures and sequences are unavailable, holotype of the type: ILL 40794, needs generic revision.


**Lopadium** Körb. [nom.cons.] 1855, *Lopacidaceae*, *Lecideales*, *Lecanoromycetes*, five species, type: *L. pezizoideum* (Ach.) Körb., lichenized, worldwide, see Ekman et al. (2008; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Lopadostoma** (Nitschke) Traverso 1906, *Lopadostomataceae*, *Xylariales*, *Sordariomycetes*, twelve species, type: *L. turgidum* (Pers.) Traverso, asexual morph libertella-like, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2014), Senanayake et al. (2015), Maharachchikumbura et al. (2015, 2016; outline), Daranagama et al. (2017 morphology, phylogeny), cultures and sequence are available but lacks for the type species.

**Lopezaria** Kalb & Hafellner 1990, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *L. versicolor* (Fée) Kalb & Hafellner, asexual morph unknown, lichenized, Morocco, see Seifert et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for type species AFTOL-ID 108, needs generic revision.

**Lophiella** Sacc. 1878, *Dothideomyces* genera incertae sedis, one species, type: *L. cristata* (Pers.) Sacc., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lophiostomataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, Index Fungorum (2016) treated type species as a synonym of *Lophiostoma angustilabrum* (Berk. & Broome) Cooke, holotype of type material unavailable, needs generic revision.

**Lophiohelichrysum** Dayarathne, Camporesi & K.D. Hyde 2015, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *L. helichrysi* Dayarathne, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Ariyawansa et al. (2015;
Lophionema Sacc. 1883, Dothideomycetes genera incertae sedis, nine species, type: L. vermiporum (Ellis) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Lophiostomataceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Lophiopoea Ariyaw., Thambug., Camporesi & K.D. Hyde 2015, Lophiostomataceae, Pleosporales, Dothideomycetes, two species, type: L. arundinis Ariyawansa, Thambugal, Camporesi & K.D. Hyde, asexual morph unknown, saprobes on Poaceae, terrestrial, Italy, Japan, see Thambugal et al. (2015b; morphology, phylogeny), cultures and sequenced are available, holotype and ex-type of type species MFLU 14–0590, MFLUCC 11–0463.

Lophiosphaerella Hara 1948, Mycosphaerellaceae, Capnodiales, Dothideomycetes, one species, type: L. euryae (Syd.) Hara, asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Dothideomycetes genera incertae sedis), Kirk et al. (2013; genus accepted), Li et al. (2014; transferred to Mycosphaerellaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Lophiostoma Ces. & De Not. 1863, Lophiostomataceae, Pleosporales, Dothideomycetes, c. 100 species, type: L. macrostomum (Tode) Ces. & De Not., asexual morph coelomycetous, only known for L. semilibrum, saprobes, terrestrial, aquatic, worldwide, sequence data available for four species, see Lumbsch and Huhndorf (2010; outline), Hirayama and Tanaka (2011; phylogeny), Hyde et al. (2013; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Thambugala et al. (2015; phylogeny, review), cultures and sequences are available, epitype of the type: IFRD 2005.

Lophiotrema Sacc. 1878, Lophiotremataceae, Pleosporales, Dothideomycetes, 15 species, type: L. nucula (Fr.) Sacc., asexual morph coelomycetous, saprobes, terrestrial habitats, worldwide, see Hirayama and Tanaka (2011; taxonomy, phylogeny), Zhang et al. (2012; taxonomy, phylogeny), Hyde et al. (2013, 2016; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type: Scler. suec. n. 230.

Lophium Fr. 1818, Mytilinidiaceae, Mytiliniales, Dothideomycetes, five species, type: L. mytilinum (Pers.) Fr., asexual morph papulaspora-like, saprobes, terrestrial, Europe, America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as agenus in Mytilinidiaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hernández-Restrepo et al. (2016; new species), cultures and sequences are available.

Lophodermella Höhn. 1917, Rhytismataceae, Rhytismatales, Leotiomyces, nine species, type: L. sulcigena (Link) Tubeuf, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Lophodermium Chevall. 1826, Rhytismataceae, Rhytismatales, Leotiomyces, c. 145 species, type: L. arundinaeum (Schrad.) Chevall., asexual morph unknown, pathogens, saprobes, endophytes, terrestrial, widespread, see Lumbsch and hunduf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Lophomerum Ouell. & Magasi 1966, Rhytismataceae, Rhytismatales, Leotiomyces, nine species, type: L. autumnale (Darker) Magasi, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Lantz et al. (2011; DNA phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available for Lophomerum ponticum (Lantz et al. 2011), but lacks for the type species, needs generic revision.
**Lophophacidium** Lagerb. 1949, *Phacidiaceae, Phacidiales, Leotiomycestes*, five species, type: *L. hyperboreum* Lagerb., asexual morph unknown, pathogens, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lafalme et al. (2015; pathogens, phylogeny), cultures and sequences are available but lacks for the type species, needs generic revision.


**Loramyces** W. Weston 1929, *Loramysetaceae, Helotiales, Leotiomycestes*, two species, type: *Loramyces juncicola* W. Weston, asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; phylogeny), Tanney et al. (2016; DNA, phylogeny), cultures and sequences are available.


**Loratospora** Kohlm. & Volkm. 1993, *Phaeosphariaceae, Pleosporales, Dothideomycestes*, two species, type: *L. aestuarii* Kohlm. & Volkm.-Kohl., asexual morph unknown, saprobes, terrestrial, USA, Italy, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; revision), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; phylogeny), cultures and sequences are available, holotype and cultures available for the type: IMS J.K. 5505, JK 5535B.

**Loricella** Velen. 1934, *Helotiales* genera incertae sedis, *Leotiomycestes*, two species, type: *L. juncina* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Lotinia** Pérez-Butrón, Fern.-Vic. & P. Alvarado 2015, *Pyronemataceae, Peziales, Pezizomycestes*, one species, type: *L. verna* Pérez-Butrón, Fern.-Vic. & P. Alvarado, asexual morph unknown, saprobes, Spain, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

**Loxospora** A.Massal. 1852, *Sarrameanaeae, Sarrameanales, Lecanoromycestes*, 13 species, type: *L. elatina* (Ach.) A. Massal., lichenized, Australia, Asia, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hodgkinson and Lendemer (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

**Loxosporopsis** Henssen 1995, *Pertusariaceae, Pertusariales, Lecanoromycestes*, one species, type: *L. corallifera* Brodo, Henssen & Imshaug, asexual morph unknown, lichenized, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Resl et al. (2015; DNA, phylogeny), cultures and sequences are available, holotype of type: herb. Henssen, Henssen 13604; isotypes CANL, FH, GZU, UPS, US.

**Lucidascocarpa** A. Ferrer, Raja & Shearer 2008, *Dothideomycestes* genera incertae sedis, one species, type: *L. pulchella* A. Ferrer, Raja & Shearer, asexual morph unknown, submerged wood from freshwater, Panama, Ecuador, see Ferrer et al. (2008; genus proposed), Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: ILL 40558 (AF178-2).
Luciotrichus R. Galán & Raitv. 1995, Pyronemataceae, Pezizales, Sordariomycetes, one species, type: L. lasioboloides R. Galán & Raitv., asexual morph unknown, saprobes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: RG [sic] 6808.

Ludwigomyces Kirschst. 1939, Ascomycota genera incertae sedis, one species, type: L. parasiticus Kirschst., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Lueckingia Aptroot & Umaña 2006, Ramalinaceae, Lecanorales, Lecanoromycetes, one species, type: L. polyspora Aptroot & Umaña, asexual morph unknown, saprobes, marine, worldwide, see Seifert et al. (2011; classification), cultures and sequences are unavailable, holotype of type species INB, Aptroot 60206.


Lunulospora Ingold 1942, Sordariales genera incertae sedis, two species, type: L. curvula Ingold, hyphomycetous, sexual morph unknown, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available.

Luteocirrus C.F. Crane, B.L. Shearer & T.I. Burgess 2013, Cryphonectriaceae, Diaporthales, Sordariomycetes, one species, type: L. shearii C.F. Crane, B.L. Shearer & T.I. Burgess, coelomycetous, sexual morph unknown, pathogens, terrestrial, Australia, see Crane and Burgess (2013; taxonomy, phylogeny), Shearer and Crane (2014; pathogens), Norphanphoun et al. (2016; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and the ex-type cultures of the type species PERTH 08439362, CBS 130776 = WAC 13425.

Luttrellia Shearer 1978, Halosphaeriaceae, Microascales, Sordariomycetes, four species, type: L. estuarina Shearer, asexual morph unknown, saprobes, marine, fresh water, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; did not accepted), Jones et al.
(2015; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.  


**Lylea** Morgan-Jones 1975, *Ascomycota genera incertae sedis*, six species, type: *L. catenulata* Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, Europe, see Karandikar and Singh (2010; new species, India), McKenzie (2009; new species, New Zealand), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Flakus and Farkas (2015; South Africa), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.  

**Lysotheca** Cif. 1962, *Ascomycota genera incertae sedis*, six species, type: *L. suprastromatica* Cif., coelomycetous, sexual morph unknown, lichenicolous, lichenized, worldwide, see Lücking (2008; new species, taxonomy), Wijayawardene et al. (2012; outline, accepted as *Pyrenulales*), Kirk et al. (2013; genus accepted), Flakus and Farkas (2013; new species, Bolivia), Farkas and Flakus (2015; South Africa), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.  

**Maasoglossum** K.S. Thind & R. Sharma 1985, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, one species, type: *M. verrucisporum* K.S. Thind & R. Sharma, asexual morph unknown, saprobes, terrestrial, Asia, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as *Leotiomyces*), Kirk et al. (2013; genus accepted), Hustad and Miller (2014; revision, phylogeny), Cultures and sequences are available, cultures available for the type: CUP-IN-000606 (Hustad and Miller 2014), needs generic revision.  

**Macgarvieomyces** Klaubauf, Lebrun & Crous 2014, *Pyriculariaceae*, *Magnaporthales*, *Sordariomycetes*, two species, type: *M. borealis* (de Hoog & Oorschot) Klaubauf, Lebrun & Crous, hyphomycetous, pathogens, terrestrial, UK, Netherlands, see Klaubauf et al. (2014; phylogeny, morphology, asexual morph), Wijayawardene et al. (2017; outline), cultures and sequences available, ex-type strain of type species CBS 461.65, needs generic revision.  


**Macowaniella** Doidge 1921, *Dothideomycetes genera incertae sedis*, two species, type: *M. congesta* (G. Winter) Doidge, epiphytes, terrestrial, see Hofmann (2009; review, accepted in *Asterinales*), Lumbsch and Huhndorf (2010; outline, accepted in *Asterinales*), Hongsanan et al. (2014; taxonomy, treated as a doubtful genus in *Asterinales*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes, genera incertae sedis*), cultures and sequences are unavailable, needs generic revision.  

**Macroconia** (Wollenw.) Gräfenhan, Seifert & Schroers 2011, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *Macroconia leptosphaeriae* (Niessl) Gräfenhan & Schroers, hyphomycetous, terrestrial, mostly fungicolous, Northern hemisphere, see
Gräfenhan et al. (2011; phylogeny), Lombard et al. (2015; phylogeny), Cultures and sequences are available, lectotype of type: K(M) 165805.

**Macroderma** Höhn. 1917, *Cryptomycetaceae, Rhytismatales, Leotiomycetes*, one species, type: *M. curtisi* (Berk. & Ravenel) Höhn., asexual morph unknown, saprobes, terrestrial, North America, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Macrodiaporthe** Petr. 1920, *Melanconidaceae, Diaporthales, Sordariomycetes*, two species, type: *M. occulta* (Fuckel) Petr., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, Needs generic revision.

**Macrodiplodia** Sacc. 1884, *Ascomycota* genera *incertae sedis*, two species, type: *M. curreyi* (Sacc. & Roum.) Sacc., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Macrodiplodiopsis** Petr. 1922, *Macrodiplodiopsidaceae, Pleosporales, Dothideomycetes*, two species, type: *M. desmazieri* (Mont.) Petr., asexual morph coelomycetous, saprobes, Europe, see Wijayawardene et al. (2012, 2014, 2016; outline), Kirk et al. (2013; genus accepted), Crous et al. (2015; taxonomy, sexual morph, typification), Tanaka et al. (2015; phylogeny), cultures and sequences are available, lectotype of the type: PC 0142158, epitype and ex-epitypeof the type: CBS H-22269, CBS 140062 (Crous et al. 2015).

**Macrographa** Etayo 2008, *Microthyriaceae, Microthyriales, Dothideomycetes*, one species, type: *M. antarctica* Etayo, asexual morph unknown, terristrial, parasymbiont, or parasite on *Nephroma antarcticum*, South America, see Etayo and Sancho (2008; morphology), Hyde et al. (2013; accepted as *Trichothyriaceae*, but without molecular data), cultures and sequences are unavailable, holotype of the type species MAF, Etayo 23269.


**Macrophomina** Petr. 1923, *Botryosphaeriaceae, Botryosphaerales, Dothideomycetes*, three species, type: *M. phaseolina* (Tassi) Goid., coelomycetous, sexual morph unknown, saprobes, pathogens, in soil, terrestrial, cosmopolitan, see Phillips et al. (2008, 2013; taxonomy, phylogeny), Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny), Dissanayake et al. (2016; taxonomy), cultures and sequences are available.

**Macrorhabdus** Tomaszewski, Logan, Snowden, Kurtzman & Phalen 2003, *Saccharomycetales* genera *incertae sedis*, *Saccharomycetes*, one species, type: *M. ornithogaster* Tomasz., asexual reproduction is by fission, typically infects the stomach of budgerigars (*Melopsittacus undulates*) and other birds causing a wasting disease, on Budgerigars and other birds, worldwide, sequences are available.

**Macrovalarsia** Petr. 1962, *Dothideomycetes* genera *incertae sedis*, *Incertae sedis*, two species, type: *M. leonensis* (Deighton) Petr., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline, *Dothideomycetes*), Hyde et al. (2013; accepted in *Botryosphaeriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted in *Botryosphaeriaceae*), Doilom et al. (2016; DNA, phylogeny), cultures and sequences are available but lacks for the type species, needs generic revision.
Macroventuria Aa 1971, Didymellaceae, Pleosporales, Dothideomycetes, three species, type: *M. anomochaeta* Aa, asexual morph unknown, saprobes, ?pathogens, terrestrial, cosmopolitan, see Aveskamp et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Chen et al. (2015; taxonomy, phylogeny), cultures and sequences are available.

Maculatifrondes K.D. Hyde 1996, Phyllachoraceae, Phyllachorales, Sordariomycetes, one species, type: *M. aequatoriensis* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: BRIP 23240, needs generic revision.

Maculatifalma J. Fröhl. & K.D. Hyde 1995, Valsaceae, Diaporthales, Sordariomycetes, one species, type: *M. frondicola* J. Fröhl. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: BRIP 21402, needs generic revision.

Madurella Brumpt 1905, Chaetomiaceae, Sordariales, Sordariomycetes, nine species, type: *M. mycetomatis* (Laveran) Brumpt, hyphomycetous, sexual morph unknown, saprobes, human (causal agent of black-grain mycetoma) and animal pathogens, worldwide, see Fahala et al. (2011; pathogen, treatments), Seifert et al. (2011; morphology), de Hoog et al. (2012, 2013; new species, Sudan, Sumatra), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Iriyiny et al. (2015; barcode), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, cultures available for the type species CBS 247.48 (*fide* de Hoog et al. 2013), needs generic revision.

Magnomopsis Nyl. 1875, Arthopyreniaceae, Pleosporales, Dothideomycetes, one species, type: *M. pertenella* Nyl., lichenized, see Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.


Magnibotryoscoma Thambugala & K.D. Hyde 2015, Floricolaceae, Pleosporales, Dothideomycetes, one species, type: *M. uniseriatum* (Mugambi, A.N. Mill. & Huhndorf) Thambug. & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, USA, see Thambugala et al. (2015b; phylogeny), cultures and sequences are available, holotype of type species ANM 909.

Magnicamarosporium Kaz. Tanaka & K. Hiray. 2015, Sulcatisporaceae, Pleosporales, Dothideomycetes, one species, type species: *M. iriomotense* Kaz. Tanaka & K. Hiray., sexual morph unknown, saprobes, terrestrial, Japan, see Tanaka et al. (2015; morphology, phylogeny), Wijayawardene et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype and ex-type cultures of the type: HHUF 30125, CBS 139696.

Magnohelicospora R.F. Castañoeda, Hern.-Restr., Gené & Guarro 2013, Ascomycota genera incertae sedis, one species, type: M. iberica R.F. Castañoeda, Hern.-Restr., Gené & Guarro, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Portugal, see Castañeda-Ruiz et al. (2013; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: HAL (Fungi) 2447, cultures and sequences are unavailable, needs generic revision.

Magnusimyces Zender 1977 (= Saprochaete Coker & Shanor ex D.T.S. Wagner & Dawes 1970), Dipodascaceae, Saccharomycetales, Saccharomycetes, eight species, type: M. ludwigii Zender, asexual reproduction consists of true hyphae that branch at acute angles with acuminate apices, and that disarticulate into arthroconidia, saprophytic, but clinical isolates are not uncommon, soil, tree fluxes, waste water, insect tunnels in trees, worldwide, cultures and sequences are available.

Mahabalella B. Sutton & S.D. Patil 1966, Ascomycota genera incertae sedis, two species, type: M. acutisetosa B. Sutton & S.D. Patil, hyphomycetous, with acremonium-like synasexual morph, sexual morph unknown, saprobes, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Majewskia Y.B. Lee & K. Sugiy. 1986, Laboulbeniaceae, Laboulbeniales, Laboulbeniomyces, one species, type: M. japonica Y.B. Lee & K. Sugiy., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Malacaria Syd. 1930, Dothideomycetes genera incertae sedis, two species, type: M. meliolicola Syd., asexual morph unknown, saprobes, pantropical, see Lumbsch and Huhndorf (2010; outline, accepted in Tubeufiaceae), Hyde et al. (2013; not accepted in Tubeufiaceae), Kirk et al. (2013; genus accepted), Boonme et al. (2014; not accepted in Tubeufiaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Malaysiasca Crous & M.J. Wingf. 2016, Glomerellales genera incertae sedis, Sordariomycetes, one species, type: M. phaii Crous & M.J. Wingf., asexual morph coelomycetous, saprobes, terrestrial, Malaysia, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type species CBS H-22616, CPC 27548.

Malbranchea Sacc. 1882, Onygenaceae, Onygenales, Eurotiomycetes, 22 species, type: M. pulchella Sacc. & Penz., hyphomycetous, sexual morph unknown, in soil, dung, keratin, cellulose, man and other substrata, terrestrial, Northern America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Malcolmiella Vězda 1997, Teloschistales genera incertae sedis, Lecanoromycetes, one species, type: M. cinereovirens Vězda, lichenized, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kalb et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, holotype of type: CHR (2757).

Mallochia Arx & Samson 1986, Gymnoascaceae, Onygenales, Eurotiomycetes, four species, type: M. echinulata (B.G. Dutta & G.R. Ghosh) Arx & Samson, assexual morph unknown, saprobes, paleotropical, see Lumbsch and Huhndorf (2010; outline, accepted in Onygenaceae), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen for type: CBS H-6703, needs generic revision.

Malmeomyces Starbäck 1899, Niessliaceae, Hypocreales, Sordariomycetes, one species, type: M. pulchellus Starbäck, asexual morph unknown, terrestrial, saprobes, see Lumbsch and
Malmideae Kalb, Rivas Plata & Lumbsch 2011, Malmideaceae, Lecanorales, Lecanoromycetes, 50 species, type: M. piperis (Spreng.) Kalb, Rivas Plata & Lumbsch, ascomata apotheciate, conidiomata pyenidal, lichen-forming, mostly on bark, pantropical, see Kalb et al. (2011; phylogeny), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Malmographina M. Cáceres, Rivas Plata & Lücking 2012, Graphidaceae, Ostropales, Lecanoromycetes, one species, type: M. plicosa (C.F.W. Meissn.) M. Cáceres, Rivas Plata & Lücking, asexual morph unknown, lichenized, terrestrial, pantropical, see Cáceres et al. (2012; taxonomy), Lumbsch et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Malthomyces K.D. Hyde & P.F. Cannon 1999, Phyllachoraceae, Phyllochoryales, Sordariomycetes, one species, type: M. calamigena (Berk. & Broome) K.D. Hyde & P.F. Cannon, asexual morph unknown, saprobes, terrestrial, India, Sri Lanka, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Mamiania Ces. & De Not. 1863, Gnomoniaceae, Diaporthales, Sordariomycetes, three species, type: M. fimбриа (Pers.) Ces. & De Not., asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Mamianiella Höhn. 1917, Diaporthales genera incertae sedis, Sordariomycetes, three species, type: M. coryi (Batsch) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Sogonov et al. (2008; accepted as Diaporthales), Lumbsch and Huhndorf (2010; outline, accepted as a genus in Gnomoniaceae), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as Diaporthales), cultures and sequences are available, available specimen and cultures for the type: CBS H-14211, BPI 877578.

Mamillisphaeria K.D. Hyde, S.W. Wong & E.B.G. Jones 1996, Melanommataceae, Pleosporales, Dothideomycetes, one species, type: M. dimorphospora K.D. Hyde, S.W. Wong & E.B.G. Jones, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Melanommataceae), Wijayawardene et al. (2014; outline), Tian et al. (2015; accepted as a genus in Melanommataceae), holotype of the type: BRIP 22967, cultures and sequences are unavailable.

Mammaria Ces. ex Rabenh. 1854, Lasiosphaeriaceae, Sordariales, Sordariomycetes, two species, type: M. echinobotryoides Ces., sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, available specimen for type: CBS H-14212.

Manglicola Kohlm. & E. Kohlm. 1971, Manglicolaceae, Jahnulales, Dothideomycetes, two species, type: M. guatemalensis Kohlm. & E. Kohlm., asexual morph unknown, saprobes, marine, Brunei, Guatemala, Thailand, see Jones et al. (2009, 2015; classification), Suetrong et al. (2010, 2011a; morphology, phylogeny), Jones et al. (2012; morphology, phylogeny), Hyde et al. (2013; morphology, phylogeny), Shearer et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype and ex-isotype strain of type species J.K. Nos. 2700 (NY), J.K. 2700a (IMS).
**Mangoldia** Lücking, Parnmen & Lumbsch 2012, *Graphidaceae*, Ostropales, Lecanoromycetes, two species, type: *M. australiana* Lücking, Parnmen & Lumbsch, asexual morph unknown, lichenized, terrestrial, Australia, see Lücking et al. (2012, 2014; taxonomy), Lumbsch et al. (2014; phylogeny), sequences are available, holotype of the type: CANB, Mangold 27zB.

**Mangrovispora** K.D. Hyde & Nakagiri 1991, *Sordariomycetes* genera incertae sedis, two species, type: *M. pemphii* K.D. Hyde & Nakagiri, asexual morph unknown, saprobes, marine, Australia, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; accepted as *Phyllachorales*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available (unpublished), holotype of the type: BRIP 17112.


**Manokwaria** K.D. Hyde 1993, *Amphisphaeriaceae*, Xylariales, Sordariomycetes, one species, type: *Manokwaria notabilis* K.D. Hyde, asexual morph unknown, saprobes, fresh water, Indonesia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: BRIP 20854, needs generic revision.

**Mapletonia** B. Sutton 1991, *Ascomycota* genera incertae sedis, one species, type: *M. falcata* B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species IMI 263431a.

**Marasasiomyces** Crous 2015, *Botryosphaeriaceae*, Botryosphaeriales, Dothideomycetes, one species, type: *M. karoo* (B. Sutton & Marasas) Crous, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-isotype culture of the type: PREM 44967, CBS 118718.

**Marcelaria** Aptroot, Nelsen & Parmmen 2013, *Trypetheliaceae*, Trypetheliales, Dothideomycetes, three species, type: *M. purpurina* (Nyl.) Aptroot, Nelsen & Parmmen, asexual morph unknown, lichenized, terrestrial, worldwide, see Aptroot et al. (2013; taxonomy), Nelsen et al. (2014; DNA, phylogeny), Luangsunphabool et al. (2016; DNA, phylogeny), cultures and sequences are available, holotype and cultures available for the type species 236 (PC), MPN323A (fide Nelsen et al. 2014).

**Marcelleina** Brumm., Korf & Rifai 1967, *Pezizaceae*, Pezizales, Pezizomycetes, one species, type: *M. persoonii* (P. Crouan & H. Crouan) Brumm., asexual morph unknown, hypogeous, terrestrial, worldwide, see Lantieri and Pfister (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rubio et al. (2014; new species, Spain), cultures and sequences are available, cultures available for type: TL-5696, needs generic revision.

**Margaritispora** Ingold 1942, *Helotiales* genera incertae sedis, one species, type: *M. aquatica* Ingold, hyphomycetous, sexual morph unknown, saprobes, aquatic, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Mariannaea** G. Arnaud ex Samson 1974, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *Mariannaea elegans* (Corda) Samson, asexual morph hyphomycetous, terrestrial, saprobes and in soil, Asia, see Gräfenhan et al. (2011; phylogeny), Lombard et al. (2015; phylogeny), cultures and sequences are available, holotype of type species in herb. Corda (as *Penicillium elegans*).


**Marinosphaera** K.D. Hyde 1989, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *M. mangrovei* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Brunei, see Jones et al. (2009, 2015; phylogeny, outline), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype of the type: IMI 325412, needs generic revision.

**Marinospora** A.R. Caval 1966, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, two species, type: *M. calyptrata* (Kohlm.) A.R. Caval, asexual morph unknown, saprobes, marine, Argentina, Belgium, Denmark, France, Germany, Scotland, Iceland, Spain, USA, Canada, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), cultures and sequences are available, needs generic revision.


**Maronea** A. Massal. 1856, *Fusciaceae*, *Umbilicariales*, *Lecanoromycetes*, 13 species, type: *M. berica* A. Massal., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; phylogeny), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Maronella** M. Steiger 1959, *Biotorellaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *M. laricina* M. Steiner, lichenized, temperate northern hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Marthamyces** Minter 2003, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, nine species, type: *M. emarginatus* (Cooke & Massee) Minter, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lantz et al. (2011; DNA, phylogeny), cultures and sequences are available.

**Martinellisia** V.G. Rao & Varghese 1977, *Ascomycota* genera incertae sedis, one species, type: *M. indica* V.G. Rao & Varghese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Martiniozyma** Kurtzman 2015, *Pichiaceae, Saccharomycetales, Saccharomycetes*, two species, type: *M. abiesophila* (Kurtzman) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, water, soil, fruit, sap of red fir, worldwide, see Kurtzman (2015; taxonomy), cultures and sequences are available.


**Masonhalea** Kärnefelt 1977, *Parmeliaceae, Lecanorales, Lecanoromycetes*, two species, type: *M. richardsonii* (Hook.) Kärnefelt, lichenized, Arctic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, needs generic revision.

**Massalongia** Körb. 1855, *Massalongiaceae, Peltigerales, Lecanoromycetes*, two species, type: *M. carnosa* (Dicks.) Körb., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, needs generic revision.

**Massalongina** Bubák 1916, *Ascomycota genera incertae sedis*, one species, type: *M. aquilina* (C. Massal.) Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Massaria** De Not. 1844, *Massariaceae, Pleosporales, Dothideomycetes*, 31 species, type: *M. inquinans* (Tode) De Not., asexual morph coelomycetous, saprobes or weak parasitic, terrestrial, northern temperate climate zone, see Lumbsch and Huhndorf (2010; outline), Voglmayr and Jaklitsch (2011; taxonomy, phylogeny), Hyde et al. (2013, 2016; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequence data available for 17 species, holotype of type species WU 30526.

**Massarina** Sacc. 1883, *Massarinaceae, Pleosporales, Dothideomycetes*, c. 100 species, type: *M. eburnea* (Tul. & C. Tul.) Sacc., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Zhang et al. (2009a, b; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Tanaka et al. (2015; taxonomy, phylogeny), cultures and sequences are available.

**Massariola** Füisting 1868, *Dothideomycetes genera incertae sedis*, two species, type: need typification, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Massariosphaeria** (E. Müll.) Crivelli 1983, *Pleosporales genera incertae sedis, Dothideomycetes*, 25 species, type: *M. phaeospora* (E. Müll.) Crivelli, asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lophiostomataceae*), Tanaka et al. (2011; new species, Pakistan), Hyde et al. (2013; excluded from *Lophiostomataceae*) Kirk et al. (2013; genus accepted), Thambubala et al. (2014; excluded from *Lophiostomataceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Pleosporales*), cultures available for the type: CBS 611.86 (fide Schoch et al. 2009), needs generic revision.

**Massariotheca** Syd. 1939, *Ascomycota genera incertae sedis*, eight species, type: *M. themedae* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see
Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Massariovalsa** Sacc. 1882 (= *Melanconiopsis* Ellis & Everh. *fide* Rossman et al. 2015), *Melanconiidaeae*, Diaporthales, Sordariomycetes, four species, type: *M. sudans* (Berk. & M.A. Curtis) Sacc., asexual morph unknown, saprobies, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, available specimen for type: CBS H-14272, needs generic revision.

**Massaea** Sacc. 1889, *Helotiales* genera *incertae sedis*, Leotiomycetes, one species, type: *M. quisquiliarum* (Berk. & M.A. Curtis) Sacc., asexual morph unknown, saprobies, terrestrial, Australia, see Hyde et al. (2010; phylogeny), Maharachchikumbura et al. (2011; morphology), Cultures and sequences are unavailable.

**Mastigosporella** Höhn. 1914 (= *Wuestneiopsis* J. Reid & Dowssett 1990 *fide* Rossman et al. 2015), Cryphonectriaceae, Diaporthales, Sordariomycetes, four species, type: *M. hyalina* (Ellis & Everh.) Höhn., asexual morph coelomycetous, pathogens, saprobies, terrestrial, worldwide, see Crous et al. (2013; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Rossman et al. (2015; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequences are available but lack for the type, needs generic revision.

**Mastigosporellum** Riess 1852, *Helotiales* genera *incertae sedis*, Leotiomycetes, four species, type: *M. album* Riess, coelomycetous, sexual morph unknown, pathogens, terrestrial, temperate, see Kirk et al. (2013; genus accepted), Crous et al. (2014; taxonomy, epitypification, phylogeny), cultures and sequences are available but lack for the type species, needs generic revision.

**Mastodia** Hook.f. & Harv. 1847, Verrucariaeae, Verrucariales, Eurotiomycetes, five species, type: *M. tesselata* (Hook. f. & Harv.) Hook. f. & Harv., lichenized, Southern hemisphere, especially Antartica, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Mastodiaceae*), Pérez-Ortega et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Matsushimaeae** Subram. 1978, Ascomycota genera *incertae sedis*, three species, type: *M. fasciculata* (Matsush.) Subram., sexual morph unknown, saprobies, terrestrial, Asia, North America, Africa, see Hyde et al. (2011; checklist), Rambelli (2011; Mediterranean), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Matsushimiella** R.F. Castañeda & Heredia 2001, Ascomycota genera *incertae sedis*, two species, type: *M. queenslandica* (Matsush.) R.F. Castañeda & Heredia, hyphomycetous, sexual morph unknown, saprobies, terrestrial, Australia, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Monteiro et al. (2015; new species, Brazil), holotype of type: MFC-8A063, cultures and sequences are unavailable, compare with *Minimelanolocus*, *Nigrolenticulus*, *Pseudospiropes* and *Spiropes*.

**Matsushimomyces** V.G. Rao & Varghese 1979, Ascomycota genera *incertae sedis*, two species, type: *M. indicus* V.G. Rao & Varghese, hyphomycetous, sexual morph unknown, saprobies, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mattirolella** S. Colla 1929, *Kathistaceae, Ophiostomatales, Sordariomycetes*, one species, type: *M. silvestrii* S. Colla, saprobes, Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Mattirolia** Berl. & Bres. 1889, *Thyridiaceae, Sordariomycetes* family incertae sedis, one species, type: *M. roseovirens* Berl. & Bres., saprobes, Africa, see Lumbsch and Huhndorf (2010; outline), Checa et al. (2013; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences and cultures are unavailable, epitype of type: WU 32154.

**Mattirolomyces** E. Fisch. 1938, *Pezizaceae, Pezizales, Pezizomycetes*, one species, type: *M. terfezioides* (Mattir.) E. Fisch., asexual morph coelomycetous, lichenized, rarely lichenicolous, terrestrial, tropical to subtropical regions, see Sogonov et al. (2008; DNA, phylogeny), Lücking et al. (2016; classification), sequences and cultures are unavailable, holotype of species: CBS H-14276.

**Mauginiella** Cavara 1925, *Phaeosphaeriaceae, Pleosporales, Dothideomycetes*, one species, type: *M. scaettedae* Cavara, asexual morph unknown, saprobes, terrestrial, South America, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

**Mauritiana** Poonyth, K.D. Hyde, Aptroot & Peerally 2000, *Halothiaceae, Pleosporales, Dothideomycetes*, one species, type: *M. rhizophorae* Poonyth, K.D. Hyde, Aptroot & Peerally, asexual morph unknown, saprobes, marine, see Alias and Jones (2009; monograph), Suetrong et al. (2009; phylogeny, morphology), Jones et al. (2009, 2015; outline, marine), Zainuddin et al. (2010; antimicrobial activities), Lee et al. (2012; checklist, Malaysia), Zhang et al. (2012; phylogeny, morphology), Hyde et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype of type: HKU(M) 10219.

**Mawsonia** C.W.Dodg 1948, *Lichinaceae, Lichinales, Lichinomycetes*, one species, type: *M. harrissonii* C.W. Dodge, lichenized, Brazil, Antarctica, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable.

**Mazaediothecium** Aptroot 1991, *Pyrenulaceae, Pyrenulales, Eurotiomycetes*, three species, type: *M. rubiginosum* Aptroot, asexual morph unknown, lichenized, terrestrial, Papua New Guinea, Costa Rica, Malaysia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available, holotype of type: Aptroot (17464).

**Mazosia** A. Massal. 1854, *Roccellaceae, Arthoniales, Arthoniomycetes*, 27 species, type: *M. rotula* (Mont.) A. Massal., sexual morph with apothecoid ascomata, asexual morph coelomycetous, lichenized, rarely lichenicolous, terrestrial, tropical to subtropical regions, see Lücking (2008, morphology), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015; phylogeny), Freysch et al. (2014; phylogeny), Lücking et al. (2016; classification), sequence data available for a few species, holotype of species unavailable.

**Mazzantia** Mont. 1855, *Diaporthaceae, Diaporthales, Sordariomycetes*, four species, type: *M. galii* (Fr.) Mont., asexual morph coelomycetous, saprobes, terrestrial, Europe, America, see Sogonov et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for the type: AR4658 (fide Udayanga et al. 2014).
**Mebarria** J. Reid & C. Booth 1989, *Melanconidaceae, Diaporthales, Sordariomycetes*, two species, type: *M. thujina* (Nag Raj & DiCosmo) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Medeolaria** Thaxt. 1922, *Medeolariaeae, Medeolariales, Pezizomycotina* order *incertae sedis*, one species, type: *M. farlowii* Thaxt., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Medusamyces** G.L. Barron & Szijarto 1990, *Ascomycota* genera *incertae sedis*, two species, type: *M. lunulosporus* G.L. Barron & Szijarto, hyphomycetous, sexual morph unknown, on rotifers, aquatic, Canada, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: OAC 10845.

**Megacapitula** J.L. Chen & Tzean 1993, *Ascomycota* genera *incertae sedis*, two species, type: *M. villosa* J.L. Chen & Tzean, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Prabhugaonkar and Bhat (2011; record in India, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype and cultures available for the type: PPH17, GUFCC 15515 (*fide* Prabhugaonkar and Bhat 2011).

**Megalaria** Hafellner 1984, *Ramalinaceae, Lecanorales, Lecanoromycetes*, 29 species, type: *M. grossa* (Pers. ex Nyl.) Hafellner, lichenized, worldwide, see Ekman et al. (2008; Ancestral state reconstructions), Schmull et al. (2011; phylogeny), Miądlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Megaloblastenia** Sipman 1983, *Megalosporaceae, Teloschistales, Lecanoromycetes*, two species, type: *M. flavidoatra* (Nyl.) Sipman, lichenized, Australia, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Megalodochium** Deighton 1960, *Ascomycota* genera *incertae sedis*, four species, type: *M. palmicola* Deighton, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, China, India, Sierra Leone (tropical Africa), see Tiwari and Rai (2009; morphology), Wijayawardene et al. (2012, 2017; outline), Zhao and Zhao (2012; morphology), Crous et al. (2015; compare with *Melanconium*), cultures and sequences are unavailable, needs generic revision.

**Megalohypha** A. Ferrer & Shearer 2007, *Aliquandostipitaeae, Jahnulales, Dothideomycetes*, one species, type: *M. aqua-dulces* A. Ferrer & Shearer, freshwater, Panama, Thailand, see Suetsong et al. (2011; phylogeny), cultures and sequences are available, holotype of type: AF005 ILL.

**Megaloseptoria** Naumov 1925, *Ascomycota* genera *incertae sedis*, one species, type: *M. mirabilis* Naumov, coelomycetous, sexual morph unknown, saprobes, terrestrial, Russia, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Megalospora** Meyen 1843, *Megalosporaceae, Teloschistales, Lecanoromycetes*, 35 species, type: *M. sulphurata* Meyen, lichenized, tropical and warm temperate zones, see Lumbsch and Huhndorf (2010; outline), Kantvilas and Lumbsch (2012; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Megalotremis** Aptroot 1991, *Monoblastiaceae, Monoblastiales, Dothideomycetes*, twelve species, type: *M. verrucosa* (Makhija & Patw.) Aptroot, asexual morph unknown, lichenized,
terrestrial, tropical, India, Costa Rica, Sri Lanka, see Nelsen et al. (2009, 2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures available for type: MPN104 (fide Nelsen et al. 2011), needs generic revision.

**Megaspora** (Clauzade & Cl. Roux) Hafellner & V.Wirth 1987, *Megasporaceae, Pertusariales, Lecanoromycetes*, three species, type: *M. verrucosa* (Ach.) Hafellner & V. Wirth, lichenized, Austria, Iran, Armenia, see Lumbsch and Huhndorf (2010; outline), Valadbeigi et al. (2011; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Zakeri et al. (2016; new species), cultures and sequences are available, needs generic revision.

**Meionomyces** Thaxt. 1931, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomyces*, six species, type: *M. asteni* Thaxt, asexual morph unknown, biotrophic, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Melanamphora** Lafl. 1976, *Melanconidaceae, Diaporthales, Sordariomycetes*, two species, type: *M. spinifera* (Wallr.) Lafl., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, cultures available for type species SPOD1, SPOD, MVS, MSH (fide Voglmayr et al. 2012), needs generic revision.

**Melanconia** Sacc. 1882, *Melanconidaceae, Diaporthales, Sordariomycetes*, two species, type: *M. spodiacea* (Tul. & C. Tul.) Sacc., asexual morph *discosporina*-like and *melanconium*-like, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Voglmayr et al. (2012; taxonomy, phylogeny, asexual morph, typification), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, cultures available for type species SPOD1, SPOD, MVS, MSH (fide Voglmayr et al. 2012), needs generic revision.

**Melanela** Essl. 1978, *Parmeliaceae, Lecanorales, Lecanoromycetes*, six species, type: *Melanela stygia* (L.) Essl., lichenized, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.


**Melanocarpus** Arx 1975, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, three species, type: *M. albomyces* (Cooney & R. Emers.) Arx, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in Sordariales), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), van den Brink et al. (2015; thermophilic nature), cultures and sequences are available.

**Melanocephala** S. Hughes 1979, *Ascomycota genera incertae sedis*, five species, type: *M. cupulifera* S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017;
Melanodothis R.H. Arnold 1972, Mycosphaerellaceae, Capnodiales, Dothideomycetes, one species, type: *Melanodothis carici* R.H. Arnold, asexual morph ramularia-like, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Mycosphaerellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Melanographium Sacc. 1913, Sordariomycetes genera incertae sedis, nine species, type: *M. splenisporum* Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Melanohalea O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 2004, Parmeliaceae, Lecanorales, Lecanoromycetes, 19 species, type: *M. exasperata* (De Not.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch (syn. *Parmelia exasperata* De Not.), lichenized, widespread, terrestrial, see Jaklitsch et al. (2016; position), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type species RÖ.

Melanolecia Hertel 1981, Hymeneliaceae, Hymeneliaceae, Lecanoromycetes, eight species, type: *M. transitoria* (Arnold) Hertel, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, cultures available for the type: Meltra167, needs generic revision.

Melanomma Nitschke ex Fuckel 1870, Melanommataceae, Pleosporales, Dothideomycetes, c. 30 species, type: *M. pulvis-pyrius* (Pers.) Fuckel, asexual morph unknown, see Lumbsch and hunduf (2010; outline), Hyde et al. (2013; accepted as a genus in *Melanommataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures available for type: CBS 371.75, CBS 109.77, CBS 124080, CBS 371.75.

Melanopeziza Velen. 1939, Helotiaceae genera incertae sedis, Leotiomyces, one species, type: *M. artemisiae* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Melanopeziza P.James & Vězda 1971, Ascomycota genera incertae sedis, one species, type: *M. pacifica* P. James & Vězda, lichenized, Mid-Atlantic region of eastern North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Thelocarpaceae*), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Melanopsidea Papendorf & J.W. du Toit 1967, Ascomycota genera incertae sedis, one species, type: *M. karroo* Papendorf & G.W. du Toit, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Melanops Nitschke ex Fuckel 1870, Melanopsaceae, Botryosphaeriales, Dothideomycetes, one species, type: *M. tulasnei* Fuckel, asexual morph coelomycetous, saprobes, terrestrial, cosmopolitan, see Phillips and Alves (2009; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Slippers et al. (2014; phylogeny, introduced of a new family *Melanopsaceae*), Wijayawardene et al. (2014; outline, phylogeny), epitype and ex-epitype of the type: LISE 95179, CBS 116805.

Melanopsamma Niessl 1876, Stachybotriaceae, Hypocreales, Sordariomycetes, c. 40 species, type: *M. pomiformis* (Pers.) Sacc., asexual morph custingophora-like, saprobes, terrestrial, widespread, see Lumbsch and Hunduf (2010; outline, accepted as a genus in *Niessliaceae*), Kirk et al. (2013; genus accepted), Wang et al. (2015; phylogeny), Maharachchikumbura et al.
M. velutina Körb., asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Melanospora Corda 1836 (= Gonatobotrys Corda 1839 fide Réblová et al. 2016), Ceratostomataceae, Melanosporales, Sordariomycetes, 35 species, type: Melanospora zamiae Corda, asexual morphs formerly named in Gonatobotrys, saprobes, from soil, fungicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; nomenclature), cultures and sequences are available.

Melanotopelia Lumbsch & Mangold 2008, Graphidaceae, Ostropales, Lecanoromycetes, four species, type: M. toensbergii (Vězda & Kantvilas) Lumbsch & Mangold, asexual morph unknown, lichenized, terrestrial, worldwide, see Mangold et al. (2008; taxonomy), Serusiaux et al. (2009; new species, Rwanda), Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2010, 2015; new species, Falkland Island, accepted in Graphidaceae), Plata et al. (2012; accepted in Graphidaceae), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type species, holotype of the type species BG, Tønsberg 25545 (holotype of Topeliopsis toensbergii Kantvilas & Vězda).

Melanotrema Frisch 2006, Graphidaceae, Ostropales, Lecanoromycetes, eleven species, type: M. platystomum (Mont.) Frisch, asexual morph unknown, lichenized, terrestrial, worldwide, see Mangold et al. (2009; new species, Australia), Lumbsch and Huhndorf (2010; outline), Papong et al. (2010; new species), Plata et al. (2013; DNA, phylogeny), Kraichak et al. (2014; new species), Sipman (2014; new species), Lumbsch et al. (2015; accepted in Graphidaceae), Lücking et al. (2016; classification), cultures and sequences are available, cultures available for the type: DNA3492 (fide Plata et al. 2013), needs generic revision.

Melarthonis Frisch & G. Thor 2014, Chrysotrichaceae, Arthoniales, Arthoniomycetes, one species, type: Melarthonis piceae Frisch & G. Thor, asexual morph unknown, saprobes, terrestrial, see Frisch et al. (2014a; taxonomy), Lücking et al. (2016; classification), holotype of the type: UPS, Thor 25995, sequences are available.

Melaspilia Nyl. 1857, Melaspilaceae, Eremithallales, Dothideomycetes, 163 species, type: M. arthonioides (A. Massal.) Nyl., asexual morph unknown, saprobes, marine and terrestrial, worldwide, see Jones et al. (2009, 2015; classification), Pérez-Ortega and Etayo (2010; morphology), Zainuddin et al. (2010; antimicrobial activities), Zhurbenko and Zhdanov (2013; morphology), Flakus et al. (2014; morphology), Ertz and Diederich (2015; phylogeny), Perlmutter et al. (2015; morphology), Lücking et al. (2016; classification), sequences are available but lacks for the type, needs generic revision.

Melaspileopsis (Müll. Arg.) Ertz & Diederich 2015, Melaspilaceae, Eremithallales, Dothideomycetes, one species, type: M. diplasiospora (Nyl.) Ertz & Diederich, sexual morph with lirelliform ascomata, saprobes, terrestrial, tropical and subtropical, see Ertz and Diederich (2015; morphology, phylogeny), Ertz et al. (2016, phylogeny), sequences are available, lectotype of the type: Lindig 846 (PC0146198).

Melastiza Boud. 1885, Pyronemataceae, Pezizales, Pezizomycetes, 14 species, type: M. miniata (Fuckel) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Melchioria Penz. & Sacc 1897, Niessliaceae, Hypocreales, Sordariomycetes, six species, type: M. leucomelaena Penz. & Sacc., asexual morph unknown, terrestrial, saprobes,
Indonesia and South America, cultures and sequences are unavailable, Holotype and ex-type strain unavailable.


**Meliola** Fr. 1825, *Meliolaceae*, *Melioles*, *Sordariomycetes*, c. 1300, type: *M. nidulans* (Schwein.) Cooke, asexual morph produced from the hyphae, saprobic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Meliolaster** Höhn. 1918, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, three species, type: *M. clavisporus* (Pat.) Höhn., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; outline), Hongsanan et al. (2014; taxonomy, keys), cultures and sequences unavailable, holotype of type: FH 258798.

**Meliolina** Syd. & P. Syd. 1914, *Meliolinaceae*, *Dothideomycetes*, families incertae sedis, c. 40 species, type: *M. cladorotricha* (Lév.) Syd. & P. Syd., asexual morph unknown, saprobic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; listed the family under excluded, doubtful and poorly known families), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

**Meliolipha** Spec. 1921, *Dothideomycetes* genera incertae sedis, *Incertae sedis,* seven species, type: *M. graminicola* (F. Stevens) Spec., asexual morph unknown, saprobic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in *Tubeufiaceae*), Hyde et al. (2013; excluded from *Tubeufiaceae*), Boonmee et al. (2014; excluded from *Tubeufiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Mellitiosporiella** Höhn. 1919, *Marthamycetaceae*, *Heliotiales*, *Leotiomyces*, two species, type: *M. pulchella* Höhn., asexual morph unknown, saprobic, terrestrial, Europe, North America, see Kirk et al. (2013; genus accepted), Index Fungorum (2015), cultures and sequences are available, needs generic revision.

**Mellitiosporium** Corda 1838, *Marthamycetaceae*, *Heliotiales*, *Leotiomyces*, one species, type: *M. versicolor* Corda, asexual morph unknown, saprobic, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline, accepted as *Rhytismatales*, genera incertae sedis), Lantz et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.


**Meloderma** Darker 1967, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, nine species, type: *M. desmazeri* (Duby) Darker, asexual morph unknown, saprobic, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lantz et al. (2011; DNA, phylogeny), cultures and sequences are available.

**Melogramma** Fr. 1849, *Melogrammataceae*, *Xylariales*, *Sordariomycetes*, three species, type: *M. campylosporum* Fr., asexual morph unknown, saprobic, Europe, see Lumbsch and Huhndorf (2010; outline, accepted in *Melanconidaceae*), Jaklitsch and Voglmayr. (2012; phylogeny, accepted in *Melogrammataceae*), Kirk et al. (2013; genus accepted), Senanayake
et al. (2015; outline, phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are available, needs generic revision.

**Melamostia** Nitschke ex Sacc. 1875, *Sordariomycetes* genera *incertae sedis*, four species, type: *M. friesii* Nitschke, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Melaphia** Sacc. 1884, *Ascomycota* genera *incertae sedis*, four species, type: *M. ophiopora* (Lév.) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mennoniella** Höhn. 1923, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, twelve species, type: *M. echinata* (Riv.) Galloway (≡ *Penicillium echinatum* Riv.), hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; synonym of *Stachybotrys*), Wang et al. (2015; synonym of *Stachybotrys*), Lombard et al. (2016; reinstated the genus, phylogeny), Wijayawardene et al. (2017; outline). Cultures and sequences are available, epitype and ex-epitype culture of type species CBS H-22447, CBS 216.32.

**Mendoziopeltis** Bat. 1959, *Dothideomycetes* genera *incertae sedis*, four species, type: *M. byrsonimae* Bat. & Nascim. ex Bat., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Schizothyriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Mendogia** Racib., *Schizothyriaceae*, *Dothideomycetes* family *incertae sedis*, four species, type: *M. bambusina* Racib. 1900, asexual morph unknown, epiphytic, terrestrial, Indonesia, Philippines, Thailand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus *Schizothyriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Menegazzia** A. Massal. 1854, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 70 species, type: *M. terebrata* (Hoffm.) A. Massal., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.


**Menispora** Pers. 1822 (= *Zignoëlla* sacc. 1878 *fide* Réblová et al. 2016), *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, 14 species, type: *Melamostia friesii* Nitschke, hyphomycetous, sexual morph formerly named in *Zignoëlla*, saprobes, terrestrial, temperate, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Raventos et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

Mercadomyces J. Mena 1988, Ascomycota genera incertae sedis, one species, type: *M. camagueyensis* J. Mena, hypymycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Meridianelia Kantvilas & Lumbsch 2009, Elixiaceae, Umbilicariales, Lecanoromycetes, one species, type: *M. maccarthyana* Kantvilas & Lumbsch, lichenized, corticolous, Tasmania, see Kantvilas and Lumbsch (2010; outline), Bendiksby and Timdal (2013; phylogeny), Międzikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

Meriscomatium Zopf 1898, Verrucariaceae, Verrucariales, Eurotiomycetes, eleven species, type: *M. lopadii* (Anzi) Zopf, asexual morph unknown, saprobes, terrestrial, Java, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Merismatium Zopf 1898, Verrucariaceae, Verrucariales, Eurotiomycetes, one species, type: *M. tenella* (Penz. & Sacc.) Clem., assexual morph unknown, lichenicolous, terrestrial, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Brackel (2011; Iceland), Kirk et al. (2013; genus accepted), Yazici and Aslan (2016; Asia, Turkey), cultures and sequences are unavailable.

Merismella Syd. 1927, Ascomycota genera incertae sedis, six species, type: *M. concinna* Syd., sexual morph *Chaetothyrium* Spec., epiphytic, terrestrial, Brazil, Greece, India, Panama, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Meristemomyces Isola & Onofri 2014, Teratosphaeriaceae, Capnodiales, Dothideomycetes, seven species, type: *M. frigidus* Isola & Onofri, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), Crous et al. (2016; new species), cultures available for the type: CBS 136109 = CCFEE 5508.

Merodontis Clem. 1909, Helotiales genera incertae sedis, Leotiomycetes, one species, type: *M. rottleri* (Racib.) Sacc. & P. Syd., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Merugia Rogerson & Samuels 1990, Sordariomycetidae genera incertae sedis, seven species, type: *M. palicoureae* Rogerson & Samuels, saprobes, terrestrial, Guyana, see Lumbsch and Huhndorf (2010; outline), Maharatchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: NY, Samuels 6552, needs generic revision.

Mesnieria Sacc. & P. Syd. 1902, Mesnieraceae, Dothideomycetes family incertae sedis, one species, type: *M. rotteri* (Racib.) Sacc. & P. Syd., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Metacapnodium Spec. 1918 (= Antennularia Rchb. 1828; = Capnocybe S. Hughes 1966; Capnophialophora S. Hughes 1966; = Capnobotrys S. Hughes 1970; Capnosporium S. Hughes 1976 fide Rossman et al. 2016), Metacapnodiaecae, Capnodiales, Dothideomycetes, 13 species, type: *M. juniperi* (W. Phillips & Plowr.) Spec., asexual morph unknown, sooty mould on living plants, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hughes et al. (2012; morphology), Hyde et al. (2013; accepted as a genus in Metacapnodiaeae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

G.H. Sung, J.M. Sung, Hywel-Jones & Spatafora, asexual morph hyphomycetous, terrestrial, entomogenous and in soil and dung, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kepler et al. (2012), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Metadiplodia** Syd. 1937, *Ascomycota* genera *incertae sedis*, c. 40 species, type: *M. eucalypti* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Metadothella** Henn. 1904, *Hypocreales* genera *incertae sedis*, one species, type: *M. stellata* Henn., asexual morph hyphomycetous, terrestrial, Peru, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; phylogeny), cultures and sequences are unavailable, needs generic revision.

**Metahyphopichia** Sipiczki & Pfieglter 2016, *Saccharomycetaceae*, *Saccharomycetes*, one species, type: *M. laotica* Sipiczki, Pfieglter, Safar, Morais, & Rosa, dimorphic, asexual morph unknown, on plants, terrestrial, Southeast Asia, South America, see Lumbsch and Huhndorf (2010; taxonomy), cultures and sequences are available.

**Metamelanea** Henssen 1989, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, three species, type: *M. umbonata* Henssen, lichenized, asexual morph unknown, terrestrial, Europe, North America, see Kirk et al. (2013; genus accepted), Prieto et al. (2015; records in Sweden), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Metameris** Theiss. & Syd. 1915, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, three species, type: *M. japonica* (Syd. & P. Syd.) Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (accepted as a genus in *Phaeosphaeriaceae*), Phookamsak et al. (2014; placed in *Botryosphaeriaceae*), Wijayawardene et al. (2014; outline, accepted in *Botryosphaeriaceae*), cultures and sequences are unavailable, needs generic revision.

**Metapezizella** Petr. 1968, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *M. phyllachorivora* Petr., asexual morph unknown, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Metapochonia** Kepler, S.A. Rehner & Humber 2014, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, five species, type: *M. suchasporia* (W. Gams & Dackman) Kepler, Rehner & Humber, asexual morph hyphomycetous, terrestrial, nematogenous and in soil, rotifers and plant roots, cosmopolitan, see Kepler et al. (2014; taxonomy), cultures and sequences are available, Holotype and ex-type of type species in Suecia, C. Dackman No. 10 (1983); CBS 251.83.

**Metarhiziopsis** D.W. Li, R.S. Cowles, Vossbrinck 2008, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *M. microspora* D.W. Li, R.S. Cowles & Vossbrinck, hyphomycetous, sexual morph unknown, terrestrial, entomogenous, USA, see Li et al. (2008; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype and ex-type of type: BPI 878276 = UAMH 10901.

**Metarhizium** Sorokin 1879, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, 24 species, type: *M. anisopliae* (Metschn.) Sorokin, hyphomycetous, sexual morph unknown, terrestrial, entomogenous and in soil, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kepler et al. (2014; phylogeny), cultures and sequences are available.
**Metathyriella** Syd. 1927, *Schizothyriaceae, Dothideomycetes* family incertae sedis, three species, type: *M. roupalae* Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013, accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Phookamsak et al. (2016; taxonomy), cultures and sequences are unavailable, needs generic revision.

**Metazythia** Petr. 1950, *Ascomycota* genera incertae sedis, one species, type: *M. caespitosa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Metazythiopsis** M. Morelet 1988, *Ascomycota* genera incertae sedis, one species, type: *M. halepensis* M. Morelet, coelomycetous, sexual morph unknown, saprobes, terrestrial, France, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Metschnikowia** Kamienski 1899, *Metschnikowiaceae, Saccharomycetales, Saccharomycetes*, c. 100 species (including c. 50 *Candida* species in the *Metschnikowia* clade), type: *M. bicuspidata* (Metschnikoff) T. Kamienski, asexual reproduction is by multilateral budding, saprophytic, on beetles, fruit flies, rotted plants, berries, water, seawater, flowers of various plant species, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2015; new species, phylogeny), asexual species in this clade are classified in the genus *Candida*, but will be transferred to *Metschnikowia* as new combinations, sequences are available.


**Metus** D.J. Galloway & P. James 1987, *Cladoniaceae, Lecanorales, Lecanoromycetes*, three species, type: *M. conglomeratus* (F. Wilson) D.J. Galloway & P. James, asexual morph unknown, lichenized, terrestrial, Australasia, see Lumbsch et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; DNA, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, cultures available for the type: AFTOL-ID 4945 (Miadlikowska et al. 2014), needs generic revision.

**Meyerozyma** Kurtzman & M. Suzuki 2010, *Debaryomycesaceae, Saccharomycetales, Saccharomycetes*, five species, type: *M. guilliermondii* (Wickerham) Kurtzman & M. Suzuki, asexual reproduction is by multilateral budding, saprophytic, but *M. guilliermondii* is a common clinical species, atmosphere, soil, water, sugar cane and other plants, plant debris, fruit, mammals, worldwide, see Kurtzman and Suzuki (2010; taxonomy), Bautista-Rosales et al. (2013; bio control agent of *Colletotrichum* sp.), Coda et al. (2013; antifungal properties), sequences are available.

**Micarea** Fr. [nom.cons.] 1825, *Pilocarpaceae, Lecanorales, Lecanoromycetes*, 100 species, type: *M. prasina* Fr., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Micareopsis** R.C. Harris & Lendemer 2013, *Ramalinaceae, Lecanorales, Lecanoromycetes*, three species, type: *M. irriguata* R.C. Harris & Lendemer, asexual morph unknown, lichenized, terrestrial, USA, see Lendemer et al. (2013; taxonomy), cultures and sequences are unavailable, holotype of the type species NY, Buck 49935.
Microascus Zukal 1886, Microascaceae, Microascales, Sordariomycetes, 51 species, type: M. longirostris Zukal, asexual morph hyphomycetous, coprophilous, on human, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Sandoval-Denis et al. (2015; new species, phylogeny), Crous et al. (2016; new species), Jagielski et al. (2016; new species, phylogeny), neotype and ex-neotype of type: CBS H-14440, MUCL 9058 (Sandoval-Denis et al. 2015).

Microblastosporon Cif., 1930, Ascomycota genera incertae sedis, one species, type: M. botryoidem (Chaborski) Cif., hyphomycetous, saprobes or plant pathogenic, Europe, See Wijayawardene et al. (2012; 2017; outline), Kirk (2013; accepted as valid genus), cultures and sequences are unavailable, needs generic revision.

Microcalicium Vain. 1927, Microcaliciaceae, Ascomycota family Incertae sedis, four species, type: M. disseminatum (Ach.) Vain., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), culture for the type species (sequence data also deposited under this number) Wedin 6355 (Prieto et al. 2012), needs generic revision.

Microcallis Syd. 1926, Chaetothyriaceae, Chaetothyriales, Eurotiomycetes, ten species, type: M. phoebes Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Microcera Desm. 1848, Nectriaceae, Hypocreales, Sordariomycetes, nine species, type: M. coccophila Desm., asexual morph hyphomycetous, terrestrial, entomogenous, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Gräfenhan et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, lectotype of type: K(M) 165807.

Microclava F. Stevens 1917, Ascomycota genera incertae sedis, six species, type: M. miconiae F. Stevens, hyphomycetous, saprobes or plant pathogenic, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Microcycella Theiss. 1914, Dothideomycetes genera incertae sedis, one species, type: M. nervisequita (Höhn.) Theiss., asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Microcyclephaeria Bat. 1958, Hypocreales, genera incertae sedis, one species, type: M. palmicola (Syd.) Bat. & H. Maia ex Bat., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Sordariomycetes genera incertae sedis), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Microcyclospora J. Frank, Schroers & Crous 2010, Teratosphaeriaceae, Capnodiales, Dothideomycetes, seven species, type: M. pomicola J. Frank, B. Oertel, Schroers & Crous, sexual morph unknown, saprobes, terrestrial, Europe, Canada, Iran, see Frank et al. (2010; taxonomy, phylogeny), Arzanlou and Bakhshi (2011; new species), Seifert et al. (2011; morphology), Crous et al. (2012; new species, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Microcyclosporella J. Frank, Schroers & Crous 2010, Mycosphaerellaceae, Capnodiales, Dothideomycetes, one species, type: M. mali J. Frank, Schroers & Crous, hyphomycetous, sexual morph unknown, plant pathogenic, epiphytic, Slovenia, see Frank et al. (2010; morphology, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype and ex-type of type: CBS H-20413; CBS 126136.
**Microcyclus** Sacc., Syd. & P. Syd. 1904, *Dothideomycetes* genera *incertae sedis*, c. 15 species, type: *M. angolensis* Sacc., Syd. & P. Syd., asexual morph unknown, pathogen, saprobes, endophytes, see Lumbsch and Hunduf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable for type species, needs generic revision.

**Microdiplodia** Allesch. 1901, *Ascomycota* genera *incertae sedis*, 30 species, type: *M. conigena* Allesch., sexual morph unknown, saprobes, terrestrial, Europe, Canada, Iran, see Wijayawardene et al. (2016; outline, taxonomic notes and treated as doubtful), cultures and sequences are available, need generic revision and epitypification.

**Microdiscula** Höhn. 1915, *Ascomycota* genera *incertae sedis*, two species, type: *M. rubicola* (Bres.) Höhn., coelomycetous, sexual morph unknown, saprobes or plant pathogenic, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted); cultures and sequences are unavailable, needs generic revision.

**Microdiscus** Sacc. 1916, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *M. americanus* (Sacc.) Trotter, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Microdothella** Syd. & P. Syd. 1914, *Dothideomycetes* genera *incertae sedis*, two species, type: *M. culmicola* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, North America, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Microdothiorea** C.A.A. Costa & Sousa da Câmara 1955, *Ascomycota* genera *incertae sedis*, one species, type: *M. sphaeralecae* M.E.A. Costa & Sousa da Câmara, hymphomycetous, sexual morph unknown, saprobes, terrestrial, Portugal, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Microeurotium** Ghatak 1936, *Pezizales* genera *incertae sedis*, *Pezizomycetes*, two species, type: *M. albidum* Ghatak, asexual morph unknown, saprobes or coprophilous, terrestrial, UK, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Microglossum** Gillet 1879, *Leotiaeae*, *Helotiales*, *Leotiomycetes*, ten species, type: *M. olivaceum* (Pers.) Gillet, asexual morph unknown, saprobes, on soil, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kucera et al. (2014; new species, phylogeny), Pärtel et al. (2016; phylogeny), cultures and sequences are available for the type species SAV 9902 (Kucera et al. 2014) and KL220 (*fide* Pärtel et al. 2016), needs generic revision.

**Microhendersonula** Dias & Sousa da Câmara 1952, *Ascomycota* genera *incertae sedis*, one species, type: *M. cesti* Dias & Sousa da Câmara, coelomycetous, saprobes or plant pathogenic, Portugal, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Micromastia** Specg. 1909, *Ascomycota* genera incertae sedis, two species, type: *M. trigonospora* Specg., asexual morph unknown, saprobes, on soil, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Micronematobotrys** Xiang Sun & L.D. Guo 2010, *Pyrenomataceae, Pezizales, Pezizomycetes*, 14 species, type: *M. verrucosus* Xiang Sun & L.D. Guo, hyphomycetous, sexual morph unknown, saprobes, terrestrial, China, see Sun and Guo (2010; taxonomy, phylogeny), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are available, holotype and cultures available for type species HMAS 186049; E13-2151 (*fide* Sun and Guo 2010).

**Micropeltis** Mont. 1842, *Micropeltidaceae, Microthyriales, Dothideomycetes*, c. 110 species, type: *M. applanata* Mont., asexual morph unknown, epiphytes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; new species), cultures and sequences are unavailable.

**Micropella** Höhn. 1909, *Ascomycota* genera incertae sedis, one species, type: *M. quercus* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Micropeziza** Fuckel 1870, *Dermateaceae, Helotiales, Leotiomyces*, twelve species, type: *M. cornea* (Berk. & Broome) Nannf., asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Micropodia** Boud. 1885, *Helotiaceae, Helotiales, Leotiomyces*, two species, type: *M. pteridina* (Nyl.) Boud., asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Micropustulomyces** R.W. Barreto 1995, *Ascomycota* genera incertae sedis, one species, type: *M. mucilaginosus* R.W. Barreto, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Microscypha** Syd. & P. Syd. 1919, *Hyaloscyphaceae, Helotiales, Leotiomyces*, six species, type: *M. grisella* (Rehm) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Europe, China, see Huhtinen et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Microsomycetes** Thaxt. 1931, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, two species, type: *M. psammoecii* Thaxt., asexual morph unknown, biotrophic, terrestrial,
tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Microsporum** Gruby 1843, *Arthrodermataceae, Onygenales, Eurotiomycetes*, c. 17 species, type: *M. audouinii* Gruby, hyphomycetous, sexual morph unknown, on humans and other mammals, causing microsporoses, terrestrial, worldwide, see Seifert et al. (2011; taxonomy), Choi et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Hubka et al. (2014; new species), Mirhendi et al. (2014; DNA, phylogeny), cultures and sequences are available, culture available for the type: CBS 280.63 (fide Mirhendi et al. 2014), needs generic revision.

**Microstoma** Bernstein 1852, *Sarcoscyphaceae, Pezizales, Pezizomycetes*, one species, type: *M. hiemale* Bernstein, asexual morph unknown, saprobe, terrestrial, Costa Rica, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Microtheliopsis** Müll. Arg. 1890, *Microtheliopsidaceae, Dothideomycetes* family incertae sedis, four species, type: *M. uleana* Müll. Arg., asexual morph unknown, saprobe, terrestrial, Central and South America, Australasia, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Microthyrium** Desm. 1841, *Microthyriaceae, Microthyriales, Dothideomycetes*, c. 60 species, type: *M. microscopicum* Desm., asexual morph unknown, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype and cultures available for the type: BPI 614275; CMW 10879 = CBS 115758, PREM 57522.

**Microthyriella** Speg. 1918, *Ascomycota* genera incertae sedis, 15 species, type: *M. fuligo* (Berk. & Desm.) Speg., coelomycetous, saprobes or plant pathogenic, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Microxyphiopsis Bat. 1963, Ascomycota genera incertae sedis, two species, type: M. byrsonimae Bat., coelomycetous, saprobes or plant pathogenic, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Micularia Boedijn 1961, Myriangiaceae, Myriangiales, Dothideomycetes, one species, type: M. merremliae Boedijn, asexual morph unknown, saprobes, parasitic, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline, accepted genus as in Elsinoaceae), Hyde et al. (2013; accepted in Myriangiaceae), Dissanayake et al. (2014; accepted in Myriangiaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Middelhovenomyces Kurtzman & Robnett 2014, ?Trichomonascaceae, Saccharomycetales, Saccharomycetes, two species, type: M. tepae (J. Grinbergs) C.P. Kurtzman & C.J. Robnett, asexual reproduction is by multilateral budding, saprophytic, on beetle larvae, food contaminants, dung, worldwide, see Kurtzman and Robnett (2014; taxonomy), sequences are available.

Midiotiopsis Henk. 1902, Helotiales genera incertae sedis, Leotiomyceetes, two species, type: M. bambusicola Henk., asexual morph unknown, saprobes, terrestrial, America (tropical), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Miladina Svrček 1972 (= Actinosporella Descals et al. 1999 fide Healy et al. 2016), Pyronemataceae, Pezizales, Pezizomycetes, two species, type: M. licithina (Cooke) Svrček, asexual morph formerly named in Actinosporella, saprobes, hypogeous, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available for the type species from voucher KH.04.22 (Hansen et al. 2013), needs generic revision.

Millerburtonia Cif. 1951, Gnomoniaceae, Diaporthales, Sordariomycetes, one species, type: M. oyedaeae Cif., coelomycetes, sexual morph unknown, saprobes, terrestrial, Venezuela, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Milleromyza Kurtzman & M. Suzuki 2010, Debaryomycetaceae, Saccharomycetales, Saccharomycetes, five species, type: Milleromyza farinosa (Lindner) Kurtzman & M. Suzuki, asexual reproduction is by multilateral budding, saprophytic, on beetle larvae, food contaminants, dung, worldwide, see Kurtzman and Suzuki (2010; taxonomy), sequences are available.

Milospium D. Hawksw. 1975, Ascomycota genera incertae sedis, three species, type: M. grapheideorum (Nyl.) D. Hawksw., lichenicolous, terrestrial, sexual morph unknown, Europe, see Seifert et al. (2011; genus accepted), Kirk et al. (2013; genus accepted), Crous et al. (2015; phylogeny), cultures and sequences are available, conserved type and epitype of type species BM (Herb. Lich. Paris 72), CBS H-22271.

Miluplicula Sturt. 1898, Milkidiaceae, Pertussariales, Lecanoromycetes, one species, type: L. rubricataula Sturt., lichenized, Southern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Widhelm and Lumbsch (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Mindoa Petr. 1949, Ascomycota genera incertae sedis, two species, type: M. ingae Petr., coelomycetous, saprobes or plant pathogenic, South America, See Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures or cultures and sequences are unavailable, needs generic revision.
**Miniancora** Marvanová & Bärl. 1989, *Leotiaeae, Helotiales, Leotiomyctetes*, one species, type: *M. allisoniensis* Marvanová and Bärl., hyphomycetous, sexual morph unknown, saprobes, freshwater, Canada, see Wijayawardene et al. (2012, 2017; outline), Barchien et al. (2013; phylogeny), sequence is available, ex-type strain CCM F-30487, needs generic revision.

**Minimelanolocus** R.F. Castañeda & Heredia 2001, *Herpotrichiellaceae, Chaetothyriales, Eurotiomyctetes*, 26 species, type: *M. navicularis* (R.F. Castañeda) R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, China, Portugal, Mexico, Cuba, see Zhang et al. (2009, 2010; new species), Ma et al. (2011a, b; China; new species), Hernández-Restrepo et al. (2013; Portugal), Heredia et al. (2014; Mexico), Xia et al. (2014; China), Liu et al. (2015; phylogeny), Hyde et al. (2016; new species), sequence available but lacks for the type species, holotype of the type: INIFAT C86/157, compare with *Pseudospiropes, Spiropes and Sympodioplanus*.

**Minimidochium** B. Sutton 1970, *Ascomycota* genera *incertae sedis*, eight species, type: *M. setosum* B. Sutton, hyphomycetous, saprobes or plant pathogenic, widespread (tropical), see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 103360c, needs generic revision.

**Minksia** Müll. Arg., 1882, *Arthoniales* genera *incertae sedis, Arthoniomyctetes*, six species, type: *M. caesiella* Müll. Arg., lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

**Mintera** Inácio & P.F. Cannon 2003, *Parmulariaceae, Dothideomyctetes* families *incertae sedis*, one species, type: *M. reticulata* (Starbäck) Inácio & P.F. Cannon, asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, Isotype of type species S F20503.

**Minteriella** Heredia, R.F. Castañeda & R.M. Arias 2013, *Dothideomyctetes* genera *incertae sedis*, one species, type: *M. cenotigena* Heredia, R.F. Castañeda & R.M. Arias, hyphomycetous, sexual morph unknown, saprobes, aquatic, Mexico, see Heredia et al. (2013; morphology), cultures and sequences are unavailable, holotype of the type: XAL CB897, compare with *Cylindrosympodium, Polyscytalum and Sympodioplanus*.

**Minutiella** Crous 2015, *Phaeomoniellaceae, Phaeomoniellales, Eurotiomyctetes*, one species, type: *M. tardicola* (Damm & Crous), coelomcetous, sexual morph unknown, on living leaves, pathogens, terrestrial, South Africa, see Damm et al. (2010; as *Phaeomoniella tardicola*, morphology), Crous et al. (2015; phylogeny), cultures and sequences are available, holotype and ex-type culture of type: CBS H-20000, CBS 121757.

**Minutisphaera** Shearer, A.N. Mill. & A. Ferrer 2011, *Minutisphaeraceae, Minutisphaerales, Dothidiomyctetes*, four species, type: *M. fimbriatispora* Shearer, A.N. Mill. & A. Ferrer, freshwatery, USA, Japan, see Ferrer et al. (2011; taxonomy), Raja et al. (2013, 2015; phylogeny, new species), cultures and sequences are available, holotype of type: A242-8 (ILL).

**Minutoexcipula** V. Atienza & D. Hawksw. 1994, *Ascomycota* genera *incertae sedis*, seven species, type: *M. tuckerae* V. Atienza & D. Hawksw., coelomycetous, sexual morph unknown, terrestrial, lichenicolous, Europe, North America, see Atienza et al. (2009; generic concept), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; illustration), cultures and sequences are unavailable, holotype of type: K(M)-IMI 352335.

**Minutophoma** D. Hawksw. 1981, *Ascomycota* genera *incertae sedis*, one species, type: *M. chrysophthalmae* D. Hawksw., sexual morph unknown, lichenicolous, Europe, terrestrial, see
Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.


**Mirannulata** Huhndorf, F.A. Fernández, A.N. Mill. & Lodge 2003, *Sordariomycetidae* genera *incertae sedis*, four species, type: *M. samuelssii* Huhndorf, F.A. Fernández, A.N. Mill. & Lodge, asexual morph unknown, saprobes, terrestrial, neotropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and cultures for the type species F (Huhndorf 1880); SMH 1880.

**Miricatena** Punith. & Spooner 2011, *Ascomycota* genera *incertae sedis*, two species, type: *M. prunicola* Punith. & Spooner, hyphomycetous, sexual morph unknown, pathogenic, terrestrial, UK, see Punithalingam and Spooner (2011; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Mirimyces** Nag Raj 1993, *Ascomycota* genera *incertae sedis*, one species, type: *M. pulcher* Nag Raj, coelomycetous, saprobes or plant pathogenic, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, holotype of type: DAOM 215253.

**Miriquidica** Hertel & Rambold 1987, *Lecanoraceae*, *Lecanora*, *Lecanoromycetes*, 30 species, type: *M. complanata* (Körb.) Hertel & Rambold (*Lecanora complanata* Körb.), lichenized fungi, saxicolous, lichenicolous, worldwide temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogenetic placement), Lücking et al. (2016; classification), sequence are available, needs generic revision.

**Misgomyces** Thaxt. 1900, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, four species, type: *M. dyschirii* Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Mitopeltis** Speg. 1921, *Dothideomycetes* genera *incertae sedis*, two species, type: *M. chilensis* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted in *Micropolitidaceae*), Hyde et al. (2013; excluded from *Micropolitidaceae*), Kir et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Mitrula** Fr. 1821, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, eight species, type: *M. paludosa* Fr., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Mitrulinia** Spooner 1987, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, one species, type: *M. ushuaiae* (Rehm) Spooner, asexual morph unknown, saprobes, terrestrial, southern hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures or sequence are unavailable, needs generic revision, needs generic revision.

**Miuraea** Hara 1948, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, three species, type: *M. degenerans* (Syd. & P. Syd.) Hara, hyphomycetous, sexual morph mycosphaerella-like, plant pathogenic, see Crous et al. (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type: *M. Miura 572* (S-F1753).
**Mixtoconidium** Etayo 1995, *Ascomycota* genera incertae sedis, one species, type: *M. canariense* Etayo, coelomycetous, sexual morph unknown, parasymbiont on *Ramalina*, terrestrial, Canary Islands, see Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: IMI Etayo 3470.

**Mixtura** O.E. Erikss. & J.Z. Yue 1990, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *M. saginata* (Syd.) O.E. Erikss. & J.Z. Yue, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; placed in *Didymellaceae*), Wijayawardene et al. (2014; outline), cultures and sequence are unavailable, needs generic revision.

**Miyakeomyces** Hara 1913, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *M. bambusae* Hara, asexual morph hyphomycetous, terrestrial, saprobes, Japan, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequence are unavailable, needs generic revision.

**Miyoshiella** Kawam. 1929, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *M. fusispora* Kawam., asexual morph unknown, terrestrial, saprobes, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; not accepted as valid genus), Index Funogrum (2016; synonym of *Chaetosphaeria*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequence are unavailable, needs generic revision.

**Moana** Kohlm. & Volkman-Kohlm. 1989, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *M. turbinulata* Kohlm. & Volkm.-Kohlm., asexual morph unknown, marine, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Mobergia** H. Mayrhofer & Sheard 1992, *Physciaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *M. calciformis* (W.A. Weber) H. Mayrhofer & Sheard, asexual morph unknown, terrestrial, saprobes, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, needs generic revision.

**Moelleriella** Bres. 1896, *Clavicipitaceae*, *Hypocreales*, *Sordariomycetes*, 25 species, type: *M. sulphurea* Bres., asexual morph hyphomycetous or coelomycetous, terrestrial, entomogenous, tropical South America and French Guiana, see Chaverri et al. (2008; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Li et al. (2016; new species, coelomycetous), cultures and sequences are available, neotype of type: CUP 067787, ex-type strain P.C. 756.


**Molleriiella** G. Winter 1886, *Elsinoaceae*, *Myriangiales*, *Dothideomycetes*, four species, type: *M. mirabilis* G. Winter, asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jayawardena et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Mollicamarops** Lar.N. Vassiljeva 2007, *Boliniaeae*, *Boliniales*, *Sordariomycetes*, one species, type: *M. stellata* Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, north temperate zone, see Huhndorf and Miller (2008; morphology), Lumbsch and Huhndorf
(2010; outline), Untereiner et al. (2013; accepted in Boliniaceae), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: VLA P-2942. **Mollisia** (Fr.) P. Karst. 1871, Dermateaceae, Helotiales, Leotiomycetes, c. 130 species, type: *M. cinerea* (Batsch) P. Karst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tanney et al. (2016; DNA), cultures and sequences are available, available specimen and cultures for the type: CBS H-14530, AFTOL-ID 76. **Mollisia** P. Karst. 1871, Dermateaceae, Helotiales, Leotiomycetes, c. 130 species, type: need typification, asexual morph phialophora-like, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type species, needs generic revision. **Mollisina** Höhn. ex Weese 1926, Hylloscyphaceae, Helotiales, Leotiomycetes, eleven species, type: *M. rubi* (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are available. **Mollisinopsis** Arendh. & R. Sharma 1984, Helotiales, Helotiales, Leotiomycetes, three species, type: *Mollisinopsis filicis* Arendh. & R. Sharma, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are unavailable. **Mollisiopsis** Rehm 1908, ?Helotiales genera incertae sedis, Leotiomycetes, seven species, type: *M. subcinerea* Rehm, asexual morph unknown, saprobes, terrestrial, Europe, see Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures and sequences are unavailable. **Monandromyces** R.K. Benj. 1999, Laboulbeniaceae, Laboulbeniales, Laboulbeniomyces, eleven species, type: *M. microveliae* (Thaxt.) R.K. Benj., asexual morph unknown, biotrophic, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable. **Monascella** Guarro & Arx 1986, Onygenaceae, Onygenales, Eurotiomycetes, one species, type: *M. botryosa* Guarro & Arx, asexual morph unknown, saprobes, Spain, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: CBS 233.85, needs generic revision. **Monascus** Tiegh. 1884 (= Basipetospora G.T. Cole & W.B. Kendr. 1968; Backusia Thirum. et al. 1965 fide Rossman et al. 2016), Monascaceae, Eurotiaceae, Eurotiomycetes, 14 species, type: *Monascus ruber* Tiegh., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures and sequences are available, available specimen for type: CBS H-14541. **Moneroolechia** Trevis. 1857, Caliciaceae, Calicariales, Lecanoromycetes, five species, type: *M. bayrhofferi* (Schaer.) Trevis., lichenized, Asia, Australia, Europe, see Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Prieto and Wedin (2016; phylogeny), Lucking et al. (2016; classification), Cultures and sequences are available, needs generic revision. **Monilinia** Honey 1928 (= Monilia Bonord. 1851 fide Johnston et al. 2014), Sclerotiniaceae, Helotiales, Leotiomycetes, c. 30 species, type: *M. fructicola* (G. Winter) Honey, asexual morph formerly named in Monilia, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Zhu et al. (2016; pathogens, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available. **Monilochaetes** Halst. ex Harter 1916 (= Australiasca sivan. & Alcorn 2002 fide Rêblová et al. 2016), Australiascaceae, Glomerellales, Sordariomycetes, two species, type: *M. infuscans
Monoblastia Riddle 1923, Monoblastiaceae, Monoblastiales, Dothideomycetes, eleven species, type: M. palmicola Riddle, asexual morph unknown, lichenized, Spain, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, available specimen and cultures for the type: CBS H-1013, CBS 869.96.

Monoblastiopsis R.C. Harris & C.A. Morse 2008, Dothideomycetes genera incertae sedis, two species, type: M. konzana R.C. Harris & C.A. Morse, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: KANU 371963, needs generic revision.

Monochaeta (Sacc.) Allesch. 1902, Amphiphaeriaceae, Xylariales, Sordariomycetes, 28 species, type: M. monochaeta (Desm.) Allesch., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; phylogeny), cultures and sequences are available, available specimen and cultures for the type: CBS H-14561; CBS 115004, CBS 191.82.

Monochaetiella E. Castell. 1943, Ascomycota genera incertae sedis, three species, type: M. hyparrheniae E. Castell., asexual morph coelomycetous, saprobes or plant pathogenic, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Monochaetiellopsis B. Sutton & DiCosmo 1977 (= Hypnotheca Tommerup 1970 fide Johnston et al. 2014), Helotiales genera incertae sedis, Leotiomycetes, two species, type: M. themeda (M. Kandaw. & Sundaram) B. Sutton & DiCosmo, coelomycetous, sexual morph Hypnotheca, saprobes, terrestrial, India, Australia, Tanzania, see Wijayawardene et al. (2012, 2017; outline), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, holotype of the type species is not designated, other specimens IM I78370a, 151159a, 62200.

Monochaetinula Muthumary, Abbas & B. Sutton 1996, Ascomycota genera incertae sedis, six species, type: M. terminaliae (Bat. & J.L. Bezerra) Muthumary, Abbas & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Monodia Breton & Faurel 1970, Ascomycota genera incertae sedis, two species, type: M. elegans Breton & Faurel, coelomycetous, coprophilous and saprobes, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Monodictys S. Hughes 1958, Dothideomycetes genera incertae sedis, c. 50 species, type: M. putredinis (Wallr.) S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology, treated as heterogenous), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species.

Monodinymaria U. Braun 1994, Ascomycota genera incertae sedis, five species, type: M. canadensis (Ellis & Everh.) U. Braun (= Ramularia canadensis Ellis & Everh.), asexual morphs hyphomycetous, terrestrial, plant pathogenic, leaf-spotting, Asia, Europe, North and South America, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology),
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequence are unavailable, lectotype of type: NY 1293230.

**Monodisma** Alcorn 1975, *Ascomycota* *genera incertae sedis*, one species, type: *M. fragilis* Alcorn, hyphomycetous, sexual morph unknown, pathogens, terrestrial, widespread, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, cultures available for type: IMI 73184, IMI 41189, needs generic revision.

**Monoiocomys** Thaxt. 1900, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 49 species, type: *M. homalotae* Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Rossi (2010; new species, Ecuador), Kirk et al. (2013; genus accepted), Haelewaters et al. (2015; DNA, phylogeny), cultures and sequences are available only for MT004.

**Monorhizina** Theiss. & Syd. 1916, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *M. filicina* (Berk. & Broome) Theiss. & Syd., terrestrial, on leaves, Sri Lanka, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Monosporascus** Pollack & Uecker 1974, *Diatrypaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *M. cannonballus* Pollack & Uecker, asexual morph unknown, thermophilic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in *Sordariomycetes*), Kirk et al. (2013; genus accepted), Correia et al. (2014; chemical compounds), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, available specimen and cultures for the type: BPI 71820; ATCC 26931 (unpublished), FMR6682 (*jide Collado et al. 2002), needs generic revision.

**Monostichella** Höhn. 1916, *Ascomycota* *genera incertae sedis*, 15 species, type: *M. roberegi* (Desm.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Montagnella** Speg. 1881, *Dothideomycetes* *genera incertae sedis*, nine species, type: *M. curumamuel* Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in *Dothideomycetes*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*), cultures and sequences are unavailable, needs generic revision.

**Montagnula** Berl. 1896, *Didymosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, 30 species, type: *M. infernalis* (Niessl) Berl., asexual morph unknown, saprobes, terrestrial, worldwide, see Zhang et al. (2012; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Hyde et al. (2014; taxonomy, phylogeny), Ariyawansa et al. (2014a; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), Wanasinghe et al. (2016; phylogeny), Tennakoon et al. (2016; taxonomy, phylogeny), cultures and sequences are available, needs generic revision.

**Montanelia** Divakar, A. Crespo, Wedin & Essl. 2012, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *M. panniformis* (Nyl.) Divakar, A. Crespo, Wedin & Essl., asexual morph unknown, lichenized, terrestrial, worldwide, see Divakar et al. (2012; taxonomy), Leavitt et al. (2015; morphology, phylogeny), Szczepańska et al. (2015; distribution in Poland and Europe), cultures and sequences are available.

**Monticola** Selbmann & Egidi 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. elongata* Selbmann & Egidi, sexual morph unknown, rock-inhabiting, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 136206 = CCFFE 5394.

**Morakotiella** (C.A. Farrant & E.B.G. Jones) Sakay. 2005, Halosphaeriaceae, Microascales, Sordariomycetes, one species, type: *M. salina* (C.A. Farrant & E.B.G. Jones) Sakay., asexual morph unknown, saprobes, marine, USA, see Lumbsch and Huhndorf (2010; outline), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype of the type: IMI 297765.

**Moralesia** Urries 1956, Ascomycota genera incertae sedis, one species, type: *M. arundinis* Urries, sexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Moravicia** Benkert, Caillet & Moyne 1987, Pyronemataceae, Pezizales, Pezizomycetes, two species, type: *M. calospora* (Quél.) Benkert, Caillet & Moyne, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are lacks for the type species, needs generic revision.

**Morchella** Dill. ex Pers. 1794 (= Costentinella Matr. 1892 fide Healy et al. 2016), Morchellaceae, Pezizales, Pezizomycetes, 40 species, type: *M. esculenta* (L.) Pers., asexual morph unknown, saprobes, terrestrial, temperate, see Isioglu et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Clowez (2012; new species, France), Kirk et al. (2013; genus accepted), Elliott et al. (2014; new species, New South Wales), Loizides et al. (2016; new species, Cyprus), cultures and sequences are available, epitype of type: PhC10.

**Morenoina** Theiss. 1913, Aulographaceae, Asterinales, Dothideomycetes, 25 species, type: *M. antarctica* (Speg.) Theiss., asexual morph coelomycetous (acarella-like), epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted in Asterinaeae), Lumbsch and Huhndorf (2010; outline, accepted in Asterinaeae), Hongsanan et al. (2014; taxonomy, accepted in Aulographaceae), Wijayawardene et al. (2014; outline, accepted in Aulographaceae), cultures and sequences are unavailable, epitype of type: IMI 349680.

**Morinia** Berl. & Bres. 1889, Bartaliniaceae, Xylariiales, Sordariomycetes, two species, type: *M. pestalozzioides* Berl. & Bres., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; outline), cultures and sequences are available, needs generic revision.

**Moriola** Norman 1872, Verrucariaceae, Verrucariales, Eurotiomycetes, 15 species, type: *M. descensae* Norman, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Moriolomyces** Cif. & Tomas. 1953, Dothideomycetes genera incertae sedis, one species, type: *M. descensae* Cif. & Tomas., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


**Morosphaeria** Suetrong, Sakay., E.B.G. Jones & C.L. Schoch 2009, Morosphaeriaceae, Pleosporales, Dothideomycetes, three species, type: *M. velatispora* (K.D. Hyde & Borse) Suetrong, Sakay., E.B.G. Jones & C.L. Schoch, asexual morph unknown, saprobes, on wood in mangrove habitats, worldwide, see Schoch et al. (2009; phylogeny), Suetrong et al. (2009; phylogeny, morphology), Lumbsch and Huhndorf (2010; outline), Zainuddin et al. (2010;

**Morrisographium** M. Morelet 1968, *Ascomycota* genera *incertae sedis*, eight species, type: *M. pilosum* M. Morelet, hyphomycetous, sexual morph unknown, saprobes, terrestrial, freshwater, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Moserella** Pöder & Scheuer 1994, *Sclerotiniaceae, Helotiales, Leotiomyces*, one species, type: *M. radicicola* Pöder & Scheuer, asexual morph unknown, on roots, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Moulinia** C.P. Robin 1853, *Ascomycota* genera *incertae sedis*, accepted as a genus in Pezizomycotinain Kirk et al. (2008) and Kirk et al. (2013) genus accepted. However, previous outlines i.e. Lumbsch and Huhndorf (2010) or Wijayawardene et al. (2012, 2016) did not list as a genus in *Pezizomycotina*.

**Moutoniella** Penz. & Sacc. 1902, *Rhytismataceae, Rhytismatales, Leotiomyces*, one species, type: *M. polita* Penz. & Sacc., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Muciturb** P.H.B. Talbot 1989, *Pezizaceae, Pezizales, Pezizomycetes*, three species, type: *M. reticulatum* P.H.B. Talbot, asexual morph unknown, saprobes, terrestrial, Australia, see Kirk et al. (2008; genus accepted), Lumbsch and Huhndorf (2010; genus not accepted), Wijayawardene et al. (2012, 2016; genus not accepted), Healy et al. (2013; DNA), Kirk et al. (2013; genus not accepted), Index Fungorum (2016; genus accepted), cultures and sequences are available, needs generic revision.


**Mucomassaria** Petr. & Cif. 1932, *Mucomassariaceae, Ascomycota* genera *incertae sedis*, one species, type: *M. maxima* Petr. & Cif., asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

**Mucomycospherella** Quaedvl. & Crous 2014, *Capnodiales* genera *incertae sedis, Dothideomycetes*, one species, type: *M. eurypotami* (Kohl., Volkm.-Kohl. & O.E. Eriks.) Quaedvl. & Crous, asexual morph unknown, terrestrial, USA, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures and sequences available, holotype and ex-type of type: JK5586; JK5586J.

Muellerites L. Holm 1968, Dothidotthiaceae, Pleosporales, Dothideomycetes, one species, type: *M. juniperi* (E. Müll. & Arx) L. Holm, asexual morph unknown, saprobes, terrestrial, temperate, Switzerland, see Lumbsch and Huhndorf (2010; outline, accepted in Dothideomycetes), Hyde et al. (2013; outline, phylogeny), Kirk et al. (2013; genus accepted), Dai et al. (2014; transferred to Dothidotthiaceae), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Muelleromyces Kamat & Anahosur 1968, Phyllachoraceae, Phyllachorales, Sordariomycetes, one species, type: *M. indicus* Kamat & Anahosur, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; phylogeny), Hyde et al. (2011; checklist), cultures and sequences are unavailable, needs generic revision.

Muiaria Thaxt. 1914, Laboulbeniales genera incertae sedis, one species, type: *M. gracilis* Thaxt., hyphomycetous, sexual morph unknown, on insects, terrestrial, Africa, Borneo, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Muiogone Thaxt. 1914, Ascomycota genera incertae sedis, two species, type: *M. chromopteri* Thaxt., hyphomycetous, sexual morph unknown, pathogen, terrestrial, West Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Muirella R. Sprague 1959, Ascomycota genera incertae sedis, one species, type: *M. alascensis* R. Sprague, hyphomycetous, sexual morph unknown, pathogens, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.


Multiclavula R.H.Petersen 1967, Clavulinaceae, Cantharellales, Agaricomycetes, 16 species, type: *Multiclavula corynoides* (Peck) R.H. Petersen, lichenized, see Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.


Multisporascus Marinc., M.J. Wingf. & Crous 2008, Ascomycota genera incertae sedis, one species, type: *M. proteae* Marine., M.J. Wingf. & Crous, asexual morph unknown, saprobes, terrestrial, South Africa, see Marincowitz et al. (2008; morphology), cultures and sequences are unavailable, holotype of the type: PREM 59465.

Munkia Speg. 1886, Hypocreales genera incertae sedis, Sordariomycetes, four species, type: *M. martyris* Speg., asexual morph hyphomycetous, terrestrial, saprobes, South America, see Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; phylogeny), cultures and sequences are unavailable.
**Munkiella** Spec. 1885, *Polystomellaceae*, *Dothideomycetes* family *incertae sedis*, *Dothideomycetes*, three species, type: *M. caca-guazu* Spec., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline). Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Munkovalsaria** Aptroot 1995, *Dacampiaceae*, *Dothideomycetes* family *incertae sedis*, three species, type: *M. donacina* (Niessl) Aptroot, asexual morph hyphomycetous (lecythophorala-like), saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline), Kirk et al. (2013; genus accepted), Pitt et al. (2014; from grapevine, DNA), Wijayawardene et al. (2014; outline), cultures and sequences are available, type specimen and cultures available for the type: CBS H-14398; HVVV01.

**Muraeriata** Huhndorf, Greif, Mugambi & A.N. Mill. 2008, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *M. collapsa* Huhndorf, Greif, Mugambi & A.N. Mill., asexual morph unknown, saprobes, terrestrial, Austria, see Huhndorf et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are available, holotype and available cultures for the type: GKM1084, SMH4553.

**Murangium** Seaver 1951, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, one species, type: *M. sequoiae* (Plowr. ex W. Phillips) Seaver, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted in *Patellariaceae*), cultures and sequences are unavailable, needs generic revision.

**Muricopeltis** Viégas 1944, *Dothideomycetes* *genera incertae sedis*, one species, type: *M. brasiliensis* Viégas, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropeltidaceae*), Hyde et al. (2013; did not accept in *Micropeltidaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Muroia** I. Hino & Katum. 1958, *Dothideomycetes* *genera incertae sedis*, one species, type: *M. nipponica* I. Hino & Katum., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Lophiostomataceae*), Hyde et
al. (2013; did not accept in *Lophiomataceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Muscia** Gizhitsk. 1929, *Helotiales* genera incertae sedis, *Leotiomyces*, one species, type: *M. catheriniae* Gizhitsk., asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Musciola** Velen. 1934, *Helotiales* genera incertae sedis, *Leotiomyces*, one species, type: *M. dubia* (Velen.) Srček, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Musicillium** Zare & W. Gams 2007, *Plectosphaerellaceae*, *Glomerellales*, *Sordariomycetes*, one species, type: *M. theobromae* (Turconi) Zare & W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, neotype (dry culture) and ex-type culture of the type: Herb. CBS 19864, CBS 968.72.

**Muyocopron** Speg. 1881, *Muyocporonaeeae*, *Muyocronales*, *Dothideomycetes*, one species, type: *M. corrientinum* Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in *Microthyriaceae*), Hyde et al. (2013; introduced *Muyocporonaeeae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Mapook et al. (2016; taxonomy, phylogeny), Tibromma et al. (2016; morphology, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

**Mycelophthora** Costantin 1892 (= Corynascus Arx 1973 fide Maharachchikumbura et al. 2015, 2016), *Chaetomiaceae*, *Sordariales*, *Sordariomycetes*, one species, type: *M. lutea* Costantin, sexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, nomenclature), van den Brink et al. (2015; DNA, phylogeny), cultures and sequences are available for the type species CBS 146.50, CBS 145.77 (van den Brink et al. 2015), available specimen for type: CBS H-10236.

**Mycerema** Bat., J.L. Bezerra & Cavalc. 1963, *Schizothyriaceae*, *Dothideomycetes* families incertae sedis, two species, type: *M. vochysiaeearum* Bat., J.L. Bezerra & Cavalc., asexual morph plenotrichaius-like, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Phookamsak et al. (2016; new species, taxonomy), cultures and sequences are unavailable.

et al. (2015, 2016; phylogeny). Cultures and sequences are available, holotype and ex-type of type: TRTC 662166f; CBS 517.70.

**Mycocarctium** K.P. Jain & Cain 1973, *Thelebolaceae*, *Thelebolales*, *Leotiomyces*, one species, type: *M. ciliatum* K.P. Jain & Cain, asexual morph unknown, coprophilous, terrestrial, Canary Islands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Mycobilimbia** Rehm 1890, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, five species, type: *M. obscurata* (Sommerf.) Rehm, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Joshi and Hur (2012; Korea), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type species, needs generic revision.

**Mycoblastus** Norman [nom.cons.] 1853, *Tephromelataceae*, *Lecanorales*, *Lecanoromycetes*, ten species, type: *M. sanguinarius* (L.) Norman, lichenized, worldwide, see Sprübille et al. (2011; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Mycocalicium** Vain. 1890, *Mycocaliciaceae*, *Mycocaliciales*, *Eurotiomycetes*, twelve species, type: *M. ciliatum* K.P. Jain & Cain, asexual morph phialophora-like, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Mycocentrodochium** K. Matsush. & Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *M. curvisporum* K. Matsush. & Matsush., asexual morph hyphomycetous, Japan, saprobes or plant pathogenic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are available, holotype of type: Matsushima Fungus Collection, Kobe, 5M406, needs generic revision.

**Mycocentrospora** Deighton 1972, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, four species, type: *M. acerina* (R. Hartig) Deighton (= *Cercospora acerina* R. Hartig), hyphomycetous, terrestrial, plant pathogenic (leaves, roots) and saprobes (isolated from soil), Asia, Australia, Europe, North America, New Zealand, see Seifert et al. (2011; phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are available, neotype of type: Herb. Mycol. Oecon. 743 (B).

**Mycochaetophora** Hara & Ogawa 1931, *Helotiales* genera *incertae sedis*, *Leotiomyces*, two species, type: *M. japonica* Hara & Ogawa, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Kobayashi et al. (2009; morphology, phylogeny), Seifert et al. (2011; phylogeny), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

**Mycochlamys** S. Marchand & Cabral 1976, *Ascomycota* genera *incertae sedis*, one species, type: *M. macrospora* S. Marchand & Cabral, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, see Wijayawardene et al. (2012, 2017; outline), Siles et al. (unpublished; phylogeny), Dong (unpublished; phylogeny), cultures available for type: CBS 639.76, BAF 2663, IMI 185605, F277901, needs generic revision.

**Mycocitrus** A. Möller 1901, *Bionectriaceae*, *Hypocreales*, *Sordariomyces*, three species, type: *M. aurantium* Möller, asexual morph hyphomycetous, terrestrial, plant pathogen, South America, Japan, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; phylogeny), cultures and sequences are unavailable, epitype of type: BPI 631727.
**Mycoclelandia** Trappe & G.W. Beaton 1984, *Pezizaceae, Pezizales, Pezizomycetes*, one species, type: *M. arenacea* (Trappe) Trappe & G.W. Beaton, asexual morph unknown, hypogeous, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Trappe et al. (2010; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: OSC:131132, needs generic revision.

**Mycocryptospora** J. Reid & C. Booth 1987, *Dothideomycetes* genera incertae sedis, one species, type: *Mycocryptospora anthostomoides* (Rehm) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Mycodidymella** C.Z. Wei, Y. Harada & Katum. 1998, *Dothideomycetes* genera incertae sedis, one species, type: *Mycodidymella aesculi* C.Z. Wei, Y. Harada & Katum., asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: HHUF 22892.

**Mycoënterolobium** Goos 1970, *Ascomycota* genera incertae sedis, one species, type: *M. platysporum* Goos, asexual morph unknown, saprobes, terrestrial, Hawaii, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Karandikar et al. (2015; morphology), cultures and sequences are unavailable, needs generic revision.

**Mycofalcella** Marvanová, Om-Kalth. & J. Webster 1993, *Helotiaceae, Helotiales, Leotiomycetes*, two species, type: *M. calcarea* Marvanová, Om-Kalth. & J. Webster, hyphomycetous, sexual morph unknown, saprobes, freshwater, British Isles (Great Britain), Pakistan, see Baschien et al. (2013; phylogeny), Benucci et al. (2016; phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype and culture available for type species IMI 351879; CCM F-10289.

**Mycohalaperon* Gjurašin 1925, *Pyronemataceae, Pezizales, Pezizomycetes*, one species, type: *M. retinospora* Gjurašin, asexual morph unknown, saprobes or plant pathogenic, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mycohalapyge** Höhn. 1909, *Dothideomycetes* genera incertae sedis, 16 species, type: *M. subcoerulescens* (Nyl.) Höhn., asexual morph unknown, saprobes and plant pathogens, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mycohalapyge** Höhn. 1909, *Dothideomycetes* genera incertae sedis, 16 species, type: *M. subcoerulescens* (Nyl.) Höhn., asexual morph unknown, saprobes and plant pathogens, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mycohalapyge** Höhn. 1909, *Dothideomycetes* genera incertae sedis, 16 species, type: *M. subcoerulescens* (Nyl.) Höhn., asexual morph unknown, saprobes and plant pathogens, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mycohalapyge** Höhn. 1909, *Dothideomycetes* genera incertae sedis, 16 species, type: *M. subcoerulescens* (Nyl.) Höhn., asexual morph unknown, saprobes and plant pathogens, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mycohalapyge** Höhn. 1909, *Dothideomycetes* genera incertae sedis, 16 species, type: *M. subcoerulescens* (Nyl.) Höhn., asexual morph unknown, saprobes and plant pathogens, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mycohalapyge** Höhn. 1909, *Dothideomycetes* genera incertae sedis, 16 species, type: *M. subcoerulescens* (Nyl.) Höhn., asexual morph unknown, saprobes and plant pathogens, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mycohalapyge** Höhn. 1909, *Dothideomycetes* genera incertae sedis, 16 species, type: *M. subcoerulescens* (Nyl.) Höhn., asexual morph unknown, saprobes and plant pathogens, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mycohalapyge** Höhn. 1909, *Dothideomycetes* genera incertae sedis, 16 species, type: *M. subcoerulescens* (Nyl.) Höhn., asexual morph unknown, saprobes and plant pathogens, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Mycomalus** Möller 1901, *Clavicipitaceae, Hypocreales, Sordariomycetes*, one species, type: *M. bambusinus* Möller, asexual morph unknown, saprobes, terrestrial, Brazil, see Tanaka et al. (2008; compare with *Ustilaginoidea*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Mycomedusiospora** G.C. Carroll & Munk 1964, *Ascomycota* genera incertae sedis, one species, type: *M. flavida* (Rick) Carroll & Munk, asexual morph unknown, saprobes, terrestrial, Brazil, see Tanaka et al. (2008; compare with *Ustilaginoidea*), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Mycomeleana** Velen. 1947, *Helotiales* genera incertae sedis, *Leotiomycales*, one species, type: *M. ludmilae* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline, misspelled as *Mycomeleina*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Mycomicrothelium** Keissl. 1936, *Trypetheliaceae, Trypetheliales*, *Dothideomycetes*, three species, type: *M. macularis* (Hampe ex A. Massal.) Keissl., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2011; DNA, phylogeny), Hyde et al. (2013; accepted as a genus in *Trypetheliaceae*), Wijayawardene et al. (2014; outline), cultures available but lacks for the type species, needs generic revision.

**Mycopappus** Redhead & G.P. White 1985, *Melanommataceae, Pleosporales, Dothideomycetes*, four species, type: *M. alni* (Dearn. & Barthol.) Redhead & G.P. White, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lee et al. (2013; pathogens, DNA), Phookamsak et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), Tian et al. (2015; accepted as a genus in *Melanommataceae*), cultures and sequences are available.

**Mycopara** Bat. & J.L. Bezerra 1960, *Ascomycota* genera incertae sedis, one species, type: *M. shawii* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, on insects, terrestrial, Africa, Borneo, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mycoparion** Boise 1887, *Dothideomycetes* genera incertae sedis, two species, type: *M. anensis* Boise, asexual morph unknown, saprobes, terrestrial, Germany, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, needs generic revision.

**Mycophilomyces** Crous & M.J. Wingf. 2016, *Clavicipitaceae, Hypocreales, Sordariomycetes*, one species, type: *M. periconiae* Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22878, CPC 27558.

**Mycoporellum** Müll. Arg. 1884, *Dothideomycetes* genera incertae sedis, seven species, type: *M. sparsellum* (Nyl.) Müll. Arg., asexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Mycoporis** Clem. 1909, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, one species, type: *M. perexigua* (Müll. Arg.) Clem., asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideaceae*), Kirk et al. (2013; genus accepted), Thambbugala et al. (2014; transferred to *Mycosphaerellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Mycoporopsis** Müll. Arg. 1885, *Dothideomycetes* genera incertae sedis, six species, type: *M. sorenocarpa* (C. Knight) Müll. Arg., asexual morph unknown, saprobes, terrestrial,
worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

*Mycoporum* Flot. ex Nyl. [nom. cons.] 1855, *Mycoporaceae*, *Pleosporales*, *Dothideomycetes*, 25 species, type: *M. elabens* (A. Massal.) Flot. ex Nyl., asexual morph unknown, non-lichenized or facultatively lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; phylogeny), Lücking et al. (2016; classification), and isotypes of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.

*Mycosphaerella* Videira & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *M. madeirae* (Crous & Denman) Videira & Crous, asexual morph unknown, plant pathogens, see Videira et al. (2016; morphology, phylogeny), holotype and ex-type of type species CBS H-9898; CBS 112895 = CPC 3745.
terrestrial, Brazil, see Wijayawardene et al. (2012, 2016), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Mycovellusia** Rangel 1917, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, one species, type: *M. cajani* Henn., hypomycetous, sexual morph unknown, plant pathogenic, ?, see Videira et al. (2017; morphology, phylogeny, and designation of neotype), cultures and sequences are available, needs generic revision.

**Mycowinteria** Sherwood 1986, *Protothelaeaceae, Lecanoromycetes* family incertae sedis, three species, type: *M. anodonta* (Nyl.) Sherwood & Boise, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Myelochroa** (Asahina) Elix & Hale 1987, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 30 species, type: *M. aurulenta* (Tuck.) Elix & Hale, lichenized, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, cultures available for the type: MPN3C, MPN759, holotype of type: E, Coppins 5131.

**Myelorrhiza** Verdon & Elix 1986, *Cladoniaceae, Lecanorales, Lecanoromycetes*, two species, type: *M. antrea* Verdon & Elix, asexual morph unknown, lichenized, terrestrial, Australasia, see Lumbsch et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures are available but lacks for the type species, needs generic revision.

**Myelosperma** Syd. & P. Syd. 1915, *Myelospherataceae, Xylariales, Sordariomycetes*, four species, type: *M. tumidum* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Myiocyprula** Petr. 1955, *Ascomycota* genera incertae sedis, two species, type: *M. gregaria* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Myriangiopsis** Henn. 1902, *Dothideomycetes* genera incertae sedis, two species, type: *M. sulfurea* (G. Winter) Henn., asexual morph unknown, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

**Myriangium** Mont. & Berk. 1845, *Myriangiaceae, Myriangiales, Dothideomycetes*, one species, type: *M. duriae* Mont. & Berk., asexual morph unknown, saprobes, terrestrial, Algeria, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Dissanayake et al. (2014; morphology), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype of the type species NL 8414.
**Myriellina** Höhn. 1915, *Ascomycota* genera *incertae sedis*, two species, type: *M. cydoniae* (Desm.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Papua New Guinea, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Pl. crypt. Fr. nr. 79, needs generic revision.

**Myriochapssa** M. Cáceres, Lücking & Lumbsch 2013, *Graphidaceae, Ostropales, Lecanoromycetes*, three species, type: *M. psoromica* (M. Cáceres, Santos de Jesus & Santos Vieira) M. Cáceres, Lücking & Lumbsch, asexual morph unknown, lichenized, terrestrial, worldwide, see Parmen et al. (2013; taxonomy), Lumbsch et al. (2014; accepted in *Graphidaceae*), Lücking et al. (2016; classification), cultures and sequences are available, holotype of the type: ASE, Cáceres 7595 (holotype of *Chapsa psoromica* M. Cáceres, L.S. de Jesus & T.S. Vieira), cultures available for the type: CHAR106 (fide Lumbsch et al. 2014).

**Myriodiscus** Boedijn 1935, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *M. sparassoides* Boedijn, asexual morph unknown, saprobes on bamboo culms, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Myriodontium** Samson & Polon. 1978, *Onygenaceae, Onygenales, Eurotiomycetes*, one species, type: *M. keratinophilum* Samson & Polon., sexual morph unknown, human pathogen, saprobes, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Man et al. (2015; DNA), cultures and sequences are available, available specimen and cultures for the type: CBS H-7385; S7-P-3-16 (fide Man et al. 2015).

**Myriogenospora** G.F. Atk. 1894, *Clavicipitaceae, Hypocreales, Sordariomycetes*, one species, type: *M. psapali* G.F. Atk., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

**Myriolecis** Clements 1909, *Lecanoraceae, Lecanorales, Lecanoromycetes*, 31 species, type: *M. sambuci* (Pers.) Clem., lichenized, worldwide, see Śliwa et al. (2012; phylogeny), Zhao et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Myriopora** R.C. Harris 1988, *Lecanoraceae, Lecanorales, Lecanoromycetes*, one species, type: *M. albidula* (Willey) R.C. Harris, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Myriophacidium** Sherwood 1974, *Rhytismataceae, Rhytismatales, Leotiomycetes*, six species, type: *M. aphylophilicum* Sherwood, asexual morph unknown, saprobes, terrestrial, worldwide, see Hou and Piepenbring (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Myriosclerotinia** N.F. Buchw. 1947, *Sclerotiniaceae, Helotiales, Leotiomycetes*, ten species, type: *M. scirpicola* (Rehm) N.F. Buchw., asexual morph unknown, on roots, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Andrew et al. (2012; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Myriospora** Nägeli ex Uloth 1861, *Acarosporaceae, Awarosporales, Lecanoromycetes*, nine species, type: *M. rufescens* (Ach.) Nägeli, lichenized, Europe, USA, Africa, see Westberg et al. (2011, 2015; phylogeny), Arcadia and Knudsen (2012; phylogeny), Gueidan et al. (2014c; phylogeny), Roux et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Myriostigma** Kremph. 1874, *Arthoniaceae, Arthoniales, Arthoniomycetes*, seven species, type: *M. candidum* Kremph., lichenized,?, see Frisch et al. (2014a; phylogeny), Ertz et al. (2015,
new combination), Jagadeesh Ram and Sinha (2016; phylogeny), Lücking et al. (2016; classification), sequences are available, needs generic revision.

**Myriostigmella** G. Arnaud 1952, *Dothideomycetes* genera *incertae sedis*, one species, type: *M. guatteriae* (G. Arnaud) G. Arnaud, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

**Myriotrema** Fée 1825, *Graphidaceae, Ostropales, Lecanoromycetes*, 54 species, type: *M. olivaceum* Fée, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Mangold et al. (2009; key, Australia), Lumbsch and Huhndorf (2010; outline), Sipman et al. (2012; key, Costa Rica), Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; accepted as a valid genus), Lücking et al. (2014, 2016; phylogeny, classification), cultures and sequences are available, needs generic revision.

**Myrmacielia** Lindau 1897, *Niessliaceae, Hypocreales, Sordariomycetes*, one species, type: *M. endoleuca* (Sacc.) Lindau, asexual morph unknown, saprobes or fungicolous, terrestrial, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Jaklitsch and Voglmayr (2011; taxonomic notes), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

**Myrmecium** Nitschke ex Fuckel 1870, *Valsariaceae, Valsariales, Dothideomycetes*, two species, type: *Myrmecium rubricosum* (Fr.) Fuckel asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2015; taxonomy, and phylogeny), cultures and sequences are available, lectotype of the type: L9118162, cultures available for the type: CBS 139067.


**Myrotheciastrum** Abbas & B. Sutton 1988, *Ascomycota* genera *incertae sedis*, one species, type: *M. salvadorae* Abbas & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Pakistan, see Wijayawardene et al. (2012, 2016, 2017; morphology, outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: IMI 139985i.

**Myrothecium** Tode 1790, *Stachybotryaceae, Hypocreales, Sordariomycetes*, 83 species, type: *M. inundatum* Tode, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; phylogeny), Maharachchikumbura et al. (2015; outline), Chen et al. (2016; review, phylogeny), Dai et al. (2016; morphology, phylogeny, new species), Lombard et al. (2016; phylogeny), cultures and sequences are available but lacks for type, epitype of type: CBS H-14989.

**Myrtapenidiella** Quaedvlieg & Crous 2014, *Teratosphaeriaceae, Capnodiales, Dothideomycetes*, four species, type: *M. tenuiramis* (Crous & Summerell) Quaedvl. & Crous,
hyphomycetous, sexual morph unknown, pathogens, saprobes, terrestrial, Australia, Thailand, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; outline), Crous et al. (2015, 2016; new species, phylogeny), sequence data available, holotype and ex-type of the type species CBS H-20253; CPC 13692.

Mystrosporiella Munjal & Kulshr. 1969, Ascomycota genera incertae sedis, two species, type: M. litseae Munjal & Kulshr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Mytilinidion Duby 1861, Mytilinidiales, Mytilinidiales, Dothideomycetes, twelve species, type: M. aggregatum (DC.) Duby, asexual morph septonema-like, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Mytilinidiales), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Mytilodiscus Kropp & S.E. Carp. 1984, Helotiaceae, Helotiales, Leotiomycetes, one species, type: M. alnicola Kropp & S.E. Carp., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Mytilostoma P. Karst. 1879, Dothideomycetes genera incertae sedis, two species, type: M. deflectens P. Karst., asexual morph unknown, saprobes, terrestrial, Finland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Myxocyclus Riess 1852, Pleomassariaceae, Pleosporales, Dothideomycetes, one species, type: M. confluens Riess, coelomycetous, sexual morph Splanchnonema sensu lato, saprobes, terrestrial, USA, Canada, Japan, see Pastirčák and Pastirčáková (2010; morphology), Wijayawardene et al. (2016, 2017; morphology, outline), cultures and sequences are unavailable, holotype of the type species IMI 180178.

Myxoparaphysella Caball. 1941, Ascomycota genera incertae sedis, two species, type: M. cocoës Caball., coelomycetous, sexual morph unknown, saprobes, terrestrial, Spain, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Myxophora Döbbeler & Poelt 1978, Pseudoperisporiaceae, Dothideomycetes genera incertae sedis, seven species, type: M. amerospora Döbbeler & Poelt, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Pseudoperisporiaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Myxospora L. Lombard & Crous 2016, Stachybotriaceae, Hypocreales, Sordariomycetes, five species, type: M. masonii (M.C. Tulloch) L. Lombard & Crous, hyphomycetous, sexual morph unknown, from forest soil, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), ex-type culture of the type: CBS 174.73.

Myxosporidella Sacc. 1881, Ascomycota genera incertae sedis, one species, type: M. miniata Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Myxosporidiella Negru 1960, Ascomycota genera incertae sedis, one species, type: M. fritillariae Negru, coelomycetous, sexual morph unknown, saprobes, terrestrial, Roumania,
see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Myxostomella** Syd. 1931, *Ascomycota* genera incertae sedis, one species, type: *M. apoensis* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Myxothyriopsis** Bat. & A.F. Vital 1956, *Ascomycota* genera incertae sedis, one species, type: *M. astronifolia* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Myxothyrium** Bubák & Kabát 1915, *Ascomycota* genera incertae sedis, one species, type: *M. leptideum* (Fr.) Bubák & Kabát, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Myxotruchium** Kunze 1823, *Myxotrichaceae*, *Leotiomycetes* families incertae sedis, twelve species, type: *M. chartarum* Kunze, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Nadsonia** Sydow 1912 (= *Schizoblastosporion* Cif. 1930), *Trichomonomascaceae*, *Saccharomycetales*, *Saccharomycetes*, four species, type: *N. fulvescens* (Nadson & Konokotina) Syd., asexual reproduction is by budding, saprophytic, on exudates of various trees, soil, peat, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kurtzman and Robnett (2014; DNA, taxonomy), sequences are available.

**Nadsoniella** Issatsch. 1914, *Herpotrichiellaceae*, *Chaetothyriaceae*, *Eurotiomycetes*, one species, type: *N. nigra* Issatsch., hyphomycetous, sexual morph unknown, saprobes, marine, USSR, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, needs generic revision.

**Nadvornikia** Tibell 1984, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, four species, type: *N. hawaiensis* (Tuck.) Tibell, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2014; accepted in *Graphidaceae*), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Naemacyclus** Fuckel 1874, *Maranthymycetales*, *Helotiales*, *Leotiomycetes*, six species, type: *Naemacyclus pinastri* Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Helotiales*), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

**Naemosphaera** P. Karst. 1888, *Ascomycota* genera incertae sedis, one species, type: *N. rudis* P. Karst., coelomycetous, sexual morph unknown, saprobes, marine, Finland, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Naemosphaerella** Höhn. 1923, *Ascomycota* genera incertae sedis, two species, type: *N. ceratophora* (Speg.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, marine, Brazil, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

**Naetrocymba** Körb. 1865, *Naetrocymbaceae*, *Dothideomycetes* genera incertae sedis, six species, type: *N. fuliginea* Körb., asexual morph unknown, epiphytes, terrestrial, worldwide, see Alstrup et al. (2009; new species, USA), Knudsen and Lendemer (2009; new species),
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Minter et al. (2015; new species), cultures and sequences are unavailable, needs generic revision.

**Naevula** B. Hein 1976, *Dermataceae, Helotiales, Leotiomycetes*, six species, type: *Naevula minutissima* (Auersw.) B. Hein, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: CBS 115920, CBS 115003 (Verkley and van Kempen unpub.), available specimen for type: CBS H-15904.

**Naeviella** Clem. 1909, *Dermataceae, Helotiales, Leotiomycetes*, three species, type: *N. paradoxa* (Rehm) Clem., asexual morph unknown, saprobes, terrestrial, Europe, see Chlebicki (2009; endophytes, Poland), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Naeviopsis** B. Hein 1976, *Dermataceae, Helotiales, Leotiomycetes*, three species, type: *N. epilobii* (P. Karst.) B. Hein, asexual morph unknown, saprobes, terrestrial, Europe, see Raitviir (2008; Magadan), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Nagrajomyces** Melnik 1984, *Ascomycota genera incertae sedis*, one species, type: *N. dictyosporus* Melnik, coelomycetous, sexual morph unknown, saprobes, terrestrial, Russia, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Naïs** Kohlm. 1962, *Halosphaeriaceae, Microascales, Sordariomycetes*, two species, type: *N. inornata* Kohlm., asexual morph unknown, marine, freshwater, on wood, worldwide, see Pang (2011; review), Sakayaroj et al. (2010; phylogeny), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Nakaseomyces** Kurtzman 2003, *Saccharomycetales, Saccharomycetes, Saccharomycetaceae*, seven species, type: *N. delphensis* (van der Walt & Tscheuschner) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, but several of the species are important human pathogens, on exudate of oaks, figs, human pathogens, worldwide, see Lumbsch and Huhndorf (2010; outline), Limtong et al. (2011; asexual morph as *Candida* sp.), sequences are available.


**Nakazawaeae** Y. Yamada, Maeda & Mikata 1994, *Pichiaceae, Saccharomycetales, Saccharomycetes*, ten species, type: *N. holstii* (Wickerham) Y. Yamada, K. Maeda & Mikata, asexual reproduction is by multilateral budding, saprophytic, on beetle larvae tunnels in spruce and pine trees, alpechin, cider, grapes, sauerkraut, silage, mastitis milk, embalmed human corpse, human feces, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kaewwichian and Limtong (2014; new species, DNA), Kurtzman and Robnett (2014; taxonomy), sequences are available.

**Nalanthamala** Subram. 1956, *Nectriaceae, Hypocreales, Sordariomycetes*, six species, type: *N. madreeya* Subram., sexual morph Rubrinectria, saprobes, plant pathogens, terrestrial, worldwide. See Ligoxigakis et al. (2013; Greece), Hong et al. (2013; selective medium), Severn-Ellis et al. (2012; South Africa), Li et al. (2013; indoor, phylogeny), Peršoh et al.
(2011; EcoChip), Rossman et al. (2013; acceptance of genus), Su et al. (2013; secondary metabolite), Wilk et al. (2009; secondary metabolite), Summerbell et al. (2011; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, but lacks for type.

**Nannfeldia** Petr. 1947, *Leptopeltidaceae, Dothideomycetes* family incertae sedis, one species, type: *N. atra* Petr., asexual morph unknown, saprobes, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Nannizzioopsis** Currah 1985, *Nannizziopsidaceae, Onygenales, Eurotiomycetes*, one species, type: *N. vriesii* (Apinis) Currah, asexual morph hyphomycetous, saprobes, animal pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stchigel et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), type specimen and ex-type of the type: CBS H-6714; IMI 149994 (fide Stchigel et al. 2016).

**Nanomyces** Thaxt. 1931, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *N. fijianus* Thaxt., asexual morph unknown, biotrophic, terrestrial, Pacific, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Nanoschema** B. Sutton 1980, *Ascomycota* genera incertae sedis, one species, type: *N. elaeocarpi* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, British Solomon Islands, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species IMI 187436.

**Nanoscypha** Denison 1972, *Sarcoscyphaceae, Pezizales, Pezizomycetes*, ten species, type: *N. tetraspora* (Seaver) Denison, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Nanostictis** M.S. Christ. 1954, *Stictidaceae, Ostropales, Lecanoromycetes*, four species, type: *N. peligerae* M.S. Christ., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Etayo and Sancho (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Naothyrsium** Bat. 1960, *Ascomycota* genera incertae sedis, one species, type: *N. splendidum* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Natantiella** Réblová 2009, *Sordariomycetes* genera incertae sedis, one species, type: *N. lignolecta* (Berk. & Broome) Réblová, asexual morph unknown, saprobes, terrestrial, Europe, see Réblová and Stepanek (2009; morphology), Maharachchikumbura et al. (2016; outline), holotype and culture of the type species K 84426 (holotype of *Sphaeria lignolecta*); CBS 123470.


**Natarajania** Pratibha & Bhat 2006, *Stilbosporaceae, Diaporthales incertae sedis, Sordariomycetes*, one species, type: *N. indica* Pratibha & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Shenoy et al. (2010; phylogeny), Seifert et al. (2011; morphology), Crous et al. (2012; phylogeny, familial position unresolved), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.
**Natipusilla** A. Ferrer, A.N. Mill. & Shearer 2011, *Natipusillaceae, Natipusillales, Dothideomycetes*, four species, type: *N. decorospora* A. Ferrer, A.N. Mill. & Shearer, saprobes, on submerged wood, Central and South America, see Raja et al. (2012; placed in *Natipusillaceae*), Hyde et al. (2013; accepted as a genus in *Natipusillaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype of type: AF236-1 (ILL 86249).

**Naumovela** Kravtzev 1955, *Sordariomycetes* genera incertae sedis, two species, type: need typification, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Naumovozyma** Kurtzman 2008, *Saccaromyxaceae, Saccharomycetales, Saccharomycotina*, two species, type: *N. dairensis* (H. Naganiishi) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, soil, spoiled milk, ensiled maize, fermented vegetables, dried fruit, cecum of baboon, worldwide, see Lumbsch and Huhndorf (2010; outline), sequences are available.

**Nautilusphaeria** E.B.G. Jones 1964, *Halosphaeraceae, Microascales, Sordariomycetes*, one species, type: *N. cristaminuta* E.B.G. Jones, asexual morph unknown, marine, on submerged wood, temperate, tropical, see Lumbsch and Huhndorf (2010; outline), Sakayaraj et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015; outline), cultures and sequences are available, needs generic revision.

**Navicella** Fabre 1879, *Melanommataceae, Pleosporales, Dothideomycetes*, five species, type: *N. julii* Fabre, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014d; transferred to *Melanommataceae*), Wijayawardene et al. (2014; outline), Tian et al. (2015; accepted as a genus in *Melanommataceae*), cultures and sequences are unavailable.

**Nawawia** Marvanová 1980, *Chaetosphaeriales* genera incertae sedis, type: *N. filiformis* (Nawawi) Marvanová, hyphomycetous, sexual morph unknown, saprobes, aquatic, worldwide, see Crous et al. (2009; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Goh et al. (2014; new species), cultures and sequences are available but lacks for the type, needs generic revision.

**Nebularia** P.M. Jørg. 2014, *Pannariaceae, Peligerales, Lecanoromycetes*, two species, type: *N. incrassata* (P.M. Jørg.) P.M. Jørg., lichenized, Ecuador, see Ekman (2014; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Nectria** (Fr.) Fr. 1849, *Nectriaceae, Hypocreales, Sordariomycetes*, around 1000 species, type: *N. cinnabarina* (Tode) Fr., saprobes, pathogens, worldwide, see Lumbsch and Huhndorf (2010; outline), Hirooka et al. (2011; monograph), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Lombard et al. (2015; phylogeny), cultures and sequences are available, epitype and ex-epitype of the type: BPI 879981; CBS 125165 = AR 4477 = CLL 7152.

**Nectriella** Nitschke ex Fuckel 1870, *Bionectriaceae, Hypocreales, Sordariomycetes*, 74 species, type: *N. fuckelii* Nitschke ex Fuckel, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Nectriopsis** Maire 1911, *Bionectriaceae, Hypocreales, Sordariomycetes*, c. 70 species, type: *N. violacea* (J.C. Schmidt ex Fr.) Maire, asexual morph acremonium-like, saprobes, fungicolous, lichenicolous, terrestrial, worldwide, see Etayo (2010; new species), Lumbsch and Huhndorf (2010; outline), Luo and Zhuang (2010; new species), Bracket and Zimmermann (2012; new species), Whitton et al. (2012; new species), Kirk et al. (2013;
genus accepted), Lombard et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Kondratyuk et al. (2016; new species), Zare and Gams (2016; phylogeny), cultures and sequences are available, needs generic revision.

**Neelakesa** Udaiy & Hosag. 1992, *Pseudeurotiaceae*, *Leotiomyces* family incertae sedis, three species, type: *N. lignicola* Udaian & V.S. Hosag., saprobes, submerged wood, freshwater, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

**Nemania** Gray 1821, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, six species, type: *N. serpens* (Pers.) Gray, asexual morph hyphomycetous, saprobes or endophytes, terrestrial or marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Nematococcusmyces** C.L. Hou, M. Piepenbr. & Oberw. 2004, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, nine species, type: *N. rhododendri* C.L. Hou, M. Piepenbr. & Oberw., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Tian et al. (2013; new species, China, phylogeny), cultures and sequences are available, holotype and culture available for type: HMAS (112); voucher HOU 469A.

**Nematogonum** Desm. 1834, *Ascomycota* genera incertae sedis, one species, type: *N. aurantiacum* Desm., hyphomycetous, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Nematographium** Goid. 1935, *Ascomycota* genera incertae sedis, one species, type: *Nematographium hippotrichoides* (Lindau) Goid., hyphomycetous, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, type specimen of type species B herb. Lindau, needs generic revision.

**Nematostoma** Syd. & P. Syd. 1914, *Pseudoperisporiaceae*, *Dothideomycetes* family incertae sedis, 13 species, type: *N. artemisiae* Syd. & P. Syd., saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Nematothecium** Syd. & P. Syd. 1912, *Pseudoperisporiaceae*, *Dothideomycetes* family incertae sedis, two species, type: *N. fusiforme* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Nemozythiella** Höhn. 1925, *Ascomycota* genera incertae sedis, one species, type: *N. lonicerae* (Died.) Höhn., coelomycetous, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Neoalpakesa** Punith. 1981, *Ascomycota genera incertae sedis*, one species, type: *N. poae* Punith., coelomycetous, sexual morph unknown, saprobes, terrestrial, UK, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: IMI 252188.


**Neoarachnotheca** Ulfig, Cano & Guarro 1997, *Onygenaceae, Onygenales, Eurotiomycetes*, one species, type: *N. keratinophila* Ulfig, Cano & Guarro, asexual morph unknown, saprobes, on marine and river sediments, Spain, see Lumbsch and Huhndorf et al. (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: IMI 351982.

**Neoarbuscula** B. Sutton 1983, *Ascomycota genera incertae sedis*, one species, type: *N. eugeniae* (Bat. & Peres) B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, specimens available for the type: IMI 159330, 192110, 198635, 199104, 227705a, 227705b, 296847.

**Neoaschochya** Q. Chen & L. Cai 2015, *Didymellaceae, Pleosporales, Dothideomycetes*, seven species, type: *N. exitialis* (Morini) Q. Chen & L. Cai, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2014; morphology, DNA), Tanaka et al. (2015; phylogeny), Cultures and sequences are available, holotype and ex-type strain of the type species CBS H-22000; CPC 24182 = CBS 138869.

**Neoobarclayaa** Kuntze 1898, *Ascomycota genera incertae sedis*, one species, type: *Neoobarclayaa primaria* (Ellis & Everh.) Kuntze, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Neoombasichola** Crous & M.J. Wingf. 2014, *Sulcatisporaceae, Pleosporales, Dothideomycetes*, one species, type: *N. strelitziae* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2014; morphology, DNA), Tanaka et al. (2015; phylogeny), Cultures and sequences are available, holotype and ex-type strain of the type species CBS H-22000; CPC 24182 = CBS 138869.

**Neobambusicola** Crous & M.J. Wingf. 2014, *Sulcatisporaceae, Pleosporales, Dothideomycetes*, one species, type: *N. strelitziae* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2014; morphology, DNA), Tanaka et al. (2015; phylogeny), Cultures and sequences are available, holotype and ex-type strain of the type species CBS H-22000; CPC 24182 = CBS 138869.

**Neobarmyella** Crous & M.J. Wingf. 2014, *Sulcatisporaceae, Pleosporales, Dothideomycetes*, one species, type: *N. strelitziae* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2014; morphology, DNA), Tanaka et al. (2015; phylogeny), Cultures and sequences are available, holotype and ex-type strain of the type species CBS H-22000; CPC 24182 = CBS 138869.

**Neobarya** Lowen 1986, *Clavicipitaceae, Hypocreales, Sordariomycetes*, ten species, type: *N. parasitica* (Fuckel) Lowen, asexual morph acremonium-like, mycoparasites, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lawrey et al. (2015; lichenicolous, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), sequence available for type species; GenBank Number: KP899626, needs generic revision.

**Neobrooimella** Petr. 1947, *Amphisphaeriaceae, Xylariales, Sordariomycetes*, one species, type: *N. ciliata* Petr., asexual morph unknown, saprobes, terrestrial, Syria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015; accepted in *Phlogicylindriaceae*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Neobulgarja** Petr. 1921, *Leotitaceae, Helotiales, Leotiomycetes*, eleven species, type: *N. pura* (Pers.) Petr., asexual morph hyphomycetous (phialophora-like), saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Johnston et al. (2012; new species, New Zealand, asexual morph, DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen and cultures for type: CBS H-15111; AFTOL-ID 1259 (Schoch unpub.).
**Neocamarosporium** Crous & M.J. Wingf. 2014, *Pleosporaceae, Pleosporales, Dothideomycetes*, four species, type: *N. goegapense* Crous & M.J. Wingf., coelomycetous, saprobes, terrestrial, worldwide, see Crous et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2016a, b; outline, taxonomy), Ariyawansa et al. (2015; phylogeny, new combination), cultures and sequences are available, holotype and ex-type strains of the type species CBS H-21722; CPC 23676.

**Neocardentes** Udagawa & Uchiy. 2002, *Trichocomaceae, Eurotiales, Eurotiomycetes*, one species, type: *N. acanthosporum* (Udagawa & Takada) Udagawa & Uchiy., asexual morph unknown, saprobes, terrestrial, temperate, see Varga et al. (2007; phylogeny), Lumbsch and Huhndorf (2010; outline), cultures and sequences are available, holotype and cultures available for the type species, holotype of type species TUR (142).

**Neocatapryrenium** H. Harada 1993, *Verrucariaceae, Verrucariales, Eurotiomycetes*, four species, type: *N. cladonioideum* (Vain.) H. Harada, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, holotype of type species TUR (142).

**Neocatenulostrona** Quaedvlieg & Crous 2014, *Teratosphaeriaceae, Capnodiales, Dothideomycetes*, three species, type: *N. microsporum* (Joanne E. Taylor & Crous) Quaedvl. & Crous, hyphomycetous, pathogens, saprobes, terrestrial, Sweden, Germany, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, nomenclature), holotype and ex-type of the type species PREM 56207a; CPC 1960.

**Neoceratospersma** Crous & Cheew. 2014, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, four species, type: *N. eucalypti* Crous & Cheew., hyphomycetous, sexual morph mycosphaerella-like, pathogens or associated with leaf spots, Brazil, China, Thailand, see Crous et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014, 2017; outline), Guatimosim et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of the type species CBS H-21712; CPC 23465.

**Neocercospora** M. Bakhshi et al. 2015, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, one species, type: *N. amnicola* M. Bakhshi, Arzanlou, Babai-ahari & Crous, hyphomycetous, sexual morph unknown, plant pathogenic, see Bakhshi et al. (2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of type: IRAN 16461 F; CCTU 1186 = CBS 136450.

**Neochaetosphaerella** Lar. N. Vassiljeva, S.L. Stephenson & Chernyshev 2012, *Nitschkiaeaceae, Coronophorales, Sordariomycetes*, one species, type: *N. thaxteriospora* Lar. N. Vassiljeva, S.L. Stephenson & Chernyshev, asexual morphs unknown, saprobes, terrestrial, southern USA, see Vasiljeva et al. (2012; morphology), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: VLA P-2489.

**Neochaetospora** B. Sutton & Sankaran 1991, *Ascomycota genera incertae sedis*, one species, type: *N. quezelli* (Faurel & Schotte) B. Sutton & Sankaran, coelomycetous, sexual morph unknown, coprophilious, terrestrial, Sahara, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Neocladoxialophora** Crous & R.K. Schumach. 2014, *Eurotiomycetes genus incertae sedis*, one species, type: *N. quercina* Crous & R.K. Schumach., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Germany, see Crous et al. (2014; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of type: CBS H-22003; CPC 24426.

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, cultures available for the type species INBio 6-141 (Chaverri et al. 2005), holotype of type species RUTPP INBio 6-141.


**Neocordyceps** Kobayasi 1984, Clavicipitaceae, Hypocreales, Sordariomycetes, one species, type: *N. kohyasanensis* Kobayasi, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Neocosmospora** E.F. Sm. 1899, Nectriaceae, Hypocreales, Sordariomycetes, 25 species, type: *N. vasinfecta* E.F. Sm., asexual morph hyphomycetous (acroniunm-like), saprobes, pathogens on human, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Nalim et al. (2011; new species), Hirooka et al. (2012; new species), Kirk et al. (2013; genus accepted), Lombard et al. (2015; new species, DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Neocrinula** Crous 2016, Helotiaceae, Helotiales, Leotiomyces, one species, type: *N. xanthorrhoeae* Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22859, CPC 29474.

**Neocryptospora** Petr. 1959, Sordariomycetes genera incertae sedis, one species, type: *N. rickii* Petr., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

**Neocudoniella** S. Imai 1941, Helotiaceae, Helotiales, Leotiomyces, two species, type: *N. jezoensis* (S. Imai) S. Imai, asexual morph unknown, saprobes, terrestrial, Japan, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Neocylindroseptoria** K.M. Thambugala & K.D. Hyde 2014, Dothideaceae, Dothideales, Dothideomycetes, one species, type: *N. pistaciae* (Quaedvl., Verkley & Crous) Thambug. & K.D. Hyde, coelomycetous, sexual morph unknown, saprobes, terrestrial, Spain, see Thambugala et al. (2015c; phylogeny), cultures and sequences are available, holotype and ex-type of type: CBS H-21301; CBS 471.69.

**Neodasycypha** Suková & Spooner 2005, Hyaloscyphaceae, Helotiales, Leotiomyces, two species, type: *N. cerina* (Pers.) Spooner, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Whitton et al. (2012; on Pandunus), cultures and sequences are available, available specimen of type: CBS H-15118.

One species, type: *N. hilliana* (Crous & U. Braun) Quaedvl. & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), epitype and ex-type culture of the type: CBS H-20340; CPC 15382.

**Neodevriesia** Quaedvl. & Crous 2014, *Neodevriesiaceae*, *Capnodiales*, *Dothideomycetes*, 17 species, type: *N. hilliana* (Crous & U. Braun) Quaedvl. & Crous, hyphomycetous, with teratosphaeria-like sexual morph, saprobes, terrestrial, worldwide, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. 2014 (phylogeny, outline), Crous et al. (2015; morphology, phylogeny, sexual morph), cultures and sequences are available, holotype and ex-type of the type: CBS H-21427; CPC 22059.

**Neodeightoniella** Crous & W.J. Swart 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *N. phragmiticola* Crous & W.J. Swart, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2013; morphology), cultures and sequences are available, holotype and ex-type culture of the type: IMI 57769(f), CBS 448.91.

**Notes:** *Striatoidium* was originally described as *Oidium* subgen. *Striatoidium* R.T.A. Cook, A.J. Inman & C. Billings, typified by *Oidium leucas-javanicae* Sawada, which is a synonym of *Oidium lamii* Rabenh. according to Braun and Cook (2012). This subgenus was subsequently raised to genus status by Braun and Cook (2012), but no binomial in *Striatoidium* was given to the type species. In addition, four species in *Striatoidium* which lack a *Neoerysiphe* sexual morph are known, i.e. *S. aloysiae* (S. Wolcan, S. Takam. & Havryl.) S. Wolcan, S. Takam. & Havryl., *S. baccharidis* (Havryl. & U. Braun) U. Braun & Havryl., *S. jaborosae* M.G. Cabrera & U. Braun, and *S. maquii* (Havryl. & U. Braun) U. Braun & Havryl. *Oidium lamii* is the asexual morph of *N. galeopsidis* (Braun and Cook 2012) and under unitary nomenclature, the genus *Striatoidium* should be considered a synonym of *Neoerysiphe*. *Oidium leonuri-sibiricae* Sawada is also a synonym of *O. lamii* (Braun & Cook 2012), therefore these names and *O. leucas-javanicae* need to be synonymized with *N.
In addition, molecular phylogenetic studies have revealed the placement of *S. aloysiæ*, *S. baccharidis*, and *S. maquii* in *Neoërysiphe*, indicating that these names need to be reallocated accordingly. The phylogenetic placement of *S. jaborosae* is unknown and therefore no new combination can be proposed for this taxon in the current state.

= *Oidium leonuri-sibiricae* Sawada, loc. cit.:24

Additional synonyms of *N. galeopsidis* are listed in Braun and Cook (2012)

*Neoërysiphe aloysiae* (S. Wolcan, S. Takam. & Havryl.) S. Takam., comb. nov.  
MycoBank (or IndexFungorum): XXXXX

*Neoërysiphe baccharidis* (Havryl. & U. Braun) S. Takam., comb. nov.  
MycoBank (or IndexFungorum): XXXXX

*Neoërysiphe maquii* (Havryl. & U. Braun) S. Takam., comb. nov.  
MycoBank (or IndexFungorum): XXXXX


*Neoflageoletia* J. Reid & C. Booth 1966, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, one species, type: *N. bambusina* (Syd.) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

*Neofuckelia* Zeller & Goodd. 1935, *Ascomycota* genera *incertae sedis*, one species, type: *N. pinicola* (Zeller & Goodd.) Zeller & Goodd., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

(2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Botryosphaeriaceae*), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny), Dissanyake et al.(2016; taxonomy), holotype and ex-type culture of the type: PDD 45438, ATCC 58191.


**Neogymnomyces** G.F. Orr 1970, *Onygenaceae, Onygenales, Eurotiomycetes*, one species, type: *N. demonbreunii* (Ajello & S.L. Cheng) G.F. Orr, asexual morph unknown, saprobes, Spain, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA), Kirk et al. (2013; genus accepted), and sequences are available, available specimen and cultures for the type: CBS H-7197; CBS 233.85.

**Neohaplomyces** R.K. Benj. 1955, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *N. medonalis* R.K. Benj., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Neohendersonia** Zahlbr. 1909, *Peltulaceae, Lichinales, Lichinomycetes*, one species, type: *N. brasiliensis* Zahlbr., asexual morph unknown, saprobes, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Neoheppia** Zahlbr. 1909, *Peltulaceae, Lichinales, Lichinomycetes*, one species, type: *N. acidophila* Zahlbr., coelomycetous, sexual morph unknown, saprobes, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: PAD 940.

**Neohortaea** Quaedvl. & Crous 2014, *Capnodiales genera incertae sedis, Dothideomycetes*, one species, type: *N. rickii* (Lloyd) J.D. Rogers, Y.M. Ju & Læssøe, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015; accepted in *Xylariomycetidae*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Neohypodiscus** J.D. Rogers, Y.M. Ju & Læssøe 1994, *Boliniaceae, Boliniales, Sordariomycetes*, three species, type: *N. rickii* (Lloyd) J.D. Rogers, Y.M. Ju & Læssøe, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015; accepted in *Xylariomycetidae*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type was not designated but several specimens are at IMI and CBS (CBS H-4370).

**Neojohnstonia** B. Sutton 1983, *Ascomycota genera incertae sedis*, two species, type: *N. colocasiae* (M.B. Ellis) B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type was not designated but several specimens are at IMI and CBS (CBS H-4370).

Ariyawansa & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Japan, Thailand, see Ariyawansa et al. (2014a; taxonomy, phylogeny), Dai et al. (2015; taxonomy, phylogeny), Tanaka et al. (2015; taxonomy, phylogeny), cultures and sequences are available. **Neolamya** Theiss. & Syd. 1918, *Sordariomycetes* *genera incertae sedis*, two species, type: *N. peltigerae* (Mont.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, Brazil, see Kocourková (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision. **Neolamya** Speloglottides, 1881, *Neolecctae, Neolamya, Neolamynolectie*, three species, type: *N. flavovirescens* Speleglottides, asexual morph unknown, saprobes, terrestrial, Brazil, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available but lacks for the type species, needs generic revision. **Neolamya** Naumov 1951, *Ascomycota* *genera incertae sedis*, four species, type: *N. immersa* Naumov, coelomycetous, sexual morph unknown, saprobes, terrestrial, former USSR, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision. **Neoligniella** S. Boonmee & K.D. Hyde 2015, *Halothiaceae, Pleosporales, Dothideomycetes*, one species, type: *N. pigmentatum* Boonmee & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 10-0062, MFLUCC 10-0129. **Neoamassaria** Mapook, Camporesi & K.D. Hyde 2016, *Massariaceae, Pleosporales, Dothideomycetes*, one species, type: *N. fabacearum* Mapook, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 16-1875, MFLUCC 14-1117. **Neoamassariosphaeria** Y. Zhang bis, J. Fourn. & K.D. Hyde 2009, *Lindgomycetaceae, Pleosporales, Dothideomycetes*, one species, type: *N. typhicola* (P. Karst.) Y. Zhang ter, J. Fourn. & K.D. Hyde, asexual morph unknown, saprobes, aquatic, cosmopolitan, see Zhang et al. (2009; taxonomy, accepted as a genus in *Amniculicolaceae*), Hyde et al. (2013; accepted as a genus in *Amniculicolaceae*), Ariyawansa et al. (2015; accepted as a genus in *Lindgomycetaceae*), Jones et al. (2015; outline, accepted as a genus in *Amniculicolaceae*), cultures and sequences are unavailable, needs generic revision. **Neoamalica** Petr. 1940, *Ascomycota* *genera incertae sedis*, three species, type: *N. gelatosporum* (Zimm.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, former USSR, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, new species), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision. **Neoamassaria** Thambug., Camporesi & K.D. Hyde 2016, *Didymellaceae, Pleosporales, Dothideomycetes*, seven species, type: *N. italica* Thambug., Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Thambugala et al. (2016; taxonomy, phylogeny), Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 16-0674, MFLUCC 16-0284. **Neoamassaria** Petr. 1947, *Hypocreales* *genera incertae sedis, Leotiomycetes*, one species, type: *N. sydowii* Petr., hypomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available. **Neoamassaria** Crous 2013, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, one species, type: *N. pseudopentameridis* Crous, asexual morph unknown, folicolous, South Africa, see Crous et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures and sequences are available, holotype and ex-type of type: CBS H-21416; CPC 21127.

**Neonectria** Wollenw. 1917 (= *Heliscus* Sacc. 1880; *Cylindrocarpon* Wollenw. 1913 fide Rossman et al. 2016), Nectriaceae, Hypocreales, Sordariomycetes, 28 species, type *N. ramulariae* Wollenw., on bark, sometimes causing cankers, cosmopolitan, mostly in temperate regions, see Chaverri et al. (2011; phylogeny), Rossman et al. (2013; *Neonectria* protected against *Cylindrocarpon*), Lombard et al. (2015; synonymised *Heliscus* under *Neonectria*), Maharachchikumbura et al. (2015, 2016; phylogeny), Rossman et al. (2016; nomenclature), cultures and sequences are available, cultures available for type: CBS 151.29 = IMI 113894 = MUCL 28083, holotype of the type species B.

**Neococcilibambusa** Doilm & K.D. Hyde 2016, *Occultibambusaceae*, Pleosporales, Dothideomycetes, one species, type: *N. chiangraiensis* Doilm & K.D. Hyde, saprobes, terrestrial, see Dai et al. (2016; phylogeny), Doilm et al. (2016; phylogeny), cultures and sequences are available, holotype and ex-type strains of type: MFLU 15–3531; MFLUCC 12–0559, MKT 075, ICMP 21165.

**Neophiosphaerella** Kaz. Tanaka & K. Hiray. 2015, Lentitheciaceae, Pleosporales, Dothideomycetes, one species, type: *N. sasicola* (Nagas. & Y. Otani) Kaz. Tanaka & K. Hiray., asexual morph unknown, saprobes, terrestrial, Japan, see Tanaka et al. (2015; morphology, phylogeny), cultures and sequences are available, holotype, epitype and ex-epitype strain of the type species TMI 3176, HHUF 29443; CBS 120247.

**Neoovularia** U. Braun 1992, Ascomycota genera incertae sedis, six species, type: *N. nomuriana* (Sacc.) U. Braun (= *Tuberculina nomuriana* Sacc.), asexual morphs hyphomycetous, terrestrial, plant pathogenic, leaf-spotting, Asia, Europe, North America, see Wijayawardene et al. (2014; outline), cultures and cultures and sequences are unavailable. Holotype of type species Nomura (PAD).

**Neoparodia** Petr. & Cif. 1932, *Parodiopsidaceae*, Dothideomycetes families incertae sedis, one species, type: *Neoparodia ekmanii* Petr. & Cif., asexual morph chupilla-like or sarcinella-like, saprobes, terrestrial, West Indies, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parodiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Neopakecia** Sacc. 1883, Ascomycota genera incertae sedis, one species, type: *N. coulteri* (Peck) Sacc., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but unavailable for type species, needs generic revision.

**Neopellella** Petr. 1950, *Micropeltidaceae*, Incertae sedis, Dothideomycetes, three species, type: *N. aequatoriensis* Petr., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline, accepted in *Schizothyriaceae*), Hyde et al. (2013, accepted in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Schizothyriaceae*), Phookamsak et al. (2016; placed in *Micropeltidaceae*), cultures and sequences are unavailable, needs generic revision.

**Neopeltis** Syd. 1937, Ascomycota genera incertae sedis, three species, type: *N. brenesii* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, central America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

hyphomycetous, sexual morph unknown, foliicolous, terrestrial, Cuba, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayarawardene et al. (2014; phylogeny, outline), cultures and sequences are available, holotype and ex-type culture of type: INIFAT C87/45; CBS 734.87.


**Neopetromyces** Frisvad & Samson 2000, *Trichocomaceae, Eurotiales, Eurotiomycetes*, one species, type: *N. muricatus* (Udagawa, Uchiy. & Kamiya) Frisvad & Samson, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available, holotype and ex-type strain of type species CBM BF42515; NRRL 35674.


**Neophaeococcomyces** Crous & M.J. Wingf. 2015, *Strelitzianaceae, Chaetothyriales, Eurotiomycetes*, two species, type: *N. aloe* (Crous & M.J. Wingf.) Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, South Africa, Switzerland, see Crous et al. (2015; taxonomy, phylogeny), Wijayarawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-21441, CPC 21873.


**Neophaeomonilla** Rooney-Latham & Crous 2015, *Phaeomoniellaceae, Phaeomoniellales, Eurotiomycetes*, three species, type: *N. eucalypti* Rooney-Latham & Crous, coelomycetous, sexual morph unknown, on living leaves, endophytic, terrestrial, USA, South Korea, South Africa, see Crous et al. (2011, 2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type culture of type: CBS H-22249; CPC 25161.

**Neophaeosphaeria** M.P.S. Câmara, M.E. Palm & A.W. Ramaley 2003, *Neophaeosphaeriaceae, Pleosporales, Dothideomycetes*, five species, type: *N. filamentosa* (Ellis & Everh.) M.P.S. Câmara, M.E. Palm & A.W. Ramaley, asexual morph coelomycetous, saprobes or pathogenic, terrestrial, Mexico, USA, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Leptosphaeriaceae*), Crous et al. (2013;
taxonomy), Ariyawansa et al. (2014a; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), sequence data available for all species, needs generic revision.

**Neophaeothecidea** Quaedv. & Crous 2014, *Teratosphaeriaceae, Capnodiales, Dothideomycetes*, one species, type: *N. proteae* (Crous) Quaedvlieg & Crous, hyphomycetous, saprobes, terrestrial, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype and ex-type strain of the type: CBS H-20092; CPC 2828.

**Neophrasia** Petr. & Syd. 1927, *Ascomycota* genera *incertae sedis*, two species, type: *N. graminellina* (Sacc.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America., see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Neophyllis** F. Wilson 1891, *Sphaerophoraceae, Lecanorales, Lecanoromycetes*, two species, type: *Neophyllis melacarpa* F. Wilson, asexual morph unknown, lichenized, terrestrial, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available for the type species, holotype of type species available.

**Neoplaconema** B. Sutton 1977, *Ascomycota* genera *incertae sedis*, two species, type: *N. napelli* (Maire & Sacc.) B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Germany, see Wijayawardene et al. (2012, 2017; outline), sequences are available, holotype of the type species was not designated (IMI 24787).

**Neoplatsporoides** Crous & M.J. Wingf. 2015, *Pleosporaceae, Pleosporales, Dothideomycetes*, one species, type: *N. aloecola* Crous & M.J. Wingf., asexual morph coelomycetous, saprobes, Tanzania, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22230, CPC 24435.

**Neopodoconis** Rifai 2008, *Ascomycota* genera *incertae sedis*, three species, type: *N. ampullacea* (Petch) Rifai, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Indonisia, see Rifai (2008; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, holotype of type species available, needs generic revision.

**Neopseudocercospora** Crous 2013, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, two species, type: *N. terminaliae* Crous, hyphomycetous, sexual morph unknown, saprobes, tropical, Zambia, type, see Crous et al. (2013; morphology), Braun et al. (2014; morphology, keys), cultures and sequences are available, holotype and ex-type of the type: CBS H- 21431; CPC 22685.

**Neopseudocercosporella** Videira & Crous 2016, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, two species, type: *N. capsellae* (Elliott & Everh.) Videira & Crous, hyphomycetous, sexual morph mycosphaerella-like, plant pathogenic on *Brassica* species, USA, see Videira et al. (2016; morphology, phylogeny), Cultures and sequences are available, holotype and isotype of type species NY 883641; BPI 399944.


**Neopersoromopsis** Gyeln. 1940, *Parmeliaceae, Lecanorales, Lecanoromycetes*, one species, type: *Neopersoromopsis argentina* Gyeln., asexual morph unknown, lichenized, terrestrial, Argentina, see Lumbsch and Huhndorf (2010; outline), Thell et al. (2012; review), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Lebrun & Crous, asexual morph unknown, saprobes, terrestrial, South Korea, see Klaubauf et al. (2014; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and available cultures for the type: KUS (F) 22838; CBS 128308 = KACC 43081


**Neoscolecobasidium** Crous 2016, *Microthyriales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *N. agapanthi* Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22870, CPC 28778.

**Neoscytalidium** Crous & Slippers 2006, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, two species, type: *N. dimidiatum* (Penz.) Crous & Slippers, coelomycetous, sexual morph unknown, saprobes, pathogen, tropical and sub-tropical regions of Europe, Africa, Asia, North and South America, see Liu et al. (2012; phylogeny), Phillips et al. (2013; morphology, phylogeny, new comb. for type species), cultures and sequences are available, isotype and ex-isotype strain of the type species CBS H-7745; CBS 145.78.

**Neoseptoria** Quaedvlieg, Verkley & Crous 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *N. caricis* W. Quaedvlieg, G.J.M. Verkley & Crous, coelomycetous, sexual morph unknown, saprobes, terrestrial, Netherlands, see Quaedvlieg et al. (2013; morphology, phylogeny), sequence data available, holotype and ex-type strain of the type: CBS H-21293; CBS 135097.


**Neosergipea** M. Cáceres, Ertz & Aptroot 2016, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, one species, type: *N. aurata* (M. Cáceres, Ertz & Aptroot) Lücking, M. Gut. & Moncada, lichenized, terrestrial, tropical, see Lücking et al. (2016a,b; taxonomy, classification), cultures and sequences are available, holotype species ISE, Cáceres & Jesus 12539 (as *Sergipea aurata* M. Cáceres, Ertz & Aptroot).

**Neosetophoma** Gruyter, Aveskamp & Verkley 2010, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *N. samararum* (Desm.) Gruyter, Aveskamp & Verkley, asexual morph coelomycetous, saprobes and plant endophytes, terrestrial, aquatic, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), Li et al. (2015; phylogeny), Phookamsak et al. (2014; phylogeny), cultures and sequences are available, holotype and ex-type strains of type: CBS H-20319; CBS 138.96 = PD 82/653.

**Neospegazzinia** Petr. & Syd. 1936, *Ascomycota* genera *incertae sedis*, two species, type: *N. pulchra* Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Neosphaerellopsis  Crous & Trakun. 2014, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, one species, type: *N. thailandica* Crous & Trakun., on uredinio rust sori on leaves of *Bothriochloa bladhii*, terrestrial, Thailand, see Trakunyingcharoen et al. (2014; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type: CBS H-21847; CPC 21659.

Neosporidesmium  Mercado & J. Mena 1988, Ascomycota genera incertae sedis, two species, type: *N. maestrense* Mercado & J. Mena, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neostagonospora  Quaedv., Verkley & Crous 2013, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, two species, type: *N. carici* Quaedvieg., Verkley & Crous, coelomycetous, sexual morph unknown, saprobes, terrestrial, Netherlands, South Africa, see Quaedvlieg et al. (2013; morphology, phylogeny), Phookamsak et al. (2014; phylogeny), cultures and sequences are available, holotype and ex-type of the type: CBS H-21306; CBS 135092.

Neostrelitziana  Crous & M.J. Wingf. 2015, Chaetothyriales genera incertae sedis, Sordariomycetes, one species, type: *N. acacigena* Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, Malaysia, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22232, CPC 24873.

Neosulcatispora  Crous & M.J. Wingf. 2015, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, two species, type: *N. agave* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, France, see Crous et al. (2015, 2016; new species, phylogeny), Wijayawardene et al. (2016, 2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22404, CPC 26407.

Neotapesia  E. Müll. & Hütter 1963, Dermataceae, Helotiales, Leotiomycetes, three species, type: *N. graddonii* E. Müll. & Hütter, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen and cultures for the type: CBS H-200; CBS 690.82.

Neothyrorida  Petr. 1934, Sordariomycetes genera incertae sedis, one species, type: *N. moravica* Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Kocourková (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Neothyronectria  Crous & Thangavel 2016, Hypocreales genera incertae sedis, Sordariomycetes, one species, type: *N. sophorae* Crous & Thangavel, coelomycetous, sexual morph unknown, saprobes, terrestrial, New Zealand, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22880, CPC 29690.

Neotrimmatostroma Quaedvl. & Crous 2014, Teratosphaeriaceae, Capnodiales, Dothideomycetes, three species, type: N. excentricum (B. Sutton & Ganapathi) Quaedvl. & Crous, with hyphomycetous asexual morph, foliicolous, terrestrial, Australia, New Zealand, see Quaedvlieg et al. (2014; morphology, phylogeny), Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype of sexual morph of the type: CBS H-19829, ex-type strain of the type: CPC 13092.


Neottiea Cooke Sacc. 1889, Pyronemataceae, Pezizales, Pezizomycetes, 13 species, type: N. albocincta (Berk. & M.A. Curtis) Sacc., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Neottiospora Desm. 1843, Ascomycota genera incertae sedis, two species, type: N. caricum Desm., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Neottiosporina Subram. 1961, Ascomycota genera incertae sedis, eleven species, type: N. apoda (Speg.) Subram., sexual morph unknown, saprobes, terrestrial, Asia, Australia, South America, see De Gruyter et al. (2009; phylogeny), Wijayawardene et al. (2012, 2016; outline), Trakunyingcharoen et al. (2014; phylogeny), cultures and sequences are available for one species (N. paspali).

Neotyphodium Glenn, C.W. Bacon & Hanlin 1996, Clavicipitaceae, Hypocreales, Sordariomycetes, three species, type: N. coenophialum (Morgan-Jones & W. Gams) Glenn, C.W. Bacon & Hanlin, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, available specimen and culture for type: CBS H-3511; CBS 494.82.

Neournula Paden & Tylutki 1969, Chorioactidaceae, Pezizales, Pezizomycetes, two species, type: N. nordmanensis Paden & Tylutki, asexual morph unknown, saprobes, terrestrial, USA, Europe, North Africa, see Pfister et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), cultures and sequences are available but lacks for the type species, holotype of type: WSP 56281.

Neoventuria Syd. & P. Syd. 1919, Dothideomycetes genera incertae sedis, two species, type: N. argentinensis (Speg.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Neophyythia Petr. 1958, Ascomycota genera incertae sedis, one species, type: N. nectrioides (Petr.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Iran, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Nephrroma Ach. 1809, Nephromataceae, Peltigerales, Lecanoromycetes, 36 species, type: N. polaris (Ach.) Ach., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Nephrumopsis Müll. Arg. 1891, Parmeliaceae, Lecanorales, Lecanoromycetes, 24 species, type: N. stracheyi (C. Bab.) Müll. Arg., asexual morph unknown, lichenized, terrestrial,
sequence data for type species), Jones et al. (2015; outline), Kirk et al. (2013; genus accepted), Randlane et al. (2013; new species), Lücking et al. (2016; classification), sequences are available, needs generic revision.


**Neta** Shearer & J.L. Crane 1971, *Ascomycota* genera *incertae sedis*, two species, type: *N. patuxentica* Shearer & J.L. Crane, hyphomycetous, sexual morph unknown, saprobes, terrestrial and aquatic, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: ILLS 34520, needs generic revision.

**Neurospora** Shear & B.O. Dodge 1927 (= *Chrysonilia* Arx 1981 *fide* Réblová et al. 2016), *Sordariaceae, Sordariales, Sordariomycetes*, 52 species, type: *N. sitophila* Shear & B.O. Dodge, asexual morph formerly named in *Chrysonilia*, saprobes, terrestrial, worldwide, see Villalta et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Nygren et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available for type species, needs generic revision.

**Nevesia** P.M. Jørg, L. Lindblom, Wedin & S. Ekman 2014, *Pannariaceae, Peltigerales, Lecanoromycetes*, one species, type: *N. sampaiana* (Tavares) P.M. Jørg., L. Lindblom, Wedin & S. Ekman, lichenized, terrestrial, worldwide, see Ekman et al. (2014; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Nidulispora** Nawawi & Kuthub. 1990, *Ascomycota* genera *incertae sedis*, one species, type: *N. quadrifida* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Malaysia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Nidulispora** Nawawi & Kuthub. 1990, *Ascomycota* genera *incertae sedis*, one species, type: *N. quadrifida* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Niebla** Rundel & Bowler 1978, *Ramalinaceae, Lecanorales, Lecanoromycetes*, 22 species, type: *Niebla homalea* (Ach.) Rundel & Bowler, lichenized, New World, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Niesslia** Auersw. 1869, *Niessliaceae, Hypocreales, Sordariomycetes*, 42 species, type: *N. chaetomium* (Corda) Auersw., asexual morph unknown, lichenicolous, parasitizing members of *Peltigerales*, terrestrial, Australia, Asia and Europe, see Etayo and Sancho (2008; three new species), Motiejūnaitė et al. (2008; Poland), Zhurbenko and Dillman (2010; Alaska), Etayo et al. (2013; new species), Himelbrant et al. (2014; Russia), Judith et al. (2015; phylogeny), Zhurbenko and Pino-Bodas (2015; New Zealand), sequence data available for *Niesslia exilis*. 
**Nigrocornus** Ryley & Langdon 2003, *Clavicipitaceae, Hypocreales, Sordariomycetes*, one species, type: *N. scleroticus* (Pat.) Ryley, asexual morph contains simple conidiophores, endophytes, terrestrial, Africa, SE Asia, Australia, see Cheplick & Faeth (2009; ecology), Wijayawardene et al. (2012, 2017; outline), Panka et al. (2013; Poland), Maharachchikumbura et al. (2015, 2016; outline), DNA sequence data available (as *Balansa sclerotica*), culture data unavailable, neotype of the type species FH (Farlow Herbarium).

**Nigrolentilocus** R.F. Castañeda & Heredia 2001, *Ascomycota* genera incertae sedis, five species, type: *N. africanaus* (B. Sutton) R.F. Castañeda & Heredia, hyphomycetous, sexual morph unknown, saprobes, terrestrial & aquatic, Malawi, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Monteiro et al. (2014; Brazil), cultures and sequences are unavailable, holotype of type: IMI 347112a, compare with *Matsushimiella, Minimelanolocus, Pseudospiropes, Spiropes* and *Symposioplanus*.

**Nigromacula** Etayo 2002, *Ascomycota* genera incertae sedis, one species, type: *N. hypotrichynae* Etayo, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, South America, Europe, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: COL Etayo 16185.

**Nigromammilla** K.D. Hyde & J. Fröhl. 2003, *Sordariomycetes* genera incertae sedis, one species, type: *N. calami* K.D. Hyde & J. Fröhl. [as 'Nigramammilla calami'], asexual morph unknown, saprobes, terrestrial, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: HKU (M) JF212.


**Nigrosabulum** Malloch & Cain 1970, *Hypocreales* genera incertae sedis, *Sordariomycetes*, twelve species, type: *N. globosum* Malloch & Cain, asexual morph aceremonium-like, saprobes, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted in *Bionectriaceae*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; accepted in *Hypocreales*), cultures and sequences are available, holotype of type species TRTC 43288.

**Nigrospora** Zimm. 1902, *Sordariomycetes*, genera incertae sedis, four species, type: *N. panici* Zimm., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Nigrovelthelium** Lücking, M.P.Nelsen & Aptroot 2016, *Trypetheliaceae, Trypetheliales, Dothideomycetes*, two species, type: *N. tropicum* (Ach.) Lücking, M.P. Nelsen & Aptroot, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Aptroot and Lücking (2016; monograph), Lücking et al. (2016c; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, lectotype and iso-lectotype of type: H-ACH 707A; BM-ACH.


lichenized, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species VAB (Lich.) 7546.

*Nipholepis* Syd. 1935, *Arthoniales* genera *incertae sedis*, *Arthoniomyces*, one species, type: *N. filicina* Syd., lichenized, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Nipicola* K.D. Hyde 1992, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, four species, type: *N. carbospora* K.D. Hyde, asexual morph unknown, saprobes, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Nipponoparmelia* (Kurok.) K.H. Moon, Y. Ohmura & Kashiw. 2010, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *N. laevior* (Nyl.) K.H. Moon, Y. Ohmura & Kashiw., asexual morph unknown, lichenized, terrestrial, Argentina, see Crespo et al. (2010; taxonomy, phylogeny), Kondratyuk et al. (2013; new species), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available, needs generic revision.

*Nipterella* Starbäck ex Dennis 1962, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *N. duplex* (Starbäck) Starbäck & Dennis, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type species, needs generic revision.

*Nipterella* Starbäck ex Dennis 1962, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *N. duplex* (Starbäck) Starbäck & Dennis, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Nitidochapsa* Parmen., Lücking & Lumbsch 2013, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *N. leprieurii* (Mont.) Parmen., Lücking & Lumbsch, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Parmen et al. (2013; genus proposed), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.


*Nodulosphaeria* Rabenh. 1858, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, c. 52 species, type: *N. hirta* Rabenh., asexul morph coelomycetous, saprobes, terrestrial, aquatic, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Zang et al. (2012; taxonomy), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline, phylogeny), Ariyawansa et al. (2015; new species, Italy), Li et al. (2015; new species, phylogeny, asexual morph), Hyde et al. (2016; new species, Italy), Mapook et al. (2016; new species, revision), cultures and sequences are available.

Nomuraea Maubl. 1903, Clavicipitaceae, Hypocreales, Sordariomycetes, one species, type: *N. prasina* Maubl., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Noosia Crous, R.G. Shivas & McTaggart 2011, Pleosporales genera incertae sedis, Dothideomycetes, one species, type: *N. banksiae* Crous, R.G. Shivas & McTaggart, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Crous et al. (2011; morphology, DNA), Wijayawardene et al. (2012, 2014; outline), holotype and ex-type: of the type CBS H-20587; CPC 17282 = CBS 129526.

Normandina Nyl. 1855, Verrucariaceae, Verrucariales, Eurotiomycetes, three species, type: *N. jungermanniae* (Nyl.) Nyl., asexual morph unknown, lichenized, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Ascomycota), Kirk et al. (2013; genus accepted), Muggia et al. (2010; phylogeny), Frisch and Ohmura (2015; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

Norrlinia Theiss. & Syd. 1918, Verrucariaceae, Verrucariales, Eurotiomycetes, one species, type: *N. peltigericola* (Nyl.) Theiss. & Syd., asexual morph unknown, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for the type species, needs generic revision.

Nosophloea Fr. 1849, Ascomycota genera incertae sedis, three species, type: need typification, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Nothomitra Maas Geest. 1964, Leotiomyctes genera incertae sedis, three species, type: *N. cinnamomea* Maas Geest, asexual morph unknown, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hustad et al. (2016; taxonomy, phylogeny), cultures and sequences are available, needs generic revision.

Nothophacidium J. Reid & Cain 1962, Dermateaceae, Helotiales, Leotiomyctes, one species, type: *N. abietinellum* (Dearn.) J. Reid & Cain, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: DAOM herb. J. Dearnest 5748, needs generic revision.

Nothophoma Q. Chen & L. Cai 2015, Didymellaceae, Pleosporales, Dothideomycetes, six species, type: *N. infossa* (Ellis & Everh.) Q. Chen & L. Cai, coelomycetous, saprobes, terrestrial, cosmopolitan, see Chen et al. (2015; taxonomy, phylogeny), Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), neotype and ex-neotype culture of the type: CBS H-20145, CBS 123395.

Nothorhytisma Minter, P.F. Cannon, A.I. Romero & Peredo 1998, Rhytismataceae, Rhytismatales, Leotiomyctes, three species, type: *N. nahueltitae* Minter, P.F. Cannon, A.I. Romero & Peredo, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: BAFC, needs generic revision.

Nothospora Peyronel 1913, Ascomycota genera incertae sedis, one species, type: *N. ambiguca* Peyronel, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Seifert et
al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Notocladonia** S. Hammer 2003, *Cladoniaceae, Lecanorales, Lecanoromycetes*, two species, type: *N. cochleata* (Müll. Arg.) S. Hammer, asexual morph unknown, lichenized, terrestrial, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Notoleciidea** Hertel 1984, *Lecanoromycetes* genera incertae sedis, one species, type: *N. subcontinua* (Nyl.) Hertel, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Notoparmelia** A.Crespo, Ferencova & Divakar 2014, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 16 species, type: *N. signifera* (Nyl.) A. Crespo, Ferencova & Divakar, lichenized, Australasia, see Ferencova et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type: F, ISE.

**Novozymia** W.P. Wu 2005, *Ascomycota* genera incertae sedis, one species, type: *N. elegans* W.P. Wu, hyphomycetous, sexual morph unknown, saprobes, terrestrial, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Nummospora** E. Müll. & Shoemaker 1964, *Ascomycota* genera incertae sedis, one species, type: *N. hexamera* E. Müll. & Shoemaker, coelomycetous, sexual morph unknown, saprobes, terrestrial, Switzerland, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Nusia** Subram. 1995, *Ascomycota* genera incertae sedis, two species, type: *N. scheeleae* Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Nyctalospora** E.F. Morris 1972, *Ascomycota* genera incertae sedis, one species, type: *N. compacta* E.F. Morris, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Costa Rica, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Nycteromyces** Thaxt. 1917, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, one species, type: *N. streblidinus* Thaxt., asexual morph unknown, biotrophic, only known from *Streblia wiedemannii*, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Nymanomyces** Henn. 1899, *Rhytismataceae, Rhytismales, Leotiomyces*, one species, type: *N. aceris-laurini* Henr., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Nyungwea** Sérus., Eb. Fisch. & Killmann 2006, *Opegraphaceae, Arthoniales, Arthoniomyces*, one species, type: *N. pallida* Sérus., Eb. Fischer & Killmann, lichenized,
terrestrial, see Lumbsch and Huhndorf (2010; outline), Frisch et al. (2014; phylogeny), sequences are available.

**Obeliospora** Nawawi & Kuthub. 1990. *Ascomycota* genera *incertae sedis*, three species, type: *O. basisspira* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Obolarina** Pouzar 1986, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *O. dryophila* (Tul. & C. Tul.) Pouzar, asexual morph hyphomycetous (rhinocladiella-like), saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Pazoutova et al. (2010; DNA, phylogeny), Mirabolfathy et al. (2013; new species, Iran), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: H76, needs generic revision.

**Obyrzum** Wallr. 1825, *Obyrzaceae*, *Ascomycota* family *incertae sedis*, two species, type: *O. corniculatum* (Hoffm.) Wallr., assexual morph unidentified, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Obstipipilus** B. Sutton 1968, *Ascomycota* genera *incertae sedis*, one species, type: *O. malabaricus* (T.S. Ramakr. & K. Ramakr.) B. Sutton, coelomycetous, sexual morph unknown, pathogens, terrestrial, India, see Wijayawardene et al. (2012, 2016; outline, morphology), cultures and sequences are unavailable, holotype of the type: IMI 110502.

**Obstipspora** R.C. Sinclair & Morgan-Jones., 1979, *Ascomycota* genera *incertae sedis*, one species, type: *O. chewaclensis* R.C. Sinclair & Morgan-Jones, sexual morph unknown, submerged decaying leaves, Alabama, see Wijayawardene et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: BPI.

**Obsectodiscus** E. Müll., Petrini & Samuels 1980, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, two species, type: *O. aquaticus* E. Müll., Petrini & Samuels, asexual morph unknown, saprobes, terrestrial, Switzerland, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ocala** Raja & Shearer 2009, *Natipusillales* genera *incertae sedis*, *Dothideomycetes*, one species, type: *O. scalariformis* Raja & Shearer, submerged wood, Florida, see Raja et al. (2009; genus proposed), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeosphaeriacae*), Shearer et al. (2009; phylogeny), Wijayawardene et al. (2014; accepted as a genus in Dothideomycetes), Raja et al. (2015; phylogeny), cultures and sequences are available, holotype of type: F121-1, ILL


**Occulitheca** J.D. Rogers & Y.M. Ju 2003, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *O. costaricensis* J.D. Rogers & Y.M. Ju, asexual morph unknown, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: INB Rogers, needs generic revision.

**Occulotocarpon** L.C. Mejía & Zhu L. Yang 2012, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *O. ailaoshanense* L.C. Mejía & Zhu L. Yang, asexual morph unknown, saprobes, terrestrial, China, see Mejía et al. (2012; taxonomy),...
Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type cultures of the type: BPI 879253, LCM524.01.  
**Oceanitis** Kohlm. 1977, *Halosphaeriaceae, Microascales, Sordariomycetes*, four species, type: *O. scuticella* Kohlm., asexual morph unknown, saprobes, freshwater or marine, worldwide, see Dupont et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequence data available for all species, holotype of type: J.K. 2971a, not found in NYBG.  
**Ocellomma** Ertz & Tehler 2015, *Roccellaceae, Arthoniales, Arthoniomycetes*, one species, type: *O. picconianum* (Bagl.) Ertz & Tehler, sexual morph with apothecioid ascomata, lichenized, terrestrial, Mediterranean, see Ertz et al. (2014; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available, lectotype and ex-type strain of type: Ertz 17143; 17132.  
**Ocellularia** G. Mey. 1825, *Graphidaceae, Ostropales, Lecanoromycetes*, 400 species, type: *O. obturata* (Ach.) Spreng., asexual morph unknown, lichenized fungi, terrestrial, tropical, see Mangold et al. (2009; key, Australia), Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; phylogeny), Sipman et al. (2012; key, Costa Rica), Kirk et al. (2013; genus accepted), Lücking (2014; key), Lücking et al. (2014, 2016; classification, phylogeny), cultures and sequences are available, needs generic revision.  
**Ochotrichobolus** Kimbr. & Korf 1983, *Thelebolaceae, Thelebolales, Leotiomyces*, one species, type: *O. polysporus* Kimbr. & Korf, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: CUP 59844.  
**Ochrocladosporium** Crous & U. Braun 2007, *Pleosporales genera incertae sedis, Dothideomycetes*, three species, type: *O. elatum* (Harz) Crous & U. Braun, hyphomycetous, terrestrial, Africa, Europe, see Hyde et al. (2011; outline), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.  
**Ochrolechia** A. Massal. 1852, *Ochrolechiaceae, Pertusariales, Lecanoromycetes*, 60 species, type: *O. tartarea* (L.) A. Massal., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2015; new species), sequence are available for the type, needs generic revision.  
**Ochronectria** Rossman & Samuels 1999, *Bionectriaceae, Hypocreales, Sordariomycetes*, three species, type: *O. calami* (Henn. & E. Nyman) Rossman & Samuels, asexual morph unknown, saprobes, terrestrial, Asia, South America, see Guu et al. (2010; Taiwan), Pinruan et al. (2010; Thailand), Luo and Zhuang (2010; China), Li et al. (2016; new species), cultures and sequences are available, holotype and culture data unavailable.  
**Ocostaspora** E.B.G. Jones, R.G. Johnson & S.T. Moss 1983, *Halosphaeriaceae, Microascales, Sordariomycetes*, one species, type: *O. apihongissima* E.B.G. Jones, R.G. Johnson & S.T. Moss, asexual morph unknown, saprobes, marine, Wales, Denmark, temperate, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Octopodotus** Kohlm. & Volkm.-Kohlm. 2003. *Ascomycota* genera *incertae sedis*, one species, type: *O. stupendous* Kohlm. & Volkm.-Kohlm., coelomycetous, sexual morph unknown, saprobes, marine, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Octospora** Hedw. 1789. *Pyronemataceae*, *Pezizales*, *Pezizales*, c. 60 species, type: *O. leucoloma* Hedw., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Octosporella** Döbbeler 1980, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, nine species, type: *O. jungermanniarum* (P. Crouan & H. Crouan) Döbbeler, asexual morph unknown, on mosses and liverworts, terrestrial, Europe, Venezuela, see Lumbsch and Huhndorf (2010; outline), Stentroos et al. (2010; DNA), Döbbeler (2011; new species, Costa Rica and French Guiana), Kirk et al. (2013; genus accepted), Kondratyuk et al. (2015; new species), cultures and sequences are available, needs generic revision.


**Odontodictyospora** Mercado 1984. *Ascomycota* genera *incertae sedis*, one species, type: *O. comasii* Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Odontotrema** Nyl. 1858. *Odontotremales*, *Ostropales*, *Lecanoromycetes*, c. seven species, type: *O. phacidioides* Nyl., asexual morph unknown, lichenized, temperate, see Baloch et al. (2010; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Zhurbenko (2010; new species), sequences are available.

**Oedocephalum** Preuss 1851, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, ten species, type: *O. elegans* Preuss, hyphomycetous, sexual morph unknown, saprobes, hypogeous, terrestrial, worldwide, see Davison et al. (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), cultures and sequences are available for the type species, needs generic revision.

**Oedohysterium** E.W.A. Boehm & C.L. Schoch 2009, *Hysteriaceae*, *Hysteriales*, *Dothideomycetes*, three species, type: *O. insidens* (Schwein.) E. Boehm & C.L. Schoch, saprobes, terrestrial, North and South America, Europe, South Africa, China, see Boehm et al. (2009; generic review), Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

**Oedothea** Syd. 1930, *Ascomycota* genera *incertae sedis*, one species, type: *O. vismiae* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et
al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Oevstedalia** Ertz & Diederich 2004, *Ascomycota* genera *incertae sedis*, one species, type: *O. antarctica* (C.W. Dodge) Ertz & Diederich, sexual morph peritheciod, asexual morph represented by true ascoconidia, lichenized, on wood, rock, detritus and whale bones, Antarctica, probably endemic, first lichenized ascomycete known to produce true ascoconidia, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of the type: Follmann 14173 (FH-Dodge).

**Ogataea** Y. Yamada, K. Maeda & Mikata 1994, *Pichiaceae*, *Saccharomycetales*, Saccharomycetes, 40 species, type: *O. minuta* (Wickerham) Y. Yamada, K. Maeda & Mikata, asexual reproduction is by multilateral budding, saprophytic, soil, flowers, tree leaves, tree sap, rotted wood, insect frass in trees and other plants, animal feces, fruit of osage orange, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Ohleria** Fuckel 1868, *Melanommataceae*, *Pleosporales*, Dothideomycetes, 13 species, type: *O. modesta* Fuckel, asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tian et al. (2015; morphology, nomenclature, phylogeny), cultures and sequences are unavailable, holotype of type species *Rhenani exsiccati* 2173 present in G, needs generic revision.

**Ohleriella** Earle 1902, *Delitschiaceae*, *Pleosporales*, Dothideomycetes, one species, type: *O. neomexicana* Earle, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Delitschiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Oidiodendron** Robak 1932, *Myxotrichaceae*, Leotiomyces families *incertae sedis*, two species, type: *O. fuscum* Robak, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for type: CBS 238.31, MUCL 1057, needs generic revision.

**Oidium** Link 1824, *Erysiphaceae*, *Erysiphales*, Leotiomyces, 300 species, type: *Oidium moniliioides* (Nees) Link, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Ojibwaya** B. Sutton 1973, *Ascomycota* genera *incertae sedis*, one species, type: *O. perpulchra* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Belarus, Canada, Malawi, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: IMI 132708.


**Oleoguttula** Selbmann & de Hoog 2014, *Teratosphaeriaceae*, Capnodiales, Dothideomycetes, one species, type: *O. mirabilis* Selbmann & de Hoog, sexual morph unknown, rock-
inhabiting fungus, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 136102 = CCFEE 5523.

**Oletheriostrigula** Huhndorf & R.C. Harris 1996, *Strigulaceae, Strigulales, Dothideomycetes*, one species, type: *O. papulosa* (Durieu & Mont.) Huhndorf & R.C. Harris, asexual morph unknown, lichenized, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Olla** Velen. 1934, *Hyaloscyphaceae, Helotiaceae, Leotiomycetes*, twelve species, type: *O. ulmariae* Velen., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Olpitrichum** G.F. Atk. 1894, *Ascomycota* *genera incertae sedis*, three species, type: *O. carpophillum* G.F. Atk., hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Osmundson et al. (2013; DNA), cultures and sequences are available.

**Ombrophila** Fr. 1849, *Helotiaceae, Helotiales, Leotiomycetes*, eleven species, type: *O. violacea* (Hedw.) Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Osmundson et al. (2013; DNA), cultures and sequences are available.

**Omega** B. Sutton & Minter 1988, *Ascomycota* *genera incertae sedis*, one species, type: *O. coenobicicum* B. Sutton & Minter, coelomycetous, sexual morph unknown, saprobes, terrestrial, Greece, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species IMI 326014.

**Ommatomyces** Kohlm., Volkm.-Kohlm. & O.E. Erikss. 1995, *Xylariales* *genera incertae sedis, Sordariomycetes*, three species, type: *O. coronatus* Kohlm., Volkm.-Kohlm. & O.E. Erikss., asexual morph unknown, saprobes, marine or terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMS JK5509, needs generic revision.

**Omnidemptus** P.F. Cannon & Alcorn 1994, *Magnaporthaceae, Magnaporthales, Sordariomycetes*, one species, type: *O. affinis* P.F. Cannon & Alcorn, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: BRIP 17195.

**Omphalodium** Meyen & Flot. 1843, *Parmeliaceae, Lecanorales, Lecanoromycetes*, four species, type: *O. pisacomense* Meyen & Flot., asexual morph unknown, lichenized, terrestrial, North and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available.

**Omphalora** T.H. Nash & Hafellner 1990, *Parmeliaceae, Lecanorales, Lecanoromycetes*, one species, type: *O. arizonica* (Tuck. ex Willey) T.H. Nash & Hafellner, asexual morph unknown, lichenized, terrestrial, North America, see Crespo et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available.

**Omphalospora** Theiss. & Syd. 1915, *Dothideomycetes* *genera incertae sedis*, two species, type: *O. stellariae* (Lib.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.
**Oncocladium** Wallr. 1833, *Gymnoascaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *O. flavum* Wallr., hyphomycetous, sexual morph unknown, soilborne, Europe, Canada, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and cultures are unavailable, needs generic revision.

**Oncopodiella** G. Arnaud ex Rifai 1965, *Ascomycota* genera *incertae sedis*, 14 species, type: *O. trigonella* (Sacc.) Rifai, hyphomycetous, soilborne, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; accepted as valid genus), cultures and sequences are unavailable, cultures available for the type: CBS 126413, MUCL 52643, needs generic revision.

**Oncopodium** Sacc. 1904, *Ascomycota* genera *incertae sedis*, twelve species, type: *O. antoniae* Sacc. & D. Sacc., hyphomycetous, soilborne, Europe and North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; accepted as valid genus); cultures or cultures and sequences are unavailable, needs generic revision, needs generic revision.

**Oncospora** Kalchbr. 1880, *Ascomycota* genera *incertae sedis*, eight species, type: *O. bullata* Kalchbr. & Cooke, coelomycetous, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Oncosporella** P. Karst. 1887, *Ascomycota* genera *incertae sedis*, one species, type: *O. punctiformis* P. Karst. 1887, coelomycetous, Finland, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Oncostroma** Bat. & Marasas 1966, *Ascomycota* genera *incertae sedis*, one species, type: *O. toddaliae* Bat. & Marasas, hyphomycetous, South Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Onychochola** Sigler 1990, *Arachnomycetaceae*, *Arachnomycetales*, *Eurotiomycetes*, five species, type: *O. canadensis* Sigler, human pathogens, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are available, UTMB 3250, needs generic revision.


**Onygena** Pers. 1800, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *O. equina* (Willd.) Pers., asexual morph unknown, on feathers, bones, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Huang et al. (2015; DNA, protein degrading taxa), cultures and sequences are available, cultures available for the type species (Huang et al. 2013), type specimen of type species CBS H-15271.

**Oomyces** Berk. & Broome 1851, *Acrosporaceae*, *Acrosporales*, *Dothideomycetes*, ten species, type: *O. carneoalbus* (Lib.) Berk. & Broome, asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, need generic revision.

Oothyrium Syd. 1939, Ascomycota genera incertae sedis, one species, type: O. bytrosperseri Syd., coelomycetous, sexual morph unknown, Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Opegrapha Ach. 1809, Opegraphaceae, Arthoniales, Arthoniomycetes, but strongly polyphyletic, 300 species, type: O. vulgata (Ach.) Ach., asexual morph unknown, lichenized, saprobes, lichenicolous, terrestrial, worldwide, see Ertz et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Ophidiomyces Sigler, Hambl. & Paré 2013, Onygenaceae, Onygenales, Eurotiomycetes, one species, type: O. ophiidiicola (Guarro, Deanna A. Sutton, Wickes & Rajeev) Sigler, Hambleton & Paré, asexual morph unknown, pathogens on snakes, Northern America, see Sigler et al. (2013; taxonomy, phylogeny), Allender et al. (2015; pathogens), Cultures and sequences are available, cultures available for the type species UAMH 10717 (Sigler et al. 2013), needs generic revision.

Ophiodolus Riess 1854, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, one species, type: O. disseminans Riess, asexual morph coniothyrium-like; phoma-like, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Zang et al. (2012; taxonomy), Hyde et al. (2013; accepted as a genus in Phaeosphaeriaceae), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Ophioceras Sacc. 1883, Ophioceraceae, Magnaporthales, Sordariomycetes, 39 species, type: O. doliostomum (Berk. & M.A. Curtis) Sacc., saprobes, aquatic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Klaubauf et al. (2014; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Ophiociliomyces Bat. & I.H. Lima 1955, Ascomycota genera incertae sedis, one species, type: O. bauhinae Bat. & I.H. Lima, asexual morph unknown, from living leaves, tropical, see Lumbsch and Huhndorf (2010; outline), accepted as a genus in Meliaceae), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded the genus from Meliaceae), cultures and sequences are unavailable, needs generic revision.

Ophiocordyceps Petch 1931, Ophiocordycipitaceae, Hypocreales, Sordariomycetes, c. 200 species, type: O. blattae (Petch) Petch, asexual morph acremonium-like, on insects, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Evans et al. (2011; new species), Kirk et al. (2013; genus accepted), Wen et al. (2014; new species), Araújo et al. (2015; new species), Ban et al. (2015; new species), Kobmoo et al. (2015; new species), Lombard et al. (2015; new species, phylogeny), Sanjuan et al. (2015; new species), Spatafora et al. (2015; new species, nomenclature), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species), cultures and sequences are available, needs generic revision.


Ophiodiaiporthe  (Henn.) Höhn. 1910, Phyllachoraceae, Phyllachorales, Sordariomycetes, 31 species, type: O. atroacaulanas (Henn.) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hanlin and González (2013; new species), Fu et al. (2013; DNA), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Ophiodiaiporthe  Sawada & W. Yamam. 1959, Dothideomycetes genera incertae sedis, one species, type: O. theae Sawada & W. Yamam., asexual morph unknown, from leaves, terrestrial, India, Taiwan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Meliolaceae), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; outline, excluded the genus from Meliolaceae and placed in Dothideomycetes), cultures and sequences are unavailable, needs generic revision.

Ophiomassaria Jacz. 1894, Sordariomycetes genera incertae sedis, one species, type: O. selenospora (G.H. Otth) Jacz., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Ophiomeliola Starbäck 1899, Sordariomycetes genera incertae sedis, four species, type: O. lindmanii Starbäck, asexual morph unknown, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in Sordariomycetes), cultures and sequences are unavailable, needs generic revision.

Ophiomeliola Starbäck, asexual morph unknown, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in Sordariomycetes), cultures and sequences are unavailable, needs generic revision.

Ophiomeliola Starbäck, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in Sordariomycetes), cultures and sequences are unavailable, needs generic revision.

Ophiomeliola Starbäck, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in Sordariomycetes), cultures and sequences are unavailable, needs generic revision.

Ophiomeliola Starbäck, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in Sordariomycetes), cultures and sequences are unavailable, needs generic revision.

Ophiomeliola Starbäck, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in Sordariomycetes), cultures and sequences are unavailable, needs generic revision.

Ophiomeliola Starbäck, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in Sordariomycetes), cultures and sequences are unavailable, needs generic revision.

Ophiomeliola Starbäck, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in Sordariomycetes), cultures and sequences are unavailable, needs generic revision.

Ophiomeliola Starbäck, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in Sordariomycetes), cultures and sequences are unavailable, needs generic revision.

Ophiomeliola Starbäck, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Perisporiopsidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Hongsanan et al. (2015; accepted as a genus in Sordariomycetes), cultures and sequences are unavailable, needs generic revision.

**Ophiosira** Petr. 1955, *Ascomycota* genera *incertae sedis*, one species, type: *O. austriaca* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ophiopsphaerella** Speg. 1909, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, ten species, type: *O. graminicola* Speg., asexual morph wojnowicia-like, saprobes, terrestrial, aquatic, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Zang et al. (2012; taxonomy), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline, phylogeny), Ariyawansa et al. (2015; new species, phylogeny), cultures and sequences are available.

**Ophiostoma** Syd. & P. Syd. 1919, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, c. 230 species, type: *O. piliferum* (Fr.) Syd. & P. Syd., saprobes, worldwide, see Linnakoski et al. (2008, 2010; new species), Kamgan Nkuekam et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Beer et al. (2013; new species), Kirk et al. (2013; genus accepted), Romón et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Oribacula** Cooke 1871, *Pyrinemataceae*, *Pezizales*, *Pezizomycetes*, one species, type: *O. cyclospora* Cooke, asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Oribilia** Fr. 1836, *Oribiliaceae*, *Orbiliales*, *Orbiliomycetes*, c. 75 species, type: *O. leucostigma* (Fr.) Fr., asexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Zhang et al. (2009; new species, China), Lumbsch and Huhndorf (2010; outline), Su et al. (2011; new species, China), Quijada et al. (2013; new species, Spain), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Orbiopsis** (Sacc. & D. Sacc.) Syd. & P. Syd. 1924, *Helotiaceae* genera *incertae sedis*, *Leotiomyces*, two species, type: *O. colesporioides* (Sacc.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available but lacks for the type species, needs generic revision.

**Orbimycetes** Linder 1944, *Ascomycota* genera *incertae sedis*, one species, type: *O. spectabilis* Linder, sexual morph unknown, hyphomycetous, marine, see Jones et al. (2008; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk (2013; genus accepted), cultures and sequences are available, holotype of type: CBS H-15318.


**Orcadia** G.K. Sutherl. 1914, *Ascomycota* genera *incertae sedis*, one species, type: *O. ascosphylli* G.K. Sutherl., asexual morph unknown, marine, on brown algae, terrestrial, UK, Norway, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Pezizales*), Kirk
et al. (2013; genus accepted), Jones et al. (2015; outline, maine), cultures and sequences are unavailable, cultures and sequences are unavailable, needs generic revision.

**Orceolina** Hertel 1970, *Trapeliaceae*, *Trapeliales*, *Lecanoromycetes*, two species, type: *O. kerguelensis* (Tuck.) Hertel, asexual morph unknown, lichenized, terrestrial, subantarctic islands, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Kantvilas et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available, needs generic revision.

**Orcularia** (Malme) Kalb & Giralt 2011, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, four species, type: *O. insperata* (Nyl.) Kalb & Giralt, asexual morph present (in the original description, authors mentioned that genus has filiform conidia), lichenized, terrestrial, worldwide, see Kalb and Giralt (2011; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.


**Oropogon** Th. Fr. 1861, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 30 species, type: *Oropogon laxensis* (Fée) Th. Fr., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Leavitt et al. (2012; diversity in Neotropical), Kirk et al. (2013; genus accepted), Divakar et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, voucher specimen for the type: Nelson 4197A (F).

**Orphanocoela** Nag Raj 1989, *Ascomycota* genera *incertae sedis*, three species, type: *O. calamagrostidis* (H.C. Greene) Nag Raj, coelomycetous, sexual morph unknown, pathogens, terrestrial, USA, Africa, Colombia, Mexico, Nicaragua, Mexico, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; morphology), cultures and sequences are unavailable, holotype of the type species unavailable.

**Orphniospora** Körb. 1874, *Elixiaceae*, *Umbilicariales*, *Lecanoromycetes*, three species, type: *O. groenlandica* Körb., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Leavitt et al. (2012; diversity in Neotropical), Kirk et al. (2013; genus accepted), Bilovitz and Mayrhofer (2014; new records in Vorarlberg, Australia), cultures and sequences are unavailable, needs generic revision.

**Orphnodactylis** Malloch & A. Mallik 1998, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, 31 species, type: *O. kalmiae* Malloch & A. Mallik, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Orromyces** B. Sur & G.R. Ghosh 1987, *Gymnoascaceae*, *Onygenales*, *Eurotiomycetes*, four species, type: *O. spiralis* B. Sur & G.R. Ghosh, asexual morph chrysosporium-like, saprobes, from soil, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Orthobellus** A.A. Silva & Cavalc. 1973, *Dothideomycetes* genera *incertae sedis*, three species, type: *O. leguminosarum* A.A. Silva & Cavalc., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Schizothyriaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus
in Schizothyriaceae), Wijayawardene et al. (2014; outline, accepted as a genus in Schizothyriaceae), Phookamsak et al. (2015; taxonomy, transferred to Dothideomycetes genera incertae sedis), cultures and sequences are unavailable.

Oscarbrefeldia Holterm. 1898, Saccharomyces genera incertae sedis, one species, type: O. pellucida Holterm., information unavailable, see Kirk et al. (2008; genus accepted in Saccharomyces), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Osorionymyces Terada 1981, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: O. rhizophorus Terada, asexual morph unknown, biotrophic, terrestrial, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ostracodermium Mukerji 1973, Ascomycota genera incertae sedis, one species, type: O. serentinum (J.N. Rai & J.P. Tewari) Mukerji, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ostreichnion Duby 1861, Hysteriales, Dothideomycetes, three species, type: O. americanum Duby, asexual morph unknown, saprobes, terrestrial, Atlantic, China, see Boehm et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Ostreola Darker 1963, Mytiliniaceae, Mytiliniidae, Dothideomycetes, twelve species, type: O. consociata Darker, asexual morph septonema-like, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Mytiliniidae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Ostropa Fr. 1825, Stictidaceae, Ostropales, Lecanoromycetes, one species, type: O. barbara (Fr.) Nannf., asexual morph unknown, lichenized, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), available specimen and cultures for the type: CBS H-15322; AFTOL-ID 77.

Oswaldina Rangel 1921, Ascomycota genera incertae sedis, one species, type: O. icarayensis Rangel, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in Phyllachoraceae), Kirk et al. (2017; not accepted in Phyllachoraceae), cultures and sequences are unavailable, needs generic revision.

Otidea (Pers.) Bonord. 1851, Pyronemataceae, Pezizales, Pezizomycetes, 40 species, type: O. onotica (Pers.) Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Carbone and Van Vooren (2011; new species), Kirk et al. (2013; genus accepted), Olariaga et al. (2015; taxonomy, monograph), cultures and sequences are available, epitype and cultures are available for the type species KH.10.284 (S - epitype); KH.10.284.

Otthia Nitschke ex Fuckel 1870, Dothideomycetes genera incertae sedis, eleven species, type: O. spiraeeae (Fuckel) Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, cultures available for the type: HKUCC 10896 (unpublished), needs generic revision.

Otwaya G.W. Beaton 1978, Hyaloscyphaceae, Helotiales, Leotiomycetes, twelve species, type: O. verruculospora G.W. Beaton, asexual morph unknown, saprobes, or endophytes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Oxidendron Sigler & J.W. Carmich. 1976, Ascomycota genera incertae sedis, one species, type: O. sulphureo-ochraceum (J.F.H. Beyma) Sigler & J.W. Carmich., hyphomycetous, sexual morph unknown, from human, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Oviascoma Y.J. Yao & Spooner 1996, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: O. paludosum (Dennis) Y.J. Yao & Spooner, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ovicuculispora Etayo 2010, Bionectriaceae, Hypocreales, Sordariomycetes, two species, type: O. parmeliae Etayo, asexual morph unknown, lichenicolous, terrestrial, tropical, see Etayo (2010; morphology), cultures and sequences are available, needs generic revision.

Ovolinia F.A. Weiss 1940 (= Ovulitix N.F. Buchw 1970 fide Johnston et al. 2014), Sclerotiniaceae, Helotiales, Leotiomycetes, nine species, type: O. azaleae F.A. Weiss, asexual morph formerly named in Ovolitis, saprobes, terrestrial, Europe, North America, see Etayo (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.


Oxodeora K.D. Hyde & P.F. Cannon 1999, Phyllachoraceae, Phyllachorales, Sordariomycetes, one species, type: O. petrakii (Cif.) K.D. Hyde & P.F. Cannon, asexual morph unknown, on living palm leaves, terrestrial, Caribbean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Oxydothis Penz. & Sacc. 1898, Xylariaceae genera incertae sedis, Sordariomycetes, 31 species, type: O. grisea Penz. & Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species, needs generic revision.

Paathramaya Subram. 1956, Ascomycota genera incertae sedis, five species, type: P. sundara Subram., hyphomycetous, sexual morph unknown, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type: CBS H-194, need generic revision.

Pachnolepia A. Massal. 1855, Arthoniaceae, Arthoniales, Arthoniomycetes, one species, type: P. pruinata (Pers.) Frisch & G. Thor, lichenized, see Frisch et al. (2014a; reinstated), Lücking et al. (2016; classification), sequences are available, need generic revision.

Pachyascus Poelt & Hertel 1968, Pachyascaceae, Lecanorales, Lecanoromycetes, one species, type: P. lapponicus Poelt & Hertel, asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

Pachycladina Marvanová 1987, Ascomycota genera incertae sedis, three species, type: P. mutabilis Marvanová, hyphomycetous, sexual morph unknown, Europe, North America, see
Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

**Pachycudonia** S. Imai 1950, Cudoniaceae, Rhytismatales, Leotiomyctes, one species, type: *P. constrictospora* (S. Ito & S. Imai) S. Imai, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ge et al. (2014; phylogeny, synonym of *Cudonia*), cultures and sequences are available, needs generic revision.

**Pachydisca** Boud. 1885, Helotiaceae, Helotiales, Leotiomyctes, one species, type: *P. guernisacii* (P. Crouan & H. Crouan) Boud., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

**Pachyella** Boud. 1907, Pezizaceae, Pezizales, Pezizomycetes, 19 species, type: *P. barlaeana* (Bres.) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Healy et al. (2009; species in USA and Mexico), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

**Pachypatella** Theiss. & Syd. 1915, Parmulariaceae, Dothideomycetes families incertae sedis, one species, type: *P. alsophilae* (Racib.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, Brazil, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype and isotype of type species KRAM?; S F9863.

**Pachypelitis** Söchting, Arup & Frödén 2013, Teloschistaceae, Teloschistales, Leconoromycetes, four species, type: *P. castellana* (Rässänen) Sochting, Frödén & Arup, asexual morph unknown, lichenized, terrestrial, Europe, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pachyphalodes** Zobel 1854, Pezizaceae, Pezizales, Pezizomycetes, 19 species, type: *P. ligericus* Zobel, asexual morph unknown, saprobes, saprobes, terrestrial, worldwide, see Doweld (2013; new combinations), Healy et al. (2015; new species, DNA), cultures and sequences are available, needs generic revision.

**Pachyphysis** R.C. Harris & Ladd 2007, Lecideaceae, Lecideales, Lecanoromycetes, one species, type: *P. ozarkana* R.C. Harris & Ladd, asexual morph unknown, on dolomite, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available, holotype and cultures are available for the type species Pacoza51; NY, Harris 44707.

**Pachysacca** Syd. 1930, Teratosphaeriaceae, Capnodiales, Dothideomycetes, one species, type: *P. eucalypti* Syd., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as genus in *Dothideomycetes*), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; excluded from *Dothideomycetes* and place in *Teratosphaeriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Pachysolen** Boid & Adzet 1957, Pichiaceae, Saccharomycetales, Saccharomycetes, one species, type: *P. tannophilus* Boidin & Adzet, asexual reproduction is by multilateral budding, saprophytic, extracts of chestnut (*Castanea vesca*) and mimosa (*Acacia mollissima*) for use in leather tanning, France, Germany, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Pachythryrium** G. Arnaud ex Spooner & P.M. Kirk 1990, Trichothryciaceae, Dothideomycetes, family incertae sedis, one species, type: *P. parasiticum* (Fabre) G. Arnaud ex Spooner & P.M. Kirk, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013;
accepted as a genus in *Trichothyriaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Pachytrype** Berl. ex M.E. Barr, J.D. Rogers & Y.M. Ju 1993, *Valsaceae*, *Diaporthales*, *Sordariomycetes*, one species, type species: *P. princeps* (Penz. & Sacc.) M.E. Barr, J.D. Rogers & Y.M. Ju, asexual morph cytospora-like, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Paecilomyces** Bainier 1907 (= Byssochlamys Westling 1909 fide Rossman et al. 2016), *Thermoasaceae*, *Eurotiales*, *Eurotiomycetes*, c. 50 species, type: *P. variotii* Bainier, hyphomycetous, sexual morph unknown, widespread, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures available for type species CBS 102.74, CBS 110431.

**Palaowanella** Syd. & P. Syd. 1914, *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, one species, type: *P. grandis* (Niessl) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.


**Pallidocercospora** Crous 2012, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, eight species, type: *P. heimi* (Crous) Crous, hyphomycetous, sexual morph reported, pathogenic, terrestrial, worldwide, see Crous et al. (2012; morphology; phylogeny), cultures and sequences are available, holotype of the type: PREM 51749 (sexual morph), holotype of the type: PREM 51748 (asexual morph), ex-type strain of type: CPC 760.

**Pallidogramma** Staiger, Kalb & Lücking 2008, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, twelve species, type: *P. chrysenteron* (Mont.) Staiger, Kalb & Lücking, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Archer (2009; key, Australia), Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2014, 2016; phylogeny, classification), Cultures and sequences are available, holotype of type species PC (Leprieur 23).

**Palmicola** K.D. Hyde 1993, *Xylariales* genera incertae sedis, *Sordariomycetes*, four species, type: *P. archontophoenicis* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Australia, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type species, holotype of the type: BRIP 20438.

**Pandanicola** K.D. Hyde 1994, *Xylariaeae*, *Xylariales*, *Sordariomycetes*, two species, type: *P. calocarpa* (Syd. & P. Syd.) K.D. Hyde, asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Pannaria** Delise ex Bory 1828, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, 60 species, type: *P. rubiginosa* (Thunb.) Delise, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; new species), Elvebakk (2012; new species), Jørgensen and Gjerde (2012; new species), Kirk et al. (2013; genus accepted), Magain and Serusiaux (2014; phylogeny), cultures and sequences are available, needs generic revision.

**Pannoparmelia** (Müll. Arg.) Darb. 1912, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *P. angustata* (Pers.) Zahlb., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Thell et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Panorbis** J. Campb., J.L. Anderson & Shearer 2003, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, three species, type: *P. viscosus* (I. Schmidt) J. Campb., J.L. Anderson & Shearer, on debris near sea, Germany, USA, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2011; phylogeny), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, needs generic revision.

**Pantospora** Cif. 1938, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. guazumae* Cif., hyphomycetous, sexual morph unknown, plant pathogenic, terrestrial, see Minnis et al. (2011; morphology; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline), cultures and sequences are available, epitype and ex-type of type: BPI 880778; CBS 130299.

**Paoayensis** Cabanela, Jeewon & K.D. Hyde 2007, *Sordariomycetes* genera incertae sedis, one species, type: *P. lignicola* Cabanela, Jeewon & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type species HKU(M) 17516, holotype of type: HKUCC 10927.

**Papilionospora** V.G. Rao & B. Sutton 1976, *Ascomycota* genera incertae sedis, one species, type: *P. aspergilloides* (Speg.) V. Rao & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Myanmar, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Papilionovela** Aptroot 1997, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, 17 species, type: *P. albothallina* Aptroot, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, holotype of type: CBS Aptroot 33014.

**Pappimyces** B. Sutton & Hodges 1975, *Ascomycota* genera incertae sedis, one species, type: *P. hastatus* B. Sutton & Hodges, hyphomycetous, sexual morph unknown, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.
**Papulaspora** Preuss 1851, *Melanosporales* genera incertae sedis, *Sordariomycetes*, 24 species, type: *P. sepedonioides* Preuss, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Ahmed et al. (2016; DNA, phylogeny), cultures and sequences are available, type specimen for type species B.

**Papulosa** Kohlm. & Volkm.-Kohlm. 1993, *Papulosaceae*, *Sordariomycetes* family incertae sedis, one species, type: *P. amerospora* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and cultures available for the type species IMS J.K. 5491; AFTOL-ID 748.

**Paraarthrocladium** Matsush. 1993, *Ascomycota* genera incertae sedis, one species, type: *P. himalayana* R.K. Verma & Kamal, asexual morph unknown, saprobes, terrestrial, Nepal, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 294092, needs generic revision.

**Parabagliettoa** Gueidan & Cl. Roux 2009, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, three species, type: *Parabagliettoa dufourii* (DC.) Gueidan & Cl. Roux, asexual morph unknown, lichenicolous, terrestrial, Europe, Asia, see Diederich et al. (2009), Gueidan et al. (2009; taxonomy), Krzewicka et al. (2012; new species, Poland), Lücking et al. (2016; classification), cultures and sequences are available, available specimen and cultures for the type: G; AFTOL-ID 2254.


**Parablasterocatenia** Y.D. Zhang & X.G. Zhang 2012, *Ascomycota* genera incertae sedis, one species, type: *P. tetracerae* Y.D. Zhang & X.G. Zhang, hypomycetous, sexual morph unknown, saprobes, terrestrial, China, see Zhang et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: HSAUP H3357, cultures and sequences are unavailable, needs generic revision.

**Paraboeremia** Q. Chen & L. Cai 2015, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *P. selaginellae* (Sacc.) Q. Chen & L. Cai, coelomycetous, saprobes, ?pathogens, terrestrial, cosmopolitan, see Chen et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), neotype and ex-neotype culture of the type: HMAS 246693, CBS 122.93.

**Paracainiella** Lar.N. Vassiljeva 1983, *Amphisphaeriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. dryadis* Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, arctic north-eastern Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, holotype of type species VLA P-2943.

et al. (2016; new species), cultures and sequences are available, holotype and ex-type cultures available for the type: CBS H-21440; CPC 21632 (Crous et al. 2014 as Camarosporium psoraleae).


**Paracercosporidium** R.F. Castañeda 1987, *Ascomycota* genera incertae sedis, six species, type: *P. silvestre* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Asia, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Paracercospora** Deighton 1979. *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, three species, type: *P. egenula* (Syd.) Deighton, hyphomycetous, sexual morph unknown, plant pathogenic, terrestrial, see Braun et al. (2013; morphology), Crous et al. (2013; morphology; phylogeny). Cultures and sequences are available, reference specimen and culture of type: CBS H-20836; CPC 12537, holotype and isotype of type species PRE 25999; IMI 89597, genus requires epitypification.

**Parachionomyces** Thaun 1979, *Ascomycota* genera incertae sedis, one species, type: *P. acroconidiellinae* Thaun, asexual morph hyphomycetous, sexual morph unknown, Myanmar, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

**Parachionoziza** Korf 1978, *Arachnopezizaceae, Helotiales, Leotiomyces*, eight species, type: *P. miniopsis* (Ellis) Korf, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Paracladophialophora** Crous 2016, *Chaetothyriales* genera incertae sedis, *Eurotiomycetes*, one species, type: *P. carceris* Crous & Roets, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2016; new species, phylogeny), holotype and ex-type culture of the type: CBS H-22865, CPC 27596.

**Paracoccidioides** F.P. Almeida 1930, *Ajellomyctaceae, Onygenales, Eurotiomycetes*, two species, type: *P. brasiliensis* (Splend.) F.P. Almeida, hyphomycetous, sexual morph unknown, humm pathogen, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), de Melo Teixeira et al. (2014; clinical control), cultures and sequences are available, needs generic revision.

**Paracollemata** Otálora & Wedin 2014, *Collemataceae, Peltigerales, Lecanoromycetes*, two species, type: *P. italicum* (B. de Lesd.) Otálora, P.M. Jørg. & Wedin, asexual morph coelomycetous, lichenized, terrestrial, Southern Europe, Northern Africa, see Otálora et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.


**Paraconostatinellla** Subram. & Sudha 1989, *Ascomycota* genera incertae sedis, one species, type: *P. pulchra* Subram. & Sudha, hyphomycetous, sexual morph unknown, India, see
Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

**Paracremonium** L. Lombard & Crous 2015, Nectriaceae, Hypocreales, Sordariomycetes, two species, type: *P. inflatum* L. Lombard & Crous, asexual morph unknown, pathogens, saprobes, terrestrial, tropical, see Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Lynch et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), holotype and cultures of the type: CBS H-21946; CBS 110348.

**Paracryptophiale** Kuthub. & Nawawi 1994, Ascomycota genera incertae sedis, two species, type: *P. kamaruddinii* Kuthub. & Nawawi, hyphomycetous, sexual morph unknown, Malaysia, China, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: KLU 300030, needs generic revision.

**Paracylindrocarpon** Crous, Roets & L. Lombard 2016, Bionectriaceae, Hypocreales, Sordariomycetes, one species, type: *P. aloiocola* Crous, Roets & L. Lombard., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22613, CPC 27362.

**Paracytospora** Petr. 1925, Ascomycota genera incertae sedis, one species, type: *P. salicis* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species and culture ex-type were not mentioned.

**Paradendryphiella** Woudenberg & Crous 2013, Pleosporaceae, Pleosporales, Dothideomycetes, two species, type: *Paradendryphiella salina* (G.K. Sutherl.) Woudenberg & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, France, Europe, see Woudenberg et al. (2013; morphology, phylogeny), cultures and sequences are available, holotype of the type species and culture ex-type were not mentioned.

**Paradendryphiopsis** M.B. Ellis 1976, Ascomycota genera incertae sedis, five species, type: *P. cambrensis* M.B. Ellis, hyphomycetous, sexual morph unknown, Europe, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type species IMI 6151c., need generic revision.

**Paradictyoarthrinium** Matsush. 1996, Paradictyoarthriniaeceae, Pleosporales, Dothideomycetes, two species, type: *P. diffractum* Matsush., hyphomycetous, sexual morph unknown, Transvaal, Thailand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Isaka et al. (2015; DNA, secondary metabolites), Liu et al. (2015; new species, Thailand, phylogeny), cultures and sequences are available, holotype and ex-type available for the type: Matsushima Fungus Collection Kobe 5A135; MFC-5A135.

**Paradidymobotryum** C.J.K. Wang & B. Sutton 1984, Ascomycota genera incertae sedis, one species, type: *P. oblongum* C.J.K. Wang & B. Sutton, asexual morph hyphomycetous, sexual morph unknown, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

**Paradiplodia** Sp. ex Trotter 1931, Ascomycota genera incertae sedis, six species, type: *P. aurantiorm* (Sp.) Clem. & Shear, coelomycetous, sexual morph unknown, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.
**Paradischloridium** Bhat & B. Sutton 1985, *Ascomycota genera incertae sedis*, one species, type: *P. ychaffrei* Bhat & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, New Zealand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Paradiscula** Petr. 1941, *Ascomycota genera incertae sedis*, one species, type: *P. spuria* (Vestergr.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Paradoxia** Mattir. 1935, *Tuberaceae, Pezizales, Pezizomycetes*, two species, type: *P. monospora* Mattir., asexual morph unknown, saprobes, hypogeous, terrestrial, Italy, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, need generic revision.

**Paradoxa** Matsush. 1993, *Ascomycota genera incertae sedis*, one species, type: *P. amazonense* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Peru, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Paræpicoccum** Matsush. 1993, *Ascomycota genera incertae sedis*, one species, type: *P. indica* Kamal, A.N. Rai & Morgan-Jones., hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parafulvia** Kamal, A.N. Rai & Morgan-Jones 1983, *Ascomycota genera incertae sedis*, one species, type: *P. subconcolor* Anzi, coelomycetous, sexual morph unknown, saprobes, terrestrial, Myanmar, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parahaplotrichum** W.A. Baker & Partr. 2001, *Ascomycota genera incertae sedis*, one species, type: *P. idahoense* W.A. Baker & Partr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Paraharknessia** Matsush. 2003, *Ascomycota genera incertae sedis*, one species, type: *P. ellipsioidea* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parahyalotiopsis** Nag Raj 1976, *Ascomycota genera incertae sedis*, one species, type: *P. borassi* (Thaung) Nag Raj 1976., coelomycetous, sexual morph unknown, saprobes, terrestrial, Myanmar, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pararingaderia** Ertz & Tehler 2011, *Opegraphaceae, Arthoniales, Arthoniomyces*, one species, type: *P. placodioidea* Ertz & Tehler, sexual morph with punctiform to shortly lirelliform ascomata in groups (synascomata), lichenized, terrestrial, Socotra island, see Ertz and Tehler (2011; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available, holotype of type: Tehler 9344 (S).


**Paralecanographa** Ertz & Tehler 2011, *Opegraphaceae, Arthoniales, Arthoniomyces*, one species, type: *P. grumulosa* (Dufour) Ertz & Tehler, lichenicolous (becoming sometimes
lichens, terrestrial, mainly (sub-)tropical, Mediterranean, see Ertz and Tehler (2011; morphology, phylogeny), sequences are available, needs generic revision.

**Paralecia** Brackel, Greiner, Peršoh & Rambold 2015, Squamariinaeae, Lecanorales, Lecanoromycetes, five species, type: *P. pratorum* Brackel, Greiner, Peršoh & Rambold, asexual morph unknown, lichenized, terrestrial, worldwide, see Liu et al. (2015; taxonomy, phylogeny), Thell et al. (2012; phylogeny), cultures and sequences are available, holotype of the type: M-0045925.

**Paraleptosphaeria** Gruyter, Verkley & Crous 2012, Leptosphaeriaceae, Pleosporales, Dothideomycetes, five species, type: *P. nitschkei* (Rehm ex G. Winter) Gruyter, Aveskamp & Verkley, asexual morph coelomycetous, saprobes, terrestrial, worldwide, see de Gruyter et al. (2012; morphology; phylogeny), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; phylogeny), cultures and sequences are available, epitype and ex-epitype of the type: CBS H-20822; CBS 306.51.

**Paralethariicola** Calatayud, Etayo & Diederich 2001, Odontotremaeaceae, Ostropales, Lecanoromycetes, one species, type: *P. aspiciliae* Calat., Etayo & Diederich, asexual morph unknown, lichenicolous, non-lichenized, Italy and Spain, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, holotype of the type species MA (Fungi) 49914.

**Paraliomyces** Kohlm. 1959, Dothideomycetes genera incertae sedis, one species, type: *P. lentifer* Kohlm., asexual morph unknown, saprobes, marine, worldwide, see Suterong et al. (2009; phylogeny, morphology), Jones et al. (2009, 2015; classification), Pang and Jheng (2012; checklist), Zhang et al. (2012; morphology), Wijayawardene et al. (2014; outline), cultures and sequences are available, type specimen of type: CBS H-5921.

**Paramassariothea** Subram. & Muthumary 1979, Ascomycota genera incertae sedis, one species, type: *P. falcata* Subram. & Muthumary., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Paramenisporopsis** Matsush. 2003, Ascomycota genera incertae sedis, Dothideomycetes, one species, type: *P. undulosetulata* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Paramicrothyrium** H.X. Wu & K.D. Hyde 2011, Microthryiaceae, Microthyriales, Dothideomycetes, one species, type: *Paramicrothyrium chinensis* H.X. Wu & K.D. Hyde, saprobes, terrestrial, Phillipines, see Wu et al. (2011; taxonomy), Hyde et al. (2013; accepted as a genus in Microthyriaceae), cultures and sequences are available, holotype and ex-type culture of the type: IFRD 8987; IFRDCC2258.

**Paramphiphaeria** F.A. Fernández, J.D. Rogers, Y.M. Ju, Huhndorf & Umaña 2004, Xylariaceae, Xylariales, Sordariomycetes, one species, type: *P. costaricensis* F.A. Fernández, J.D. Rogers, Y.M. Ju, Huhndorf & L. Umaña, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Sananayake et al. (2015; accepted as a genus in Xylariaceae), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: INB 3466410.

**Paramycoleptodiscus** Crous & M.J. Wingf. 2016, Acropermales genera incertae sedis, Dothideomycetes, one species, type: *P. albizziae* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Crous et al. (2016; taxonomy,
phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22615, CPC 27552.

**Paramycosphaerella** Crous & Jol. Roux 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, 15 species, type: *P. brachystegia* Crous & Jol. Roux, asexual morph hyphomycetous (zasmidium-like), foliicolous, terrestrial, worldwide, see Crous et al. (2013; morphology, phylogeny), Quaedvlieg et al. (2014; phylogeny), Guatimosim et al. (2016; phylogeny, new comb.), cultures and sequences are available, holotype and ex-type culture of type: CBS H-21445; CPC 21136.


**Paranannizziopsis** Sigler, Hambl. & Paré 2013, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, four species, type: *P. australasiensis* Sigler, Hambleton & Paré, asexual morph hyphomycetous, animal pathogens, USA, see Sigler et al. (2013; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype of the type: UAMH 11645, cultures available for the type: UAMH 10439, UAMH 11719.

**Paranectria** Sacc. 1878, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *P. affinis* (Grev.) Sacc., asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Paraniesslia** K.M. Tsui, K.D. Hyde & Hodgkiss 2001, *Niesliaceae*, *Hypocreales*, *Sordariomycetes*, one species, type: *P. tuberculata* K.M. Tsui, K.D. Hyde & Hodgkiss, asexual morph unknown, saprobes, terrestrial, Hong Kong, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of the type: HKU (M) 4647.

**Parapenidiella** Crous & Summerell 2012, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *P. tasmaniensis* (Crous & M.J. Wingf.) Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Crous et al. (2012; morphology; phylogeny), cultures and sequences are available, holotype of the type: PREM 55340.

**Parapericonia** M.B. Ellis 1976, *Ascomycota* genera *incertae sedis*, one species, type: *P. angustii* M.B. Ellis., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa and Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Paraphaeoisaria** de Hoog & Morgan-Jones 1978, *Ascomycota* genera *incertae sedis*, one species, type: *P. alabamensis* de Hoog & Morgan-Jones., hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Paraphaeomoniella** Crous 2015, *Phaeomoniellaceae*, *Phaeomoniellales*, *Eurotiomycetes*, one species, type: *P. capensis* Crous & A.R. Wood, coelomycetous, sexual morph unknown,
on living leaves, endophytic, terrestrial, South Africa, see Crous et al. (2008 as *Phaeomoniella capensis* Crous & A.R. Wood, morphology; 2015, phylogeny), cultures and sequences are available, holotype and ex-type culture of type: CBS H-20159; CPC 15416.


**Parapithomyces** Thaung 1976, *Ascomycota* genera incertae sedis, one species, type: *P. brideliae* Thaung., hyphomycetous, sexual morph unknown, saprobes, terrestrial, British Isles, Japan, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parapleurotheciiopsis** P.M. Kirk 1982, *Beltraniaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. inaequiseptata* (Matsush.) P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, British Isles, Japan, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), DNA sequence available, available specimen and cultures for the type: IMI 234741; MUCL 41089.

**Paraporpidia** Rambold & Pietschm. 1989, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *P. aboriginum* Rambold, asexual morph unknown, lichenized, on soil and boulders, terrestrial, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parapyrenis** Aptroot 1991, *Requienellaceae*, *Pyrenulales*, *Eurotiomycetes*, eight species, type: *P. aurora* (Zahlbr.) Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parapycricularia** M.B. Ellis 1972, *Ascomycota* genera incertae sedis, one species, type: *P. musae* M.B. Ellis & Peregrine., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Pararobillarda** Matsush. 1996, *Ascomycota* genera incertae sedis, one species, type: *P. coffra* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Cape Province, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.


**Parascedosporium** Gilgado, Gené, Cano & Guarro 2007, *Microascaceae*, *Microascales*, *Sordariomycetes*, two species, type: *P. tectonae* (C. Booth) Gilgado, Gené, Cano & Guarro, asexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, available specimen and ex-type strain of the type species CBS H-7195; CBS 127.84.

**Paraschismatomma** Ertz & Tehler 2011, *Opegraphaceae*, *Arthoniales*, *Arthoniomyces*, one species, type: *P. ochroleucum* (Zahlbr.) K. Knudsen, Ertz & Tehler, sexual morph with
apothecioid ascomata, lichenized, terrestrial, Californian coast and Baja California, see Ertz and Tehler (2011; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available.

**Parasctellinia** Srček 1975, *Pyrnemataceae, Pezizales, Pezizomycetes*, three species, type: *P. violacea* (Velen.) Srček, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type species, needs generic revision.

**Parasiphula** Kantvilas & Grube 2006, *Coccotremataceae, Pertusariales, Lecanoromycetes*, seven species, type: *Parasiphula fragilis* (Hook. f. & Taylor) Kantvilas & Grube, asexual morph unknown, terrestrial, USA, Brazil (Rondônia), Taiwan, see Dornelo et al. (2013; genus accepted), Hongsanan et al. (2014; taxonomy, keys), Wijayawardene et al. (2014; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parasphaeropsis** Petr. 1953, *Ascomycota genera incertae sedis*, one species, type: *P. shearii* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Hawaii, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parastagonospora** Quaedvl., Verkley & Crous 2013, *Phaeosphaeriaceae, Pleosporales, Dothideomycetes*, five species, type: *P. nodorum* (Berk.) Quaedvliege, Verkley & Crous, coelomycetous, pathogenic, saprobes, terrestrial, Germany, Netherlands, Denmark, see Quaedvlieg et al. (2013; taxonomy, phylogeny), Phookamsak et al. (2014; accepted as a genus in *Phaeosphaeriaceae*), Wijayawardene et al. (2014, 2017; outline), Crous et al. (2016; new species, phylogeny), Li et al. (2016; new species), culture of type species CBS 110109 (no ex-type cultures), needs generic revision.

**Parastenella** J.C. David 1991, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, three species, type: *P. magnoliana* (Weedon) J.C. David, coelomycetous, sexual morph unknown, saprobes, associated with leaf spots, USA, Brazil (Rondônia), Taiwan, see Dornelo-Silva et al. (2008; new species), Wijayawardene et al. (2012, 2017; outline), Kirschner and Chen (2010; new species), cultures and sequences are available but lacks for the type species, needs generic revision.

**Parasterinopsis** Bat. 1960, *Asterinales, Asterinales, Dothideomycetes*, three species, type: *P. sarsalisiae* (Hansf.) Bat., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Hongsaan et al. (2014; taxonomy, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, isotype of type: URM 11923, needs generic revision.

**Parastigmata** Doidge 1921, *Polystomellaceae, Dothideomycetes* family *incertae sedis*, three species, type: *P. nervisita* Doidge, sexual morph unknown, widespread (tropical), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Polystomellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable for type species, needs generic revision.

**Parastigmellina** Bat. & C.A.A. Costa 1959, *Ascomycota genera incertae sedis*, one species, type: *P. asiatica* Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines and Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parasympodiella** Ponnappa 1975, *Scortechiniaceae, Coronophorales, Sordariomycetes*, seven species, type: *P. laxa* (Subram. & Vittal) Ponnappa, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Cheewangkoon et al. (2009; new species, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, specimens available for the type: IMI 50645, IMI 173095h, cultures available for the type: CBS 102698.

**Parateratosphaeria** Quaedvl. & Crous 2014, *Teratosphaeriaceae, Capnodiales, Dothideomycetes*, four species, type: *P. bellula* (Crous & M.J. Wingf.) Quaedvl. & Crous,
asexual morph unknown, pathogens, terrestrial, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures and sequences are available, epitype and ex-epitype strain of the type: CBS H-20094; CPC 1821. **Paratetraploa** M.K.M. Wong & K.D. Hyde 2002, *Ascomycota* genera incertae sedis, one species, type: *P. exappendiculata* M.K.M. Wong, Goh & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, aquatic, Hong Kong, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type species HKU (M) 12646, needs generic revision.

**Paratomenticola** M.B. Ellis 1976, *Ascomycota* genera incertae sedis, one species, type: *P. lanceolata* (Cooke) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision, needs generic revision.

**Paratopeliopsis** Mercado-Díaz, Lücking & Parmmen 2014, *Graphidaceae*, Ostropales, Lecanoromycetes, one species, type: *P. caraibica* Mercado-Díaz, Lücking & Parmmen, asexual morph unknown, lichenized, terrestrial, worldwide, see Mercado-Díaz et al. (2011; taxonomy), Lumbsch et al. (2014; accepted as a genus in *Thelotrematae*), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type: Mercado-Díaz 836.

**Paratricharia** Lücking 1997, *Gomphillaceae*, Ostropales, Lecanoromycetes, three species, type: *P. paradoxa* (Lücking) Lücking, asexual morph unknown, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Plata et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: UPS (114).


**Paratrichoconis** Deighton & Piroz. 1972, *Ascomycota* genera incertae sedis, four species, type: *P. chinensis* (Hansf.) Deighton & Piroz., hyphomycetous, sexual morph unknown, saprobes or fungicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Paratrichophae** Trigaux 1985, *Pyronemataceae*, Pezizales, Pezizomycetes, five species, type: *P. macrocystis* Trigaux, asexual morph unknown, from soil, saprobes, terrestrial, Europe, North America, see Benkert et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available but lacks for the type species, needs generic revision.

**Parauloacladium** R.F. Castañeda 1986, *Ascomycota* genera incertae sedis, two species, type: *P. angulosporum* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parauncinula** S. Takam. & U. Braun 2005, *Erysiphaceae*, Erysiphales, Leotiomyctes, two species, type: *P. septata* (E.S. Salmon) S. Takam. & U. Braun, biotrophic, obligate plant pathogens, terrestrial, Asia (China, Japan), see Lumbsch and Huhndorf (2010; outline), Braun and Cook (2012; taxonomy), sequences of non-type material of the type species are available, lectotype of type: TNS-F-214605.

**Paravalsa** Ananthap. 1990, *Valsaceae*, Diaporthales, Sordariomycetes, one species, type: *P. indica* Ananthap., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and
Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Parawieseneriomyces** Crous & M.J. Wingf. 2016, *Wieseneriomyctaceae, Tubafuliales, Dothideomycetes*, one species, type: *P. syzygii* Crous & M.J. Wingf., hyphomycetous, saprobes, terrestrial, France, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22630, CPC 26528.

**Parberyca** C.A. Pearce & K.D. Hyde 2001, *Phyllachoraceae*, *Phyllachorales, Sordariomycetes*, two species, type: *P. kosciuskaoa* C.A. Pearce & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: DAR 28023, needs generic revision.

**Parencelia** Petr. 1950, *Helotiaceae, Helotiales, Leotiomycetes*, four species, type: *P. andina* Petr., asexual morph unknown, saprobes, terrestrial, Central America, West Indies, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parenglerula** Höhn. 1910, *Englerulaceae, Dothideomycetes* families incertae sedis, nine species, type: *P. macowaniana* (Thüm.) Höhn., asexual morph unknown, epiphytic, terrestrial, tropical region, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Dai et al. (2014; morphology), cultures and sequences are unavailable, needs generic revision.

**Pareutypella** Y.M. Ju & J.D. Rogers 1996, *Sordariomycetes* genera incertae sedis, one species, type: *P. sulcata* Y.M. Ju & J.D. Rogers, asexual morph unknown, saprobes, terrestrial, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Parmelia** Ach. [nom.cons.] 1803, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 50 species, type: *P. saxatilis* (L.) Ach., lichenized, worldwide, see Crespo et al. (2010a; phylogeny), Kirk et al. (2013; genus accepted), Lumbsch and Huhndorf (2010; outline), Divakar (2012, 2013; India, phylogeny), Ferencova et al. (2014; new species), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Parmeliella** Müll. Arg. 1862, *Pannariaceae, Peltigerales, Lecanoromycetes*, 90 species, type: *P. triphylla* (Ach.) Müll. Arg., lichenized (with cyanobacteria), terrestrial (saxicolous, corticolous or lignicolous), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ekman et al. (2014; phylogeny), sequences are available, needs generic revision.

**Parmelina** Hale 1974, *Parmeliaceae, Lecanorales, Lecanoromycetes*, seven species, type: *P. tiliacea* (Hoffm.) Hale, lichenized (with green algae), terrestrial (saxicolous, corticolous or lignicolous), Northern Hemisphere with a center of distribution in western North America and Europe, see Crespo et al. (2010a, b; phylogeny), Lumbsch and Huhndorf (2010; outline), Núñez-Zapata et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), sequence data available for six species, including the generic type, needs generic revision.

**Parmelinella** Elix & Hale 1987, *Parmeliaceae, Lecanorales, Lecanoromycetes*, nine species, type: *P. wallichiana* (Taylor) Elix & Hale, lichenized (with green algae), terrestrial (saxicolous, corticolous or lignicolous), tropical, see Crespo et al. (2010a; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence data available only for the type species, needs generic revision.

**Parmeliopsis** (Nyl.) Nyl. 1866, *Parmeliaceae, Lecanorales, Lecanoromycetes*, eight species, type: *P. ambiguia* (Wulfen) Nyl., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska
et al. (2014; DNA, phylogeny), Mark et al. (2016; DNA, phylogeny), cultures available for the type: AFTOL-ID 199, needs generic revision.

**Parmostictina** Nyl. 1875, *Lobariaceae, Peltigerales, Lecanoromycetes*, 15 species, type: *Sticta hirsuta* Mont., lichenized.,?., rejected against *Pseudocyphellaria* Vain. 1890, see Moncada et al. (2013; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Parmotrema** A.Massal. 1860, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 300 species, type: *P. perforatum* (Jacq.) A. Massal., lichenized, terrestrial (corticolous, saxicolous, terricolous or lichenicolous), worldwide, but with the center of distribution in tropical regions, see Crespo et al. (2010a; phylogeny), Lumbsch and Huhndorf (2010; outline), Lendemer and Hodkinson (2012; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Parmotrempsis** Elix & Hale 1987, *Parmeliaceae, Lecanorales, Lecanoromycetes*, three species, type: *P. antillensis* (Nyl.) Elix & Hale, asexual morph unknown, lichenized, terrestrial, Central America, West Indies, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parmularia** Lév. 1846, *Parmulariaceae, Dothideomycetes* families incertae sedis, 31 species, type: *P. styracis* Lév., asexual morph unknown, pathogens, epiphytes, terrestrial, Brazil, Paraguay, Uruguay, see Inácio and Cannon (2008; morphology), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Guatimosim et al. (2015; phylogeny), cultures and sequences are available but lacks for type material, holotype and epitype of type: PC; VIC 42447.

**Parmulariella** Hen. 1904, *Dothideomycetes* genera incertae sedis, one species, type: *P. vernoniae* Hen., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, isotype of type: K, NY, needs generic revision.

**Parmulariopsisella** Sivan. 1970, *Parmulariaceae, Dothideomycetes* families incertae sedis, one species, type: *P. burseracearum* Sivan., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: IMI 34052.

**Parmulariopsis** Petr. 1954, *Parmulariaceae, Dothideomycetes* families incertae sedis, one species, type: *P. pulchella* Petr., asexual morph unknown., epiphytes, terrestrial, Malaysia, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, isotype of type: K Herb. C.E. Broome 593.

**Parmulina** Theiss. & Syd. 1914, *Parmulariaceae, Dothideomycetes* families incertae sedis, six species, type: *P. excelsulpa* (Berk.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, neotype of type: K Herb. C.E. Broome 593.

**Parodiella** Speg. 1880, *Parodiellaceae, Dothideomycetes* families incertae sedis, four species, type: *P. perisporioides* (Berk. & M.A. Curtis) Speg., asexual morph unknown, biotrophic, terrestrial, America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parodiellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, available specimen of type: CBS H-15496, needs generic revision.

**Parodiellina** Hen. ex G. Arnaud 1918, *Parodiopsidaceae, Dothideomycetes* families incertae sedis, one species, type: *P. manaosensis* (Hen.) G. Arnaud, asexual morph
unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parodiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Parorbiliopsis** Spooner & Dennis 1986, *Helotiaceae, Helotiales, Leotiomycetes*, five species, type: *P. minuta* Spooner & Dennis, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parthenope** Velen. 1934, *Helotiales* genera incertae sedis, *Leotiomycetes*, one species, type: *P. parasitica* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Parvaccum** R.S. Hunt & A. Funk 1988, *Rhytismataceae, Rhytismatales, Leotiomycetes*, one species, type: *P. pini* R.S. Hunt & A. Funk, asexual morph unknown, saprobes, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: DAVFP 23419, needs generic revision.

**Parvomyces** Santam. 1995, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, one species, type: *P. merophysiae* Santam., asexual morph unknown, biotrophic, terrestrial, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Parvoplaca** Arup, Sochting & Frödén 2013, *Teloschistaceae, Teloschistales, Lecanoromycetes*, five species, type: *P. tiroliensis* (Zahlbr.) Arup, Sochting & Frödén, asexual morph unknown, lichenized, terrestrial, worldwide, see Arup et al. (2013, 2015; taxonomy, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, culture available for the type: U1289, U1290, needs generic revision.

**Parvothecium** L. Lombard & Crous 2016, *Stachybotriaceae, Hypocreales, Sordariomycetes*, one species, type: *P. terrestr e* L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, from soil, terrestrial, Brazil, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), epitype and ex-epitype culture of the type: CBS H-4380, CBS 198.89.

**Paschelkiella** Sherwood 1987, *Odontotremataceae, Ostropales, Lecanoromycetes*, three species, type: *P. pini* (Romell) Sherwood, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Paspalomyces** Linder 1933, *Ascomycota* genera incertae sedis, one species, type: *P. aureus* Linder, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Passalora** Fr. 1849, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, c. 250 species, type: *P. bacilligera* Fr. & Mont., hyphomycetous, sexual morph unknown, plant pathogens, terrestrial, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Guatimosim et al. (2013; new species), Kirk et al. (2013; genus accepted), Moreno-Rico et al. (2014; new species), Braun et al. 2015; new species), cultures and sequences are available, needs generic revision.

**Passeriniella** Berl. 1890, *Dothideomycetes* genera incertae sedis, seven species, type: *P. dichroa* (Pass.) Berl., asexual morph unknown, saprobes, marine habitat, see Suetrong et al. (2009; phylogeny, morphology), Zhang et al. (2009b, 2012; phylogeny), Jones et al. (2009, 2015; outline, marine), Alias et al. (2010; diversity), Besitullo et al. (2010; diversity), Lee et
al. (2012; checklist), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Passerinula Sacc. 1875, Dothideomycetes genera incertae sedis, one species, type: P. candida Sacc., asexual morph unknown, saprobes or fungicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Patellaria Fr. 1822, Patellariaceae, Patellariales, Dothideomycetes, twelve species, type: P. atrata (Hedw.) Fr., asexual morph unknown, saprobes, terrestrial, temperate, see Schoch et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Patellariaceae, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; taxonomy), cultures and sequences are available, cultures available for the type: CBS 958.97, BCC 28876, holotype of type: CBS H-17437.

Patellariopsis Dennis 1964, Dermataceae, Helotiaceae, Leotiomyces, five species, type: P. clavispora (Berk. & Broome) Dennis, asexual morph unknown, saprobes, terrestrial, Europe, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Patescospora Abdel-Wahab & El-Sharouny 2002, Aliquandostipitaceae, Jahnulales, Dothideomycetes, one species, type: P. separans Abdel-Wahab & El-Shar., asexual morph unknown, saprobes, freshwater, Egypt, see Suetrong et al. (2010; phylogeny), cultures and sequences are available, holotype of the type: IMI 386405, ?

Patinella Sacc. 1875, Dermataceae, Helotiaceae, Leotiomyces, three species, type: P. hyalophaea Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures are available for the type (unpublished), needs generic revision.

Patinellaria P. Karst. 1885, Helotiaceae, Helotiaceae, Leotiomyces, one species, type: P. sanguinea (Pers.) P. Karst., asexual morph unknown, saprobes, terrestrial, Europe, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


Pauahia F. Stevens 1925, Dothideomycetes genera incertae sedis, one species, type: P. sideroxyli F. Stevens, asexual morph unknown, saprobes, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Meliolaceae), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from Meliolaceae and placed in Dothideomycetes), cultures and sequences are unavailable, needs generic revision.


Paucithecium Lloyd 1923, Xylariaceae, Xylariales, Sordariomyces, one species, type: P. rickii Lloyd, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Paulia Fée 1836, Lichinaceae, Lichinaceae, Lichinomycetes, ten species, type: P. pullata Fée, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available but lack for the type, needs generic revision.

Paurocotylis Berk. 1855, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: *P. pilia* Berk., asexual morph unknown, from soil, hypogeous, terrestrial, Europe, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wang et al. (2016; DNA, phylogeny), cultures and sequences are available, voucher specimen of the type: Trappe 12583 (OSC).

Payosphaeria H.Y.M. Leung 1990, Nectriaceae, Hypocreales, Sordariomycetes, one species, type: *P. minuta* H.Y.M. Leung, asexual morph unknown, marine, on wood, mangrove, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: IMI 327472.

Peccania A. Massal. ex Arnold 1858, Lichinaceae, Lichinales, Lichinomycetes, eight species, type: *P. coralloides* (A. Massal.) A. Massal., asexual morph unknown, lichenized, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available, needs generic revision.

Pectenia P.M. Jørg., L. Lindblom, Wedin & S. Ekman 2014, Pannariaceae, Peltigerales, Lecanoromycetes, four species, type: *P. plumbea* (Lightf.) P.M. Jørg., L. Lindblom, Wedin & S. Ekman, lichenized, terrestrial, Europe, Africa, mostly along the Atlantic coast, see Ekman et al. (2014; taxonomy), cultures and sequences are unavailable, needs generic revision.


Peethambara Subram. & Bhat 1978, Stachybotriaceae, Hypocreales, Sordariomycetes, one species, type: *P. sundara* Subram. & Bhat, asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Lombard et al. (2016; phylogeny), cultures and sequences are available, ex-type culture of type: CBS 646.77, needs generic revision.

Peethasthabeja P.Rag. Rao 1981, Ascomycota genera incertae sedis, one species, type: *P. krishna* P. Rag. Rao, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pellionella (Sacc.) Sacc. 1902, Ascomycota genera incertae sedis, one species, type: *P. deformans* Penz. & Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Java, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: Mauritius (Dulymamode P6), needs generic revision.


**Pellaster** Syd. & P. Syd. 1917, *Dothideomycetes* genera incertae sedis, seven species, type: *P. hedyotidis* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes or pathogens, terrestrial, Philippines, South America, Slovenia, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Medjedović et al. (2014; new species, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

**Peltasterella** Bat. & H. Maia 1959, *Ascomycota* genera incertae sedis, one species, type: *P. ocoteae* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Peltasterinostroma** Punith. 1975, *Ascomycota* genera incertae sedis, one species, type: *P. rubi* Punith., coelomycetous, sexual morph unknown, saprobes, terrestrial, British Isles, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Peltasteropsis** Bat. & H. Maia 1959, *Ascomycota* genera incertae sedis, seven species, type: *P. discreta* Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Peltigera** Willd. [nom.cons.] 1787, *Peltigeraeae*, *Peltigerales*, *Lecanoromycetes*, 100 species, type: *P. canina* (L.) Willd., lichenized (green algae or, and cyanobacteria), terrestrial ( saxicolous, terricolous, corticolous or lignicolous) or aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Peltigeromyces** Möller 1901, *Helotiales* genera incertae sedis, *Leotiomycetes*, three species, type: *P. microsporus* Möller, asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; phylogeny), cultures and sequences are available for unidentified species, needs generic revision, needs generic revision.

**Pelitigera** Willd., *Peltigeraeae*, *Peltigerales*, *Lecanoromycetes*, 100 species, type: *P. canina* (L.) Willd., lichenized (green algae or, and cyanobacteria), terrestrial ( saxicolous, terricolous, corticolous or lignicolous) or aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pelitigeraeae** Möller 1901, *Helotiales* genera incertae sedis, *Leotiomycetes*, three species, type: *P. microsporus* Möller, asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; phylogeny), cultures and sequences are available for unidentified species, needs generic revision, needs generic revision.

**Peltistroma** Henn. 1904, *Ascomycota* genera incertae sedis, one species, type: *P. juruanum* Henn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, lectotype of type: K (Mycotheca Brasiliensis no. 93), needs generic revision.

**Peltistromella** Höhn. 1907, *Ascomycota* genera incertae sedis, one species, type: *P. brasiliensis* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pellosoma** Syd. 1925, *Ascomycota* genera incertae sedis, one species, type: *P. freycinetiae* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Peltostromella** Bat. & A.F. Vital 1959, *Ascomycota* genera incertae sedis, one species, type: *P. atra* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Sri Lanka, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Peltostromopsis** Bat. & A.F. Vital 1959, *Ascomycota* genera incertae sedis, one species, type: *P. artocarpi* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Sri Lanka, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Peltula** Nyl. 1853, *Peltulaceae*, *Lichinales*, *Lichinomycetes*, 32 species, type: *P. radicata* Nyl., asexual morph unknown, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), McDonald et al. (2013; DNA, phylogeny), Marques et al. (2013; new species, Portugal), sequences are available, needs generic revision.

**Peltularia** R. Sant. 1944, *Coccocarpiaceae*, *Peltigerales*, *Lecanoromycetes*, three species, type: *P. gyrophoroides* (Räsänen) R. Sant., asexual morph unknown, lichenized, terrestrial, South America, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type: CBS H-6336, needs generic revision.

**Pendulispora** M.B. Ellis., 1961, *Dothideomycetes* genera incertae sedis, one species, type: *P. venezuelanica* M.B. Ellis, sexual morph unknown, hyphomycetous, on dead branches, Venezuela, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type: CBS H-7461; CBS 560.67.

**Penicillifer** Emden 1968 (= *Viridispora* Samuels & Rossman 1999 fide Maharachchikumbura et al. 2015, 2016; outline; Lombard et al. 2016; Rossman et al. 2016), *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, seven species, type: *P. pulcher* Emden, asexual morph hyphomycetous, saprobes, from soil, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), Lombard et al. (2016; phylogeny), Rossman et al. (2016; nomenclature), cultures and sequences are available, type specimen and culture available for type: CBS H-7461; CBS 761.68.

**Penicilliosis** Solms 1887, *Aspergillaceae*, *Eurotiaceae*, *Eurotiomycetes*, three species, type: *P. clavariiformis* Solms, asexual morph unknown, saprobes, terrestrial, worldwide, see Houbraken and Samson (2011; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Trichocomaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are available, lectotype and culture available for type: Hauman (BR); CBS 761.68.

**Penicillium** Link 1809, *Aspergillaceae*, *Eurotiaceae*, *Eurotiomycetes*, c. 300 species, type: *P. crustaceum* Link, hyphomycetous, pathogens, saprobes, widespread (common moulds), see Houbraken and Samson (2011; morphology, phylogeny), Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences available.

phylogeny), Wijayawardene et al. (2014; phylogeny, outline), cultures and sequences are available, epitype and ex-epitype strain of the type: CBS H-9937; CBS 486.80.

**Penidiellopsis** Sandoval-Denis, Gené, Deanna A. Sutton & Guarro 2016, *Teratosphaeriaceae, Capnodiales, Dothideomycetes*, one species, type: *P. syzygii* Crous & M.J. Wingf., hyphomycetous, human pathogen, terrestrial, USA, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22389, CBS 140695.

**Pentagenella** Darb. 1897, *Opegraphaceae, Arthoniales, Arthoniomycetes*, three species, type: *P. fragillima* Darb., lichenized, terrestrial, neotropical, see Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; new species, phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Penzigomyces** Subram. 1992, *Ascomycota genera incertae sedis*, 13 species, type: *P. nodipes* (Penz. & Sacc.) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Periamphispora** J.C. Krug 1989, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, one species, type: *P. phacelodes* J.C. Krug, asexual morph unknown, on dung, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariales*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Periconia** Tode 1791, *Periconiaceae, Pleosporales, Dothideomycetes*, c. 45 species, type: *P. lichenoides* Tode, hyphomycetous, terrestrial, aquatic, worldwide, see Seifert et al. (2011; outline), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Jones et al. (2015; outline, marine), Tanaka et al. (2015; phylogeny), sequence data available, needs generic revision.

**Periconiella** Sacc. 1885, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, 70 species, type: *P. velutina* (G. Winter) Sacc., hyphomycetous, sexual morph unknown, plant pathogens, terrestrial, see cultures and sequences are available, Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), epitype and ex-epitype of type: CBS H-15612; CBS 101948.

**Peridiothelia** D. Hawksw. 1985, *Pleomassariaceae, Pleosporales, Dothideomycetes*, three species, type: *P. fuliguncta* (Norman) D. Hawksw., asexual morph unknown, on bark, Europe, terrestrial, see Lumbsch & Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Peridiothelia*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, lectotype of type: O.

**Periglandula** U. Steiner, Leistner & Leuchtm. 2011, *Clavicipitaceae, Hypocreales, Sordariomycetes*, two species, type: *P. ipomoeae* U. Steiner, E. Leistner & Schardl, asexual morph unknown, on living leaves, terrestrial, Ecuador, Panama, see Steiner et al. (2011; taxonomy, outline), Beaulieu et al. (2015; DNA), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Perigraphe** Hafnell 1996, *Arthoniales genera incertae sedis, Arthoniomycetes*, four species, type: *P. superveniens* (Nyl.) Hafnell, lichenicolous, terrestrial, Asia, Europe and North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),
Etayo and Pérez-Vargas (2013; morphology), Zhurbenko et al. (2015; morphology), sequences are available.

**Perischizon** Syd. & P. Syd. 1914, *Dothideomycetes* genera *incertae sedis*, three species, type: *P. oleifolium* (Kalchbr. & Cooke) Syd. & P. Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted in *Parmulariaceae*), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; excluded from *Parmulariaceae*), Wijayawardene et al. (2014; outline, accepted in *Dothideomycetes*), cultures and sequences unavailable, Holotype of *K* (P. MacOwan 7).

**Perisporiopsis** Henne. 1904, *Perisporiopsidaceae*, *Dothideomycetes* families *incertae sedis*, *Dothideomycetes*, 17 species, type: *P. struthanthi* Henne., asexual morph unknown, saprobes, endophytes, terrestrial, tropical, see Chaverri and Gazis (2010, 2011; new species, endophytes), Kawada et al. (2010; antitumour compounds), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Perisporiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Perizomella** Syd. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *P. inquinans* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Peroneutypa** Berl. 1902, *Diastrypaceae*, *Xylariales*, *Sordariomycetes*, 47 species, type: *P. bellula* (Desm.) Berl., asexual morph unknown, saprobes, pathogens, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Dai et al. (2016; morphology, phylogeny), cultures and sequences are available but lacks for type, needs generic revision.

**Peroschaeta** Bat. & A.F. Vital 1957, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. artocarpi* Bat. & A.F. Vital, asexual morph unknown, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Perrotia** Boud. 1901, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, 19 species, type: *P. flammea* (Alb. & Schwein.) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Monaghan et al. (2009; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny), sequence available for the type, needs generic revision.


**Pertusaria** DC. [nom.cons.] 1805, *Pertusariaceae*, *Pertusariales*, *Lecanoromycetes*, 500 species, type: *P. communis* DC., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Perusta** Egidi & Sielow 2014, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. inaequalis* Egidi & Sielow, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 118271 = TRN272.

**Pesotum** J.L. Crane & Schokn. 1973, *Ophiostomataceae*, *Ophiostomatales*, *Sordariomycetes*, seven species, type: *P. ulmi* (M.B. Schwarz) J.L. Crane & Schokn., hyphomycetous, saprobes, pathogens, worldwide, see Kamgan Nkuekam et al. (2008; new species),
Grobbelaar et al. (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

**Pestalopezia** Seaver 1942, *Helotiaceae, Helotiales, Leotiomyctes*, three species, type: *P. brunneopruinosa* (Zeller) Seaver, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pestalotiopsis** Steyaert 1949, *Pestalotiopsidaceae, Xylariales, Sordariomyctes*, c. 300 species, type: *P. maculans* (Corda) Nag Raj, asexual morph coelomycetous, saprobes or pathogens on plants, worldwide, see Maharachchikumbura et al. (2012, 2014; phylogeny, morphology), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), 55 species have ex-type sequences, type specimen of: CBS H-15678, needs generic revision.

**Pestalozziella** Sacc. & Ellis ex Sacc. 1882, *Ascomycota genera incertae sedis*, four species, type: *P. inquinans* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Petchiomyces** E. Fisch. & Mattir. 1938, *Pyronemataceae, Pezizales, Pezizomyctes*, one species, type: *P. thwaitesii* (Berk. & Broome) E. Fisch. & Mattir., asexual morph unknown, saprobes, terrestrial, North America, Sri Lanka, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Peterozyma** Kurtzman & Robnett 2010, *Pichiaceae, Saccharomycetales, Saccharomyctes*, two species, type: *P. toletana* (Socias, C. Ramírez & Peláez) Kurtzman & Robnett, asexual reproduction is by multilateral budding, saprophytic, tanning fluid, insect frass from trees and tree bark, Europe, North America, see Kurtzman and Suzuki (2010; taxonomy), sequences are available.

**Petraclis** Fr. 1845, *Stictidaceae, Ostropales, Lecanoromyctes*, six species, type: *P. exanthematica* (Sm.) Fr., asexual morph unknown, lichenized, terrestrial, worldwide, see Orange (2009; new species, DNA), Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

**Petraclia** Syd. & P. Syd. 1913, *Dothideomyctes genera incertae sedis*, three species, type: *P. echinata* (Peglion) Syd. & P. Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Asia, see Wijayawardene et al. (2012, 2017; outline), Butin et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Li et al. (2016; phylogeny, taxonomy), cultures available for the type: OH 080921.4, needs generic revision.

**Petraclia** Syd. 1924, *Phyllachoraceae, Phyllachorales, Sordariomyctes*, two species, type: *P. insignis* Syd., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Petraclia** Cif. 1932, *Dothideomyctes genera incertae sedis*, two species, type: *P. a mirabilis* Cif., asexual morph unknown, epiphytes, terrestrial, see Hofmann (2009; review, accepted as a genus in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, keys, accepted as a genus in *Dothideomyctes*), Wijayawardene et al. (2014; outline, accepted in *Dothideomyctes*), cultures and sequences unavailable, syntype of type: NY 00936794.

**Petraclia** Bat., A.F. Vital & Cif. 1958, *Dothideomyctes genera incertae sedis*, one species, type: *P. byrsonimae* Bat., A.F. Vital & Cif., asexual morph unknown, epiphytes, terrestrial, Guyana, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Wu et al. (2011; not accepted as *Microthyriaceae*), Kirk et al. (2013; genus
accepted), Hyde et al. (2013; not accepted as a genus in Microthyriaceae), Wijayawardene et al. (2014; outline, accepted as a genus in Dothideomycetes), cultures and sequences are unavailable, needs generic revision.

**Petrakiopsis** Subram. & K.R.C. Reddy 1968, Ascomycota genera incertae sedis, one species, type: *P. elegans* Subram. & K.R.C. Reddy, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Petersiella** Curzi 1930, Microascaceae, Microascales, Sordariales, two species, type: *P. asymmetrica* Curzi, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, available specimen and cultures for the type: CBS H-7548; CBS 238.38.

**Petrophila** de Hoog & Quaedvlieg 2014, Extremaceae, Capnodiales, Dothideomycetes, one species, type: *P. incerta* de Hoog & Quaedvlieg, hyphomycetous, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 118608 = TRN139b.

**Peyritschiella** Thaxt. 1890, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, 47 species, type: *P. curvata* Thaxt., asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Peyronelia** Cif. & Gonz. Frag. 1927, Ascomycota genera incertae sedis, six or seven species (fide Seifert et al. 2011) but Index Fungorum (2017) lists only four epithets, type: *P. sirodesmioides* Cif. & Gonz. Frag., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, two species, type: *P. carpena* (Pers.) Tul. ex Fückel, asexual morph *Cryptosporiopsis*, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen and cultures for the type: CBS H-17476; CBS 923.96, CBS 921.96, needs generic revision.

**Pezicula** Tul. & C. Tul. 1865 (= Cryptosporiopsis Bubák & Kabát 1912; = Lagynodella Petr. 1922 fide Johnston et al. 2014), Dermateaceae, Helotiales, Leotiomyces, c. 50 species, type: *P. carpineae* (Pers.) Tul. ex Fückel, asexual morph *Cryptosporiopsis*, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Ashraf et al. (2012; Pakistan, ectomycorrhizae), Barseghyan et al. (2012; Israel). Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen and cultures for type: CBS H-15930; AFTOL-ID 507.

**Peziza** Dill. ex Fr. 1822, Pezizaceae, Pezizales, Pezizomycetes, one species, type: *P. vesiculosa* Bull., asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Ashraf et al. (2012; Pakistan, ectomycorrhizae), Barseghyan et al. (2012; Israel). Kirk et al. (2013; genus accepted), cultures and sequences are available, available specimen and cultures for type: CBS H-15930; AFTOL-ID 507.

**Pezolepis** Syd. 1925, Dermateaceae, Helotiales, Leotiomyces, two species, type: *P. denigrata* Syd., asexual morph unknown, saprobes, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pezoloma** Clem. 1909, Leotiaceae, Helotiales, Leotiomyces, 14 species, type: *P. denigrata* Clem., asexual morph unknown, saprobes, terrestrial, temperate, see Huhtinen et al. (2010; new species, Sweden), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Bruzone et al. (2016; DNA), cultures and sequences are available but lacks for the type, needs generic revision.

**Pezomela** Syd. 1928, Helotiales genera incertae sedis, Leotiomyces, one species, type: *P. saxegothaeae* Syd., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and
Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; phylogeny), cultures and sequences are available for unidentified species, needs generic revision.

**Phacellium** Bonord. 1860, *Tetraoeciaecae, Capnodiales, Dothideomycetes*, 27 species, type: *P. inornatum* Bonord., hyphomycetous, saprobes, pathogens, terrestrial, Asia, Europe, North America, South America, see Crous et al. (2009; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Phacidiella** P. Karst. 1884, *Helotiales* genera *incertae sedis*, *Leotiomyctes*, one species, type: *P. salicina* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species, treated as *Ostropales*), cultures and sequences are available but lacks for the type, needs generic revision since have different opinions.

**Phacidina** Höhn. 1917, *Leptopeltidaceae, Dothideomycetes* families *incertae sedis*, one species, type: *P. gracilis* (Niessl) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Leptopeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Phacioidynyisin** Potebnia 1912 (= *Potebniyamycis* Smerlis 1962, = *Discosporiopsis* Petr. 1921 *fide* Johnston et al. 2014), *Phacidaeaceae, Phacidiales, Leotiomyctes*, five species, type: *P. malorum* Potebnia, asexual morph coelomycetous, saprobes, pathogens terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; phylogeny), Johnston et al. (2014; nomenclature), Díaz et al. (2016; pathogens, DNA), cultures and sequences are available but lacks for the type, needs generic revision.

**Phacidium** Fr. 1815 (= *Ceuthospora* Grev. 1826 *fide* Johnston et al. 2014), *Phacidaeaceae, Phacidiales, Leotiomyctes*, 270 species, type: *P. lacerum* Fr., asexual morph formerly named in *Ceuthospora*, saprobes, plant pathogens, terrestrial, worldwide, see Barbeito et al. (2013; pathogenicity), Petäistö et al. (2013; pathogenicity), Crous et al. (2014, 2015a, b; phylogeny, new species), Johnston et al. (2014; nomenclature), Suija et al. (2015; phylogeny), Wiseman et al. (2016; new disease), cultures and sequences are available, epitype and ex-epitype of type: CBS H-10302; CBS 761.73.

**Phacographa** Hafellner 2009, *Lecanographaceae, Arthoniales, Arthoniomyctes*, three species, type: *P. glaucomaria* (Nyl.) Hafellner, sexual morph with rounded ascomata, lichenicolous, terrestrial, Northern Hemisphere, see Hafellner (2009; morphology), Frisch et al. (2014; phylogeny), sequences are available, lectotype of the type: Nylander (H-Nyl. 11019).

**Phacopsis** Tul. 1852, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 22 species, type: *P. vulpina* Tul., assexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhurbenko (2010; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Phacostrama** Petr. 1955, *Asconymyctes* genera *incertae sedis*, one species, type: *P. hypoderrium* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phacostrama** Petr. 1955, *Asconymyctes* genera *incertae sedis*, one species, type: *P. coronata* (Fuckel) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Gennany, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phacothea** Trevis. 1856, *Lecanographaceae, Arthoniales, Arthoniomyctes*, one species, type: *P. varium* (Tul.) Trevis., lichenicolous, terrestrial, Northern Hemisphere, see Hafellner
Phaeangellina  Dennis 1955, Helotiaceae, Helotiales, Leotiomycetes, one species, type: P. empetri (W. Phillips) Dennis, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeangium Pat. 1894, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: P. lefebvrei Pat., asexual morph unknown, saprobes, terrestrial, North Africa, Arabian peninsula, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Zitouni-Haouar et al. (2016; DNA), cultures available for the type: BMBH4 (Zitouni-Haouar et al. 2016), needs generic revision.


Phaeoblastophora Partr. & Morgan-Jones 2002, Ascomycota genera incertae sedis, two species, type: P. resinae (Fr.) Partr. & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Phaeobotryon Theiss. & Syd. 1915, Botryosphaeriaceae, Botryosphaeriaceae, Dothideomycetes, four species, type: P. cercidis (Cooke) Theiss. & Syd., asexual morph coelomycetous, saprobes, pathogens, terrestrial, cosmopolitan, see Phillips et al. (2008, 2013; taxonomy, phylogeny), Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in Botryosphaeriaceae), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny), Dissanayake et al.(2016; taxonomy), cultures and sequences are available.

Phaeocalicium A.F.W. Schmidt 1970, Mycocaliciaceae, Mycocaliciales, Eurotiomycetes, eleven species, type: P. praecedens (Nyl.) A.F.W. Schmidt, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Tibell et al. (2014; new species), Tuovila et al. (2014; DNA), Telfer et al. (2015; DNA, phylogeny), sequences are available, voucher specimen of the type: Tuovila 09-240 (TUR).


Phaeochora Höhn. 1909, Phaeochoraceae, Phyllichorales, Sordariomycetes, five species, type: P. chamaeropis (Cooke) Höhn., saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.
Phaeochorella Theiss. & Syd. 1915, Phyllachoraceae, Phyllachorales, Sordariomycetes, six species, type: P. parinaris (Henn.) Theiss. & Syd., from living leaves, South Africa, Phillipines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, available specimen of type: CBS H-15956, needs generic revision.

Phaeochoropsis K.D. Hyde & P.F. Cannon 1999, Phaeochoraceae, Phyllachorales, Sordariomycetes, four species, type: P. neowashingtoniae (Shear) K.D. Hyde & P.F. Cannon, saprobes, North and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phaeococcomyces de Hoog 1979, Phaeococcomycetaceae, Lichenostigmatales, Arthoniaceae, eight species, type: P. nigricans (M.A. Rich & A.M. Stern) de Hoog, hyphomycetous, sexual morph unknown, on human, saprobes, Asia, Europe, North America, South America, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), Moreno-Rico et al. (2014; new species), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Phaeocryptopus Naumov 1915, Dothideaceae, Dothideales, Dothideomycetes, eight species, type: P. abietis Naumov, asexual morph unknown, growing on conifer needles, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Thambugala et al. (2014; review), cultures and sequences are available, holotype of type: F67760.

Phaeocyrtidula Vain. 1921, Dothideomycetes genera incertae sedis, two species, type: P. pinea (Nyl.) Vain., saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Phaeocyrtostroma Petr. 1921, Diaporthaceae, Diaporthales, Sordariomycetes, four species, type: P. istricha Petr., coelomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; phylogeny, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Phaeodactyllum Agnihothr. 1968, Ascomycota genera incertae sedis, five species, type: P. venkatesanum Agnihothr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Castañeda Ruiz et al. (2009, 2013; new species), Seifert et al. (2011; morphology), Zhang et al. (2011; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished), needs generic revision, needs generic revision.

Phaeodimeriella Speg. 1908, Pseudoperisporiaceae, Dothideomycetes family incertae sedis, 15 species, type: P. occulta (Racib.) Speg, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Pseudoperisporiaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Mapook et al. (2016; taxonomy, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Phaeodiscula Cub. 1891, Ascomycota genera incertae sedis, one species, type: P. celottii Cub., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeodomus Höhn. 1909, Ascomycota genera incertae sedis, three species, type: P. lauracearum Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Phaeodothis Syd. & P. Syd. 1904, Didymosphaeriaceae, Pleosporales, Dothideomycetes, five species, type: *P. tricuspidis* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline). Hyde et al. (2013; accepted in *Didymosphaeriaceae*), Ariyawansa et al. (2014; accepted in *Didymosphaeriaceae*), Wijayawardene et al. (2014; outline), Verkley et al. (2014; new species, phylogeny), sequences and cultures available only for *P. winteri* but lacks for the type, available specimen for type: CBS H-4793.

Phaeofabraea Rehm 1909, Helotiaceae, Helotiales, Leotiomycetes, one species, type: *P. miconta* Rehm, asexual morph unknown, saprobes, terrestrial, South America, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeographis Müll. Arg. 1882, Graphidiaceae, Ostropales, Lecanoromycetes, 150 species, type: *P. dendritica* (Ach.) Müll. Arg., asexual morph unknown, lichenized, terrestrial, mostly tropical, see Rivas Plata et al. (2012a; phylogeny), Archer (2009; key, Australia), Lücking et al. (2014; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Phaeographopsis Sipman 2007, Graphidiaceae, Ostropales, Lecanoromycetes, three species, type: *P. indica* (Patw. & Nagarkar) Sipman & Aptroot, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2013; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Phaeohelotium Kanouse 1935, Helotiaceae, Helotiales, Leotiomycetes, 41 species, type: *P. flavum* Kanouse, asexual morph unknown, saprobes, terrestrial, worldwide, see Hengstmengel (2009; outline), Kaya (2009; Turkey), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Phaeohiratsukaea Udagawa & Iwatsu 1990, Ascomycota genera incertae sedis, one species, type: *P. expansa* Udagawa & Iwatsu, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: National Institute of Hygienic Sciences, Tokyo, NHL2968, needs generic revision.

Phaeoidiomyces Dorn.-Silva & Dianese 2004, Ascomycota genera incertae sedis, one species, type: *P. qualear* Dorn.-Silva & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: UB (col. micol.) 9851, needs generic revision.

Phaeoisaria Höhn. 1909, Pleurotheciaceae, Pleurotheciales, Sordariomycetes, 20 species, type: *P. bambusae* Höhn., hyphomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Mel’nik et al. (2012; new species, Vietnam), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Cheng et al. (2014; new species, China), Crous et al. (2015; new species), Liu et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Phaeolabrella Speg. 1912, Ascomycota genera incertae sedis, one species, type: *P. eryngicola* Speg., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phaeomoniella Crous & W. Gams 2000, Phaeomoniellaceae, Phaeomoniellales, Eurotiomycetes, one species, type: *P. chlamydospora* (W. Gams, Crous, M.J. Wingf. &
Mugnai) Crous & W. Gams, hyphomycetous, sexual morph unknown, with coelomycetous synasexual morph, pathogens, saprobes, endophytic, terrestrial, Italy, see Chen et al. (2015; phylogeny), Crous et al. (2015; phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, holotype of type: CBS H-229.95 as Phaeoacremonium chlamydosporum W. Gams et al., reference culture of type: CBS 229.95.

**Phaeomonilia** R.F. Castañeda, Heredia & R.M. Arias 2007, Ascomycota genera incertae sedis, four species, type: *P. pleiomorpha* R.F. Castañeda, Heredia & R.M. Arias, hyphomycetous, sexual morph unknown, saprobes, terrestrial and aquatic, Mexico, see Hyde et al. (2011; checklist), Seifert et al. (2011; morphology), Ma et al. (2015; new species), Yang et al. (2016; new species), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, holotype of the type: XAL CB746, compare with Botryomonilia, Pseudaegerita, Staheliella and Oidiodendron.

**Phaeomonostichella** Keissl. ex Petr. 1941, Ascomycota genera incertae sedis, one species, type: *P. symploci* (Keissl.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phaeonaea** L. Holm & K. Holm 1977, Dermateaceae, Helotiales, Leotiomycetes, one species, type: *P. monilispora* (Starbäck) L. Holm & K. Holm, asexual morph unknown, saprobes, terrestrial, northern Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phaeonectriella** R.A. Eaton & E.B.G. Jones 1971, Halosphaeriaceae, Microascales, Sordariomycetes, two species, type: *P. lignicola* R.A. Eaton & E.B.G. Jones, asexual morph unknown, saprobes on wood, marine, temperate, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015, 2016; outline), sequences are available, needs generic revision.

**Phaeopeltopsophera** Berl. & Peglion 1892, Dothideomycetes genera incertae sedis, two species, type: *P. caudata* Berl. & Peglion, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Phaeophacidium** Henn. & Lind 1897, Rhytismatales genera incertae sedis, Leotiomycetes, four species, type: Phaeophacidium escalloniae Henn. & Lindau, asexual morph unknown, saprobes, causing leaf spots, terrestrial, Asia, Australia, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phaeophleospora** Rangel 1916, Mycosphaerellaceae, Capnodiales, Dothideomycetes, eleven species, type: *P. eugeniae* Rangel, coelomycetous, with mycosphaerella-like sexual morphs, plant pathogens, see Wijayawardene et al. (2012, 2017; outline), Quaedvlieg et al. (2014; morphology; phylogeny), Crous et al. (2015, 2016; new species), cultures and sequences are available, neotype of type: IMI 372655.

**Phaeophloeospora** Crous & B. Sutton 1997, Ascomycota genera incertae sedis, one species, type: *P. ekebergiae* (Syd.) Crous & B. Sutton, coelomycetous, sexual morph unknown, Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phaeophyscia** Moberg 1977, Physciaceae, Teloschistales, Lecanoromycetes, 66 species, type: Phaeophyscia orbicularis (Neck.) Moberg, foliose lichen, terrestrial, worldwide, see Shukla & Upreti (2009; bioindicator), Lendemer (2009; record), Brackel (2010; Iceland), Arslan et al. (2011; Turkey), Shukla et al. (2012; physiology), Pindaru et al. (2013; chemical composition),
Lücking et al. (2016; classification), cultures and sequences are available for most of the species including type, needs generic revision.

**Phaeopyxis** Rambold & Triebel 1990, *Helotiales* genera *incertae sedis*, *Leotiomyces*, five species, type: *P. punctum* (A. Massal.) Rambold, lichenicolous, terrestrial, Europe, Asia, North and South America, Australia, see Diederich et al. (2009; Europe), Motiejūnaitė et al. (2011; Lithuania), Matwiejuk and Bohdan (2011; Poland), Himelbrant et al. (2013; Russia), Suija et al. (2015; phylogeny), sequences are available, needs generic revision.

**Phaeoramularia** Munt.-Cvetk. 1960, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, more than 100 species names, but genus appears one species, type: *P. gomphrenicola* (Speg.) Munt.-Cvetk., hyphomycetous, plant pathogens, see Videira et al. (2017; morphology, phylogeny), cultures and sequences are available, holotype of type: LPS 914, isotypes of type: BPI 436740, BPI 722393; K(M) IMI 7706 (slide), MICH 15302.

**Phaeorrhiza** H. Mayrhofer & Poelt 1979, *Physciaceae*, *Teloschistales*, *Lecanoromycetes*, two species, type: *Phaeorrhiza nimbosa* (Fr.) H. Mayrhofer & Poelt, asexual morph unknown, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Resl et al. (2016; phylogeny), cultures and sequences are available, cultures available for the type: T805, needs generic revision.

**Phaeosaccardinula** Henn. 1905, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, 16 species, type: *P. diospyricola* Henn., asexual morph unknown, epiphytes, sooty moulds, terrestrial, China, Thailand, see Chomnunti et al. (2012; 2014; morphology; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Yang et al. (2014; morphology; phylogeny), cultures and sequences are available for some species, available specimen of type: CBS H-4260, needs generic revision.

**Phaeoschizotrichum** C.R. Silva, Gusmão & R.F. Castañeda 2015, *Ascomycota* genera *incertae sedis*, one species, type: *P. ramosum* Silva, Gusmão & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Silva et al. (2015; morphology), cultures and sequences are unavailable, holotype of the type: HUEFS 210423, compare with *Passalora*, *Pseudocercospora* and *Schizotrichum*.

**Phaeosclera** Sigler, Tsuneda & J.W. Carmich. 1981, *Dothideomycetes* genera *incertae sedis*, two species, type: *P. dematioides* Sigler, Tsuneda & J.W. Carmich., hyphomycetous, sexual morph unknown, terrestrial, saprobes, worldwide, see Schoch et al. (2011; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, isotype and cultures available for the type: CBS H-7557; CBS 157.81.

**Phaeosclerotinia** Hori 1916, *Sclerotiniaceae*, *Helotiales*, *Leotiomyces*, one species, type: *P. nipponica* Hori, asexual morph hyphomycetous, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phaeoscypha** Spooner 1984, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, one species, type: *P. cladii* (Nag Raj & W.B. Kendr.) Spooner, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Phaeosperma** Nitschke ex Fuckel 1870, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. dryophilum* Nitschke ex G.H. Otth, asexual morph unknown, saprobes, terrestrial,
Switzerland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, epitype and ex-epitype strains of type: WU 32035; CBS 133213, LG21, needs generic revision.

**Phaeosphaeria** I. Miyake 1909, *Phaeosphaeriaceae, Pleosporales, Dothideomycetes*, 90 species, type: *P. oryzae* I. Miyake, asexual morph coelomycetous, saprobos or pathogens, terrestrial, worldwide, see Zhang et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), sequence data available for more than 10 species, need adequate sequence data, needs generic revision, ex-epitype strains of type: CBS 110110; lectotype of type: S-F9572.

**Phaeosphaeriopsis** M.P.S. Câmara, M.E. Palm & A.W. Ramaley 2003, *Phaeosphaeriaceae, Pleosporales, Dothideomycetes*, ten species, type: *Phaeosphaeriopsis glauco punctata* (Grev.) M.P.S. Câmara, M.E. Palm & A.W. Ramaley, asexual morph unknown coelomycetous, saprobos, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013 accepted as a genus in *Phaeosphaeriaceae*), Phookamsak et al. (2014; accepted as a genus in *Phaeosphaeria ceae*), Wijayawardene et al. (2014, 2017; outline), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

**Phaeospora** Hepp 1867, *Verrucariaceae, Verrucariales, Eurotiomycetes*, 17 species, type: *P. rimosicola* (Leight. ex Mudd) Hepp, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Etayo (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), van den Boom and Etayo (2014; new species), cultures and sequences are unavailable for the type, needs generic revision.

**Phaeosporis** Clem. 1909, *Sordariales* genera *incertae sedis*, *Sordariomycetes*, two species, type: *P. melasperma* (Nyl.) Clem., asexual morph unknown, saprobos, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


**Phaeostalagmus** W. Gams 1976, *Ascomycota* genera *incertae sedis*, seven species, type: *P. cyclosporus* (Grove) W. Gams, hyphomycetous, sexual morph unknown, saprobos, terrestrial, worldwide, see Seifert et al. (2011; morphology, treated as *Chaetosphaeriaceae*), Wijayawardene et al. (2012, 2017; outline, accepted as a genus in *Ascomycota*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, listed in *Chaetosphaeriaceae*), cultures and sequences are unavailable, available specimen of type: CBS H-19245, needs generic revision.

**Phaeostilbelloides** Armando, Z.M. Chaves & Dianese 2015, *Ascomycota* genera *incertae sedis*, one species, type: *P. velloziae* Armando, Z.M. Chaves & Dianese, hyphomycetous, sexual morph unknown, on living leaves, terrestrial, Brazil, see Armando et al. (2015; morphology), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, holotype of the type: UBMC 18404, compare with *Myrothecium* and *Phaeostilbella*.

**Phaeotheca** Sigler et al. 1981 *Capnodiales*, genera *incertae sedis*, four species, type: *P. fissurella* Sigler, Tsuneda & J.W. Carmich., hyphomycetous, sexual morph unknown, saprobos, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2016; new species, phylogeny), cultures are available.

**Phaeothecoidea** Crous 2007, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, three species, type: *P. eucalypti* Crous & Summerell, hyphomycetous, sexual morph unknown, pathogens, saprobos, Australia, see Crous et al. (2007, 2009; morphology, phylogeny), Seifert
et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype and ex-type culture of type: CBS-H 19836, CPC 12918.

**Phaeothecoidiella** Batzer & Crous 2010, *Capnodiales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *P. missouriensis* Batzer & Crous, hyphomycetous, sexual morph unknown, pathogens, saprobes, USA, see Yang et al. (2010; morphology, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype and ex-type culture of type: CBS H-20322, CPC 16116.

**Phaeothyriolum** Syd. 1938, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. eucalyptinum* Syd., asexual morph unknown, saprobes, terrestrial, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

**Phaeothyrium** Petr. 1947, *Ascomycota* genera *incertae sedis*, one species, type: *P. pulchellum* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phaeotomasellia** Katum. 1981, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. ruwenzoensis* Katum., asexual morph unknown, saprobes, terrestrial, Uganda, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Phaeotrichoconis** Subram. 1956, *Ascomycota* genera *incertae sedis*, two species, type: *P. crotalariae* (M.A. Salam & P.N. Rao) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phaeotrichosphaeria** Sivan. 1983, *Sordariomycetes* genera *incertae sedis*, two species, type: *P. indica* Sivan. & N.D. Sharma, asexual morph unknown, pathogens, terrestrial, India, UK, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Phaeotrichum** Cain & M.E. Barr 1956, *Phaeotrichaceae*, *Phaeotrichales*, *Dothideomycetes*, two species, type: *P. hystricum* Cain & M.E. Barr, asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as a genus in *Phaeotrichaceae*), Hyde et al. (2013; accepted as a genus in *Phaeotrichaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, needs generic revision.

**Phaeoxyphiella** Bat. & Cif. 1963, *Ascomycota* genera *incertae sedis*, seven species, type: *P. morotototoni* Bat. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Phaffiomycetes** Y. Yamada 1997, *Phaffiomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, five species, type: *P. opuntiae* (Starmer, Phaff, M. Miranda, M.W. Miller & J.S.F. Barker) Y. Yamada, asexual reproduction is by multilateral budding, saprophytic, necrotic tissue of the columnar cactus (*Cephalocereus royenii*), the prickly pear cactus (*Opuntia inermis*) and the senita cactus (*Lophocereus schottii*), Australia, USA, islands of the Caribbean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Phalangispora** Nawawi & J. Webster 1982, *Ascomycota* genera *incertae sedis*, three species, type: *P. constrepta* Nawawi & J. Webster, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available (unpublished), needs generic revision.

**Phanerococcus** Cif. 1954, *Ascomycota* genera *incertae sedis*, two species, type: *P. rapanea* Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, Santo Domingo, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phaneromyces** Speg. & Har. 1889, *Phaneromycetaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *P. macrosporus* (Boud.) Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Phaulemoniopsis** Perdomo, Dania García, Gené, Cano & Guarro 2013, *Sordariomycetes* genera *incertae sedis*, six species, type: *P. ocularis* (Gené & Guarro) Perdomo, Dania García, Gené & Guarro, asexual morph unknown, pathogens on human, endophytes, terrestrial, America, China, see Perdomo et al. (2013; taxonomy, phylogeny), Desoubeaux et al. (2014; pathogens, phylogeny), Tsang et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), Su et al. (2016; new species), cultures and sequences are available, cultures available for the type: FMR 6632, needs generic revision.


**Phialarthrobotryum** Matsush. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *P. tri septatum* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen for type: CBS H-7561, needs generic revision.

**Phialoascus** Redhead & Malloch 1977, *Saccharomycetales* genera *incertae sedis*, *Saccharomyces*, one species, type: *P. borealis* Redhead & Malloch, asexual reproduction unknown, mycoparasitic on the mushroom *Cor tinarius huronensis*, Canada, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

terrestrial, aquatic, worldwide, see Grünig et al. (2009; new species), Wang et al. (2009; new species, Missouri), Lumbsch and Huhndorf (2010; outline), Day et al. (2012; new species), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures available for the type: CBS 300.62, needs generic revision.

**Phialogeniculata** Matsush. 1971. *Ascomycota* genera incertae sedis, one species, type: *P. guadalcanalensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Guadalupe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Phialophaeoisaria** Matsush. 1995, *Ascomycota* genera incertae sedis, one species, type: *P. spongiosa* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Matsushima Fungus Collection, Kobe, MFC-21770, needs generic revision.

**Phialophora** Medlar 1915, *Herpotrichiellaceae*, *Chaetothyriales*, *Eurotiomycetes*, nine species, type: *P. verrucosa* Medlar, hyphomycetous, mostly saprobes, terrestrial, isolated from soil, decaying plant material and other substrates, also including important clinically-relevant fungi, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Réblová et al. (2013; reallocation of selected taxa), Madrid et al. (2016; reallocation), Li et al. (2017; outline, new species), cultures and sequences are available, ex-epitype of the type: CBS 140325.

**Phialophorophoma** Linder 1944, *Pleosporales* genera incertae sedis, one species, type: *P. litoralis* Linder, coelomycetous, sexual morph unknown, marine, saprobes, Europe, USA, see Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), Wijayawardene et al. (2017; outline), cultures and sequences are available, available specimen of type: CBS H-17521, needs generic revision.

**Phialosporostilbe** Mercado & J. Mena 1985, *Ascomycota* genera incertae sedis, five species, type: *P. turbinata* Mercado & J. Mena, hyphomycetous, sexual morph unknown, saprobes, in soil, terrestrial, Asia, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available (unpublished), needs generic revision.

**Phialostele** Deighton 1969, *Ascomycota* genera incertae sedis, one species, type: *P. scytopetalii* Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Phillipsia** Berk. 1881, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, 17 species, type: *P. domingensis* Berk., asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: DHP 7169, needs generic revision.
**Phillipsiella** Cooke 1878, *Capnodiales* *genera incertae sedis, Dothideomycetes*, twelve species, type: *P. atra* Cooke, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Saccardiales*), Kirk et al. (2013; genus accepted), da Silva et al. (2016; phylogeny), cultures and sequences are available.

**Philobryon** Döbbeler 1988, *Dothideomycetes* *genera incertae sedis*, one species, type: *P. anuliferum* Döbbeler, on Bryophyta, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Philonectria** Hara 1914, *Dothideomycetes* *genera incertae sedis*, three species, type: *P. variabilis* Hara, saprobes, Japan, Uganda, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Phleoeopsis** J. Steiner 1902, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, four species, type: *P. pulvinulina* J. Steiner, asexual morph unknown, lichenized, terrestrial, Asia, Africa, North America, see Schultz et al. (2009; Namibia, South Africa), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Candan and Schultz (2015; new species, taxonomy), Lücking et al. (2016; classification), sequence data available for one species, needs generic revision.

**Phloeospora** Wallr. 1833, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, c. 150 species but need a revision, type: *P. ulmi* (Fr.) Wallr., coelomycetous, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2013; phylogeny), cultures and sequences are unavailable, needs generic revision.

**Phloeosporina** Höhn. 1924, *Ascomycota* *genera incertae sedis*, one species, type: *P. minor* (Ellis & Kellerm.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phlogicylindrium** Crous, Summerb. & Summerell 2006, *Phlogicylindriaceae*, *Xylariales*, *Sordariomycetes*, three species, type: *P. eucalypti* Crous, Summerb. & Summerell, asexual morph unknown, saprobes, all occurring on *Eucalyptus* species, Australia, see Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2012, 2014; phylogeny, morphology), Crous et al. (2016; new species, phylogeny), sequence data available for all species, holotype and ex-type strain of the type: CBS H-19749; CBS 120080.

**Phlyctenaelli** Petr. 1922, *Ascomycota* *genera incertae sedis*, two species, type: *P. polonica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Australia, see Tiwari et al. (2012; new species, India), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phlyctema** Desm. 1847, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, c. 30, type: *M. caespitosa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2013; new species), Johnston et al. (2014; treated as a synonym of *Neofabraea*), Chen et al. (2016; resurrected the genus), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

**Phlyctis** (Wallr.) Flot., 1850, *Phlyctidaceae*, *Lecanorales*, *Lecanoromycetes*, 20 species, type: *P. agelaea* (Ach.) Flot., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Fernandez-Brime et al. (2011; phylogeny), Kelly et al. (2011; DNA barcoding), Kirk et al. (2013; genus accepted), Gasparyan and Sipman (2015; diversity and conservation), Gerra-Inohosa et al. (2015; epiphytes diversity), Lücking et al.
(2016; classification), Weerakoon et al. (2016; new species and records), sequence data available, needs generic revision.

**Phoebus** R.C. Harris & Ladd, 2007, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *P. hydrophobius* R.C. Harris & Ladd, asexual morph unknown, lichenized, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Phoma** Sacc. 1880, *Didymellaceae*, *Pleosporales*, *Dothideomycetes*, c. 100 species, type: *P. herbarum* Westend., coelomycetous, sexual morph didymella-like, saprobes, pathogens, terrestrial, worldwide, see de Gruyter et al. (2009, 2010, 2013; taxonomy, phylogeny), Aveskamp et al. (2010; phylogeny), Woudenberg et al. (2009; sexual morph), Wijayawardene et al. (2012, 2014, 2017; outline); Hyde et al. (2013; accepted as a genus in *Didymellaceae*), Kirk et al. (2013; genus accepted), Chen et al. (2015; phylogeny), cultures and sequences are available.

**Phomachorella** Petr. & Syd. 1925, *Ascomycota* genera *incertae sedis*, two species, type: *P. lucida* (Berk. & M.A. Curtis) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, America, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phomatospora** Sacc., 1875, *Magnaportheaceae*, *Magnaporthales*, *Sordariomycetes*, c. 100 species, type: *P. berkeleyi* Sacc., saprobes on submerged wood or decaying twigs, widespread, asexual morph sporothrix-like reported from culture, see Raja and Shearer (2008; overview), Lumbsch and Huhndorf (2010; outline), Jones et al. (2015; marine species, outline), Maharachchikumbura et al. (2015, 2016; outline). Senanayake et al. (2016), sequences are available for four species but lacks for the type; available specimen of type: CBS H-5533.


**Phomidesmia** Clem. 1931, *Ascomycota* genera *incertae sedis*, one species, type: *P. meliolicola* (Speg.) Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Phomospora** Sacc., 1879, *Magnaporthaceae*, *Magnaporthales*, *Sordariomycetes*, one species, type: *P. marina* (Rehm) Bat., asexual morph unknown, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Phragmaspidium** Bat. 1960, *Dothideomycetes* genera *incertae sedis*, three species, type: *P. corruscans* (Rehm) Bat., asexual morph unknown, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Phragmeriella** Hansf. 1946, *Pseudoperisporiaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *P. ireiniae* Hansf., asexual morph unknown, saprobes, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, holotype of type: HKU (M) 5151.

**Phragmiticola** Sherwood 1987, *Helotiales* genera incertae sedis, *Leotiomyetes*, one species, type: *P. rhopalospermum* (Kirschst.) Sherwood, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phragmocephala** E.W. Mason & S. Hughes 1951, *Pleurotheciaceae*, *Pleurotheciales*, *Sordariomycetes*, nine species, type: *P. cookii* E.W. Mason & S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

**Phragmoconidium** G.F. Sepúlveda, Pereira-Carv. & Dianese 2009, *Ascomycota* genera incertae sedis, two species, type: *P. cerradense* G.F. Sepúlveda, Pereira-Carv. & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phragmodiaporthe** Wehm. 1941, *Melanconidaceae*, *Xylariales*, *Sordariomycetes*, five species, type: *P. caryae* (Peck) Wehm., asexual morph unknown, saprobes, North America, China, see Vasilyeva et al. (2008; new species, China), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

**Phragmodiscus** Hansf. 1947, *Sordariomycetes* genera incertae sedis, two species, type: *P. arundinariae* Hansf., asexual morph unknown, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

**Phragmogibbera** Samuels & Rogerson 1990, *Dothideomycetes* genera incertae sedis, three species, type: *P. xylaricola* Samuels & Rogerson, saprobes, Venezuela, see Lumbsch and Huhndorf (2010; outline, accepted in *Venturiaceae*), Hyde et al. (2013; not accepted in *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: VEN.

**Phragmopeltis** Hennek. 1904, *Ascomycota* genera incertae sedis, five species, type: *P. siparunae* Hennek., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Phragmoporthe** Petr. 1934, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *P. ploettnneriana* (Henn.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, North America., see Sogonov et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

**Phragmoscutella** Woron. & Abramov 1927, *Dothideomycetes* genera incertae sedis, one species, type: *P. abchasica* Woron. & Abramov, saprobes, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Phragmospathula** Subram. & N.G. Nair 1966, *Ascomycota* genera incertae sedis, one species, type: *P. phoenicis* Subram. & N.G. Nair, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012,
2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision. **Phragmospathulella** J. Mena & Mercado 1986, *Ascomycota* genera *incertae sedis*, one species, type: *P. matsushimae* J. Mena & Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision. **Phragmotrichum** Kunze 1823, *Ascomycota* genera *incertae sedis*, four species, type: *P. chaillietii* Kunze, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Asia, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen for type: CBS H-16912, needs generic revision. **Phththora** d'Hérelle 1909, *Ascomycota* genera *incertae sedis*, one species, type: *P. vastatrix* d'Hérelle, asexual morph unknown, saprobes, terrestrial, Guatemala, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision. **Phurnomyces** Thaxt. 1931, *Ceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *P. obtusus* Thaxt., asexual morph unknown, saprobes, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision. **Phycomelaina** Kohlm., 1968, *Phyllachorales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *P. laminariae* (Rostr.) Kohlm., asexual morph unknown, on marine alga *Laminaria*, temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phyllachoraceae*), Kirk et al. (2013; genus accepted), Jones et al. (2015; review), Maharachchikumbura et al. (2015, 2016; outline, accepted as a genus in *Phyllachorales*), cultures and sequences are unavailable, needs generic revision. **Phycorella** Döbbeler 1980, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. scytomonematis* Döbbeler, parasites, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision. **Phylacia** Lév. 1845, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, eight species, type: *P. globosa* Lév., asexual morph unknown, terrestrial, saprobes, mainly coprophilous, world wide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available. **Phyllachora** Nitschke ex Fuckel 1870, *Phyllachoraceae*, *Phyllachorales*, *Sordariomycetes*, c. 1000 species (need revision), type: *P. graminis* (Pers.) Fuckel, saprobes, North and South America, see Lumbsch and Huhndorf (2010; outline), Santos et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), DNA sequence available for the voucher UB21307 of the type, available specimen of type: CBS H-5212, needs generic revision. **Phyllachorella** Syd. 1914, *Botryosphaeriaceae*, *Botryosphaeriales*, *Dothideomycetes*, one species, type: *P. micheliae* Syd., asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (accepted as a genus in *Botryosphaeriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, available specimen of type: CBS H-4052, needs generic revision. **Phyllactinia** Lév. 1851, *Erysiphaceae*, *Erysiphales*, *Leotiomycetes*, 111 species, type: *P. guttata* (Wallr.: Fr.) Lév., asexual morph hyphomycetous, biotrophic, obligate plant pathogens, terrestrial, worldwide, see Takamatsu et al. (2008b, 2016; phylogeny), Lumbsch and Huhndorf (2010; outline), Braun and Cook (2012; taxonomy), Kirk et al. (2013; genus
accepted), sequences of non-type material of the type species are available, lectotype of type: ex herb. de Candolle (G 00122109).

**Phylleutypa** Petr. 1934, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, two species, type: *P. dioscoreae* (Wakef.) Petr., saprobes, Africa, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Phylliscidopsis** Sambo 1937, *Lichinaceae, Lichinales, Lichinomycetes*, one species, type: *P. abissinica* Sambo., asexual morph unknown, lichenized, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Phylliscidium** Forssell 1885, *Lichinaceae, Lichinales, Lichinomycetes*, one species, type: *P. abissinica* Sambo., asexual morph unknown, lichenized, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Phyllisciella** Henssen 1984, *Lichinaceae, Lichinales, Lichinomycetes*, three species, type: *P. marionensis* Henssen, asexual morph unknown, lichenized, terrestrial, Africa, see De Lange et al. (2012; conservation), Lumbsch and Huhndorf (2010; outline) Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Phylliscum** Nyl. 1855, *Lichinaceae, Lichinales, Lichinomycetes*, eight species, type: *Phylliscum demangeonii* (Moug. & Mont.) Nyl., asexual morph unknown, lichenized, terrestrial, worldwide, see Bajpai et al. (2009a, b; biodeterioration), Sheik et al. (2009, 2016; taxonomy), Lumbsch and Huhndorf (2010; outline), Nayaka and Upreti (2011; Uttar Pradesh), Anderson and Neily (2012, Nova Scotia), Prieto et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Goni et al. (2014; Jammu), Shukla et al. (2014; diversity), Lücking et al. (2016; classification), sequences are available.

**Phyllobaeis** Kalb & Gierl 1993, *Baeomycetaceae, Baeomycetales, Lecanoromycetes*, six species, type: *Phyllobaeis imbricata* (Hook.) Kalb & Gierl, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Cao et al. (2016; new species, phylogeny), Kirk et al. (2013; genus accepted), Flakus et al. (2015; taxonomy), Mittermeier et al. (2015; metabolic profiling), Lücking et al. (2016; classification), sequences are available.


**Phylloblastia** Vain. 1921, *Verrucariaceae, Verrucariales, Eurotiomycetes*, twelve species, type: *P. dolichospora* Vain., asexual morph unknown, lichenicolous, terrestrial, pantropical, see Flakus and Lücking (2008; new species, Bolivia), Lücking (2008; new species), Lumbsch and Huhndorf (2010; outline), McCarthy (2010; new species), Kirk et al. (2013; genus accepted), McCarthy and Stajsic (2013; new species), van den Broeck et al. (2014; new species), Lücking et al. (2016; classification), cultures and sequences are available for the type, needs generic revision.

**Phylloceles** Syd. 1925, *Sordariomycetes genera incertae sedis*, two species, type: *P. oyedaeae* Syd., saprobes, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.
Phyllocrea Sérusiaux & Aptroot 1997, Strigulaceae, Strigulales, Dothideomycetes, two species, type: P. papuanus Sérusiaux & Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted in Strigulaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of type: LG (Lambinon 87.427). Phyllocybe Höhn. 1918, Phyllachoraceae, Phyllachorales, Sordariomycetes, one species, type: P. quittenis (Pat.) Hönn., from living leaves, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phylloepis Petr. 1949, Helotiales genera incertae sedis, one species, type: P. epiphylla (Vézda) Lücking & Aptroot, asexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phylloepis Petr. 1949, Helotiales genera incertae sedis, one species, type: P. andina Petr., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Phylopendium Fr. 1825, Ascomycota genera incertae sedis, one species, type: P. epiphylla Fr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Wikee et al. (2013a, b; reinstated the family Phyllostictaceae), Kirk et al. (2013; genus accepted), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014; outline, phylogeny), cultures and sequences are available, available specimen of type: CBS H-16994, needs generic revision.

Phyllophora Tassi 1902, Ascomycota genera incertae sedis, 25 species, type: P. mahoniae Unamuno, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phyloplagia Deighton 1947, Helotiales genera incertae sedis, Leotiomyces, one species, type: P. coelomycetous, sexual morph unknown, saprobes, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Phyloporthe Syd. 1925, Gnomonaceae, Diaporthales, Sordariomycetes, one species, type: P. vernoniae Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Phyllosticta Pers. 1818 (= Guignardia Viala & Ravaz 1892 fide Wijayawardene et al. 2014), Phyllostictaceae, Botryosphaeriales, Dothideomycetes, c. 100 species, type: P. convallariae Pers., coelomycetous, sexual morph formerly named in Guignardia, saprobes, pathogens, endophytes, terrestrial, worldwide, see Wulandari et al. (2009; pathogens), Glienke et al. (2011; taxonomy), Wikie et al. (2011; review), Su and Cai (2012; phylogeny), Hyde et al. (2013; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Slippers et al. (2013; phylogeny). Wikie et al. (2013a, b; reinstated the family Phyllostictaceae), Wijayawardene et al. (2014; outline, phylogeny), cultures and sequences are available, available specimen of type: CBS H-16994, needs generic revision.

Phyumatrichopsis Hennebert 1973, Rhizinaeae, Pezizales, Pezizomycetes, 17 species, type: P. omnivora (Duggar) Hennebert, hyphomycetous, sexual morph unknown, pathogens, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Physalidiella Rulamort 1990, Ascomycota genera incertae sedis, three species, type: P. elegans (Mosca) Rulamort, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, Europe, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Physalospora** Niessl 1876, *Hyphomycetes, Xylariales, Sordariomycetes*, 37 species, type: *P. alpestris* Niessl, asexual morph unknown, terrestrial, aquatic, saprobes and endophytic, widespread, see Raja and Shearer (2008; new species, freshwater), Polashock et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available for three species, needs generic revision.

**Physalosporopsis** Bat. & H. Maia 1955, *Dothideomycetes* genera incertae sedis, 17 species, type: *P. rhizophoricola* Bat. & H. Maia, asexual morph unknown, pathogens, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Polashock et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Physcia** (Schreb.) Michaux 1803, *Physciaceae, Caliciales, Lecanoromycetes*, 80 species, type: *P. tenella* (Scop.) DC., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Prieto and Wedin (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Physcidia** Tuck 1862, *Ramalinaceae, Lecanorales, Lecanoromycetes*, ten species, type: *P. wrightii* (Tuck.) Tuck., assexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot and da Silva Caceres (2014; key), Dong et al. (2015; new records), Liu et al. (2016; taxonomy), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Physciella** Essl. 1986, *Physciaceae, Caliciales, Lecanoromycetes*, four species, type: *P. chloantha* (Ach.) Essl., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Prieto and Wedin (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Physconia** Poelt 1965, *Physciaceae, Caliciales, Lecanoromycetes*, 25 species, type: *P. pulverulenta* (Schreb.) Poelt, assexual morph unknown, lichenized, terrestrial, worldwide, see Lendemer et al. (2009; taxonomy), Begum and HariKrishna (2010; air pollution), Björk (2010; new record), Esslinger and Dillman (2010; new record), Loppi and Nascimbene (2010; bioindicators), Stamenković and Cvijan (2010; air pollution). Stamenković et al. (2010; bioindicators), Lisowska (2011; air pollution), Lumbsch and Huhndorf (2010; outline), Tsurykau et al. (2011; checklist), Yatsyna (2011; taxonomy), Gaya et al. (2012; sequence), Vicol (2012; list), Jury et al. (2013; list), Kirk et al. (2013; genus accepted), Bilovitz (2014; biodiversity), Goni et al. (2014; checklist), Karakoti et al. (2014; taxonomy), Kondratyuk et al. (2015; new species), Paoli et al. (2015; air pollution), Yavuz et al. (2015; epiphytes diversity), Lücking et al. (2016; classification), Motiejūnaitė et al. (2016; list), sequences are available for few species, needs generic revision.

**Physma** A. Massal. 1854, *Pannariaceae, Peltigerales, Lecanoromycetes*, 51 species, type: *P. boryanum* (Pers.) A. Massal., assexual morph unknown, lichenized, terrestrial, worldwide, see Wedin et al. (2009; phylogeny), Diederich et al. (2010; lectotypification), Otálora et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Din et al. (2010; chemoprofile), Jayalal et al. (2013; Vietnam), Kirk et al. (2013; genus accepted), Magain and Sérusiaux (2014; drivers in lichen symbiosis), Kerr (2014; checklist), Magain and Sérusiaux (2014; partial sequence), Ekman et al. (2014; transferred to *Pannariaceae*), Aptroot and John (2015;
taxonomy), Lücking et al. (2016; classification), Ohmura et al. (2016; Japan), Rangsriruji et al. (2016; phylogeny), sequences are available but lacks for type, needs generic revision.

**Physmatomyces** Rehm 1900, *Helotiaceae, Helotiales, Leotiomycetes*, one species, type: *P. compacti* E.A. Thomas ex Cif. & Tomas., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Picardella** I.I. Tav. 1985, *Labouleniaceae, Laboulbeniales, Laboulbeniomycetes*, two species, type: *P. endogaea* (F. Picard) I.I. Tav., asexual morph unknown, biotrophic, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Piccolia** A. Massal. 1856, *Lecanoromycetes* genera incertae sedis, seven species, type: *P. crocea* (Spreng.) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Pichia** E.C. Hansen 1904, *Pichiaceae, Saccharomycetales, Saccharomycetes*, 35 species, type: *P. membranifaciens* (E.C. Hansen) E.C. Hansen, asexual reproduction is by multilateral budding, saprophytic, but a few strains are of clinical origin, insect frass from various trees, cacti, rotted fruit, spoiled fruit juice, soil, tanning liquor, sputum, cecum of a cow, human and animal feces, various clinical sources (*P. kudriavzevii = Candida krusei*), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), a few assexual species of this clade presently remain in *Candida*, but will be transferred to *Pichia* as new combinations, cultures and sequences are available, needs generic revision.

**Picoa** Vittad. 1831, *Pyrenomataceae, Pezizales, Pezizomycetes*, three species, type: *P. juniperi* Vittad., asexual morph unknown, saprobes, hypogeous, terrestrial, worldwide, see Guecin et al. (2010; Turkey), Lumbsch and Huhndorf (2010; outline), Sbissi et al. (2010; DNA, phylogeny), Ammarellou et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Pidorplitchkoviella** Kiril. 1975, *Xylariales* genera incertae sedis, *Sordariomycetes*, one species, type: *P. terricola* Kiril., asexual morph unknown, from soil, terrestrial, British Islesrraine, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Piedraia** Fonseca & Leão 1928, *Piedraiaceae, Capnodiales, Dothideomycetes*, two species, type: *P. hortae* Fonseca & Leão, asexual morph unknown, human pathogen, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Piggotia** Berk. & Broome 1851, *Ascomycota* genera incertae sedis, three species, type: *P. astroidea* (Berk.) Berk. & Broome, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Pilgeriella** Hen. 1900, *Parodiopsidaceae, Dothideomycetes* families incertae sedis, two species, type: *P. perisporioides* Hen., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parodiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.
**Pilidium** Kunze 1823 (= *Discohainesia* Nannf. 1932; *Hainesia* Ellis & Sacc. 1884; *Sclerotiopsis* Sp. 1882 fide Johnston et al. 2014), *Chaetomellaceae*, *Helotiaceae*, *Leotiomyccetes*, six species, type: *P. acerinum* (Alb. & Schwein.) Kunze, coelomycetous, sexual morph formerly named in *Discohainesia*, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2013, 2015; new species), Johnston et al. (2014; nomenclature, new combination), cultures and sequences are available, available specimen and cultures for the type: CBS H-17074; CBS 736.68.

**Piloophorus** Th. Fr., 1857, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, 38 species, type: *P. robustus* Th. Fr., asexual morph unknown, lichenized, terrestrial, worldwide, see Wang et al. (2010, 2011a, b; new species, taxonomy), Lim et al. (2010; pyrosequencing), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequence data available, needs generic revision.

**Pinatubo** J.B. Manandhar & Mew 1996, *Ascomycota* genera incertae sedis, one species, type: *P. oryzae* J.B. Manandhar & Mew, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: ?CALP [as 'UPLB'] 10284, needs generic revision.

**Piperivora** Siboe, P.M. Kirk & P.F. Cannon 1999, *Ascomycota* genera incertae sedis, one species, type: *P. nodosa* Siboe, P.M. Kirk & P.F. Cannon, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 376523, needs generic revision.

**Piricauda** Bubák 1914, *Ascomycota* genera incertae sedis, eight species, type: *P. uleana* (Sacc. & P. Syd.) Bubák, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; outline), Whitton et al. (2012; morphology), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Piricaudilium** Hol.-Jech. 1988, *Ascomycota* genera incertae sedis, two species, type: *P. lobatum* Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Piricaudiopsis** J. Mena & Mercado 1987, *Ascomycota* genera incertae sedis, one species, type: *P. elegans* J. Mena & Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Zhang et al. (2014; transferred five species to new genus *Xiuguozhangia*), cultures and sequences are unavailable, needs generic revision.

**Pirispora** Faurel & Schotter 1966, *Ascomycota* genera incertae sedis, one species, type: *P. trisetosa* Faurel & Schotter, coelomycetous, sexual morph unknown, saprobes, terrestrial, Algeria, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pirostomella** Sacc. 1914, *Ascomycota* genera incertae sedis, two species, type: *P. raimundi* Sacc., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pirottaea** Sacc. 1878, *Dermateaceae*, *Helotiaceae*, *Leotiomyccetes*, 28 species, type: *P. veneta* Sacc. & Sp., asexual morph unknown, saprobes, terrestrial, aquatic, worldwide, see Lumbsch and Huhndorf (2010; outline), Chlebicka and Konvalinkova (2011; new species),
Kirk et al. (2013; genus accepted), cultures available but lacks for the type, needs generic revision.

**Pirozynskia** Subram. 1972, *Dothideomycetes* genera *incertae sedis*, two species, type: *P. fariae* Subram., sexual morph maurodothina-like, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*), cultures and sequences unavailable, needs generic revision.

**Pirozynskiiella** S. Hughes 2007, *Ascomycota* genera *incertae sedis*, two species, type: *P. solaninum* (Sacc. & P. Syd.) S. Hughes, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pisomyxa** Corda 1837, *Ascomycota* genera *incertae sedis*, one species, type: *P. rhacodioides* Corda, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available but lacks for the type, needs generic revision.

**Pisorisporium** Réblová & J. Fourn. 2015, *Pisorisporiaceae*, *Pisorisporales*, *Sordariomycetes*, one species, type: *P. cymbiforme* Réblová & J. Fourn., asexual morph unknown, from submerged branch, aquatic, France, Belgium, see Réblová et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type cultures available for the type: PRM 924377; CBS 138884.

**Pithomyces** Berk. & Broome 1873, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, c. 38 species, type: *P. flavus* Berk. & Broome, hyphomycetous, sexual morph didymella-like, saprobes, human and plant pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Irinyi et al. (2015; DNA barcodes for clinically important species), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

**Pithya** Fuckel 1870, *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, five species, type: *P. cupressina* (Batsch) Fuckel, asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Pithyella** Boud. 1885, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, eight species, type: *P. hypnina* (Quél.) Boud., asexual morph unknown, saprobes, on bryophytes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Pittostroma** Kowalski & T.N. Sieber 1992, *Ascomycota* genera *incertae sedis*, one species, type: *P. abietinum* Kowalski & T.N. Sieber, coelomycetous, sexual morph unknown, saprobes, terrestrial, Poland, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: ZT, needs generic revision.

**Placella** Syd. 1938, *Ascomycota* genera *incertae sedis*, one species, type: *P. fraseriana* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Placiopsis** Beltr. 1858, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 20 species, type: *P. grappae* Beltr., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2010; new species), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

**Placidium** A. Massal. 1855, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 28 species, type: *P. michelii* A. Massal., asexual morph unknown, lichenicolous, lichenized, terrestrial, worldwide, see Gueidan et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Prieto et al. (2012; new species), Kirk et al. (2013; genus accepted), sequences are available for the voucher M. Prieto 702 of the type, needs generic revision.

**Placoasterella** Sacc. ex Theiss. & Syd. 1915, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, four species, type: *P. schweinfurthii* (Henn.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted in *Asterinaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hongsanan et al. (2014; taxonomy, keys, transferred to *Parmulariaceae*), Wijayawardene et al. (2012, 2017; outline, accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), sequences are available but lacks for the type, needs generic revision.

**Placoasterina** Toro 1930, *Dothideomycetes* genera *incertae sedis*, three species, type: *P. antioquensis* Toro, asexual morph unknown, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Placocarpus** Trevis. 1860, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, five species, type: *P. schaereri* (Fr.) Breuss, asexual morph unknown, lichenized, terrestrial, worldwide, see Knudsen et al. (2009; new species, USA), Moon and Aptroot (2009; new species, South Korea), Lumbsch and Huhndorf (2010; outline), Prieto et al. (2010; new species), Roux and Gueidan (2011; new species, France), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Placocrea** Syd. 1939, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, four species, type: *Placocrea pulchella* Syd., asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Placodiplodia** Bubák 1916, *Ascomycota* genera *incertae sedis*, two species, type: *P. copelandii* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Placodothis** Syd. 1928, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. petrakii* Syd., asexual morph unknown, saprobes, terrestrial, West Indies, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Placolecios** Trevis 1857, *Cattillariaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *P. balaniana* (Fr.) Trevis., asexual morph unknown, lichenized, terrestrial, Asia, Europe, see Lumbsch and Huhndorf (2010; outline), Rizzi et al. (2011; Sardinia), Tufan-Çetin and Sümbül (2011; taxonomy), Kirk et al. (2013; genus accepted), Aptroot and Moon (2014; Korea), Gupta et al. (2015; checklist), Sipman and Raus (2015; Greece), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Placomaronea** Räsänen 1944, *Candelariaceae*, *Lecanorales*, *Lecanoromycetes*, six species, type: *P. candelarioides* Räsänen, asexual morph unknown, lichenized, terrestrial, America, Africa. See Westberg et al. (2009; monograph), Lumbsch and Huhndorf (2010; outline), Westberg and Sohrabi (2012; taxonomy), Kirk et al. (2013; genus accepted), Flakus et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are available, needs generic revision.
Placomyllum Cif. 1962, Dothideomycetes genera incertae sedis, one species, type: *P. dipteridis* Cif., sexual morph dothisasteroma-like, epiphytes, terrestrial, see Hofmann (2009; review, accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2012, 2014; outline), cultures and sequences are unavailable, needs generic revision.

Placozonema (Sacc. & D. Sacc.) Petr. 1921, Ascomycota genera incertae sedis, three species, type: *P. bambusacearum* (Sacc., Syd. & P. Syd.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, needs generic revision.

Placostromella Petr. 1947, Parmulariaceae, Dothideomycetes families incertae sedis, two species, type: *P. macrospora* Petr., asexual morph unknown, saprobes, terrestrial, China, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes*), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Placostromella Petr. 1947, Parmulariaceae, Dothideomycetes families incertae sedis, two species, type: *P. macrospora* Petr., asexual morph unknown, saprobes, terrestrial, China, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes*), Kirk et al. (2013; genus accepted), Thambugala et al. (2014; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.
Placothelium Müll. Arg. 1893, Verrucariaceae, Verrucariales, Eurotiomycetes, one species, type: *P. staurothelioides* Müll. Arg., asexual morph unknown, lichenized, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Placothyrium Bubák 1916, Ascomycota genera incertae sedis, one species, type: *P. athyrinum* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Placynthiella Elenkin 1909, Trapeliaceae, Trapeliales, Lecanoromycetes, seven species, type: *P. perfurfurea* (Nyl.) Gyeln., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Voytsekhovich et al. (2011; photobiont), Joshi et al. (2011; new records from South Korea), Kirk et al. (2013; genus accepted), Kantvilas et al. (2015; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

Placynthiopsis Zahlbr. 1932, Placynthiaceae, Peltigerales, Lecanoromycetes, one species, type: *P. africana* Zahlbr., lichenized, terrestrial, central Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.


Plagiophiale Petr. 1955, Melanconidaceae, Xylariales, Sordariomycetes, two species, type: *Plagiophiale eucarpa* (P. Karst.) Petr., asexual morph unknown, saprobes, North America, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Plagiosphaera Petr. 1941, Sordariomycetes genera incertae sedis, five species, type: *P. moravica* (Petr.) Petr., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Plagiostigme Syd. 1925, Melanconidaceae, Xylariales, Sordariomycetes, one species, type: *P. couraliae* Syd., asexual morph unknown, saprobes, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

Plagiostigmella Petr. 1949, Ascomycota genera incertae sedis, one species, type: *P. clypeata* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Plagiostoma Fuckel 1870, Gnomoniaceae, Diaporthales, Sordariomycetes, 50 species, type: *P. euphorbiae* (Fuckel) Fuckel, asexual morph unknown, saprobes, terrestrial, tropical, see Sogonov et al. (2008; new species, phylogeny), Lumbsch and Huhndorf (2010; outline), Mejía et al. (2011; new species, phylogeny), Kirk et al. (2013; genus accepted), Walker et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, available specimen and cultures or the type: CBS H-17115; CBS 817.79.

Plagiogramma Höhn. 1917, Dothideomycetes genera incertae sedis, one species, type: *P. pleurostoma* Höhn., asexual morph unknown, saprobes, India, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Planimstromella A.W. Ramaley 1991, Planistromellaceae, Botryosphaeriales, Dothideomycetes, two species, type: *P. yuccigenum* A.W. Ramaley, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Plasia Sherwood 1981, Ascomycota genera incertae sedis, one species, type: *P. ramicola* (Cooke & Massee) Sherwood, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Platismatia W.L. Culb. & C.F. Culb. 1968, Parmeliaceae, Lecanorales, Lecanoromycetes, ten species, type: *P. glauca* (L.) W.L. Culb. & C.F. Culb., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Thell et al. (2012; phylogeny, accepted as a genus in *Parmeliaceae*), Kirk et al. (2013; genus accepted), Mitrovic et al. (2014; antimicrobial properties), cultures available for the type: AFTOL-ID 201, needs generic revision.

Planistromellaceae, Botryosphaeriales, Dothideomycetes,十二 species, type: *P. chartarum* (Fuckel) Shoemaker & C.E. Babc., asexual morph unknown, saprobes, terrestrial, California, Europe and India, See Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; taxonomy), cultures and sequences are unavailable, needs generic revision, needs generic revision.
**Platythecium** Staiger 2002, *Graphidaceae, Ostropales, Lecanoromycetes*, 25 species, type: *P. grammithis* (Fée) Staiger, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Neuwirth et al. (2017; key), cultures and sequences are available, needs generic revision.

**Platytrachelon** Réblová 2013, *Sordariomycetes* genera incertae sedis, one species, type: *P. abietis* (Réblová) Réblová, asexual morph unknown, saprobes, Czech Republic, Ukraine, see Réblová (2013; taxonomy phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available, holotype and cultures available for the type: PRM 842974; CBS 125235.

**Plectania** Fuckel 1870, *Sarcosomataceae, Pezizales, Pezizomycetes*, c. 20 species, type: *P. melastoma* (Sowerby) Fuckel, asexual morph conoplea-like, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Plectocarpon** Fée 1825, *Lecanographaceae, Arthoniales, Arthoniomycetes*, 37 species, type: *P. pseudosticta* (Fée) Fée, sexual morph with mainly multilocular-lirelliform stromatic ascomata, lichenicolous (only one lichenized), terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Frisch et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available but lacks for the type.

**Plectomycyes** Thaxt. 1931, *Ceratomyctaceae, Laboulbeniales, Laboulbeniomycetes*, one species, type: *P. gracilis* Thaxt., asexual morph unknown, saprobes, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Plectonaemella** Höhn. 1915, *Ascomycota* genera incertae sedis, one species, type: *P. fuckeliana* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable but lacks for the type.

**Plectopeptis** Syd. 1927, *Ascomycota* genera incertae sedis, one species, type: *P. egenula* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Plectophomopsis** Petr. 1922, *Ascomycota* genera incertae sedis, one species, type: *P. rivularis* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Plectosira** Petr. 1929, *Ascomycota* genera incertae sedis, one species, type: *P. adeana* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Plectosphaerella** Kleb. 1929 (= *Plectosporium* M.E. Palm et al. 1995 fide Maharachchikumbura et al. 2015, 2016; Réblová et al. 2016), *Plectosphaerellaceae, Glomerellales, Sordariomycetes*, 13 species, type: *P. cucumeris* Kleb., asexual morph formerly known in *Plectosporium*, pathogens, nematophagous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Carlucci et al. (2012; new species, phylogeny), Liu et al. (2013; new species), Kirk et al. (2013; genus accepted), Crous et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Réblová et al. (2016; nomenclature), cultures and sequences are available but lacks for the type, needs generic revision.

**Plectronidiopsis** Nag Raj 1979, *Ascomycota* genera incertae sedis, one species, type: *P. chilensis* (Speg.) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial,
Chile, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Electronidium** Nag Raj 1977, *Ascomycota genera incertae sedis*, four species, type: *P. sinense* Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Electrothrix** Shear 1902, *Ascomycota genera incertae sedis*, one species, type: *P. globosa* Shear, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleiochaeta** (Sacc.) S. Hughes 1951, *Pleosporinae, Pleosporales, Dothideomycetes*, four species, type: *P. setosa* (Kirchn.) S. Hughes, hyphomycetous, sexual morph unknown, pathogens, saprobes, terrestrial, North America, see Garibaldi et al. (2012; pathogens, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Gur and Frenkel (2015; pathogens, DNA), Cultures and sequences are available, cultures available for the type: DBS0112 (Garibaldi et al. 2012), type specimen of type: CBS H-17161.

**Pleiopatella** Rehm 1908, *Helotiales genera Incertae sedis, Leotiomycetes*, one species, type: *P. harperi* Rehm, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleiofomellina** Bat., J.L. Bezerra & H. Maia 1964, *Dothideomycetes genera incertae sedis*, one species, type: *Pleiofomellina pernambucensis* Bat., J.L. Bezerra & Cavalc., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Pleiozostellina** Bat. & Cif. 1959, *Ascomycota genera incertae sedis*, one species, type: *P. magnoliae* Bat. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleiondomus** Preuss 1851, *Leptosphaeriaceae, Pleosporales, Dothideomycetes*, 18 species, type: *P. lingam* (Tode: Fr.) Höhn., asexual morph coelomycetous, pathogens, saprobes, terrestrial, worldwide, see de Gruyter et al. (2013; taxonomy, phylogeny, treated *Plenodomus raebohorstii* Preuss as a nom. Dub. and reduced under *Plenodomus lingam*), Hyde et al. (2013; accepted as a genus in *Leptosphaeriaceae*), Wijayawardene et al. (2014, 2016; outline), Ariyawansa et al. (2015; phylogeny), Cultures and sequences are available, cultures available for the type: CBS 260.94 (de Gruyter et al. 2013), needs generic revision.

**Pleionophyta** Syd. & P. Syd. 1920, *Ascomycota genera incertae sedis*, one species, type: *P. mirabilis* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, Sri Lanka, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Plenotrichiaus** Bat. & Valle 1961, *Ascomycota genera incertae sedis*, one species, type: *P. swartzieae* Bat. & Valle, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Plenotrichopsis** Bat. 1961, *Ascomycota genera incertae sedis*, one species, type: *P. coffeae* Bat., H. Maia & C.T. Vasconc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Plenotrichum** Syd. 1927, *Ascomycota genera incertae sedis*, two species, type: *P. mirabile* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, China,
see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Plenozythia** Syd. & P. Syd. 1916, *Ascomycota* genera *incertae sedis*, two species, type: *P. euphorbiae* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleochacta** Sacc. & Spig. 1881 emend. Kimbrough & Korf 1963, *Erysiphaceae*, *Erysiphales*, *Leotiomyces*, five species, type: *P. lynckii* (Spig.) Spig., sexual and hyphomycetous asexual morphs, biotrophic, obligate plant pathogens, terrestrial, Asia, North and South America, see Lumbsch and Huhndorf (2010; outline), Lee et al. (2011; phylogeny, Korea), Kirk et al. (2013; genus accepted), Takamatsu (2013, 2016; phylogeny, phenotypic evolution), sequences for non-type material of the type species are available, holotype of type: C.L. Spagazini (LPS), needs generic revision.

**Pleocouturea** G. Arnaud 1911, *Ascomycota* genera *incertae sedis*, two species, type: *P. castagnaei* G. Arnaud, coelomycetous, sexual morph unknown, saprobes, terrestrial, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleocryptospora** J. Reid & C. Booth 1969, *Sordariomycetes* genera *incertae sedis*, two species, type: *Pleocryptospora bamusae* (Spig.) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, needs generic revision.

**Pleogibberella** Sacc. ex Berl. & Voglino 1886, *Nectriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *P. calamia* (Cooke) Berl. & Voglino, asexual morph unknown, saprobe, saprobes, terrestrial, India, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Pleomeliola** (Sacc.) Sacc. 1899, *Ascomycota* genera *incertae sedis*, one species, type: *P. fenestrata* (Cooke & Ellis) Sacc., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from *Meliolaceae*), cultures and sequences are unavailable, needs generic revision.

**Pleomelogramma** Spig. 1909, *Herpotrichiellaceae*, *Chaetothyriales*, *Chaetothyriomycetes*, one species, type: *P. argentinensis* Spig., asexual morph unknown, saprobes, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleomerium** Spig. 1918, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. fuscoviridescens* (Rehm) Spig., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from *Meliolaceae* and placed in *Dothideomycetes*), cultures and sequences are unavailable, needs generic revision.

**Pleopsisidium** Körb. 1855, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, four species, type: *P. flavum* Körb., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Knudsen (2011; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Lücking et al. (2016; classification), sequences are available, needs generic revision.

**Pleoscutula** Vouaux 1913, *Dermateaceae*, *Helotiiales*, *Leotiomyces*, three species, type: *P. arsenii* Vouaux, asexual morph unknown, lichenicolous, terrestrial, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available but lacks for the type, needs generic revision.
**Pleosptum** A.W. Ramaley & M.E. Barr 1995, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. yuccaesedum* A.W. Ramaley & M.E. Barr, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeosphaeriaceae*), Hyde et al. (2013; accepted as a genus in *Phaeosphaeriaceae*), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; excluded from *Phaeosphaeriaceae* and placed in *Pleosporaceae*), Wijayawardene et al. (2014; accepted as a genus in *Pleosporaceae*), Ariyawansa et al. (2015; did not accept as *Pleosporaceae*), cultures and sequences are unavailable, holotype of the type: BPI 802381, needs generic revision.

**Pleosphaerella** Naumov & Czerepan. 1952, *Pleosporales* genera *incertae sedis*, *Dothideomycetes*, two species, type: *P. corincola* Naumov & Czerepan., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Pleosphaeria** Speg. 1881, *Sordariomycetes* genera *incertae sedis*, 15 species, type: *P. australis* Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Pleotrichiella** Sivan. 1984, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. australiensis* Sivan., asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Plesiospora** Drechsler 1971, *Ascomycota* genera *incertae sedis*, one species, type: *P. globosa* Drechsler, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleuroascus** Massee & E.S. Salmon 1901, *Pseudeurotiaceae*, *Leotiomycetes* families *incertae sedis*, eleven species, type: *P. nicholsonii* Massee & E.S. Salmon, saprobes, from soil, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Crous et al. (2013; new species), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 345.73 (fide Malloch et al. 2016), available specimen for type: CBS H-7657, needs generic revision.

**Pleurocera** Riess 1854, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, twelve species, type: *P. ciliatum* Riess, asexual morph unknown, saprobes, terrestrial, north temperate, see Mejia et al. (2008; DNA, phylogeny), Sogonov et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.; needs generic revision.

**Pleurocytospora** Petr. 1923, *Ascomycota* genera *incertae sedis*, three species, type: *P. vestita* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Pleurodiscula** Höhn. 1926, *Ascomycota* genera *incertae sedis*, one species, type: *P. neglecta* (Desm.) Höhn, coelomycetous, sexual morph unknown, saprobes, Europe, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleurodomus** Petr. 1934, *Ascomycota* genera *incertae sedis*, one species, type: *P. humuli* Petr., coelomycetous, sexual morph unknown, sapropels, on decaying stems of *Humuli lupuli*, Siberia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleurodendrum** Marvanová & S.H. Iqbal., 1973, *Ascomycota* genera *incertae sedis*, three species, type: *P. tricladioïdes* Marvanová & S.H. Iqbal, sexual morph unknown, on submerged dead *Juncus effusus* and from foam in mountain streams, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: BRNU 445.796

**Pleurophoma** Höhn. 1914, *Lentinheciaceae*, *Pleosporales, Dothideomycetes*, nine species, type: *P. pleuropora* (Sacc.) Höhn., sexual morph unknown, sapropels, terrestrial, UK, see Wijayawardene et al. (2012, 2017; outline), de Gruyter et al. (2013; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Crous et al. (2015, 2016; new species, phylogeny), cultures and sequences are available, cultures available for the type: CBS 130329, needs generic revision.

**Pleurophomopsis** Petr. 1924, *Ascomycota* genera *incertae sedis*, seven species, type: *P. salicicola* Petr., coelomycetous, sexual morph unknown, sapropels, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Pleurophragmium** Costantin 1888, *Sordariomycetes* genera *incertae sedis*, 29 species, type: *P. bicolor* Costantin, hyphomycetous, sexual morph unknown, sapropels, terrestrial, widely distributed, see Réblová (2009; phylogeny), D’Souza and Bhat (2012; key), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015; outline), Dai et al. (2016; morphology, phylogeny), cultures and sequences are available but lacks for type, needs generic revision.

**Pleuroplaconema** Petr. 1923, *Ascomycota* genera *incertae sedis*, two species, type: *P. sambuci* Petr., coelomycetous, sexual morph unknown, endophytes, Europe and Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleuroplacosphearia** Syd. 1928, *Ascomycota* genera *incertae sedis*, one species, type: *P. negeriana* Syd., coelomycetous, sexual morph unknown, sapropels, Chile, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pleurosticta** Petr.1931, *Parmeliaceae, Lecanorales, Lecanoromycetes*, three species, type: *P. lichenicola* Petr., asexual morph unknown, lichenized, terrestrial, Asia, Europe, Africa, see Lumbsch and Huhndorf (2010; outline), Crespo et al. (2011; generic concept), Hawksworth et al. (2011; checklist), Schmull et al. (2011; sequence), Vicol (2012; Romania), Matwiejuk and Korobkiewicz (2012; taxonomy), Kirk et al. (2013; genus accepted), Millot et al. (2014; cancer), Lumbsch (2014; taxonomy), Favero-Longo et al. (2015; saxicolous community), Papazi et al. (2015; symbiosis), Kaźmierska and Kossowska (2016; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pleurostromella** Petr. 1922, *Ascomycota genera incertae sedis*, 15 species, type: *P. ulmecola* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Pleurotheciopsis** B. Sutton 1973, *Ascomycota genera incertae sedis*, seven species, type: *P. pusilla* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, on litter (*Calophyllum*, *Castanea*, *Rubus*) and bank (*Betula*, *Ilex*, *Salix*), Caribbean, Europe, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: IMI 168990, needs generic revision.

**Pleurothecium** Höhn. 1919, *Pleurotheciaceae*, *Pleurotheciales*, *Sordariomycetes*, nine species, type: *P. recurvatum* (Morgan) Höhn., asexual morph hyphomycetous, saprobes, terrestrial, Canada, see Wu and Zhang (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Réblová et al. (2012, 2016; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 138686, needs generic revision.

**Pleurothyriella** Petr. & Syd. 1925, *Ascomycota genera incertae sedis*, one species, type: *P. pinastri* (Oudem.) Petr. & Syd., coelomycetous, sexual morph unknown, saprobes, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: Yoshinaga 25 (B).

**Pliariona** A. Massal. 1860, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *P. montagnei* (Bosch) A. Massal., asexual morph lichenized, terrestrial, tropical, see Rivas Plata et al. (2013; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Plicaria** Fuckel 1870, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, ten species, type: *P. trachycarpa* (Curt.) Boud., asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: DAOM 195830, genus needs revision since it is polyphyletic.

**Plochmopeltis** Theiss. 1914, *Schizothyriaceae*, *Dothideomycetes* families *incertae sedis*, five species, type: *P. intricata* (Ellis & G. Martin) Theiss., asexual morph unknown, saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Schizothyriaceae*), Wijayawardene et al. (2014; outline), Phookamsak et al. (2015; taxonomy), cultures and sequences are unavailable, needs generic revision.

**Ploetniera** Henn. 1900, *Dermateaceae*, *Helotiales*, *Leotiomycetes*, five species, type: *P. caeruleoviridis* (Rehm) Henn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Ploiamidionymcyces** Bat., C.A.A. Costa & Cif. 1957, *Euantennariaeae, Dothideomycetes* families incertae sedis, two species, type: *P. colensoi* Bat., C.A.A. Costa & Cif., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Pereira-Carvalho et al. (2013; taxonomy), cultures and sequences are available but lacks for the type, needs generic revision.

**Ploiamidia** Sivan. 1970, *Verrucariaeae, Verrucariales, Eurotiomycetes*, one species, type: *P. dalbergiae* Sivan., asexual morph unknown, saprobes, terrestrial, Pakistan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ploiamidiospora** Pereira-Carv., Inácio & Dianese 2010, *Capnodiales, Capnodiales, Dothideomycetes*, one species, type: *P. cerradiensis* Pereira-Carvalho, Inacio & Dianese, asexual morph unknown, saprobes, terrestrial, Brazil, see Pereira-Carvalho et al. (2010; taxonomy), cultures and sequences are unavailable, needs generic revision.

**Pnemocystis** Delanoë & Delanoë 1912, *Pneumocystidaeae, Pneumocystidiales*, *Pneumocystidomycetes*, five species, type: *P. carinii* P. Delanoë & Delanoë, asexual reproduction occurs by binary fission, pathogens, on mammals (frequent cause of pneumonia in HIV/AIDS patients), worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pnemocystis** Pereira-Carv., Inácio & Dianese 2010, *Capnodiales, Capnodiales, Dothideomycetes*, one species, type: *P. cerradiensis* Pereira-Carvalho, Inacio & Dianese, asexual morph unknown, saprobes, terrestrial, Brazil, see Pereira-Carvalho et al. (2010; taxonomy), cultures and sequences are unavailable, needs generic revision.

**Pnemocystis** Delanoë & Delanoë 1912, *Pneumocystidaeae, Pneumocystidiales*, *Pneumocystidomycetes*, five species, type: *P. carinii* P. Delanoë & Delanoë, asexual reproduction occurs by binary fission, pathogens, on mammals (frequent cause of pneumonia in HIV/AIDS patients), worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pochonia** Bat. & O.M. Fonseca 1965, *Clavicipitaeae, Hypocreales, Sordariomycetes*, four species, type: *P. humicola* Bat. & O.M. Fonseca, asexual morph unknown, saprobes, from soil, terrestrial, worldwide, see Kirk et al. (2013; genus accepted), Nonaka et al. (2013; new species, Japan), Huang et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, type specimen of type: CBS H-7885, needs generic revision.

**Pocillopycnis** Dyko & B. Sutton 1979, *Ascomycota* genera incertae sedis, one species, type: *P. umensis* (Bubák & Vleugel) Dyko & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Sweden, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pocillum** De Not. 1864, *Vibrissesaeae, Helotiales, Leotiomycetes*, one species, type: *P. cesatii* (Mont.) De Not., asexual morph unknown, saprobes on fruits and leaves, Europe and America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), DNA sequences and cultures unavailable, needs generic revision.

**Poculina** Spooner 1987, *Sclerotiniaeeae, Helotiales, Leotiomycetes*, one species, type: *P. nothofagi* (Rodway) Spooner, asexual morph unknown, saprobes, terrestrial, Tasmania, see
species, associated with scale insects, evolution, Europe, North America, see Doveri (2008; key), ten species, type: *Podospora* Ces. 1856, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, one species, type: *P. fimiseda* (Ces. & De Not.) Niessl, asexual morph consist of dark celled phialides such as *Cladorrhinum, Phialophora, Rhizoctonia, Ramophilophora*, saprobes on dung of animals, worldwide, see Doveri (2008; key), Lumbsch and Huhndorf (2010; outline), Chang et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Kruys et al. (2015; phylogeny), about 24 species have sequence data, cultures available for the type: CBS 482.64, needs generic revision.

**Poculopsis** Kirschst. 1935, *Helotiaceae, Helotiales, Leotiomyzocetes*, one species, type: *P. ogrensis* Kirschst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Podocapsa** Tiegh. 1887, *Ascomycota* genera *incertae sedis*, one species, type: *P. palmata* Tiegh., asexual morph unknown, saprobes, terrestrial, Europe, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pododimeria** E. Müll. 1959, *Pseudoperisporiaceae, Dothideomycetes* families *incertae sedis*, four species, type: *P. gallica* E. Müll., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Pseudoperisporiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Podonectria** Petch 1921, *Tuberufiaceae, Tuberufiales, Dothideomycetes*, nine species, type: *P. coccicola* (Ellis & Everh.) Petch, asexual morph hyphomycetous, saprobes, coprophilous, terrestrial, worldwide, see Hsieh et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Podophacidium** Niessl 1868, *Dermateaceae, Helotiales, Leotiomyzocetes*, two species, type: *P. terrestre* Niessl, asexual morph unknown, saprobes, terrestrial, terrestrial, Europe, North America see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Podoplaconema** Petr. 1921, *Ascomycota* genera *incertae sedis*, one species, type: *P. melaenaum* (Fr.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2014; genus accepted, in *Dothideomycetes*), Hyde et al. (2013; genus accepted, in *Dothideomycetes*), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

**Podosordaria** Ellis & Holw. 1897, *Xylariaceae, Xylariales, Sordariomycetes*, one species, type: *P. mexicana* Ellis & Holw., asexual morph hyphomycetous, saprobes, coprophilous, terrestrial, worldwide, see Hsieh et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; phylogeny), sequences are available for the voucher 176 (WSP) of the type, needs generic revision.


**Podospora** Ces. 1856, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, c. 100 species, type: *P. fimiseda* (Ces. & De Not.) Niessl, asexual morph consist of dark celled phialides such as *Cladorrhinum, Phialophora, Rhizoctonia, Ramophilophora*, saprobes on dung of animals, worldwide, see Doveri (2008; key), Lumbsch and Huhndorf (2010; outline), Chang et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Kruys et al. (2015; phylogeny), about 24 species have sequence data, cultures available for the type: CBS 482.64, needs generic revision.
**Podosporiella** Ellis & Everh. 1895, *Ascomycota* genera *incertae sedis*, four species, type: *P. humilis* Ellis & Everh, hyphomycetous, sexual morph unknown, saprobes, on leaves (*Garrya, Faurea*), Africa, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Podosporium** Schwein. 1832, *Ascomycota* genera *incertae sedis*, 67 species, type: *P. rigidum* Schwein, hyphomycetous, sexual morph unknown, saprobes, on dead stems and litter (*Ampelopsis, Bambusa, Rhus* and others), terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Podostictina** Clem. 1909, *Lobariaceae*, *Patellariales*, *Lecanoromycetes*, six species, type: *P. endochrysoides* (Müll. Arg.) Clem., lichenized, see Moncada et al. (2013a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Podotara** Malcolm & Vězda 1996, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *P. pilophoriformis* Malcolm & Vězda, asexual morph unknown, lichenized, terrestrial, New Zealand, see Hsieh et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, holotype of type: CHR 486638.

**Poeltiaria** Hertel 1984, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, six species, type: *P. turgescens* (Körb.) Hertel, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Fryday and Hertel (2014; new species, Antarctica, Tasmenia), Lücking et al. (2016; classification), cultures and sequences are available for an unidentified species but lacks for the type, needs generic revision.

**Poeltidea** Hertel & Hafellner 1984, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, three species, type: *P. perusta* (Nyl.) Hertel & Hafellner, asexual morph unknown, lichenized, terrestrial, Kerguelen, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Fryday and Hertel (2014; new species, New Zealand), Lücking et al. (2016; classification), cultures and sequences are unavailable, lectotype of type: BM.

**Poeltinula** Hafellner 1984, *Rhizocarpaceae*, *Rhizocarpales*, *Lecanoromycetes*, two species, type: *P. cerebrina* (DC.) Hafellner, asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, needs generic revision.

**Poetschia** Körb. 1861, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, four species, type: *P. buelliioides* Körb., asexual morph unknown, saprobes, terrestrial, Europe, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; taxonomy), cultures and sequences are unavailable, needs generic revision.

**Poikilosperma** Bat. & J.L. Bezerra 1961, *Ascomycota* genera *incertae sedis*, one species, type: *P. scutellare* Bat. & J.L. Bezerra, coelomycetous, sexual morph unknown, saprobes, on leaves of *Brosimum*, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Polaroscyphus** Huhtinen 1987, *Hyaloscyphaceae*, *Helotiales*, *Leotiomycetes*, one species, type: *P. spetsbergianus* Huhtinen, asexual morph unknown, saprobes, terrestrial, Svalbard, Norway, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Polistroma** Clemente 1807, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *P. fernandezii* Clemente, asexual morph unknown, lichenized, terrestrial, tropical, see
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lumbsch et al. (2014; did not accept in Graphidaceae), Lücking et al. (2016; classification), sequences and cultures are unavailable, needs generic revision.

**Polyancona** Voglmayr & Yule. 2006, Xylariaceae, Xylariales, Sordariomycetes, one species, type: *P. globosa* Voglmayr & Yule, sexual morph unknown, saprobes, submerged leaves, Peninsular Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type strains of type: WU 26489; CBS 118182.

**Polypandromycyes** Thaxter 1920, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: *P. coptosomatis* Thaxter., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Polyascomyces** Thaxter. 1900, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: *P. trichophytae* Thaxter., asexual morph unknown, saprobes, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Polyblasia** A. Massal. 1852, Verrucariaceae, Verrucariales, Eurotiomycetes, 120 species, type: *P. cupularis* A. Massal., asexual morph unknown, saprobes, terrestrial, worldwide, see Savić et al. (2008; phylogeny), Lumbsch and Huhndorf (2010; outline), Savić and Leif (2012; northern Europe, adjacent Arctic), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Polyblastidium** Kalb 2015, Physciaceae, Calicariales, Lecanoromycetes, 18 species, type: *P. japonicum* (M. Satô) Kalb, lichenized, worldwide, see Mongkolsum et al. (2015; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Polybolbophiale** Goh & K.D. Hyde 1998, Ascomycota genera incertae sedis, one species, type: *P. palmicola* Goh & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, on palm petiole (*Licuala*), Brunei, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: HKU (M) 4717, needs generic revision.

**Polycauliona** Hue 1908, Teloschistaceae, Teloschistales, Lecanoromycetes, 25 species, type: *P. regalis* (Vain.) Hue, lichenized, worldwide, see Mongkolsum et al. (2015; phylogeny), Konratyuk et al. (2014b; phylogeny), Jaklitsch et al. (2016a; notes), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Polycephalomyces** Kobayasi 1941, Ophiocordycipitaceae, Hypocreales, Sordariomycetes, twelve species, type: *P. formosus* Kobayasi, hyphomycetous, on insects, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kepler et al. (2013; new species), Kirk et al. (2013; genus accepted), Matočec et al. (2014; revision), Quandt et al. (2014; nomenclature), cultures and sequences are available.

**Polychaetella** Speg. 1918, Ascomycota genera incertae sedis, three species, type: *P. schwefinitzii* (Berk. & Desm.) Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Polychidium** (Ach.) Gray 1821, Massalangiaceae, Peltigerales, Lecanoromycetes, c. 10 species, type: *P. muscicola* (Sw.) Gray, asexual morph unknown, lichenized, terrestrial, worldwide, see Wedin et al. (2009; phylogeny), Hansen (2009; Iceland), Lumbsch and Huhndorf (2010; outline), Muggia et al. (2011; phylogeny, systematics), Anderson and Neilly (2012; Nova Scotia), Jayalal et al. (2012; new records), Kirk et al. (2013; genus accepted), Aptom (2016; checklist), Lücking et al. (2016; classification), sequences are available, needs generic revision.
**Polycladium** Ingold. 1959, *Ascomycota genera incertae sedis*, one species, type: *P. equiseti* Ingold, sexual morph unknown, found on dead internodes of *Equisetum fluviatile*, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of: IMI 73532.

**Polyclypeolina** Bat. & I.H. Lima 1959, *Dothideomycetes genera incertae sedis*, one species, type: *P. brideliae* (Hansf.) Bat., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review, accepted as a genus in *Aulographaceae*), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Aulographaceae*), Hyde et al. (2013; review, excluded from *Aulographaceae*), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*), cultures and sequences are unavailable, holotype of type: K(M) 177972.

**Polycoccum** Saut. ex Körb. 1865, *Polycoccaceae*, *Trypetheliales*, *Dothideomycetes*, 66 species, type: *P. sauteri* Körb., asexual morph unknown, saprobes, lichenicolous, terrestrial, worldwide, see Halc et al. (2009; new species), Etayo (2010; new species), Brackel and Berger (2010; new species), Lumbsch and Huhndorf (2010; outline), Zhubenko and Dillman (2010; new species), van den Boom (2012; new species), Hyde et al. (2013; outline, accepted as a genus in *Dacampiaceae*), Halici et al. (2013; new species, Turkey), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Ertz et al. (2015; phylogeny, introduced *Polycoccaceae*), Hafellner (2015; new species), cultures and sequences are available but lacks for the type, needs generic revision.

**Polycyclina** Theiss. & Syd. 1915, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, one species, type: *P. rhytismoides* (Speg.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Polycyclinopsis** Bat., A.F. Vital & I.H. Lima 1958, *Dothideomycetes genera incertae sedis*, one species, type: *P. solani* Bat., A.F. Vital & I.H. Lima, asexual morph unknown, saprobes, terrestrial, Brazilian, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in *Dothideomycetes genera incertae sedis*), cultures and sequences are unavailable, needs generic revision.

**Polycyclus** Höhn. 1909, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, two species, type species: *P. andinus* (Pat.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, São Paulo, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, keys), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Polydesmia** Boud. 1885, *Hyaloscyphaceae*, *Helotiaceae*, *Leotiomycetes*, seven species, type: *P. pruinosa* (Berk. & Broome) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Polydesmus** Mont. 1845, *Ascomycota genera incertae sedis*, 14 species, type: *P. elegans* Durieu & Mont., hyphomycetous, sexual morph unknown, saprobes, terrestrial, American, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Polydiscidium** Wakef. 1934, *Helotiaceae*, *Helotiiales*, *Leotiomycetes*, seven species, type: *P. martynii* Wakef., asexual morph unknown, saprobes, Africa, Guyana, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Polydiscina** Syd. 1930, *Heliotiales genera Incertae sedis*, *Leotiomycetes*, one species, type: *P. boliviana* Syd., asexual morph unknown, saprobes, terrestrial, Bolivia, see Lumbsch and
Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Polyetron** Bat. & Peres 1963, *Ascomycota* genera *incertae sedis*, one species, type: *P. myrtridgecola* Bat. & Peres, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Polylobatispora** Matsush. 1996, *Ascomycota* genera *incertae sedis*, two species, type: *P. deltoidea* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: Matsushima Fungus Collection, Kobe, 5T195, needs generic revision.

**Polymeridium** (Müll. Arg.) R.C. Harris 1980, *Trypetheliaceae*, *Trypetheliae*, *Dothideomycetes*, 50 species, type: *P. contendens* (Nyl.) R.C. Harris, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot and Cáceres (2014; key), Aptroot and Lücking (2016; monograph), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Polyphialoseptoria** Quaedvlieg., R.W. Barreto, Verkley & Crous 2013, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. terminaliae* Quaedvlieg, R.W. Barreto, Verkley & Crous, coelomycetous, sexual morph unknown, pathogens, terrestrial, Brazil, see Quaedvlieg et al. (2013; morphology, phylogeny), cultures and sequences are available, holotype and ex-type of the type: CBS H-21298; CBS 135106.

**Polyplosphaeria** Kaz. Tanaka & K. Hiray. 2009, *Tetrapsphaeriaceae*, *Pleosporales*, *Dothideomycetes*, two species, type: *P. fuscata* Kaz. Tanaka & K. Hiray., assexual morph hyphomycetous, saprobes, terrestrial, Japan, Thailand, see Tanaka et al. (2009; morphology, phylogeny), Li et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type: HHUF 29399; JCM 13175.

**Polyprenula** D. Hawksw. 1985, *Trypetheliaceae*, *Trypetheliae*, *Dothideomycetes*, one species, type: *P. sexlocularis* (Müll. Arg.) D. Hawksw., asexual morph unknown, on bark, doubtfully lichenized, terrestrial, Caribbean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type: G.

**Polypyrhizon** Theiss., Syd. & P. Syd. 1914, *Dothideomycetes* genera *incertae sedis*, two species, type: *P. terminaliae* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, India, South Africa, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaeaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Polyrostrata** T.P. Devi & N. Mathur 2009, *Ascomycota* genera *incertae sedis*, two species, type: *P. indica* T.P. Devi & N. Mathur, coelomycetous, sexual morph unknown, pathogens, terrestrial, India, see Mathur et al. (2009; taxonomy), Wijayawardene et al. (2016; outline), cultures and sequences are unavailable, holotype of the type: HCIO 46892, needs generic revision.

Saprobes, one species from human clinical sample, terrestrial, cosmopolitan, see Mota et al. (2008; new species, key), Castañeda-Ruiz et al. (2009; new species), Shenoy et al. (2010; monophily within Pleosporales), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2015; placement in Latoruaceae), ex-type culture of the type: CBS 301.65.

**Polyscytalum** Riess 1853, Xylariales genera incertae sedis, Sordariomycetes, 13 species, type: *P. fecundissimum* Riess, hyphomycetous, saprobes, pathogens, terrestrial, worldwide, see Cheewangkoon et al. (2009; new species, Portugal), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), Senanayake et al. (2015; phylogeny), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, available specimen and cultures for the type: CBS H-6049; CBS 100506.

**Polysporidiella** Petr. 1960, Dothideomycetes genera incertae sedis, one species, type: *P. iranica* Petr., asexual morph unknown, saprobes, terrestrial, Iran, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2017; outline); (2012, 2017; outline) 7 species, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in Venturiaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Polysporina** Vězda [nom.cons.] 1978, Acarosporaceae, Acarosporales, Lecanoromycetes, ten species, type: *P. simplex* (Taylor) Vězda, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Polystigma** DC. 1815 (= Polystigmata Sacc. 1884, Rhodoseptoria Naumov 1913 fide Maharachchikumbura et al. 2015, 2016; Réblová et al. 2016), Phyllachoraceae, Phyllachorales, Sordariomycetes, 25 species, type: *Polystigma rubrum* (Pers.) DC., pathogens, worldwide, see Suzuki et al. (2008; pathogens, Japan), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Habibi and Banihashemi (2015, 2016; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

**Polystomellina** Bat. & A.F. Vital 1958, Dothideomycetes genera incertae sedis, one species, type: *P. didymopanacis* Bat. & A.F. Vital, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; accepted as a genus in Dothideomycetes genera incertae sedis), cultures and sequences are unavailable, needs generic revision.

**Polystomelomyces** Bat. 1959, Ascomycota genera incertae sedis, one species, type: *P. atheniensis* Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, Greece, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Polystomellopsis** F. Stevens 1924 [1923], Dothideomycetes genera incertae sedis, one species, type: *P. mirabilis* F. Stevens, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Polystratorictus** Matsush. 1993, Ascomycota genera incertae sedis, two species, type: *P. fusarioides* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Peru, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Matsushima Fungus Collection, Kobe, 0P-353, needs generic revision.

**Polythrincium** Kunze 1817 (= Cymadothea F.A. Wolf 1935 fide Wijayawardene et al. 2014; Rossman et al. 2015), Mycosphaerellaceae, Capnodiales, Dothideomycetes, type: Polythrincium trifolii Kunze, hyphomycetous, sexual morph Cymadothea, saprobes,
terrestrial, temperate, see Lumbers and Huhndorf (2010; outline, sexual morph), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; nomenclature), Rossman et al. (2015; nomenclature), cultures and sequences are available.

**Polytelyta** J.A. Scott & Malloch 1993, *Onygenaceae, Onygenales, Eurotiomycetes*, one species, type: *P. hystricis* J.A. Scott & Malloch, asexual morph unknown, coprophilous, terrestriul, Canada, see Lumbersch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hirooka et al. (2016; phylogeny), cultures and sequences are available, cultures available for the type: UAMH 7299, holotype of type: TRRC 51349.

**Polytretophora** Mercado 1983, *Ascomycota* genera *incertae sedis*, one species, type: *P. calcarata* Mercado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Pontoporeia** Kohlm. 1963, *Halotrichaceae, Pleosporales, Dothideomycetes*, one species, type: *P. biturbinata* (Durieu & Mont.) Kohlm., asexual morph coelomycetous, saprobes, marine, Mediterranean Sea, see Jones et al. (2009, 2015; classification), Sutrong et al. (2009; phylogeny, morphology), Zhang et al. (2012, 2013; morphology, phylogeny), Hyde et al. (2013; morphology, phylogeny), Wijayawardene et al. (2014; phylogeny, nomenclature), cultures and sequences are available, needs generic revision.


**Porina** Müll. Arg. [nom.cons.] 1883, *Porinaceae, Ostropales, Lecanoromycetes*, 140 species, type: *P. nucula* Ach., lichenized, worldwide, see Lumbersch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.


**Porocercospora** Amaradasa, Amundsen, Madrid & Crous 2014, *Pleosporaceae, Pleosporales, Dothideomycetes*, one species, type: *P. seminalis* (Ellis & Everh.) Amaradasa, Amundsen, H. Madrid & Crous, hyphomycetous, sexual morph unknown, pathogens, USA, see Amaradasa et al. (2014; morphology, phylogeny), cultures and sequences are available, epitype and ex-epitype culture of type: CBS H-21149, CBS 134906.

**Porocladium** Descals., 1976, *Ascomycota* genera *incertae sedis*, one species, type: *P. aquaticum* Descals., hyphomycetous, sexual morph unknown, saprobes, terrestrial, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 199900.
Porocyphus Körb. 1855, Lichinaceae, Lichinales, Lichinomycetes, eight species, type: P. coccodes Flot. ex Körb., asexual morph unknown, lichenized, terrestrial, worldwide, see Högnabba et al. (2009; evolution of photobiont), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type, needs generic revision.

Poroleprieuria M.C. González, Hanlin, Ulloa & Elv. Aguirre 2004, Xylariaceae, Xylariales, Sordariomycetes, one species, type: P. rogersii M.C. González, Hanlin, Ulloa & Elv. Aguirre, asexual morph hyphomycetous, saprobes, terrestrial, Mexico, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; phylogeny), cultures and sequences are available but lacks for the type; needs generic revision.

Poropeltis Henn. 1904, Ascomycota genera incertae sedis, one species, type: P. davillae Henn., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Porophilomyces U. Braun 2000, Ascomycota genera incertae sedis, one species, type: P. poricola (Bonar) U. Braun, hyphomycetous, terrestrial, fungicolous, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype and isolectotype of type: UC 1272179; UC 568840.

Porophoromyces Thaxt. 1926, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: P. tmesiphori Thaxt., asexual morph unknown, biotrophic, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Porosubramaniania Hol.-Jech. 1985, Ascomycota genera incertae sedis, two species, type: P. moniliformis Hol.-Jech., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Porpidia Körb. 1855, Lecideaceae, Lecideales, Lecanoromycetes, 50 species, type: P. trullisata (Kremp.) Körb., lichenized, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Schmull et al. (2011; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Porpidinia Timdal 2010, Porpidiaceae, Lecideales, Lecanoromycetes, one species, type: Porpidinia tumidula (Sm.) Timdal (Lichen tumidulus Sm.), lichenized fungi, saxicolous, Europe, North Africa, see Timdal (2010; phylogenetic placement based on anatomical characters), sequences are unavailable, holotype of type: Smith s.n., LINN.

Psora Hoffm. 1796, Psoraceae, Lecanorales, Lecanoromycetes, c. 35 species, type: P. decipiens (Hedw.) Hoffm. (Lichen decipiens Hedw.), lichenized fungi, saxicolous, terricolous, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psorinia Gott. Schneid. 1980, Lecanoraceae, Lecanorales, Lecanoromycetes, one species, type: P. conglomerata (Ach.) Gott. Schneid. (Lecidea conglomerata Ach.), lichenized, saxicolous, temperate northern hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Mischoblastia A.Massal. 1852, Physciaceae, Caliciales, Lecanoromycetes, three species,
type: *M. oxydata* A. Massal., lichenized, see Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Prieto & Wedin (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

*Porrectotheca* Matsush. 1996, *Ascomycota* genera incertae sedis, one species, type: *P. divaricata* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of: Matsushima Fungus Collection, Kobe, 5H436, needs generic revision.

*Potamomyces* K.D. Hyde 1995, *Ascomycota* genera incertae sedis, one species, type: *P. armatisporus* K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of: CBS HK 1298.

*Potridiscus* Döbbeler & Triebel 2000, *Helotiales* genera incertae sedis, *Leotiomycetes*, one species, type: *P. polymorphus* Döbbeler & Triebel, asexual morph unknown, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type: M Rambold 3269, needs generic revision.

*Potriphila* Döbbeler 1996, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *P. navicularis* Döbbeler, asexual morph unknown, saprobes, terrestrial, Austria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of: M (Döbbeler 6759), needs generic revision.


*Pragmopora* A. Massal 1855 (= *Pragmopycnis* B. Sutton & A. Funk 1975 fide Johnston et al. 2014), *Tympanidaceae*, *Phacidiales*, *Leotiomyctes*, seven species, type: *Pragmopora amphibia* A. Massal., asexual morph formerly known in *Pragmopycnis*, saprobes, common in temperate northern hemisphere, see Kirk et al. (2013; genus accepted), Quijada et al. (2015; phylogeny), living cultures or cultures and sequences are unavailable for the type of the type, lectotype in Royal Botanic Gardens (K).

*Prataprajella* Hosag. 1992, *Meliolaceae*, *Meliolales*, *Sordariomycetes*, two species, type: *P. turpiniicola* (Hosag.) Hosag., asexual morph unknown, saprobes, terrestrial, India, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; treated as a doubtful genus in *Meliolaceae*), cultures and sequences are unavailable, needs generic revision.

*Preussia* Fuckel 1867, *Sporormiaceae*, *Pleosporales*, *Dothideomycetes*, 49 species, type: *P. funiculata* (Preuss) Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Chang and Wang (2009; new species), Kruys and Wedin (2009; new species), Schoch et al. (2009; phylogeny), Asgari and Zare (2010; new species), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Sporormiaceae*, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Kruys (2015; new species, Sweden), cultures and sequences are available, type specimen and cultures available for the type: CBS H-17339; CBS 659.74.

*Priceomyces* Kurtzman & M. Suzuki 2010, *Debaryomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, nine species, type: *P. haplophilus* (Shirine & Phaff) M. Suzuki, asexual reproduction is by multilateral budding, saprophytic, in tree fluxes, spoiled wine, alpechin,
soil, insect frass in various trees, worldwide, see Kurtzman and Suzuki (2010; taxonomy), Crous et al. (2016; new species), cultures and sequences are available.

**Prillieuxina** G. Arnaud 1918 (= Leprieurina G. Arnaud 1918 fide Wijayawardene et al. 2014; Rossman et al. 2015), Asterinaceae, Asterinales, Dothideomycetes, 55 species, type: *P. winteriana* (Pazschke) G. Arnaud, asexual morph unknown, parasymbiont on Pertusaria, terrestrial, tropical, see Hosagoudar and Chandraprabha (2009; new species), Lumbsch and Huhndorf (2010; outline), Hosagoudar (2012; new species, India), Hosagoudar and Divya (2013; new species, India), Hyde et al. (2013; accepted as a genus in Asterinaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Gautam (2015; new species), Guatimosim et al. (2015; phylogeny), Rossman et al. (2015; nomenclature), cultures and sequences are available but lacks for the type, needs generic revision.

**Pringsheimia** Schulzer 1866, Dothideaceae, Dothideales, Dothideomycetes, nine species, type: *P. rosarum* Schulzer, asexual morph unknown, parasitic or saprobes, terrestrial habitats, worldwide, see Kirk et al. (2013; genus accepted), Thambugala et al. (2014; review), Wijayawardene et al. (2014; outline), sequence data available for one species, but no ex-type sequence data are available, needs generic revision.

**Proboscispora** Punith. 1984, Ascomycota genera incertae sedis, one species, type: *P. manihotis* Punith., coelomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Proliferodiscus** J.H. Haines & Dumont 1983, Hyaloscyphaceae, Helotiales, Leotiomyces, eight species, type: *P. inspersus* (Berk. & M.A. Curtis) J.H. Haines & Dumont, asexual morph unknown, saprobes, terrestrial, worldwide, see Hofton et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

**Prolifersphaera** T.P. Devi 2012, Dothideomycetes genera incertae sedis, one species, type: *P. capsici* T.P. Devi, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Devi et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), Cultures and sequences are available, cultures available for the type: PP-2011 isolate 6494, holotype of type: ITCC 6494, needs generic revision.

**Proliferosphaera** T.P. Devi 2012, Dothideomycetes genera incertae sedis, one species, type: *P. inspersus* (Berk. & M.A. Curtis) J.H. Haines & Dumont, asexual morph unknown, parasymbiont on Velidi bugs, semiaquatic, Africa, Asia, Central America, Europe, see Weir (2008; review), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pfleigler et al. (2016; Hungary), cultures and sequences are available, cultures available for the type: DAH 18, needs generic revision.

**Prolixandromyces** R.K. Benj. 1970, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, eight species, type: *P. velliae* R.K. Benj., asexual morph unknown, parasitic on Velidi bugs, semi-aquatic, Africa, Asia, Central America, Europe, see Weir (2008; review), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pfleigler et al. (2016; Hungary), cultures and sequences are available, cultures available for the type: DAH 18, needs generic revision.

**Pronectria** Clem. 1931, Bionectriaceae, Hypocreales, Sordariomycetes, 41 species, type: *P. lichenicola* (Ces.) Clem., asexual morph hyphomycetous, parasymbiont to parasites on lichens, more rarely algae, worldwide, see Étayo and Sancho (2008; morphology, keys), Brackel (2014; morphology), Maharachchikumbura et al. (2015, 2016; outline), sequence data only for the type *P. robergei* as *illasporium carneum* (ATCC 201590), lectotype of type: PC, Roberge.

**Propolidium** Sacc. 1884, Rhytismatales genera incertae sedis, Leotiomycetes, two species, type: *P. glaucum* (Ellis) Sacc., asexual morph unknown, saprobes, terrestrial, Africa, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Propolina** Sacc. 1884, Dothideomycetes genera incertae sedis, one species, type: *P. cervina* Sacc., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf
Propolis (Fr.) Corda 1838, Dothideomycetes genera incertae sedis, one species, type: P. farinosa (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, Asia, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Proprioscypha Spooner 1987, Hyaloscyphaceae, Helotiaceae, Leotiomycetes, one species, type: P. corticicola Spooner, asexual morph unknown, saprobes, pathogens, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

Prosopticola Crous & C.L. Lennox 2004, Cryphonectriaceae, Diaporthales, Sordariomycetes, two species, type: P. mexicana Crous & C.L. Lennox, coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Wijayawardene et al. (2012, 2017; outline), Crous et al. (2016; new species, phylogeny), cultures are available.

Prosthemium Kunze 1817 (= Pleomassaria Speg. 1880 fide Wijayawardene et al. 2014; Rossman et al. 2015), Pleomassariaceae, Pleosporales, Dothideomycetes, one species, type: P. betulinum Kunze, coelomycetous, sexual morph formerly known in Pleomassaria, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline, sexual morph), Tanaka et al. (2010; taxonomy, phylogeny), Wijayawardene et al. (2012, 2014, 2016; outline, taxonomy, nomenclature), Zhang et al. (2012; accepted as a genus in Pleomassariaceae, phylogeny), Hyde et al. (2013; accepted as a genus in Pleomassariaceae), Rossman et al. (2015; nomenclature), cultures available for the type: CBS 279.74, needs generic revision.

Prostratus Sivan., W.H. Hsieh & Chi Y. Chen 1993, Melanconidaceae, Xylariales, Sordariomycetes, one species, type: P. cyclobalanopsisd Sivan., W.H. Hsieh & Chi Y. Chen, asexual morph unknown, saprobes, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable, holotype of type: IMI 354625.

Protoblastenia (Zahlbr.) J. Steiner 1911, Psoraceae, Lecanorales, Lecanoromycetes, 30 species, type: P. rupestris (Scop.) J. Steiner, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures available for the type: Prorup415 (Gaya et al. 2008), needs generic revision.

Protocrea Petch 1937, Hypocreaceae, Hypocreales, Sordariomycetes, six species, type: P. farinosa (Berk. & Broome) Petch, asexual morph acremonium-like, saprobes, terrestrial, worldwide, see Jaklitsch et al. (2008, 2015; new species, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, epitype and cultures available for the type: BPI 747356; CBS 121554.

Protocreopsis Yoshim. Doi 1977, Bionectriaceae, Hypocreales, Sordariomycetes, twelve species, type: P. zingibericola Yoshim. Doi, asexual morph acremonium-like, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lechat and Fournier (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Protocucurbitaria Naumov 1951, Sordariomycetes genera incertae sedis, six species, type: P. ribicola Naumov, asexual morph unknown saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Protomicarea Hafellner 2001, Pilocarpaceae, Lecanorales, Lecanoromycetes, one species, type: P. limosa (Ach.) Hafellner, asexual morph unknown, lichenized, terrestrial, Europe, Turkey, see Lumbsch and Huhndorf (2010; outline), Kınalıoglu and Aptroot (2011; new
records in Turkey), Schmull et al. (2011; phylogeny), cultures available for the type: Obermayer 07939 (Schmull et al. 2011), needs generic revision.

**Protomyces** Unger 1833, *Protomycesaceae*, *Taphriniales*, *Taphrinomycetes*, ten species, type: *P. macrosporus* Unger, asexual morph unknown, biotrophic on plants, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available, available specimen of type: CBS H-17359, needs generic revision.

**Protomyxopsis** Magnus 1905, *Protomyxaceae*, *Taphriniales*, *Taphrinomycetes*, ten species, type: *P. leucantheri* Magnus, asexual morph unknown, biotrophic on plants, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Protopannaria** (Gyeln.) P.M. Jørg. & S. Ekman 2000, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, five species, type: *P. pezizoides* (Weber) P.M. Jørg. & S. Ekman, lichenized, Southern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Protoparmelia** M. Choisy 1929, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 35 species, type: *P. badia* (Hoffm.) Hafellner, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Papong et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Protoparmeliopsis** Choisy 1929, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, 20 species, type: *P. muralis* (Schreb.) M. Choisy, lichenized, see Zhao et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Protoroccella** Follmann 2011, *Roccellaceae*, *Arthoniales*, *Arthoniaceae*, two species, type: *P. minima* (R. Sant.) Follmann ex Follmann, lichenized, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

**Protoscypha** Syd. 1925, *Protoscyphaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *P. pulla* Syd., asexual morph unknown, biotrophic, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Protostegia** Cooke 1880, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *P. euclaeae* Kalchbr. & Cooke, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Kirk et al. (2013; genus accepted), Crous et al. (2015; phylogeny, epitypification), Wijayawardene et al. (2017; outline), epitype and ex-epitype of the type: PREM 60879; CPC 23549.

**Protostegiomycetes** Bat. & A.F. Vital 1955, *Ascomycota* genera *incertae sedis*, one species, type: *P. lebosiae* Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Protostroma** Bat. 1957, *Ascomycota* genera *incertae sedis*, one species, type: *P. hyphaenes* Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Protothelenna** Räsänen 1943, *Protothelenniaeaceae*, *Ostropales*, *Lecanoromycetes*, eleven species, type: *P. reducta* (Th. Fr.) Räsänen, lichenized, Asia, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Resl et al. (2015; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Protothyrium** G. Arnaud 1917, *Parmulariaceae*, *Dothideomycetes* families *incertae sedis*, two species, type: *P. salvadorae* (Cooke) G. Arnaud, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al.
(2016; outline), cultures and sequences are unavailable, isotype of type: IMI 158625, needs generic revision.


**Protousnea** (Motyka) Krog 1976, *Parmeliaceae, Lecanorales, Lecanoromycetes*, eight species, type: *P. magellanica* (Mont.) Krog, lichenized, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.


**Psammina** Sacc. & M. Rousseau ex E. Bommer & M. Rousseau 1891, *Ascomycota* genera incertae sedis, eight species, type: *P. bommeriae* Sacc. & M. Rousseau, hyphomycetous, sexual morph unknown, saprobes, lichenicolous, terrestrial, Africa, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Psathyrophlyctis** Brusse 1987, *Phlyctidaceae, Ostropales, Lecanoromycetes*, one species, type: *P. serpentaria* Brusse, asexual morph unknown, lichenized, terrestrial, South Africa, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

**Pselaphidomyces** Speg. 1917, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, one species, type: *P. corticalis* (Peck) J.L. Crane & Schokn., asexual morph unknown, biotrophic, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Pseudaegerita** J.L. Crane & Schokn. 1981, *Hyaloscyphaceae, Helotiales, Leotiomyctes*, eight species, type: *P. pselapti* Speg., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Yamaguchi et al. (2012; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Pseudallescheria** Negroni & I. Fisch. 1944, *Microascaceae, Microascales, Sordariomycetes*, nine species, type: *P. shearii* Negroni & I. Fisch., asexual morph unknown, saprobes, human pathogens, terrestrial, worldwide, see Gilgad et al. (2010; new species, human pathogen), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

**Pseudarctomia** Gyeln. 1939, *Lichinaeae, Lichinales, Lichinomycetes*, one species, type: *P. microleuca* (Nyl.) Gyeln., asexual morph unknown, lichenized, terrestrial, France, see
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Pseudoscozonus** Brumm. 1985, *Thelebolaceae*, *Thelebolales*, *Leotiomycetes*, one species, type: *P. racemosorus* Brumm., asexual morph unknown, saprobic terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudopebe** M. Choisy 1930, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, two species, type: *P. pubescens* (L.) M. Choisy, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Wang and McCune (2010; China), Thell et al. (2012; phylogeny, accepted as a genus in *Parmeliaceae*), Wang et al. (2012; China), Kirk et al. (2013; genus accepted), Mitrovic et al. (2014; antimicrobial properties), Boluda et al. (2016; cryptic species), sequences are available, needs generic revision.

**Pseudeurotium** J.F.H. Beyma 1937, *Pseudeurotiales*, *Leotiomycetes* family *incertae sedis*, six species, type: *P. zonatum* J.F.H. Beyma, asexual morph unknown, biotrophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Minnis and Lindner (2013; new species), cultures and sequences are available.

**Pseudevernia** Zopf 1903, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, four species, type: *P. furfuracea* (L.) Zopf, lichenized, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pseuodoacriddix** W.A. Baker & Morgan-Jones 2003, *Ascomycota* genera *incertae sedis*, 14 species, type: *P. eickeri* (Morgan-Jones) W.A. Baker & Morgan-Jones, sexual morph unknown, saprobic terrestrial, see Castaneda Ruiz et al. (2010; new species), Zhao et al. (2011; outline), Zhang et al. (2011; new species), Dubey et al. (2012; a new species), Fiuza et al. (2014; new species), Ma et al (2015; new species), two species have sequence data, needs generic revision.

**Pseuodoamauroascus** Cano, M. Solé & Guarro 2002, *Onygenaceae*, *Onygenales*, *Eurotiomycetes*, one species, type: *P. australiensis* Cano, M. Solé & Guarro, asexual morph unknown, saprobic terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), sequences are available for the type (unpublished), holotype of type: IMI 370014.

**Pseuodoangillivora** S.H. Iqbal 1974, *Ascomycota* genera *incertae sedis*, two species, type: *P. stricta* S.H. Iqbal, hyphomycetous, sexual morph unknown, saprobic terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseuodoaristastoma** Suj. Singh 1979, *Ascomycota* genera *incertae sedis*, one species, type: *P. indicum* Suj. Singh, coelomycetous, sexual morph unknown, saprobic terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Pseuodoasteromassarya** Matsumura & Kaz. Tanaka 2015, *Latoruaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. fagi* M. Matsum. & Kaz. Tanaka, asexual morph coelomycetous (*stagonospora*-like), saprobic terrestrial, Japan, see Ariyawansa et al. (2015;
morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type: HHUF 30471; MAFF 245221.

**Pseudobaeomyces** M. Satô 1940, *Icemadophilaceae, Pertusariales, Lecanoromycetes*, one species, type: *P. insignis* (Zahlbr.) M. Satô, asexual morph unknown, lichenized, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudobasidiopora** Dyko & B. Sutton., 1978, *Ascomycota* genera *incertae sedis*, one species, type: *P. caroliniana* Dyko & B. Sutton, coelomycetous, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sexual morph unknown, cultures and sequences are unavailable, holotype of type: IMI 208458.

**Pseudobeltrania** Henn. 1902, *Beltraniaceae, Xylariales, Sordariomycetes*, one species, type: *P. cedrelae* Henn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), Rajeshkumar et al. (2016; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

**Pseudocalopadia** Lücking 1999, *Pilocarpaceae, Lecanorales, Lecanoromycetes*, one species, type: *P. mira* Lücking, lichenized, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type: M.

**Pseudocamarosporium** Wijayaw. & K.D. Hyde 2014, *Didymosphaeriaceae, Pleosporales, Dothideomycetes*, ten species, type: *P. propinquum* (Sacc.) Wijayaw., Camporesi & K.D. Hyde, coelomycetous, sexual morph unknown, has camarosporium-like and coniothyrium-like morphologies, saprobes, Europe, see Wijayawardene et al. (2014, 2016a, b; morphology, phylogeny), Crous et al. (2015; new species, phylogeny, coniothyrium-like species), sequence data available, holotype and ex-type strains of type: MFLU 14-0090; MFLUCC 14-0192 = ICMP 20203.


**Pseudocatenomyopsis** Crous & L.A. Shuttlew. 2013, *Coronophorales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *P. rothmanniae* Crous & L.A. Shuttlew., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Zambia, see Crous et al. (2013; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; phylogeny, outline), holotype and ex-type of the type: CBS H- 21432; CBS 22733.

**Pseudocenangium** P. Karst. 1886, *Ascomycota* genera *incertae sedis*, one species, type: *P. pinastrii* P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudocercospora** Speg. 1910, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, c. 1500 accepted species (Mycobank), type: *P. vitis* (Lév.) Speg., asexual morph mycosphaerella-like, plant pathogens, endophytes or saprobes, cosmopolitan, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Yusef M (2013; review), Crous et al. (2013: phylogeny), Bakhashi et al. (2014; phylogeny), Shivas et al. (2015; new species), Li et al. (2015; new species), Osorio et al. (2015; new species), Silva et al. (2016; new species), sequences are available, epitype of type: CBS HAL (MBT 102230).
**Pseudocercosporella** Deighton 1973, Mycosphaerellaceae, Capnodiales, Dothideomycetes, 150 species, type: *P. ipomoeae* Sawada ex Deighton, hyphomycetous, sexual morph mycosphaerella-like, plant pathogens, terrestrial, five species confirmed based on DNA, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Frank et al. (2010; morphology, phylogeny), epitype and ex-epitype of type: CBS H-20409; CBS 125685.

**Pseudocercosporidium** Deighton 1973, Ascomycota genera incertae sedis, one species, type: *P. venezuelanum* (Syd.) Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudochapsa** Parmmen, Lücking & Lumbsch 2012, Graphidaceae, Ostropales, Lecanoromycetes, 17 species, type: *Pseudochapsa dilatata* (Müll. Arg.) Parmmen, Lücking & Lumbsch, asexual morph unknown, lichenized, terrestrial, tropical, see Parmmen et al. (2012; genus proposed), cultures and sequences are available, needs generic revision.

**Pseudochlupapia** Kamal, A.N. Rai & Morgan-Jones 1984, Ascomycota genera incertae sedis, one species, type: *P. sarcinispora* Kamal, A.N. Rai & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable (unpublished), needs generic revision.

**Pseudociboria** Kanouse 1944, Sclerotiniaceae, Helotiales, Leotiomycetes, one species, type: *P. umbrina* Kanouse, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudoclathrosphaerina** Voglmayr 1997, Ascomycota genera incertae sedis, one species, type: *P. evamariae* Voglmayr, hyphomycetous, sexual morph unknown, saprobes, from submerged deciduous leaves, USA, New Zealand, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable (unpublished), holotype of the type: WU 17015, needs generic revision.

**Pseudocoleodictyspora** Doilom & K.D. Hyde 2016, Pseudocoleodictysporaceae, Pleosporales, Dothideomycetes, three species, type: *P. tectona* Doilom, D.J. Bhat & K.D. Hyde, saprobes, terrestrial, see Doilom et al. (2016; phylogeny), cultures and sequences are available, holotype and ex-holotype type strains of type: MFLU 15-3527; MFLUCC 12–0385, MKT 058, ICMP 21160.

**Pseudocoleophoma** Kaz. Tanaka & K. Hiray. 2015, Dictyosporiaceae, Pleosporales, Dothideomycetes, two species, type: *P. calamagrostidis* Kaz. Tanaka & K. Hiray., asexual morph coelomycetous, saprobes, terrestrial, Japan, see Tanaka et al. (2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type strain of the type: HHUF 30450; CBS 139700.

**Pseudoconium** Petr. 1969, Ascomycota genera incertae sedis, one species, type: *P. pallescens* (Bäumler) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished), needs generic revision.

**Pseudocosmospora** C. Herrera & P. Chaverri 2013, Nectriaceae, Hypocreales, Sordariomycetes, two species, type: *P. eutypellae* C. Herrera & P. Chaverri, asexual morph hyphomycetous (accremonium-like to verticillium-like), saprobes, terrestrial, worldwide, see Herrera et al. (2013; taxonomy, phylogeny), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type cultures of the type: BPI 884165; CBS 133966 = A.R. 4562.
**Pseudocryptospora** J. Reid & C. Booth 1969, *Diaporthales genera incertae sedis, Sordariomycetes*, one species, type: *P. polyplepis* (E. Müll.) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Venezuela, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Pseudocyphellaria** Vain. [nom. cons.] 1890, *Lobariaceae, Peltigerales, Lecanoromycetes*, 100 species, type: *Ps. curvata* (Ach.) Vain., lichenized, South America, Asia, see Lumbsch and Huhndorf (2010; outline), Quilhot, et al. (2010; taxonomy), Miller et al. (2011; taxonomy), Pandit and Sharma (2012; new record), Fritis et al. (2013; biological activity), Kirk et al. (2013; genus accepted), Moncada et al. (2014; taxonomy, phylogeny), Yoshiaki and Ohmura (2014; transplant experiment), Beese et al. (2015; ecology), Lücking et al. (2016; classification), Messuti et al. (2016; sequence), sequences are available but lacks for type, needs generic revision.

**Pseudocytoplacosphaeria** Punith. & Spooner 2002, *Ascomycota genera incertae sedis*, one species, type: *P. conicola* Punith. & Spooner, coelomycetous, sexual morph unknown, saprobes, British Isles, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: K(M) 85582, needs generic revision.

**Pseudocytospora** Petr. 1923, *Ascomycota genera incertae sedis*, one species, type: *P. allantospora* Petr., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudodichomera** Höhn. 1918, *Ascomycota genera incertae sedis*, three species, type: *P. varia* (Pers.) Höhn., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudodictyosporium** Matsush. 1971, *Dictyosporiaceae, Pleosporales, Dothideomycetes*, four species, type: *P. wauense* Matsush., hyphomycetous, sexual morph unknown, saprobes, Asia, South America, see Menkis and Vasaitis (2011; DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Kirschner et al. (2013; new species, Thailand), Hyde et al. (2016; new species, Thailand), Boonmee et al. (2016; phylogeny), Cultures and sequences are available, type specimen and cultures available for the type: CBS H-5642; KRP88–6 (Menkis and Vasaitis 2011).


Pseudodinemasporium  A. Hashim. & Kaz. Tanaka 2015, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, one species, type: *P. fabiformis* A. Hashim., G. Sato & Kaz. Tanaka, coelomycetous, sexual morph unknown, saprobes, Japan, Malaysia, see Hashimoto et al. (2015b; morphology, phylogeny), Crous et al. (2015b; phylogeny), holotype and ex-type strain of the type: HHUF 29716; MAFF 244361.

Pseudodiplodia  (P. Karst.) Sacc. 1884, *Ascomycota* genera incertae sedis, 45 species, type: *P. ligniaria* (P. Karst.) Sacc., coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are available for an unidentified species, needs generic revision.

Pseudodiscula  Lautert 1911, *Ascomycota* genera incertae sedis, two species, type: *P. endogenospora* Lautert, coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudodiscus  Arx & E. Müll. 1959, *Saccardiaceae*, *Ascomycota* families incertae sedis, one species, type: *P. nootkatensis* (Terrier) Arx & E. Müll., asexual morph unknown, saprobes, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen of type: CBS H-17396, needs generic revision.

Pseudoecteinomyces  W. Rossi 1977, *Euceratomycetaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *P. zuphiicola* (Speg.) W. Rossi, asexual morph unknown, biotrophic, Africa, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Pseudoepicoccum  M.B. Ellis 1971, *Ascomycota* genera incertae sedis, two species, type: *P. cocos* (F. Stevens) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudofuscophialis  Sivan. & H.S. Chang 1995, *Ascomycota* genera incertae sedis, one species, type: *P. lignicola* Sivan. & H.S. Chang, hyphomycetous, sexual morph unknown, saprobes, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 356633, needs generic revision.


Pseudogaster  Höhn. 1907, *Ascomycota* genera incertae sedis, one species, type: *P. singularis* Höhn., hyphomycetous, sexual morph unknown, saprobes, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Pseudogliophragma** Phadke & V.G. Rao 1980, *Wiesneriomycetaceae, Tubeufiales, Dothideomycetes*, one species, type: *P. indicum* [as india] Phadke & V.G. Rao, hyphomycetous, sexual morph unknown, saprobes, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Pratibha et al. (2015; phylogeny, typification), cultures and sequences are available, ex-type of the type: MTCC 11985.

**Pseudographiella** E.F. Morris 1966, *Ascomycota* genera incertae sedis, one species, type: *P. variiseptata* E.F. Morris., hyphomycetous, sexual morph unknown, saprobes, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudographis** Nyl. 1855, *Tribliidaceae, Tribliidales, Ascomycota orders incertae sedis*, three species, type: *P. elatina* (Ach.) Nyl., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, available specimen of type:CBS H-17399, needs generic revision.

**Pseudogymnoascus** Raillo 1929, *Myxotrichaceae, Leotiomycetes family incertae sedis*, ten species, type: *P. roseus* Raillo, asexual morph unknown, animal pathogens, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Minnis and Lindner (2013; new species), Hoyt et al. (2015; control disease), cultures and sequences are available.

**Pseudoheppia** Zahlbr. 1903, *Heppiaceae, Lichinales, Lichinomycetes*, one species, type: *P. schuleri* Zahlbr., asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and
Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudohypocreaa** Yoshim. Doi 1972, *Hypocreaceae, Hypocreales, Sordariomycetes*, one species, type: *P. citrinella* (Ellis) Yoshim. Doi, asexual morph acremonium-like, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


**Pseudolachnea** Ranoj. 1910, *Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes*, five species, type: *P. insignis* Velen., coelomycetous, sexual morph unknown, terrestrial, saprobies, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hashimoto et al. (2015; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

**Pseudolachnella** Teng. 1936, *Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes*, 18 species, type: *P. scolecospora* (Teng & C.I. Chen) Teng, coelomycetous, sexual morph unknown, saprobes, worldwide, see Hashimoto et al. (2015b; morphology, phylogeny), Li et al. (2016; new species), cultures and sequences are available, holotype of the type: “Ling 138.”

**Pseudolachnum** Velen. 1934, *Helotiales* genera incertae sedis, *Leotiomyces*, one species, type: *P. lateritium* Velen., ascoelomorph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudolecanaucitis** Zahlbr. 1907, *Roccellaceae, Arthoniales, Arthoniomyces*, one species, type: *P. filicicola* Zahlbr., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015; phylogenetic study), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

**Pseudolembosia** Theiss. 1913, *Parmulariaceae, Dothideomycetes* families incertae sedis, two species, type: *P. geographica* (Massaei) Theiss., asexual morph unknown, saprobes, terrestrial, Australia, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in Parmulariaceae), Wijayawardene et al. (2016; outline), cultures and sequences are unavailable, holotype of type: NY, needs generic revision.

**Pseudoleptogium** Müll. Arg. 1885, *Collemataceae, Peltigerales, Lecanoromycetes*, one species, type: *P. diffraactum* (Kremp.) Müll. Arg., lichenized, see Otálora et al. (2013a, 2014; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

**Pseudolignincola** Chatmala & E.B.G. Jones 2006, *Halosphaeriaceae, Microascales, Sordariomycetes*, one species, type: *P. siamensis* Chatmala & E.B.G. Jones, asexual morph unknown, on wood, marine, tropical, see Sakayaroj et al. (2010; phylogeny), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), sequences are available, needs generic revision.

Pseudomassaria Jacz. 1894, Pseudomassariaceae, Xylariales, Sordariomycetes, c. 20 species, type: P. chondrospora (Ces.) Jacz., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Jaklitsch and Voglmayr (2012; phylogeny), Senanayake et al. (2015; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016, outline, phylogeny), cultures available for type: MFLUCC 15-0545.


Pseudombrophila Boud. 1885, Pyronemataceae, Pezizales, Pezizomycetes, 28 species, type: P. pedrottii Boud., asexual morph unknown, coprophilous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Pseudomeliola G.L. Barron 1980, Ascomycota genera incertae sedis, Sordariomycetes, one species, type: P. mucosa G.L. Barron, hypymycetous, sexual morph unknown, on nematodes, terrestrial, Canada, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Pseudonaidexia Doilom, Ariyawansa, D.J. Bhat & K.D. Hyde 2015, Macrodiplodiopsidaceae, Pleosporales, Dothideomycetes, one species, type: P. tectonae Doilom, Ariyawansa, D.J. Bhat & K.D. Hyde, saprobes, terrestrial, see Ariyawansa et al. (2015; phylogeny), Doilom et al. (2016; phylogeny), cultures and sequences are available, holotype and ex-holotype type strains of type: MFLU 15-1413; MFLUCC 12-0552.

Pseudonavicula Dennis & Spooner 1993, Dermateaceae, Helotiales, Leotiomyctetes, two species, type: P. caricina Dennis & Spooner, asexual morph unknown, saprobes, terrestrial, British Isles, see Raitviir (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk
et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: K, needs generic revision.  


**Pseudoneotyssipora** Faurel & Schotter 1965, *Ascomycota* genera incertae sedis, two species, type: *P. cunicularia* Faurel & Schotter, coelomycetous, sexual morph unknown, saprobes, Algeria, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.  

**Pseudoneurospora** Dania García, Stchigel & Guarro 2004, *Sordariales, Sordariales, Sordariomycetes*, two species, type: *P. amorphoporcata* (Udagawa) Dania García, Stchigel & Guarro, asexual morph unknown, saprobes, soil, terrestrial, Thailand, Spain, see Lumbsch and Huhndorf (2010; outline), Nygren et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.  

**Pseudonitschia** Copps & S.Y. Kondr. 1995, *Dacampiaceae, Dothideomycetes* Incertae sedis, one species, type: *P. parmotrematis* Copps & S.Y. Kondr., asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes*), Hyde et al. (2013; outline, accepted as a genus in *Dacampiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of the type: BM, Alston 5836.  

**Pseudopannaria** (B.de Lesd.) Zahlbr. 1924, *Lecideaceae, Lecideales, Lecanoromycetes*, one species, type: *P. marcii* (B. de Lesd.) Zahlbr., lichenized, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; taxonomy), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.  

**Pseudoparmelia** Lyne 1914, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 15 species, type: *P. cyphellata* Lyne, lichenized, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Buuruang et al. (2015; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.  

**Pseudoparodia** Theiss. & Syd. 1917, *Patellariaceae, Patellariales, Dothideomycetes*, one species, type: *P. pseudopeziza* (Pat.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariales*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariales*), cultures and sequences are unavailable, holotype of type: FH 7735, needs generic revision.  

**Pseudoparodiella** F. Stevens 1927, *Venturiaeaceae, Venturiales, Dothideomycetes*, one species, type: *P. vermontiae* F. Stevens, asexual morph unknown, saprobes, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; morphology, phylogeny), Hyde et al. (2013; accepted as in *Venturiaeaceae*, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.  


**Pseudopatellina** Höhn. 1908, *Ascomycota* genera incertae sedis, one species, type: *P. conigena* (Niessl) Höhn., coelomycetous, sexual morph unknown, saprobes, Europe, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type: CBS H-17414, needs generic revision. **Pseudopaulia** M. Schultz 2002, *Lichinaeae, Lichinales, Lichinomycetes*, one species, type: *P. tessellata* M. Schultz, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type: B (Schultz 14042a).

**Pseudopeltis** L. Holm & K. Holm 1978, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, one species, type: *P. filicium* L. Holm & K. Holm, asexual morph unknown, saprobes, terrestrial, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: COLO.

**Pseudopeltistroma** Katum. 1975, *Ascomycota* genera *incertae sedis*, one species, type: *P. kyusyuense* Katum., coelomycetous, sexual morph unknown, saprobes, Japan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudopeltula** Henssen 1995, *Gloeophepiaceae, Lichinales, Lichinomycetes*, four species, type: *P. myriocarpa* Henssen, lichenized, Mexico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, holotype of type: COLO.

**Pseudopenidiella** Crous & Koukol 2012, *Ascomycota* genera *incertae sedis*, one species, type: *P. piceae* Crous & Koukol, hyphomycetous, saprobes, Czech Republic, see Crous et al. (2012; morphology; phylogeny), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, holotype of the type: CBS H-20964, ex-type strain of the type: CPC 19969.

**Pseudoperipitheca** Elenkin 1922, *Ascomycota* genera *incertae sedis*, one species, type: *P. murmanica* Elenkin, asexual morph unknown, saprobes, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudopestalotiopsis** Maharachch., K.D. Hyde & Crous 2014, *Pestalotiopsidaceae, Xylariales, Sordariomycetes*, seven species, type: *P. theae* (Sawada) Maharachch., K.D. Hyde & Crous, coelomycetous, sexual morph unknown, saprobes or pathogens on leaves, China, India, Indonesia, Malaysia, Thailand, see Maharachchikumbura et al. (2014, 2016; morphology, phylogeny), Wijayawardene et al. (2016; outline, taxonomy), all species have sequence data, epitype and ex-epitype strain of the type: MFLU 12-0116, MFLUCC 12-0055.

**Pseudopestrakia** M.B. Ellis 1971, *Ascomycota* genera *incertae sedis*, two species, type: *P. kambakkamensis* (Subram.) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, Asia, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudopezicula** Korf 1986, *Drepanopeziculaceae, Helotiales, Leotiomycetes*, two species, type: *P. tetraspora* Korf, Pearson & Zhuang, asexual morph Phialophora-like, pathogen of Vitaceae, Europe and North America, see Kirk et al. (2013; genus accepted), living cultures or cultures and sequences are available, holotype of the type: CUP-061765.

**Pseudopeziza** Fuckel 1870, *Dermateaceae, Helotiales, Leotiomycetes*, three species, type: *P. trifolii* (Biv.) Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished) but lacks for the type, needs generic revision.

**Pseudophacidium** P. Karst. 1885, *Phacidiaeae, Phacidiales, Leotiomycetes*, five species, type: *P. ledi* (Alb. & Schwein.) P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in
Ascodichaenaceae), Crous et al. (2014; phylogeny), cultures and sequences are available for the type: CBS 377.59, needs generic revision.

**Pseudopaemooniona** Nigro, Antelmi & Crous 2015, Phaeomoniellaceae, Phaeomoniellales, Eurotiomycetes, one species, type: *P. oleae* Nigro, Antelmi & Crous, coelomycetous, sexual morph unknown, on living leaves, pathogens, terrestrial, Italy, see Crous et al. (2015; morphology, phylogeny), cultures and sequences are available, holotype and ex-type culture of the type: CBS H-22250, FV84 = CBS 139191.

**Pseudopaemoospheria** Jayasiri, Camporesi & K.D. Hyde 2016, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, one species, type: *P. rubi* Jayasiri, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Hyde et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15-1400, MFLUCC 14-0259.

**Pseudophleospora** Crous & R.G. Shivas 2010, Xylariales genera incertae sedis, Sordariomycetes, two species, type: *P. syzygii* Crous & M.J. Wingf., coelomycetous, associated with leaf spots, terrestrial, Australia, see Crous et al. (2010, 2016; new species, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H 20493, CPC 17051.

**Pseudophleosporrella** U. Braun 1993, Ascomycota genera incertae sedis, one species, type: *P. dioscoreae* (Miyabe & S. Ito) U. Braun, coelomycetous, sexual morph unknown, terrestrial, plant pathogens, leaf-spotting, Asia, see Hong et al. (2010; Korea), Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: Miyabe & Hanzawa 9 (SAPA).

**Pseudophragmotrichum** W.P. Wu, B. Sutton & Gange 1998, Ascomycota genera incertae sedis, one species, type: *P. cubense* W.P. Wu, B. Sutton & Gange, coelomycetous, sexual morph unknown, saprobes, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 372456, needs generic revision

**Pseudophthomyces** Ariyawansa & K.D. Hyde 2015, Didymosphaeriaceae, Pleosporales, Dothideomycetes, seven species, type: *P. chartarum* (Berk. & M.A. Curtis) J.F. Li, Ariyawansa & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, from human, cosmopolitan, see Ariyawansa et al. (2015; taxonomy, phylogeny), Crous et al. (2016; new species, phylogeny), cultures and sequences are available.

**Pseudophyilloella** Seaver 1928, Sarcomycophaceae, Pezizales, Pezizomycetes, two species, type: *P. minuscula* (Boud. & Torrend) Seaver, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: AFTOL-ID 69 (unpublished), needs generic revision

**Pseudoplagiostoma** Cheew., M.J. Wingf. & Crous 2010, Pseudoplaciostomataceae, Diaporthales, Sordariomycetes, four species, type: *P. eucalypti* Cheew., M.J. Wingf. & Crous, asexual morph coelomycetous, saprobes, terrestrial, tropical, see Cheewangkoon et al. (2010; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), holotype and ex-type cultures of the type: CBS H-20303, CPC 13341=CBS 124807.

**Pseudoplatsystemum** Thambugala & K.D. Hyde 2015, Lophiostomataceae, Pleosporales, Dothideomycetes, one species, type: *P. scabridisporum* (Abdel-Wahab & E.B.G. Jones) Thambugala & K.D. Hyde, asexual morph unknown, saprobes, on marine driftwood, Australia, see Thambugala et al. (2015b; taxonomy), cultures and sequences are available, holotype of type: IMI 379750.

**Pseudoplectania** Fuckel 1870, Sarcosomataceae, Pezizales, Pezizomycetes, ten species, type: *P. nigrella* (Pers.) Fuckel, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny),

**Pseudopleospora** Petri. 1920, *Dothideomycetes* genera incertae sedis, three species, type: *P. a. ruthenica* Petri., asexual morph unknown, saprobases, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Pseudopolystigmina** Murash. 1928, *Ascomycota* genera incertae sedis, two species, type: *P. spiraeicola* Murash., coelomycetous, sexual morph unknown, saprobases, Russia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudoproboscispora** Punith. 1999, *Annulatascaceae*, *Annulatascaceae*, *Sordariomycetes*, two species, type: *P. aquatica* (S.W. Wong & K.D. Hyde) Punith., asexual morph unknown, saprobases, aquatic, widespread, see Navarro-Rosinés et al. (2010; taxonomy), cultures and sequences are unavailable, needs generic revision.

**Pseudoporyriana** Müll. Arg. 1883, *Tryptetheliaceae*, *Tryptetheliales*, *Dothideomycetes*, 20 species, type: *P. diluta* (Fée) Müll. Arg., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot and Lücking (2016; monograph), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.


**Pseudoramichloridium** Cheew. & Crous 2009, *Extremaceae*, *Capnodiaceae*, *Dothideomycetes*, one species, type: *P. henryi* Cheew. & Crous, hyphomycetous, sexual morph unknown, saprobases, pathogens, Australia, see Cheewangkoon et al. (2010; taxonomy, phylogeny), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2014, 2016; outline), holotype and ex-type cultures for the type: CBS H-20293, CPC 13121 = CBS 124775.

**Pseudoramonia** Kantvilas & Vězda 2000, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *P. stipitata* (Vězda & Hertel) Kantvilas & Vězda, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2012a; key), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pseudoramulairia** Matsush. 1983, *Ascomycota* genera incertae sedis, two species, type: *P. ponapensis* Matsush., hyphomycetous, sexual morph unknown, saprobases, Uganda, Pacific islands, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Pseudorhizopogon** Kobayasi 1983, *Ascomycota* genera incertae sedis, one species, type: *P. sudae* Kobayasi, coelomycetous, sexual morph unknown, saprobases, Japan, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudorhytisma** Juél 1894, *Cryptomycetaceae, Rhytismatales, Leotiomycetes*, one species, type: *P. bistortae* (DC.) Juél, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, type specimen of type: CBS H-17420, needs generic revision.

**Pseudorobillarda** M. Morelet 1968, *Dothideomycetes* genera incertae sedis, twelve species, type: *P. phragmitis* (Cunnell) M. Morelet, coelomycetous, sexual morph unknown, saprobes, marine, terrestrial, worldwide, see Sutrong et al. (2009; phylogeny, morphology), Runingdamaï et al. (2012; morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Moreno-Pérez et al. (2014; antagonist), Tangthirasunun et al. (2014; new species, Thailand), Crous et al. (2015; phylogeny), Jones et al. (2015; outline), available specimen and cultures for the type: CBS 842.84, CBS H-17422.

**Pseudosaccharomyces** Briosi & Farnetti 1906, *Ascomycota* genera incertae sedis, 20 species, type: *P. citri* Briosi & Farnetti, hyphomycetous, sexual morph unknown, saprobes, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudosagedia** (Müll.Arg.) Choisy 1949, *Porinaceae, Ostropales, Lecanoromycetes*. 80 species, type: *P. cerasi* (Schrad.) M. Choisy, lichenized, see Brodo et al. (2013; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

**Pseudosarcosoma** M. Carbone, Agnello & P. Alvarado 2013, *Chorioactidaceae, Pezizales, Pezizomycetes*, two species, type: *P. latahense* (Paden & Tylutki) M. Carbone, Agnello & P. Alvarado, asexual morph unknown, saprobes, terrestrial, USA, see Carbone et al. (2013; taxonomy), sequences are available of the voucher TUR-A 195801 of the type.: holotype of the type: WTU-F-33051.

**Pseudoschismatomma** Ertz & Tehler 2014, *Roccellaceae, Arthoniales, Arthoniomycetes*, one species, type: *P. rufescens* (Pers.) Ertz & Tehler, sexual morph with lirelliform ascomata, lichenized, terrestrial, Europe, Macaronesia, North America, Asia, Australia, see Ertz et al. (2014; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available.

**Pseudoschizathyra** Punith. 1980, *Ascomycota* genera incertae sedis, one species, type: *P. thaungii* Punith., coelomycetous, sexual morph unknown, saprobes, Myanmar, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudoscopulariopsis** Sandoval-Denis, Gené & Guarro 2015, *Microascaceae, Microascales, Sordariomycetes*, one species, type: *P. schumacheri* (E.C. Hansen) M. Sandoval-Denis, J. Gené & J. Guarro, asexual morph hyphomycetous, saprobes, terrestrial, North America, see Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Sandoval-Denis et al. (2015; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Pseudoscypha** Duby 1861, *Hysteriaceae, Hysteriales, Dothideomycetes*, three species, type: *P. abietis* J. Reid & Piroz., asexual unknown, terrestrial, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), sequences are unavailable, needs generic revision.

**Pseudoseptoria** Speg. 1911, *Sacchariellaceae, Dothideales, Dothideomycetes*, eight species, type: *P. donacicola* Speg., sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014, 2016; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2013; accepted as a genus in *Dothioraceae*, phylogeny), Thambugala et al.


Pseudostegia Bubák 1906, Ascomycota genera incertae sedis, one species, type: *P. nubilosa* Bubák, coelomycetous, sexual morph unknown, saprobes, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudostigmiddium Etayo 2008, Mycosphaerellaceae, Capnodiales, Dothideomycetes, five species, type: *P. nephromiarium* (Linds.) Etayo, asexual morph unknown, lichenicolous, South America, see Etayo and Sancho (2008; morphology, keys). Hyde et al. (2013; accepted as a genus in Mycosphaerellaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of the type: E, J.D. Hooker.

Pseudostreckeria Q. Tian, Wanasinghe, Camporesi & K.D. Hyde 2015, Melanommataceae, Pleosporales, Dothideomycetes, two species, type: *P. muriformis* Wanasinghe, Q. Tian, Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Italy, see Tian et al. (2015; taxonomy), cultures and sequences are available for type, holotype and ex-type strains of type: MFLU 15–1407; MFLUCC 13–0764 = KUMCC15-0062.


Pseudotaeniolina J.L. Crane & Schokn. 1986, Teratosphaeriaceae, Capnodiales, Dothideomycetes, two species, type: *P. convolvuli* (Esfand.) J.L. Crane & Schokn., hyphomycetous, sexual morph unknown, on litter, rock-inhabiting, cosmopolitan, see Egidi et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Pseudotapesia Velen. 1939, Helotiales genera incertae sedis, Leotiomycetes, one species, type: *P. pilattii* Velen., asexual morph unknown, saprobes, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Pseudoteratosphaeria Quaedvl. & Crous 2014, Teratosphaeriaceae, Capnodiales, Dothideomycetes, six species, type: *P. perpendicularis* (Crous & M.J. Wingf.) Quaedvl. & Crous, asexual morph unknown, folicolous, pathogens, saprobes, Brazil, Colombia, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), cultures and sequences are available, holotype and ex-type culture of type: CBS H-19691, CBS 118367.

**Pseudothelomma** M.Prieto & Wedin 2016, *Caliciaceae, Caliciales, Lecanoromycetes*, two species, type: *P. ocellatum* (Körb.) M. Prieto and Wedin, lichenized, see Prieto & Wedin (2016; genus proposed, phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, voucher specimen of type: Tehler 8063 (S), needs generic revision.

**Pseudothiella** Petr. 1928 (= *Pseudothiopsella* Petr. 1928 *fide* Reblova et al. 2016), *Phyllachoraceae, Phyllorhiza*, *Sordariomycetes*, six species, type: *P. hirtellae* (Henn.) Petr., from living leaves, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Reblova et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

**Pseudothis** Theiss. & Syd. 1914, *Diaporthales* genera *incertae sedis, Sordariomycetes*, one species, type: *Pseudothyriis machaerii* (Rehm) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Pseudothyrium** Höhn. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *P. polygonati* (Tassi) Höhn., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudotopeliopsis** Parnmen, Lücking & Lumbsch 2012, *Graphidaceae, Ostropales, Lecanoromycetes*, four species, type: *P. laceratula* (Müll. Arg.) Parnmen, Lücking & Lumbsch, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Parnmen et al. (2012; genus proposed, phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, lectotype of type: Sayer s.n. – G (Australia).

**Pseudotorula** Subram. 1958, *Ascomycota* genera *incertae sedis*, three species, type: *P. heterospora* Subram., hyphomycetous, sexual morph unknown, saprobes, Asia, see Seift et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudotrachyla** B. Sutton & Hodges 1976, *Ascomycota* genera *incertae sedis*, three species, type: *P. dentata* B. Sutton & Hodges, coelomycetous, sexual morph unknown, saprobes, Brazil, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pseudotrachydia** Kirschst. 1939, *Pleomassariaceae, Pleosporales, Dothideomycetes*, eight species, type: *P. stromatophila* Kirschst., asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Melanommataceae*), Hyde et al. (2013; accepted as a genus in *Melanommataceae*), Wijayawardene et al. (2014; outline), Liu et al. (2015; new species, Thailand), Tian et al. (2015; phylogeny, accepted as a genus in *Pleomassariaceae*), cultures and sequences are available.


**Pseudotripycnodidium** Z.F. Yu & K.Q. Zhang 2011, *Orbiliaceae, Orbiliales, Orbiliomycetes*, one species, type: *P. sinense* Z.F. Yu & K.Q. Zhang, saprobes, terrestrial, China, see Yu et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: YMF 1.01843, needs generic revision.

**Pseudotrochila** Höhn. 1917, *Rhytismatales* genera *incertae sedis, Leotiomyces*, two species, type: *P. rhododendri* (Racib.) Höhn., asexual morph unknown, saprobes, terrestrial, Java, see
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Pseudotryblidium* Rehm 1890, *Helotiales* genera *incertae sedis*, *Leotiomyces*, one species, type: *P. neesii* (Flot.) Rehm, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


*Pseudovalsina* Spooner 1986, *Boliniaceae*, *Boliniales*, *Sordariomycetes*, four species, type: *P. foedans* (P. Karst.) Spooner, asexual morphs unknown, saprobes, terrestrial, Europe, China, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Clypeosphaeriaceae*), Untereiner et al. (2013; accepted as a genus in *Boliniaceae*, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

*Pseudoversa* Höhn. 1918, *Melanconidaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *P. thelebola* (Fr.) Höhn., asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

*Pseudoveronae* Crous & Batzer 2012, *Dissoconiaceae*, *Capnodiales*, *Dothideomycetes*, two species, type: *P. ellipsoidea* Batzer & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Li et al. (2012; morphology; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, holotype and ex-type of the type: CBS H-20927, CBS 132086.


*Pseudoyuconia* Lar.N. Vassiljeva 1983, *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, one species, type: *P. thalictri* (G. Winter) Lar.N. Vassiljeva, asexual morph unknown, saprobe, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; accepted as a genus in *Pleosporaceae*), Wijayawardene et al. (2014; outline), Ariyawansa et al. (2015; accepted as a genus in *Pleosporaceae*), cultures and sequences are unavailable, needs generic revision.

*Pseudozythia* Höhn. 1902, *Ascomycota* genera *incertae sedis*, one species, type: *P. pusilla* Höhn., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Psilachnum* Höhn. 1926, *Hyaloscyphaceae*, *Helotiales*, *Leotiomyces*, 28 species, type: *P. lateritioalbum* (P. Karst.) Höhn., asexual morph unknown, saprobes, terrestrial, worldwide, see Han et al. (2009, 2014; new species, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.
Psilocistella Svrček 1977, Hyaloscyphaceae, Helotiales, Leotiomyctes, ten species, type: P. obsoleta (Velen.) Svrček, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Psilolechia A.Massal. 1860, Psilolechiaceae, Lecanorales, Lecanoromycetes, four species, type: P. lucida (Ach.) M. Choisy, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psiloparmelia Hale 1989, Parmeliaceae, Lecanorales, Lecanoromycetes. 13 species, type: P. distincta (Nyl.) Hale, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psiopezia Berk. 1847, Rhizinaeae, Pezizales, Pezizomycetes, five species, type: P. nummularia Berk., asexual morph unknown, pathogens, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable but lacks for the type, needs generic revision.

Psilophana Syd. 1939, Helotiales generae incertae sedis, Leotiomyctes, one species, type: P. andina Syd., asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Psilosphaeria Cooke 1879, Ascomycota generae incertae sedis, one species, type: need typification, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Psora Hoffm. [nom. cons.] 1796, Psoraceae, Lecanorales, Lecanoromycetes, 35 species, type: Lecidea decpiiens (Hedw.) Ach., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psoroglaena Müll. Arg., Verrucariaceae, Verrucariales, Eurotiomyctes, 17 species, type: P. cubensis Müll. Arg., lichenized, see Muggia et al. (2010; phylogeny), Czarnota et al. (2011; sequence), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), McCarthy and Kantvilas (2013; new species), Yatsyna (2014; new records), Himelbrant et al. (2015; new records), Käffer et al. (2015; new records), Kondratyuk et al. (2016; new species), Kubik et al. (2016; biodiversity), Lücking et al. (2016; classification), Weerakoon and Aptroot (2016; new records), cultures and sequences are available, needs generic revision.

Psoroma Michaux 1803, Pannariaceae, Peltigerales, Lecanoromycetes, 70 species, type: P. hypnorum (Vahl) Gray, lichenized, worldwide, see Ekman et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psoromella Gyeln. 1940, Lecanorales generae incertae sedis, Lecanoromycetes, one species, type: P. a pampana Gyeln., lichenized, see Lumbsch and Huhndorf (2010; outline), Thell et al. (2012; overview), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

Psoromidium Stirt. 1877, Pannariaceae, Peltigerales, Lecanoromycetes, two species, type: P. wellingtonii Stirt., lichenized, Southern Hemisphere, see Lumbsch and Huhndorf (2010; outline), Rubio et al. (2013; taxonomy), Jørgensen and Andersen (2015; genus re-evaluation, sequence), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

Psoronactis Ertz & Tehler 2015, Roccellaceae, Arthoniales, Arthoniomycetes, one species, type: P. dilienenana (Ach.) Ertz & Tehler, sexual morph with apotheciod ascomata, asexual morph coelomycetous, lichenized, terrestrial, Euro-Siberian, see Ertz et al. (2015;
morphology, phylogeny), Lücking et al. (2016; classification), sequences are available, needs generic revision.

**Psorophorus** Elvebakk & S.G. Hong 2010, *Pannariaceae, Peltigerales, Lecanoromycetes*, two species, type: *P. pholidotus* Elvebakk & S.G. Hong, asexual morph unknown, lichenized, terrestrial, South America, see Elvebakk et al (2010; new genus, sequence), sequences are available, needs generic revision.

**Psorothecopsis** Rehm 1900, *Gomphillaceae, Ostropales, Lecanoromycetes*, seven species, type: *P. decipiens* Rehm, lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Psorotichia** A.Massal. 1855, *Lichinaceae, Lichinales, Lichinomycetes*, 50 species, type: *P. murorum* A. Massal., lichenized, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.


**Pteridosperma** J.C. Krug & Jeng 1979, *Ceratostomataceae, Melanopsorales, Sordariomycetes*, one species, type: *Pteridosperma foveolatum* (Udagawa & Y. Horie) J.C. Krug & Jeng, asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Pteridiospora** Penz. & Sacc. 1897, *Astrosphaeriellaceae, Pleosporales, Dothideomycetes*, one species, type: *P. javanica* Penz. & Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as *Dothideomycetes*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as *Dothideomycetes*), Phookamsak et al. (2015; pylogeny, introduced *Astrosphaeriellaceae*), available cultures for the type: MFLUCC 11-0195, needs generic revision.

**Pteromyces** E. Bommer, M. Rousseau & Sacc. 1906, *Helotiales genera incertae sedis, Leotiomycetes*, one species, type: *P. ambiguus* E. Bommer, M. Rousseau & Sacc. ex Sacc., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pteromycola** P.F. Cannon 1997, *Ascomycota genera incertae sedis*, one species, type: *P. clupeiformis* P.F. Cannon, asexual morph unknown, saprobes, terrestrial, Great Britain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: IMI 362154a, needs generic revision.

**Pterosporidium** W.H. Ho & K.D. Hyde 1996, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, one species, type: *P. rhizophorae* (Vizioli) W.H. Ho & K.D. Hyde, from living leaves, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Pterulopsis** Wakef. & Hansf. 1943, *Ascomycota genera incertae sedis*, one species, type: *P. dummeri* Wakef. & Hansf., hyphomycetous, sexual morph unknown, saprobes, Uganda, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pterygiopsis** Vain. 1890, *Lichinaceae, Lichinales, Lichinomycetes*, 17 species, type: *P. atra* Vain., lichenized, North America, South America, Europe, Australia, Afirica, see Eichler et al. (2010; list), Schultz and Moon (2011; taxonomy), Lumbsch and Huhndorf (2010; outline),
Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pterygosporopsis** P.M. Kirk 1983, *Ascomycota* genera *incertae sedis*, two species, type: *P. fragilis* P.M. Kirk, hyphomycetous, sexual morph unknown, saproples, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Ptychographa** Nyl. 1874, *Xylographaceae*, *Trapeliales*, *Lecanoromycetes*, one species, type: *P. xylographoides* Nyl., lichenized, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Spißbille et al. (2014; sequence), Resl et al. (2015; sequence, partial sequence), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pucciniospora** Speg. 1886, *Ascomycota* genera *incertae sedis*, one species, type: *P. chusqueae* Speg., coelomycetous, sexual morph unknown, saproples, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, cultures available for the type: ATCC 18595 (unpublished), needs generic revision.

**Pulchromyces** Hennebert 1973, *Ascomycota* genera *incertae sedis*, one species, type: *P. fimicola* (V. Dring) Hennebert, coelomycetous, sexual morph unknown, coprophilous, Ghana, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, cultures available for the type: ATCC 18595 (unpublished), needs generic revision.

**Pulmosphaeria** Joanne E. Taylor, K.D. Hyde & E.B.G. Jones 1996, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *P. archontophoenicis* Joanne E. Taylor, K.D. Hyde & E.B.G. Jones, assexual morph unknown, saproples, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Pulvinaria** Bonord. 1851, *Sordariomycetes* genera *incertae sedis*, one species, type: *P. bohemica* Velen., assexual morph unknown, saproples, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Pulvinella** A.W. Ramaley 2001, *Ascomycota* genera *incertae sedis*, one species, type: *P. nolinae* A.W. Ramaley, hyphomycetous, sexual morph unknown, coprophilous, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: UC 1512945, needs generic revision.

**Pulvinodecton** Henssen & G. Thor 1998, *Roccellaceae*, *Arthoniales*, *Arthoniomycetes*, two species, type: *P. kurzii* (Krempr.) Henssen & G. Thor, lichenized, Seychelles, Asia, Australia, see Jaklitsch et al. (2016a; phylogeny), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

**Pulvinula** Boud. 1885, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 28 species, type: *P. convexella* (P. Karst.) Pfister, asexual morph unknown, coprophilous, saproples, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), sequences are available, voucher specimen of the type: KH.03.19 (FH), needs generic revision.

**Punctelia** Krog 1982, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 45 species, type: *P. borreri* (Sm.) Krog, lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

**Punctillina** Toro 1934, *Ascomycota* genera *incertae sedis*, one species, type: *P. solteroi* Toro, coelomycetous, sexual morph unknown, saproples, South America, see Wijayawardene et al.
(2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Punctillum** Petr. & Syd. 1924, *Dothideomycetes* genera *incertae sedis*, two species, type: *P. hepaticarum* (Cooke) Petr. & Syd., asexual morph unknown, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Punctonora** Aptroot 1997, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *P. nigropulvinata* Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: B, Aptroot 33356.

**Pureke** P.R. Johnst. 1991, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, seven species, type: *P. zelandicum* P.R. Johnst., asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, holotype of type: PDD 45591, needs generic revision.


**Pustulipora** P.F. Cannon 1982, *Ceratostomataceae*, *Melanosporales*, *Sordariomycetes*, one species, type: *P. corticola* P.F. Cannon, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


**Puttea** S.Stenroos & Huhtinen 2009, *Lecanorales* genera *incertae sedis*, *Lecanoromycetes*, three species, type: *P. margaritella* (Hulting) S. Stenroos & Huhtinen, lichenized, Eastern Europe, America, Russia, see Stenroos, et al. (2009; taxonomy), Stenroos et al. (2010; sequence), Lumbsch and Huhndorf (2010; list), Davydov and Printzen (2012; taxonomy), Czarnota and Hernik (2013; taxonomy, new report), Dillman et al. (2014; new combination), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Puttemansia** Hen. 1902, *Paranectriellaceae*, *Dothideomycetes* families *incertae sedis*, 19 species, type: *Puttemansia lanosa* Hen., asexual morph hyphomycetous, parasitic on *Nectandra*, worldwide, see Hyde et al. (2013; accepte as a genus in *Paranectriellaceae*), Wijayawardene et al. (2014; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pycnidioarxiella** Punith. & N.D. Sharma 1980, *Ascomycota* genera *incertae sedis*, one species, type: *P. indica* Punith. & N.D. Sharma, coelomycetous, sexual morph unknown, saprobes, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Pycnidioptelis** Bat. & C.A.A. Costa 1959, *Ascomycota* genera incertae sedis, one species, type: *P. smilacina* Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, USA, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pycnis** Bref. 1881, *Ascomycota* genera incertae sedis, one species, type: *P. sclerotivora* Bref., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pycnocarpon** Theiss. 1913, *Dothideomycetes* genera incertae sedis, two species, type: *P. magnificum* (Syd., P. Syd. & E.J. Butler) Theiss., asexual morph unknown, saprobes, terrestrial, India, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pycnodactylus** Bat., A.A. Silva & Cavalc. 1967, *Ascomycota* genera incertae sedis, one species, type: *P. maranhensis* Bat., A.A. Silva & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Pycnodermata** Syd. & P. Syd. 1914, *Cookellaceae, Dothideomycetes* families incertae sedis, one species, type: *P. bambusinum* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Cookellaceae*), Hongsanan et al. (2014; accepted as a genus in *Cookellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Pycnokharnessia** Matsush. 1996, *Ascomycota* genera incertae sedis, one species, type: *P. pakistanica* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Pakistan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: Matsushima Fungus Collection, Kobe, IPX295, needs generic revision.

**Pycnomma** Syd. 1924, *Ascomycota* genera incertae sedis, one species, type: *P. canariense* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Canary Islands, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pycnomoreletia** Rulamort 1990, *Ascomycota* genera incertae sedis, two species, type: *P. aristata* (J. Ahmad) Rulamort, coelomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Pakistan, seen Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pycnopapezia** W.L. White & Whetzel 1938 (= *Acarosporium* Bubák & Vleugel ex Bubák 1911; *Chaetalysis* Peyronel 1922; *Ciliotisira* Syd. 1942 *fide* Johnston et al. 2014), *Sclerotiniaceae, Helotiaceae, Leotiaceae*, four species, type: *P. sympodialis* W.L. White & Whetzel, asexual morphs formerly known in *Acarosporium, Chaetalysis*, *Ciliotisira*, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available, needs generic revision.

**Pycnopsammmina** Diederich & Etayo 1995, *Ascomycota* genera incertae sedis, one species, type: *P. lobariae* Diederich & Etayo, coelomycetous, sexual morph unknown, lichenicolous,
non-lichenized, terrestrial, France, Spain, UK, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, holotype of the type: LG (Diederich 9697).

**Pycnora** Hafellner 2001, Pycnocarpaceae, Candelariales, Lecanoromycetes, three species, type: *Pycnora xanthococca* (Sommerf.) Hafellner, lichenized, Europe, Asia, North America, see Bendiksb & Timdal (2013; phylogeny), Lücking et al. (2016; classification), Cultures and sequences are available, needs generic revision.

**Pycnothelyra** Duf. 1821, Cladoniaceae, Lecanorales, Lecanoromycetes, two species, type: *P. papillaria* (Ehrh.) L.M. Dufour, lichenized, see Coste and Dufène (2009; checklist), Crisan and Ardelean (2010; ecology), Ketner-Oostra et al. (2010; outline), Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; sequence), Zarabska and Rosadzinski (2011; new records), Grochowski (2012; ecology), Kirk et al. (2013; genus accepted), McCune and Rosentreter (2014; new record), Miadlikowska et al. (2014; sequence), Lücking et al. (2016; classification), Şenkardeşler et al (2016; taxonomy), cultures and sequences are available, needs generic revision.

**Pycnothelia** Duf. 1821, Cladoniaceae, Lecanorales, Lecanoromycetes, two species, type: *P. papillaria* (Ehrh.) L.M. Dufour, lichenized, see Coste and Dufène (2009; checklist), Crisan and Ardelean (2010; ecology), Ketner-Oostra et al. (2010; outline), Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; sequence), Zarabska and Rosadzinski (2011; new records), Grochowski (2012; ecology), Kirk et al. (2013; genus accepted), McCune and Rosentreter (2014; new record), Miadlikowska et al. (2014; sequence), Lücking et al. (2016; classification), Şenkardeşler et al (2016; taxonomy), cultures and sequences are available, needs generic revision.

**Pycnothyriella** Bat. 1952, Ascomycota genera incertae sedis, two species, type: *P. discreta* Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pycnotrema** Rivas Plata & Lücking 2012, Graphidaceae, Ostropales, Lecanoromycetes, three species, type: *P. pycnoporellum* (Nyl.) Rivas Plata & Lücking, lichenized, terrestrial, tropical, see Rivas Plata et al. (2012a; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pyramididospora** Sv. Nilsson., 1962, Ascomycota genera incertae sedis, seven species, type: *P. casuarinae* Sv. Nilsson, hyphomycetous, sexual morph unknown, on submerged decaying branches of *Casuarina*, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pyrenidium** Nyl. 1865, Dacampiaceae, Dothideomycetes families incertae sedis, one species, type: *P. actinellum* Nyl., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in *Dacampiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Pyrenobotrys** Theiss. & Syd. 1914, Dothideomycetes genera incertae sedis, one species, type: *P. conferta* (Fr.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, America, Scandinavia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Zhang et al. (2012; not accepted as a genus in *Venturiaceae*), Hyde et al. (2013; not accepted as a genus in *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.
**Pyrenocarpus** Trevis. 1855, *Lichinaceae, Lichinales, Lichinomycetes*, one species, type: *P. flotowianum* (Hepp) Trevis., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Medeiros et al. (2014; ecology and new record), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Pyrenochaeta** De Not. 1849, *Cucurbitariaceae, Pleosporales, Dothideomycetes*, five species, type: *P. nobilis* De Not., coelomycetous, saprobes, plant endophytes, terrestrial, aquatic, worldwide, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk (2013; genus accepted), de Gruyter et al. (2010, 2013; phylogeny), Doilom et al. (2013; phylogeny), cultures and sequences are available, holotype and ex-type strains of type: CBS H-500; CBS 407.76.


**Pyrenochium** Link 1833, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. pini* Link, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Pyrenocollema** Reinke 1895, *Ascomycota* genera *incertae sedis*, 19 species, type: *P. tremellooides* Reinke, lichenized, marine, terrestrial, near sea shores, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), Pérez-Ortega et al. (2016; phylogeny), cultures and sequences are available, holotype of type: H9505110.

**Pyrenocyclus** Petr. 1955, *Dothideomycetes* genera *incertae sedis*, one species, type: *P. ambiguus* Petr., asexual morph unknown, saprobes, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Pyrenodesmia** A.Massal. 1853, *Teloschistaceae, Teloschistales, Lecanoromycetes*, six species, type: *P. chalybaea* (Fr.) A. Massal., lichenized, Europe, North America, China, see Arup et al. (2013; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pyrenographa** Aptroot 1991, *Pyrenulaceae, Pyrenulales, Eurotiomycetes*, three species, type: *P. xylographoides* Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type: CBG, Streimann 37582.

**Pyrenopeziza** Fuckel 1870 (= *Cylindrosporium* Grev. 1822 *fide* Johnston et al. 2014), *Dermataceae, Helotiales, Leotiomycetes*, three species, type: *P. chailletii* (Pers.) Fuckel, asexual morph formerly named in *Cylindrosporium*, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Carter et al. (2013; DNA, pathogens), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are available but lacks for the type, needs generic revision.

**Pyrenophora** Fr. 1849, *Pleosporaceae, Pleosporales, Dothideomycetes*, 16 species, type: *P. phaeocomes* (Rebent.) Fr., asexual morph hyphomycetous, saprobes or pathogens (phytopathogens) in terrestrial habitats, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in *Pleosporaceae*), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2014c, 2015;
taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

**Pyrenopsis** Nyl. [nom. cons.] 1858, *Lichinaceae, Lichinales, Lichinomycetes*, 40 species, type: *P. fuscataula* Nyl., lichenized, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pyrenostigme** Syd. 1926, *Dothideomycetes* genera incertae sedis, one species, type: *P. siparanae* Syd., asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Pyrenothrix** Riddle 1917, *Pyrenotrichaceae, Chaetothyriales, Eurotiomycetes*, two species, type: *P. nigra* Riddle, lichenized, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pyrenolinsia** R.C. Harris & Aptroot 1991, *Pyrenulaceae, Pyrenulales, Eurotiomycetes*, one species, type: *P. ferruginosa* (Müll. Arg.) R.C. Harris & Aptroot, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pyrenula** Ach. 1814, *Pyrenulaceae, Pyrenulales, Eurotiomycetes*, 175 species, type: *Pyrenula nitida* (Weig.) Ach., asexual morph unknown, lichenized, terrestrial, mostly tropical, see Lumbsch and Huhndorf (2010; outline), Aptroot (2012; key), Weerakoon et al. (2012; phylogeny), Aptroot et al. (2013a; taxonomy), Kirk et al. (2013; genus accepted), Gueidan et al. (2016; phylogeny), Lücking et al. (2016; classification), sequences are available for the voucher F 5929 of the type, needs generic revision.

**Pyrenullum** Clem. 1909, *Ascomycota* genera incertae sedis, two species, type: *P. analeptum* (Ach.) Clem., coelomycetous, sexual morph unknown, lichenized, terrestrial, distribution unknown, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pyrgidium** Nyl. 1867, *Sphinctrinaceae, Mycocaliciales, Eurotiomycetes*, twelve species, type: *P. bengaliense* Nyl., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pyrgillus** Nyl. 1857, *Pyrenulaceae, Pyrenulales, Eurotiomycetes*, four species, type: *Pyrgillus americanus* Nyl., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Weerakoon et al. (2012; phylogeny), Gueidan et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures and sequences are available but lacks for the type, needs generic revision.

**Pygostroma** Petr. 1951, *Ascomycota* genera incertae sedis, two species, type: *P. shearii* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pyricularia** (Sacc.) Sacc. 1886, *Pyriculariaceae, Magnaporthales, Sordariomycetes*, 83 species, type: *Pyricularia grisea* (Sacc.) Sacc., sexual morph *Magnaporthe*, plant pathogens, saprobes, terrestrial, worldwide. See Console et al. (2008; pathotype diversity in Argentina), Hayashi and Fukuta (2009; Blast differentiation), Park and Shin (2009; new species), McKenzie et al. (2010; new species), Suzuki et al. (2010; fungicide resistance), Zhang et al. (2010; spot disease in banana), Kohli et al. (2011; pathology), Netam et al. (2011; plant extract for controlling rice blast), Zhang et al. (2011; phylogeny), Debona et al. (2012; pathological biochemistry), Yang et al. (2012; early detection of rice blast), Alexandrova et al.
(2013; new species), Crous et al. (2013, 2015, 2016; new species), Choi et al. (2013; relationship of pathogenicity and phylogeny), Sousa et al. (2013; phytopathology), Klaubauf et al. (2014; phylogeny, new species), Murata et al. (2014; phylogeny), Castroagudín et al. (2016; new species), sequence data available for most of the species, including type, epitype and ex-epitype of the type: CBS H-22280, CBS 138707.

**Pyriculariopsis** M.B. Ellis 1971, **Magnaporthaceae, Magnaporthales, Sordariomycetes**, six species, type: *P. parasitica* (Sacc. & Berl.) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Thongkantha et al. (2009; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Silva et al. (2015; new species), cultures and sequences are available, needs generic revision.

**Pyriformascoma** Daranagama, Camporesi & K.D. Hyde 2015, **Xylariaceae, Xylariales, Sordariomycetes**, one species, type: *P. trilobatum* Daranagama, Camporesi & K.D. Hyde, asexual morph hyphomycetous, saprobes, terrestrial, Italy, Europe, see Daranagama et al. (2015; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype and ex-type strains of type: MFLU 14-0231; MFLUCC 14-0012.

**Pyrigemmula** D. Magyar & Shoemaker 2011, **Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes**, one species, type: *P. aurantiaca* D. Magyar & R. Shoemaker, hyphomycetous, sexual morph unknown, terrestrial, saprobes, worldwide, see Magyar et al. (2011; taxonomy), Crous et al. (2012; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2016; outline), cultures and sequences are available, holotype and ex-type cultures of the type: BP 101176, CBS 126743.

**Pyripnomycyes** Cavalc. 1972, **Ascomycota** genera incertae sedis, one species, type: *P. maranensis* Cavalc., coelomycetous, sexual morph unknown, lichenized, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Pyronema** Carus 1834, **Pyronemataceae, Pezizales, Pezizomycetes**, two species, type: *P. marianum* Carus, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Traeger et al. (2013; evolution), sequences are available but lacks for the type, needs generic revision.

**Pyropyxis** Egger 1984, **Pyronemataceae, Pezizales, Pezizomycetes**, one species, type: *P. rubra* (Peck) Egger, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), sequences are available for the voucher K. Egger 323 (DAOM) of the type, needs generic revision.

**Pyrrhospora** Körb. 1855, **Lecanoraceae, Lecanorales, Lecanoromycetes**, one species, type: *P. quernea* (Dicks.) Körb., lichenized, see Rotter (2010; checklist), Lumbsch and Huhndorf (2010; list), Perlmutter et al. (2012; checklist), Kirk et al. (2013; genus accepted), Singh et al. (2015; sequence), Urbanavichus and Urbanavichene (2015; checklist), Gasparyan and Sipman (2016; new records), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Pyxidiophora** Bref. & Tavel 1891, **Pyxidiophoraceae, Pyxidiophorales, Laboulbeniomyctes**, 17 species, type: *P. nyctalidis* Bref. & Tavel, asexual morph hyphomycetous, mainly coprophilous, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Pyxine** Fr. 1825, **Caliciaceae, Caliciales, Lecanoromycetes**, 75 species, type: *P. sorediata* (Ach.) Mont., lichenized, see Maier (2009; natural product), Bajpai et al. (2010;
bioaccumulation), Rout et al. (2010; ecology), Jungbluth and Marcelli (2011; taxonomy), Jungbluth et al. (2011; new species and new records), Lumbsch and Huhndorf (2010; list), Bajpai and Upreti (2012; ecology), Gaya et al. (2012; sequence), Mongkolsuk et al. (2012; taxonomy), Danesh et al. (2013; air pollution), Kirk et al. (2013; genus accepted), Nayaka et al. (2013; new species), Prieto et al. (2013; taxonomy, phylogeny), Shukla et al. (2013; bioaccumulation), Karakoti et al. (2014; ecology), Aptroot et al. (2014a, b; key, taxonomy), Pandit (2014; ecology), Bajpai et al. (2015; genotoxicity), Aptroot (2016; new records), Prieto and Wedin (2016; taxonomy), Lücking et al. (2016; classification), cultures and sequences are available, needs generic revision.

**Quadracaea** Lunghini, Pinzari & Zuconi 1996, *Ascomycota* genera *incertae sedis*, three species, type: *Q. mediterranea* Lunghini, Pinzari & Zuconi, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, see Seifert et al. (2011; morphology), Zhang et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Barbosa et al. (2013; new species), Kirk et al. (2013; genus accepted), holotype of the type: IMI 367816, cultures and sequences are unavailable, needs generic revision.

**Quadracadium** Nawawi & Kuthub. 1989, *Ascomycota* genera *incertae sedis*, one species, type: *Q. aquaticum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Malaysia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 327415, cultures and sequences are unavailable, needs generic revision.


**Quasicladorcha** M.E. Barr & M. Blackw. 1981, *Mytilinidiaceae*, *Mytilinidiales*, *Dothideomycetes*, one species, type: *Q. reticulata* M.E. Barr & M. Blackw., asexual morph hyphomycetous, mainly coprophilous, terrestrial, USA, see Boehm et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Mytilinidiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Quasicladorchus** B. Sutton 1991, *Ascomycota* genera *incertae sedis*, one species, type: *Q. simmondsii* B. Sutton, coelomycetous, sexual morph unknown, saprobes, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 263349c, cultures and sequences are unavailable, needs generic revision.

**Quasiphosteospora** B. Sutton, Crous & Shamoun 1996, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *Q. saximontanensis* (Deighton) B. Sutton, Crous & Shamoun, sexual morph unknown, one species, foliicolous, pathogens, North America, see Seifert et al. (2011; morphology), Braun et al. (2013; Cercosporoid fungi), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014, 2017; outline), holotype of type: IMI 98069, cultures and sequences are unavailable.

**Queenslandia** Bat. & H. Maia 1959, *Ascomycota* genera *incertae sedis*, five species, two varieties, type: *Q. pulchella* Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Queenslandipenidiella** Quaedvl. & Crous 2014, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *Q. kurandae* (Crous & J.K. Stone) Quaedvlieg & Crous, hyphomycetous, sexual morph unknown, pathogens, saprobes, Australia, see Quaedvlieg et al.

**Queirozia** Viégas & Cardoso 1944, *Erysipheae, Erysiphales, Leotiomycetes*, one species, type: *Q. turbinata* Viégas & Cardoso, sexual and hyphomycetous asexual morph, biotrophic, obligate plant pathogens, terrestrial, South America, see Liberato et al. 2006 (morphology, phylogeny, taxonomy), Braun and Cook 2012 (taxonomy), Kirk et al. (2013; genus accepted), holotype of the type: IACM 26560, sequences of non-type material of the type species are available.

**Quezelia** Faurel & Schotter 1965, *Ascomycota* genera incertae sedis, one species, type: *Q. hoggariana* Faurel & Schotter, coelomycetous, sexual morph unknown, coprophilous, Sahara, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Quintaria** Kohlm. & Volkm.-Kohl. 1991, *Dothideomycetes* genera incertae sedis, four species, type: *Q. lignatilis* (Kohl.) Kohlm. & Volkm.-Kohl., asexual morph unknown, saprobes, freshwater or marine, worldwide, see Zhang et al. (2008), Schoch et al. (2009; phylogenetic assessment), Su et al. (2009; placement in *Testudinaceae*), Hirayama et al. (2010), Wijayawardene et al. (2014; accepted as a genus in *Dothideomycetes*), cultures and sequences are available, holotype of type: J.K.4365a = 01097442, NYBG.


**Racodium** Fr. [nom. cons.] 1829, *Racodiaceae, Capnodiales, Dothideomycetes*, one species, type: *R. rupestre* Pers., lichenized, see Muggia et al. (2008; phylogeny), Nelsen et al. (2009; phylogeny), Kennet and Jaram (2012; ecology and conservation), Anderson (2014; checklist), Schoch and Grube (2015; systematics), Lücking et al. (2016; classification); sequences are available, holotype of type: UPS:BOT:L-024182.


**Radiatiospora** Matsush. 1995, *Ascomycota* genera incertae sedis, one species, type: *R. yunnanensis* Matsush., coelomycetous, sexual morph unknown, coprophilous, China, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of type: MFC-0Y237.

**Radotina** Velen. 1934, *Helotiales* genera incertae sedis, *Leotiomycetes*, one species, type: *R. caudata* Velen., asexual morph unknown, saprobes, former Czechoslovakia, see Kirk et al. (2008; mentioned as *Helotiales*, genera incertae sedis, Lumbsch and Huhndorf (2010; did not accept as genus in *Helotiales*), Kirk et al. (2013; genus accepted), data inadequate, cultures and sequences are unavailable, needs generic revision.
Radulidium Arzanlou, W. Gams & Crous 2007, Dothideomycetes genera incertae sedis, three species, type: *R. subulatum* (de Hoog) Arzanlou, W. Gams & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Czech Republic, USA, see Wu et al. (2013; new species, morphology), Wijayawardene et al. (2017; outline), ex-type culture of type: CBS 405.76.

Raesaenienia D. Hawksw. C. Boluda & H. Lindgren 2015, Parmeliaceae, Lecanorales, Lecanoromycetes, one species, type: *R. huukseneni* (Räsänen) D. Hawksw. C. Boluda & H. Lindgren, asexual morph unknown, on lichens, Europe, see Divakar et al. (2015; phylogeny), cultures and sequences are unavailable. isotype of type: K(M)-IMI 209424.


Raffaelea Arx & Hennebert 1965, Ophiostomataceae, Ophiostomatales, Sordariomycetes, 31 species, type: *R. ambrosiae* Arx & Hennebert, sexual morph unknown, symbionts of Ambrosia beetle, plant pathogen, terrestrial, worldwide, see Harrington et al. (2008, new species), Mayfield et al. (2008; laurel wilt on avocado), Kim et al. (2009a, 2009b; effect of Silver nanoparticles, new species), Kolarik and Hulcr (2009; Scolytodes unipuncta mycobiota), Smith et al. (2009; laurel wilt on Camphor), Harrington et al. (2010; phylogeny, new species), Matsuda et al. (2010; phylogeny), Harrington et al. (2011; origin of Raffaelea lauricola), Seo et al. (2012; phylogeny), Dreaden et al. (2014a; multilocus PCR assays), Dreaden et al. (2014b; phylogeny), Jeypaprakash et al. (2014; molecular diagnostics), Musvuugwa et al. (2015; sexual state), Simmons et al. (2016; new species), cultures and sequences are available, holotype and ex type of the type: CBS H-7710, CBS 185.64.

Raizadenia S.L. Srivast. 1981, Ascomycota genera incertae sedis, one species, type: *R. garhiwalensis* S.L. Srivast., hyphomycetous, sexual morph unknown, saprobes, India, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Chomnunti et al. (2014; morphology), cultures and sequences are unavailable, needs generic revision.

Ramakrishnanella Kamat & Ullasa ex Ullasa 1970, Ascomycota genera incertae sedis, one species, type: *R. indica* Ullasa, coelomycetous, sexual morph unknown, saprobes, India, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Ramalea Nyl. 1866, Lecanorales genera incertae sedis, Lecanoromycetes, four species; type: *Ramalea tribulosa* Nyl.; lichenized; see Lücking et al. (2016; classification); sequences are available.

Ramalina Ach. 1809, Ramalinaceae, Lecanorales, Lecanoromycetes, c. 230 species, type: *R. fraxinea* (L.) Ach., lichenized, worldwide, see Bermudez et al. (2009; air pollution), Del Campo et al. (2010; taxonomy), Hoskeri et al. (2010; bactericidal study), Lumbsch and Huhndorf (2010; outline), Luo et al (2010; antioxidant study), Paudel et al. (2010, 2011; chemistry), Riddle et al. (2010; air quality), Werth and Sork (2010; photobiont genetics), Aptroot and Bruyn (2011; new record), Arroyo et al. (2011; new species), Cordeiro et al. (2011; experimental study), Casano et al. (2011; physiology), del Hoyo et al. (2011; oxidative stress), Quedensley and Véliz Pérez (2011; new species), Timsina et al. (2012; phylogeny), Türküz et al. (2012; cytogenetic and biochemical study), Verma et al. (2012; culture study), Del Campo et al. (2013; photobiont coexistence), Kirk et al. (2013; genus accepted), Sisodia et al. (2013; bioactivity study), Duman et al. (2014; genotoxicity), Moncada et al. (2014, Oh et al. (2014; taxonomy), Perez-Vargas and Perez-Ortega (2014; new and endemic species), Sork and Werth (2014; phylogeography), Moncada et al. (2014), Blanchon et al. (2015; new records), Ly et al. (2015; chemistry), Moreira et al. (2015; chemistry and biological activity),
Catala et al. (2016; phylogenomic analyses), Cornejo et al. (2016; chemistry), Lücking et al. (2016; classification), Ristie et al. (2016; biopharmaceutical potential study), Zrnzević et al. (2016; Gc-Ms analysis), sequences are available for few species, needs generic revision.

**Ramalodium** Nyl. 1879, *Pannariaceae, Peltigerales, Lecanoromycetes*, five species, type: *R. succulentum* Nyl., lichenized, see Wedin et al. (2009; molecular), Hill et al. (2011; new record), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), de Lange and Blanchon (2014; endemic record), Ekman et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.


**Ramgea** Brumm. 1992, *Thelebolaeaceae, Thelebolales, Leotiomycetes*, one species, type: *R. annulispora* Brumm., asexual morph unknown, saprobes, terrestrial, Netherlands, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Ramicapitulum** Voglmayr & G. Delgado 2002, *Ascomycota genera incertae sedis*, one species, type: *R. sphaerospora* Voglmayr & G. Delgado, hyphomycetous, sexual morph unknown, saprobes, aquatic, Cuba, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: WU 22035, cultures and sequences are unavailable, needs generic revision.


**Ramimonilia** Stielow & Quaedvl. 2014, *Dothideomycetes genera incertae sedis*, one species, type: *R. apiculis* B. Stielow & W. Quaedvl., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Spain, see Egidi et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014, 2017; outline), cultures and sequences are available, holotype of type: CBS 118327.

**Ramonia** Stizenb. 1862, *Gyalectaceae, Ostropales, Lecanoromycetes*, 24 species, type: *R. valenzueleana* (Mont.) Stizenb., lichenized, cosmopolitan, see Lendemer et al. (2009; new species), Knudsen and Kocourková (2010; checklist), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Stepanchikova et al. (2013; new records), Aptom et al. (2015; new species), Lücking et al. (2016; classification), sequences are available.

**Ramopenidiella** Crous & R.G. Shivas 2014, *Teratosphaeriaceae, Capnodiales, Dothideomycetes*, one species, type: *R. cycadicola* Crous & R.G. Shivas, hyphomycetous, sexual morph unknown, saprobe, associated with leaf spots, terrestrial, Australia, see Crous et al. (2014; morphology, phylogeny), Wijayawardene et al. (2017; outline), culture and sequence are available, holotype and ex-type culture of type: CBS 137973, CBS H-21684.

**Ramphialophora** M. Calduch, Stchigel, Gené & Guarro 2004, *Sordariales*, genera *incertae sedis*, *Sordariomycetes*, two species, type: *R. vesiculosa* M. Calduch, Stchigel, Gené & Guarro, hyphomycetous, sexual morph unknown, in soil, terrestrial, Europe, see Madrid et al. (2010; new species, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Ramsbottomia** W.D. Buckley 1924, *Pyrenomataceae, Pezizales, Pezizomycetes*, two species, type: *R. lamprosporoidea* W.D. Buckley, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Shcherbakova (2016, new record), cultures and sequences are available, needs generic revision.


**Ramulispora** Miura 1920, *Mycosphaerellaceae, Capnodiales, Dothideomycetes*, twelve species, type: *R. andropogonis* Miura, hyphomycetous, sexual morph unknown, plant pathogens, on Poaceae, see Malinski (2008; antimicrobial), Crous et al. (2009; review, phylogeny, taxonomy), Brady et al. (2011; pathology), Wijayawardene et al. (2012, 2017; outline), Videira et al. (2017; morphology, phylogeny), cultures and sequences are available.

pathogenesis), Houbraken et al. (2013; antifungal susceptibility), Salgüero et al. (2013; infection in dog), Su and Cai (2013; new species), Tanney and Seifert (2013; new species), Steinmann et al. (2014; real time PCR, clinical diagnosis), Matos et al. (2015; isolation from cystic fibrosis patient), Crous et al. (2016; new species, phylogeny), Gudmundsson et al. (2016; extrolite profiling), Ishiwada et al. (2016; mixed infection), Jurjevic et al. (2016; new species), Mouhajir et al. (2016; rep-PCR, clinical diagnosis), Steinmann et al. (2016; isavuconazole drug response), cultures and sequences are available for all species, holotype and ex-type of type: CBS H-7817; CBS 393.64.


**Readeriellopsis** Crous & C. Decock 2015, *Capnodiales* genera incertae sedis, *Dothideomycetes*, two species, type: *R. fuscoporiae* Crous & C. Decock, coelomycetes, sexual morph unknown, saprobes, French Guiana, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2016, 2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22229, CPC 24637.


**Rechingeriella** Petr. 1940, *Zopfiaeae, Pleosporales, Dothideomycetes*, two species, type: *R. insignis* Petr., asexual morph unknown, saprobes, Terrestrial, Asia, Europe, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Hyde et al. (2013; morphology, outline), Wijayawardene et al. (2014b; outline), cultures and sequences are unavailable, needs generic revision.

**Reconditella** Matzer & Hafellner 1990, *Sordariales* genera incertae sedis, *Sordariomycetes*, one species, type: *R. physconiarium* Matzer & Hafellner, asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Recurvomyces Selbmann & de Hoog 2008, Teratosphaeriaceae, Capnodiales, Dothideomycetes, hyphomycetous, one species, type: *R. mirabilis* Selbmann & de Hoog, sexual morph unknown, saprobes, terrestrial, Antarctica, see Selbmann et al. (2008; morphology; phylogeny), Onofri et al. (2011; biodiversity, Italy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2016; outline), Quaedvlieg et al. (2014; phylogeny), Selbmann et al. (2015; distributional pattern), holotype and ex-type strain of the type: CBS H-20178, CBS 119434.

Redibia Deighton & Piroz. 1972, Ascomycota genera incertae sedis, two species, type: *R. pucciniicola* Deighton & Piroz., hyphomycetous, sexual morph unknown, fungicolous, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Reddellomyces Trappe, Castellano & Malajczuk 1992, Tuberaeaceae, Pezizales, Pezizomycetes, four species, type: *R. westraliensis* (G.W. Beaton & Malajczuk) Trappe, Castellano & Malajczuk, asexual morph unknown, saprobes, saprobes, terrestrial, Australasia, Mediterranean, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kušan et al. (2014: review of the hypogeous species), Rana et al. 2015; classification), sequences are available for unidentified species (unpublished).

Redingeria Frisch 2006, Graphidaceae, Ostropales, Lecanoromycetes, twelve species, type: *R. leiostoma* (Nyl.) Frisch, asexual morph unknown, lichenized fungi, terrestrial, tropical, placement in *Graphidaceae* supported by molecular data, see Lumbsch and Huhndorf (2010; outline), da Silva Caceres et al. (2012; new combinations), Rivas Plata et al. (2012a, b; molecular, classification), Kirk et al. (2013; genus accepted), Van den Broeck et al. (2014; new species), Lücking et al. (2016; classification), sequences are available.

Redonia C.W.Dodge 1973, Caliciaceae, Caliciales, Lecanoromycetes, two species, type: *R. chilena* C.W. Dodge, lichenized, see Lumbsch and Huhndorf (2010; outline), Gay et al. (2012; taxonomy), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are unavailable.

Redonographa Lücking, Tehler & Lumbsch 2013, Graphidaceae, Ostropales, Lecanoromycetes, five species, type: *R. chilensis* (Zahlbr.) Lücking & Tehler, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Lücking et al. (2013, 2014, 2016; phylogeny, new species, classification), sequences are available.

Refractohilum D. Hawksw. 1977, Ascomycota genera incertae sedis, six species, type: *R. galligenum* D. Hawksw., hyphomycetous, sexual morph unknown, lichenicolous, fungicolous, widespread, terrestrial, see Seifert et al. (2011; genus accepted), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: K(M)-IMI 212682.

Regiocrella P. Chaverri & K.T. Hodge 2006, Clavicipitaceae, Hypocreales, Sordariomycetes, two species, type: *R. camerunensis* P. Chaverri & H.C. Evans, asexual morph unknown, mainly coprophilous, terrestrial, Cameroon, China, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: CUP 67512, cultures and sequences are available.

Rehmiodothis Theiss. & Syd. 1914, Phyllachoraceae, Phyllachorales, Sordariomycetes, one species, type: *R. osbeckiae* (Berk. & Broome) Theiss. & Syd., from living leaves, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Rehmiomyccella E. Müll. 1962, Sordariomycetes genera incertae sedis, one species, type: *Rehmiomyccella phoradendri* (Rehm) E. Müll., saprobes, Brazil, see Lumbsch and Huhndorf
(2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Reichlingia** Diederich & Scheid. 1996, *Arthoniaceae, Arthoniales, Arthoniomycetes*, four species, type: *R. leopoldii* Diederich & Scheid., two species known from the sexual stage, the generic type only known from the asexual stage with loose, sporodochia-like conidiomata, lichenized, on saxicolous and corticolous, Europe and Africa (Uganda), see Motiejūnaitė (2011; taxonomy), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Frisch et al. (2014a, b), Lücking et al. (2016; classification), holotype of the type: STU Wirth 23450, sequences are available.

**Reimnitzia** Kalb 2001, *Graphidaceae, Ostropales, Lecanoromycetes*, one species, type: *R. santensis* (Tuck.) Kalb, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Rivas Plata et al. (2012a; phylogeny), see Lumbsch and Huhndorf (2010; outline), Kraichak et al. (2014; phylogen), Lücking et al. (2015, 2016; phylogeny, classification), sequences are available.

**Relicina** (Hale & Kurok.) Hale, 1974, *Parmeliaceae, Lecanorales, Lecanoromycetes*, 60 species, type: *R. eumorpha* (Hepp) Hale, asexual morph, undetermined, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Benatti (2011; taxonomy), Kirk et al. (2013; genus accepted), Sethy et al. (2012; taxonomy), Crespo et al. (2010; phylogeny), De Paz et al. (2011; phlogeny), Buurang et al. (2015; lineage), Kirika et al. (2016; txonomy), Lücking et al. (2016; classification), sequences are available.

**Remersonia** Samson & Seifert 1997, *Sordariales* genera *incertae sedis, Sordariomycetes*, two species, type: *R. thermophila* (Fergus) Seifert & Samson, hyphomycetous, sexual morph unknown, in soil, terrestrial, Asia, Australasia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Remispora** Barghoon & Linder 1944, *Halosphaeriaceae, Microascales, Sordariomycetes*, six species, type: *R. maritima* Linder, asexual morph unknown, saprobes, marine, worldwide, see Jones et al. (2009, 2015; outline), Lumbsch and Huhndorf (2010; outline), Abdel-Wahab (2011; phylogeny), Sakayaroj et al. (2011; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are available.

**Remleria** Raitv. 2004, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, four species, type: *R. myrtillinoides* (Rehm) Raitv., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available but lacks for the type, needs generic revision.

**Remototrichyna** Divakar & A. Crespo 2009, *Parmeliaceae, Lecanorales, Lecanoromycetes* 20 species, type: *R. flexilis* (Kurok.) Divakar & A. Crespo, asexual morph, undetermined, terrestrial, see Flakus et al (2012; taxonomy), Crespo et al. (2010; phylogen)ey, De Paz et al. (2011; origin and diversification), Divakar et al. (2012; data partial sequencing), Thell et al. (2012; review of the family Parmeliaceae), Masson et al. (2015; sequencing data), Lücking et al. (2016; classification), cultures and sequences are available.


morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Requienella** Fabre 1883, *Requienellaceae, Xylariales, Sordariomycetes*, one species, type: *R. seminuda* (Pers.) Boise, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: *C. dimorphandrae* (S.M. Reddy & Bilgrami) de Hoog & Bat. Vegte, asexual morph unknown, on pollen, South Africa, see Marincowitz et al. (2009; new species), Zhang et al. (2009; phylogeny), Inderbitizin et al. (2004), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; phylogeny), Lücking et al. (2016; classification), cultures available for the type: RS12, RS13, sequences are available.

**Resendea** Bat. 1961, *Dothideomycetes genera incertae sedis*, two species, type: *R. paraguayensis* Bat., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Retiarus** D.L. Olivier 1978, *Orbiliaceae, Orbiliales, Orbiliomycetes*, two species, type: *R. superficiarius* D.L. Olivier, hyphomycetous, sexual morph unknown, on pollen, South Africa, see Lumbsch and Huhndorf (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Reticulosphaeria** Sivan. & Bahekar 1982, *Xylariales genera incertae sedis, Sordariomycetes*, one species, type: *R. indica* Sivan. & Bahekar, asexual morph unknown, on stems of *Achyranthes aspera*, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 254813, cultures and sequences are unavailable.

**Retroa** P.F. Cannon 1991, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, one species, type: *R. dimorphandracea* (F. Stevens) P.F. Cannon, from living leaves, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


**Retrostium** Nakagiri & Tad. Ito 1997, *Spathulosporaceae, Lulworthiales, Sordariomycetes*, one species, type: *R. amphiroae* Nakagiri & Tad. Ito, spermatiophores or asexual morph hyphomycetous, biotrophic on marine red alga, Japan, see Nakagiri and T. Ito (1997; morphology). Inderbitizin et al. (2004), Business et al. (2012; taxonomy), Loque et al. (2014; taxonomy), holotype of the type: IFO H-12210, cultures and sequences are unavailable.

**Rhabdoclisma** Syd. 1939, *Ascomycota genera incertae sedis*, two species, type: *R. chusqueae* Syd., coelomycetous, sexual morph unknown, saprobes, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

saprobes, pathogens, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Morgenstern et al. (2013; pathogens), Johnston et al. (2014; nomenclature), Sweet et al. (2015; pathogens, DNA), cultures available for the type.

**Rhabdodiscus** Vain. 1921, *Graphiaceae*, *Ostropalectaceae*, *Lecanoromycetes*, 42 species, type: *R. auberianus* (Mont.) Vain., asexual morph unknown, lichenized, terrestrial, tropical, see Rivas Plata et al. (2012; phylogeny), Singh et al. (2013; new species, India), Caceres et al. (2014; taxonomy), Papong et al. (2014; taxonomy), Peláez et al. (2014; new combination), Lücking et al. (2016; classification), sequences are available

**Rhabdogleoopsis** Petr. 1925, *Ascomycota* genera incertae sedis, two species, type: *R. balsameae* (Davis) Petr., coelomycetous, sexual morph unknown, saprobes, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhabdomyces** Balbiani 1889, *Ascomycota* genera incertae sedis, one species, type: *R. lobjoyi* Balbiani., coelomycetous, sexual morph unknown, saprobes, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Rhabdostromella** Höhn. 1915, *Ascomycota* genera incertae sedis, one species, type: *R. rubi* Höhn., coelomycetous, sexual morph unknown, saprobes, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhabdostromina** Died. 1921, *Ascomycota* genera incertae sedis, three species, type: *R. empetri* (Rostr.) Died., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Punithalingam and Spooner (2011; reinstated the genus, morphology, new comb.), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.


**Rhadalobium** Henn. & Lindau 1897, *Parmulariaceae*, *Asterinales*, *Dothideomycetes*, seven species, type: *R. hemitheliae* Henn. & Lindau, asexual morph unknown. Epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Inácio et al. (2012; taxonomy), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Rhadostoma** Körb. 1865, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, six species, type: *R. corrugatum* Körb., asexual morph unknown, saprobes, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),
Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Rhagadostomella** Etayo 2002, *Nitschkiaceae*, *Coronophorales*, *Sordariomycetes*, one species, type: *R. gregaria* Etayo, asexual morph unknown, lichenicolous on *Sticta*, terrestrial, South America, see Etayo (2002; morphology, distinction of similar lichenicolous genera), Maharachchikumbura et al. (2015, 2016; outline), need revision, holotype of the type: COL, Etayo 15943, cultures and sequences are unavailable.

**Rhamphoria** Niesl 1876, *Annulatascales*, *Annulatascales*, *Sordariomycetes*, 14 species, type: *R. delicatula* Niesl, asexual morph hyphomycetous (phaeosiria-like), saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Reblova et al. (2016: new species), sequences are available.

**Rhamphosphera** Kirschst. 1936, *Sordariomycetes* genera *incertae sedis*, one species, type: *R. capillata* Kirschst., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Rhapidicyrtis** Vain. 1921, *Pyrenulales incertae sedis*, *Eurotiomycetes*, one species, type: *R. trichospora* (Nyl.) Vain., asexual morph unknown, lichenized, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.


**Rhexoampullifera** P.M. Kirk 1982, *Pyrenulales incertae sedis*, *Eurotiomycetes*, three species, type: *R. fagi* (M.B. Ellis) P.M. Kirk & C.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, British Isles, Brazil, Czech Republic, see Seifert et al. (2011; morphology), Koukol (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Rhexophialae** Th. Fr. 1860, *Sagiolechiaceae*, *Ostropales*, *Lecanoromycetes*, one species, type: *R. coronata* Th. Fr., lichenized, see Baloch et al. (2010; phylogeny), Kondratyuk et al. (2016; new reports), Lücking et al. (2016; classification), sequences are available.

**Rhexoprolifer** Matsush. 1996, *Ascomycota* genera *incertae sedis*, one species, type: *R. variabilis* Matsush., hyphomycetous, sexual morph unknown, saprobes, France, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhexosporium** Udagawa & Furuya 1977, *Sordariales incertae sedis*, *Sordariomycetes*, one species, type: *R. terrestr* Udagawa & Furuya, asexual morph unknown, saprobes, terrestrial,
Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Rhextothecium** Samson & Mouch. 1975, *Eremomyctaceae, Dothideomycetes* families incertae sedis, one species, type: *R. terrestre* Udagawa & Furuya, asexual morph hyphomycetous (trichosporiella-like), saprobes, terrestrial, Egypt, Kenya, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Eremomyctaceae*), Kirk et al. (2013; genus accepted), Giraldo et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, needs generic revision.

**Rhinocladiella** Nannf. 1934, *Herpotrichiellaceae, Chaetothyriales, Eurotiomycetes*, c. 13 species, type: *R. atrovirens* Nannf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Wu et al. (2013; new species), Hernandez-Restrepo et al. (2016; new species), Madrid et al. (2016; new species, phylogeny), cultures and sequences are available.

**Rhinocladium** Sacc. & Marchal 1885, *Microascaceae, Microascales, Sordariomycetes*, nine species, type: *R. coprogenum* Sacc. & Marchal ex Marchal, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Lackner et al. (2012; DNA), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available but lacks for the type.

**Rhinotrichella** G. Arnaud ex de Hoog 1977, *Ascomycota* genera incertae sedis, four species, type: *R. globulifera* G. Arnaud ex de Hoog, hyphomycetous, sexual morph unknown, saprobes, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhipidiomyces** Thaxt. 1926, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, one species, type: *R. acritii* Thaxt., asexual morph unknown, biotrophic, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Rhipidocarpon** (Theiss.) Theiss. & Syd. 1915, *Parmulariaceae, Dothideomycetes* families incertae sedis, two species, type: *R. javanicum* (Pat.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, Java, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Rhipidocephalum** Trail 1888, *Ascomycota* genera incertae sedis, two species, type: *R. abietis* Trail, hyphomycetous, sexual morph unknown, saprobes, British Isles, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Rhizina** Fr. 1815, *Rhizinales, Pezizales, Pezizomycetes*, two species, type: *R. undulata* Fr., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Palomares-Rius et al. (2014; DNA), cultures available for the type: AFTOL-ID 918.

**Rhizoblepharia** Rifai 1968, *Pyronemataceae, Pezizales, Pezizomycetes*, two species, type: *R. jugispora* Rifai, asexual morph unknown, saprobes, terrestrial, Australia, Jamaica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhizocarpon** Ramond ex DC., 1805, *Rhizocarpaceae, Lecanorales, Lecanoromycetes*, 325 species, 71 subspecies, 197 varieties, 188 forma species, type: *Rhizocarpon geographicum* (L.) DC. morph, undetermined, terrestrial, Europe, Middle East, South Korea, Turkey, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Bradwell (2010;
applied studies), Matthews and Trenbirth (2011; lichenometry), Sánchez et al. (2014; physiology), Joshi et al. (2010; rare lichens), Aptroot and Aslan (2011; rare lichens), Fleischhacker et al. (2015; partial sequencing, ribosomal RNA), Lücking et al. (2016; classification), sequences are available.


**Rhizodiscina** Hafellner 1979, *Patellariaceae*, *Patellariales*, *Dothideomycetes*, one species, type: *R. lignyota* (Fr.) Hafellner, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Patellariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Yacharoen et al. (2015; accepted as a genus in *Patellariaceae*), cultures and sequences are unavailable, needs generic revision.

**Rhizogene** Syd. & P. Syd. 1921, *Dothideomycetes* genera *incertae sedis*, one species, type: *R. symphoricarpi* (Syd. & P. Syd.) Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; provisionally accepted as a genus in *Venturiaceae*), Hyde et al. (2013; excluded the genus from *Venturiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Rhizolecia** Hertel 1984, *Lecideaceae*, *Lecanorales*, *Lecanoromycetes*, one species, one species, type: *R. hybrida* (Zahlbr.) Hertel, asexual morph, undetermined, terrestrial, See Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hertel (2014; taxonomy revision), cultures and sequences are unavailable.


**Rhizoplaca** Zopf 1905, *Lecanoraceae*, *Lecanoromycetes*, *Lecanorales*, eleven species, five sub species, seven varieties, type: *R. opaca* (Ach.) Zopf., asexual morph unknown, lichenized, terrestrial, see Castello (2010; new combination), Leavitt (2010; circumscription), Sinha and Jagadeesh Ram (2011; taxonomy), Leavitt et al. (2011; species delimitation, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Leavitt et al. (2013a, 2016; phylogeny), Tuthill (2013; checklist), Goni et al. (2014; checklist), Houshyar et al. (2014; antimicrobial), Kondratyuk et al. (2014; molecular phylogeny), Zhao et al. (2016; generic concepts, taxonomy), Lücking et al. (2016; classification), sequences are available.

Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

**Rhizosphaera** L. Mangin & Har. 1907, Dothideaceae, Dothideales, Dothideomycetes, six species, type: *R. abietis* L. Mangin & Har., sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014; outline), Thambugala et al. (2014; accepted as a genus in Dothideaceae, phylogeny), Kirk et al. (2013; genus accepted), Azeem et al. (2015; DNA, fungi on conifer), cultures and sequences are available but lacks for the type, needs generic revision.

**Rhizosphaerina** B. Sutton 1986, Ascomycota genera incertae sedis, two species, type: *R. variabilis* B. Sutton, coelomycetous, sexual morph unknown, saprobes, Australia, South East Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhizotexis** Theiss. & Syd. 1917, Dothideomycetes genera incertae sedis, one species, type: *R. bauhiniarum* (Henn.) Theiss. & Syd., asexual morph unknown, epiphytes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Dai et al. (2014; taxonomy), cultures and sequences are unavailable, needs generic revision.

**Rhizothrium** Naumov 1915 (= Rhizocalyx Petr. 1928; Bactrexcipula Höhn. 1918 fide Johnston et al. 2014), Helotiaceae, Helotiiales, Leotiomycetes, one species, type: *R. abietis* Naumov, asexual morph coelomycetous, saprobes, terrestrial, Russia, Chile, Siberia, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.

**Rhodesia** Grove 1937, genera Ascomycota genera incertae sedis, two species, type: *R. subtecta* (Roberge ex Desm.) Grove, coelomycetous, sexual morph unknown, saprobes, Gennany, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhodesiospis** B. Sutton & R. Campb. 1979, Ascomycota genera incertae sedis, two species, type: *R. gelatinosa* B. Sutton & R. Campb., coelomycetous, sexual morph unknown, saprobes, British Isles, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhodopeziza** Hohmeyer & J. Moravec 1995, Pezizaceae, Pezizales, Pezizomycetes, one species, type: *R. tuberculata* (Gamundi) J. Moravec & Hohmeyer, asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhodoscypha** Dissing & Sivertsen 1983, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: *R. ovilla* (Peck) Dissing & Sivertsen, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: HMAS97505, needs generic revision.

**Rhodosticta** Woron. 1911, Phyllachoraceae, Phyllachorales, Sordariomycetes, two species, type: *R. caraganae* Woron., coelomycetous, sexual morph unknown, saprobes, Asia, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhodotarzetta** Dissing & Sivertsen 1983, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: *R. rosea* (Rea) Dissing & Sivertsen, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Rhodothallus** Bat. & Cif. 1959, Ascomycota genera incertae sedis, two species, type: *R. caseariaefolius* Bat., Cif. & C.A.A. Costa ex Bat. & Cif., coelomycetous, sexual morph
unknown, saprobes, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Rhombochistidella** Zimm. 1902, *Ascomycota* genera incertae sedis, two species, type: *R. rosae* Zimm., hyphomycetous, sexual morph unknown, fungicolous, Asia, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhopalocladium** Schroers, Samuels & W. Gams 1999, *Ascomycota* genera incertae sedis, two species, type: *R. myxophilum* Schroers, Samuels & W. Gams, hyphomycetous, sexual morph unknown, fungicolous, Asia, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhopalostroma** D. Hawksw. 1977, *Xylariaceae*, Xylariales, Sordariomycetes, eleven species, type: *R. indicum* D. Hawksw. & Muthappa, on wood and bark, tropical, Africa and Asia, asexual morph nodulisporium-like, see Lumbsch and Huhndorf (2010; outline), Stadler et al. (2010, 2013; phylogeny), Kirk et al. (2013; genus accepted), Darangama et al. (2014; phylogeny), Darangama et al. (2015; includes description of type), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; position), cultures and sequences are available but lacks for the type:), holotype of type: K(M)-IMI 190605.

**Rhopogaphella** (Henn.) Sacc. & Trotter 1913, Sordariomycetes genera incertae sedis, one species, type: *R. gaduae* (Henn.) Sacc. & Trotter, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Rhopographus** Nitschke ex Fuckel 1870, Dothideomycetes genera incertae sedis, six species, type: *R. filicinus* (Fr.) Nitschke ex Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Phyllopsora** Müll. Arg. 1894, Ramalinaceae, Lecanorales, Lecanoromycetes, 70 species, type: *P. breviscula* (Nyl.) Müll. Arg. (*Lecidea breviscula* Nyl.), lichenized, corticolous, tropical, extending into oceanic temperate, see Rikkinen and Poinar (2008; new species), Timdal (2008; Peru), Timdal (2011; West Indies), Mishra et al. (2011; India), Lücking et al. (2016; classification), sequence data available.

**Rhymbocarpus** Zopf 1896, Helotiales genera incertae sedis, Leotiomycetes, 17 species, type: *R. punctiformis* Zopf, asexual morph unknown, lichenicolous, terrestrial, Europe, see Diederich et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Suija et al. (2015; phylogeny), cultures and sequences are available but lacks for the type, needs generic revision.

**Rhynchodiplodia** Briosi & Farneti 1904, Ascomycota genera incertae sedis, one species, type: *R. citri* Briosi & Farneti, coelomycetous, sexual morph unknown, saprobes, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhynchomeliola** Speg. 1884, Rhynchostomataceae, Eurotiomycetes families incertae sedis, three species, type: *R. pulchella* Speg., asexual morph unknown, lichenicolous, terrestrial,
South America, Australasia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

**Rhyncophoromyces** Thaxt. 1908, *Ceratomycetaceae, Laboulbeniales, Laboulbeniomycetes*, eight species, type: *R. rostratus* (Thaxt.) Thaxt., asexual morph unknown, biotrophic on Coleoptera (Hydrophilidae), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhyncoseptoria** Unamuno 1940, *Ascomycota* genera *incertae sedis*, one species, type: *R. caballeroana* Unamuno, coelomycetous, sexual morph unknown, saprobes, Morocco, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rhyncosphearia** (Sacc.) Berl. 1890, *Sordariomycetes* genera *incertae sedis*, one species, type: *R. dusenii* Henn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Rhyncosporina** Arx 1957, *Ascomycota* genera *incertae sedis*, two species, type: *R. meinersii* (R. Sprague) Arx, hyphomycetous, sexual morph unknown, saprobes, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of the type species not preserved, needs generic revision.


**Rhytidenglerula** Höhn.1918, *Englerulaceae, Dothideomycetes* families *incertae sedis*, eleven species type: *R. carnea* (Ellis & G. Martin) Höhn., asexual morph coelomycetous, saprobes, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Dai et al. (2014, morphology), cultures and sequences are unavailable, type specimen need recollect and sequence.

**Rhytidhysteron** Speg. 1881, *Hysteriales, Hysteriales, Dothideomycetes*, 19 species, type: *R. brasiliense* Speg, diplodia- and aposphaeria-like, saprobes, terrestrial, worldwide, see Boehm et al. (2009a, b; phylogeny), Murillo et al. (2009; morphology, chemistry, phylogeny), Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Méndez-Mayboca et al. (2010; diversity), Hyde et al. (2013; outline, key, phylogeny), Almeida et al. (2014; diversity), Chacón et al. (2014; diversity), Mahajan et al. (2014; pathogenicity), Mishra et al. (2014; pathogenicity), Pudhom and Teerawatananond (2014; chemistry), Yacharoe et al. (2015; revision, classification, morphology), Chokpaiboon et al. (2016; chemistry), Doilom et al. (2016; morphology, phylogeny), Thambugala et al. (2016; morphology, phylogeny), cultures and sequences are available, holotype of type: LPS 1189.

**Rhytidiella** Zalasky 1968, *Cucurbitariaceae, Pleosporales, Dothideomycetes*, four species, type: *Rhytidiella moriformis* Zalasky, asexual morph coelomycetous (phaeoseptoria-like), pathogen, terrestrial, see Lumbsch and Huhndorf (2010; outline), Doilom et al. (2013; accepted as a genus in *Cucurbitariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available.

**Rhytidospora** Jeng & Cain 1977, *Ceratostomataceae, Melanosporales, Sordariomycetes*, five species, type: *R. tetraspora* Jeng & Cain, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),
Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


**Rhytismataceae** De Not. 1846, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, 127 species, type: *R. acerinum* (Pers.) Fr., asexual morph unknown, saprobes, terrestrial, worldwide, see Suto (2009; new species, Japan), Wang et al. (2009; new species), Hou et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Masumoto et al. (2014, 2015; new species, Japan, phylogeny), sequences are available for voucher Hou 203 (AAUF), needs generic revision.

**Ricasolia** De Not. 1846, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, 15 species; type: *R. amplissima* (Scop.) De Not.; lichenized; see Moncada et al. (2013a; taxonomy), Cornejo and Scheidegger (2015; phylgoeny), Lücking et al. (2016; classification), Tønsberg et al. (2016; new combination), sequences are available.

**Rickia** Cavara 1899, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, 161 species, type: *R. wasmannii* Cavara, asexual morph unknown, biotrophic hosts are Acari (Chelicerata), Diplopoda (Myriapoda), Formicidae (Hexapoda: Hymenoptera), and several other groups of insects (Hexapoda: Blattodea, Coleoptera, Orthoptera), worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariomycetidae*, genera incertae sedis), Huhndorf and Miller (2011; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), sequences are available.

**Rikatlia** P.F. Cannon 1993, *Phyllachoraceae*, *Phyllachorales*, *Sordariales*, *Sordariomycetes*, one species, type: *R. lungusaensis* (Henn.) P.F. Cannon, from living leaves, Eastern America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rileya** A. Funk 1979, *Ascomycota* genera incertae sedis, one species, type: *R. piceae* A. Funk, coelomycetous, sexual morph unknown, saprobes, Canada, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Rimula** Velen. 1934, *Helotiiales* genera incertae sedis, *Leotiomycetes*, one species, type: *R. faginea* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

phylogenetic studies), Lücking et al. (2016; classification), cultures and sequences are available.

**Rinodina** (Ach.) Gray, 1821, Physciaceae, Lecanorales, Lecanoromycetes, 692 species, nine sub species, 148 varieties, 122 forma species, type: *R. sophodes* (Ach.) A. Massal., asexual morph unknown, terrestrial, coticulose, muscicolous, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Giralt et al. (2009; new species), Giralt and Klaus (2010; taxonomy), Nadyeina et al. (2010; sequencing and taxonomy), Sheard (2010; taxonomy), Knahoglu and Aptroot (2011; new records), Muggia et al. (2011; molecular, data, unpublished), Sheard et al. (2011; new species), Gaya et al. (2012; comprehensive phylogenetic studies), Upreti and Patel (2012; environmental studies, ecology), Lücking et al. (2016; classification), Resl et al. (2016, sequencing data, unpublished), sequences are available.


**Riomyces** A. Ferrer, A.N. Mill., C. Sarmiento et Shearer 2012, Sordariomycetes genera incertae sedis, one species, type: *R. rotundus* A. Ferrer, A.N. Mill., Costa Rica, see Ferrer et al. (2012; taxonomy), cultures and sequences are available.

**Rivulata** Kohlm., Volkm.-Kohlm. & O.E. Erikss. 1998, Dothideomycetes genera incertae sedis, one species, type: *R. ius* Kohlm., Volkm.-Kohlm. & O.E. Erikss, asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Rizalia** Syd. & P. Syd. 1914, Trichosphaeriaceae, Trichosphaeriales, Sordariomycetes, two species, type: *R. fasciculata* Syd. & P. Syd, asexual morph unknown, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Robakia** Petr. 1952, Ascomycota genera incertae sedis, one species, type: *R. arctica* Petr., coelomycetous, sexual morph unknown, saprobes, Norway, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Robergea** Desm., 1847, Stictidaceae, Ostropales, Lecanoromycetes, 13 species, two varieties and two forma species, type: *R. unica* Desm., asexual morph, undetermined, terrestrial, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable.

Robincola Velen. 1947, Helotiales genera incertae sedis, Leotiomycetes, one species, type: *R. gregaria* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Roburnia Velen. 1947, Helotiales genera incertae sedis, Leotiomycetes, one species, type: *R. karschioides* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


Rodcellina Darb. 1898, Roccellaceae, Arthoniales, Arthoniomycetes, 35 species, type: *R. condensata* Darb., asexual morph unknown, lichenized, terrestrial, see Kocourková et al. (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Norvell (2010; nomenclature), Printzen (2010; systematic study), Rotter (2010; list), Ertz and Tehler (2011; phylogeny), Tehler (2012; taxonomy), Kirk et al. (2013; genus accepted), Tehler et al. (2013; molecular study), de Lange (2014; taxonomy), Ertz et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

Rodcellinastrum Follmann 1968, Micareaeae, Lecanorales, Lecanoromycetes, six species, type: *Roccellinastrum spongideum* Follmann, asexual morph unknown, lichenized, terrestrial, Chile, Tasmania, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification); cultures and sequences are unavailable, needs generic revision.

Rodcellographa J. Steiner, 1902, Roccellaceae, Arthoniales, Arthoniomycetes, four species, type: *R. cretacea* J. Steiner, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

Rodaucea W. Rossi & Santam. 2012, Teratomyctcetaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: *R. salgadoi* W. Rossi & Santam., asexual morph unknown, biotrophic only host known is *Eucatops curts* Salgado (Coleoptera, Cholevidae), Ecuador, see Rossi and Santamaria (2012; taxonomy, morphology), Haelewaters et al. (2015; extracted ribosomal DNA).

Rodentaomycetes Doveri, Pecchia, Sarrocco & Vannacci 2010, Nectriaceae, Hypocreales, Sordariomycetes, two species, type: *R. reticulatus* Doveri, Pecchia, Sarrocco & Vannacci, asexual morph unknown, saprobes, terrestrial, Italy, see Doveri et al. (2010; taxonomy, phylogeny), Lombard et al. (2015; taxonomy, phylogeny, doubt the placement in *Nectriaceae* since low bootstrap values in phylogenetic analyses), Maharachchikumbura et al. (2015, 2016; outline), Index Fungorum (2016; fixed the nomenclature issue), holotype and ex-type cultures of the type: CBS H-21948, CBS 128675.

Rodwayella Spooner 1986, Hyaloscyphaceae, Helotiales, Leotiomycetes, three species, type: *R. sessilis* (Rodway) Spooner, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Roesleria** Thüm. & Pass. 1877, Helotiaceae, Helotiales, Leotiomyces, c. 50 species, type: *R. subterranea* (Weinn.) Redhead, asexual morph unknown, saprobes, terrestrial, Europe, see Kirchmair et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Roeslerina** Redhead 1985, Ascomycota genera incertae sedis, two species, type: *R. radicella* Redhead, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available for the type (unpublished), needs generic revision.

**Rogellia** Döbbeler 1999, Odontotremataceae, Ostropales, Lecanoromycetes, three species, type: *R. lectioidea* Döbbeler, asexual morph unknown, saprobes, terrestrial, Tierra del Fuego, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Rogersonia** Samuels & Lodge 1996, Hypocreaceae, Hypocreales, Sordariomycetes, one species, type: *R. striolata* Samuels & Lodge, asexual morph unknown, saprobes, terrestrial, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Rolfidium** Moberg, 1986, Ramalinaceae, Lecanorales, Lecanoromycetes, two species, *R. pellatum* Moberg, asexual morph, undetermined, terrestrial, East Africa, Sri Lanka, Mascarenes, see Ekman et al. (2008; evolution of the ascus), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available, needs generic revision.

**Rolueckia** Papong, Thammath. & Boonpr. 2008, Gomphillaceae, Ostropales, Lecanoromycetes, three species; type: *R. conspersa* (Stirt.) Papong, Thammath. & Boonpr., lichenized, see Lumbsch and Huhndorf (2010; outline), Plata et al. (2012; classification), Lücking et al. (2016; classification), sequences are unavailable, needs generic revision.

**Romellina** Petr. 1955, Sordariomycetes genera incertae sedis, one species, type: *Romellina variabilis* Petr., asexual morph unknown, on insects, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

**Romjularia** Timdal 2007, Leceideaceae, Leceideales, Lecanoromycetes, one species, type: *R. lurida* (Ach.) Timdal, lichenized, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; phylogeny), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Rommelaarsia** Baral & Haelew. 2015, Hyaloscyphaceae, Helotiaceae, Leotiomyces, one species, type: *R. flavovirens* Baral, Tanchaud & Romm., asexual morph hyphomycetous, saprobes, terrestrial, see Baral and Haelewaters (2015; morphology, DNA, phylogeny), Guatimosim et al. (2016; phylogeny), sequences are available.

**Ronningeria** Petr. 1947, Leptopeltidaceae, Dothideomycetes families incertae sedis, one species, type: *R. arctica* (Oudem.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in *Leptopeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Ropalospora** A. Massal. 1860, Ropalosporaceae, Umbilicariales, Lecanoromycetes, eight species and three forma species, type: *R. caffra* A. Massal., asexual morph, unknown,
terrestrial, Europe, Japan, see Hauck et al. (2009; biochemical studies), Lõhmus and Lõhmus (2010; conservation studies), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lendemer (2012; floristic studies), Lücking et al. (2016; classification), sequences are available.


**Roscoepoundia** Kuntze 1898, *Ascomycota* genera incertae sedis, one species, type: *Roscoepoundia croceola* (Sacc.) Kuntze, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rosellinia** De Not. 1844, *Xylariaceae, Xylariales, Sordariomycetes*, two species, type: *R. aquila* (Fr.) Ces. & De Not., asexual morph unknown, saprobes, terrestrial, Italy, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Petrini and Petrini (2013; taxonomy, monograph), Maharachchikumbura et al. (2015, 2016; outline), Li et al. (2016; taxonomy, phylogeny), cultures and sequences are available.

**Roselliniella** Vain. 1921, *Hypocreales* genera incertae sedis, *Sordariomycetes*, 15 species, type: *Roselliniella nephromatis* (P. Crouan & H. Crouan) Matzer & Hafellner, asexual morph unknown, saprobes, lichenicolous, terrestrial, worldwide, see Zhurbenko et al. (2009; new species), Hawksworth et al. (2010; new species, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariales*, genera incertae sedis), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), van den Boom (2015; new species), cultures and sequences are available but lacks for the type, needs generic revision.

**Roselliniomyces** Matzer & Hafellner 1990, *Sordariales* genera incertae sedis, *Sordariomycetes*, one species, type: *R. trichotheliorum* Matzer & Hafellner, asexual morph unknown, lichenicolous, terrestrial, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Kondratyuk et al. (2013; new species, South Korea), cultures and sequences are unavailable, needs generic revision.

**Roselliniopsis** Matzer & Hafellner 1990, *Sordariales* genera incertae sedis, *Sordariomycetes*, nine species, type: *R. groedensis* (Zopf) Matzer & Hafellner, asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kaur And Gehlot (2011; new species, India), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Rosellinula** R. Sant. 1986, *Dothideomycetes* genera incertae sedis, *Sordariomycetes*, one species, type: *R. haplospora* (Th. Fr. & Almq.) R. Sant., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are unavailable, needs generic revision.

**Rosenscheldia** Speg. 1885, *Dothideomycetes* genera incertae sedis, *Sordariomycetes*, one species, type: *R. paraguaya* Speg., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Rosenscheldiella** Theiss. & Syd. 1915, *Dothideomycetes* genera incertae sedis, one species, type: *R. styracis* (Henn.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Sultan et al. (2011; new species, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as a genus in *Dothideomycetes*, genera incertae sedis)
cultures and sequences are available only for *R. korthalsellae* Sultan, P.R. Johnst., D.C. Park & A.W. Robertson, needs generic revision.

**Roseodiscus** Baral 2006, *Leotiomyctes, Helotiales, Helotiaceae*, six species, type: *R. rhodoleucus* (Fr.) Baral, asexual morph unknown, from soil, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Hyaloscyphaceae*), Wieschollek et al. (2011; new species), Kirk et al. (2013; genus accepted), Zheng and Zhuang (2013; new species, China), Baral and Haelewaters (2015; DNA, phylogeny), cultures and sequences are available.


**Rostrohypoxylon** J. Fourn. & M. Stadler 2010, *Xylariaceae, Xylariales, Sordariomycetes*, eight species, type: *R. terebratum* J. Fourn. & M. Stadler, asexual morph hyphomycetous (sporothrix-like to virgariella-like), terrestrial, saprobes, Thailand, see Fournier et al. (2010; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.


**Rosulomyces** S. Marchand & Cabral 1976, *Ascomycota genera incertae sedis*, one species, type: *R. arthrosporiioides* Marchand & Cabral, hyphomycetous, sexual morph unknown, from soil, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Rota** Bat., Cif. & Nascim. 1959, *Ascomycota genera incertae sedis*, one species, type: *R. pulchra* Bat., Cif. & Nascim., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Roumegueria** (Sacc.) Henn. 1908, *Dothideomycetes* genera incertae sedis, one species, type: *R. goudotii* (Lév.) Sacc. ex Clem. & Shear, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Roumegueriella** Speg. 1880, *Bionectriaceae, Hypocreales, Sordariomycetes*, three species, type: *R. muricospora* Speg., asexual morph gliocladium-like, coprophilous, saprobes, terrestrial, temperate, see Hirooka et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.


**Roussoellopsis** I. Hino & Katum. 1965, *Roussoellaceae, Pleosporales, Dothideomycetes*, three species, type: *R. japonica* (I. Hino & Katum.) I. Hino & Katum., asexual morph coelomycetous, saprobes, terrestrial, Asia, see Kirk et al. (2013; genus accepted), Liu et al. (2014; new species, phylogeny), Phookamsak et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, needs generic revision.


**Rubrotricha** Lücking, Sérus. & Vězda 2005, *Gomphillaceae, Ostropales, Lecanoromycetes*, two species, type: *R. helminthospora* (R. Sant.) Lücking, Sérus. & Vězda; lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

**Rugonectria** P. Chaverri & Samuels 2011, *Nectriaceae, Hypocreales, Sordariomycetes*, four species, type: *R. rugulosa* (Pat. & Gaillard) Samuels, P. Chaverri & C. Salgado,
hyphomycetous asexual morph (cylindrocarp-like), saprobes, pathogens, terrestrial, pantropical, Japan, Indonesia, see Chaverri et al. (2011; morphology, phylogeny), Zeng et al. (2013; new species), Lombard et al. (2015; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 126565.

**Ruhlandiella** Henn. 1903, *Pezizaceae, Pezizales, Pezizomycetes*, four species, type: *R. berolinensis* Henn., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Rubio et al. (2010; new species), Lantieri et al. (2012; new species, Italy), Kirk et al. (2013; genus accepted), sequence are available for the voucher Mycoflora of Macaronesia 1230 (C) of the type, needs generic revision.


**Ruwenzoria** J. Fourn., M. Stadler, Laessøe & Decock 2010, *Xylariaceae, Xylariales, Sordariomycetes*, eight species, type: *R. pseudoannulata* J. Fourn., M. Stadler, Laessøe & Decock, asexual morph hyphomycetous (sporothrix- or nodulisporium-like), terrestrial, saprobes, Democratic Republic of Congo, see Stadler et al. (2010; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: MUCL 51394, cultures and sequences are available.


**Sabahriopsis** Crous & M.J. Wingf. 2015, *Helotiales* genera incertae sedis, *Leotiomyctetes*, one species, type: *S. eucalypti* Crous & M.J. Wingf., hyphomycetous, saprobes, Malaysia, see
Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22235, CPC 24957.

**Sabalicola** K.D. Hyde 1995, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *S. sabalensioides* (Ellis & G. Martin) K.D. Hyde, asexual morph unknown, terrestrial, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: MUCL 51394, cultures and sequences are unavailable.

**Sabalicola** E.B.G. Jones, K.L. Pang & Vrijmoed 2004, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *S. sabalensioides* (Ellis & G. Martin) K.D. Hyde, asexual morph unknown, terrestrial, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype of the type: MUCL 51394, cultures and sequences are unavailable.

**Sabalicola** E.B.G. Jones, K.L. Pang & Vrijmoed 2004, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *S. sabalensioides* (Ellis & G. Martin) K.D. Hyde, asexual morph unknown, terrestrial, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype of the type: MUCL 51394, cultures and sequences are unavailable.

**Sabalicola** E.B.G. Jones, K.L. Pang & Vrijmoed 2004, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *S. sabalensioides* (Ellis & G. Martin) K.D. Hyde, asexual morph unknown, terrestrial, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype of the type: MUCL 51394, cultures and sequences are unavailable.

**Sabalicola** E.B.G. Jones, K.L. Pang & Vrijmoed 2004, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *S. sabalensioides* (Ellis & G. Martin) K.D. Hyde, asexual morph unknown, terrestrial, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype of the type: MUCL 51394, cultures and sequences are unavailable.


**Saccardia** Cooke 1878, *Saccardiaceae*, *Ascomycota* families incertae sedis, three species, type: *S. quercina* Cooke, asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Saccardia** Cooke 1878, *Saccardiaceae*, *Ascomycota* families incertae sedis, three species, type: *S. quercina* Cooke, asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Saccardia** Cooke 1878, *Saccardiaceae*, *Ascomycota* families incertae sedis, three species, type: *S. quercina* Cooke, asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Saccardia** Cooke 1878, *Saccardiaceae*, *Ascomycota* families incertae sedis, three species, type: *S. quercina* Cooke, asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Saccardoëlla** Speg. 1879, *Sordariomycetes* genera incertae sedis, 18 species, type: *S. montellica* Speg., asexual morph unknown, terrestrial, saprobes, aquatic, widespread, see Suetrong et al. (2009; molecular), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available for *S. rhizophorae* in GenBank: GU479860.


**Saccharomyces** Meyen 1870, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, seven species, type: *S. cerevisiae* Meyen ex E.C. Hansen, asexual reproduction is by multilateral budding, saprophytic, but some strains are of clinical origin, in beer, wine and other alcoholic beverages, grain-based fermented foods, occasionally in soil, tree bark, fruit flies, occasional clinical isolates, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), *Saccharomyces cerevisiae* is a model organism for studies of genetics and molecular biology and was the first eukaryote to have its genome sequence determined.

**Saccharomyces** Meyen 1870, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *S. ludwigii* (E.C. Hansen) E.C. Hansen, asexual reproduction is by bipolar budding on a broad base (bud-fission) and are lemon-shaped (apiculate), saprophytic, in tree exudates, soil, spoiled alcoholic beverages, worldwide, see
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Saccharomyopsis** Schiönn. 1903, *Saccharomycosidaceae, Saccharomycetales, Saccharomyces*, 15 species, type: *S. capsularis* Schiönn., asexual reproduction is by multilateral budding and production of arthroconidia by some species, saprophytic, on hawthorne fruit, grapes and other fruit, soil of fruit orchards, starchy foods, beetles, tree exudates, tanning fluids, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Sacchobolus** Boud. 1869, *Ascobolaceae, Pezizales, Pezizomycetes*, about 27 species, type: *S. kervernii* (P. Crouan & H. Crouan) Boud., asexual morph hyphomycetous, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Ramos et al. (2011; molecular studies), Jungai et al. (2012; ecology, taxonomy), Kirk et al. (2013; genus accepted), Doveri (2014; taxonomy, keys), Melo et al. (2014; ecology, taxonomy, keys), evolutionary lineages of *Pezizales* has been confirmed and refined by ascus septal ultrastructure, number of nuclei in spores and molecular phylogenetics.

**Sacchotheicum** Fr. 1836, *Sacchotheciaceae, Dothideales, Dothideomycetes*, two species, type: *S. sepincola* (Fr.) Fr., asexual morph hyphomycetous, terrestrial, Italy, saprobes, terrestrial, Italy, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Li et al. (2016; new species), cultures available for the type: CBS 278.32.

**Sadasivania** Subram. 1957, *Ascomycota* genera *incertae sedis*, three species, type: *Sadasivania girisa* Subram., hyphomycetous, sexual morph unknown, saprobes, Asia, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Sagedia** Ach. 1809, *Megasporaceae, Pertusariales, Lecanoromycetes*, three species, type: *S. zonata* Ach., lichenized, see Nordin et al. (2010; reinstated the genus), Lücking et al. (2016; classification), sequences are available.

**Sagediopsis** Sacc. ex Vain. 1921, *Adelococcaceae, Verrucariales, Eurotiomycetes*, one species, type: *S. tartarina* (Nyl.) Vain., asexual morph unknown, lichenicolous, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Sagemia** Poelt & Grube 1993, *Lecanoraceae, Lecanorales, Lecanoromycetes*, one species, type: *S. potentillae* Poelt & Grube, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.


**Sagiolechia** A. Massal. 1854, *Sagiolechiaceae, Ostropales, Lecanoromycetes*, nine species, three varieties, three forma species, type: *S. protuberans* (Ach.) A. Massal., asexual morph
unknown, lichenized, terrestrial, Europe, see Baloch et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Gomphillaceae*), Thor and Nascimbene (2010; checklist), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), cultures available for the type: AFTOL-ID 4896.

*Saitoella* S. Goto, Sugiyama, Hamamoto & Komagata 1987, *Protomycetaceae, Taphrinales, Taphrinomycetes*, two species, type: *S. complicata* Goto, Sugiyama, Hamamoto & Komagata, asexual reproduction is mainly by multipolar enteroblastic budding, saprophyte, soil, insect frass, Bhutan, western USA, see Kirk et al. (2013; genus accepted), cultures and sequences are available.


*Samarospora* Rostr. 1892, *Eurotiomycetes* genera *incertae sedis*, one species, type: *S. potamogetonis* Rostr., asexual morph unknown, saprobies, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Sambucina* Velen. 1947, *Helotiales* genera *incertae sedis, Leotiomyces*, one species, type: *S. aculeata* Velen., asexual morph unknown, saprobies, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Samuelsia* P. Chaverri & K.T. Hodge 2008, *Clavicipitaceae, Hypocreales, Sordariomycetes*, one species, type: *S. rufobrunnea* Chaverri & K.T. Hodge, asexual morph coelomycetous (aschersonia-like), saprobies, on insects, terrestrial, Bolivia, Thailand, see Chaverri et al. (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Mongkolsamrit et al. (2011; new species), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: CUP 067858, cultures and sequences are available.

*Sandersoniomycetes* R.K. Benj. 1968, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, one species, type: *S. divaricatus* R.K. Benj., asexual morph unknown, biotrophic on Coleoptera, Staphylinidae (*Quedius* sp.), America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


*Sapucchaka* K. Ramakr. 1956, *Dothideomycetes* genera *incertae sedis*, two species, type: *S. madreeya* K. Ramakr., asexual morph unknown, saprobies, terrestrial, India, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

*Sarcinella* Sacc. 1880 (= *Schiffnerula* Höhn. 1909; = *Questieriella* G. Arnaud ex S. Hughes 1983 fide Rossman et al. 2016), *Englerulaceae, Dothideomycetes* genera *incertae sedis*, 71 species type: *S. heterospora* Sacc., schiffnerulaceous fungi, *Questieriella, Digitosarciella* and *Miteriella* synanamorphs of *Schiffnerula*, saprobies, plant pathogens, terrestrial,
worldwide. See Hosagoudar and Riju (2009; description), Hosagoudar et al. (2010; new species), Hosagoudar and Riju (2011; new species), Hosagoudar et al. (2011a; Schizophyllaceae fungi), Hosagoudar et al. (2011b; new species), Soni et al. (2011; neem disease) Singh and Singh (2012; new species), Bhise et al. (2014; new species), Dai et al. (2014; family description), Rossman et al. (2016; nomenclature), sequences are unavailable.

**Sarcinomyces** Lindner 1898, *Eurotiomycetes* genera *incertae sedis*, five species, type: *S. crustaceus* Lindner, sexual morph unknown, saprobes, plant and animal pathogen, terrestrial, worldwide, see Ruibal et al. (2008; phylogeny, ecology), Ruibal et al. (2009; phylogeny), Hallman et al. (2011; Burg Gleichen), Tsuneda et al. (2011; phylogeny), Zhang et al. (2012; acid mine drainage lake), Muggia et al. (2013; lichen connection), Nagano et al. (2014; deep sea), sequences are available.

**Sarcinosporon** D.S. King & S.C. Jong 1975, *Ascomycota* genera *incertae sedis*, one species, type: *S. inkin* (Oho) D.S. King & S.C. Jong, hyphomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Sarcoexcipula** Etayo 2008, *Ascomycota* genera *incertae sedis*, one species, type: *S. pannariae* Etayo, asexual morph unknown, parasymbiont on *Pannaria*, terrestrial, South America, see Etayo and Sancho (2008; morphology, distinction of similar lichenicolous genera), needs generic revision, holotype of the type: MAF Etayo 23100, cultures and sequences are unavailable.

**Sarcographa** Fée 1921, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, c. 40 species, type: *S. cinchonarum* Fée, asexual morph unknown, lichenized, terrestrial, tropical, see Rivas Plata et al. 2012a, Lumbsch and Huhndorf 2010 (outline), Kirk et al. 2013 (genus accepted). Lücking et al. (2016; classification); sequences are available.

**Sarcographina** Müll. Arg. 1887, *Graphidaceae*, *Ostropales*, *Lecanoromycetes*, eight species, type: *S. cyclospora* Müll. Arg., asexual morph unknown, lichenized, terrestrial, tropical, see Plata et al. (2012; classification), Kirk et al. (2013; genus accepted), Joshi et al. (2014; report), Kraichak et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Sarcogyne** Flot., 1851, *Acarosporaceae*, *Lecanorales*, *Lecanoromycetes*, 88 species, 38 varieties, two subspecies, 32 forma species, type: *S. corrugata* Flot., asexual morph unknown, terrestrial, terricolous, saxicolous, crustose, squamulose, America, Australia, Japan, Turkey, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Knudsen et al. (2011; new species), Nayaka and Upreti (2011; distribution), Knudsen and Kocourková (2012; neotypification), McCarthy and Kantvilas (2013; new species), Knudsen and McCune (2013; new species), Knudsen et al. (2013; new species), Westberg et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Sarcoleotia** S. Ito & S. Imai 1934, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, one species, type: *S. nigra* S. Ito & S. Imai, asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny, accepted as a genus in *Rutstroemiaceae*), Lumbsch and Huhndorf (2010; outline), Hustad et al. (2013; taxonomy, phylogeny), sequences are available but lacks for type.

**Sarcomyces** Massee 1891, *Helotiaceae* genera *incertae sedis*, *Leotiomycetes*, one species, type: *S. vinosus* Massee, asexual morph unknown, saprobes, America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Sarconiptera** Raitv. 2003, *Dermateaceae*, *Helotiaceae*, *Leotiomycetes*, one species, type: *S. vinacea* Raitv., asexual morph unknown, saprobes, terrestrial, Greenland, see Lumbsch and
Huhndorf (2010; outline), holotype of the type: TAA 137803, cultures and sequences are unavailable, needs generic revision.

**Sarcophoma** Höhn. 1916, *Ascomycota* genera *incertae sedis*, three species, type: *S. endogenospora* Höhn., asexual morph unknown, saprobes, widespread, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Sarcopyrenia** Nyl. 1858, *Sordariomycetes* genera *incertae sedis*, one species, type: *S. gibba* Nyl., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Sarcosagium** A. Massal. 1856, *Theilocarpaceae*, *Leotiomycetes* families *incertae sedis*, one species, type: *S. biatorellum* A. Massal., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.

**Sarcoscypha** (Fr.) Boud. 1885 (= *Molliardiomyces* Paden 1984 *fide* Healy et al. 2016), *Sarcoscyphaceae*, *Pezizales*, *Pezizomycetes*, c. 30 species, type: *S. coccinea* (Jacq.) Sacc., asexual morph formerly named in *Molliardiomyces*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Wang et al. (2016; new species), cultures available for the type: AFTOL-ID 930 (unpublished).

**Sarcosoma** Casp. 1891, *Sarcosomataceae*, *Pezizales*, *Pezizomycetes*, five species, type: *S. globosum* (Schmidel) Casp., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Sarcosphaera** Auersw. 1869, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *S. macrocalyx* (Riess) Auersw., asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Wang et al. (2016; new species), cultures and sequences are available.

**Sarcostrorma** Cooke 1871, *Sporocadaceae*, *Xylariales*, *Sordariomycetes*, 28 species, type: *S. berkeleyi* Cooke, asexual morph coelomycetous, sexual morph unknown, saprobes, endophytes, foliar pathogens in tropical and temperate regions, see Maharachchikumbura et al. (2015, 2016; outline), Norphanphoun et al. (2015; phylogeny), need generic revision.

**Sarcothrolia** Höhn. 1917, *Hemiphaecidaeae*, *Helotiales*, *Leotiomycetes*, four species, type: *S. alpina* (Fuckel) Höhn., asexual morph unknown, saprobes, terrestrial, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; phylogeny), cultures and sequences are available but lacks for the type.

**Sarcoxyylon** Cooke 1883, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, two species, type: *S. compunctum* (Jungh.) Cooke, asexual morph unknown, terrestrial, saprobes, Asia, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; DNA, phylogeny), cultures and sequences are available.

**Sarea** Fr. 1825, *Trapeliaceae, Trapeliales, Lecanoromycetes*, two species, type: *S. difformis* (Fr.) Fr., asexual morph unknown, on resins, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; reinstated the genus), Kirk et al. (2013; genus accepted), Sanz-Ros et al. (2015; DNA, phylogeny), Burneviča et al. (2016; DNA), Lücking et al. (2016; classification), cultures and sequences are available.


**Saroocladium** W. Gams & D. Hawksw. 1976, *Hypocreales* genera incertae sedis, *Sordariomycetes*, eight species, type: *S. oryzae* (Sawada) W. Gams & D. Hawksw., hyphomycetous, sexual morph unknown, on plants, isolated from soil, human tissues, widespread, terrestrial, see Seifert et al. (2011; genus accepted), Summerbell et al. (2011; phylogeny and circumscription), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; position), cultures and sequences are available, holotype of type: TAI.

**Sarrameana** Vězda & P. James 1973, *Sarrameanaeae, Sarrameanales, Lecanoromycetes*, three species, type: *S. paradoxa* Vězda & P. James, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Satchmopsis** B. Sutton & Hodges 1975, *Ascomycota* genera incertae sedis, one species, type: *S. brasiensis* B. Sutton & Hodges, coelomycetous, sexual morph unknown, saprobes, terrestrial, widespread, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, needs generic revision.

**Sativumoides** S.C. Ren, Jian Ma & X.G. Zhang 2012, *Ascomycota* genera incertae sedis, one species, type: *S. punicea* S.C. Ren, Jian Ma & X.G. Zhang, hyphomycetous, saprobes, terrestrial, China, see Ren et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

**Saturnispora** Liu & Kurtzman 1991, *Pichiaceae, Saccharomyceles, Saccharomycetes*, 20 species, type: *S. dispora* (Dekker) Z.W. Liu & Kurtzman, asexual reproduction is by multilateral budding, saprophytic, in plant rhizosphere in salt marsh, tree exudates, grapes, fruit flies, sauerkraut, soil, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), many species in this genus represent asexual taxa originally classified in the genus *Candida*, but have been transferred to the genus *Saturnispora* as new combinations, cultures and sequences are available.


**Savorylla** E.B.G. Jones & R.A. Eaton. 1969, *Savoryellaceae, Savoryellales, Sordariomycetes*, ten species, type: *S. lignicola* E.B.G. Jones & R.A. Eaton, asexual morph unknown, saprobes, freshwater and marine, Australia, Brunei, China, Hong Kong, India, Japan, Malaysia, Mauritius, Mexico, Philippines, South Africa, Thailand, Taiwan, UK, see
Gayatri Mambiar and Raveendran et al. (2009; diversity), Nambiar and Raveendran (2009; diversity), Nambiar et al. (2009; diversity), Dethoup and Manoch (2009; diversity), Kurniawati et al. (2010; diversity), Alias et al. (2010; diversity), Boonyuen et al. (2011; outline, phylogeny, morphology, classification), Awaluddin et al. (2015; diversity), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, holotype of type: IMI 129784.

Sawadaea Miyabe 1914, Erysiphaceae, Erysiphales, Leotiomycetes, ten species, type: S. bicornis (Wallr. Fr.) Homma, sexual and hyphomycetous asexual morphs, biotrophic, obligate plant pathogens, terrestrial, worldwide, see Takamatsu et al. (2008; phylogeny and taxonomy of S. nankinensis), Lumbsch and Huhndorf (2010; outline), Braun and Cook (2012; taxonomy), Kirk et al. (2013; genus accepted), sequences of non-type material of the type species are available, lectotype of type species: France, on Acer campestre, “fl. Fr. 732” [ex herb. de Candolle] (G 00298361).

Sawantomyces R. Dubey & Neelima A. Moonambeth 2013, Ascomycota genera incertae sedis, one species, type: S. indica R. Dubey & Neelima A. Moonambeth, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Dubey et al. (2013; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

Saxomyces Selbmann & Isola, MB802899. For diagnosis see Fungal Diversity 65(1): 174 2014, Dothideomycetes genera incertae sedis, type: Saxomyces alpinus Zucconi & Selbmann, MB802892, rock-inhabiting fungus; teleomorph unknown; For diagnosis see Fungal Diversity 65(1): 174 (2014). From granite, Val de La Mare, Passo Stelvio, Alps, Italy; CCFEE 5470. Culture preserved in liquid nitrogen and in dried condition (NCBI accession numbers: KC315861 (SSU), KC315872 (LSU), KC315883 (mtSSU), taxonomic species delimitation supported by molecular data.

Notes: The genus Saxomyces was invalidly published because the type: S. alpinus was invalidly published [ICN (Melbourne) Art. 40].

The genus and the type: are here validated as follows:

**Saxomyces Selbmann & Isola gen. nov., MB819855.** For diagnosis see Fungal Diversity 65(1): 174 (2014).

Type: **Saxomyces alpinus** Zucconi & Selbmann sp. nov., MB819851. For diagnosis see Fungal Diversity 65(1): 174 (2014). Holotype: CBS 135222. From granite, Val de La Mare, Passo Stelvio, Alps, Italy; = CCFEE 5470.

Additional species: **Saxomyces penninicus** Zucconi & Onofri, MB802900. For diagnosis see Fungal Diversity 65(1): 175 (2014). From sandstone, Punta Indren, Monte Rosa, Alps, Italy; CCFEE 5495. Culture preserved in dried condition (NCBI accession numbers: KC315864 (SSU), KC315875 (LSU), KC315886 (mtSSU)), taxonomic species delimitation supported by molecular data. The species was invalidly published because the type: S. alpinus was invalidly published [ICN (Melbourne) Art. 40]. It is here validated as follows:

**Saxomyces penninicus Zucconi & Onofri sp. nov.,** MB819852. For diagnosis see Fungal Diversity 65(1): 175 (2014). Holotype: CBS H-22053. From sandstone, Punta Indren, Monte Rosa, Alps, Italy; = CCFEE 5495.

**Saxophila** Selbmann & de Hoog 2016, Extremaceae, Capnodiales, Dothideomycetes, one species, type: S. tyrrhenica Selbmann & de Hoog, sexual morph unknown, rock-inhabiting, see Isola et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 139725 = CCFEE 5935.

**Scaphidiomyces** Thaxt. 1912, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, five species, type: S. baeocerae Thaxt., asexual morph unknown, biotrophic on Coleoptera (Scaphidiinae), South America, West Africa, see Lumbsch and Huhndorf (2010; outline),
Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.  
**Scaphidium** Clem. 1901, *Ascomycota* genera *incertae sedis*, one species, type: *S. boutelouae* Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available, needs generic revision.

**Scedosporium** Sacc. ex Castell. & Chalm. 1919, *Microascaceae*, *Microascales*, *Sordariomycetes*, seven species, type: *S. apiospermum* Sacc. ex Castell. & Chalm., hyphomycetous, sexual morph unknown, saprobes, human pathogen, terrestrial, worldwide, see Gilgado et al. (2008; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lackner et al. (2014; new species), Vandeputte et al. (2014; genome study), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Crous et al. (2016; taxonomy, phylogeny), cultures available for the type: IHEM 14462.

**Scelophoromyces** Thaxt. 1912, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *S. osorianus* Thaxt., asexual morph unknown, biotrophic on Coleoptera (Staphylinidae, *Osorius* sp.), South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Scepastocarpus** Santam. 2004, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, one species, type: *S. peritheciiformis* Santam., asexual morph unknown, biotrophic on aquatic Coleoptera (Hydrophilidae, *Hydrochus* sp.), Spain, see Lumbsch and Huhndorf (2010; outline), related to *Zodiomyces* Thaxt., cultures and sequences are unavailable, needs generic revision.

**Sceptrifera** Deighton 1965, *Ascomycota* genera *incertae sedis*, one species, type: *S. pulchra* Deighton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Schadonia** Körb. 1859, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *S. alpina* Körb., asexual morph unknown, lichenized, terrestrial, see Ekman et al. (2008; molecular), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), culture and sequences are unavailable for type.


**Scharifia** Petr. 1955, *Sordariomycetes* genera *incertae sedis*, one species, type: *S. procumbens* Petr., asexual morph unknown, saprobes, terrestrial, Iran, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Scheffersomyces** Kurtzman & M. Suzuki 2010, *Debaryomyceetales*, *Saccharomycetales*, *Saccharomyces*, ten species, type: *S. stipitis* (Pignal) Kurtzman & M. Suzuki, asexual reproduction is by multilateral budding, saprophytic, in beetles and beetle larvae in various trees, rotted wood, one species (*S. spartinae*) was isolated from oyster grass (*Spartina alterniflora*) marshes, worldwide, see Kurtzman and Suzuki (2010; taxonomy), *S. stipitis* (formerly *Pichia stipitis*) and *S. shehatae* (formerly *Candida*) are important for biomass utilization because of their ability to ferment D-xylose, cultures and sequences are available.
**Schenckiella** Henn. 1893 (= Allothyrium Syd. 1939 fide Hongsan et al. 2014), Asterinaceae, Asterinales, Dothideomycetes, one species, type: *S. marcgraviae* Henn., asexual morph unknown. Epiphytes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline; accepted as a genus in Saccarinaceae), Hongsan et al. (2014; taxonomy, keys, nomenclature, accepted as a genus in Asterinaceae), Wijayawardene et al. (2014; outline), placement in Asterinaceae supported by morphology, cultures and sequences are unavailable.

**Schiffnerula** Höhn. 1909, Englerulaceae, Dothideomycetes families incertae sedis, 98 species, type: *S. mirabilis* Höhn. 1909, asexual morph hypromycetous, epiphytes, pathogens, terrestrial, widely distributed, see Lumbsch and Huhndorf (2010; outline), Hosagoudar (2011; morphology, key), Kirk et al. (2013; genus accepted), Dai et al. (2014, morphology), cultures and sequences are unavailable, type specimen need recollect and sequence.

**Schismatomma** Flot. & Körb. ex A. Massal. 1852, Roccellaceae, Arthoniales, Arthoniomycetes, ten species, type: *S. periculum* (Ach.) Branth & Rostr., Asia, North America, Europe, see Hauck and Wirth (2010; ecology), Kocourková et al. (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; phylogeny), Stepanchikova et al. (2011; new records), Kirk et al. (2013; genus accepted), Tehler et al. (2013; phylogeny), Lendemer and Harris (2014; taxonomy), Himelbrant et al. 2016; new records), London (2016; new record), Motiejūnaitė et al. (2016; new records), Lücking et al. (2016; classification), sequences are available.

**Schistophoron** Stirt. 1876, Graphidaceae, Lecanorales, Lecanoromycetes, five species, type: *S. tenuis* Stirt., Asia, see Tehler et al. (2009; systematic study), Lumbsch and Huhndorf (2010; outline), Singh and Swarnalatha (2011; new species), Plata et al. (2012; classificiation), Luecking et al. (2013; molecular phylogeny), Prieto et al. (2012; classification), Kirk et al. (2013; genus accepted), Weerakoon and Aptroot (2016; new species from Sri Lanka), sequences are available.

**Schizochora** Syd. & P. Syd. 1913, Phyllachoraceae, Phyllachorales, Sordariomycetes, one species, type: *S. elmeri* Syd. & P. Syd., from living leaves, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Schizodiscus** Brusse 1888, Lecideaceae, Lecideales, Lecanoromycetes, one species, type: *S. afroalpinus* Brusse, subpolar region, see Lumbsch and Huhndorf (2010; outline), Hertel (2014; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

**Schizopelte** Th. Fr. 1875, Opegraphaceae, Arthoniales, Arthoniomycetes, four species, type: *S. californica* Th. Fr., lichenized, see Lumbsch and Huhndorf (2010; outline), Ertz, and Tehler (2011; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Schizosaccharomyces** Lindner 1893, Schizosaccharomycetaceae, Schizosaccharomyctales, Schizosaccharomyces, four species, type: *S. pombe* Lindner, asexual reproduction is by fission, saprophytic, fruit wines and fruit, honey, dried figs, sugar cane molasses, tree fluxes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Schizothecium** Corda 1838, Lasiosphaeraceae, Sordariales, Sordariomycetes, one species, type: *S. fimicola* Corda, asexual morph unknown, on dung, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Sordariales genera incertae sedis), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

**Schizothyra** Bat. & C.A.A. Costa 1957, Ascomycota genera incertae sedis, one species, type: *S. minuta* Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobtes, terrestrial, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Schizothyrella Thüm. 1880, Ascomycota genera incertae sedis, one species, type: S. quercina (Lib.) Thüm., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schizothyrioma Höhn. 1917, Dermateaceae, Helotiales, Leotiomyces, one species, type: Sc. ptarmicae (Desm.) Höhn., coelomycetous, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schizothyrium Desm. 1849, Schizothyriaceae, Dothideomycetes family incertae sedis, five species, type: S. acerinum Desm., saprobes, terrestrial, pantropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013, accepted as a genus in Schizothyriaceae), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2014; outline), Phookamsak et al. (2015; taxonomy), cultures and sequences are available.

Schizotrichum McAlpine 1903, Ascomycota genera incertae sedis, one species, type: S. lobeliae McAlpine, saprobes, terrestrial, Australia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schizotrichum Mangold & Lumbsch 2009, Graphidaceae, Ostropales, Lecanoromycetes, 13 species, type: S. zebrinum Mangold, lichenized, tropical, see Kalb et al. (2009; new report), Rivas Plata et al. (2010a; key), Sipman et al. (2012; key), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Schizotrichum Pers. 1811, Stictidaceae, Ostropales, Lecanoromycetes, one species, type: S. sepincola Pers., Asia, see Lumbsch and Huhndorf (2010; outline), Muggia et al. (2011; partial sequence), Rivas Plata et al. (2010a; key), Sipman et al. (2012; key), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

Schnablia Sacc. & P. Syd. 1899, Helotiales, genera incertae sedis, Leotiomyces, one species, type: B. schnablium Rehm, asexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schwanniomyces Klöcker emend. M. Suzuki & Kurtzman 2010, Debaryomycetaceae, Saccharomycetales, Saccharomycetes, one species, type: S. occidentalis Klöcker, asexual reproduction is by multilateral budding, saprophytic, soil, tree exudates, cucumber brines, fruit flies, human feces, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al.
Schwarzmannia Pisareva 1968, Ascomycota genera incertae sedis, one species, type: S. goebeliae Pisareva, coelomycetous, sexual morph unknown, saprobes, terrestrial, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Schweinitziella Speg. 1888, Trichosphaeriacaeae, Trichosphaeriales, Sordariomycetes, three species, type: S. styraum Speg., asexual morph unknown, fungicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Scirrhia Nitschke ex Fuckel 1870, Mycosphaerellaceae, Capnodiales, Dothideomycetes, ten species, type: S. rimosae (Alb. & Schwein.) Fuckel, asexual morph unknown, saprobes, pathogens, terrestrial, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Crous et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as Dothideomycetes genera incertae sedis), cultures and sequences are available but lacks for the type, needs generic revision.

Scirrhophoma Petr. 1941, Ascomycota genera incertae sedis, one species, type: S. dothideoides (Mont.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sclerococcum Fr. 1825, Dactylosporaceae, Eurotiomycetes families incertae sedis, 18 species, type: S. sphaerale (Ach.) Fr., hyphomycetous, sexual morph unknown, saprobes, lichenicolous, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); sequences are available.

Sclerococcina Tsuneda, Currah & Thornman 2000, Dothideomycetes genera incertae sedis, one species, type: S. sphagnicola Tsuneda, Currah & Thornman, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), cultures available for the type: UAMH 9731.

Sclerotrinae Samuels & L.M. Kohn 1987, Sclerotiniaceae, Helotiales, Leotiomycetes, four species, type: S. atra Samuels & L.M. Kohn, asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sclerographiopsis Deighton 1973, Ascomycota genera incertae sedis, one species, type: S. dalbergiae Deighton, hyphomycetous, sexual morph unknown, saprobes, Africa, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sclerographium Berk. 1854, Ascomycota genera incertae sedis, three species, type: S. aterrimum Berk., hyphomycetous, sexual morph unknown, saprobes, Africa, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scleromeris Syd. 1926, Ascomycota genera incertae sedis, three species, type: S. guazumae Syd., coelomycetous, sexual morph unknown, saprobes, Central America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scleromitrula S. Imai 1941, Rutstroemiaceae, Helotiales, Leotiomycetes, six species, type: S. shiraiana (Henn.) S. Imai, asexual morph unknown, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016;
phylogeny, strains of type were grouped in *Rutstroemiaceae* and *Sclerotiniaceae*), needs generic revision.

**Scleropezicula** Verkley 1999 (= *Cryptosympodula* Verkley 1999 *fide* Johnston et al. 2014), *Dermateaceae*, *Helotiales*, *Leotiomyetes*, six species, type: *S. alnicola* (J.W. Groves) Verkley, asexual morph formerly known in *Cryptosympodula*, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.

**Sclerophoma** Höhn. 1909. *Ascomycota* genera *incertae sedis*, 30 species, type: needs typification, coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Scleropycnis** Syd. & P. Syd. 1911, *Ascomycota* genera *incertae sedis*, two species, type: *S. abietina* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Scleropyrenium** H. Harada 1993, Verrucariaceae, Verrucariales, Eurotiomycetes, two species, type: *S. japonicum* H. Harada, asexual morph unknown, lichenized, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Prieto et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Sclerostagonospora** Höhn. 1917, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, eight species, type: *S. heraclei* (Sacc.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Crous et al. (2011, 2016; new species, phylogeny), Quaedvlieg et al. (2013; new species, phylogeny), Wijayawardene et al. (2016, 2017; taxonomy, outline, phylogeny), cultures are available.

**Sclerotinia** Fuckel 1870, Sclerotiniaceae, Helotiales, Leotiomyetes, 15 species, type: *S. libertiana* Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; phylogeny), cultures and sequences are available, needs generic revision.

**Sclerotium** Tode 1790, Sclerotiniaceae, Helotiales, Leotiomyetes, c. 100 species (probably more than this), type: *S. complanatum* Tode, hyphomycetous, sexual morph unknown, see Seifert et al. (2011; outline), Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type, needs generic revision.

**Sclerosyzthia** Petch 1937, Ascomycota genera *incertae sedis*, one species, type: *S. brassicae* Petch, coelomycetous, sexual morph unknown, saprobes, British Isles, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Scolecosasidiella** M.B. Ellis 1971, Ascomycota genera *incertae sedis*, two species, type: *S. avellanea* (Sappa & Mosca) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, Africa, Caribbean, see Shenoy et al. (2010; DNA), Seifert et al. (2011; morphology),
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available, needs generic revision.

**Scolecobasidium** E.V. Abbott 1927, *Pleosporales* genera incertae sedis, *Dothideomycetes*, one species, type: *S. terreum* E.V. Abbott, hyphomycetous, sexual morph unknown, saprobes, British Isles, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Scolecodochium** K. Matsush. & Matsush. 1996, *Ascomycota* genera incertae sedis, one species, type: *S. filiformis* (W. Yamam.) Bat., asexual morph unknown, epiphytes, terrestrial, Taiwan, USA, see Seifert (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Scolecosporiella** Petr. 1921, *Ascomycota* genera incertae sedis, six species, type: *S. typhae* (Oudem.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scolecothea Søchting & B. Sutton 1997, *Ascomycota* genera incertae sedis, one species, type: *S. cornuta* Søchting & B. Sutton, coelomycetous, sexual morph unknown, saprobes, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Scolecoxyphium* Cif. & Bat. 1956, *Dothideomycetes* genera incertae sedis, four species, type: *S. fraserae* Cif. & Bat., coelomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Scolecozythia* Curzi 1927, *Ascomycota* genera incertae sedis, one species, type: *S. valsivora* Curzi, coelomycetous, sexual morph unknown, saprobes, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Scoliciosporum* A. Massal. 1852, *Scoliciosporaceae*, *Lecanorales*, *Lecanoromycetes*, 15 species; type: *S. holomelaeum* (Flörke) A. Massal., lichenized, see Spröbelle et al. (2009; new species), Dolnik et al. (2010; new report: Germany), Lumbsch and Huhndorf (2010; outline), Dymytrova (2011; notes), Kukwa et al. (2012; new records: Poland), Matwiejuk et al. (2012; new report), Kirk et al. (2013; genus accepted), Marmor et al. (2013; new record), Ardelean et al. (2015; ecology), Lücking et al. (2016; classification), sequences are available.

*Scolicosporium* Lib. ex Roum. 1880, *????*

*Scoliocarpon* Nyl. 1858, *Sordariomycetes* genera incertae sedis, one species, type: *S. pupula* (Tuck.) Nyl., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

*Scolionema* Theiss. & Syd. 1918, *Perisporiopsidaceae*, *Dothideomycetes* families incertae sedis, one species, type: *S. palmarum* (Kunze & Fr.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Perisporiopsidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2013, 2016; outline, treated as coelomycetous, phylogeny, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

*Scoliotidium* Bat. & Cavalc. 1963, *Ascomycota* genera incertae sedis, one species, type: *S. lauracearum* Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Scopaphoma* Dearn. & House 1925, *Ascomycota* genera incertae sedis, one species, type: *S. corioli* Dearn. & House, coelomycetous, sexual morph unknown, saprobes, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Scopinella* Lév. 1846, *Stachybotryaceae*, *Hypocreales*, *Sordariomycetes*, nine species, type: *S. pleiospora* (J. Schröt.) Sacc., asexual morph aunknown, saprobes, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Hypocreales*, genera incertae sedis), Kirk et al. (2013; genus accepted), Sánchez et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.
Scopulariella Gjærum 1971, Ascomycota genera incertae sedis, one species, type: S. vaccinii Gjærum, hyphomycetous, sexual morph unknown, saprobes, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scopulariopsis Bainier 1907, Microascales, Microascales, Sordariomycetes, 32 species, type: S. brevicaulis (Sacc.) Bainier, hyphomycetous, sexual morph unknown, from soil, saprobes, human pathogen, terrestrial, worldwide, see Seifert et al. (2011; morphology), Iwen et al. (2012; human pathogen, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Pan et al. (2014; new species, China), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Grum-Grzhimaylo et al. (2016; DNA), cultures available for the type: UAMH 10915.

Scoriadopsis J.M. Mend. 1930, Capnodiales, Capnodiales, Dothideomycetes, one species, type: S. miconiae J.M. Mend., asexual morph unknown, epiphytes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Chomnunti et al. (2011; taxonomy), Hyde et al. (2013; accepted as a genus in Capnodiales), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Scorias Fr. 1832, Capnodiales, Capnodiales, Dothideomycetes, three species, type: S. spongiosa (Schwein.) Fr., asexual morph unknown, epiphytes, terrestrial, tropical, see Crous et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Chomnunti et al. (2011; taxonomy), Hyde et al. (2013; accepted as a genus in Capnodiales), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Scothelius Bat., J.L. Bezerra & Cavalc. 1965, Ascomycota genera incertae sedis, one species, type: S. guianensis Bat., J.L. Bezerra & Cavalc., coelomycetous, sexual morph unknown, saprobes, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scotiosphaeria Sivan. 1977, Sordariomycetes genera incertae sedis, one species, type: S. endoxylinae Sivan., asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Sculptolumina Marbach 2000, Caliciaceae, Caliciaceae, Lecanoromycetes, three species, type: S. japonica (Tuck.) Marbach, asexual morph unknown, lichenized, terrestrial, see Giralt et al. (2009; taxonomy), Joshi et al. (2010; new record, taxonomy), Lumbsch and Huhndorf (2010; outline), Giralt et al. (2014; morphology), Kondratyuk (2015; new records), Lücking et al. (2016; classification), sequences are unavailable.

Scutaria Sochting, Arup & Frödén 2013, Teloschistaceae, Teloschistales, Lecanoromycetes, one species, type: S. andina (Räsänen) Sochting, Frödén & Arup., lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

Scutellinia (Cooke) Lambotte 1887, Pyronemataceae, Pezizales, Pezizomycetes, 75 species, type: Scutellinia scutellata (L.) Lambotte, asexual morph unknown, from soil, saprobes, terrestrial, Europe, see Zhuang and Yang (2008; new species), Han et al. (2010; new species, Korea), Lumbsch and Huhndorf (2010; outline), Zhuang (2010; new species), Choi et al. (2013; new species), Hansen et al. (2013; phylogeny), Izquierdo-San et al. (2013; new species, Mexico), Kirk et al. (2013; genus accepted), Zhuang et al. (2013; new species, key to species in China), cultures and sequences are available but lacks for the type.

Scutisporus Ando & Tubaki 1985, Ascomycota genera incertae sedis, one species, type: S. brunneus K. Ando & Tubaki, hyphomycetous, saprobes, terrestrial, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Fiuza et al. (2015a; taxonomy), holotype of type: TKB-F-5093, cultures and sequences are unavailable, needs generic revision, compare with Bißlagellospora.
Scutobelonium  Graddon 1984, Dermataceae, Helotiales, Leotiomycetes, one species, type: *S. amorilens* Graddon, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scutomollisia  Nannf. 1976, Dermataceae, Helotiales, Leotiomycetes, 14 species, type: *S. punctum* (Rehm) Nannf., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scotopeltis  Bat. & H. Maia 1957, Ascomycota genera incertae sedis, two species, type: *S. alafiae* Bat. & H. Maia, coelomycetous, sexual morph unknown, saprobes, Ghana, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scotopycnis  Bat. 1957, Ascomycota genera incertae sedis, two species, type: *S. osmanthi* Bat., coelomycetous, sexual morph unknown, saprobes, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Scotula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutulopsis  Velen. 1934, Helotiales genera incertae sedis, Leotiomycetes, one species, type: *S. pinacea* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutulopsis  Velen. 1934, Helotiales genera incertae sedis, Leotiomycetes, one species, type: *S. pinacea* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Scutula  Tul. 1852, Micareaeaceae, Lecanorales, Lecanoromycetes, 41 species, two subspecies, three varieties, four forma species, type: *S. wallrothii* Tul., asexual morph unknown, lichenicolous, see Hawksworth et al. (2008; artificial key), Egan (2009; recent literature), Etayo and Triebel (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable

Seaverinia  Whetzel 1945 (= Verrucobotrys Hennebert 1973 fide Johnston et al. 2014), Sclerotiniaceae, Helotiales, Leotiomycetes, two species, type: *Verrucobotrys geranii* (Seaver) Hennebert, asexual morph formerly named in *Verrucobotrys*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.


Segestria  Fr. 1825, Porinaceae, Ostropales, Lecanoromycetes, 70 species, type: *S. lectissima* Fr., lichenized, see Lücking (2008; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification); sequences are available but lcks for type.

**Seimatosporiopsis** B. Sutton, Ghaffer & Abbas 1972, *Ascomycota genera incertae sedis*, two species, type: *S. salvadorae* B. Sutton, Ghaffer & Abbas, coelomycetous, sexual morph unknown, saprobes, Pakistan, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Seimatosporium** Corda 1833 (= *Discostroma* Clem. 1909 fide Reblova et al. 2016), *Sporocadaceae, Xylariales, Sordariomycetes*, 75 species, type: *S. rosea* Corda, asexual morph coelomycetous, saprobes, ?pathogens, worldwide, see Barber et al. (2011; new species, phylogeny), Tanaka et al. (2011; phylogeny), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy, new species), Crous et al. (2014c; new species), Ariyawansa et al. (2015a; new species), Norphanphoun et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Senanayake et al. (2015; outline, phylogeny), Reblova et al. (2016; nomenclature), cultures available for the type: MFLUCC 14–0621 (fide Norphanphoun et al. 2015).


**Seirophora** Poelt 1983, *Teloschistaceae, Teloschistales, Lecanoromycetes*, twelve species, type: *S. magara* (Kremp.) Poelt, lichenized, see Lumbsch and Huhndorf (2010; outline), Moniri and Sipman (2011; new record), Arup et al. (2013; phylogeny), Benesperi et al. (2013; ecology), Kirk et al. (2013; genus accepted), Zhurbenko (2013; new record), Giordani et al. (2015; ecology), Kondratyuk et al. (2014, 2015a, b; taxonomy, phylogeny), Moniri (2015; new record), Lücking et al. (2016; classification), sequences are available.

**Selenaspora** R. Heim & Le Gal 1936, *Sarcosomataceae, Pezizales, Pezizomycetes*, two species, type: *S. batava* R. Heim & Le Gal, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for the type.


**Selenophoma** Maire 1907, *Saccotheciaceae, Dothideales, Dothideomycetes*, 13 species, type: *S. catananchae* Maire, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Cheewangkoon et al. (2009; new species, phylogeny), Wijayawardene et al. (2012, 2014, 2016; outline), Kirk et al. (2013; genus accepted), Thambugala et al. (2015c; phylogeny), cultures and sequences are available but lacks for the type.

**Selenosira** Petr. 1957, *Ascomycota genera incertae sedis*, one species, type: *S. unica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene
et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Selenosporea** G. Arnaud ex MacGarvie 1968, *Ascomycota* genera *incertae sedis*, twelve species, type: *S. curvispora* G. Arnaud ex MacGarvie, hyphomycetous, saprobes, on decaying leaves, terrestrial, worldwide, Castañeda-Ruiz et al. (2009; key and new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Selenozyma** Yarrow 1977, *Saccharomyces* genera *incertae sedis*, two species, type: *S. intestinalis* (Krassiln.) Yarrow, yeast, sexual morph unknown, saprobes, terrestrial, Netherlands, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for the type.

**Selinia** P. Karst. 1876, *Bio necriaceae, Hypocreales, Sordariomycetes*, two species, type: *S. pulchra* (G. Winter) Sacc., asexual morph tubercularia-like, coprophilous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Chaverri et al. (2011; phylogeny), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures are available.

**Semidelitschia** Cain & Luck-Allen 1969, *Delitschiaceae, Pleosporales, Dothideomycetes*, two species, type: *S. agasmatica* Cain & Luck-Allen, asexual morph unknown, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Delitschiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Semifissispora** H.J. Swart 1982, *Massarinaceae, Pleosporales, Dothideomycetes*, four species, type: *S. fusiformis* H.J. Swart, asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes, genera incertae sedis*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Crous et al. (2015; DNA, new species, phylogeny), cultures and sequences are available but lacks for the type..

**Semigyalecta** Vain. 1921, *Gyalectaceae, Ostropales, Lecanoromycetes*, one species, type: *S. paradoxa* Vain., lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Semisphaeria** K. Holm & L. Holm 1991, *Dothideomycetes* genera *incertae sedis*, one species, type: *S. sigmoidii* K. Holm & L. Holm, asexual morph unknown, saprobes, terrestrial, Norway, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Septocyta** Petr. 1927, *Capnodiales* genera *incertae sedis, Dothideomycetes*, five species, type: *S. ramealis* (Roberge ex Desm.) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Aleksić et al. (2011; use in disease control, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

**Septocyttella** Syd. 1929, *Ascomycota* genera *incertae sedis*, one species, type: *S. bambusina* Syd., coelomycetous, sexual morph unknown, saprobes, China, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Septofusidium W. Gams 1971, Tilachlidiaceae, Hypocreales, Sordariomycetes, five species, type: *S. elegantatum* (Pidopl.) W. Gams, hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), Lombard et al. (2015; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Septigloeum Sacc. 1880, Ascomycota genera incertae sedis, two species, type: *S. carthusianum* (Sacc.) Sacc., coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014, 2015; new species, morphology, phylogeny), Li et al. (2015; new species), epitype and ex-type cultures available, sequences are unavailable.

Septimyrophotium Matsush. 1971 (= Sporothrix Hektoen & C.F. Perkins 1901 fide Maharachchikumbura et al. 2016), Stachybotriaceae, Hypocreales, Sordariomycetes, three species, type: *S. uniseptatum*, asexual morph unknown, saprobes, terrestrial, Asia, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Liu et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), Lombard et al. (2016; phylogeny), cultures available for the type: CBS 100966.

Septomyxella (Höhn.) Höhn. 1923, Ascomycota genera incertae sedis, one species record, type species: *Myxosporium spaethianum* Allesch., coelomycetous, sexual morph unknown, saprobes, terrestrial, Italy, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


Septopatella Petr. 1925, Ascomycota genera incertae sedis, one species, type: *S. septata* (Jaap) Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Septopezizella Svrček 1987, Helotiaceae, Helotiales, Helotiomycetes, one species, type: *S. oreadum* (Velen). Svrček, asexual morph unknown, sabrobe of pine scale, Czech Republic, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), lectotype of the type: PRM 148822a, cultures and sequences are unavailable.

Septoria Sacc. 1884, Mycosphaerellaceae, Capnodiales, Dothideomycetes, c. 1000 (200 are presently recognized based on DNA), type: *Septoria cyisti* Desm., coelomycetous, sexual morph mycosphaerella-like, of which, plant pathogens, terrestrial, worldwide, see Quaedvlieg et al. (2011, 2013; morphology, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Verkley et al. (2013; morphology, phylogeny), cultures and sequences are available.

Septoriella Oudem. 1889 (including Wojnowicia Sacc. 1892), Phaeosphaeriaceae, Pleosporales, Dothideomycetes, 19 species, type: *S. phragmitis* Oudem., coelomycetous, sexual morph mycosphaerella-like, of which, plant pathogens, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Crous et al. (2014, 2015; new species, phylogeny), Li et al. (2015; new species), epitype and ex-epitype cultures of the type: CBS H-22281, CPC 24118 = CBS 140065.

Septorioides Quaedv., Verkley & Crous 2013, Botryosphaeriaceae, Botryosphaeriales, Dothideomycetes, one species, type: *S. pini-thunbergii* (S. Kaneko) Quaedvlieg, Verkley &
Crous, coelomycetous, sexual morph unknown, pathogens, terrestrial, Japan, see Quaedvlieg et al. (2013; morphology, phylogen) cultures and sequences are available.

**Septosporiopsis** W.A. Baker & Morgan-Jones 2009, *Ascomycota genera incertae sedis*, one species, type: *S. elaeidis* (J.M. Yen & Sulmont) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, on palm litter, Africa, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Septosporium** Corda 1831, *Ascomycota genera incertae sedis*, 28 species, type: *S. atrum* Corda, hyphomycetous, sexual morph unknown, saprobes, on wood (*Acer, Carpinus, Sorbus,* and many others) and litter (*Bambusa*), cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Septotis** Whetzel ex J.W. Groves & M.E. Elliott 1961 (*= Septotis N.F. Buchw. ex Arx 1970 fide Johnston et al. 2014*), *Sclerotiniaceae, Helotiales, Leotiomycetes*, two species, type: *S. podophyllina* Whetzel, asexual morph formerly known in *Septotis*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures and sequences are unavailable, needs generic revision.


**Septotrupelia** Aptroot & Chaves 2007, *Pilocarpaceae, Lecanorales, Lecanoromycetes*, four species, seven species, type: *S. elaeidis* (J.M. Yen & Sulmont) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, on bark (*Betula, Fagus, Quercus*), Australasia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Elliott et al. (2014; species associated with palms in southeastern USA), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for unidentified species (unpublished), needs generic revision.

**Serenomyces** Petr. 1952, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, five species, type: *S. shearii* Petr., saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Phaeochoraceae*), Kirk et al. (2013; genus accepted), Elliott et al. (2014; species associated with palms in southeastern USA), Maharachchikumbura et al. (2015, 2016; outline), cultures are available for unidentified species (unpublished), needs generic revision.


**Servazziella** J. Reid & C. Booth 1987, *Sordariomycetes genera incertae sedis*, five species, type: *S. longispora* (Servazzi) J. Reid & C. Booth, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Elliott et al. (2014; species associated with palms in southeastern USA), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Servitia** M.S. Christ. & Alstrup 2001, *Verrucariaceae, Verrucariales, Eurotiomycetes*, species, type: *S. inconspicuum* (Lynge) M.S. Christ. & Alstrup, asexual morph unknown, lichenized, terrestrial, Greenland, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable, needs generic revision.
Sessiliospora  D. Hawksw. 1979, Ascomycota genera incertae sedis, one species, type: S. bicolor  D. Hawksw., sexual morph unknown, lichenicolous on foliicolous lichens, Asia, terrestrial, see Seifert et al. (2011; genus accepted), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, holotype of type: K(M)-IMI 41011c.

Setameliola  D.R. Reynolds 2010, Meliolaceae, Meliolales, Sordariomycetes, 26 species, type: Setameliola argentina  (Speg.) D.R. Reynolds, asexual morph unknown, saprobes, terrestrial, Singapore, see Reynolds (2010; taxonomy), cultures and sequences are unavailable, needs generic revision.

Setiferatheca  Matsush. 1995, Ceratostomataceae, Melanosporales, Sordariomycetes, one species, type: S. nipponica  Matsush., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Setocampanula  Sivan. & W.H. Hsieh 1989, Trichosphaeriaceae, Trichosphaeriaceae, Sordariomycetes, one species, type: S. taiwanensis  Sivan. & W.H. Hsieh, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences unavailable, needs generic revision.

Setobilertella  Punith. & Spooner 1999, Ascomycota genera incertae sedis, one species, type: S. solani  Punith. & Spooner, sexual morph unknown, coelomycetous, saprobes, on dead stems of Solanum mauritianum, Azores, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: KM 58669, cultures and sequences are unavailable, needs generic revision.

Setomelanomma  M. Morelet 1980, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, one species, type: S. holmii  M. Morelet, asexual morph coelomycetous, saprobes or pathogens, terrestrial, cosmopolitan, see Zhang et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in Phaeosphaeriaceae), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Setophaeosphaeria  Crous & Y. Zhang ter 2014, Pleosporales genera incertae sedis, Dothideomycetes, three species, type: S. hemerocallidis  Crous & Y. Zhang ter, with coelomycetous asexual morph, saprobes, ?pathogens, terrestrial, China, see Crous et al. (2014; morphology, phylogeny), Wijayawardene et al. (2014; outline), holotype and ex-type culture of type: CBS H-21720, CPC 23645.

Setophiale  Matsush. 1995, Ascomycota genera incertae sedis, one species, type: S. unisetulata  Matsush., sexual morph unknown, hyphomycetous, saprobes, on palm petioles, Peru, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: Matsushima Fungus Collection, Kobe, MFC-4P766, cultures and sequences are unavailable, needs generic revision.


Setoseptoria  Quaedvl., Verkley & Crous 2013, Lentitheciaceae, Pleosporales, Dothideomycetes, one species, type: S. phragmitis  Quaedvlieg, Verkley & Crous coelomycetous, sexual morph unknown, pathogens, terrestrial, Hong Kong, see Quaedvlieg et al. (2013; morphology, phylogeny), Wijayawardene et al. (2014; outline), holotype of type: CBS H-21324, culture ex-type CBS 114802.
Setosporella Mustafa & Abdul-Wahid 1989, Ascomycota genera incertae sedis, one species, type: S. mahmoudii Moustafa & Abdul-Wahid, sexual morph unknown, hyphomycetous, saprobes, isolated from soil, Egypt, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 326932, cultures and sequences are unavailable, needs generic revision.

Setosynnema D.E. Shaw & B. Sutton 1985, Ascomycota genera incertae sedis, one species, type: S. isthmusporum D.E. Shaw & B. Sutton, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Seuratiopsis Woron. 1934, Seuratiaceae, Ascomycota families incertae sedis, one species, type: S. epiphylla Woron., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type, needs generic revision.

Seychellomyces Matsush. 1981, Ascomycota genera incertae sedis, one species, type: S. hexagonus Matsush, sexual morph unknown, hyphomycetous, saprobes, isolated from soil, Seychelles, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Seynesia Sacc. 1883, Cainiaceae, Xylariales, Sordariomycetes, two species, type: S. nobilis (Welw. & Curr.) Sacc., tropical, see Lumbsch & Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type, needs generic revision.

Seynesiella G. Arnaud 1918, Microthyriaceae, Microthyriales, Dothideomycetes, c. 80 species, type: S. juniperi (Desm.) G. Arnaud, asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy), Hyde et al. (2013; accepted as a genus in Micropeltidaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

Seynesiopelitis F. Stevens & R.W. Ryan 1925, Seynesiopeltidaceae, Dothideomycetes, incertae sedis, one species, type: S. epiphylla Woron., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Seynesiopsis Henn. 1904, Ascomycota genera incertae sedis, one species, type: S. rionegrensis Henn., sexual morph unknown, coelomycetous, saprobes, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Shackletonia Søchting, Frödén & Arup 2013, Teloschistaceae, Teloschistales, Lecanoromycetes, five species, type: S. hertelii (Søchting, Øvstedal & Sancho) Søchting, Frödén & Arup, asexual morph unknown, lichenized, terrestrial, see Arup et al. (2013; taxonomy), Kondratyuk et al. (2014; phylogeny), Garrido-Benavent et al. (2016; new species), Lücking et al. (2016; classification), sequences are available.

Shanorella R.K. Benj. 1956, Arthrodermataceae, Onygenales, Eurotiomycetes, 17 species, type: S. spirotricha R.K. Benj., a sexual morph unknown, on humans and other mammals, causing microsporodes, terrestrial, USA, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), culture available for the type: CBS 305.56.

Shawiella Hansf. 1957, Ascomycota genera incertae sedis, one species, type: S. grevilleae Hansf., sexual morph unknown, coelomycetous, saprobes, on leaves of Grevillea robusta, New Guinea, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Shearia Petr. 1924, Ascomycota genera incertae sedis, two species, type: S. magnoliae (Shear) Petr., coelomycetous, sexual morph unknown, saprobes, worldwide, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sheariella Petr. 1952, Ascomycota genera incertae sedis, one species, type: S. carbonacea Petr., sexual morph unknown, coelomycetous, saprobes, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sheathnema Dubey & Moonnambeth 2014, Ascomycota genera incertae sedis, two species, type: S. indicum Dubey & Moonnambeth, hyphomycetous, sexual morph unknown, saprobes, epiphytes, India, see Dubey and Moonnambeth (2014; taxonomy), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Shimizuomyces Kobayasi 1981, Clavicipitaceae, Hypocreales, Sordariomycetes, four species, type: S. paradoxus Kobayasi, asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Sung et al. (2010, 2011; culture characters of the type, applications), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: EFCC 6279.

Shiraia Henn. 1900, Shiraiaceae, Pleosporales, Dothideomycetes, one species, type: S. bambusicola Henn., asexual morph coelomycetous, parasitic, terrestrial, China and Japan, see Lumbsch and Huhndorf (2010; outline), Liu et al. (2013; morphology, nomenclature, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; 2016; outline; phylogeny, coelomycetous taxa), cultures and sequences are available, ex-epitype strains of type: GZAAS2.0708 = CGMCC 3.15200 = MFLUCC 13-0408; holotype of type: Shirai (B1!), epitype of type: GZAAS K-2002.

Shivomyces Hosag. 2004, Ascomycota genera incertae sedis, two species, type: S. ligustri Hosag. & Kamar., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Shrungabeeja V.G. Rao & K.A. Reddy 1981, Tetraplosphaeriacaeae, Pleosporales, Dothideomycetes, four species, type: S. vadirajensis V.G. Rao & K.A. Reddy, hyphomycetous, saprobes, on bamboo (Bambusa) and other plants (Begonia, Melicope), Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Ariyawansa et al. (2015; new species, phylogeny), cultures and sequences are unavailable, needs generic revision.

Siemaszkoa I.I. Tav. & T. Majewski 1976, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, seven species, type: S. flexa (T. Majewski) I.I. Tav. & T. Majewski, asexual morph unknown, biotrophic on Coleoptera (Ptiliidae), Europe, Southern America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


Sigmatomyces Sacc. & P. Syd. 1913, Ascomycota genera incertae sedis, one species, type: S. bakeri Sacc., Syd. & P. Syd., sexual morph unknown, hyphomycetous, saprobes, Philippines, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Sigmoidea** J.L. Crane 1968, *Halosphaeriaceae*, **Microascales**, **Sordariomycetes**, six species, type: *S. prolifera* (R.H. Petersen) J.L. Crane, hyphomycetous, polyphyletic, marine, freshwater, sexual morph unknown, on wood and leaves, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Sigridae** Tehler 1993, *Roccellaceae*, *Arthoniales*, **Arthoniomyces**, six species, type: *S. californica* (Tuck.) Tehler, lichenized (only one lichenicolous), terrestrial, tropical to subtropical with a preference for coastal habitats with a Mediterranean climate, see Ertz and Tehler (2011; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ertz et al. (2015; morphology, phylogeny), Lücking et al. (2016; classification), lectotype and ex-type strain of type: Bolander 129 (FH).


**Simonyella** J.Steiner 1902, *Lecanographaceae*, *Arthoniales*, **Arthoniomyces**, one species, type: *S. variegata* J. Steiner, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification, treated as *Roccellaceae*), sequences are available.


**Sinodidyella** J.Z. Yue & O.E. Erikss. 1985, *Dacampiaceae*, *Dothideomycetes* families *incertae sedis*, five species, type: *S. verrucosa* (Petr.) J.Z. Yue & O.E. Erikss., see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, needs generic revision.

**Sinotrichium** Juan Wang, S.Q. Xu & Strongman 2010, *Ascomycota* genera *incertae sedis*, one species, type: *S. chironomidarum* Juan Wang, S.Q. Xu & Strongman, asexual morph unknown, from the hindgut of a chironomid larva, China, see Wang et al. (2010; taxonomy), holotype of the type: XIN-4, cultures and sequences are unavailable, needs generic revision.

**Siphula** Fr. [nom. cons.] 1824, *Icmadophilaceae*, *Pertusariales*, *Lecanoromycetes*, 26 species; type: *S. ceratitis* (Wahlenb.) Fr., lichenized, see Valadbeigi and Sipman (2010; new records), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Resl et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Siphulastrum** Müll.Arg. 1889, *Pannariaeae*, *Pelitigerales*, *Lecanoromycetes*, four species; type: *S. triste* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ekman et al. (2014; phylogeny), Jørgensen and Andersen (2015; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

**Siphulella** Kantvilas, Elix & P.James 1992, *Icmadophilaceae*, *Pertusariales*, *Lecanoromycetes*, one species, type: *S. coralloidea* Kantvilas, Elix & P. James, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Sipmania** Egea & Torrente 1994, *Roccellaceae*, *Arthoniales*, **Arthoniomyces**, one species, type: *S. peltata* Egea & Torrente, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.
Sipmaniella Kalb 2009, *Megalosporaceae, Teloschistales, Lecanoromycetes*, two species, type: *S. sulphureofusca* (Fée) Kalb, lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Lücking et al. (2016; classification), sequences are available.


Sirexicipula Bubák 1907, *Ascomycota* genera incertae sedis, one species, type: *S. kabatiana* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirococcus Preuss 1855, *Gnomoniaceae, Diaporthales, Sordariomycetes*, three species, type: *S. strobilinus* Preuss, coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Crous et al. (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Crous et al. (2016; new species, phylogeny), cultures and sequences are available but lacks for the type:.

Sirocyphis Clem. 1909, *Ascomycota* genera incertae sedis, one species, type: *S. kabatiana* Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirogloea Petr. 1923, *Ascomycota* genera incertae sedis, one species, type: *S. euonymi* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Siroiligniella Naumov 1926, *Ascomycota* genera incertae sedis, one species, type: *S. saliciola* Naumov, coelomycetous, sexual morph unknown, saprobes, terrestrial, former USSR, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirophoma Höhn. 1917, *Ascomycota* genera incertae sedis, three species, type: *S. singularis* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Siroplacodium Petr. 1940, *Ascomycota* genera incertae sedis, six species, type: *S. atrum* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, China, see Wijayawardene et al. (2012, 2017; outline), Zhao and Zhao (2012; new species, China), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Siropleura Petr. 1934, *Ascomycota* genera incertae sedis, one species, type: *S. pulchella* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Siroscyphellina Petr. 1923, *Ascomycota* genera incertae sedis, two species, type: *S. arundinacea* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Austria, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Sirosperma Syd. & P. Syd. 1917, Ascomycota genera incertae sedis, two species, type: S. hypocrellae Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Papua New Guinea, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirosphaera Syd. & P. Syd. 1913, Ascomycota genera incertae sedis, two species, type: S. hypopolla Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirosporum Bubák & Serebrian. 1912, ?Dothideomycetes genera incertae sedis, c. 26 species, type: S. antenniforme (Berk. & M.A. Curtis) Bubák & Serebrian., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Kamal (2010; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are available, needs generic revision.

Sirosporonaemella Naumov 1951, Ascomycota genera incertae sedis, one species, type: S. strobilina Naumov, coelomycetous, sexual morph unknown, saprobes, terrestrial, Russia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirotchera H.B.P. Upadhyay 1964, Ascomycota genera incertae sedis, one species, type: S. ellipsospora H.B.P. Upadhyay, asexual morph unknown, saprobes, terrestrial, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirotchyliella Höhn. 1909, Ascomycota genera incertae sedis, one species, type: S. sydowiana (Sacc.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirothermium P. Karst. 1887, Ascomycota genera incertae sedis, three species, type: S. saepiarium P. Karst., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirothrygium Syd. & P. Syd. 1916, Ascomycota genera incertae sedis, one species, type: Sirothyrium taxi Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirotthyria Höhn. 1904, Ascomycota genera incertae sedis, two species, type: S. rosea Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sirothyriella Höhn. 1909, Ascomycota genera incertae sedis, one species, type: S. sydowiana (Sacc.) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sitochera H.B.P. Upadhyay 1964, Ascomycota genera incertae sedis, one species, type: S. ellipsospora H.B.P. Upadhyay, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sivanesania W.H. Hsieh & Chi Y. Chen 1996, Botryosphaeriaceae, Botryosphaerales, Dothideomycetes, one species, type: S. rubi W.H. Hsieh & Chi Y. Chen, asexual morph unknown, saprobes, terrestrial, Taiwan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (accepted as a genus in Botryosphaeriaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Sivanesaniella Gawande & D.K. Agarwal 2004, Dothideomycetes genera incertae sedis, one species, type: S. prunicola Gawande & D.K. Agarwal, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline, accepted as agenus in Venturiaceae), Kirk et al. (2013; genus accepted), Hyde et al. (2013; did not accept as a genus in Venturiaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.
Skottsbergiella Petr. 1927, Gnomoniaceae, Diaporthales, Sordariomycetes, one species, type: S. diaporthoides Petr., asexual morph unknown, saprobes, terrestrial, Chile, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Skyathea Spooner & Dennis 1986, ?Gelatinodiscaceae, Helotiales, Leotiomycetes, one species, type: S. hederae Spooner & Dennis, asexual morph unknown, sabrope of wood, Skye Island, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: K 32267, cultures and sequences are unavailable, needs generic revision.


Skyttella D. Hawksw. & R. Sant. 1988, ?Cordieritidaceae, Leotiomycetes families incertae sedis, one species, type: S. muelleri (Willey) D. Hawksw. & R. Sant., on lichens, terrestrial, Europe and North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), sequences are available, holotype of type: FH.

Slimacomyces Minter 1986, Ascomycota genera incertae sedis, two species, type: S. monosporus (W.B. Kendr.) Minter, hypymycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, see Seifert et al. (2011; morphology), Koukol et al. (2012; enzymes), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Slopeiomyces Klaubauf, Lebrun & Crous 2014, Magnaporthaceae, Magnaporthales, Sordariomycetes, one species, type: S. cylindrosporus (D. Hornby, Slope, Gutter. & Sivan.) Klaubauf, Lebrun & Crous, asexual morph hypymycetous, saprobes, terrestrial, UK, see Klaubauf et al. (2014; morphology, phylogeny), Maharachchikumbura et al. (2015; outline), ex-type culture of the type: CBS 459.82.

Smaragdiniseta L. Lombard & Crous 2016, Stachybotriaceae, Hypocreales, Sordariomycetes, one species, type: S. bisetosa (V.G. Rao & de Hoog) L. Lombard & Crous, hypymycetous, sexual morph unknown, saprobes, terrestrial, India, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), ex-type culture of the type: CBS 459.82.

Smaradaea Svrček 1969, Pyronemataceae, Pezizales, Pezizomycetes, eight species, type: S. amethystina (W. Phillips) Svrček, asexual morph unknown, saprobes, terrestrial, North temperate, see Van Vooren (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

Smarodzia Raitv. & Vimba 2006, Pyronemataceae, Pezizales, Pezizomycetes, one species, type: S. stollii Raitv. & Vimba, asexual morph unknown, from soil, terrestrial, Latvia, see Lumbsch and Huhndorf (2010; outline), holotype of the type: RIG 6493, cultures and sequences are unavailable, needs generic revision.

Smeringomyces Thaxt. 1908, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, four species, type: S. anomalous (Thaxt.) Thaxt., asexual morph unknown, biotrophic on Coleoptera (Staphilinidae), USA, Europe, Japan, Trinidad, Sumatra, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Solanealia Vaňha 1910, Helotiales genera incertae sedis, Leotiomycetes, one species, type: S. rosea Vaňha, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Soleella** Darker 1967, Rhytismataceae, Rhytismatales, Leotiomyetes, seven species, type: *S. striiformis* (Darker) Darker, asexual morph unknown, saprobes, terrestrial, North America, China, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

**Solenopezia** Sacc. 1889, Lachnaceae, Helotiaceae, Leotiomyetes, seven species, type: *S. solenia* Sacc., asexual morph unknown, saprobes, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable for type, needs generic revision.

**Solenopora** A. Massal. 1855, Catullariaceae, Rhizocarpales, Lecanoromycetes, 20 species, type: *S. requienii* A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Van Den Boom (2010; new records, Spain), Farkas et al. (2011; distribution in Hungary), Kinalioglu and Aproot (2011; new records, Turkey), Kirk et al. (2013; genus accepted), Yazici and Aslan (2013; new records, Turkey), Guttóvá et al. (2014; generic diveristy), Lücking et al. (2016; classification), sequences are available.

**Solicorynespora** R.F. Castañeda & W.B. Kendr. 1990, Ascomycota genera incertae sedis, 27 species, type: *S. zapatensis* R.F. Castañeda & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see McKenzie (2010; new species), Seifert et al. (2011; morphology), Ma et al. (2012, 2016; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hernández-Restrepo et al. (2014; new species), cultures and sequences are unavailable, needs generic revision.

**Solitaria** Arup, Sochting & Frödén 2013, Teloschistaceae, Teloschistales, Lecanoromycetes, one species, type: *S. chrysophthalma* (Degelius) Arup, Sochting & Frödén, asexual morph unknown, lichenized, terrestrial, see Arup et al. (2013; taxonomy), Gaya et al. (2015; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Soloacrosporina** W.B. Kendr. & R.F. Castañeda 1991, Ascomycota genera incertae sedis, two species, type: *S. flagellisetosa* W.B. Kendr. & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Neednández-Restrepo et al. (2014; new species), cultures and sequences are unavailable, needs generic revision.

**Soloacrosporiella** Crous & M.J. Wingf. 2015, Dothideomycetes genera incertae sedis, one species, type: *S. acaeciae* Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, Malaysia, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22223, CPC 24871.

**Solorina** Ach. 1808, Peltigeraeaceae, Peltigerales, Lecanoromycetes, ten species, type: *S. crocea* (L.) Ach., lichenized, Asia, Europe, North America, see Gagunashvili et al. (2009; molecular), Björk (2010; new record), Lumbsch and Huhndorf (2010; outline), Wedin et al. (2011; molecular), Grube et al. (2012; symbiosis), Lisov et al. (2012; ecology), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; molecular), Centeno et al. (2016; metabolic profiling), Magain et al. (2016; molecular), Lücking et al. (2016; classification), sequences are available.

**Solorina** Ach. 1808, Peltigeraeaceae, Peltigerales, Lecanoromycetes, 21 species, type: *S. crocea* (L.) Ach., asexual morph unknown, lichenized, terrestrial, Asia, Europe, North America, see Gagunashvili et al. (2009; molecular), Björk (2010; new record), Lumbsch and Huhndorf (2010; outline), Wedin et al. (2011; molecular), Grube et al. (2012; symbiosis), Lisov et al. (2012; ecology), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; molecular), Centeno et al. (2016; metabolic profiling), Magain et al. (2016; molecular), sequences are available.

**Solorinaria** (Vain.) Gyeln., 1935, Lichinaceae, Lichinales, Lichinomycetes, one species, type: *S. fuscata* (Vain.) Gyeln., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Brackel (2013; taxonomy),
Aptroot and Iqbal (2014; checklist), Lücking et al. (2016; classification), sequences are unavailable.

**Solosympodiella** Matsush. 1971, *Ascomycota* *genera incertae sedis*, eight species, type: *S. clavata* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Soloterminospora** Matsush. 1996, *Ascomycota* *genera incertae sedis*, one species, type: *S. caffra* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: Matsushima Fungus Collection, Kobe, 5A089, cultures and sequences are unavailable, needs generic revision.


**Soosiella** Hujslová & M. Kolařík 2013, *Helotiales* *genera incertae sedis*, Leotiomycetes, one species, type: *S. minima* Hujslová & M. Kolařík, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Czech Republic, see Hujslová et al. (2013, 2014; phylogeny), holotype and ex-type of the type: PRM 922619, CBS 136257.

**Sordaria** Ces. & De Not. 1863, *Sordariaceae*, *Sordariales*, Sordariomycetes, twelve species, type: *S. fimicola* (Roberge ex Desm.) Ces. & De Not., asexual morph unknown, terrestrial, saprobes, coprophilous, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; phylogeny), cultures and sequences are available.

**Sorokina** Sacc. 1892, *Dermateaceae*, Helotiales, Leotiomycetes, six species, type: *S. microspora* (Berk.) Sacc., asexual morph unknown, saprobes, terrestrial, pantropical, see Wongsawas (2008, new record from China), Li (2010, new species), Ma et al. (2010, 2014, 2016; new species), Shenoy et al. (2010, polyphyly, affinities with Dothideomycetes and Sordariomycetes), Seifert et al. (2011; morphology), Ma et al. (2012a, new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Xia et al. (2013, new species), Heredia et al. (2015, new species), sequences are available but lacks for the type.

**Sorokinella** J. Fröhl. & K.D. Hyde 2000, *Dermateaceae*, Helotiales, Leotiomycetes, two species, type: *S. appendicospora* J. Fröhl. & K.D. Hyde, asexual morph unknown, phialophora-like and selenosporella-like synanamorphs, saprobes, terrestrial and aquatic, cosmopolitan, see Wongsawas (2008, new record from China), Li (2010, new species), Ma et al. (2010, 2014, 2016; new species), Shenoy et al. (2010, polyphyly, affinities with Dothideomycetes and Sordariomycetes), Seifert et al. (2011; morphology), Ma et al. (2012a, new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Xia et al. (2013, new species), Heredia et al. (2015, new species), sequences are available but lacks for the type.

**Sowerbyella** Nannf. 1938, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, eight species, type: *S. radiculata* (Sowerby) Nannf., asexual morph unknown, saprobes, terrestrial, Europe, China, see Zhuang (2009; new species), Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available.

**Spadicoides** S. Hughes 1958, *Sordariomycetes* *genera incertae sedis*, c. 40 species, type: *S. bina* (Corda) S. Hughes 1958, hyphomycetous, sexual morph unknown, phialophora-like and selenosporella-like synanamorphs, saprobes, terrestrial and aquatic, cosmopolitan, see Wongsawas (2008, new record from China), Li (2010, new species), Ma et al. (2010, 2014, 2016; new species), Shenoy et al. (2010, polyphyly, affinities with Dothideomycetes and Sordariomycetes), Seifert et al. (2011; morphology), Ma et al. (2012a, new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Xia et al. (2013, new species), Heredia et al. (2015, new species), sequences are available but lacks for the type.
**Sparria** Ertz & Tehler 2011, *Opegraphaceae, Arthoniales, Arthoniomycetes*, two species, type: *S. cerebriformis* (Egea & Torrente) Ertz & Tehler, lichenized, see Californian coast, Baja California and Europe, see Ertz and Tehler (2011; morphology, phylogeny), Lücking et al. (2016; classification), sequences are available.


**Spathaspora** N.-H. Nguyen, S.-O. Suh & M. Blackwell 2006, *Debaryomycetaceae, Saccharomycetales, Saccharomycetales*, ten species, type: *S. passalidarum* N.H. Nguyen, S.O. Suh & M. Blackwell, asexual reproduction is by multilateral budding, saprophytic, associated with wood boring insect larvae, possibly worldwide, see Lumbsch and Huhndorf (2010; outline), *S. passalidarum* and other species in the clade are noted for fermentation of D-xylose, which is important for fermentation of biomass to fuel ethanol, many species in this genus represent asexual taxa originally classified in the genus *Candida*, but which have been transferred to the genus *Spathaspora* as new combinations, cultures and sequences are available.

**Spathularia** Pers. 1797, *Cudoniaceae, Rhytismatales, Leotiomyces*, twelve species, type: *S. flavida* Pers., asexual morph unknown, saprobes, terrestrial, North temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Gè et al. (2014; DNA, phylogeny), cultures and sequences are available, needs generic revision.

**Spathulospora** A.R. Caval. & T.W. Johnson 1965, *Lulworthiaceae, Lulworthiales, Sordariomycetes*, five species, type: *S. phycophila* A.R. Caval. & T.W. Johnson, spermatiophores or asexual morph hyphomycetous, biotrophic on marine red alga, temperate to Antarctic sea of Southern hemisphere, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: (R.E. Norris, 3892), needs generic revision.

**Speerschneidera** Trevis. 1861, *Leprocaulaceae, Leprocaulales, Lecanoromycetes*, one species, type: *S. euploca* (Tuck.) Trevis., lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Lecanorales, genera incertae sedis), Kirk et al. (2013; genus accepted), Lendemer and Hodkinson 2013, Lücking et al. (2016; classification); sequences are available.

**Spegazzinia** Sacc. 1880, *Apiosporaceae, Xylariale, Sordariomycetes*, nine species, type: *S. ornata* Sacc., hyphomycetous, saprobes, terrestrial, widespread, see Seifert et al. (2011; morphology), Hyde et al. (2011; outline), Whitton et al. (2012; morphology with two types of conidia), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Speiropsis** Tubaki 1958, *Dothideomycetes* genera *incertae sedis*, nine species, type: *S. pedatospora* Tubaki, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Caribbean, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Pratibha et al. (2016; DNA, phylogeny), cultures available for the type: GUFCC 18008.

phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy), Dissanayake et al. (2016; taxonomy), holotype and ex-type culture of the type: LISE 95177, CBS 117009.

**Spermatonolcha** Péter, Dlauchy, Tornai-Lehoczki, M. Suzuki & Kurtzman 2011, Trichomonasaceae, Saccharomycetales, Saccharomycetes, four species, type: *S. europaea* G. Péter, Dlauchy, Tornai-Leh., M. Suzuki & Kurtzman, cell division is by multilateral budding, saprophytic, rotted wood, Europe, South America, see Péter et al. (2011; taxonomy), cultures and sequences are available.

**Spermartinsiella** Péter, Dlauchy, Tornai-Lehoczki, M. Suzuki & Kurtzman 2011, Trichomonascaceae, Saccharomycetales, Saccharomycetes, four species, type: *S. tecomae* (Chardón & Toro) Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Spermochaeletella** Cif. 1954, Ascomycota genera incertae sedis, one species, type: *S. maticola* Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Spermoterichium** Kuntze 1898, Ascomycota genera incertae sedis, one species, type: *S. pulchellum* (Speg.) Kuntze, coelomycetous, sexual morph unknown, saprobes, terrestrial, Paraguay, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type.

**Sphaerellopsis** Cooke 1883, Leptosphaeriaceae, Pleosporales, Dothideomycetes, five species, type: *S. quercuum* Cooke, asexual morph coelomycetous, pathogens, lichenicolous, terrestrial, worldwide, see Wijayawardene et al. (2012, 2014, 2017; outline), Trakunyingcharoen et al. (2014; new species, phylogeny), Crous et al. (2016; new species, phylogeny), cultures and sequences are available but lacks for the type.

**Sphaerellothecium** Zopf 1897, Mycosphaerellaceae, Capnodiales, Dothideomycetes, type: *S. araneosum* (Rehm) Zopf, asexual morph unknown, terrestrial, on lichens, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Mycosphaerellaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Sphaeriostromella** Bubák 1916, Ascomycota genera incertae sedis, one species, type: *S. pteridina* (Sacc. & Roum.) Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Sphaeriothyrium Bubák 1916, Ascomycota genera incertae sedis, two species, type: S. filicinum Bubák, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.  

Sphaerocordyceps Kobayasi 1981, Clavicipitaceae, Hypocreales, Sordariomycetes, two species, type: Sphaerocordyceps palustris (Berk.) Kobayasi, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: CUP 067858, cultures and sequences are unavailable.  

Sphaerodes Clem. 1909, Ceratostomataceae, Melanosporales, Sordariomycetes, 13 species, type: S. episphearium (W. Phillips & Plowr.) Clem., asexual morph unknown, saprobes, terrestrial, worldwide, see Vujanovic and Goh (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.  

Sphaerodothella C.A. Pearce & K.D. Hyde 2001, Phyllachoraceae, Phyllachorales, Sordariomycetes, one species, type: S. danthoniae (McAlpine) C.A. Pearce & K.D. Hyde, saprobes, Australia, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.  

Sphaerodothis (Sacc. & P. Syd.) Shear 1909, Phyllachoraceae, Phyllachorales, Sordariomycetes, 20 species, type: S. arenegae (Racib.) Shear ex Theiss. & Syd., saprobes, South East Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.  

Sphaerognomoniella Naumov & Kusnezowa 1952, Diaporthales genera incertae sedis, Sordariomycetes, one species, type: S. cornicola Naumov & Kusnezowa, asexual morph unknown, saprobes, terrestrial, former USSR, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.  

Sphaerographium Sacc. 1884, Chaetomellaceae, Helotiales, Leotiomycetes, twelve species, type: S. squarrosum Riess, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Minnis et al. (2010; new species, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; accepted as valid genus), cultures available but lacks for the type.  

Sphaeromma H.B.P. Upadhay 1964, Ascomycota genera incertae sedis, two species, type: S. mazosiae H.B.P. Upadhay, coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.  

Sphaeronaemella P. Karst. 1884 (= Gabarnaudia Samson & W. gams 1974 fide Reblova et al. 2016), Microascales genera incertae sedis, Sordariomycetes, ten species, type: S. helvellae (P. Karst.) P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), de Beer et al. (2013; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Reblova et al. (2016; nomenclature), Wijayawardene et al. (2017; outline), sequences are available.  

Sphaerophoma Petr. 1924, Ascomycota genera incertae sedis, two species, type: S. brenclelei Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.  

Sphaerophoropsis Vain. 1890, Cladoniaceae, Lecanorales, Lecanoromycetes, one species, type: S. stereocauloides Vain., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.
Sphaerophorus Pers. 1794, Sphaerophoraceae, Lecanorales, Lecanoromycetes, 69 species, type: S. coralloides Pers., asexual morph unknown, fruticose, terrestrial, saxicolous, see Wedin et al. (2009; taxonomy), Hua Jie et al. (2010; metal studies), Lumbsch and Huhndorf (2010; outline), Miller et al. (2011; ecological data), Cameron and Bondrup-Nielsen (2012; indicator species), Gielwanowska and Olech (2012; physiological and ultrastructure studies). Lang et al. (2012; species richness), Williams et al. (2012; biochemical and ecological studies), Kirk et al. (2013; genus accepted), Liu et al. (2014; new species), McMullin and Arsenault (2016; new records), Root et al. (2014; climate indicator), Chamizo et al. (2016, spatial distribution), Lücking et al. (2016; classification), sequences are available.

Sphaeropsis Sacc. 1880 (= Phaeobotryosphaeria Spec. 1908 fide Phillips et al. 2013; Wijayawardene et al. 2014; Rossman et al. 2015), Botryosphaeriaceae, Botryosphaeriales, Dothideomycetes, five species, type: S. visci (Alb. & Schwein.) Sacc, coelomycetous, sexual morph formerly known in Phaeobotryosphaeria, saprobes, endophytes, terrestrial, cosmopolitan, see Phillips et al. (2008, 2013; taxonomy, phylogeny), Liu et al. (2012; taxonomy, phylogeny), Hyde et al. (2013; accepted as a genus in Botryosphaeriaceae), Slippers et al. (2013; phylogeny), Wijayawardene et al. (2014, 2016; outline, taxonomy, phylogeny, nomenclature), Rossman et al. (2015; nomenclature), Diessanyake et al. (2016; taxonomy), neotype and ex-neotype culture of the type: CWU (MYC) AS 2271 (MBT176099), CBS 122527.

Sphaerosoma Klotzsch 1839, Pyronemataceae, Pezizales, Pezizomycetes, three species, type: S. fuscescens Klotzsch, asexual morph unknown, hypogeous, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sphaerospora (Svrček) Svrček & Kubička 1961, Pyronemataceae, Pezizales, Pezizomycetes, three species, type: S. brunnea (Alb. & Schwein.) Svrček & Kubička, asexual morph hyphomycetous, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Sánchez et al. (2014; asexual reproduction, DNA), cultures and sequences are available for the type.

Sphaerosporium Schwein. 1832, Onygenales genera incertae sedis, two species, type: S. lignatile Schwein., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North and South America, see Seifert et al. (2011; morphology), Ropars et al. (2012; DNA, phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

Sphaerostilbella (Henn.) Sacc. & D. Sacc. 1905 (= Gliocladium Corda 1840 fide Rossman et al. 2013; Macharachchikumbura et al. 2016), Hypocreaceae, Hypocreales, Sordariomycetes, four species, type: S. lutea (Henn.) Sacc. & D. Sacc., asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Macharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

Sphaerotus Zobel 1854, Pezizaceae, Pezizales, Pezizomycetes, four species, type: S. tulansnei Zobel, asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sphaerulina Sacc. 1878, Mycosphaerellaceae, Capnodiales, Dothideomycetes, 66 species, type: S. myriadea (DC.) Sacc., asexual morph coelomycetous, asexual morph septoria-like, saprobes or plant pathogens, terrestrial, freshwater or marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Crous et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in Mycosphaerellaceae), Verkley et al. (2013; phylogeny), Wijayawardene et al. (2014, outline), cultures and sequences are available.
*Sphaerulomyces* Marvanová. 1977, *Ascomycota* genera *incertae sedis*, one species, type: *S. coralloides* Marvanová, hyphomycetous, saprobes, Czechoslovakia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Sphaleromyces* Thaxt. 1894, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, four species, type: *S. lathrobii* Thaxt., asexual morph unknown, biotrophic on Coleoptera (Staphylinidae), Europe, America, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), and sequences are unavailable, needs generic revision.

*Spheconisca* (Norman) Norman 1876, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, twenty species, type: *S. hypocrita* Norman, asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

*Sphintrina* Fr. 1825, *Sphintrinaceae*, *Myxococcales*, *Eurotiomycetes*, ten species, type: *S. turbinata* (Pers.) De Not., asexual morph unknown, lichenicolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Muniz et al. (2014; new species), Tibell et al. (2014; new species, DNA), cultures available for the type: AFTOL-ID 1721.

*Sphintrinopsis* Woron. 1927, *Caliciaceae*, *Calicium*, *Lecanoromycetes*, one species, type: *S. pertusaria* Woron., lichenized, see Gaya et al. (2012; taxonomy), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are unavailable.


*Splodochium* Syd. 1927, *Ascomycota* genera *incertae sedis*, four species, type: *S. vernoniae* Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, Neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Splonema* Bornet 1856, *Coccocarpiaaceae*, *Peltigerales*, *Lecanoromycetes*, five species, type: *S. paradoxum* Bornet, lichenized, see Lumbsch and Huhndorf (2010; outline), Anderson and Neily (2012; new records), Kirk et al. (2013; genus accepted), Medeiros et al. (2014; ecology), Spribille et al. (2014; phylogeny), McMullin et al. (2015; new records), Prieto et al. (2015; new record), Lücking et al. (2016; classification), sequences are available.

*Spiopodia* Boud. 1885, *Dermateaceae*, *Helotiales*, *Leotiomyces*, four species, type: *S. nervisequa* (Pers.) Boud., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Spiopodiella* E. Müll. 1989, *Dermateaceae*, *Helotiales*, *Leotiomyces*, one species, type: *S. arxii* E. Müll., asexual morph unknown, saprobes, terrestrial, Switzerland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Spinulosphaeria* Sivan. 1974, *Chaetosphaeriales*, *Coronophorales*, *Sordariomycetes*, 14 species, type: *S. thaxteri* (Pat.) Sivan., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Mugambi and Huhndorf (2010; new species, phylogeny), Maharachchikumbura et al. (2016; outline, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type.

Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Spiralum** J.L. Mulder 1975, *Ascomycota* genera incertae sedis, two species, type: *S. helicosporum* J.L. Mulder, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Spirodecospora** B.S. Lu, K. D. Hyde & W. H. Ho 1998, Xylariaceae, Xylariales, Sordariomycetes, two species, type: *S. bambusicola* B.S. Lu et al., asexual morph unknown, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Spiromastigoides** Doweld 2013, Spiromastigaceae, Onygenales, Eurotiomycetes, 17 species, type: *S. warcupii* (Kuehn & G.F. Orr) Doweld, asexual morph unknown, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.


**Spirosphaera** Beverw. 1953, Helotiales genera incertae sedis, nine species, type: *S. floriformis* Beverw, hyphomycetous, sexual morph unknown, on decaying birch leaves in water, see Seifert et al. (2011; morphology), Voglmayr et al. (2011; taxonomy), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Splanchnonema** Corda 1829, Pleomassariaceae, Pleosporales, Dothideomycetes, 37 species, type: *S. pustulatum* Corda, asexual morph unknown, saprobes, terrestrial, Europe, North America, China, India, see Lumbsch and Huhndorf (2010; outline, sexual morph), Zhang et al. (2012; accepted as a genus in Pleomassariaceae, phylogeny), Zhao and Zhao (2012; new species, China), Hyde et al. (2013; accepted as a genus in Pleomassariaceae, phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type.

**Splanchnospora** Lar.N. Vassiljeva 1998, *Ascomycota* genera incertae sedis, one species, type: *S. ampullacea* (Pers.) Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, North temperate zone, see Honda et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Spondylocladiella** Linder 1934, *Ascomycota* genera incertae sedis, two species, type: *S. botrytioides* Linder, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Spondylocladiopsis** M.B. Ellis 1963, *Ascomycota* genera incertae sedis, two species, type: *S. cupulicola* M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, India, see Pratibha et al. (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Spooneromyces** T. Schumach. & J. Moravec 1989, Pyronemataceae, Pezizales, Pezizomycetes, five species, type: *S. laeticolor* (P. Karst.) T. Schumach. & J. Moravec, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; phylogeny), Kirk et al. (2013; genus accepted), Van Vooren (2014; new species), cultures and sequences are available.
Sporastatia A. Massal. 1854, Sporastatiaceae, Rhizocarpaceae, Lecanoromycetes, four species, type: S. testudinea (Ach.) A. Massal., lichenized, saxicolous, worldwide temperate, see Lumbsch and Huhndorf (2010; outline), Bendiksby and Timdal (2013; phylogenetic placement), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogenetic placement), Lücking et al. (2016; classification), sequences are available.

Sporendocladia G. Arnaud ex Nag Raj & W.B. Kendr. 1975, Microascales genera incertae sedis, Sordariomycetes, seven species, type: S. castanea G. Arnaud ex Nag Raj & W.B. Kendr., asexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Kiyuna et al. (2012; DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

Sporhaplus H.B.P. Upadhyay 1964, Ascomycota genera incertae sedis, one species, type: S. rondoniensis H.B.P. Upadhyay, asexual morph unknown, lichenized, terrestrial, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Sporidesma Batzer & Crous 2010, Dothideomycetes genera incertae sedis, Dothideomycetes, one species, type: S. pennsylvaniensis Batzer & Crous, hyphomycetous, sexual morph unknown, one species, saprobes, pathogens, terrestrial, USA, see Yang et al. (2010; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of type: CBS H-20326, CPC 16112.

Sporidesmiella P.M. Kirk 1982, Melanommataceae, Pleosporales, Dothideomycetes, 32 species, type: S. claviformis P.M. Kirk, hyphomycetous, sexual morph unknown, saprobes, on dung, terrestrial, worldwide, see Braun and Heuchert (2010; new species), Seifert et al. (2011; morphology), Ma et al. (2012, 2016; new species, China), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Monteiro et al. (2014; new species, Brazil), Heredia et al. (2015; new species, Mexico), Zhurbenko et al. (2015; new species), holotype of the type: IMI 246982, cultures and sequences are available but lacks for the type, needs generic revision.

Sporidesminia Subram. & Bhat 1989, Xylariales genera incertae sedis, Sordariomycetes, one species, type: S. malabarica Subram. & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: NN43118.

Sporidesmium Link 1809, Sporidesmiaceae, Diaportheomycetidae families incertae sedis, Sordariomycetes, around 330 species, type: S. atrum Link, hyphomycetous, saprobes, mycoparasites, terrestrial and aquatic, cosmopolitan, see Iturriaga et al. (2008; new species), Seifert et al. (2011; morphology), Ma et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Dubey and Sengupta (2015; new species), Hyde et al. (2016; new species, phylogeny), Mena-Portales et al. (2016; new species), Su et al. (2016; phylogeny of Sporidesmiaceae), cultures and sequences are available.

Sporoctomorpha J.V. Almeida & Sousa da Câmara 1903, Sordariomycetes genera incertae sedis, one species, type: S. magnoliae J.V. Almeida & Sousa da Câmara, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Sporodictyon A. Massal. 1852, Verrucariaceae, Verrucariales, Eurotiomycetes, five species, 38 species, type: S. schaereri B. A. Massal., lichenized, see Savić and Tibell (2009; taxonomy), Dillman et al. (2014; new records, Alaska), Lücking et al. (2016; classification); sequences are available.
Sporodochiolicrien Aptroot & Sipman 2011, Ascomycota genera incertae sedis, four species, type: S. lecanoricus Aptroot & Sipman, hyphomycetous, sexual morph unknown, lichenized, terrestrial, pantropical, see Aptroot and Sipman (2011; taxonomy), Diederich (2013; taxonomy), holotype of the type: ABL, Aptroot 31060, cultures and sequences are unavailable, needs generic revision.

Sporodophoron Frisch, Y. Ohmura, Ertz & G. Thor 2015, Arthoniaceae, Arthoniales, Arthoniomyces, four species, type: S. gossypinum Frisch, Y. Ohmura & G. Thor, lichenized, see Frisch et al. (2015), Lücking et al. (2016; classification), sequences are available.

Sporomega Corda 1842, Rhytismataceae, Rhytismatales, Leotiomycetes, seven species, type: S. degenerans (Fr.) Corda, asexual morph unknown, saprobes, terrestrial, North America, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2011; DNA, phylogeny), Lantz et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available.

Sporopachydermia Rodrigues de Miranda 1978, Saccharomycetales genera incertae sedis, Saccharomycetes, five species, type: S. lactativora Rodrigues de Miranda, asexual reproduction is by multilateral budding, saprophytic, in cacti, seawater, tree exudates, waste lagoon, clinical, Europe, North America, Antarctica, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Sporopagiomyces K. Pöldmaa & Samuels 1999, Hypocreaceae, Hypocreales, Sordariomycetes, three species, type: S. chrysostomus (Berk. & Broome) K. Pöldmaa & Samuels., asexual morph unknown, fungicolous, terrestrial, worldwide, see Jaklitsch et al. (2008; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Sporopachiopsis Sérusiaux 1997, Pilocarpaceae, Lecanorales, Lecanoromycetes, two species, type: S. sipmanii Sérus., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Sporopodium Mont. 1851, Pilocarpaceae, Lecanorales, Lecanoromycetes, 24 species, type: S. leprieurii Mont., lichenized, see Nelson et al. (2008; molecular), Lumbsch and Huhndorf (2010; outline), Weerakoon et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Rashmi and Rajkumar (2015; new report), Lücking et al. (2016; classification), sequences are available.

Sporormia De Not. 1845, Sporormiaceae, Pleosporales, Dothideomycetes, 29 species, type: Sporormia fimetaria De Not., asexual morph unknown, saprobes on dung, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; accepted genus), Hyde et al. (2013; phylogeny), Wijayawardene et al. (2014; outline), cultures and sequences are available.


Sporostigma Grube 2001, Arthoniales genera incertae sedis, Arthoniomyces, one species, type: S. melaspora (Tuck.) Grube, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

morph unknown, saprobes, terrestrial, Philippines, see Whitton et al. (2012; taxonomy), cultures and sequences are unavailable, needs generic revision.

**Spumatoria** Massee & E.S. Salmon 1901, *Ophiostomataceae, Ophiostomatales*, *Sordariomycetes*, one species, type: *S. longicollis* Massee & E.S. Salmon, asexual morph unknown, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Squamarina** Poelt, 1958, *Stereocaulaceae, Lecanorales, Lecanoromycetes*, species, sub species, varieties, forma species, type: *S. gypsacea* (Sm.) Poelt, asexual morph, undetermined, terricolous, saxicolous, widespread, see Dietrich and Buergi-Meyer, (2010; taxonomy, rare occurrences in surroundings), Lumbsch and Huhndorf (2010; outline), Miralles-Mellado et al. (2011; indicator species), Jorge-Villar et al. (2011; Raman spectroscopy study), Bevan et al. (2012; transplant experiments), Cansaran-Dunan and Halici (2012; biochemistry and antimicrobial study), Kirk et al. (2013; genus accepted), Bastida et al. (2014, ecology), Martellos et al. (2014; ecology, species distribution) Delgado Baquerizo et al. (2015, chemistry), Lange and Belnap (2016; soil crust studies), Lücking et al. (2016; classification); sequences are available.

**Squamella** S. Hammer 2001, *Cladoniacae, Lecanorales, Lecanoromycetes*, one species, type: *S. spumosa* S. Hammer, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

**Squamotubera** Henn. 1903, *Xylariaceae, Xylariales, Sordariomycetes*, one species, type: *Squamotubera le-raiti* Henn., see Maharachchikumbura et al. (2015, 2016; outline), Daranagama et al. (2016), this genus was not accepted as a genus in Lumbsch and Huhndorf (2010), Kirk et al. (2013).

**Squamulea** Arup, Søchting & Frödén, 2013, *Teloschistaceae, Teloschistales, Lecanoromycetidae*, five species, type: *S. subsoluta* (Nylander) Arup, Søchting & Frödén, asexual morph unknown, lichenized, terrestrial, Antarctica, see Arup et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Kondratyuk and Kondratyuk (2014; taxonomy), Kondratyuk et al. (2014, 2016; revised taxonomy), Søchting et al. (2014; taxonomy and new species), Lücking et al. (2016; classification), sequences are available.


**Stachybotrys** Corda 1837, *Stachybotryaceae, Hypocreales, Sordariomycetes*, c. 60 species, type: *S. chartarum* (Ehrenb.) S. Hughes, hyphomycetous, sexual morph available, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), Wang et al. (2015; new species, revision, phylogeny), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Lombard et al. (2016; phylogeny, revision, sexual morph), cultures and sequences are available, needs generic revision.
**Stachyliidium** Link 1809, *Plectosphaerellaceae, Glomerellales, Sordariomycetes*, two species, type: *S. bicolor* Link, hyphomycetous, sexual morph unknown, pathogens, nematophagous, terrestrial, worldwide, see Réblóvá et al. (2011; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures sequences are available for the type: DAOM 226658.

**Stagonopatella** Petr. 1927, *Ascomycota* genera incertae sedis, one species, type: *S. aeruginosa* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stagonopsis** Sacc. 1884, *Ascomycota* genera incertae sedis, four species, type: *S. pallida* (Berk. & M.A. Curtis) Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Stagonosporina** Tassi 1902, *Ascomycota* genera incertae sedis, one species, type: *S. sparti* Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stagonosporopsis** Died. 1912, *Didymellaceae, Pleosporales, Dothideomycetes*, 22 species, type: *S. hortensis* (Sacc. & Malbr.) Petr., coelomycetous, with sexual morph, saprobes, ?pathogens, terrestrial, cosmopolitan, see Vaghefi et al. (2012; species associated with ray blight disease of Asteraceae), Chen et al. (2015; taxonomy, phylogeny), Hyde et al. (2016; sexual morph), Wijayawardene et al. (2017; outline), cultures and sequences are available.

**Stagonostromella** Petr. & Syd. 1927, *Ascomycota* genera incertae sedis, one species, type: *S. sparti* Tassi, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Staheliella** Emeden 1974, *Ascomycota* genera incertae sedis, two species, type: *S. nodosa* Emeden, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Staibia** Bat. & Peres 1966, *Leptopeltidaceae, Dothideomycetes, incertae sedis*, one species, type: *S. connari* Bat. & Peres, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, accepted as a genus in *Leptopeltidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Stalagmochaetia** Cif. & Bat. 1963, *Ascomycota* genera incertae sedis, two species, type: *S. basilisca* Bat., Cif. & Nascim., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stamnaria** Fuckel 1870 (= *Titaeospora* Bubák 1916 fide Johnston et al. 2014), *Helotiales, Helotiales, Leotiomyces*, five species, type: *S. persoonii* (Moug.) Fuckel, asexual morph formerly known in *Titaeospora*, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature),
Baral and Haelewaters (2015; DNA), Wijayawardene et al. (2016; outline), cultures and sequences are available but lacks for the type.  

**Stanhughesia** Constant. 1989, Chaetothyriaceae, Chaetothyriales, Eurotiomycetes, four species, type: *S. linnaeae* Constant., sexual morph unknown, epiphytes, epiphyllous, hyphomycetous, terrestrial, Sweden, South Africa, see Seifert et al. (2011; morphology), Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.  

**Staninwardia** B. Sutton 1971, Extremaceae, Capnodiales, Dothideomycetes, two species, type: *S. breviuscula* B. Sutton, coelomycetous, sexual morph unknown, saprobes, pathogens, Australia, see Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2014, 2017; outline, taxonomy), cultures and sequences are available but lacks for the type.

**Stanjehughesia** Subram. 1992, Sordariomycetes genera incertae sedis, 16 species, type: *S. hormiscioideae* (Corda) Subram., hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Delgado (2008; new species, USA), Marinowitz et al. (2008; new species), Ma et al. (2011; new species, China), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Carneiro et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type, needs generic revision.

**Stanjemonium** W. Gams, O'Donnell, Schroers & M. Chr. 1999, Hypocreales genera incertae sedis, Sordariomycetes, four species, type: *S. grisellum* W. Gams, Schroers & M. Chr., hyphomycetous, sexual morph unknown, from soil, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 655.79.

**Staphylotrichum** J. Mey. & Nicot 1957, Chaetomiaceae, Sordariales, Sordariomycetes, four species, type: *S. coccosporum* J.A. Mey. & Nicot, sexual morph unknown, saprobes, from soil, terrestrial, Africa, Asia, Europe, see Seifert et al. (2011; morphology), Nonaka et al. (2012; new species, Japan phylogeny), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for the type.

**Starbaecokia** Rehm ex Starbäck 1899, Helotiaceae incertae sedis, Leotiomycetes, one species, type: *S. pseudotryblidioides* Rehm & Starbäck, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Starmera** Y. Yamada, Higashi, Ando & Mikata 1997, Phaffiomycetaceae, Saccharomycetales, Saccharomycetes, ten species, type: *S. anethionina* (Starmer, Phaff, M. Miranda & M.W. Miller) Y. Yamada, Higashi, S. Ando & Mikata, cell division is by multilateral budding, saprophytic, in cacti, tunnels of wood boring insects, slime fluxes of trees, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Starmerella** Rosa & Lanchance 1998, Trichomonascaceae, Saccharomycetales, Saccharomycetes, 25 species, type: *S. bombicola* C.A. Rosa & Lanchance, cell division is by multilateral budding, saprophytic, in honey, fruit juice concentrate, flowers, various beetles, bees, worldwide, see Kurtzman et al. (2010; phylogeny, revision), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), most of the species in this genus represent asexual forms originally classified in the genus *Candida* thus, they will be transferred to *Starmerella* as new combinations, cultures and sequences are available.

**Staurolemma** Körb. 1867, Pannariaceae, Pelgitergales, Lichinomycetes, three species, type: *S. dalmaticum* Körb., asexual morph unknown, lichenized, terrestrial, see Wedin et al. (2009; taxonomy), Jørgensen (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Bendiksby et al. (2014; long-distance dispersal), Dixon et al. (2014;
mapping), Ekman et al. (2014; taxonomy), Otálora et al. (2013, 2014; revised generic classification), Tapper et al. (2014; endemics on granite), Boutabia et al. (2015; floristic), Paoli et al. 2015; indicator species), Lücking et al. (2016; classification), sequences are available.

**Staurnonema** (Sacc.) Syd., P. Syd. & E.J. Butler 1916, *Ascomycota* genera *incertae sedis*, four species, type: *S. cruciferum* (Ellis) Syd., P. Syd. & E.J. Butler, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stauronematopsis** Abbas, B. Sutton & Ghaffar 2002, *Ascomycota* genera *incertae sedis*, one species, type: *S. sojae* (Uecker & Kulik) Abbas, B. Sutton & Ghaffar, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Staurophoma** Höhn. 1907, *Ascomycota* genera *incertae sedis*, one species, type: *S. panici* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Hong Kong, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Staurotheca** Norman [nom. cons.] 1853, *Verrucariaceae*, *Verrucariales*, *Eurotiomycetes*, 40 species; type: *S. clopina* (Wahlenb.) Th. Fr., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2013; classification); sequences are available.

**Stegonsporiopsis** Van Warmelo & B. Sutton 1981, *Ascomycota* genera *incertae sedis*, one species, type: *S. cenangioides* (Ellis & Rothr.) Van Warmelo & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Hong Kong, South America, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Stegonsporium Corda 1827, Stilbosporaceae, Diaporthales, Sordariomycetes, eight species, type: S. pyriforme (Hoffm.) Corda, asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Voglmayr and Jaklitsch (2008, 2014; phylogeny, taxonomy, holomorph), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; taxonomy, outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Stegophora Syd. & P. Syd. 1916, Sydowiellaceae, Diaporthales, Sordariomycetes, three species, type: S. ulmea (Fr.) Syd. & P. Syd., asexual morphs unknown, saprobes, terrestrial, North America, see Da Silva et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stegophorella Petr. 1947, Sordariomycetes genera incertae sedis, one species, type: S. lagerheimii Petr., asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stegotyphium Höhn. 1918, Dothideomycetes genera incertae sedis, two species, type: S. demudans (Rehm) Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae). Kirk et al. (2013; genus accepted), Wu et al. (2011) and Hyde et al. (2013) did not accept as Microthyriaceae, Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Steineria Zahlbr. 1906, Koerberiaceae, Peltigerales, Lecanoromycetes, four species, type: S. molybdochlaca (Nyl.) Zahlbr., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Spribille and Muggia (2013; evolutionary), Lücking et al. (2016; classification), sequences are available.

Steineropsis T. Sprib. & Muggia 2010, Pannariaceae, Peltigerales, Lecanoromycetes, one species, type: S. alaskana T. Sprib. & Muggia, lichenized, Europe, Africa, mostly along the Atlantic coast, see Spribille et al. (2010; taxonomy), Spribille and Muggia (2013; phylogenetics), Arup et al. (2014; taxonomy), Schneider et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.

Steinia Körb., 1873, Aphanopsidaceae, Pezizomycotina families incertae sedis, three species, type: S. luridescens Körb., asexual morph unknown, lichenized, terrestrial, European distribution, see Lumbsch and Huhndorf (2010; outline), Kärnefelt et al. (2012; systematic, biodiversity), Printzen et al. (2012; partial sequencing), Kirk et al. (2013; genus accepted), Czarnota and Hernik (2014; ecology), Yatsyna and Motiejūnaitė (2015; new contributions), Kondratyuk et al. (2015; molecular phylogeny), Lücking et al. (2016; classification); sequences are available.

Stellariangia Frödén, Arup & Søchting 2013, Teloschistaceae, Teloschistales, Lecanoromycetes, three species, type: S. elegantissima (Nyl.) Frödén, Arup & Søchting, lichenized, see Arup et al. (2013; taxonomy), Gayà et al. (2015; adaptations, phylogeny), Lücking et al. (2016; classification), sequences are available.

Stellatospora Tad. Ito & Nakagiri 1994, Sordariaceae, Sordariales, Sordariomycetes, one species, type: Stellatospora terricola Tad. Ito & Nakagiri asexual morph unknown, saprophytic, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: IFO H-12166, ex-type cultures of type: NBRC 32597.

Stellifraga Alstrup & Olech 1993, Ascomycota genera incertae sedis, one species, type: S. cladonicola Alstrup & Olech, asexual morph unknown, saprobes, terrestrial, Spitsbergen, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Stellomyces** Morgan-Jones, R.C. Sinclair & Eicker 1987, *Ascomycota* genera *incertae sedis*, two species, type: *S. suidafricanus* Morgan-Jones, R.C. Sinclair & Eicker, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stellopeltis** Bat. & A.F. Vital 1959, *Ascomycota* genera *incertae sedis*, two species, type: *S. philodendricola* (Bat.) Bat. & A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stellosetifera** Matsush. 1996, *Sordariomycetes* genera *incertae sedis*, one species, type: *Stellosetifera malaysiana* Matsush., assexual morph unknown, lichenized, terrestrial, worldwide, see Wicklow et al. (2011; bioactive metabolites), Wijayawardene et al. (2012, 2014, 2017; outline), cultur es and sequences are unavailable, needs generic revision.

**Stellospora** Alcorn & B. Sutton 1984, *Ascomycota* genera *incertae sedis*, two species, type: *S. appendiculellae* Alcorn & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, Phillipines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stellothyrella** Bat. & Cif. 1959, *Ascomycota* genera *incertae sedis*, two species, type: *S. graminis* (Wehm.) Bat. & Cif., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stemmatomyces** Thaxt. 1931, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *S. anoplischii* (Thaxt.) Thaxt., asexual morph unknown, biotrophic on Coleoptera (Elateridae), USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stemphylium** Wallr. (= *Pleospora* Rabenh. ex Ces. & De Not. 1863 *fide* Wijayawardene et al. 2014), *Pleosporaceae*, *Pleosporales*, *Dothideomycetes*, 56 species, type: *S. botryosum* Sacc., hyphomycetous, sexual morph formerly known in *Pleospora*, saprobes or pathogens in terrestrial habitats, worldwide, see Seifert et al. (2011; morphology), Zhang et al. (2012; taxonomy, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Ariyawansa et al. (2015; taxonomy, phylogeny), Rossman et al. (2015; nomenclature), Crous et al. (2016; new species, phylogeny), sequences are available.

**Stenella** Syd. 1930, *Teratosphaeriaceae*, *Capnodiales*, *Dothideomycetes*, c. 140 species, type: *S. araguita* Syd., hyphomycetous, saprobes, pathogens, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2014; phylogeny), cultures and sequences are available, needs generic revision.

**Stenhammarella** Hertel 1967, *Lecideaceae*, *Lecideales*, *Lecanoromycetes*, one species, type: *S. turgida* (Ach.) Hertel, asexual morph unknown, lichenized, terrestrial, Europe, Central Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures available for the type: Stetur3861.

**Stenocarpella** Syd. & P. Syd. 1917, *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*, two species, type: *S. zeae* Syd. & P. Syd., coelomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Wicklow et al. (2011; bioactive metabolites), Wijayawardene et al. (2012, 2016; phylogeny, taxonomy), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for the type: NRRL:13609.

morph unknown, saprobes, terrestrial, Australasia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stenocladiella** Marvanová & Descals 1987, *Ascomycota* genera incertae sedis, one species, type: *S. neglecta* (Marvanová & Descals) Marvanová & Descals, hyphomycetous, sexual morph unknown, saprobes, aquatic, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stenocybe** Nyl. ex Körb. 1855, *Mycocaliciaceae, Mycocaliciales, Eurotiomycetes*, 14 species, type: *S. byssacea* (Fr.) Nyl. ex Körb., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type.

**Stenospora** Deighton 1969, *Ascomycota* genera incertae sedis, one species, type: *S. neglecta* (Marvanová & Descals) Marvanová & Descals, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stephanocyclos** Hertel 1983, *Lecideaceae, Lecideales, Lecanoromycetes*, one species, type: *S. henssenianus* Hertel; lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Schmull et al. (2011; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Stephanonectria** Schroers & Samuels 1999, *Bionectriaceae, Hypocreales, Sordariomycetes*, two species, type: *S. keithii* (Berk. & Broome) Schroers & Samuels, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Stephanotheca** Syd. & P. Syd. 1914, *Dothideomycetes* genera incertae sedis, four species, type: *S. micromera* Syd. & P. Syd., asexual morph unknown, foliar epiphytes, terrestrial, India, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jayawardena et al. (2014; morphology), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, holotype of the species S-F6581.

**Stephanembruneria** R.F. Castañeda 1988, *Ascomycota* genera incertae sedis, one species, type: *S. elegans* R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Stephensia** Tul. & C. Tul. 1845, *Pyronemataceae, Pezizales, Pezizomycetes*, seven species, type: *S. bombycina* (Vittad.) Tul., asexual morph unknown, hypogeous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wang et al. (2016; DNA, phylogeny), sequences are available.

**Stereocaulon** Hoffm. 1795. *Stereocaulaceae, Lecanorales, Lecanoromycetes*, 140 species, type: *S. paschale* (L.) Hoffm., asexual morph unknown, lichenized, terrestrial, worldwide, see Khare et al. (2009; taxonomy), Morita et al. (2009; antimitotic study), Seo et al. (2009; bioactivity study), Wedin et al. (2009; molecular), Fryday (2010; taxonomy), Hafellner et al. (2010; biodiversity), Huang (2010; environment), Lumbsch and Huhndorf (2010; outline), Melechin (2010; taxonomy), Goel et al. (2011; antifungal study), Hansen (2011; taxonomy), Ismed et al. (2012; chemistry), Bhattarai et al. (2013; bioactivity study), Kim et al. (2013; antimicrobial study), Kirk et al. (2013; genus accepted), Rincon-Espitia et al. (2013; taxonomy), Motiejūnaitė (2013; taxonomy), Singh et al. (2013; physiology), Högnabba et al. (2014; phylogeny), Meunier et al. (2014; environment), Nayaka and Saxena (2014;
physiology), Oset and Kukwa (2014; typification), Ranković et al. (2014; bioactivity), Oset (2015; taxonomy), Doering et al. (2016; taxonomy), Kossowska and Szczepańska (2016; taxonomy), Lücking et al. (2016; classification), Shukla et al. (2016; amino acids), sequences are available.

**Stereocrea** Syd. & P. Syd. 1917, *Clavicipitaceae, Hypocreales, Sordariomycetes*, one species, type: *S. schizostachyi* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, paleotropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: CUP 067858, cultures and sequences are unavailable.

**Stereospheria** Kirschst. 1939, *Sordariomycetes* genera *incertae sedis*, two species, type: *S. phloeophila* Kirschst., widespread in temperate regions, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016), one sequence is available.

**Sterigmatobryts** Oudem. 1886, *Pleurotheciaceae, Pleurotheciales, Sordariomycetes*, three species, type: *S. elata* (Sacc.) Oudem., hyphomycetous, sexual morph unknown, saprobes, terrestrial, north temperate, see Réblová and Seifert (2011; epitypification, holomorph), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Réblová et al. (2016; phylogeny), cultures available but lacks for the type.

**Stevensonula** Petr. 1952, *Ascomycota* genera *incertae sedis*, one species, type: *S. ciliata* Petr., coleomycetous, sexual morph unknown, saprobes, terrestrial, USA, New Caledonia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stichomyces** Thaxt. 1901, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *S. conosomatis* Thaxt., asexual morph unknown, biotrophic on Coleoptera (Staphylinidae), Africa, Europe, USA, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stictis** Pers. 1800, *Stictidaceae, Ostropales, Lecanoromycetes*, four species, type: *S. radiata* (L.) Pers., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures available for type: AFTOL-ID 398, MW6493, P164, F907E267.

**Stictopatella** Höhn. 1918, *Ascomycota* genera *incertae sedis*, one species, type: *S. euonymi* (Desm.) Höhn., coleomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stictosepta** Petr. 1964, *Ascomycota* genera *incertae sedis*, one species, type: *S. cupularis* Petr., coleomycetous, sexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stictospora** Cif., 1957, *Stictidaceae, Ostropales, Ostropomycetes*, one species, type: *S. oleae* (De Not.) Cif., asexual morph unknown, lichenized, terrestrial, see Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stigmatellina** Bat. & H. Maia 1960, *Ascomycota* genera *incertae sedis*, one species, type: *S. epilobii* Bat. & H. Maia, coleomycetous, sexual morph unknown, saprobes, terrestrial, Belgium, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stigmatochromata** Marbach, 2000, *Caliciaceae, Caliciales, Lecanoromycetes*, nine species, type: *S. epimarta* (Nyl.) Marbach, asexual morph unknown, lichenized, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Cavalcante (2012; comparative studies), Gaya et al.
Stigmatodothis Syd. & P. Syd. 1914. Dothideomycetes genera incertae sedis, one species, type: *S. palawanensis* Syd. & P. Syd., asexual morph unknown, saprobes, terrestrial, Philippines, Australia, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Micropeltidaceae), Hyde et al. (2013; did not recognize this genus as in Micropeltidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline) cultures and sequences are unavailable, needs generic revision.

Stigmatomyces H. Karst. 1869, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, 145 species, type: *S. baeri* (Knoch) Peyritsch, asexual morph unknown, biotrophic on Diptera, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossi and Leonardi (2012, most recent species descriptions Africa), cultures and sequences are available but lacks for the type.

Stigmatophragmia Tehon & G.L. Stout 1929, Dothideomycetes genera incertae sedis, one species, type: *S. sassafrascola* Tehon & G.L. Stout, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Micropeltidaceae), Hyde et al. (2013; did not recognize this genus as in Micropeltidaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Stigmatula (Sacc.) Syd. & P. Syd. 1901, Phyllachoraceae, Phyllachorales, Sordariomycetes, ten species, type: *S. sutherlandiae* (Kalchbr. & Cooke) Syd. & P. Syd., saprobes, temperate, see Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stigmea Fr. 1836, Ascomycota genera incertae sedis, one species, type: *S. submaculans* Mont., saprobes, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stigmella Lév. 1842, Ascomycota genera incertae sedis, 28 species, type: *S. dryina* (Corda) Lév., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wang et al. (2012; new species, China), Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stigmidium Trevis. 1860, Mycosphaerellaceae, Capnodiales, Dothideomycetes, one species, type: *S. schaereri* (A. Massal.) Trevis., lichenicolous or lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

Stigmochora Theiss. & Syd. 1914, Phyllachoraceae, Phyllachorales, Sordariomycetes, twelve species, type: *S. controversa* (Starbäck) Theiss. & Syd., saprobes, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Stigmopeltis Syd. 1927, Ascomycota genera incertae sedis, two species, type: *S. rupalae* Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stilbella Lindau 1900, Hypocreales genera incertae sedis, Sordariomycetes, four species, type: *S. fimetaria* (Pers.) Lindau, hyphomycetous, sexual morph unknown, from soil and dung, saprobes, worldwide, see Mazzaferro et al. (2010; secondary metabolites), Seifert et al. (2011; morphology), Summerbell et al. (2011; phylogeny), Wijayawardene et al. (2012, 2017;
**Stilbellula** Boedijn 1951, *Ascomycota* genera incertae sedis, one species, type: *S. pallida* Boedijn, hyphomycteous, sexual morph unknown, saprobes, terrestrial, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Stilbocrea** Pat. 1900, *Bionectriaceae*, *Hypocreales*, *Sordariales*, two species, type: *S. dussii* Pat., asexual morph hyphomycteous, saprobes, terrestrial, worldwide, see Sung et al. (2008; DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type.

**Stilbodendron** Syd. & P. Syd. 1916, *Ascomycota* genera incertae sedis, one species, type: *S. camerunense* Syd. & P. Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stilbohypoxylon** Henn. 1902, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, ten species, type: *S. moelleri* Henn., asexual morph unknown, terrestrial, saprobes, subtropical, see Hsieh et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Stilbopeziza** Speg. 1908, *Helotiales* genera incertae sedis, *Leotiomyctes*, one species, type: *S. yerbae* Speg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stilbophoma** Petr. 1942, *Ascomycota* genera incertae sedis, one species, type: *S. microspora* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, India, Africa, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stilbospora** Pers. 1794 (= *Prosthecium* Fresen. 1852 fide Voglmayr and Jaklitsch 2014), *Stilbosporaceae*, *Diaporthales*, *Sordariomycetes*, 20 species, type: *S. macrosperma* Pers., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Voglmayr and Jaklitsch (2008, 2014; phylogeny, taxonomy, holomorph), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Stioclettia** Dennis 1975, *Diaporthales* genera incertae sedis, *Sordariomycetes*, one species, type: *S. luzulina* Dennis, asexual morph unknown, saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stirtonia** A.L. Sm. 1926, *Arthoniaceae*, *Arthoniales*, *Arthoniomycetes*, 25 species, type: *S. obvallata* A.L. Sm., lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are available.

**Stirtoniella** D.J. Galloway, Hafellner & Elix 2005, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *S. kelica* (Stirt.) D.J. Galloway, Hafellner & Elix, asexual morph unknown, lichenized, terrestrial, Australasia, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), cultures and sequences are unavailable.

**Stomatogene** Theiss. 1917, *Perisporiopsidaceae*, *Dothideomycetes* families incertae sedis, two species, type: *S. agaves* (Ellis & Everh.) Theiss., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013;
genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Stomatogenella** Petr. 1955, *Sordariomycetes genera incertae sedis, incertae sedis*, two species, type: *Stomatogenella mirabilis* Petr., asexual morph unknown, saprobes, terrestrial, North Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Stomiopeltis** Theiss. 1914, *Micropeltidaceae, Microthyriales, Dothideomycetes*, 25 species, type: *S. aspera* (Berk.) Theiss., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for type, needs generic revision.

**Stomiopeltis** Bat. & Cavalc. 1963, *Micropeltidaceae, Microthyriales, Dothideomycetes*, two species, type: *S. linacearum* Bat. & Cavalc., asexual morph unknown, saprobes, terrestrial, Brazil, New Mexico, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Hyde et al. (2013; accepted as a genus in *Micropeltidaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Stomiotheca** Bat. 1959, *Micropeltidaceae, Microthyriales, Dothideomycetes*, two species, type: *S. amazonensis* Bat., asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Microthyriaceae*), Wu et al. (2011; new combination), Hyde et al. (2013; accepted as a genus in *Microthyriaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Stouffera** Kovács & Trappe 2011, *Pezizaceae, Pezizales, Pezizomycetes*, four species, type: *S. longii* (Gilkey) Kovács, Trappe, asexual morph unknown, hypogeous, terrestrial, Argentina, USA, see Kovács et al. (2011; taxonomy, phylogeny), sequences and cultures are unavailable.

**Strangospora** Körb. 1860, *Strangosporaceae, Pezizomycotina* families incertae sedis, nine species, type: *S. pinicola* (A. Massal.) Körb., asexual morph unknown, lichenized, terrestrial distribution, Reeb et al. (2004; sequencing), Lumbsch and Huhndorf (2010; outline), Stepanchikova et al. (2011; new records), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; phylogeny), Rogers et al. (2015; lichen monitoring), Urbanavichene and Zapovednik (2015; new findings), Lücking et al. (2016; classification), Urbanavichus et al. (2016; new records), sequences are available.

**Strasseriopsis** B. Sutton & Tak. Kobay. 1970, *Ascomycota* genera *incertae sedis*, one species, type: *S. carpophila* Bres. & Sacc., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Stratiphoromyces** Goh & K.D. Hyde 1998, *Ascomycota* genera *incertae sedis*, one species, type: *S. brunneisporus* Goh & K.D. Hyde, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Strattonia** Cif. 1954, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, nine species, type: *S. tetraspora* (R. Stratton) Cif., asexual morph unknown, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Sordariales generator incertae sedis*), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.


Strelitziana  Arzanlou & Crous 2006 *Strelitzianaceae, Chaetothyriales, Eurotiomycetes*, seven species, type: *S. africana* Arzanlou & Crous, hyphomycetous, sexual morph unknown, saprobes, cosmopolitan, see Crous et al. (2010, 2015; new species, phylogeny), Zhang et al. (2010; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline), cultures and sequences are available.

Streptotinia  Whetzel 1945 (= *Streptobotrys* Hennebert 1973 *fide* Johnston et al. 2014), *Sclerotiniaceae, Helotiales, Leotiomycetes*, three species, type: *S. arisaematis* Whetzel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

Striatibotrys  L. Lombard & Crous 2016 *Stachybotriaceae, Hypocreales, Sordariomycetes*, six species, type: *S. eucylindrospora* (D.W. Li) L. Lombard & Crous, asexual morph hyphomycetous, saprobes, from soil, terrestrial, cosmopolitan, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), ex-type culture of the type: MUCL 9483.

Striaticonidium  L. Lombard & Crous 2016 *Stachybotriaceae, Hypocreales, Sordariomycetes*, four species, type: *S. cinctum* (Corda) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), epitype, ex-epitype culture of the type: CBS H-22471, CBS 932.69.

Striatocechosporá D.Q. Zhou, K.D. Hyde & B.S. Lu. 2000 *Xylariaceae, Xylariales, Sordariomycetes*, one species, type: *S. bambusae* D.Q. Zhou, K.D. Hyde & B.S. Lu., asexual morph unknown, on dead bamboo culm, see Lumbsch and Huhndorf (2010; outline), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Striatosphaeria  Samuels & E. Müll. 1979 *Chaetosphaeriales, Chaetosphaeriaceae, Sordariomycetes*, one species, type: *S. codineaeaphora* Samuels & E. Müll., asexual morph unknown, saprobes, Central and South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for the type.

Strickeriá Körb. 1865 *Sporocadaceae, Xylariales, Sordariomycetes*, ten species, type: *S. kochii* Körb., asexual morph coelomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Sordariales genera incertae sedis), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Jaklitsch et al. (2016; taxonomy, phylogeny, holomorph), cultures available for the type: C149, C138.

Strigopodia  Bat. 1957 *Euantennariaceae, Dothideomycetes* families incertae sedis, two species, type: *S. piceae* Bat., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Hyde et al. (2013; accepted as a genus in Euantennariaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.
**Strigula** Fr. 1823, *Strigulaceae, Strigulales, Dothideomycetes*, one species, type: *S. smaragdula* Fr., asexual morph unknown, lichenized, fociolous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Nelsen et al. (2011; DNA, phylogeny), Hyde et al. (2013; accepted as a genus in *Strigulaceae*), Jayalal et al. (2013; DNA), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Lücking et al. (2016; classification), sequences are available.

**Striosphaeropsis** Verkley & Aa 1997, *Ascomycota* genera *incertae sedis*, one species, type: *S. mirabilis* Verkley & Aa, coelomycetous, sexual morph unknown, saprobes, terrestrial, Papua New Guinea, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Strobiloscypha** N.S. Weber & Denison 1995, *Sarcosomataceae, Pezizales, Pezizomycetes*, two species, type: *S. keliae* N.S. Weber & Denison, asexual morph unknown, saprobes, terrestrial, Montenegro, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Perić et al. (2013; new species, DNA, phloheny), sequences are available.

**Stromaster** Höhn. 1930, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, twelve species, type: *S. tuberculatus* (Pat.) Höhn., saprobes, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Stromatella** Henssen 1989, *Lichinaceae, Lichinales, Lichinomycetes*, one species, type: *S. bermudana* (Riddle) Henssen, lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Stromatinia** W.B. Cooke 1952, *Ascomycota* genera *incertae sedis*, one species, type: *S. cerebriformis* W.B. Cooke, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequence available for the type: Z73801 (ITS), needs generic revision.

**Stromatocrea** W.B. Cooke 1952, *Ascomycota* genera *incertae sedis*, one species, type: *S. caraganae* (Höhn.) Jaklitsch & Voglmayr (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline, treated as a genus in *Bionectriaceae* or *Hypocreaceae*), cultures and sequences are unavailable, needs generic revision.

**Stromatographium** Höhn. 1907, *Ascomycota* genera *incertae sedis*, one species, type: *S. stromaticum* (Berk.) Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, pantropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Stromatonecrosispora** S.C. Jong & E.E. Davis. 1973, *Xylariaceae, Xylariales*, *Sordariomycetes*, one species, type: *S. phoenix* S.C. Jong & E.E. Davis., tropical, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Senanayake et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), a sequence is available.

**Stromatopogon** Zahlbr. 1897, *Ascomycota* genera *incertae sedis*, three species, type: *S. baldwinii* Zahlbr., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Stromatopycnis  A.F. Vital 1956, Ascomycota genera incertae sedis, one species, type: *Stromatopycnis rosetum* A.F. Vital, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stromatoseptoria Quaedv., Verkly & Crous 2013, Mycosphaerellaceae, Capnodiales, Dothideomycetes, one species, type: *S. castaneicola* (Desmazières) Quaedvlieg, Verkly & Crous, coelomycetous, sexual morph unknown, pathogens, terrestrial, Austria, France, Netherlands, one species, see Quaedvlieg et al. (2013; morphology, phylogeny), holotype PC0084574, reference specimens: CBS H-21200, culture CBS 102322; requires epitypification.

Stromatostyosanus Höhn. 1919, Ascomycota genera incertae sedis, three species, type: *S. caprifoliorum* (Desm.) Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stromatothecia D.E. Shaw & D. Hawksw. 1971, Odontotemataceae, Ostropales, Lecanoromycetes, one species, type: *S. nothofagi* D.E. Shaw & D. Hawksw., on bark, Papua New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), cultures and sequences are unavailable, holotype of type: K(M)-IMI 151852a.

Stromatothelium Trevis. 1861, Pyrenulales genera incertae sedis, Eurotiomycetes, four species, need typification, hyphomycetous, sexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Strongylothallus Bat. & Cif. 1959, Ascomycota genera incertae sedis, one species, type: *S. scutatus* Bat., Cif. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Strossmayeria Schulzer 1881 (= Pseudospiropes M.B. Ellis 1971 fide Johnston et al. 2014), Helotiales, Helotiales, Eurotiomycetes, 16 species, type: *S. rackii* Schulzer, asexual morph hyphomycetous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hustad and Miller (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequences are available but lacks for the type.

Stuartella Fabre 1879, Dothideomycetes, incertae sedis, incertae sedis, three species, type: *S. formosa* Fabre, asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Stygomiycetes Coppins & S.Y. Kondr. 1995, Ascomycota genera incertae sedis, one species, type: *S. galliformis* Coppins & S.Y. Kondr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Tasmania, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: HO 34310, cultures and sequences are unavailable, needs generic revision.

Stylaspergillus B. Sutton, Alcorn & P.J. Fisher 1982, Ascomycota genera incertae sedis, one species, type: *S. laxus* B. Sutton, Alcorn & P.J. Fisher, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Stylodothis Arx & E. Müll. 1975, Dothideaceae, Dothideales, Dothideomycetes, two species, type: *S. puccinioides* (DC.) Arx & E. Müll., asexual morph unknown, saprobes, terrestrial, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),
Thambugala et al. (2014b; accepted as a genus in Dothideaceae), Wijayawardene et al. (2014; outline), sequences are available.

**Subbaromycetes** Hesselt. 1953, Ophiostomataceae, Ophiostomatales, Sordariomycetes, two species, type: *S. splendens* Hesselt., asexual morph unknown, saprobes, North America, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), sequences are available, needs generic revision.

*Subbaroteraspora* Quaedvlieg & Crous 2014, Teratosphaeriaceae, Capnodiales, Dothideomycetes, three species, type: *S. suberosa* (Crous, F.A. Ferreira, Alfenas & M.J. Wingf.) Quaedvlieg & Crous asexual morph unknown, pathogens, Australia, Brazil, Uruguay, see Quaedvlieg et al. (2014; morphology, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), sequences are available, needs generic revision.

**Suberoteratosphaeria** Quaedvlieg & Crous 2014, Teratosphaeriaceae, Capnodiales, Dothideomycetes, type: *S. tectona* Doilom & K.D. Hyde, saprobes, terrestrial, see Doilom et al. (2016; taxonomy), ex-type strains of type: MFLUCC 12-0393, MKT 066, ICMP 21258; holotype of type: MFLU 15-3560.

*Subhysteropycnis* Wedin & Hafellner, 1998, Ascomycota genera incertae sedis, one species, type: *S. maculiformans* Wedin & Hafellner, lichenized, lichenicolous, terrestrial, restricted distribution, see Hyde et al (2011; outline), Kirk et al. (2013; genus accepted), Zhurbenko and Tugi (2013; records), Wijayawardene et al. (2017; outline), sequences are unavailable, needs generic revision.

**Submersisphaeria** K.D. Hyde 1996, Annulatascaceae, Annulataales, Sordariomycetes, five species, type: *S. aquatica* K.D. Hyde, asexual morph unknown, terrestrial, saprobes, aquatic, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of type: BRIP 22743, one putative strain is available of *S. aquatica*.

*Subplenodomus* Gruyter, Aveskamp & Verkley 2012, Leptosphaeriaceae, Pleosporales, Dothideomycetes, type: *S. violicola* (P. Syd.) Gruyter, Aveskamp & Verkley coelomycetous, saprobes, terrestrial, worldwide, see de Gruyter et al. (2012; morphology; phylogeny), Wijayawardene et al. (2014, 2017; outline), Ariyawansa et al. (2015; phylogeny), cultures and sequences are available.

**Subramaniomyces** Varghese & V.G. Rao 1980, Beltraniaceae, Xylariales, Sordariomycetes, three species, type: *S. indicus* Varghese & V.G. Rao, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

**Subramaniula** Arx 1985, Chaetomiaceae, Sordariales, Sordariomycetes, four species, type: *S. thielavioides* (Arx, Mukerji & N. Singh) Arx, asexual morph unknown, saprobes, opportunistic pathogen on human, terrestrial, India, South Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Ahmed et al. (2015; new species, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 560.84, CBS 122.78.

**Subulispora** Tubaki 1971, Ascomycota genera incertae sedis, eight species, type: *S. procura* Tubaki, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, tropical, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

**Sugiyamaella** Kurtzman & Robnett 2007, Trichomonascaceae, Saccharomycetales, Saccharomycetes, 20 species, type: *S. smithiae* (Giménez-Jurado) Kurtzman & Robnett, asexual reproduction is by multilateral budding and through formation of blastoconidia,
saprophytic, insect frass in trees, soil, worldwide, Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

سورايجامارىمنيس ى.ى. تا و بالازوك 1989, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, one species, type: S. orruissetii ى.ى. تا و بالازوك, asexual morph unknown, biotrophic, only known from Clidicus formicarius (Coleoptera: Scydmaenidae), Malaysian Borneo, a second species on Clidicus laticeps (from India) is suggested but not formally described because of lack of material, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

سوروميمازيس م. بلاكويل و كروتزمان 2016, Debaryomycetaceae, Saccharomycetales, Saccharomycetes, 24 species, type: S. tanzawaensis (نادكاس و أيثو) م. بلاكويل و كروتزمان, asexual reproduction is by multilateral budding, saprophytic, soil, insects, moss, gum exudates of black cherry, maize kernels, rotted mushroom, worldwide, see Kurtzman et al. (2016; taxonomy, phylogeny), sequences are available.

سوركاري بستريك 1971, Parmeliaceae, Lecanorales, Lecanoromycetes, five species, four variety, type: S. sulcata (لوپ) بستريك, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2012; chemistry), Kirk et al. (2013; genus accepted), Myllys et al (2014; taxonomy), Wang et al (2014; taxonomy), Hisayoshi et al. (2015; molecular), Lücking et al. (2016; classification); sequences are available.

سوركاستريستورما أ.وى راملي 2005, Calosphaeriaceae, Calosphaeriales, Sordariomycetes, one species, type: Sulcatistroma nolinae A.وى راملي, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

سوركاستريستورما ه. هارادا 1999, Pyrenulaceae, Pyrenulales, Eurotiomycetes, four species, type: S. stauropora (توك.) ه. هارادا, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Aptroot (2012; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), cultures and sequences are unavailable.

سوركاستروبيوم فوكماسك و ك.دى هايد 2015, Halotiellaceae, Pleosporales, Dothideomycetes, one species, type: S. thailandicum فوكماسك و ك.دى هايد, asexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 11-0243, MFLUCC 12-0004.

سورعايكلوكا فري و ك.دى هايد 2004, Sordariomycetes genera incertae sedis, two species, type: S. bactrodesmiella فري و ك.دى هايد, asexual morph unknown, saprobes, marine, Brunei, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: HKU (M) 15201, cultures and sequences are unavailable, needs generic revision.

سوركوريسيز أكانا و ناكانجيري و تاد. يتو 2001, Xylariaceae, Xylariales, Sordariomycetes, one species, type: S. rugispora أكانا, ناكانجيري و تاد., sexual morph unknown, endophytic on mangroves, saprophytic, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: IFO H-12236, ex-type cultures of type: NBRC 33167.

S. S. Ahmad 1961, Ascomycota genera incertae sedis, three species, type: S. gaubae (پتر.) S. Ahmad, coelomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australasia, tropical, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.
Suttonia H.C. Evans 1984, *Ascomycota* genera incertae sedis, one species, type: *S. guatemalitica* H.C. Evans, coelomycetous, sexual morph unknown, saprobes, terrestrial, Guatemal, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.


Swampomyces Kohlm. & Volkm.-Kohlm. 1987, *Etheiophoraceae*, *Torpedosporales*, *Sordariomycetes*, two species, type: *S. armeniacus* Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, mangroves, Australia, Belize, Brunei, Egypt, North Sumatra, Papua New Guinea, Philippines, Saudi Arabia, South Africa, Thailand, see Besituto et al. (2010; diversity), Sakayaroj et al. (2011; diversity), Abdel-Wahab et al. (2014; diversity), Jones et al. (2014, 2015; outline, phylogeny, morphology, re-classification), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Syamithabejaa Subram. & Natarajan 1976, *Ascomycota* genera incertae sedis, one species, type: *S. girisa* Subram. & Natarajan, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Sydowia Bres., 1895, *Dothideaceae*, *Dothisiales*, *Sordariomycetes*, 19 species, type: *S. gregaria* Bres., asexual morph coelomycetous, parasitic or saprobes on conifer plants or branches and wood, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Thambugala et al. (2014b; taxonomy), Wijayawardene et al. (2014; outline), holotype of type: S-F6473, cultures and sequences are available.

Sydowiella Petr. 1923, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, four species, type: *S. Fenestrans* (Duby) Petr., asexual morphs unknown, saprobes, terrestrial, Europe, North America, see Marinowitz et al. (2008; new species), Lumbsch and Huhndorf (2010; outline), Kruys and Castlebury (2012; phylogeny), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 125530.

Sylvicollaea Cif. 1963, *Ascomycota* genera incertae sedis, one species, type: *S. termitaria* Cif., coelomycetous, sexual morph unknown, on termites, terrestrial, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Symbiotaphrina Kühlw. & Juritzia ex W. Gams & Arx 1980, *Ascomycota* genera incertae sedis, two species, type: *S. Buchneri* Griibner ex W. Gams & Arx, coelomycetous, sexual morph unknown, on termites, terrestrial, Asia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Symphaeophyuma Specg. 1912, *Parmulariaceae*, *Dothideomycetes* families incertae sedis, one species, type: *S. Subtropicale* Specg., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Symphaster Theiss. & Syd. 1915, *Dothideomycetes* genera incertae sedis, incertae sedis, one species, type: *S. Gesneraceae* (Henn.) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, South Africa, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.
Symphyosirinia E.A. Ellis 1956 (= Symphyosirella Seifert 2009 fide Johnston et al. 2014), Helotiaeae, Helotiales, Leotiomycetes, six species, type: S. gali E.A. Ellis, asexual morph formerly known in Symphyosirella, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Symphysos Bat. & Cavalc. 1967, Ascomycota genera incertae sedis, one species, type: S. sapindaceifolii Bat. & Cavalc., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Symplectomyces Thaxt. 1908, Laboulbeniaeae, Laboulbeniales, Laboulbeniomycetes, one species, type: S. vulgaris (Thaxt.) Thaxt., asexual morph unknown, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

Symphyosira W.B. Kendr. 1958, Ascomycota genera incertae sedis, one species, type: S. acicola W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Cuba, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are available (unpublished), needs generic revision.

Symplectomyces W.B. Kendr. 1958, Ascomycota genera incertae sedis, one species, type: S. acicola W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

Symplectomyces Voglmayr 1997, Ascomycota genera incertae sedis, one species, type: S. globosa Voglmayr, hyphomycetous, sexual morph unknown, saprobes, aquatic, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2016; outline), holotype of the type: WU 17019, cultures and sequences are unavailable, needs generic revision.

Symphycos R.C. Sinclair & Boshoff 1997, Ascomycota genera incertae sedis, one species, type: S. capensis R.C. Sinclair & Boshoff, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2016; outline), holotype of the type: PREM 55315, cultures and sequences are unavailable, needs generic revision.

Symphycos R.K. Benj. 1973, Laboulbeniaeae, Laboulbeniales, Laboulbeniomycetes, one species, type: S. pentacellularis R.K. Benj., asexual morph unknown, biotrophic on Coleoptera (Tenebrionoidea), Papua-New Guinea, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Symphycos Crous & Seifert 2007, Sympoventuriaceae, Venturiales, Dothideomycetes, one species, type: S. vulgaris (Thaxt.) Thaxt., asexual morph unknown, worldwide, see Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; phylogeny), Hyde et al. (2013; accepted as a genus in Sympoventuriaceae), Wijayawardene et al. (2014; outline), sequences are available.

Synalissa Fr. 1825, Lichiniaeae, Lichiniales, Lichinomycetes, 39 species, type: S. ramulosa (Bernh.) Körb., asexual morph unknown, lichenized, terrestrial, see Dietrich et L. (2010; taxonomy), Eichler et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Schultz and Moon (2011; taxonomy), Paukov and Teptina (2012; new record), de la Rosa (2013; ecology), Kirk et al. (2013; genus accepted), Stordeur et al. (2015; new record), Lücking et al. (2016; classification), sequences unavailable.
**Synandromyces** Thaxt. 1912, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, ten species, type: *S. telephani* Thaxt., no asexual state, biotrophic, hosts are Biphyllidae, Cryptophagidae, Cucujidae, Nitudulidae, and Tenebrionidae (Coleoptera: Cucujiformia), widespread but not in Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Synaptomyces** Thaxt. 1912, *Ceratomyctaceae, Laboulbeniales, Laboulbeniomycetes*, one species, type: *S. argentinus* Thaxt., no asexual state, biotrophic, only known from *Hydrochara* sp. [as *Hydrocharis*] (Coleoptera, Hydrophilidae), Argentina, two more species are suggested but not formally described, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable.

**Synaptoascus** Cain 1957, *Helminthosphaeriaceae, Chaetosphaeriales, Sordariomycetes*, four species, type: *S. petrakii* Cain, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Miller et al. (2014; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), sequences are available but lacks for the type.

**Synarthothelium** Müll. Arg. 1891, *Arthoniaceae, Arthoniales, Arthoniomycetes*, three species, type: *S. bicolor* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Menezes et al. (2013; new species), Joseph and Sinha (2015; taxonomy), Lücking et al. (2016; classification, treated as *Arthoniales* genera *incertae sedis*), sequences are unavailable.

**Synarthronia** C. Lumbsch and Huhndorf (2010; outline), Ertz and Tehler (2011; phylogeny), Joshi et al. (2011; taxonomy), Lücking et al. (2016; classification), Kirk et al. (2013; genus accepted), sequence are unavailable but lacking for the type.

**Syncarpella** Sparrius 2009, *Arthoniales* genera *incertae sedis*, *Arthoniomycetes*, one species, type: *S. sipmanianum* Sparrius, lichenized, terrestrial, Venezuela, see Sparrius (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), holotype B Sipman 26697, cultures and sequences are unavailable.

**Syncarpella** Theiss. & Syd. 1915 (= *Syntholus* A.W. Ramaley & M.E. Barr 1997), *Cucurbitariaceae, Pleosporales, Dothideomycetes*, type: *Syncarpella tumefaciens* (Ellis & Harkn.) Theiss. & Syd., asexual morph coelomycetous, saprobes, terrestrial, cosmopolitin, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Cucurbitariaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), in here we propose to consider *Syntholus* as a synonym of *Syncarpella*, ex-holotype type strains of type: NY, 1677.


**Synchaetomella** Decock & Seifert 2005, *Chaetomellaceae, Helotiales, Leotiomycetes*, three species, type: *S. lunatospora* Decock, G. Delgado & Seifert, hyphomycetous, saprobes, terrestrial, Brazil, Singapore, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Crous et al. (2012; taxonomy), Fiuza et al. (2015c; taxonomy), sequences are available for two species, compare with *Chaetomella, Sphaerographium*, holotype of type: MUCL 43804.

**Synchrononoblastia** Uecker & F.L. Caruso 1988, *Ascomycota* genera *incertae sedis*, one species, type: *S. crypta* Uecker & F.L. Caruso, coelomycetous, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Syncladium** Rabenh. 1859, *Ascomycota* genera *incertae sedis*, one species, type: *S. nietneri* Rabenh., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see
Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Synnemacrodictys** W.A. Baker & Morgan-Jones 2009, _Ascomycota_ genera _incertae sedis_, one species, type: _S. stilboidea_ (J. Mena & Mercado) W.A. Baker & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Synnemadiella** Crous & M.J. Wingf. 2016, _Xylariales_ genera _incertae sedis_, one species, type: _S. eucalypti_ Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Crous et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22886, CPC 27637.

**Synnemapastaloides** T. Handa & Y. Harada 2004, _Xylariales_ genera _incertae sedis_, _Sordariomycetes_, one species, type: _S. rhododendri_ T. Handa & Y. Harada, coelomycetes, sexual morph unknown, leaves and twigs of _Rhododendron brachycarpum_, Japan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Synnematomyces** Kobayasi 1981, _Ascomycota_ genera _incertae sedis_, one species, type: _S. capitatus_ Kobayasi, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequences are available (unpublished), needs generic revision.

**Synnemella** N.K. Rao, Manohar. & Goos 1989, _Ascomycota_ genera _incertae sedis_, two species, type: _S. hyalospora_ N.K. Rao, Manohar. & Goos, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Crous et al. (2016; new species, phylogeny), cultures and sequences are available, needs generic revision.

**Synostomina** andina Petr. 1949, _Ascomycota_ genera _incertae sedis_, one species, type: _S. andina_ Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Syphosphaera** Dumort. 1822, _Ascomycota_ genera _incertae sedis_, one species, type: _S. coronata_ Dumort., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Syrropeltis** Bat., J.L. Bezerra & Matta 1964, _Dothideomycetes_ genera _incertae sedis_, one species, type: _S. xylopiae_ Bat., J.L. Bezerra & Matta, asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Syspastospora** P.F. Canon & D. Hawksw. 1982, _Cordycipitaceae_, _Hypocreales_, _Sordariomycetes_, one species, type: _S. parasitica_ (Tul.) P.F. Cannon & D. Hawksw., fungicolous, widespread, terrestrial, see Lumbsch and Huhndorf 2010; outline, accepted as a genus in _Hypocreaceae_), Kirk et al. (2013; genus accepted), cultures and sequences are available, holotype of type: ? PC.
**Systremmopsis** Petr. 1923, *Ascomycota* genera incertae sedis, one species, type: *S. ribesia* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Szczawinska** A. Funk, 1984, *Pilocarpaceae*, *Lecanorales*, *Lecanoromycetes*, five species, type: *S. tsugae* A. Funk, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Øvstedal and Gremmen (2010; new species), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification); sequences are unavailable.

**Taeniola** S. Hughes 1958, *Kirschsteiniotheliaceae*, *Dothideomycetes* family incertae sedis, c. 40 species, type: *T. exilis* (P. Karst.) S. Hughes, sexual morph unknown, saprophytic, endophytic, lichenicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Ertz et al. (2016; phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

**Taeniolina** M.B. Ellis 1976, *Ascomycota* genera incertae sedis, six species, type: *T. centaurii* (Fuckel) M.B. Ellis, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Prasher and Verma (2014; new species, India), Zhang et al. (2014; new species, China), cultures and sequences are unavailable, needs generic revision.


**Taiwanascus** Sivan. & H.S. Chang 1997, *Niesliaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *T. tetrasporus* Sivan. & H.S. Chang asexual morph unknown, saprobes, lignonicolous, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rajeshkumar et al. (2013; new species), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: IMI 364835, cultures and sequences are unavailable.


**Talaromyces** C.R. Benj. 1955 (= *Erythrogynnotheca* Yaguchi & Udagawa; = *Paratalaromyces* Matsush.; = *Penicillium* Link subgenus *Biverticillium* Dierckx; = *Penicillium* Link subgenus *Biverticillata-Symmetrica* Thom; = *Sagenoma* Stolk & G.F. Orr (*fide* Samson et al. 2011), *Trichocomaceae*, *Eurotiales*, *Eurotiomycetes*, c. 114 species, type: *T. flavus* (Klöcker) Stolk & Samson, terrestrial, but sometimes also isolated from aquatic habitats, associated with diverse substrates, including living or decaying plant material, soil, compost, dung, house dust, foodstuffs, leather, arthropods, rodents, air, cosmopolitan, the genus includes some clinically-relevant species, of which the most important is *Talaromyces marneffei* (Segretain, Capponi & Sureau) Samson, Yilmaz, Frisvad & Seifert (= *Penicillium marneffei* Segretain, Capponi & Sureau), a thermally dimorphic fungus which commonly infects immunocompromised patients in southeast Asia, see Proksa (2010; secondary metabolites), Samson et al. (2011; phylogeny, new combinations, epitypification of the type:), Houbraken and Samson (2011; phylogeny), Guarro et al. (2012; soilborne species), Yilmaz et al. (2012, 2014, 2016a, 2016b; phylogeny, revision, new species), Frisvad et al. (2013; new species), Sang et al. (2013; new species), Visagie et al. (2015; new species), Chen et al. (2016; new species), Luo et al. (2016; new species), Wang et al. (2016; new species), ex-epitype strain of the type: = CBS 310.38.
Talekpea

Lunghi & Rambelli 1979, Ascomycota genera incertae sedis, one species, type: T. foeticia Lunghi & Rambelli, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Ivory Coast, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Talpapellis


Tamaricicola

Thambugala, E. Camporesi & K.D. Hyde 2016, Pleosporaceae, Pleosporales, Dothideomycetes, one species, type: T. muriformis Thambugala, Camporesi & K.D. Hyde, asexual morph coelomycetous, saprobes, terrestrial, Italy, see Thambugala et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 16–0676, MFLUCC 15–0488.

Tamhinispora

Rajeshkumar & Rahul Sharma 2013, Tubeufiaceae, Tubeufiales, Dothideomycetes, one species, type: T. indica Rajeshkumar & Rahul Sharma, hyphomycetous, sexual morph unknown, saprobes, see Rajeshkumar and Sharma (2013; morphology), Boomnee et al. (2014; placed in Tubeufiales, phylogeny, key), holotype and ex-type strain of the type: AMH 9555, NFCCI 2924.

Tamsiniella


Tandonea

M.D. Mehrotra 1991, Ascomycota genera incertae sedis, one species, type: T. dargentiana M.D. Mehrotra, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 269926, cultures and sequences are unavailable, needs generic revision.

Tangerinosporium

L. Lombard & Crous 2016, Stachybotriaceae, Hypocreales, Sordariomycetes, one species, type: T. thalitricola L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, UK, see Lombard et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of the type: CBS H-22472, CBS 317.61.

Tania

Egea, Torrente & Sipman 1995, Roccellaceae, Arthoniales, Arthoniomyces, two species, type: T. lanosa Egea, Torrente & Sipman, lichenized, terrestrial, Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification), sequences unavailable.

Tapellaria

Müll. Arg. 1898, Pilocarpaceae, Lecanorales, Lecanoromycetes, 22 species, type: T. herpetospora Müll. Arg., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; new species), Messuti et al. (2011; new species), Kirk et al. (2013; genus accepted), Farkas (2014; taxonomy), Van Den Broeck et al. (2014; taxonomy), Lücking et al. (2016; classification), McCarthy and Elix (2016; new species), van den Boom et al. (2016; new species), sequences are unavailable

Tapellariopsis

Lücking 1999, Pilocarpaceae, Lecanorales, Lecanoromycetes, one species, type: T. octomera Lücking, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.
**Tapesina** Lambotte 1887, *Hyaloscyphaceae, Helotiales, Leotiomyces*, one species, type: *T. griseovitellina* (Fuckel) Höhn., asexual morph hyphomycetous, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Taphridium** Lagerh. & Juel 1902. *Protomycetaceae, Taphriniales, Taphrinomycetetes*, two species, type: *Taphridium umbelliferarum* (Rostr.) Lagerh. & Juel, asexual morph unknown, ?saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Taphrina** Fr. 1815, *Taphrinaceae, Taphriniales, Taphrinomycetetes*, two species, type: *T. aurea* (Pers.) Fr., asexual morph unknown, ?saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Taphrophila** Scheuer 1988. *Dothideomycetes* genera incertae sedis, incertae sedis, four species, type: *T. cornu-capreoli* Scheuer, asexual morph unknown, on rotten leaves, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Tarbertia** Dennis 1974. *Arthoniales* genera incertae sedis, one species, type: *T. juncina* Dennis, ?lichenized or saprobes, terrestrial, British Isles, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Tarsodisporus** Bat. & A.A. Silva 1965, *Ascomycota* genera incertae sedis, one species, type: *T. paraensis* Bat. & A.A. Silva, coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tarzetta** (Cooke) Lambotte 1887, *Pezizaceae, Pezizales, Pezizomycetes*, nine species, type: *P. tarzetta* Cooke, asexual morph unknown, hypogeous, terrestrial, worldwide, see Hansen et al. (2013; phylgeny), Olariagaet al. (2015; taxonomy), culture and sequences are available but lacks for the type.

**Tasmidella** Kantvilas, Hafellner & Elix 1999, *Ramalinaceae, Lecanorales, Lecanoromycetes*, one species, type: *T. variabilis* Kantvilas, Hafellner & Elix, lichenized, see Ekman et al. (2008; taxonomy), Lendemer (2010; taxonomy), Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; phylgeny), Lumbsch et al. (2012; phylgeny), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; phylgeny), Lücking et al. (2016; classification), sequences unavailable.


**Tatraea** Svrček 1993, ?*Helotiales, Helotiomyces*, two species, type: *T. dumbirensis* (Velen.) Svrček, asexual morph unknown, sabrobes of wood, widespread (temperate), see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: PRM 148876 (Svrček 1993), cultures and sequences are unavailable.

**Tavaresiella** T. Majewski 1980, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, four species, type: *T. hebri* T. Majewski, asexual morph unknown, biotrophic, hosts are Hebridae (Hemiptera: Heteroptera), Africa, Asia, and Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

Tectacervulus A.W. Ramaley 1992, Ascomycota genera incertae sedis, one species, type: T. mahoniae A.W. Ramaley, coelomycetous, sexual morph unknown, pathogens, on leaf spots, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: BPI 1107358, cultures and sequences are unavailable, needs generic revision.

Teichospora Fuckel 1870, Teichosporaceae, Pleosporales, Dothideomycetes, 35 species, type: T. trabicola Fuckel, asexual morph coelomycetous, terrestrial, saprobes, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in Teichosporaceae), Wijayawardene et al. (2014; outline), Crous et al. (2016; new species, phylogeny), Jaklitsch et al. (2016; new species, phylogeny), cultures available for type: C160, C134, C141.

Teichosporella (Sacc.) P. Karst. 1895, Dothideomycetes genera incertae sedis, 26 species, type: T. dura Sacc., asexual morph unknown, saprobes, terrestrial, America, Germany, Italy, temperate, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Telimena Racib. 1900, Phyllachoraceae, Phyllachorales, Sordariomycetes, eleven species, type: T. erythrinae Racib., from living leaves, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Telimenella Petr. 1940, Phyllachoraceae, Phyllachorales, Sordariomycetes, two species, type: T. persica Petr., from living leaves, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Telimenochora Sivan. 1987, Phyllachoraceae, Phyllachorales, Sordariomycetes, one species, type: T. abortiva (F. Stevens) Sivan., from living leaves, Mexico, Puerto Rico, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Telioclipeum Viégas 1962, Ascomycota genera incertae sedis, one species, type: T. lavrense Viégas, saprobes, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Telogalla Nik. Hoffm. & Hafellner 2000, Verrucariaceae, Verrucariales, Eurotiomycetes, one species, type: T. olivieri (Vouaux) Nik. Hoffm. & Hafellner, asexual morph unknown, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Van den Broeck et al. (2012; new records), cultures and sequences are unavailable, needs generic revision.

Teloschistes Norman 1853, Teloschistaceae, Teloschistales, Lecanoromycetes, 20 species, type: T. flavicans (Sw.) Norman, asexual morph unknown, lichenized, terrestrial, worldwide, see Muggia et al. (2008; taxonomy, phylogeny), Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012, 2015; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: AFTOL-ID 315.

Teloschistopsis Frödén, Sochting & Arup 2013, Teloschistaceae, Teloschistales, Lecanoromycetes, three species, type: T. chrysocarpoides (Vainio) Frödén, Arup & Sochting, asexual morph unknown, lichenized, terrestrial, see Arup et al. (2013; taxonomy), Kondratyuk et al. (2013; new genera, phylogeny), Lücking et al. (2016; classification); sequences are available.
**Temerariomycetes** B. Sutton 1993, *Ascomycota* genera *incertae sedis*, one species, type: *T. acutulus* B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Malawi, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 347181, cultures and sequences are unavailable, needs generic revision.

**Temperantia** K. Hansen, Healy & Kovács 2011, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, nine species, type: *T. tiffanvae* (Healy) K. Hansen, Healy & Kovács, asexual morph unknown, hypogeous, terrestrial, USA, see Kovács et al. (2011; taxonomy, pylogeny), holotype of the type: ISC, Healy 231, are available.

**Tengiomyces** Réblová 1999, *Helminthosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, four species, type: *T. indicus* (Varghese & V.G. Rao) Réblová, asexual morph unknown, saprobes, terrestrial, India, China, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Tenuimurus** Senan., Camporesi & K.D. Hyde 2016, *Phomatosporaceae*, *Phomatosporales*, *Sordariomycetes*, one species, type: *T. clematis* Senan., Camporesi & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, temperate, Italy, see Senanayake et al. (2016; taxonomy, pylogeny), cultures and sequences are available.


**Teracosphaeria** Réblová & Seifert 2007, *Sordariomycetes* genera *incertae sedis*, two species, type: *T. petroica* Réblová & Seifert, asexual morph unknown, saprobes, terrestrial, New Zealand, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Annulatascaceae* and *Sordariomycetidae*, genera *incertae sedis*), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: PDD 81436, cultures and sequences are available, needs generic revision.

**Teratomyces** Thaxt. 1893, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, nine species, type: *T. mirificus* Thaxt., asexual morph unknown, biotrophic, hosts are Staphylininae (Coleoptera: Staphylinidae), widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossi (2010; most recent species description), Haeflewaters et al. (2015b; synonymy of *T. brevicaulis* with *T. acutulus*), cultures and sequences are unavailable, needs generic revision.

**Teratoschaeta** Bat. & O.M. Fonseca 1967, *Dothideomycetes* genera *incertae sedis*, two species, type: *T. rondoniensis* Bat. & O.M. Fonseca, asexual morph unknown, lichenicolous, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Teratosperma** Syd. & P. Syd. 1909, *Ascomycota* genera *incertae sedis*, one species, type: *T. singulare* Syd. & P. Syd., saprobes, Africa, North America, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

taxonomy, phylogeny), Andjic et al. (2010, 2016; new species, Australia, cryptic species), Lumbsch and Huhndorf (2010; outline), Yamazaki et al. (2010; acidophilic), Hunter et al. (2011; diseases), Taole et al. (2012; *T. suttonii* complex), Taylor et al. (2012; pathogens), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, nomenclature), Quaedvlieg et al. (2014; phylogeny), cultures and sequences are available, needs generic revision.


**Teratosphaeriopsis** Quaedvlieg & Crous 2014, *Teratosphaeriaceae, Capnodiales, Dothideomycetes*, one species, type: *T. pseudoafricana* Quaedvlieg & Crous asexual morph unknown, one species, pathogens, South Africa, see Quaedvlieg et al. (2014; morphology, phylogeny), holotype and ex-type culture of type: CBS H-21137, CBS 111171.


**Termitaria** Thaxt. 1920, *Ascomycota* genera incertae sedis, three species, type: *T. snyderi* Thaxt., hyphomycetous, sexual morph unknown, America, Sardinia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Termitariopsis** M. Blackw., Samson & Kimbr. 1980, *Ascomycota* genera incertae sedis, three species, type: *T. cavernosa* M. Blackw., Samson & Kimbr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North and Central America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Testudina** Bizz. 1885, *Testudinaceae, Pleosporales, Dothideomycetes*, one species, type: *T. terrestris* Bizz., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Testudinaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Testudomyces** Cano, M. Solé & Guarro 2002, *Onygenaceae, Onygenales, Eurotiomycetes*, one species, type: *T. verrucosus* M. Solé, Cano & Guarro, asexual morph unknown, saprobes, terrestrial, Spain, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences is available for the type (unpublished).

**Tetrabrachium** Nawawi & Kuthub. 1987, *Ascomycota* genera incertae sedis, three species, type: *T. elegans* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tetr brunneospora** Dyko 1978, *Ascomycota* genera incertae sedis, two species, type: *T. ellisi* Dyko, hyphomycetous, sexual morph unknown, saprobes, aquatic, USA, see Seifert et
al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Tetraochaetum* Ingold 1942, *Leotiomycetes* genera *incertae sedis*, three species, type: *T. elegans* Ingold, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished), needs generic revision.

*Tetracladium* De Wild. 1893, *Helotiales* genera *incertae sedis*, *Leotiomycetes*, eight species, type: *T. marchalianum* De Wild., hyphomycetous, sexual morph unknown, saprobes, aquatic, terrestrial, worldwide, see Satì et al. (2009; new species), Letourneau et al. (2010; DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CCM F-11001.

*Tetracososporium* Szabó 1905, *Ascomycota* genera *incertae sedis*, three species, type: *T. paxianum* Szabó, hyphomycetous, sexual morph unknown, on dung and soil, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Tetracrium* Henn., 1902, *Dothideomycetes* genera *incertae sedis*, nine species, type: *T. aurantii* Henn., hyphomycetous, sexual morph unknown, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

*Tetramerlas* Norman 1853, *Caliciaceae, Caliciales, Lecanoromycetes*, 16 species, type: need typification, lichenized, see Giralt and Clerc (2011; comb. nov.), Gaya et al. (2012; phylogeny), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; taxonomy), sequences are available.

*Tetrameronycha* Speg. ex W. Rossi & M. Blackw. 1990, *Ascomycota* genera *incertae sedis*, one species, type: *T. bonaerensis* (Speg.) W. Rossi & M. Blackw., hyphomycetous, sexual morph unknown, on insects, terrestrial, Africa, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Tetranacriella* Kohlm. & Volkm.-Kohl. 2001, *Ascomycota* genera *incertae sedis*, one species, type: *T. papillata* Kohlm. & Volkm.-Kohl., coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Tetranacrium* H.J. Huds. & B. Sutton 1964, *Ascomycota* genera *incertae sedis*, one species, type: *T. gramineum* H.J. Huds. & B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, West Indies, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Tetrandromyces* Thaxt. 1912, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, six species, type: *T. brachidae* Thaxt., no asexual state, biotrophic, hosts are Anthicidae and Staphylinidae (Coleoptera), widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Tetrapisispora* Ueda-Nishimura & Mikata emend. Kurtzman 2003, *Saccharomycetales, Saccharomycetales, Saccharomyces*, seven species, type: *T. phaffii* (van der Walt) Ueda-Nishimura & Mikata, asexual reproduction is by multilateral budding, aaprophytic, in soil, Japanese blueberry, mangrove trees, cockroach, food processing plant, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

coelomycetous, saprobes, terrestrial or aquatic, worldwide, see Tanaka et al. (2009; phylogeny, morphology), Wijayawardene et al. (2014; nomenclature), Rossman et al. (2015; nomenclature), holotype of the type: IMI 178411, cultures and sequences are available.

*Tetraposporium* S. Hughes 1951. *Ascomycota* genera *incertae sedis*, two species, type: *T. asterinearum* S. Hughes, hyphomycetous, sexual morph unknown, fumigolous, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Tettigomyces* Thaxt. 1915. *Ceratomyctaceae*, *Laboulbeniales*, *Laboulbeniomyces*, 16 species, type: *T. grylloalpae* Thaxt., asexual morph unknown, biotrophic, hosts are *Grylloalpae* species and *Sclerotinia* sp. (Orthoptera: Gryllotalidae), widespread, see Lumbsch and Huhndorf (2010; outline), Kirby et al. (2011; morphology), Wijayawardene et al. (2015, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

*Teunomyces* Kurtzman & M. Blackwell 2016. *Debaryomycesaceae*, *Saccharomycetales*, *Saccharomycetes*, twelve species, type: *T. kruisii* ((Kocková-Kratochvílová & ondrušová) Kurtzman & M. Blackwell, asexual reproduction is by multilateral budding, saprophytic, in insects, often the guts of insects, worldwide, see Kurtzman et al. (2016; taxonomy), cultures and sequences are available.


*Textotheca* Matsush. 1996. *Ascomycota* genera *incertae sedis*, one species, type: *T. caffra* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


*Thalassoasculus* Ollivier 1926. *Dothideomycetes* genera *incertae sedis*, three species, type: *T. tregoubovi* Ollivier, asexual morph unknown, parasites, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Jones et al. (2015; classification, marine), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


*Thalespore* Chatmala & E.B.G. Jones 2006. *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *T. appendiculata* Chatmala & E.B.G. Jones, asexual morph unknown, marine, on wood, tropical, see Sakayaroj et al. (2010; taxonomy), Jones et
al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.


**Thalloloma** Trevis. 1853, *Graphidaceae, Ostropales, Lecanoromycetes*, 19 species, type: *T. anguinum* (Mont.) Trevis., asexual morph unknown, lichenized fungi, terrestrial, tropical, placement in *Graphidaceae* supported by molecular data, see Rivas Plata et al. (2012a; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Thallomyces** H.J. Swart 1975, *Parmulariaceae, Dothideomycetes* families incertae sedis, one species, type: *T. oritis* (Hansf.) H.J. Swart, asexual morph unknown, saprobes, terrestrial, tropical, placement in *Graphidaceae* supported by molecular data, see Rivas Plata et al. (2012a; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Thamnochrolechia** Aptroot & Sipman 1991, *Pertusariaceae, Pertusariales, Lecanoromycetes*, one species, type: *T. verticillata* Aptroot & Sipman, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available. holotype of the type: B, Aptroot 18622.

**Thamnogalla** D. Hawksw. 1980, *Cordieritidaceae, Leotiomycetes* families incertae sedis, one species, type: *T. crombiei* (Mudd) D. Hawksw., lichenicolous, Europe and North America, terrestrial, see Kirk et al. (2013; genus accepted), Suja et al. (2015; phylogeny), Jaklitsch et al. (2016; position), cultures and sequences are available, lectotype of type: BM.

**Thamnolecania** (Vain.) Gyeln., 1933, *Ramalinaceae, Lecanorales, Lecanoromycetes*, eight species, type: *L. brialmontii* Vain., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Thamnolia** Ach. ex Schaer. 1850, *Icmadophilaceae, Pertusariales, Lecanoromycetes* four species, type: *T. vermicularis* (Sw.) Schaer., asexual morph unknown, lichenized, terrestrial, see Nelsen. and Gargas (2009; molecular), Diederich et al. (2010; taxonomy), Manojlović et al. (2010a, b; HPLC analysis, bioactivity)), Guo et al. (2011; chemistry), Schmull et al. (2011; molecular), Lumbsch and Huhndorf (2010; outline), Hansen (2013; taxonomy), Kirk et al. (2013; genus accepted), Knight et al. (2013; chemotaxonomy), Árnason (2014; chemistry), Plazaa et al. (2014; antioxidant property), Lücking et al. (2016; classification), sequences are available.

**Thamnomomyces** Ehrenb. 1820, *Xylariaceae, Xylariales, Sordariomycetes*, five species, type: *T. chamissonis* Ehrenb., asexual morph hyphomycetous, terrestrial, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Stadler et al. (2010; new species), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available for unidentified species.

**Thaptospora** B. Sutton & Pascoe 1987, *Ascomycota genera incertae sedis*, one species, type: *T. atrobrunnea* B. Sutton & Pascoe, coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Thaumasiomyces** Thaxt. 1931, *Ceratomycetaceae, Laboulbeniales, Laboulbeniomycetes*, three species, type: *T. scabellularius* Thaxt., no asexual state, biotrophic, hosts are Hydrophilidae (Coleoptera), Africa and Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.
**Thaxteria** Sacc. 1891, Lasiosphaeriaceae, Sordariales, Sordariomycetes, nine species, type: *T. kunkeli* Giard, asexual morph unknown, coprophilous, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

**Thaxteriella** Petr., 1924, Tubeufiaceae, Tubeufiales, Dothideomycetes, nine species, type: *T. corticola* Petr., saprobes on decaying wood, Puerto Rico, Thailand, asexual morph hyphomycetous, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; taxonomy), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Thecaria** Fée 1824, Graphidaceae, Ostropales, Lecanoromycetes, three species, type: *T. quassiicola* Fée, asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2014; outline), Seifert et al. (2011), Wijayawardene et al. (2017; classification), sequences are available.

**Thecographa** A. Massal. 1860, Graphidaceae, Ostropales, Lecanoromycetes, three species, type: *T. ceramia* A. Massal., asexual morph unknown, lichenized fungi, terrestrial, tropical, see Rivas Plata et al. (2012a; taxonomy), Lücking et al. (2016; classification), sequences are unavailable.

**Thecotheus** Boud. 1869, Ascobolaceae, Pezizales, Pezizomycetes, 20 species, type: *T. pelletieri* (P. Crouan & H. Crouan) Boud., asexual morph unknown, coprophilous, terrestrial, worldwide, see Doveri and Coué (2008; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kušan et al. (2015; new species), cultures and sequences are available but lacks for the type.


**Theissenia** Maubl. 1914, Xylariaceae, Xylariales, Sordariomycetes, four species, type: *T. pyrenocrista* (Theiss.) Maubl., asexual morph hyphomycetous, terrestrial, saprobes, pantropical, see Hsieh et al. (2010; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Thelebolus** Tode 1790, Thelebolaceae, Thelebolales, Leotiomycetes, one species, type: *T. stercoratus* (Tode) Tode, asexual morph unknown, saprobes, from soil, on dung, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Mukhopadhyay et al. (2014; extracellular enzymes), Singh et al. (2014; extracellular enzymes), Crous et al. (2015; new species), cultures available for the type: CBS 709.69, CBS 717.69 (unpublished), needs generic revision.

**Thelenella** Nyl. 1855, Thelenellaceae, Ostropales, Lecanoromycetes, 30 species, type: *T. modesta* (Nyl.) Nyl., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kulaoglu and Aptroot (2011; new records of Turkey), Aptroot and Schumm (2012; new species), Kirk et al. (2013; genus accepted), Aptroot et al. (2014; new species), Cáceres and Aptroot (2016; new species), Nelsen et al. 2016, Lücking et al. (2016; classification), sequences are available.

**Thelendidia** Nyl. 1886, Ascomycota genera incertae sedis, one species, type: *T. monosporella* Nyl., asexual morph unknown, lichenized, terrestrial, Greenland, Switzerland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as Dothideomycetes), Lücking et al. (2016; classification), sequences are unavailable.
Thelidiella Fink 1933, Sordariomycetes genera incertae sedis, two species, type: *T. blastenicola* Fink ex J. Hedrick, asexual morph unknown, lichenicolous, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

*Thelidiopsis* Vain. 1921, Verrucariaceae, Verrucariales, Eurotiomycetes, one species, type: *T. robinsonii* Vain., asexual morph unknown, lichenized, terrestrial, Europe, Asia, see Holger et al. (2008; fresh water species), Lumbsch and Huhndorf (2010; outline), Pykälä et al. (2012; species in Russia), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

*Thelidium* A. Massal. 1855, Verrucariaceae, Verrucariales, Eurotiomycetes, c. 100 species, type: *T. amylaceum* A. Massal., asexual morph unknown, lichenized, terrestrial, fresh water, Europe, Asia, see Lumbsch and Huhndorf (2010; outline), Lumbsch and Huhndorf (2010; classification), sequences are available.

*Thelignya* A. Massal.1856, Lichinaeae, Lichinales, Lichinomycetes, three species, type: *T. fuliginea* (Ach.) A. Massal., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences unavailable.

*Thellianna* S.Y.Kondr., Kärnefelt, Elix & Hur 2015, Teloschistaceae, Teloschistales, Lecanoromycetes, one species; type: *T. pseudokiamae* S.Y. Kondr., Kärnefelt, Elix & Hur; lichenized; see Kondratyuk et al. 2015b, Lücking et al. (2016; classification), sequences are available.


*Thelocarpus* Nyl. 1853, Thelocarpaceae, Thelocarpales, Ascomycota orders incertae sedis, 27 species, type: *T. laureri* (Flot.) Nyl., asexual morph unknown, lichenized or non-lichenized, terrestrial, worldwide, see Moon and Aptroot (2009; new species, South Korea), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Flakus and Kukwa (2014; new species), Cáceres and Aptroot (2016; new species, Brazil), van den Boom et al. (2016; new species), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification), sequences are available, needs generic revision.

*Thelomma* A. Massal. 1860, Caliciaceae, Caliciales, Lecanoromycetes, seven species; type: *T. mammosum* (Hepp) A. Massal., lichenized, see Lumbsch and Huhndorf (2010; outline), Gaya et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.


*Thelopsis* Nyl. 1855, Stictidaceae, Ostropales, Lecanoromycetes, nine species, type: *T. rubella* Nyl., asexual morph unknown, lichenized, terrestrial, see Giordani et al. (2009; new
records), Øvstedal. and Gremmen (2009; new record), Aptroot et al. (2010; biodiversity), Potenza et al. (2010; new records), Lumbsch and Huhndorf (2010; outline), Dymytrova et al. (2013; taxonomy), Gundersen (2013; ecology), Kirk et al. (2013; genus accepted), Aptroot et al. (2014; world key), Mies (2015; new records), Stehn et al. (2015; list), Lücking et al. (2016; classification), sequences unavailable.

**Thelotrema** Ach. 1803, Graphidaceae, Ostropales, Lecanoromycetes, 106 species, type: *T. lepadinum* (Ach.) Ach., asexual morph unknown, lichenized fungi, terrestrial, mostly tropical, see Mangold et al. (2009; key, Australia), Lumbsch and Huhndorf (2010; outline), Rivas Plata et al. (2010a, 2012a; key), Sipman et al. (2012; key, Costa Rica), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Themisia** Velen. 1939, Helotiales genera incertae sedis, Leotiomyctes, eight species, type: *T. nudula* Velen., asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Thermutis** Fr. 1825, Lichinaceae, Lichinales, Lichinomycetes, two species, type: *T. velutina* (Ach.) Flot., asexual morph unknown, lichenized, terrestrial, see Schutz (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Urbanavichus and Urbanavichene (2011; new records), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Thermutopsis** Henssen 1990, Lichinaceae, Lichinales, Lichinomycetes, one species, type: *T. jamiessii* Henssen, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.

**Therrya** Sacc. 1882, Rhytismataceae, Rhytismatales, Leotiomyctes, seven species, type: *T. gallica* Sacc. & Penz., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Solheim et al. (2013; DNA, phylogeny), cultures and sequences are available but lacks for the type.

**Thielavia** Zopf 1876, Chaetomiaceae, Sordariales, Sordariomycetes, 31 species, type: *T. basicola* Zopf, asexual morph unknown, saprobes, saprobes, terrestrial, worldwide, see Kusari et al. (2009; enophytes, secondary metabolites), Lumbsch and Huhndorf (2010; outline), Berka et al. (2011; genomic analysis), Kirk et al. (2013; genus accepted), Van den Brink et al. (2015; DNA, thermophilic properties), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: CBS 229.82.

**Thielaviopsis** Went 1893, Ceratocystidaceae, Microascales, Sordariomycetes, six species, type: *T. ethaceta* Went, asexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see de Beer et al. (2014; new species), Mbenoun et al. (2014, 2016; DNA, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), de Melo et al. (2016; pathogens), cultures available for the type: CMW37775.

**Thindia** Korf & Waraitch 1971, Sarcoscyphaceae, Pezizales, Pezizomycetes, one species, type: *T. cupressi* Korf & Waraitch, asexual morph unknown, saprobes, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wang et al. (2016; new species), cultures and sequences are unavailable, needs generic revision.

**Thindiomycetes** Arendh. & R. Sharma 1983, Hyaloscyphaceae, Helotiales, Leotiomyctes, one species, type: *T. epiphyllus* Arendh. & Sharma, asexual morph unknown, saprobes of leaves, Bhutan, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; outline), holotype of the type: PAN 17589, cultures and sequences are unavailable.

**Thirumalacharia** Rathaiyah 1981, Ascomycota genera incertae sedis, one species, type: *T. curcuma* Rathaiyah, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see
Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tholomyces** Matsush. 2003, *Ascomycota* genera *incertae sedis*, one species, type: *T. flagellifer* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, Honshu, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tholurna** Norman 1861, *Caliciaceae*, *Caliciales*, *Lecanoromycetes*, one species, type: *T. dissimilis* Norman, asexual morph unknown, lichenized, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Gaye et al. (2012; molecular), Allen and Lendemer (2013; molecular), Kirk et al. (2013; genus accepted), Prieto et al. (2013; phylogeny), Beese et al. (2015; ecology), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are available.

**Thoracella** Oudem. 1901, *Ascomycota* genera *incertae sedis*, one species, type: *T. ledi* Oudem., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Thozetella** Kuntze 1891, *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*, 17 species, type: *T. nivea* (Berk.) Kuntze, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Whitton et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

**Thrauste** Theiss. 1916, *Englerulaceae*, *Dothideomycetes* families *incertae sedis*, three species, type: *T. medinillae* (Racib.) Theiss., sexual morph hyphomycetous, epiphytes, saprobes, terrestrial, Philippines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Dai et al. (2014, morphology), cultures and sequences are unavailable, needs generic revision.

**Thrinacospora** Petr. 1948, *Ascomycota* genera *incertae sedis*, one species, type: *T. insignis* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Ecuador, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Thripomyces** Speg. 1915, *Ceratomyctaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, two species, type: *T. italicus* Speg., asexual morph unknown, biotrophic, hosts are *Hydraena* species (Coleoptera: Hydraenidae), Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Thrombiun** Wallr. 1831, *Thrombiaceae*, *Ostropales*, *Lecanoromycetes*, five species, type: *T. epigaeum* (Pers.) Wallr., Russia, America, see Nadyeina (2009; taxonomy), Kukwa (2010; Isit), Lumbsch and Huhndorf (2010; outline), Stepanchikova et al. (2011; new records), Kirk et al. (2013; genus accepted), Resl et al. (2015), Lücking et al. (2016; classification), sequences are available.

**Thrytospora** Petr. 1947, *Dothideomycetes* genera *incertae sedis*, one species, type: *T. singularis* Petr., asexual morph unknown, saprobes, terrestrial, Syria, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Thuemenella** Penz. & Sacc. 1898, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *T. javanica* Penz. & Sacc., asexual morph hyphomycetous, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Thyrea** A. Massal. 1856, *Lichinaceae*, *Lichinales*, *Lichinomycetes*, 13 species, type: *T. plectospora* A. Massal. asexual morph unknown, lichenized, terrestrial, South Korea, Iran, Turkey, USA, see Björk (2010; new records), Lumbsch and Huhndorf (2010; outline),
Schultz and Moon (2011; taxonomy), Kirk et al. (2013; genus accepted), Candan and Schultz (2015; new records), Ahti et al. (2016; checklist), Lücking et al. (2016; classification); sequences are available.

**Thyridaria** Sacc. 1875, *Thyridariaceae*, *Pleosporales*, *Dothideomycetes*, 52 species, type: *T. incrustans* Sacc., asexual morph unknown, saprobes, terrestrial, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), Hyde et al. (2013; morphology; phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

**Thyridella** (Sacc.) Sacc. 1895, *Sordariomycetes* genera incertae sedis, three species, type: *T. colliculus* Sacc., sexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Wijayawardene et al. (2014; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available; needs generic revision.

**Thyrinula** Petr. & Syd. 1924, *Ascomycota* genera incertae sedis, one species, type: *T. eucalypti* (Cooke & Massee) H.J. Swart, coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, Australia, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.

**Thyrinula** Cif. 1962, *Dothideomycetes* genera incertae sedis, one species, type: *T. microsperma* (Syd. & P. Syd.) Cif., asexual morph unknown, saprobes, terrestrial, Dominican Republic, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Micropolitidaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Thyrinopsis** Theiss. & Syd. 1915, *Aulographaceae*, *Dothideomycetes* families incertae sedis, one species, type: *T. halepensis* (Cooke) Theiss. & Syd., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hyde et al. (2013; accepted as a genus in *Aulographaceae*), Kirk et al. (2013; genus accepted), Hongsonan et al. (2014c; taxonomy, accepted as a genus in *Aulographaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Thyrinula** Bat. & C.A.A. Costa 1959, *Ascomycota* genera incertae sedis, one species, type: *T. calophylli* (Sacc.) Bat. & C.A.A. Costa, coelomycetous, sexual morph unknown, saprobes, terrestrial, Malaysia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Thyrostroma** Höhn. 1911, *Pleosporales* genera incertae sedis, *Dothideomycetes*, c. 45 species, type: *T. compactum* (Sacc.) Höhn., hyphomycetous, sexual morph unknown, saprobes, pathogens, terrestrial, worldwide, see Phillips et al. (2008; accepted as genus in *Dothidotthiaceae*), Seifert et al. (2011; morphology), Hyde et al. (2013; accepted as genus in *Dothidotthiaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline, accepted as genus in *Dothidotthiaceae*), Crous et al. (2016; phylogeny), cultures available but lacks for the type.

**Thyrostroma** Höhn. 1919, *Ascomycota* genera incertae sedis, three species, type: *T. myriana* (Desm.) Höhn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Australia, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Thyrostroma** Kirschst. 1944, *Sordariomycetes* genera incertae sedis, three species, type: *T. nyssae* (Berk. & M.A. Curtis) Kirschst., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.
**Thrysidiella** Höhn. 1909, *Ascomycota* genera incertae sedis, two species, type: *T. lignicola* (Höhn.) Clem. & Shear, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Thrysidina** Höhn. 1905, *Ascomycota* genera incertae sedis, one species, type: *T. carneominiata* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.


**Thysanothecium** Mont. & Berk. 1846, *Cladoniaceae*, *Lecanorales*, *Lecanoromycetes*, three species, type: *T. hookeri* Mont. & Berk., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Tiarospora** Sacc. & Marchal 1885, *Phaeosphaeriaceae*, *Pleosporales*, *Dothideomycetes*, three species, type: *T. westendorpii* Sacc. & Marchal, coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Phookamsak et al. (2014; accepted as a genus in *Phaeosphaeriaceae*), cultures and sequences are unavailable, needs generic revision.


**Tiarosporellivora** Punith. 1981, *Ascomycota* genera incertae sedis, one species, type: *T. caricina* Punith., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Germany, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tibellia** Vezda & Hafellner 1992, *Ramalinaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *T. dimerelloides* Vezda & Hafellner, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.


**Ticomycyes** Toro 1952, *Sordariomycetes* genera incertae sedis, one species, type: *T. psychotriae* (F. Stevens) Toro, asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded the genus from *Meliolaceae* and placed in *Sordariomycetes* genera incertae sedis), cultures and sequences are unavailable, needs generic revision.

**Ticonectria** Döbbeler 1998, *Hypocreales* genera incertae sedis, *Sordariomycetes*, one species, type: *T. perianthii* Döbbeler, asexual morph unknown, on liver worts, Costa Rica, see
Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Ticosynnema** R.F. Castañeda, Granados & Mardones 2013, *Ascomycota* genera incertae sedis, one species, type: *T. carranzae* R.F. Castañeda, Granados & Mardones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Costa Rica, see Castañeda-Ruiz et al. (2013; taxonomy), Wijayawardene et al. (2017; outline), holotype of the type: HAL 2454F, cultures and sequences are unavailable, needs generic revision.

**Tilachlidium** Preuss 1851, *Tilachlidiaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *T. pinnatum* Preuss, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Lombard et al. (2015; phylogeny, new family), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.


**Tilakiella** Srinivas. 1973, *Dothideomycetes* genera incertae sedis, *Sordariomycetes*, one species, type: *Tilakiella indica* Srinivas., asexual morph unknown, saprobes, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Timdalia** Hafellner 2001, *Acarosporaceae*, *Acarosporales*, *Lecanoromycetes*, one species, type: *T. intricata* (H. Magn.) Hafellner, lichenized, see Lumbsch and Huhndorf (2010; outline), Westberg et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available.


**Tirispora** E.B.G. Jones & Vrijmoed, 1994, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, two species, type: *T. unicaudata* E.B.G. Jones & Vrijmoed, asexual morph unknown, two species, marine, on mangrove wood, tropical, see Lumbsch and Huhndorf (2010; outline), Sakayaroj et al. (2010; phylogeny), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.


**Tirmania** Chatin 1892, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, three species, type: *T. nivea* (Desf.) Trappe, asexual morph unknown, hypogeous, terrestrial, worldwide, see Al-Laith et al. (2010; Antioxidant components and antioxidant/antiradical activities), Lumbsch and Huhndorf (2010; outline), Dib-Belahouel and Fortas (2011; antibacterial activity), Kirk et al. (2013; genus accepted), Osmundson et al. (2013; DNA), sequences are available.
**Titae** Sacc., 1876, *Ascomycota genera incertae sedis*, 23 species, type: *T. callispora* Sacc., hyphomycetous, see Seifert et al. (2011; morphology), Wijayawardene et al. (2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Titaeopsis** B. Sutton & Deighton 1984, *Ascomycota genera incertae sedis*, one species, type: *T. ugandae* (Hansf.) B. Sutton & Deighton, hyphomycetous, sexual morph unknown, lichenicolous, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Titaeospora** Bubák 1916, *Ascomycota genera incertae sedis*, two species, type: *T. detospora* (Sacc.) Bubák, coelomycetous, sexual morph unknown, lichenicolous, terrestrial, temperate, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Toensbergia** Bendiksby & Timdal 2013, *Sporastatiaceae, Rhizocarpales, Lecanoromycetes*, one species, type: *T. leucococca* (R. Sant.) Bendiksby & Timdal, lichenized, corticolous, temperate northern hemisphere, see Bendiksby and Timdal (2013; phylogenetic placement), Lücking et al. (2016; classification), sequences are available, type specimen UPS- L-86993 (holotype).


**Tolypocladium** W. Gams 1971 (= *Elaphocordyceps* G.H. Sung & Spatafora 2007 *fide* Maharachchikumbura et al. 2016), *Ophiocordycipitaceae, Hypocreales, Sordariomycetes*, c. 15 species, type: *T. inflatum* W. Gams, hyphomycetous, sexual morph formerly known in *Elaphocordycipitaceae*, on soil, rotifers and mosquito larvae, terrestrial, cosmopolitan, see Sato et al. (2010; new species), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Wijayawadene et al. (2017; outline), cultures and sequences are available.

**Tomasellia** A. Massal. 1856, *Naertocymbaceae, Dothideomycetes, incertae sedis*, 50 species, type: *T. arthronoides* (A. Massal.) A. Massal., asexual morph unknown, epiphytes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Naertocymbaceae*), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tomenticola** Deighton 1969, *Ascomycota genera incertae sedis*, two species, type: *T. trematis* Deighton, hyphomycetous, sexual morph unknown, on living leaves, terrestrial, Africa, see Seifert et al (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Toomea** I. Hino 1954, *Dothideomycetes genera incertae sedis*, one species, type: *T. viridicolliculosa* I. Hino, asexual morph unknown, saprobes, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Tompetchia** Subram. 1985, *Ascomycota genera incertae sedis*, one species, type: *T. webberi* (H.S. Fawc.) Subram., hyphomycetous, sexual morph unknown, on insects, terrestrial, Australasia, North and South America, see Seifert et al (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Toninia** A. Massal. [nom. cons.] 1852, *Ramalinaceae, Lecanorales, Lecanoromycetes*, species, 85 species, type: *T. squalida* (Ach.) A. Massal., asexual morph unknown, lichenized, terrestrial, worldwide, see Moniri et al. (2009; taxonomy), Lumbsch and Huhndorf (2010;
Toniiniopsis Frey 1926, Ramalinaceae, Lecanorales, Lecanoromycetes, one species, type: T. obscura Frey, lichenized, see Lumbsch and Huhndorf (2010; outline), Lücking et al. (2016; classification), sequences are unavailable.

Topelia P.M. Jørg. & Vezda, 1984, Stictidaceae, Ostropales, Lecanoromycetes, six species, type: T. rosea (Servít) P.M. Jørg. & Vezda, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot et al. (2014; checklist), Lücking et al. (2016; classification), sequences are unavailable.

Topeliopsis Kantvilas & Vezda 2000, Graphidaceae, Ostropales, Lecanoromycetes, 20 species, type: T. muscicola Kantvilas & Vezda, asexual morph unknown, lichenized, terrestrial, see Messuti et al. (2010; new species), Lumbsch and Huhndorf (2010; outline), Plata et al. (2010; key), Sipman et al. (2012; new combinations), Mangold et al. 2009 (key Australia), Rivas Plata et al. (2010a; key), Rivas Plata et al. (2012a; taxonomy), Plata and Lücking (2013; taxonomy), Aptroot et al. (2014; phylogeny), Lücking et al. (2014; new species), Lumbsch et al. (2014; phylogeny), Weerakoon et al. (2015; new species), Lücking et al. (2016; classification), sequences are available.


Tornabea Østh.1980, Physciaceae, Caliciiales, Lecanoromycetes, one species, type: T. montagnei Trevis. asexual morph unknown, saprobes, marine, Canada, Denmark, England, Germany, Iceland, Norway, Sweden, USA, see Sakayaroj et al. (2011; morphology, phylogeny), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), holotype and ex-type strain of the type: BCC33511, BCC33512, BCC33513.

Torpedospora Meyers 1957 (= Glomerulispora Abdel-Wahab & Nagah. fide Réblová et al. 2016), Torpedosporaceae, Torpedosporales, Sordariomycetes, five species, type: Torpedospora radiata Meyers asexual morph produced helicoid conidia (hyphomycetous), saprobes, marine, worldwide, see Abdel-Wahab et al. (2010; phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Réblová et al. (2016; nomenclature), holotype and ex-type strains of the type: Torrendiella Boud. & Torrend 1911, Sclerotiniaceae, Helotiales, Leotiomycetes, three species, type: T. ciliata Boud., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Johnston et al. (2014; taxonomy, phylogeny), cultures available for the type: F132996, needs generic revision.

Torrubiella Boud. 1885, Cordycipitaceae, Hypocreales, Sordariomycetes, 71 species, type: Torrubiella aranicida Boud., asexual morph unknown, saprobic, terrestrial, cosmopolitan, see Johnson et al. (2009; taxonomy, DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Sato et al. (2010; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Tortispora Lachance & Kurtzman 2013, Trigonopsidaceae, Saccharomycetales, Saccharomycetes, eight species, type: T. ganteri Lachance & Kurtzman, asexual growth is by multilateral budding, saprophytic, in rotted cacti, Costa Rica, Hawaii, USA, Argentina, Brazil, Mexico, see Lachance et al. (2013; taxonomy), cultures and sequences are available.


Torulaspora Lindner 1904, Saccharomycetaceae, Saccharomycetales, Saccharomycetes, six species, type: T. delbrueckii (Lindner) Lindner, asexual reproduction is by multilateral budding, saprophytic, soil, plant material, Indonesian ragi, grapes, tree bark, mangrove trees, spoiled fruit juice, dough, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Torulosiella Bender 1932, Ascomycota genera incertae sedis, one species, type: T. fumaginea (Speg.) Bender, hyphomycetous, sexual morph unknown, on leaves (sooty moulds), terrestrial, Australasia, South America, see Seifert et al (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

Tothia Bat. 1960, Venturiaceae, Venturiiales, Dothideomycetes, two species, type: T. fuscella (Sacc.) Bat., asexual morph unknown, saprobic, terrestrial, Austria, Niederösterreich, Hungary and Italy, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; morphology; phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline; phylogeny), Liu et al. (2015; morphology; phylogeny), cultures and sequences are available for all species.

Tovariella Syd. 1930, Helotiaceae genera incertae sedis, Leotiomycetes, one species, type: T. pittieriana Syd., asexual morph unknown, saprobic, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


Toxosporiella B. Sutton 1986, Ascomycota genera incertae sedis, one species, type: T. bactrodesmioides B. Sutton, coelomycetous, sexual morph unknown, on leaves (sooty moulds), terrestrial, Australia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Toxosporiopsis B. Sutton & Sellar 1966, Ascomycota genera incertae sedis, one species, type: T. capitata B. Sutton & Sellar, coelomycetous, sexual morph unknown, on leaves (sooty moulds), terrestrial, Australia, see Wijayawardene et al. (2012, 2016; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trabutia Sacc. & Roum. 1881, Phyllachoraceae, Phyllachorales, Sordariomycetes, one species, type: T. abortiva (F. Stevens) Sivan., from living leaves, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; not genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Traecylla (Sacc.) Tassi 1904, Ascomycota genera incertae sedis, two species, type: T. spartinae (Peck) Tassi, coelomycetous, saprobes, terrestrial, Brazil, Dominican Republic, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trailia G.K. Sutherl. 1915, Halosphaeriaceae, Microascales, Sordariomycetes, three species, type: T. ascophylli G.K. Sutherl., asexual morph unknown, terrestrial, one marine on brown seaweeds, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


Trapeliopsis Hertel & Gotth. Schneid. 1980, Trapeliaceae, Trapeliales, Lecanoromycetes, 20 species, type: T. wallrothii (Flörke ex Spreng.) Hertel & Gotth. Schneid., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hodkinson and Lendemer (2011; taxonomy), Aptroot and Schumm (2012; new species), Elix et al. (2013; Trapeliopsis granulosa var. australis, new species), Kirk et al. (2013; genus...
accepted), Sanz-Resl et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification), sequences are available for the type: CP956.


**Trematophoma** Petr. 1924, *Ascomycota* genera *incertae sedis*, two species, type: *T. lignicola* Petr., coelomycetous, saprobes, terrestrial, Brazil, Dominican Republic, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available for unidentified species, needs generic revision.

**Trematosphaeria**Fuckel 1870, *Trematosphaeriaceae, Pleosporales, Dothideomycetes*, c. 20 species, type: *T. pertusa* Fuckel, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Pleosporales*, genera incertae sedis), Suetrong et al. (2011; phylogeny, new family), Hyde et al. (2013; accepted as a genus in *Trematosphaeriaceae*, phylogeny), Kirk et al. (2013; genus accepted), Zhang et al. (2012; phylogeny), Ahmed et al. (2014; new species), Wijayawardene et al. (2014; outline), Tanaka et al. (2015; phylogeny), cultures and sequences are available, needs generic revision.

**Trematovalsasa** Jacobesco 1906, *Diaportheales* genera *incertae sedis, Sordariomycetes*, one species, type: *T. matruchotii* Jacobesco, asexual morph unknown, saprobes, terrestrial, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Tremellidium** Petr. 1927, *Ascomycota* genera *incertae sedis*, one species, type: *T. piskorzii* Petr., coelomycetous, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Trenomyces** Chatton & F. Picard 1909, *Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes*, eleven species, type: *T. histoptorus* Chatton & F. Picard, asexual morph unknown, biotrophic, dioecious, hosts are Mallophaga (Arthropoda: Phthiraptera), widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequence are unavailable.

**Tretoccephala** Subram. 1995, *Ascomycota* genera *incertae sedis*, one species, type: *T. decidua* Subram., hyphomycetous, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tretolylea** Cantillo, R.F. Castañeda & Gusmão 2015, *Ascomycota* genera *incertae sedis*, one species, type: *T. pleiomorpha* T. Cantillo, R.F. Castañeda & . Gusmão, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Souza Armando et al. (2015;
taxonomy), Cantillo-Pérez et al. (2015; morphology), holotype of the type: HUEFS 211337, cultures and sequences are unavailable, compare with Capnophilaphora, Capnosporium Heteroconium, Lylea, Taelioliella and Taeliolina.

*Tretospeira* Pirz. 1972, *Ascomycota* genera *incertae sedis*, one species, type: *T. ugandensis* (Hansf.) Pirz., hyphomycetous, saprobes, terrestrial, Africa, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Tretovularia* Deighton 1984, *Ascomycota* genera *incertae sedis*, one species, type: *T. villiana* (Magnus) Deighton, hyphomycetous, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Treubiomyces* Höhn. 1909, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, seven species, type: *T. pulcherrimus* Höhn., asexual morph unknown, epiphytes, sooty moulds, terrestrial, America, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Triacutus* G.L. Barron & Tzean 1981, *?Sordariomycetes, incertae sedis, incertae sedis*, 18 species, type: *Triacutus subcircularis* G.L. Barron & Tzean, hyphomycetous, saprobes, from soil, on immunocompromised patients, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Edathodu et al. (2013; human pathogens *Triadelphia pulvinata*, DNA, treated as *Hypocreomycetidae incertae sedis*), Kirk et al. (2013; genus accepted), Crous et al. (2015; new species, immunocompromised patients, treated as *Microascales, genera incertae sedis*), cultures and sequences are unavailable for the type, genus could be polyphyletic, needs generic revision.

*Triadelphia* Shearer & J.L. Crane 1971, *Microascales* genera *incertae sedis*, *Sordariomycetes*, 18 species, type: *T. heterospora* Shearer & J.L. Crane, hyphomycetous, sexual morph unknown, saprobes, human pathogen, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.


*Triangularia* Boedijn 1934, *Lasiosphaeriaceae*, *Sordariales*, *Sordariomycetes*, six species, type: *T. bambusae* (J.F.H. Beyma) Boedijn, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available but lacks for the type.

*Tribidium* Rebent. 1805, *Tribidiaceae*, *Tribilidiales*, *Ascomycota* orders *incertae sedis*, one or six species, type: *T. calciforme* Rebent., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Tribolospora* D. A. Reid 1966, *Ascomycota* genera *incertae sedis*, one species, type: *T. sycopsidis* D.A. Reid, coelomycetous, sexual morph unknown, saprobes, on leaves of *Sycopsis dunnii*, New Guinea, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tricellula Beverw. 1954. Ascomycota genera incertae sedis, one species, type: T. inaequalis Beverw., hyphomycetous, sexual morph unknown, saprobics, terrestrial, Europe, see Seifert et al. (2011; morphology, accepted as a genus in Orbiliaceae). Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Triceromycetes T. Majewski 1980, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, eight species, type: T. balazucii T. Majewski, no asexual state, biotrophic, monocious, dioecious, and tricioecious, hosts are Hebridae, Hydrometridae, and Veliidae (Hemiptera: Heteroptera), worldwide, see Santamaria (2008; morphology, review), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable, needs generic revision.

Trichangium Kirschst. 1935, Helotiales genera incertae sedis, Leotiomyces, one species, type: T. vinosum Kirschst., asexual morph unknown, saprobics, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Tricharia Fée 1825 Gomphillaceae, Ostropales, Lecanoromycetes, 30 species, type: T. gilva (Boud.) Boud., asexual morph unknown, lichenized, terrestrial, India, Brazil, Colombia, see Lumbsch and Huhndorf (2010; outline), Lumbsch et al. (2011; new species), Messuti et al. (2011; new species), Mateus et al. (2012; taxonomy), Kirk et al. (2013; genus accepted), Rashmi and Rajkumar (2015; taxonomy, new record), Sanders and Lücking (2015; new species), Sanders and de los Rios (2016; morphotaxonomy), Gupta and Sinha (2016; new report), Lücking et al. (2016; classification), van den Boom and Sipman (2016; new records), sequences are available.

Tricharina Eckblad 1968, Pyronemataceae, Pezizales, Pezizomycetes, 15 species, type: T. gilva (Boud. ex Cooke) Eckblad, asexual morph unknown, hypogeous, terrestrial, temperate, see Benkert (2010; new species), Lumbsch and Huhndorf (2010; outline), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Stielow et al. (2013; phylogeny), Kušan et al. (2015; new species), Lindemann and Böhning (2016; new species), sequences are available for voucher DED 7356 (SFSU) of the type: (fide Hansen et al. 2013).

Trichasterina G. Arnaud 1918, Asterinaceae, Asterinales, Dothideomycetes, nine species, type: T. styracis (Theiss.) G. Arnaud, asexual morph unknown, foliar epiphytes, terrestrial, tropical, three species, cultures and sequences are unavailable, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Asterinaceae), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; taxonomy, accepted as a genus in Asterinaceae), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

Trichobolbus Bat. 1964, Ascomycota genera incertae sedis, one species, type: T. palmae Bat. & Cavalc, coelomycetous, sexual morph unknown, saprobics, on leaves of Palmae, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichobolus (Sacc.) Kimbr. & Cain 1967, Thelebolaceae, Thelebolales, Leotiomyces, one species, type: T. zukalii (Heimerl) Kimbr., asexual morph unknown, saprobics, from soil, on dung, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Doveri (2012; new species, coprophilous, Italy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Trichobotrys Penz. & Sacc. 1902, Ascomycota genera incertae sedis, four species, type: T. pannosa Penz. & Sacc., hyphomycetous, saprobics, from soil, terrestrial, Africa, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Trichocladium** Harz 1871, *Ascomycota* genera incertae sedis, 31 species, type: *T. asperum* Harz, hyphomycetous, sexual morph unknown, terrestrial, aquatic, saprobes, worldwide, see Abdel-Wahab (2011; phylogeny), Seifert et al. (2011; morphology), Abdel-Wahab and Bahkali (2012; phylogeny), Wijayawardene et al. (2012, 2017; outline), polyphyletic, needs generic revision.


**Trichocoris** Clem. 1909, *Ascomycota* genera incertae sedis, 20 species, type: *T. caudata* (Appel & Strunk) Clem., hyphomycetous, saprobes, terrestrial, pantropic, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Brackel (2014; new species), Silvansilva et al. (2016; new species, Brazil), cultures and sequences are available but lacks for the type, needs generic revision.

**Trichodectischia** Munk 1953, *Phaeotrichaceae*, *Phaeotrichales*, *Dothideomycetes*, four species, type: *T. bisporula* (P. Crouan & H. Crouan) Munk, asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; outline, phylogeny), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures available for the type: CBS 262.69.

**Trichoderma** Pers. 1794 (= *Hypocrea* Fr. 1825 fide Rosman et al. 2013), *Hypocreaceae*, *Hypocreales*, *Sordariomycetes*, c. 100 species, type: *T. viride* Pers., hyphomycetous, sexual morph *Hypocrea*, in soil, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2013; nomenclature), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Trichodiscula** Vouaux 1910, *Ascomycota* genera incertae sedis, one species, type: *T. lesdainii* Vouaux, coelomycetous, saprobes, terrestrial, France, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Trichodochium** Syd. 1927, *Ascomycota* genera incertae sedis, one species, type: *T. disseminatum* Syd., hyphomycetous, saprobes, terrestrial, Asia, Central and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Trichodothella** Petr. 1946, *Dothideomycetes* genera incertae sedis, one species, type: *T. blumeri* Petr. ex S. Blumer, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Zhang et al. (2011; morphology, accepted as a genus in *Venturiaceae*), Hyde et al. (2013) did not accept as a genus in *Venturiaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Trichodothis** Theiss. & Syd. 1914, *Dothideomycetes* genera incertae sedis, three species, type: *T. comata* (Berk. & Ravenel) Theiss. & Syd., asexual morph unknown, saprobes, North America, Africa, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Venturiaceae*), Zhang et al. (2012; provisionally included in *Venturiaceae*), Hyde et al. (2013) did not accept as a genus in *Venturiaceae*, Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Trichoglossum** Boud. 1885, *Geoglossaceae*, *Geoglossales*, *Geoglossomycetes*, 20 species, type: *T. hirsutum* (Pers.) Boud., asexual morph unknown, on soil, saprobes, terrestrial, temperate, see Schoch et al. (2009; phylogeny, accepted as a genus in *Rutstroemiaceae*), Kučera et al. (2010; new records in Slovakia), Lumbsch and Huhndorf (2010; outline), Akata
and Kaya (2013; new records in Turkey), Hustad et al. (2013; DNA, phylogeny), sequences are available for the type. **Trichohelotium** Killerm. 1935, *Helotiales* genera *incertae sedis*, *Leotiomyces*, two species, need typification, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Trichomaris** Hibbits, G.C. Hughes & Sparks 1981, *Halosphaeriaceae*, *Microascales*, *Sordariomycetes*, one species, type: *T. invadens* Hibbits, G.C. Hughes & Sparks, on tanner crab, marine, Alaska, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Trichomatisphaera** Pereira-Carv., G.F. Sepúlveda, Pereira-Carv. & Dianese 2009, *Ascomycota* genera *incertae sedis*, one species, type: *T. cerradensis* G.F. Sepúlveda, Pereira-Carv. & Dianese, hyphomycetous, saprobes, terrestrial, South America, see Pereira-Carvalho et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: UB (Mycol. Col.) 19597, cultures and sequences are unavailable, needs generic revision.

**Trichomatosphaeria** Munk 1953, *Dothideomycetes* genera *incertae sedis*, eight species, type: *T. dianthi* (Rostr.) Munk, asexual morph coelomycetous, saprobes, North America, see Chlebicki (2009; new species), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Trichometasphaeria** Pereira-Carv., G.F. Sepúlveda & Dianese 2009, *Ascomycota* genera *incertae sedis*, one species, type: *T. cerradensis* Pereira-Carv.-, G.F. Sepúlveda & Dianese, hyphomycetous, saprobes, terrestrial, South America, see Pereira-Carvalho et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: UB (Mycol. Col.) 19597, cultures and sequences are unavailable, needs generic revision.

**Trichomerium** Speg. 1918, *Chaetothyriaceae*, *Chaetothyriales*, *Eurotiomycetes*, 32 species, type: *T. coffeicola* (Puttemans) Speg., asexual morph hyphomycetous, possibly *Tripopsernum* Speg., epiphytes or saprobes, sooty moulds, terrestrial, Australia, Brazil, Thailand, see Lumbsch and Huhndorf (2010; outline), Chomnunti et al. (2012; morphology; phylogeny), Liu et al. (2015; morphology, phylogeny), Hyde et al. (2016; morphology, phylogeny), cultures and sequences are available but lacks for type, needs generic revision.

**Trichometasphaeria** Munk 1953, *Dothideomycetes* genera *incertae sedis*, eight species, type: *T. dianthi* (Rostr.) Munk, asexual morph coelomycetous, saprobes, North America, see Chlebicki (2009; new species), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Trichonetria** Kirschst. 1907, *Bionectriaceae*, *Hypocreales*, *Sordariomycetes*, 19 species, type: *T. aculeata* Kirschst., asexual morph unknown, saprobes, lichenicolous, terrestrial, Austria, see Etayo and Sancho (2008; new species), Lumbsch and Huhndorf (2010; outline), Gardiennet and Lechat (2011; new species), Brackel (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), Farkas and Flaks (2016; new species), cultures and sequences are available but lacks for the type.

**Trichopeltella** Höhn. 1910, *Trichopeltinaceae*, *Dothideomycetes* families *incertae sedis*, one species, type: *T. montana* (Racib.) Höhn., asexual morph unknown, epiphytes, Java, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Hongsanan et al. (2014; accepted as a genus in *Trichopeltinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.
**Trichopeltina** Theiss. 1914, *Trichopeltinae*, *Dothideomycetes* families *incertae sedis*, two species, type: *T. labecula* (Mont.) Theiss., asexual morph unknown, epiphytes, South America, see Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy), Hongsanan et al. (2014; keys), Wijayawardene et al. (2014; outline), holotype of type: URM 2492, cultures and sequences are unavailable, needs generic revision.

**Trichopeltulum** Speg. 1889, *Ascomycota* genera *incertae sedis*, one species, type: *T. pulchellum* Speg., coelomycetes, sexual morph unknown, saprobes, terrestrial, Hawaii, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Trichopeltospora** Bat. & Cif. 1958, *Asterinaeae*, *Asterinales*, *Dothideomycetes*, two species, type: *T. pipericola* Bat., Cif. & C.A.A. Costa, asexual morph unknown. Epiphytes, terrestrial, worldwide, no molecular data, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy), Hongsanan et al. (2014; keys), Wijayawardene et al. (2014; outline), holotype of type: URM 2492, cultures and sequences are unavailable.

**Trichopeltulum** Bat., Cif. & C.A.A. Costa (1958) [1957], ? *Microthyriaceae*, *Microthyriales*, *Dothideomycetes*, type: *T. hawaiense* Bat. & C.A.A. Costa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wu et al. (2011; did not accept the placement), needs generic revision.

**Trichopeziza** Fuckel 1870, *Lachnaceae*, *Helotiales*, *Leotiomyces*, 30 species, type: *T. sulphurea* (Pers.) Fuckel, asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), cultures available for the type: KUS-F52218, needs generic revision.

**Trichophaea** Boud. 1885 (= *Dichobotrys* Hennebert 1973 *fide* Healy et al. 2016), *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, 32 species, type: *T. woollhoepeia* (Cooke & W. Phillips) Boud., asexual morph unknown, hypogeous, saprobes, terrestrial, worldwide, see Benkert (2010; new species), Lumbsch and Huhndorf (2010; outline), Rubini et al. (2011; DNA, phylogeny), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), Stielow et al. (2013; phylogeny), Perić et al. (2014; new species), sequences are available.

**Trichophaeopsis** Korf & Erb 1972, *Pyronemataceae*, *Pezizales*, *Pezizomycetes*, three species, type: *T. bicuspis* (Boud.) Korf & Erb, asexual morph unknown, hypogeous, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available.

**Trichophyina** Rehm 1904, *Arthoniales* genera *incertae sedis*, two species, type: *T. buncosiae* Rehm, asexual morph unknown, lichenicolous, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: E. Ule 1120 (S), cultures and sequences are unavailable.

**Trichophyton** Malmsten 1848, *Arthrodermataceae*, *Onygenales*, *Eurotiomycetes*, 32 species, type: *T. tonsurans* Malmsten, hyphomycetous, sexual morph unknown, on humans and other animal, saprobes, on soil, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Hubka et al. (2014; new species), Lorch et al. (2014; new species), Hiruma et al. (2016; DNA, mating types), culture and sequences are available for the type.
**Trichoseptoria** Cavara 1892, *Ascomycota genera incertae sedis*, two species, type: *T. alpei* Cavara, coelomycetes, sexual morph unknown, saprobes, terrestrial, Europe, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Trichospermella** Spec. 1912, *Sordariomycetes genera incertae sedis*, one species, type: *T. pulchella* Spec., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Trichosphaerella** E. Bommer, M. Rousseau & Sacc. 1891, *Niesilliaceae, Hypocreales, Sordariomycetes*, four species, type: *T. decipiens* E. Bommer, M. Rousseau & Sacc., asexual morph unknown, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Whiton et al. (2012; morphology), Kirk et al. (2013; genus accepted), Döbbeler et al. (2015; new species), Maharachchikumbura et al. (2015, 2016; outline), Lendemer et al. (2016; new species), cultures and sequences are unavailable for type, needs generic revision.

**Trichosphaeria** Fuckel 1870, *Trichosphaeriaceae, Trichosphaeriales, Sordariomycetes*, c. 20 new species, type: *T. pilosa* (Pers.) Fuckel, saprobes, terrestrial, widespread, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for type: 089319.

**Trichosphaeropsis** Bat. & Nascim. 1960, *Sordariomycetes genera incertae sedis*, one species, type: *T. crescentiae* Bat. & Nascim., asexual morph unknown, saprobes, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Trichosporiella** Kamyschko 1960, *Ascomycota genera incertae sedis*, two species, type: *T. hyalina* Kamyschko, hyphomycetous, sexual morph unknown, saprobes, oh human, on soil, terrestrial, Asia, Europe, see Seifert et al. (2011; morphology, accepted as a genus in *Sordariales*), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), sequence available for unidentified species, needs generic revision.

**Trichosporodochium** Dorn.-Silva & Dianese 2004, *Ascomycota genera incertae sedis*, two species, type: *T. cerradens* Dorn.-Silva & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Trichothallus** F. Stevens 1925 (= *Plokamidomyces* Bat. et al. 1958; *Trichopeltheca* Bat. et al. 1958 *fide* Rossmann et al. 2016), *Euantennariaceae, Dothideomycetes* families *incertae sedis*, two species, type: *T. hawaiensis* F. Stevens, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, Oceania, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable, needs generic revision.

**Trichothecium** Link 1809, *Hypocreales genera incertae sedis*, nine species, type: *T. roseum* (Pers.) Link, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Seifert et al. (2011; morphology), Summerbell et al. (2011; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Trichothelium** Müll. Arg. 1885, *Porinaceae, Ostropales, Lecanoromycetes*, 40 species, type: *T. epiphyllum* Müll. Arg., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

**Trichothyriella** Theiss. 1914, *Dothideomycetes genera incertae sedis*, one species, type: *T. quercigena* (Berk. ex Cooke) Theiss., asexual morph unknown, terrestrial, South East Asia,
see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Wu et al. (2011; treated as a doubtful genus), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Trichothyriunula** Petr. 1950, *Trichopeltinaceae*. *Dothideomycetes* families incertae sedis, one species, type: *T. labecula* (Mont.) Theiss., asexual morph unknown, epiphytes, Ecuador, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; morphology), Kirk et al. (2013; genus accepted), Hongsonan et al. (2014; accepted as a genus in *Trichopeltinaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Trichothyrium** Sperr. 1889, *Trichothyriaceae*, *Dothideomycetes* families incertae sedis, twelve species, type: *T. sarciniferum* Sperr., asexual morph unknown, saprobes, terrestrial, subtropical, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Microthyriaceae), Hyde et al. (2013; accepted as a genus in *Trichothyriaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Tricladidiella** K. Ando & Tubaki 1984, *Ascomycota* genera incertae sedis, one species, type: *T. pluvialis* K. Ando & Tubaki, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tricladopsis** Descals 1982, *Ascomycota* genera incertae sedis, two species, type: *T. foliosa* Descals, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, Europe, Central and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tricladiospora** Nawawi & Kuthub. 1988, *Ascomycota* genera incertae sedis, three species, type: *T. stricta* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tricladium** Ingold 1942, *Helotiaceae*, *Helotiales*, *Leotiomyces*, 25 species, type: *T. splendens* Ingold, hyphomycetous, saprobes, aquatic, worldwide, see Campbell et al. (2009; Evolutionary relationships), Seifert et al. (2011, polyphyletic), Gulis et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Baschien et al. (2013; molecular phylogenoy), sequences are available for 15 species, compare with *Varicosporium*, holotype of type: CBS 234.46, MUCL 28105, needs generic revision.

**Trifurcospora** K. Ando & Tubaki 1988, *Ascomycota* genera incertae sedis, two species, type: *T. irregularis* (Matsush.) K. Ando & Tubaki, hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Trigoniopsidaceae**, *Saccharomycetales*, *Saccharomycetes*, four species, type: *T. variabilis* Schachner, asexual reproduction is by multilateral budding, saprophytic, grape must, wine, beer, worldwide, cultures and sequences are available.

**Trigonopsis** Schachner emend. Kurtzman & Robnett 2007, *Trigonopsisidaceae*, *Saccharomyces* families, four species, type: *T. variabilis* Schachner, asexual reproduction is by multilateral budding, saprophytic, grape must, wine, beer, worldwide, cultures and sequences are available.

**Trigonosporium** Tassi 1900, *Ascomycota* genera incertae sedis, two species, type: *T. australiense* Tassi, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Trimmatostrona** Corda 1837, *Dermataceae*, *Helotiales*, *Leotiomyces*, c. 30 species type: *T. salicis* Corda, sexual morph unknown, saprobes, terrestrial, aquatic, halophillic, worldwide,
see Vaupotič et al. (2008; physiology), Bartosik et al. (2010; biodeterioration), Diederich et al. (2010; new species), El-Said et al. (2010; Egypt), Mansour (2010; Lybia), Sepcic et al. (2010; metabolite profiling), Shenoy et al. (2010; phylogeny), Mohammadi (2011; spectrofluorometry), Ruiz-González et al. (2013; isolation protocol), Sarma and Raghukumar (2013; India), Gessler et al. (2014; review), Gunde-Cimerman and Zalar (2014; solar salterns), Heuchert and Braun (2014; new species), cultures and sequences are available.

**Trimmatothelopsis** Zschacke 1934, *Acarosporaceae*, *Acarospora*, *Lecanoromycetes*, one species, type: *T. perquisita* (Norman) Norman ex Zahlbr., lichenized, see Lücking et al. (2016; classification), sequences are available.

**Trimmatothelopsis** Zschacke 1934, *Acarosporaceae*, *Acarospora*, *Lecanoromycetes*, one species, type: *T. versipellis* (Nyl.) Zschacke, lichenized, see Güedan et al. (2014c; taxonomy), Knudsen and Lendemer (2016; taxonomy), Roux et al. (2016; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Trinacrium** Riess 1852, *Orbiliaceae*, *Orbilia*, *Orbiliomycetes*, ten species, type: *T. subtile* Riess, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Trinathotrema** Lücking, Rivas Plata & Mangold 2011, *Stictidaceae*, *Ostropales*, *Lecanoromycetes*, three species, type: *T. stictidium* (Nyl.) Lücking, R.Miranda & Kalb, asexual morph unknown, lichenized, terrestrial, Bolivia, Canary Iceland, see Lücking et al. 2011b, Boom and Ertz (2012; new species, new records), Flakus et al. (2013; taxonomy), Lücking et al. (2016; classification); sequences are available.


**Tripoconidium** Subram. 1978, *Ascomycota* genera incertae sedis, one species, type: *T. aphanophilagum* (Drechsler) Subram., hyphomycetous, sexual morph unknown, on nematodes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tripospermum** Spieg. 1918, *Neodevriesiaceae*, *Capnodiales*, *Dothideomycetes*, 27 species, type: *M. caesipitosa* Petr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Rocha et al. (2010; new species), Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Quaedvlieg et al. (2014; phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available, needs generic revision.

**Triposporina** Höhn. 1912, *Ascomycota* genera incertae sedis, two species, type: *T. uredinicola* Höhn., hyphomycetous, sexual morph unknown, fungicolous, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Triposporium** Corda 1837, *Helotiales* genera incertae sedis, *Leotiomycetes*, 41 species, type: *T. elegans* Corda, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014; outline, accepted as a genus in *Asterinaceae*), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species, phylogeny, accepted as a *Helotiales*), Wijayawardene et al. (2017; outline), cultures and sequences are available but lacks for the type, taxonomic placement is based on sequence of non-type, needs generic revision.
**Tripterosporella** Subram. & Lodha 1968, *Lasiosphaeriaceae*, Sordariales, Sordariomycetes, six species, type: *T. coprophila* Subram. & Lodha, asexual morph unknown, saprobes, coprophilous, terrestrial, Asia, Africa, see Doveri (2010; new species and two varities), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Triiramulispora** Matsush. 1975, *Ascomycota* genera *incertae sedis*, three species, type: *T. gracilis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Trisulcosporium** Nawawi & Kuthub. 1987, *Ascomycota* genera *incertae sedis*, one species, type: *T. verrucosum* Nawawi & Kuthub., hyphomycetous, sexual morph unknown, saprobes, aquatic, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Duarte et al. (2014; phylogeny), Fiuza et al. (2015a; morphology), cultures and sequences are available, needs generic revision.

**Triscelophorus** Ingold 1943, *Ascomycota* genera *incertae sedis*, eight species, type: *T. monosporus* Ingold, hyphomycetous, saprobes, aquatic, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Seifert et al. (2011; morphology), Fiuza et al. (2015a; morphology), cultures and sequences are available, needs generic revision.

**Triscelosporium** Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: IMI 313480, cultures and sequences are unavailable, needs generic revision.

**Triramospora** Matsushikumbura et al. (2015, 2016; outline), Kirk et al. (2013; genus accepted), holotype NY00945981, for epitype see Videira et al. (2017).

**Trizodia** Laukka 2010, *Ascomycota* genera *incertae sedis*, one species, type: *T. acrobia* Laukka, lichenized, terrestrial, Finland, see Stenroos et al. (2010; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Trochila** Fr. 1849, *Cenangiaceae*, Helotiales, Leotiomycetes, 15 species, type: *T. craterium* (DC.) Fr., asexual morph unknown, saprobes, terrestrial, temperate, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dermateaceae*), Kirk et al. (2013; genus accepted), Pärtel et al. (2016; DNA, phylogeny, accepted as a genus in *Cenangiaceae*), cultures available for the type: KL333.

**Trochoideomycetes** Thaxt. 1931, *Laboulbeniaceae*, Laboulbeniales, Laboulbeniomycetes, one species, *T. gracilicaulis* Thaxt., asexual morph unknown, biotrophic, only known from *Trochoideus desjardinsii* (Coleoptera: Endomychidae), Malaysian Borneo, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Trogloomyces** S. Colla 1932, *Laboulbeniaceae*, Laboulbeniales, Laboulbeniomycetes, six species, type: *T. manfredii* S. Colla, asexual morph unknown, biotrophic on millipedes
(Blaniulidae & Julidae), mostly Europe, Madeira, Tenerife, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Santamaría et al. (2014 morphology), Enghoff and Santamaría (2015, morphology, taxonomy, key, specificity and transmission), cultures and sequences are unavailable, needs generic revision.

**Troneropsis** Sherwood 1981, *Ascomycota* genera incertae sedis, one species, type: *T. microtheca* (P. Karst.) Sherwood, asexual morph unknown, saprobes, terrestrial, Finland, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Trosporella** P. Karst. 1892, *Dothideomycetes* genera incertae sedis, four species, type: *T. fumosa* P. Karst., hyphomycetous, sexual morph unknown, saprobes, aquatic, Australasia, Europe, North and South America, see Tsui and Berbee (2010; new species, DNA, phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: MUCL 15695.

**Trosporium** Harkn. 1884, *Ascomycota* genera incertae sedis, one species, type: *T. album* Harkn., hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Trullula** Ces. 1852, *Leotiomycetes* genera incertae sedis, 15 species, type: *T. oreoselini* Ces., coelomycetous, sexual morph unknown, saprobes, terrestrial, North temperate, see Wijayawardene et al. (2012, 2016; outline), taxononomy, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, taxonomic placement is based od sequences of non-type., needs generic revision.

**Truncatella** Steyaert 1949, *Bartaliniaceae*, *Amphisphaeriaceae*, *Sordariomycetes*, eleven species, type: *T. truncata* (Lév.) Steyaert, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2016, 2017; outline, morphology), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), Senanayake et al. (2015; new species, phylogeny), cultures and sequences are available, needs generic revision.

**Tryblidiopsis** P. Karst. 1871, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, three species, type: *T. pinastri* (Pers.) P. Karst., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010) did not list, Kirk et al. (2013; genus accepted), Wang et al. (2014; DNA, phylogeny), cultures and sequences are available for the type: AFTOL-ID 1319.

**Tryblidiopycnis** Höhn. 1918, *Ascomycota* genera incertae sedis, one species, type: *T. pinastri* Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tryblis** Clem. 1931, *Odontotremataceae*, *Ostropales*, *Lecanoromycetes*, two species, type: *T. arnoldii* (Rehm) Clem., asexual morph unknown, saprobes, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are unavailable

**Trypethelium** Spreng. [nom. cons.] 1804, *Trypetheliaceae, Trypetheliales, Dothideomycetes*, 16 species, type: *T. eluteriae* Spreng., asexual morph unknown, lichenized, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Aptroot and Lücking (2016; taxonomy, monograph), Lücking et al. (2016; classification); sequences are available.

**Trysogglobulus** B. Sutton & Pascoe 1987, *Ascomycota* genera *incertae sedis*, one species, type: *T. aspergilloides* B. Sutton & Pascoe, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tubakia** B. Sutton 1973, *Diaporthales* genera *incertae sedis*, *Sordariomycetes*, eight species, type: *T. japonica* (Sacc.) B. Sutton, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; treated as coelomycetous), Yun and Rossman (2011; new species), Harrington et al. (2012; new species), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Braun et al. (2014; new species), cultures and sequences are available but lacks for the type, needs generic revision.


**Tuber** P. Micheli ex F.H. Wigg. 1780, *Tuberaeaceae, Pezizales, Pezizomycetes*, 135 species, type: *T. aestivum* Vittad., asexual morph unknown, saprobes, saprobes, hypogeous, terrestrial, worldwide, see Bonito et al. (2010; new species), Culleré et al. (2010; aromatic compounds), Lumbsch and Huhndorf (2010; outline), Benucci et al. (2011; ectomycorrhizal), Fan et al. (2013; new species), Guevara et al. (2013; new species), Kirk et al. (2013; genus accepted), Li et al. (2014; new species, China), Su et al. (2014; new species), Guevara-Guerrero et al. (2015; new species), Qing et al. (2015; new species), cultures and sequences are available.

**Tuberculosispora** Deighton & Piroz. 1972, *Ascomycota* genera *incertae sedis*, one species, type: *T. jamaicensis* Deighton & Piroz., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Caribbean, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tubefusia** Penz. & Sacc., 1898, *Tubefusiaceae, Tubefusiales, Dothideomycetes*, 29 species, type: *T. javanica* Penz. & Sacc., saprobes on decaying wood or sheaths of bamboo, widespread, asexual morph hyphomycetous, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Boonmee et al. (2014; taxonomy, phylogeny), Wijayawardene et al. (2014, 2017; outline), cultures and sequences are available, ex-type strains of type: MFLUCC12-0545; epitotype of type: MFLU13-0371.

**Tubolachnum** Velen. 1934, *Helotiales* genera *incertae sedis*, *Leotiomyces*, two species, type: need typification, asexual morph unknown, saprobes, terrestrial, former Czechoslovakia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

list), Bartkowiak and Bennett (2016; taxonomy), Herrera Campos et al. (2016; taxonomy), Lücking et al. (2016; classification); sequences are available.

**Tuckermanopsis** Gyeln. 1933, Parmeliaceae, Lecanorales, Lecanoromycetes, nine species, type: *T. ciliaris* (Ach.) Gyeln., assexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Büdel (2011; taxonomy), Kelly et al. (2011; molecular), Grochowski (2012; ecology), Kirk et al. (2013; genus accepted), Mcmullin et al. (2013; conservation), Lücking et al. (2016; classification), Mark et al. (2016; molecular), sequences are available.

**Tulipispora** Révay & J. Gönczöl 2009, Ascomycota genera incertae sedis, one species, type: *T. ingoldii* Révay & J. Gönczöl, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), holotype of the type: BP 99766, cultures and sequences are unavailable, needs generic revision.

**Tumidispora** Hongsanan & K.D. Hyde 2015, Microthyriaceae, Microthyriales, Dothideomycetes, one species, type: *T. strandiae* Hongsanan & K.D. Hyde, assexual morph unknown, saprobes, terrestrial, Thailand, see Ariyawansa et al. (2015; taxonomy, phylogeny), holotype and ex-type culture of the type: MFLU 15-1391, MFLUCC 12-0409.

**Tumularia** Descals & Marvanová 1987, Lophiostomataceae, Pleosporales, Dothideomycetes, two species, type: *T. tuberculata* (J. Gönczöl) Descals & Marvanová, hyphomycetous, sexual morph unknown, saprobes, aquatic, Europe, North and South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2014, 2016; morphology, phylogeny), Hyde et al. (2013; accepted as a genus in Lophiostomataceae), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

**Tunicago** B. Sutton & Pollack 1977, Ascomycota genera incertae sedis, two species, type: *T. uniolae* B. Sutton & Pollack, coelomycetous, sexual morph unknown, saprobes, terrestrial, USA, Australia, see Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tunicatispora** K.D. Hyde 1990, Halosphaeriaceae, Microascales, Sordariomycetes, one species, type: *T. australiensis* K.D. Hyde, saprobes, marine, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Tunstallia** Agnihothri 1961, Sordariomycetes genera incertae sedis, type: *T. aculeata* (Petch) Agnihothr., asexual morph unknown, saprobes, pathogens, terrestrial, India, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Turgidoscum** Kohlm. & E. Kohlm. 1972, Ascomycota genera incertae sedis, two species, type: *T. ulvae* (M. Reed) Kohlm. & E. Kohlm., assexual morph unknown, symbiotic, marine, worldwide, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Turturconchata** J.L. Chen, T.L. Huang & Tzean 1999, Ascomycota genera incertae sedis, two species, type: *T. reticulata* J.L. Chen, T.L. Huang & Tzean, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tylophorella** Vain. 1890, Arthoniales genera incertae sedis, Arthoniomycetes, one species, type: *T. polyspora* Vain., lichenized, terrestrial, Bolivia, New guinea, see Lumbsch et al. (2009; molecular), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted),
McCarthy (2014; new record), Ertz et al (2015; new record), Lücking et al. (2016; classification), sequences are unavailable.

**Tylaphoron** Nyl. ex Stizenb. 1862, *Arthoniaceae, Arthoniales, Lecanoromycetes*, eight species, type: *T. protrudens* Nyl., lichenized, terrestrial, mainly tropical, see Lumbsch et al. (2009; molecular), Lumbsch and Huhndorf (2010; outline), Aptroot et al. (2010; biodiversity), Ertz et al. (2011; molecular), Reddy et al. (2011; new record), Diederich et al. (2012; new records), Sethy et al. (2012; new record), Kirk et al. (2013; genus accepted), Lendemer et al. (2013; new species), Lendemer and Harris (2014; taxonomy), Gupta and Sinha (2015; new records), Pérez-Pérez et al. (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Tylaphoropsis** Sambo 1938, *Caliciaceae, Caliciale, Lecanoromycetes*, one species, type: *T. nyeriana* Sambo, lichenized, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Physciaceae*), Gaye et al. (2012; taxonomy), Lücking et al. (2016; classification), Prieto and Wedin (2016; phylogeny), sequences are unavailable.


**Tympanis** Tode 1790 (= *Sirodothis* Clem. 1909; *Pleurophomella* Höhn 1914; *fide* Johnston et al. 2014), *Tympanidaceae, Phacidiales, Leotiomycetes*, 27 species, type: *T. saligna* Tode, asexual morphs formerly known in *Sirodothis* and *Pleurophomella*, weak parasite of gymnosperms trees commonly associated with cankers, worldwide, common in temperate areas, Kirk et al. (2013; genus accepted), Quijada et al. (2015; phylogeny), Kowalski et al. (2016; distribution), cultures and sequences are available but lacks for the type, needs typification and generic revision.

**Tympanosporium** W. Gams 1974, *Ascomycota* genera *incertae sedis*, one species, type: *T. parasiticum* W. Gams, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Tyrannicordyceps** Kepler & Spatafora 2012, *Clavicipitaceae, Hypocreales, Sordariomycetes*, five species, type: *T. fratricida* (Tanda & Kobayasi) Kepler & Spatafora, asexual morph unknown, saprobes, terrestrial, cosmopolitan, see Kepler et al. (2012; taxonomy), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Tyrannosorus** Unter. & Malloch 1995, *Venturiaeae, Venturiales, Dothideomycetes*, one species, type: *T. pinicola* (Petrini & P.J. Fisher) Unter. & Malloch, asexual morph unknown, saprobes, terrestrial, Canada, Pakistan, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Dothideomycetes* genera *incertae sedis*), Zhang et al. (2011; accepted as in *Venturiaeae*), Hyde et al. (2013; accepted as in *Venturiaeae*, phylogeny), Wijayawardene et al. (2014; outline), cultures available for the type: AFTOL-ID 1235.

**Uberspora** Piroz. & Hodges 1973, *Ascomycota* genera *incertae sedis*, four species, type: *U. simplex* (Ichinoe) Piroz. & Hodges, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, Asia, Caribbean, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Ma et al. (2014; new species, China), cultures and sequences are unavailable, needs generic revision.

**Ubrisyzya** Negru 1965, *Ascomycota* genera *incertae sedis*, one species, type: *U. oxyccoci* Negru & R. Sandor, coelomycetous, sexual morph unknown, saprobes, terrestrial, Rumania, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Uleodothis** Theiss. & Syd. 1915, *Dothideomycetes* genera incertae sedis, four species, type: *U. balansiana* (Sacc., Roum. & Berl.) Theiss. & Syd., saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Uleomyces** Henn. 1895, *Cookellaceae*, *Dothideomycetes* family incertae sedis, four species, type: *U. parasiticus* Henn., asexual morph unknown, on rusts and ascomycetes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Cookellaceae*), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Uleoporthe** Petr. 1941, *Sydowiellaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *U. orbiculata* (Syd. & P. Syd.) Petr., asexual morphs unknown, saprobes, terrestrial, America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Uleothyrium** Petr. 1929, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, two species, type: *U. amazonicum* Petr., asexual morph coelomycetous (= Septothyrella-like, *fide* Hofmann 2009), epiphytes, terrestrial, worldwide, see Hofmann (2009; review), Lumbsch and Huhndorf (2010; outline), Wu et al. (2011; taxonomy), Hongsanan et al. (2014; keys), Wijayawardene et al. (2014; outline), placement in *Asterinaceae* supported by morphology, cultures and sequences are unavailable, holotype of type: W 10746.


**Uluru** Trappe, Claridge & Kovács 2010, *Pezizaceae*, *Pezizales*, *Pezizomycetes*, one species, type: *U. nonparaphysata* Trappe & Claridge, asexual morph unknown, hypogeous, terrestrial, Northern Territory, see Trappe et al. (2010; taxonomy, phylogeny), isotype of the type: OSC 131126, sequences are available.

**Umbellidion** B. Sutton & Hodges 1975, *Ascomycota* genera incertae sedis, one species, type: *U. radulans* B. Sutton & Hodges, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Umbilithecium Etayo 2002, Lecanoromycetes genera incertae sedis, one species, type: *U. pseudocyphellariae* Etayo., asexual morph unknown, parasymbiont on macrolichens of *Pseudocyphellaria*, terrestrial, South America, see Etayo and Sancho (2008; morphology, distinction of similar lichenicolous genera), needs revision, holotype of the type: MAF Etayo 23090, cultures and sequences are unavailable.

Umthunziomyces Crous & M.J. Wingf. 2016, Planistromellaceae, Botryosphaeriales, Dothideomycetes, one species, type: *U. hagahagensis* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Crous et al. (2016; taxonomy, phylogeny), holotype and ex-type culture of the type: CBS H-22873, CPC 29917.

Umushamyces Etayo 2002, Scociliosporaceae, Lecanorales, Lecanoromycetes, one species, type: *U. kuturnum* Etayo., asexual morph unknown, parasymbiont on *Coccotrema*, terrestrial, South America, see Etayo and Sancho (2008; morphology, distinction of similar lichenicolous genera), need revision, holotype of the type: MAF Etayo 22460, cultures and sequences are unavailable.

Uncinocarpus Sigler & G.F. Orr 1976, Onygenaceae, Onygenales, Eurotiomycetes, three species, type: *U. reesii* Sigler & G.F. Orr, asexual morph unknown, saprobes, terrestrial, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), sequences are available for the type (unpublished).

Uncispora R.C. Sinclair & Morgan-Jones 1979, Chaetothyriaceae genera incertae sedis, Eurotiomycetes, three species, type: *U. harroldiae* R.C. Sinclair & Morgan-Jones, hyphomycetous, sexual morph unknown, saprobes, terrestrial, China, North America, see Seifert et al. (2011; morphology), Yang et al. (2011; new species, China, DNA), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Li et al. (2015; new species; DNA), cultures and sequences are available but lacks for the type;, generic placement is based on no-type:, needs generic revision.

Underwoodia Peck 1890, Helvellaceae, Pezizales, Pezizomycetes, three species, type: *U. columnaris* Peck., asexual morph unknown, saprobes, from soil, terrestrial, worldwide, see Bonito et al. (2013; DNA, phylogeny, stated that the genus is polyphyletic), Kirk et al. (2013; genus accepted), sequences are available for the type: U42658 (SSU).

Unguicularia Höhn. 1905, Hyaloscyphaceae, Helotiaceae, Leotiomyces, seven species, type: *U. unguiculata* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available (unpublished), needs generic revision.

Unguiculariella K.S. Thind & R. Sharma 1990, Hyaloscyphaceae, Helotiaceae, Leotiomyces, one species, type: *U. bhutanica* K.S. Thind & R. Sharma, asexual morph unknown, saprobes, terrestrial, Bhutan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

phylogeny), Wijayawardene et al. (2017; outline, taxonomy), cultures and sequences are available but lacks for the type.

**Unguiculella** Höhn. 1906, *Hyaloscyphaceae, Helotiales, Leotiomyctes*, 17 species, type: *U. falcipila* Höhn., asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Unisetaphora** Pinnoi, E.B.G. Jones, McKenzie & K.D. Hyde 2003, *Trichosphaeraceae, Trichosphaeriales, Sordariomycetes*, one species, type: *S. styracum* Speg., asexual morph unknown, saprobes, terrestrial, Thailand, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Urceolella** Boud. 1885, *Hyaloscyphaceae, Helotiales, Leotiomyctes*, 24 species, type: *U. crispula* (P. Karst.) Boud., asexual morph unknown, saprobes, terrestrial, worldwide, see Baral et al. (2009; new species), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Han et al. (2014; DNA, phylogeny), sequences are available for voucher TNS-F18014 of the type, needs generic revision.

**Uredinophila** Rossman 1987, *Dothideomycetes genera incertae sedis*, two species, type: *U. tropicalis* (Speg.) Rossman, asexual morph unknown, parasitic on *Pucciniales* on leaves of *Dryopteris tetragona*, Venezuela, see Boonmee et al. (2014), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable.

**Urnula** Fr. 1849, *Sarcosomataceae, Pezizales, Pezizomycetes*, ten species, type: *U. craterium* (Schwein.) Fr., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Pfister et al. (2008; phylogeny), Lumbsch and Huhndorf (2010; outline), Carbone et al. (2013; new species, DNA, phylogeny), Kirk et al. (2013; genus accepted), Wang and Huang (2015; new species, DNA, phylogeny), sequences are available for voucher DHP 04-511 (FH) of the type.

**Urohendersonia** Speg. 1902, *Ascomycota genera incertae sedis*, five species, type: *U. platensis* Speg., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, South America, India, see Wijayawardene et al. (2012, 2014, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Urohendersoniella** Petr. 1955, *Ascomycota genera incertae sedis*, one species, type: *U. mastigospora* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Australia, see Wijayawardene et al. (2012, 2014, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Uropolystigma** Maubl. 1920, *Phyllachoraceae, Phyllachorales, Sordariomycetes*, one species, type: *U. atrotestaceum* Maubl., in living leaves, Brazil, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Urosporella** G.F. Atk. 1897, *Clayeosphaeriaceae, Amphisphaeriales, Sordariomycetes*, two species, type: *U. americana* G.F. Atk., cosmopolitan, Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


Urupe Viégas 1944, *Sordariomycetes* genera incertae sedis, one species, type: *U. guaduae* Viégas, asexual morph unknown, saprobes, terrestrial, Central America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Meliolaceae*), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from *Meliolaceae* and placed in *Sordariomycetes* genera incertae sedis), cultures and sequences are unavailable, needs generic revision.

Usnea Dill. ex Adans., 1763, *Parmeliaceae, Lecanorales, Lecanoromycetes*, c. 350 species, type: *U. florida* (L.) Weber ex Wigg., asexual morph unknown, lichenized, terrestrial, worldwide, see Duman et al. (2008; usnic acid content), Hauck and Jürgens (2008; acidity tolerance), Hong et al. (2008; Anti-tuberculosis compound), Malhotra et al. (2008; traditional medicine), Schmeda-Hirschmann et al. (2008; antifungal and antiprotozoal depsides), Verma et al. (2008; antioxidant and hepatoprotective activity), Wirtz et al. (2008; ecology, cohesion approach), Behera et al. (2009; culture optimization and antioxidant), Biazrov (2009; redlist), Kolanko and Matwiejuk (2009; new to Białowieża Primeval Forest), Randlane et al. (2009; Key), Lumbsch and Huhndorf (2010; outline), Öztürk and Güvenç (2010; records from Black Sea region of Turkey), Pérez-Vargas et al. (2010; new species), Sivas (2015; antigenotoxic effect), Çobanoğlu et al. (2016; antimicrobial activity), Truong and Clerc (2016; new species and new records, South America), Yang et al. (2016; anticancer activity), sequences are available.


Usnochroma Søchting, Arup & Frödén 2013, *Teloschistaceae, Teloschistales, Lecanoromycetes*, two species, type: *U. carphineum* (Fr.) Søchting, Arup & Frödén, asexual morph unknown, lichenized, terrestrial, France, South Africa, see Arup et al. (2013; taxonomy, phylogeny), Gaya et al. (2015; DNA), Lücking et al. (2016; classification); sequences are available for the type: Ccar201 (fide Gaya et al. 2015).


Republic, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2016; outline), cultures and sequences are unavailable, needs generic revision.

**Uvarispora** Goos & Piroz. 1975, *Ascomycota* genera incertae sedis, one species, type: *U. lignicola* Goos & Piroz., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Central America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Uwemyces** Hern. -Restr., G.A. Sarria & Crous 2016, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, one species, type: *U. elaeidis* (Steyaert) Hern.-Restr., G.A. Sarria & Crous, hyphomycetous, associated with leaf spots, terrestrial, Australia, see Crous et al. (2016; taxonomy, phylogeny), Wijayawardene et al. (2017; outline), culture and sequences are available.


**Vaginatispora** K.D. Hyde 1995, *Lophiostomataceae*, *Pleosporales*, *Dothideomycetes*, four species, type: *V. aquatica* K.D. Hyde, asexual morph unknown, saprobes, fresh water or terrestrial, Hong Kong, Japan, Thailand, all species have sequence data, see Kirk et al. (2013; genus accepted), Thambugala et al. (2015b; morphology, phylogeny), accepted as a genus in *Lophiostomataceae*, Wanasinghe et al. (2016; morphology, phylogeny), ex-type strains of type: MFLUCC 11–0083 = IFRDCC 2462; holotype MFLU 11–1115.

**Vagnia** D. Hawksw. & Miadl. 1997, *Ascomycota* genera incertae sedis, one species, type: *V. cirriformia* D. Hawksw. & Miadl., lichenicolous, Europe, terrestrial, see Kirk et al. (2013; genus accepted), culture and sequences are unavailable, holotype of type: K(M)–IMI 371358.

**Vahlia** P.M. Jørg. 2008, *Vahlillaceae*, *Peltigerales*, *Lecanoromycetes*, eight species, type: *V. leucophaea* (Vahl) P.M. Jørg., assexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Wedin and Jørgensen (2011; new species), Wedin et al. (2011; phylogeny), Perez-Vargas et al. (2014; new species), Lücking et al. (2016; classification), cultures and sequences are available, sequences are available.

**Vainionora** Kalb 1991, *Lecanoraceae*, *Lecanorales*, *Lecanoromycetes*, nine species, type: *V. pallidostraminea* (Vain.) Kalb, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Papong and Lumbsch (2011; taxonomy), Menezes et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Papong et al. (2013; molecular), Lücking et al. (2016; classification), sequences are unavailable.

**Valdensia** Peyronel 1923 (= *Valdensinia* Peyronel 1953 *fide* Johnston et al. 2014), *Sclerotiniaceae*, *Helotiaceae*, *Leotiomycetes*, three species, type: *V. heterodoxa* Peyronel, asexual morph formerly known in *Valdensinia*, saprobes, terrestrial, Europe, Japan, see Lumbsch and Huhndorf (2010; outline), Papong and Lumbsch (2011; taxonomy), Menezes et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Papong et al. (2013; molecular), Lücking et al. (2016; classification), sequences are unavailable.

**Valetoniella** Höhn. 1909, *Niessliaceae*, *Hypocreales*, *Sordariomycetes*, three species, type: *V. crucipila* Höhn., asexual morph unknown, saprobes, or fungicolous, terrestrial, tropics, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline),
Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Valetoniellopsis** Samuels & M.E. Barr 1998, Niessliaceae, Hypocreales, Sordariomycetes, three species, type: *V. laxa* Samuels & M.E. Barr, asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 191.97.

**Valsalnicola** D.M. Walker & Rossman 2012, Diaporthales genera incertae sedis, Sordariomycetes, one species, type: *V. oxystoma* (Rehm) D. Walker & Rossman, asexual morph dimorphic, pathogens, saprobes, terrestrial, Europe, America, see Crous et al. (2012; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), lectotype of the type: BPI 884138, cultures available for the type: AR4833.


**Vanakripa** Bhat, W.B. Kendr. & Nag Raj 1993, Ascomycota genera incertae sedis, nine species, type: *V. gigaspora* Bhat, W.B. Kendr. & Nag Raj, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, Brazil, see Arias Mota et al. (2008; new species), Hu et al. (2010; new species, China), Mel’nik et al. (2011; new species, Vietnam), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Leão-Ferreira et al. (2013; new species; Brazil), cultures and sequences are unavailable, needs generic revision.

**Vanbeverwijkia** Agnihothr. 1961, Ascomycota genera incertae sedis, one species, type: *V. spirospora* Agnihothr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Assam, USA, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Vanderwaltozyma** Kurtzman 2003, Saccharomycetaceae, Saccharomycetales, Saccharomycetes, two species, type: *V. polyspora* (van der Walt) Kurtzman, asexual reproduction is by multilateral budding, saprophytic, soil, cactus fruit, tanning fluids, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

**Vanderystiella** Henn. 1908, Ascomycota genera incertae sedis, one species, type: *V. leopoldvilleana* Henn., coelomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Vanterpoolia** A. Funk 1982, Ascomycota genera incertae sedis, one species, type: *V. tsugae* A. Funk, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Varicella**ria Nyl. 1858, Ochrolechiaceae, Pertusariales, Lecanoromycetes, seven species, type: *V. microsticta* Nyl., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Schmitt et al. (2012; circumscription), Kirk et al. (2013; genus accepted), Ren and Li (2013; new record), Miadlikowska et al. (2014; molecular), Lücking et al. (2016; classification), cultures and sequences are unavailable for type.
**Varicosporium** W. Kegel 1906, *Helotiales genera incertae sedis, Leotiomycetes*, eleven species, type: *V. elodeae* W. Kegel, hyphomycetous, sexual morph unknown, in soil, saprobes, terrestrial, aquatic, worldwide, see Campbell et al. (2009; phylogeny, polyphyletic), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Baschien et al. (2016; DNA, phylogeny), cultures available for the type: CBS 541.92, needs generic revision.

**Variocladium** Descals & Marvanová 1998, *Helotiales genera incertae sedis, Leotiomycetes*, one species, type: *V. rangiferinum* (Descals) Descals & Marvanová, hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, temperate, see Campbell et al. (2009; phylogeny), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 508.71 (unpublished), needs generic revision.

**Variospora** Arup, Søchting & Frödén 2013, *Teloschistaceae, Teloschistales, Lecanoromycetes*, twelve species, type: *V. velana* (A. Massal.) Arup, Søchting & Frödén, asexual morph unknown, lichenized, terrestrial, Europe, North Africa, see Arup et al. (2013; taxonomy, phylogeny), Kondratyuk et al. (2014; DNA), Gaya et al. (2015; DNA, phylogeny), Lücking et al. (2016; classification); cultures available for the type: Cavel192, sequences are available.

**Vasudevella** Chona, Munjal & Bajaj 1957, *Ascomycota genera incertae sedis*, one species, type: *V. sporoboli* Chona, Munjal & Bajaj, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Velloziomyces** Armando, Z.M. Chaves & Dianese 2015, *Ascomycota genera incertae sedis*, one species, type: *V. ramosiconidiali* Armando, Z.M. Chaves & Dianese, hyphomycetous, sexual morph unknown, on living leaves, terrestrial, Brazil, see Armando et al. (2015; morphology), holotype of the type: UBMC 8849, cultures and sequences are unavailable, compare with *Dictyodochium*, *Minimidochium* and *Iyengarina*.

**Velutaria** Fuckel 1870, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, one species, type: *V. griseovitellina* (Fuckel) Fuckel, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Velutarina** Korf 1971, *Helotiaceae, Helotiales, Leotiomycetes*, three species, type: *V. rufo-olivacea* (Alb. & Schwein.) Korf, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Perić et al. (2015; new species), Pärtel et al. (2016; DNA, phylogeny), cultures and sequences are available.

**Velutipila** D. Hawksw. 1987, *Ascomycota genera incertae sedis*, one species, type: *V. poeltii* D. Hawksw., algicolous, terrestrial, Europe, hyphomycetous, sexual morph unknown, see Seifert et al. (2011; genus accepted), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision, holotype of type: K(M)-IMI 309488.

**Ventrographium** H.P. Upadhyay, Cavalc. & A.A. Silva 1986, *Ascomycota genera incertae sedis*, one species, type: *V. nervicola* H.P. Upadhyay, Cavalc. & A.A. Silva, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Venturia** Sacc. 1882 (= *Fusicladium* Bonord. 1851; = *Pollaccia* E. Bald. & Cif. 1937 fide Rossman et al. 2015), *Venturiaeae, Venturionales, Dothideomycetes*, c. 60 species, type: *V. inaequalis* (Cooke) G. Winter, asexual morph hyphomycetous, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Zhang et al. (2011; phylogeny),
Hyde et al. (2013; taxonomy), Kirk et al. (2013; genus accepted), Rossman et al. (2015; nomenclature), cultures and sequences are available.

**Venturiocistella** Raitv. 1979, *Hyaloscyphaceae, Helotiales, Leotiomycetes*, seven species, type: *V. venturioides* (Sacc. & Roum.) Raitv., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Hosoya et al. (2011; taxonomy, DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures and sequences are available. needs generic revision.

**Venustocephala** Matsush. 1995, *Ascomycota* genera incertae sedis, two species, type: *V. aequatorialis* Matsush., hyphomycetous, sexual morph unknown, saprobes, Neotropics, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Veracruzomyces** Mercado, Guarro, Heredia & J. Mena 2002, *Ascomycota* genera incertae sedis, one species, type: *V. obclavatus* Mercado, Guarro, Heredia & J. Mena, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Veramycella** G. Delgado 2009, *Ascomycota* genera incertae sedis, one species, type: *V. bispora* G. Delgado, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Veramyces** Matsush. 1993, *Ascomycota* genera incertae sedis, one species, type: *V. manuensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Verdipulvinus** A.W. Ramaley 1999, *Ascomycota* genera incertae sedis, one species, type: *V. nolinae* A.W. Ramaley, hyphomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Vermiconia** Egidi & Onofri 2014, *Extremaceae, Capnodiales, Dothideomycetes* genera incertae sedis, four species, type: *V. foris* D. Isola & L. Selbmann, sexual morph unknown, rock-inhabiting fungus, see Egidi et al. (2014; taxonomy), Quaedvlieg et al. (2014; phylogeny), Isola et al. (2016; new species, phylogeny), Wijayawardene et al. (2017; outline), cultures available for the type: CBS 136106 = CCFEE 5459.

**Vermiculariopsiella** Bender 1932, *Chaetosphaeriaceae, Chaetosphaeriales, Sordariomycetes*, 19 species, type: *V. immersa* (Desm.) Bender, hyphomycetous, sexual morph unknown, saprobes, worldwide, see Dhargalkar and Bhat (2009; new species), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Hernández-Restrepo et al. (2012; new species), Kirk et al. (2013; genus accepted), Dubey and Moonambeth (2014; new species), Crous et al. (2016; new species, phylogeny), cultures and sequence available but lack for the type, generic placement is based on non-type, needs generic revision.
**Vermispora** Deighton & Piroz. 1972, *Orbiliaceae, Orbiliales, Orbiliomycetes*, seven species, type: *V. grandispora* Deighton & Piroz., hyphomycetous, sexual morph unknown, fungicolous, nematode cysts, in soil, terrestrial, Africa, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available but lacks for the type, needs generic revision.

**Veronaea** Cif. & Montemart. 1957, *Herpotrichiellaceae, Chaetothyriales, Eurotiomycetes*, 21 species, type: *V. botryosa* Cif. & Montemart., asexual morph unknown, saprobes, fungicolous, on dung, on soil, worldwide, see Soares, and Barreto (2008; new species), Chlebicki (2009; new species), Pan et al. (2009; new species, China), de Hoog et al. (2011; DNA), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 254.57.

**Veronaella** Subram. & K.R.C. Reddy 1975, *Ascomycota* genera incertae sedis, one species, type: *V. indica* Subram. & K.R.C. Reddy, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Veronaepopsis** Arzanlou & Crous 2007, *Sympoventuriaceae, Venturiales, Dothideomycetes*, one species, type: *V. simplex* (Papendorf) Arzanlou & Crous, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Zhang et al. (2011; accepted as a genus in *Sympoventuriaceae*), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in *Sympoventuriaceae*), Samarjit et al. (2014; phylogeny), holotype and ex-type culture of the type: CBS H-7810, CBS 588.66 = IMI 203547.

**Veronaia** Benedek 1961, *Eurotiomycetidae* genera incertae sedis, two species, type: *V. castellanii* Benedek, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Veronidia** Negru 1964, *Ascomycota* genera incertae sedis, one species, type: *V. oxyccocii* Negru, coelomycetous, sexual morph unknown, saprobes, terrestrial, Rumania, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Verpa** Sw. 1815, *Morchellaceae, Pezizales, Pezizomycetes*, five species, type: *V. conica* (O.F. Müll.) Sw., asexual morph unknown, saprobes, terrestrial, north temperate, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Osmundson et al. (2013; DNA), cultures available for type: AFTOL-ID 74 (unpublished).

**Verrucaria** Schrad. [nom. cons.] 1794, *Verrucariaceae, Verrucariales, Eurotiomycetes*, 300 species, type: *V. rupestris* Schrad., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available, needs generic revision.

**Verrucariella** S. Ahmad 1967, *Ascomycota* genera incertae sedis, one species, type: *V. capparicola* S. Ahmad, coelomycetous, sexual morph unknown, saprobes, terrestrial, Pakistan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Verrucoconiothyrium** Crous 2015, *Didymosphaeriaceae, Pleosporales, Dothideomycetes*, one species, type: *V. nitidae* (Crous & Denman) Crous, coelomycetous, sexual morph
unknown, saprobes, Germany, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2016, 2017; outline, phylogeny), holotype of the type species PREM 55346.


**Verrucophragmia** Crous, M.J. Wingf. & W.B. Kendr. 1994, *Ascomycota* genera incertae sedis, one species, type: *V. splendens* Crous, M.J. Wingf. & W.B. Kendr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: PREM 51441, cultures and sequences are unavailable, needs generic revision.


**Verruculina** Kohlm. & Volkm.-Kohlm. 1990, *Testudinaceae, Pleosporales, Dothideomycetes*, one species, type: *V. enalia* (Kohlm.) Kohlm. & Volkm.-Kohlm., asexual morph unknown, saprobes, marine, Liberia, see Suetrong et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Didymosphaeraceae*), Hyde et al. (2013; accepted as a genus in *Testudinaceae*), Kirk et al. (2013; genus accepted), Jones et al. (2015; outline, marine), cultures available for the type: BCC 18402.

**Verruculopsis** Gueidan, Nav.-Ros. & Cl. Roux 2007, *Verrucariaceae, Verrucariales, Eurotiomycetes*, six species, type: *V. poeltiana* (Clauzade & Cl. Roux) Gueidan, Nav.-Ros. & Cl. Roux, asexual morph unknown, lichenized, lichenicolous, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Krzewicka (2012; new species, Poland), Kukwa and Pérez-Ortega (2012; phylogeny), Lücking et al. (2016; classification); sequences are available, cultures available for the type: AFTOL-ID 2298, needs generic revision.

**Verticicola** K.D. Hyde, Ranghoo & S.W. Wong 2000, *Annulatasaceae, Annulatascales, Sordariomycetidae*, two species, type: *V. caudatus* K.D. Hyde, S.W. Wong & Ranghoo, asexual morph unknown, saprobes, fresh water, terrestrial, Philippines, Hong Kong, Costa Rica, see Lumbsch and Huhndorf (2010; outline), Barbosa et al. (2013; new species, Costa Rica), Maharachchikumbura et al. (2016; outline), holotype of the type: HKU (M) 3108, cultures and sequences are available but lacks for the type, needs generic revision.

**Verticicladium** Matsush. 1993, *Ascomycota* genera incertae sedis, three species, type: *V. amazonensis* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, aquatic, Africa, South America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Guo et al. (2015; new species), cultures and sequences are unavailable, needs generic revision.

**Verticillium** Nees 1816, *Plectosphaerellaceae, Glomerellales, Sordariomycetes*, c. 20 species (in strict sense), type: *V. dahliae* Kleb., hyphomycetous, Hyde et al. (2011; outline), Seifert et
Verticimonosporium Matsush. 1971, *Hypocreaceae, Hypocreales, Sordariomycetes*, two species, type: *V. diffractum* Matsush., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, North and South America, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures available for the type: NRRL 26545, needs generic revision.

Vesicladiella Crous & M.J. Wingf. 1994, *Ascomycota genera incertae sedis*, two species, type: *V. capitata* (B. Sutton) Crous & M.J. Wingf., hyphomycetous, sexual morph unknown, saprobes, Australia, see Seifert et al. (2011; morphology), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures available for the type: IMI163277a.

Vesiculohyphomyces Armando, Pereira-Carv. & Dianese 2009, *Ascomycota genera incertae sedis*, one species, type: *V. cerradensis* Armando, Pereira-Carv. & Dianese, hyphomycetous, sexual morph unknown, saprobes, terrestrial, South America, see Pereira-Carvalho et al. (2009; taxonomy), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), holotype of the type: UB (Mycol. Col.) 14595, cultures and sequences are unavailable, needs generic revision.

Vestergrenia Rehm 1901, *Botryosphaeriaceae, Botryosphaeriales, Dothideomycetes*, 13 species, type: *V. nervisequia* Rehm, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbersch and Huhndorf (2010; outline, accepted as a genus in *Dothideaceae*), Kirk et al. (2013; genus accepted), Hyde et al. (2013; accepted as a genus in *Botryosphaeriales*), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Vestergrenopsis Gyeln. 1940, *Koerberiaceae, Peltigerales, Lecanoromycetes*, two species, type: *V. elaenia* (Wahlenb. ex Ach.) Gyeln., asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbersch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification) cultures and sequences are available, needs generic revision.

Vestigium Piroz. & Shoemaker 1972, *Ascomycota genera incertae sedis*, two species, type: *V. felicis* Piroz. & Shoemaker, coelomycetous, sexual morph unknown, saprobes, aquatic, cosmopolitan, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Shoemaker et al. (2013; new species), cultures and sequences are available, needs generic revision.

Vezdaea Tscherm.-Woess & Poelt 1976, *Vezdaeaceae, Vezdaeales, Sordariomycetes*, twelve species, type: *V. aestivalis* (Ohlert) Tscherm.-Woess & Poelt, asexual morph unknown, lichenized, saprobes, Europe, see Czarnota and Kukwa (2009; Poland), Lumbersch et al. (2009; DNA, phylogeny), Lumbersch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification) cultures and sequences are available, needs generic revision.

Vialaea Sacc. 1896, *Vialaeaceae, Xylariales, Sordariomycetes*, three species, type: *V. insculpta* (Fr.) Sacc., asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbersch and Huhndorf (2010; outline), Senanayake et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures available for the type: AFTOL-ID:1302.

Vibrissaea Fr. 1822 (= Anavirga B. Sutton 1975 fide Johnston et al. 2014), *Vibrissaceae, Helotiales, Leotiomycetes*, 34 species, type: *V. truncorum* (Alb. & Schwein.) Fr., asexual morph formerly known in *Anavirga*, saprobes, aquatic or semiaquatic, worldwide, see Grünig et al. (2009; DNA, phylogeny), Lumbersch and Huhndorf (2010; outline), Hustad and Miller (2011; DNA, phylogeny), Raja et al. (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), Johnston et al. (2014; nomenclature), cultures available for the type: CBS 143.92.
**Viegasella** Inácio & P.F. Cannon 2003, *Parmulariaceae, Dothideomycetes* genera *incertae sedis*, one species, type: *V. pulchella* (Speg.) Inácio & P.F. Cannon, assexual morph unknown, saprobies, terrestrial, Brazil, see Lumbsch and Huhndorf (2010; outline, listed as *Viegasiella*), Hyde et al. (2013; accepted as a genus in *Parmulariaceae*). Wijayawardene et al. (2014; outline), holotype of type: LPS, cultures and sequences are unavailable, needs generic revision.

**Vigneronia** Ertz 2015, *Roccellaceae, Arthoniales, Arthoniomycetes*, three species, type: *V. spieri* (Aptroot & Sparrius) Ertz & Bungartz, sexual morph with lirelliform ascomata, lichenized, terrestrial, neotropical, see Ertz et al. (2015; morphology, phylogeny); Lücking et al. (2016; classification); sequences are available, holotype and ex-type strain of the type: Aptroot 65014 (CDS31595).

**Villophora** Sochting, Arup & Frödén 2013, *Teloschistaceae, Teloschistales, Lecanoromycetes*, two species, type: *V. isidioclada* (Zahlbr.) Sochting, Frödén & Arup, assexual morph unknown, lichenized, saxicolous or epiphytic, terrestrial, southern hemisphere, see Arup et al. (2013; taxonomy, phylogeny), Kondratyuk et al. (2015; new species, DNA, phylogeny), Lücking et al. (2016; classification); sequence available for the type: KC179325 (ITS) (fide Arup et al. 2013).

**Violella** T.Sprib. 2011, *Tephromelataceae, Lecanorales, Lecanoromycetes*, two species, type: *V. fucata* (Stirt.) T. Sprib., lichenized, see Spribille et al. (2011; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Virgaria** Nees 1816, *Xylariaceae, Xylariales, Sordariomycetes*, 16 species, type: *V. nigra* (Link) Nees, assexual morph unknown, saprobies, terrestrial, Africa, Australia, Europe, Japan, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Nonaka et al. (2013; new species, Japan, DNA), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: NBRC 9453.

**Virgariella** S. Hughes 1953, *Ascomycota* genera *incertae sedis*, eleven species, type: *V. globigera* (Sacc. & Ellis) S. Hughes, hyphomycetous, sexual morph unknown, saprobies, terrestrial, Asia, Caribbean, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Virgatospora** Finley 1967, *Stachybotriaceae, Hypocreales, Sordariomycetes*, one species, type: *V. echinofibrosa* Finley, hyphomycetous, sexual morph unknown, saprobies, terrestrial, pantropical, see Seifert et al. (2011; morphology), Lombard et al. (2016; phylogeny), Wijayawardene et al. (2017; outline), culture available for the type: CBS.

**Virgella** Darker 1967, *Rhytismataceae, Rhytismatales, Leotiomycetes*, one species, type: *V. robusta* (Tubeuf) Darker, assexual morph unknown, saprobies, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Viridiannula** Etayo 2002, *Ascomycota* genera *incertae sedis*, one species, type: *V. pertusariae* Etayo, coelomycetous, sexual morph unknown, parasymbiont, terrestrial, Spain, see Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs revision, holotype of the type: hb. Etayo, Etayo 14496.


**Vishnumyces** Hosag. 2010, *Dothideomycetes* genera *incertae sedis*, one species, type: *V. otonephelii* Hosag. & Harish, saprobies, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in *Asterinaceae*), Hosagoudar and Harish (2010;
taxonomy, accepted as a genus in *Asterinaceae*, Hyde et al. (2013) and Hongsanan et al. (2014c) did not treat as a genus in *Asterinaceae*, Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Vismaya** V.V. Sarma & K.D. Hyde 2001, *Diaporthales* genera *incertae sedis*, one species, type: *V. chaturbeeka* V.V. Sarma & K.D. Hyde, asexual morph unknown, saprobes, terrestrial, Hong Kong, see Lumbsch and Huhndorf (2010; outline, listed as *Vismya*), Maharachchikumbura et al. (2015, 2017; outline), lectotype of the type: HKU (M) 12457, cultures and sequences are unavailable, needs generic revision.

**Vitreostroma** P.F. Cannon 1991, *Phyllachorales*, *Phyllachoraceae*, *Sordariomycetes*, one species, type: *V. desmodii* (Henn.) P.F. Cannon, in living leaves, montane paleotropics, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Vittalia** Gawas & Bhat 2007, *Ascomycota* genera *incertae sedis*, one species, type: *V. indica* Gawas & Bhat, hyphomycetous, sexual morph unknown, saprobes, terrestrial, India, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.


**Vivantia** J.D. Rogers, Y.M. Ju & Cand. 1996, *Xylariaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *V. guadalupensis* J.D. Rogers, Y.M. Ju & Cand., asexual morph hyphomycetous, terrestrial, saprobes, Guadeloupe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

**Vizella** Sacc. 1883, *Vizellaceae*, *Dothideomycetes* genera *incertae sedis*, eleven species, type: *V. conferta* (Cooke) Sacc., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in *Vizellaceae*), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.

**Vizellopsis** Bat., J.L. Bezerra & T.T. Barros 1969, *Asterinaceae*, *Asterinales*, *Dothideomycetes*, one species, type: *V. grevilleae* Bat., J.L. Bezerra & T.T. Barros, asexual morph unknown, foliar epiphytes, terrestrial, New Caledonia, see Lumbsch and Huhndorf (2010; outline, accepted as *Dothideomycetes* genera *incertae sedis*), Kirk et al. (2013; genus accepted), Dai et al. (2014; accepted as a genus in *Asterinaceae* based on morphology), Hongsanan et al. (2014; taxonomy, accepted as a genus in *Asterinaceae*), Wijayawardene et al. (2014; 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Vladracula** P.F. Cannon, Minter & Kamal 1986, *Rhytismataceae*, *Rhytismatales*, *Leotiomyces*, two species, type: *V. annuliformis* (Syd., P. Syd. & E.J. Butler) P.F. Cannon, Minter & Kamal, asexual morph unknown, saprobes, terrestrial, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Vleugelia** J. Reid & C. Booth 1969, *Sordariomycetes* genera *incertae sedis*, one species, type: *V. betulina* (Bubák & Vleugel) J. Reid & C. Booth, asexual morph unknown, saprobes, terrestrial, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.
**Volkartia** Maire 1907, *Protomycetaceae, Taphrinales, Taphrinomycetes*, one species, type: *V. rhaetica* (Volkart) Maire, asexual reproduction is unknown, plant parasite, parasitic on species of *Asteraceae*, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.


**Vonarxella** Bat., J.L. Bezerra & Peres 1965, *Saccardiaceae, Ascomycota* families incertae sedis, one species, type: *V. dipterygis* Bat., J.L. Bezerra & Peres, asexual morph unknown, saprobes, Brazil, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Vonarxia** Bat. 1960, *Chaetothyriaceae, Chaetothyriales, Eurotiomycetes*, one species, type: *V. anacardii* Bat. & J.L. Bezerra, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Crous et al. (2009; DNA, phylogeny, treated as hyphomycetous i.e. with sporodochial conidioma), Seifert et al. (2011; treated as coelomycetous), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Vouauxiella** Petr. & Syd. 1927, *Ascomycota* genera incertae sedis, five species, type: *V. verrucosa* (Vouaux) Petr. & Syd., coelomycetous, sexual morph unknown, lichenicolous, terrestrial, Europe, South America, see Wijayawardene et al. (2012, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Vulpicida** J.-E. Mattsson & M.J. Lai 1993, *Parmeliaceae, Lecanorales, Lecanoromycetes*, six species, type: *V. juniperinus* (L.) J.-E. Mattsson & M.J. Lai, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kowalski et al. (2011; bioactivity study), Kristiina et al. (2012; molecular), Mark et al. (2012; molecular), Kirk et al. (2013; genus accepted), Kubiak and Guzow (2014; taxonomy), Saag et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Wadeana** Coppins & P. James 1978, *Ascomycota* genera incertae sedis, two species, type: *W. dendrographa* (Nyl.) Coppins & P. James, asexual morph unknown, lichenized, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences unavailable.

**Wahlenbergiella** Gueidan & Thüs 2009, *Verrucariaceae, Verrucariales, Eurotiomycetes*, three species, type: *W. mucosa* (Wahlenb.) Gueidan & Thüs, asexual morph unknown, lichenized, terrestrial, Europe, see Gueidan et al. (2009, 2011; taxonomy), Lumbsch and Huhndorf (2010; outline), Shivarov et al. (2013; new records, Bulgaria), Higgins et al. (2015; factors in distributing), Lücking et al. (2016; classification), sequences are available, cultures available for the type: AFTOL-ID 2264.

**Waihonghopes** Yanna & K.D. Hyde 2002, *Ascomycota* genera incertae sedis, one species, type: *W. australiensis* Yanna & K.D. Hyde, hyphomycetous, sexual morph unknown,
saproboids, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), cultures and sequences are unavailable, needs generic revision.

**Wallrothiella** Sacc. 1882, *Amplistromataceae, Amplistromatales, Sordariomycetes*, ten species, type: *W. congregata* (Wallr.) Sacc., asexual morph unknown, saproboids, terrestrial, worldwide, see Huhndorf et al. (2009; DNA, phylogeny), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures available for the type: ANM81, needs generic revision.

**Waltonia** Saho 1970, *Dermataceae, Helotiales, Leotiomyces*, one species, type: *W. pinicola* Saho, asexual morph unknown, saproboids, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Warcupia** Paden & J.V. Cameron 1972, *Pyronemataceae, Pezizales, Pezizomycetes*, three species, type: *W. terrestris* Paden & J.V. Cameron, asexual morph unknown, hypogeous, saproboids, terrestrial, Canada, see Lumbsch and Huhndorf (2010; outline), Barua et al. (2012; environmental adaptations), Hansen et al. (2013; DNA, phylogeny), Kirk et al. (2013; genus accepted), cultures available for the type: CBS 891.69.


**Wardinella** Bat. & Peres 1960, *Ascomycota genera incertae sedis*, one species, type: *W. jaboatonomensis* Bat. & Peres, coelomycetous, sexual morph unknown, saproboids, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Wardomycopsis** Udagawa & Furuya 1978, *Microascaceae, Microascales, Sordariomycetes*, four species, type: *W. inopinata* Udagawa & Furuya, hyphomycetous, saproboids, Asia, Europe, North America, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), Sandoval-Denis et al. (2016; new species, phylogeny), cultures and sequences are available.

**Waydena** Henssen & Kantvilas 1985, *Arctomiaceae, Arctomiales, Lecanoromycetes*, one species, type: *W. fruticulosa* Henssen & Kantvilas, asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miadlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Waydora** B. Sutton 1976, *Valsaceae, Diaporthales, Sordariomycetes*, one species, type: *W. typica* (Rodway) B. Sutton, coelomycetous, sexual morph unknown, saproboids, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures available for voucher PDD 103894 of the type: (unpublished), needs generic revision.

**Waynea** Moberg 1990, *Ramalinaceae, Lecanorales, Lecanoromycetes*, seven species; type: *W. californica* Moberg; lichenized; see Lücking et al. (2016; classification); sequences are available.


*Wegea* Aptroot & Tibell 1997, *Arthoniales genera incertae sedis*, Arthoniomycetes, one species, type: *W. tylophorelloides* Aptroot & Tibell, lichenized fungi, terrestrial, tropical, see Lumbsch and Huhndorf 2010 (outline), Kirk et al. 2013 (genus accepted), sequences are unavailable.

*Wehmeyera* J. Reid & C. Booth 1989, *Melanconidaceae, Diaporthales, Sordariomycetes*, one species, type: *W. acerina* (Wehm.) J. Reid & C. Booth, asexual morph unknown, saprobes, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

*Weinmannioscyphus* Srček 1977, *Helotiaceae, Helotiales, Leotiomycetes*, one species, type: *W. messerschmidii* (Weinm.) Srček, asexual morph unknown, saprobes, terrestrial, Europe, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Wentiomyces* Koord. 1907, *Dothideomycetes genera incertae sedis*, c. 50 species, type: *W. javanicus* Koord., Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


*Westea* H.J. Swart 1988, *Dothideomycetes genera incertae sedis*, one species, type: *W. banksiae* H.J. Swart, saprobes, terrestrial, Australia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are unavailable, needs generic revision.


*Wettsteinina* Höhn. 1907, *Dothideomycetes genera incertae sedis*, 29 species, type: *W. gigantospora* (Rehm) Höhn., saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, needs generic revision.

Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Whalleya J.D. Rogers, Y.M. Ju & F. San Martín 1997, Xylariaceae, Xylariales, Sordariomycetes, two species, type: W. microplaca (Berk. & M.A. Curtis) J.D. Rogers, Y.M. Ju & F. San Martín, asexual morph unknown, terrestrial, saprobes, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

Wickerhamia Soneda 1960, Metschnikowiaceae, Saccharomycetales, Saccharomycetes, one species, type: W. fluorescens (Soneda) Soneda, saprophytic, Japan, France, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Wickerhamiella van der Walt 1973, Trichomonascaceae, Saccharomycetales, Saccharomycetes, 25 species, type: W. domercqiae van der Walt & Liebenberg, asexual reproduction is by multilateral budding on either a narrow or a broad base, saprophytic, on nitidulid beetles, flowers of morning glory (Hibiscus spp.) and cacti, wine, worldwide, see de García et al. (2010; new species, DNA), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

Wickerhamomyces Kurtzman, Robnett & Basehoar-Powers 2008, Phaffomycetaceae, Saccharomycetales, Saccharomycetes, 20 species, type: W. canadensis (Wickerham) Kurtzman, Robnett & Basehoar-Powers, asexual reproduction is by multilateral budding, saprophytic, but several species are infrequent clinical isolates, in tree sap fluxes, insect tunnels in trees, leaf litter, berries, soil, tanned leather, soy sauce, blood, lung, eye, worldwide, see de García et al. (2010; new species, DNA), Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

Wicklowia Raja, A. Ferrer & Shearer 2010, Wicklowiaceae, Pleosporales, Dothideomycetes, two species, type species W. javanicus Koord., hyphomycetous, saprobe, terrestrial, widespread, see Hyde et al. (2011; outline), Kirk et al. (2013; genus accepted), Suetrong et al. (2014; morphology, phylogeny), Wilcox and Lembute (2017; outline), cultures and sequences are available, needs generic revision.

Wilcoxina Chin S. Yang & Korf 1985, Pyronemataceae, Pezizales, Pezizomycetes, three species, type: W. mikolae (Chin S. Yang & H.E. Wilcox) Chin S. Yang & Korf, asexual morph unknown, hypogeous, saprobes, terrestrial, Europe, North America, see Siemans et al. (2008; mycorrhizal with Hebeloma crustuliniforme), Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures are available for the type: but unpublished, sequence available for the type: DQ220468 (LSU) (fide Perry et al. 2007).

Willeya Müll. Arg. 1883, Verrucariaceae, Verrucariales, Eurotiomycetes, eleven species; type: W. diffractella (Nyl.) Müll. Arg., lichenized, see Gueidan et al. (2014a; taxonomy), Gueidan and Lendemer (2015; taxonomy), Lücking et al. (2016; classification), sequences are available.

Wirthiotrema Rivas Plata, Kalb, Frisch & Lumbsch 2010, Graphidaceae, Ostropales, Lecanoromycetes, seven species, type: W. glaucopallens (Nyl.) Rivas Plata & Kalb, asexual morph unknown, lichenized fungi, terrestrial, tropical, see Rivas Plata et al. (2010), Sipman et al. (2012; key), Lücking et al. (2016; classification), sequences are available.

Wojnowiciella Crous, M. Hern.-Restr. & M.J. Wingf. 2015, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, seven species, type: W. eucalypti Crous, M. Hern.-Restr. & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see
Crous et al. (2015, 2016; new species, phylogeny), Hernandez-Restrepo et al. (2016; new species, new species, phylogeny), Wijayawardene et al. (2016, 2017; taxonomy, outline, phylogeny), cultures are available.

**Wolfina** Seaver ex Eckblad 1968, *Chorioactidaceae, Pezizales, Pezizomycetes*, three species, type: *W. aurantiopsis* (Ellis) Seaver, asexual morph unknown, saprobes, terrestrial, USA, China, see Lumbsch and Huhndorf (2010; outline), Hustad and Miller (2011; DNA, phylogeny), Kirk et al. (2013; genus accepted), sequences are available.

**Wolkia** Ramsb. 1915, *Ascomycota* genera incertae sedis, one species, type: *W. decolorans* (Wolk) Ramsb., asexual morph unknown, saprobes, terrestrial, Java, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

**Woodiella** Sacc. & P. Syd. 1899, *Helotiales* genera incertae sedis, three species, type: *W. natalensis* Sacc. & P. Syd., asexual morph unknown, saprobes, terrestrial, South Africa, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

**Woswasia** Jaklitsch, Réblová & Voglmayr 2012, *Sordariomycetidae* genera incertae sedis, *Sordariomycetes*, one species, type: *W. atropurpurea* Jaklitsch, Réblová & Voglmayr, asexual morph formed in culture only (penicilliate heads with terminally arranged, sympodially proliferating conidiogenous cells producing simple ellipsoid to obovoid, hyaline, nonseptate conidia holoblastically), myotrophic saprobes, terrestrial, Italy, see Jaklitsch et al. (2013; original description, phylogeny), Réblová et al. (2014; close relationship with *Xylochrysis*), Maharachchikumbura et al. (2015, 2016; outline), sequence are available, holotype and ex-type of type: WU 32007, CBS 131167.

**Wuestneia** Auerw. ex Fuckel 1864, *Melanconidaceae, Diaporthales, Sordariomycetes*, 20 species, type: *W. aurea* (Fuckel) Auerw., forms pycnidial asexual morphs harknessia-like, saprobes, terrestrial, worldwide, see Crous et al. (2012; placement in new family *Harknessiaceae*), Wijayawardene et al. (2012, 2017; outline), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available.

**Wynnea** Berk. & M.A. Curtis 1867, *Sarcoscyphaceae, Pezizales, Pezizomycetes*, seven species and two variants, type: *W. gigantea* Berk. & M.A. Curtis, saprobes, terrestrial, Asia, North and Central America, see Lumbsch and Huhndorf (2010; outline), Romero et al. (2012; phylogeny), Kirk et al. (2013; genus accepted), sequences are available

**Wynnella** Boud. 1885, *Helvellaceae, Pezizales, Pezizomycetes*, three species, type: *W. auricula* (Schaeff.) Boud., saprobes, terrestrial, Europe, Asia, North America, see Parslow and Spooner (2009, new species), Kirk et al. (2013; genus accepted), Landeros et al. (2015; phylogeny), Zhao et al. (2016; new species, phylogeny), sequences are available.

**Xalocoa** Kraichak, Lücking & Lumbsch 2013, *Graphidaceae, Ostropales, Lecanoromycetes*, one species, type: *X. ocellata* (Fr.) Kraichak, Lücking & Lumbsch, asexual morph unknown, lichenized fungi, terrestrial, temperate, see Kraichak et al. (2013; taxonomy), Lücking et al. (2016; classification), sequences are available.

**Xanthocarpia** A.Massal. & De Not. 1853, *Teloschistaceae, Teloschistales, Lecanoromycetes*, 13 species, type: *X. ochracea* (Schaer.) A. Massal. & De Not., lichenized, see Arup et al. (2013; taxonomy), Lücking et al. (2013; classification), sequences are available.

**Xanthodactylon** P.A. Duvign 1941, *Teloschistaceae, Teloschistales, Lecanoromycetes*, seven species, type: *X. perforatum* P.A. Duvign, asexual morph unknown, lichenized, terrestrial, see Fedorenko et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Zedda and Rambold (2011; environmental study), Kirk et al. (2013; genus accepted), Nyati et al. (2013; phylogeny), sequences are unavailable for type species.

morph unknown, lichenized, terrestrial, see Fedorenko et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Lamit et al. (2011; ecology), Messuti et al. (2011; new species), Moniri, et al. (2011; new record), Riddell et al. (2011; air pollution), Bomble (2012; taxonomy), Arup et al. (2013; taxonomy), Hauck et al. (2013; new records), Kirk et al. (2013; genus accepted), Leavitt et al. (2013; taxonomy), Lindblom and Sochting (2013; genetic diversity of photobiont), Nyati et al. (2013; phylogeny), Diederich et al. (2014; new combination), Kondratyuk et al. (2014; phylogeny), Lindblom (2014; taxonomy), Palmer (2014; ecology), Valadbeigi (2014; floristic), Crittenden et al. (2015; ecology), Gaya et al. (2012, 2015; molecular), Holt et al. (2015; ecology), McMullin et al. (2015; new records), Miralles et al. (2015; biostrategy), Suija et al. (2015; new record), Tripp (2015; inventory), Jaklitsch et al. (2016a; outline), Lücking et al. (2016; classification), sequences are available.

*Xanthoparmelia* (Vain.) Hale 1974, *Parmeliaceae*, *Lecanorales*, *Lecanoromycetes*, 820 species, type: *X. conspersa* (Ehrh. ex Ach.) Hale, asexual morph unknown, lichenized, terrestrial, worldwide, see Elix and Kantvilas (2009; new species), Tuzen et al. (2009; biosorptive study), Dailey et al. (2010; chemical study), Lumbsch and Huhndorf (2010; outline), Pérez-Vargas et al. (2010; new species), Yazici et al. (2010; new records), Hawkinson and Lendemer (2011; molecular), Leavitt and Clair (2011; ecology), Leavitt et al. (2011a, b; taxonomy and molecular), Biakov (2012; physiology), de Paz et al. (2012; molecular taxonomy), Favero-Longo. and Piervittori (2012; transplant expt.), Molnár et al. (2012; molecular), Kirk et al. (2013; genus accepted), Rizzi and Giordani (2013; ecology), Goni et al. (2014; checklist), Jayalal et al. (2014; new species, taxonomy), Laska et al. (2015; chemopreventive activity), Cao et al. (2015; molecular), Diaz (2016; diversity), Lücking et al. (2016; classification), sequences are available.

*Xanthopeltis* R.Sant. 1949, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, one species, type: *X. rupicola* R. Sant., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; taxonomy), Arup et al. (2013; taxonomy), sequences are available.

*Xanthopsorella* Kalb & Hafellner 1984, *Catillariaceae*, *Lecanorales*, *Lecanoromycetes*, one species, type: *X. texana* (W.A. Weber) Kalb & Hafellner, asexual morph unknown, lichenized, Mexico, USA, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are available.

*Xanthopsoroma* Elvebakk & S.G. Hong 2010, *Pannariaceae*, *Peltigerales*, *Lecanoromycetes*, two species, type: *X. contextum* Elvebakk & S.G. Hong, asexual morph unknown, lichenized, terrestrial, see Elvebakk et al. (2010; molecular), sequences are available for type.

*Xanthoria* (Fr.) Th. Fr. 1861, *Teloschistaceae*, *Teloschistales*, *Lecanoromycetes*, ten species, type: *X. parietina* (L.) Beltr., asexual morph unknown, lichenized, terrestrial, see Aptroot et al. (2009; taxonomy), Lumbsch and Huhndorf (2010; outline), Sarı and Tuzen (2010; biosorption), Karagöz et al. (2011; new species), Pisani et al. (2011; physiology), Aptroot and Aslan (2012; new records), Beck and Mayr (2012; physiology), Demiray et al. (2012; biomonitoring), Arup et al. 2013, Kirk et al. (2013; genus accepted), Kondratyuk et al. (2013; new species), Nyati et al. (2013; phylogeny), Motiejunaite and Grochowski (2014; new records), Joshi et al. (2015; checklist), Kaya et al. et al. (2015; natural product), Anar et al. (2016; antigenotoxic and Antioxidant study), Lücking et al. (2016; classification), sequences are available.

sequences), Ertz et al. (2013; phylogeny), Pérez-Ortega et al. (2015; position), sequences are available, isotype of type: S.


**Xenidiocercus** Nag Raj 1993, *Ascomycota* genera incertae sedis, one species, type: *X. macarangae* (T.S. Ramakr.) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, West Africa, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Xenoacremonium** L. Lombard & Crous 2015, *Nectriaceae, Hypocreales, Sordariomycetes*, two species, type: *X. recifei* (Leão & Lôbo) L. Lombard & Crous, hyphomycetous, sexual morph unknown, saprobes, Brazil, New Zealand, see Lombard et al. (2015; morphology, phylogeny), Wijayawardene et al. (2017; outline), ex-type of type: CBS 137.3.

**Xenocamarosporium** Crous & M.J. Wingf. 2015, *Didymosphaeriaceae, Pleosporales, Dothideomycetes*, one species, type: *X. acaciae* Crous & M.J. Wingf., coelomycetous, sexual morph unknown, saprobes, Malaysia, see Crous et al. (2015; taxonomy, phylogeny), Wijayawardene et al. (2016, 2017; outline, phylogeny), holotype and ex-type culture of the type: CBS H-22224, CPC 24755.


**Xenochora** Petr. 1948, *Ascomycota* genera incertae sedis, one species, type: *X. sydowii* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Ecuador, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, need generic revision.

**Xenoconiothyrium** Crous & Marinc. 2011, *Teratosphaeriaceae, Capnodiales, Dothideomycetes*, one species, type: *X. catenatum* Crous & Marinc. coelomycetous, saprobes, South Africa, see Crous et al. (2011; morphology, phylogeny), Wijayawardene et al. (2017; morphology, phylogeny, outline), holotype and ex-type culture of type: PREM 59486, CMW 22113.

**Xenocylindrosporium** Crous & Verkley 2009, *Phaeomoniellaceae, Phaeomoniellales, Eurotiomycetes*, one species, type: *X. kirstenboschense* Crous & Verkley, hyphomycetous, pathogens, South Africa, see Crous et al. (2009; morphology, phylogeny), Wijayawardene et al. (2016; outline), holotype and ex-type culture of type: CBS H-20346, CPC 16311.


**Xenodomus** Petr. 1922, *Ascomycota* genera incertae sedis, one species, type: *X. sydowii* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, North America, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Xenoheteroconium Bhat, W.B. Kendr. & Nag Raj 1993, Ascomycota genera incertae sedis, one species, type: *X. bicolor* Bhat, W.B. Kendr. & Nag Raj, hyphomycetous, sexual morph unknown, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Xenolecia Hertel 1984, Lecideaceae, Lecideales, Lecanoromycetes, one species, type: *X. spadicomma* (Nyl.) Hertel, lichenized, see Lumbsch and Huhndorf (2010; outline), Schmull et al. (2011; taxonomy), Kirk et al. (2013; genus accepted), Lücking et al. (2016; classification), sequences are unavailable.


Xenomeris Syd. 1924, Dothideomycetes genera incertae sedis, eleven species, type: *X. pruni* Syd., asexual morph hormonema-like, Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available but lacks for the type, need generic revision.

Xenomycosphaerella Quaedvl. & Crous 2014, Mycosphaerellaceae, Capnodiales, Dothideomycetes, three species, type: *X. elongata* (Crous & M.J. Wingf.) Quaedvl. & Crous asexual morph unknown, pathogens, Brazil, Venezuela, see Quaedvlieg et al. (2014; morphology, phylogeny), Guatimosim et al. (2016; morphology, phylogeny), holotype and ex-type culture of type: CBS-H 19824, CPC 13378.

Xenomyxa Syd. 1939, Ascomycota genera incertae sedis, one species, type: *X. disseminata* Syd., asexual morph unknown, saprobes, terrestrial, Ecuador, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Xenonectriella Weese 1919, Nectriaceae, Hypocreales, Sordariomycetes, twelve species, type: *X. lutescens* (Arnold) Weese, asexual morph unknown, saprobes, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Etayo and van den Boom (2013; new species, Dominican Republic), Kirk et al. (2013; genus accepted), Brackel et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable.

Xenopeltis Syd. & P. Syd. 1919, Ascomycota genera incertae sedis, one species, type: *X. philippinensis* Syd. & P. Syd., coelomycetous, sexual morph unknown, saprobes, terrestrial, Philippines, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.

Xenopenidiella Quaedvlieg & Crous 2014, Teratosphaeriaceae, Capnodiales, Dothideomycetes, one species, type: *X. rigidophora* (Crous, R.F. Castañeda & U. Braun) Quaedvlieg & Crous hyphomycetous, saprobes, Cuba, see Quaedvlieg et al. (2014; morphology, phylogeny), holotype and ex-type culture of type: CBS H-19938, CBS 314.95.

Xenophacidiella Crous 2011, Dothideomycetes genera incertae sedis, one species, type: *X. pseudocatenata* Crous, hyphomycetous, sexual morph unknown, saprobes, South Africa, terrestrial, see Crous and Groenewald (2011; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of type: CBS H-20536, CPC 18472.

Xenophaeosphaeria Crous & M.J. Wingf. 2014, Phaeosphaeriaceae, Pleosporales, Dothideomycetes, one species, type: *X. grewiae* Crous & M.J. Wingf., asexual morph unknown, Tanzania, terrestrial, see Crous et al. (2014; morphology, phylogeny), holotype and ex-type culture of type: CBS H-21999, CPC 24398.

Xenoplaca Petr. 1949, Ascomycota genera incertae sedis, one species, type: *X. aequatoriensis* Petr., hyphomycetous, sexual morph unknown, South America, see Seifert et al. (2011;
Xenopolyscytalum Crous 2010, Helotiales genera incertae sedis, Leotiomycetes, one species, type: X. pinea Crous, hyphomycetous, sexual morph unknown, The Netherlands, terrestrial, see Crous et al. (2010; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype and ex-type culture of type: CBS-H 20488, CPC 14225.

Xenopyricularia Klaubauf, Lebrun & Crous 2014, Pyriculariaceae, Magnaporthales, Sordariomycetes, one species, X. zizanicola (Hashioka) Klaubauf, Lebrun & Crous, hyphomycetous, sexual morph unknown, pathogens, terrestrial, worldwide, see Klaubauf et al. (2014; taxonomy, phylogeny), Maharachchikumbura et al. (2015, 2016; outline), Wijayawardene et al. (2017; outline), neotype and ex-neotype cultures for the type: CBS-H 21846, CBS133593 = MAFF 240219.


Xenosonderhenia Crous 2012, Capnodiales genera incertae sedis, Dothideomycetes, two species, type: X. syzygii Crous, coelomycetous, saprobes, terrestrial, worldwide, see de Gruyter et al. (2012, 2014; morphology, phylogeny), Wijayawardene et al. (2017; outline), holotype of the type: CBS-H-20968, ex-type strain of type: CPC 19790.

Xenosporium Penz. & Sacc. 1902, Dothideomycetes genera incertae sedis, 18 species, type: X. mirabile Penz. & Sacc., hyphomycetous, sexual morph unknown, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.


Xenostomella Syd. 1930, Dothideomycetes genera incertae sedis, two species, type: X. tovarensis Syd., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline, accepted as a genus in Meliolaceae), Kirk et al. (2013; genus accepted), Hongsanan et al. (2015; excluded from Meliolaceae and placed in Sordariomycetes genera incertae sedis), cultures and sequences are unavailable, needs generic revision.

Xenostroma Höhn. 1915, Ascomycota genera incertae sedis, one species, type: X. caespitosum (Fückel) Höhn., coelomycetous, sexual morph unknown, saprobes, terrestrial,
Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, need generic revision.


**Xenothecium** Höhn. 1919, *Hyponectriaceae*, *Xylariales*, *Sordariomycetes*, one species, type: *X. jodophilum* Höhn., asexual morph unknown, saprobes, terrestrial, South America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BRIP 22762, cultures and sequences are unavailable, needs generic revision.

**Xenotypa** Petr. 1955, *Gnomoniaceae*, *Diaporthales*, *Sordariomycetes*, one species, type: *X. aterrima* (Fr.) Petr., asexual morph unknown, saprobes, terrestrial, Europe, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.


**Xepiculopsis** Nag Raj 1993, *Stachybotriaceae*, *Hypocreales*, *Sordariomycetes*, two species, type: *X. perpulchra* Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Lombard et al. (2016; taxonomic notes), cultures are unavailable, needs generic revision.


**Xeromedulla** Korf & W.Y. Zhuang 1987, *Helotiaceae*, *Helotiales*, *Leotiomycetes*, three species, type: *X. leptospora* W.Y. Zhuang & Korf, asexual morph hyphomycetous, saprobes, terrestrial, China, Phillipines, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Xeromyces** L.R. Fraser 1954 (= *Fraseriella* Cif. & A.M. Corte fide Rossman et al. 2016), *Aspergillaceae*, *Eurotiales*, *Eurotiomycetes*, one species: *X. bisporus* L.R. Fraser, type:
Xeromyces bisporus L.R. Fraser asexual morph hyphomycetous (Fraseriella bispora Cif. & A.M. Corte fide Petterson et al. 2011 and Seifert et al. 2011), terrestrial, strongly xerophilic, isolated from dry, sugar-rich foodstuffs, cosmopolitan, see Fraser (1954; morphology), Seifert et al. (2011; morphology), Petterson et al. (2011; phylogeny, morphology), Houbraken et al. (2011; phylogeny). Under unitary nomenclature (Hawksworth et al. 2011), the names Xeromyces and Fraseriella compete for use. Since the former genus name is more widely used and older than the latter, we consider Fraseriella to represent a synonym of Xeromyces. The synonymy is formally proposed herein as follows: Xeromyces bisporus L.R. Fraser Proc. Linn. Soc. N.S.W. 78:245. 1954.
Xerotrema Sherwood & Coppins 1980, Odontotremataceae, Ostropales, Lecanoromycetes, two species, type: X. megalospora Sherwood & Coppins, asexual morph unknown, ?saprobes, terrestrial, see Lumbsch and Huhndorf (2010; outline), Purvis (2012; floristic), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.
Xiambola Minter & Hol. -Jecl. 1981, Ascomycota genera incertae sedis, one species, type: X. mirabilis Minter & Hol.-Jecl., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Xiphomyces Syd. & P. Syd. 1916, Ascomycota genera incertae sedis, two species, type: X. sacchari Syd. & P. Syd., hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Xiuguozhangia K. Zhang, R.F. Castañeda, Jian Ma & L.G. Ma 2014, Ascomycota genera incertae sedis, five species, type: X. rosae (K. Zhang & X.G. Zhang) K. Zhang & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Zhang et al. (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.
Xylaria Hill ex Schrank 1789, Xylariaceae, Xylariales, Sordariomycetes, c. 350 species, type: X. hypoxylon (L.) Grev., asexual morph geniculosporium-like, terrestrial, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Fournier et al. (2011; new species), Rogers and Ju (2012; new species), Ma et al. (2012, 2013; new species), Kirk et al. (2013; genus accepted), Gu et al. (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Senanayke et al. (2015; outline, phylogeny), Réblová et al. (2016; new species; nomenclature), cultures and sequences are available.
Xyleborus R.C. Harris & Ladd 2007, Stereocaulaceae, Lecanorales, Lecanoromycetes, two species, type: X. sporodochifer R.C. Harris & Ladd., asexual morph unknown, lichenized, terrestrial, see Lumbsch and Huhndorf (2010; outline), Lendemer et al. (2013; list), Lendemer and Harris (2015; new species), Lücking et al. (2016; classification), sequences unavailable.
Xylobotryum Pat. 1895, Ascomycota genera incertae sedis, two species, type: X. andinum Pat., asexual morph unknown, saprobes, terrestrial, tropical, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Xylochia B. Sutton 1983, Ascomycota genera incertae sedis, one species, type: X. stegonsporioideis B. Sutton, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Xylochora Arx & E. Müll. 1954, Amphisphaeriaceae, Xylariales, Sordariomycetes, three species, type: *X. craticola* (H. Wegelin) Arx & E. Müll., asexual morph unknown, saprobes, Sweden, Switzerland and India, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

*Xyloglyphis* Clem. 1909. Ascomycota genera incertae sedis, one species, type: *X. striola* (Fr.) Clem., coelomycetous, sexual morph unknown, saprobes, terrestrial, Europe, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Xylogramma* Wallr. 1833, Helotiaceae, Helotiales, Leotiomycetes, 18 species, type: *X. sticticum* (Fr.) Wallr., asexual morph unknown, saprobes, terrestrial, China, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Xylographa* (Fr.) Fr., 1836, Xylographaceae, Trapeliales, Lecanoromycetes, 20 species, type: need typification, see Heininger and Spribille (2009; new species), Wetmore (2009; floristic study), Zhdanov (2009; new record), Agnello et al. (2010; ecology), Bilovitz et al. (2010; biodiversity), Brodo (2010; new record), Lumbsch and Huhndorf (2010; outline), Hansen (2012; new record), Mayrhofer et al. (2012; new records), Bennett (2013; review), Hauck et al. (2013; new record), Kirk et al. (2013; genus accepted), Mayrhofer et al. (2013; new record), Svensson (2013; biodiversity), Svensson et al. (2013, 2016; ecology, biodiversity), Tønsberg (2013; new species), Urbanavichene et al. (2013, new record), Abbas et al. (2014; new records), Goni et al. (2014; new record), Spribille et al. (2014; systematic, new species), Hämäläinen et al. (2015; biodiversity), Maliček et al. (2015; new record), Resl et al. (2015; phylogeny), Tarasova et al. (2015; new record), Wegrzyn et al. (2015; new record), Himelbrant et al. (2016; new record), Kharpukhaeva and Mukhortova (2016; ecology), Motiejūnaitė et al. (2016; new record), Tarasova et al. (2016; new record), Lücking et al. (2016; classification), sequences are available.

*Xylohypha* (Fr.) E.W. Mason 1960, Ascomycota genera incertae sedis, six species, type: *X. nigrescens* (Pers.) E.W. Mason, hyphomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Xylohyphopsis* W.A. Baker & Partr. 2000, Ascomycota genera incertae sedis, two species, type: *X. curta* (Corda) W.A. Baker & Partr., hyphomycetous, sexual morph unknown, saprobes, terrestrial, South Africa, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

*Xylomelasma* Réblová 2006, Sordariomycetidae genera incertae sedis, Sordariomycetes, three species, type: *X. sordida* Réblová, asexual morph hyphomycetous, saprobes, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Vasilyeva and Stephenson (2014; new species), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), Réblová et al. (2015; DNA, phylogeny), cultures are available for the type: CBS 131683.

*Xylomyces* Goos, R.D. Brooks & Lamore, 1977, Aliquandostipitaceae, Jahnulales, Dothideomycetes, ten species, type: *X. chlamydosporus* Goos, R.D. Brooks & Lamore, hyphomycetous, sexual morph unknown, aquatic (freshwater/marine), see Shearer et al. (2009; phylogeny), Sivichai and Boonyuen (2010; association with *Jahula*), Seifert et al. (2011; morphology), Hose et al. (2010; chemistry), Hu et al. (2010; diversity), Barbosa and Gusmão (2011; diversity), Suetrong et al. (2011; phylogeny), Sivichai et al. (2011; taxonomy), Zhang et al. (2011; checklist), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2012, 2014, 2017; outline), Hyde et al. (2013; accepted as a genus in
Aliquandostipitaceae), Borse et al. (2014; diversity), da Silva et al. (2015; diversity), Jones et al. (2015; marine genera), Oliveira et al. (2015; diversity), cultures available for the type: SS2917.

**Xylona** Gazis & P. Chaverri 2012, *Xylonaceae, Xylonales, Xylonomycetes*, one species, type: *X. heveae* Gazis & P. Chaverri 2012, coelomycetous, sexual morph unknown, saprobes, terrestrial, Perú, see Gazis et al. (2012, 2016; taxonomy, phylogeny, genome studies), Wijayawardene et al. (2017; outline), holotype and ex-type cultures of the type: BPI 884084, TC161 = CBS132557.

**Xyloschistes** Vain. ex Zahlbr. 1903, *Stictidaceae, Ostropales, Lecanoromycetes*, one species, type: *X. platytropa* (Nyl.) Vain. ex Zahlbr., lichenized, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Miądlikowska et al. (2014; phylogeny), Lücking et al. (2016; classification), sequences are available.

**Xyloschizon** Syd. 1922, *Rhytismataceae, Rhytismatales, Lecanoromycetes*, two species, type: *X. weirianum* Syd., asexual morph unknown, saprobes, terrestrial, North America, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable.

**Xylopsora** Bendiksby & Timdal 2013, *Umbilicariaceae, Umbilicariales, Lecanoromycetes*, two species, type: *X. friesii* (Ach.) Bendiksby & Timdal, lichenized, lignicolous, corticolous, often on charred substrata, temperate northern hemisphere, Australia, see Bendiksby and Timdal (2013; phylogenetic placement), Lücking et al. (2016; classification), type specimen H-ACH-436A sequences are available.

**Xylotumulus** J.D. Rogers, Y.M. Ju & Hemmes 2006, *Xylariaceae, Xylariales, Sordariomycetes*, one species, type: *X. gibbisporus* J.D. Rogers, Y.M. Ju & Hemmes, asexual morph unknown, saprobes, terrestrial, Hawaii, see Lumbsch and Huhndorf (2010; outline), Rogers et al. (2012; Hawaii fungi), Chang et al. (2014; secondary compounds), Maharachchikumbura et al. (2015, 2016; outline), holotype of the type: BISH, Rogers, 2 Aug. 2005, cultures available for the type: NBRC 9453, ATCC MYA-4109.

**Yalomyces** Nag Raj 1993, Ascomycota genera incertae sedis, six species, type: *Y. pulcher* Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, worldwide, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Yamadazyma** Billon-Grand 1989, *Debaryomycesaceae, Saccharomycetales, Saccharomyces*, 20 species, type: *Y. philoagea* (van der Walt & Johannsen) Billon-Grand, asexual reproduction is by multilateral budding, saprophytic, in tree exudates and insect frass, insect guts, soil, cactus rots, seawater, soy sauce, infrequent clinical isolates, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), many species in this genus represent asexual taxa originally classified in the genus *Candida*, thus they will be transferred to *Yamadazyma* as new combinations, cultures and sequences are available.

**Yarrowia** van der Walt & von Arx 1980, ?*Trichomonascaceae, Saccharomycetales, Saccharomyces*, 13 species, type: *Y. lipolytica* (Wickerham, Kurtzman & Herman) van der Walt & von Arx, asexual reproduction is by multilateral budding, saprophytic, but clinical isolates are not uncommon, on wet milled maize, refrigerated meats, soil, clinical, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), some species in this genus represent asexual taxa originally classified in the genus *Candida* thus they will be transferred to *Yarrowia* as new combinations, cultures and sequences are available.

**Yarrumia** D.J. Galloway 2015, *Lobariaceae, Peltigerales, Lecanoromycetes*, two species, type: lichenized, see Galloway (2015; taxonomy), Lücking et al. (2016; classification); sequences are available.

**Yatesula** Syd. & P. Syd. 1917, *Chaetothyriaceae, Chaetothyriales, Eurotiomycetes*, two species, type: *Y. calami* Syd. & P. Syd., asexual morph unknown, epiphytic, sooty moulds,


Yoshimuriella Moncada & Lücking 2013, *Lobariaceae*, *Peltigerales*, *Lecanoromycetes*, eight species, type: *Y. fendleri* (Tuck. & Mont.) Moncada & Lücking, lichenized, see Moncada et al. (2013a; taxonomy), Lücking et al. (2016; classification), sequences are available but lacks for the type species.

Yoshinagaia Henn. 1904 (= *Japonia* Höhn. 1909; = *Yoshinagamyces* Hara 1912; *Monoloculia* Hara 1927 *fide* Rossman et al. 2016), *Dothideomycetes* genera *incertae sedis*, two species, type: *Y. quercus* Henn., asexual morph unknown, saprobes, terrestrial, Japan, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Rossman et al. (2016; nomenclature), cultures and sequences are unavailable.

Yoshinagella Höhn. 1913, *Dothideomycetes* genera *incertae sedis*, four species, type: *Y. japonica* Höhn, asexual morph unknown, saprobes and parasitic, reported from Japan and Hawai, see Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), Dai et al. (2014; phylogeny, *Dothideomycetes*), cultures and sequences are unavailable, needs generic revision.


Ypsilomyces D.A.C. Almeida & Gusmão 2014, *Ascomycota* genera *incertae sedis*, one species, type: *Y. elegans* D.A.C. Almeida & Gusmão, hyphomycetous, sexual morph unknown, one species, saprobes, terrestrial, Brazil, see Almeida and Gusmão (2014; morphology), holotype of the type: HUEFS 155081, cultures and sequences are unavailable, compare with *Biflagellospora*, *Diademospora*, *Diplocladiella*, *Iyengarina*, *Vanterpoolia*, *Weufia* and *Ypsilina*.

Ypsilomyces D.A.C. Almeida & Gusmão 2014, *Ascomycota* genera *incertae sedis*, one species, type species *Y. elegans* D.A.C. Almeida & Gusmão, hyphomycetous, sexual morph unknown, saprobes, reported from Brazilian semi arid region, see Almeida and Gusmão (2014; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable.

Ypsilonia Lév. 1846, *Sordariales* genera *incertae sedis*, five species, type: *Y. cuspidata* Lév., coelomycetous, sexual morph of unknown, saprobes, aquatic, see Hyde et al. (2011; outline), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Yuccamyces Gour, Dyko & B. Sutton 1979, *Ascomycota* genera *incertae sedis*, seven species, type: *Y. purpureus* Gour, Dyko & B. Sutton, hyphomycetous, sexual morph unknown,
saprobes, Canada and Cuba, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Yuea** O.E. Erikss. 2003, *Xylariales* genera *incertae sedis*, *Sordariomycetes*, one species, type: *Y. chusqueicola* O.E. Erikss., asexual morph unknown, terrestrial, saprobes, Chile, see Lumbsch and Huhndorf (2010; outline), Maharachchikumbura et al. (2015, 2016; outline, phylogeny), cultures and sequences are unavailable.

**Yueomyces** Q.M. Wang, L. Wang, M. Groenewald & T. Boekhout 2015, *Saccharomycetaceae*, *Saccharomycetales*, *Saccharomycetes*, one species, type: *Y. sinensis* (J.Z. Yue) Q.M. Wang, L. Wang, M. Groenewald & T. Boekhout, asexual reproduction is by bipolar budding, saprophytic, Soil, China, see Wang et al. (2015; taxonomy), cultures and sequences are available.

**Zahlbrucknerella** Herre 1912, *Lichinales*, *Lichinomycetes*, eight species, type: *Z. calcarea* (Herre) Herre, asexual morph unknown, lichenized, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Zakatoshia** B. Sutton 1973, *Ascomycota* genera *incertae sedis*, two species, type: *Z. hirschiopori* B. Sutton, hyphomycetous, sexual morph unknown, fungicolous, terrestrial, worldwide, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Zanclospora** S. Hughes & W.B. Kendr. 1965, *Ascomycota* genera *incertae sedis*, nine species, type: *Z. novae-zelandiae* S. Hughes & W. B. Kendr., hyphomycetous, sexual morph unknown, saprobes, tropical and subtropical distribution with only two records in temperate region, see Hyde et al. (2011; outline), Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Almeida et al. (2013; new species), Kirk et al. (2013; genus accepted), needs generic revision.

**Zasmidium** Fr. 1849, *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*, c. 70 species names, type: *Z. cellare* (Pers.) Fr., sexual morph mycosphaerella-like, five species confirmed based on DNA, plant pathogens, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Braun et al. (2013; morphology), Videira et al. (2017; morphology, phylogeny), cultures and sequences are available.

species, phylogeny), Hongsanan et al. (2015; new species, phylogeny), Wijayawardene et al. (2017; outline), cultures and sequences are available.

**Zelodactylaria** A.C. Cruz, Gusmão & R.F. Castañeda 2012, *Ascomycota* genera incertae sedis, one species, type: *Z. verticillata* A.C. Cruz, Gusmão & R.F. Castañeda, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Cruz et al. (2012; taxonomy), Wijayawardene et al. (2017; outline), cultures and sequences are unavailable, needs generic revision.


**Zernya** Petr. 1947, *Ascomycota* genera incertae sedis, one species, type: *Z. clypeata* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Brazil, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.


**Zetesimomyces** Nag Raj 1988, *Ascomycota* genera incertae sedis, one species, type: *Z. setibicolor* (R.F. Castañeda) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, Cuba, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Zetiasplozna** Nag Raj 1993, *Bartaliniaceae*, *Xylariales*, *Sordariomycetes*, six species, type: *Z. caffra* Matsush., coelomycetous, sexual morph unknown, saprobes, terrestrial, cosmopolitan, see Nicoletti et al. (2010; endophytes), Wijayawardene et al. (2012, 2016, 2017; outline, taxonomy), Kirk et al. (2013; genus accepted), Crous et al. (2014; new species), Senanayake et al. (2015; outline), Jaklitsch et al. (2016; phylogeny, accepted as a genus in *Sporocadaceae*), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are available, needs generic revision.

**Zeugandromyces** Thaxt. 1912, *Laboulbeniaceae*, *Laboulbeniales*, *Laboulbeniomycetes*, four species, type: *Z. australis* Thax., asexual morph unknown, biotrophic on Coleoptera (Staphylinidae, Paederini), America, Philippines, Sumatra, Sri Lanka, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Zeus** Minter & Diam. 1987, *Rhytismataceae*, *Rhytismatales*, *Leotiomycetes*, two species, type: *Z. olympius* Minter & Diam., asexual morph unknown, saprobes, terrestrial, Greece, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

**Zevadia** J.C. David & D. Hawksw. 1995, *Ascomycota* genera incertae sedis, one species, type: *Z. peroccidentalis* J.C. David & D. Hawksw., lichenicolous, Europe, sexual morph unknown, see Seifert et al. (2011; genus accepted), Kirk et al. (2013; genus accepted), no cultures or sequences are available, holotype of type: K(M)-IMI 401823.

**Zilingia** Petr. 1934, *Ascomycota* genera incertae sedis, one species, type: *Z. sibirica* Petr., coelomycetous, sexual morph unknown, saprobes, terrestrial, Siberia, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
Zimmermanniella  Henn. 1902, Phyllachoraceae, Phyllachorales, Sordariomycetes, one species, type: Z. trispora Henn., from living leaves, South East Asia, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

Zinzipegasa  Nag Raj 1993, Ascomycota genera incertae sedis, one species, type: Z. argentinensis (Speg.) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, Argentina, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

Zodiomyces  Thaxt. 1891, Laboulbeniaceae, Laboulbeniales, Laboulbeniomycetes, four species, type: Z. vorticellarius Thaxt., asexual morph unknown, biotrophic on aquatic Coleoptera (Hydrophilidae), worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Rossi et al. (2016; most recent species description), ribosomal sequence are available.

Zoggium  Lar.N. Vassiljeva 2001, Mytilinidiaceae, Mytilinidiales, Dothideomycetes, one species, type: Z. mayorii (H. Zogg) Lar.N. Vassiljeva, asexual morphs unknown, saprobes, terrestrial, north temperate, Boehm et al. (2009, 2015; accepted as in Mytilinidiaceae), Hyde et al. (2013; accepted as in Mytilinidiaceae), Wijayawardene et al. (2014; outline), cultures and sequences are available.

Zopfia  Rabenh. 1874, Zopfiaceae, Pleosporales, Dothideomycetes, five species, type: Z. rhizophila Rabenh., asexual morph unknown, saprobes, terrestrial, worldwide, see Schoch et al. (2009; phylogeny), Lumbsch and Huhndorf (2010; outline), Hyde et al. (2013; accepted as a genus in Zopfiaceae), Kirk et al. (2013; genus accepted), Wijayawardene et al. (2014; outline), cultures and sequences are available, needs generic revision.

Zopfiaella  G. Winter 1884, Lasiosphaeriaceae, Sordariales, Sordariomycetes, 30 species, type: Z. tabulata (Zopf) G. Winter, asexual morph unknown, coprophilous, saprobes, terrestrial, marine, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kruys et al. (2014; phylogeny), cultures and sequences are available.

Zopfiofoveola  D. Hawksw. 1979, Zopfiaceae, Pleosporales, Dothideomycetes, one species, type: Z. punctata (D.Hawksw. & C. Booth) D. Hawksw., on earthworm excrements, Sweden, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Jaklitsch et al. (2016; position), cultures and sequences are unavailable, holotype of type: (microscope slide) UPS.

Zopheromyces  B. Sutton & Hodges 1977, Ascomycota genera incertae sedis, one species, type: Z. fasciatus B. Sutton & Hodges, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Australasia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

Zugazaea  Korf, Iturr. & Lizoñ 1998, Helotiales genera incertae sedis, Leotiomyces, one species, type: Z. agyrioides Korf, Iturr. & Lizoñ, asexual morph unknown, saprobes, Canary Islands, Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), holotype of the type: CUP-MM 2844, cultures and sequences are unavailable

Zukaliopsis  Henn. 1904, Myriangiaceae, Myriangiales, Dothideomycetes, one species, type: Z. amazonica Henn., asexual morph unknown, parasitic, terrestrial, Peru, isotype of the type: S, F5604, see Dissanayake et al. (2014; morphology), Wijayawardene et al. (2014; outline), needs generic revision.

Zunura  Nag Raj 1993, Ascomycota genera incertae sedis, one species, type: Z. appendiculata (B. Sutton) Nag Raj, coelomycetous, sexual morph unknown, saprobes, terrestrial, India, see Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.
**Zwackhia** Körb. 1855, *Lecanographaceae, Arthoniales, Arthoniomycetes*, six species, type: *Z. viridis* (Ach.) Poetsch & Schied., lichenized, see Ertz and Tehler (2011; taxonomy) Diederich et al. (2012; taxonomy), Lücking et al. (2016; classification); sequences are available.

**Zwackhiomacromyces** Etayo & van den Boom 2014, *Xanthopyrenaceae, Collemopsidiales, Dothideomycetes*, one species, type: *Z. constrictocarpus* Etayo & Van den Boom asexual morph unknown, parasymbiont on *Megalospora*, terrestrial, Mediterranean Europe, see van den Boom and Etayo (2014; morphology, distinction of similar lichenicolous genera), holotype of the type: P. & B. van den Boom 27046 (BCN), cultures and sequences are unavailable.


**Zygoascus** M.Th. Smith 1986, *Trichomonasaceae, Saccharomycetales, Saccharomycetes*, six species, type: *Z. hellenicus* M.T. Smith, asexual reproduction is by multilateral budding, saprotophic, but there are some clinical isolates, in soft drinks, fruit juices, insect tunnels, cactus fruits, soil, tanning fluids, clinical isolates, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available.

**Zygoceps** M.T. Smith 1986, *Trichomonasaceae, Saccharomycetales, Saccharomycetes*, six species, type: *Z. oblongus* M.T. Smith, asexual reproduction is by multilateral budding, saprotophic, but there are some clinical isolates, in soft drinks, fruit juices, insect tunnels, cactus fruits, soil, tanning fluids, clinical isolates, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), cultures and sequences are available, needs generic revision.

**Zygospermella** Cain 1935, *Lasiosphaeriaceae, Sordariales, Sordariomycetes*, six species, type: *Z. setosa* (Cain) Cain, asexual morph unknown, saprotophic, terrestrial, worldwide, see Lumbsch and Huhndorf (2010; outline), Kirk et al. (2013; genus accepted), Kruys et al. (2015; DNA, phylogeny), Maharachchikumbura et al. (2015; outline, DNA, phylogeny), cultures and sequences are available but lacks for the type.

**Zygotorulaspora** Kurtzman 2003, *Saccharomycetales, Saccharomycetes, Saccharomycetaceae*, two species, type: *Z. mrakii* (Capriotti) Kurtzman, asexual reproduction is by multilateral budding, saprotophic, fruit drinks, fruit flies, grape must, silage, worldwide, see Lumbsch and Huhndorf (2010; outline), cultures and sequences are available.

**Zythia** Fr. 1849, *Gnomoniaceae, Diaporthales, Sordariomycetes*, type: *Z. resinae* (Ehrenb.) P. Karst. 1890, coelomycetous, sexual morph unknown, endophytic, saprobes, widespread, see Ding et al. (2010; antimicrobial activity), Hyde et al. (2011; checklist), Wijayawardene et al. (2012, 2017; outline), Kirk et al. (2013; genus accepted), Maharachchikumbura et al. (2015, 2016; outline), cultures and sequences are unavailable, needs generic revision.

**Zyxiphora** B. Sutton 1981, *Ascomycota* genera incertae sedis, one species, type: *Z. appendiculata* (B. Sutton) Nag Raj, hyphomycetous, sexual morph unknown, saprobes, terrestrial, Asia, see Seifert et al. (2011; morphology), Wijayawardene et al. (2012, 2016; outline), Kirk et al. (2013; genus accepted), cultures and sequences are unavailable, needs generic revision.

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