



## Outline of *Fungi* and fungus-like taxa – 2021

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## Abstract

This paper provides an updated classification of the Kingdom *Fungi* (including fossil fungi) and fungus-like taxa. Five-hundred and twenty-three (535) notes are provided for newly introduced taxa and for changes that have been made since the previous outline. In the discussion, the latest taxonomic changes in *Basidiomycota* are provided and the classification of *Mycosphaerellales* are broadly discussed. Genera listed in *Mycosphaerellaceae* have been confirmed by DNA sequence analyses, while doubtful genera (DNA sequences being unavailable but traditionally accommodated in *Mycosphaerellaceae*) are listed in the discussion. Problematic genera in *Glomeromycota* are also discussed based on phylogenetic results.

**Keywords** – *Ascomycota* – basal fungi – *Basidiomycota* – Classification – Fossil fungi – *Rozellomycota*

## Introduction

The ‘Outline of *Fungi* and fungus-like taxa’ (Wijayawardene et al. 2020a) was the first attempt at compiling a classification of all taxa (from genera to higher levels) in the Kingdom *Fungi*, with the contribution and agreement of 155 authors. The Outline listed higher-level taxa (phyla, classes, orders, families and genera) in the higher fungi (i.e. *Ascomycota*, *Basidiomycota*), early-diverging lineages of fungi, fossil fungi and fungus-like taxa. Moreover, the estimated number of species based on the available data, for each genus, was included. During preparation of the manuscript, the authors recognized the necessity to continuously update such an important database, and thus [www.outlineoffungi.org](http://www.outlineoffungi.org) was developed (Wijayawardene et al. 2020b). One of the important features of the Outline of *Fungi* is providing a platform for different opinions on different taxa, mainly at higher ranks. As an example, Wijayawardene et al. (2020a) included two different classifications for *Leotiomycetes* and *Glomeromycota*. The aim of including these differing opinions was to make these aware to taxonomists and mycologists since it is vital to discuss divergent views broadly, rather than ignoring or excluding them without rational arguments. It is widely accepted that only ca. 150,000 (5-10%) species of fungi (Species Fungorum 2021) are currently recognized, thus classification conclusions will be subjective. Nevertheless, publishing such controversial opinions in a single peer reviewed article is challenging; hence, the series of Outline of *Fungi* and its web page (<https://www.outlineoffungi.org/>) aim to provide an opportunity for this.

## Avoiding subjectivity and bickering in fungal systematics

Since molecular phylogenetics has been utilized in fungal systematics, there has been a great improvement in the resolution of species and this has been discussed in several recent publications (e.g. Chethana et al. 2021a, Jayawardena et al. 2021). In addition, guidelines have been published on how to describe new genera and species (Jeewon & Hyde 2016, Aime et al. 2021, Lücking et al. 2021). However, despite all of the advances with molecular phylogenetics, the decision of whether or not to introduce a new taxon seems often as subjective as it was 30 years ago, due to misplaced arguments, unfounded criticism, and reference to low-quality publications.

Here we provide a few examples of changes made in systematics based on subjective arguments. A new monotypic genus *Vaginatisspora* was introduced from freshwater habitats in Queensland, Australia (Hyde 1995). It was immediately suggested that *Vaginatisspora* should be a synonym of *Massarina* by Eriksson & Hawksworth (1996) based on the interpretation of morphological features. However, recent studies using molecular phylogenetics have clearly shown that

*Vaginatispora* is a well-resolved genus in *Massarinaceae* comprising eight species (Wong et al. 2020).

In another study, Jaklitsch et al. (2016a) reviewed *Floricolaceae* introduced by Thambugala et al. (2015) and found an earlier name for the family that was introduced as *Teichosporaceae*, which we follow here. As a consequence, all the genera belonging in *Floricolaceae* accepted in Thambugala et al. (2015), became synonyms of *Teichospora* (broad genus concept). In their phylogeny, which involved 45 taxa, all genera were interpreted as a single genus, as the morphological differences were not thought to be sufficient for generic differentiation. Tennakoon et al. (2021) revisited this family with increasing taxon sampling and used a matrix comprising five genetic markers (ITS, LSU, SSU, *tef1-α* and *rpb2*) for phylogenetic analyses. The broad genus concept of *Teichospora* was dismissed based on morphological dissimilarities and the monophyletic status of the genera *Asymmetrispora*, *Aurantiascoma*, *Floricola*, *Magnibotryascoma*, *Misturatosphaeria*, *Pseudoaurantiascoma*, *Pseudomisturatosphaeria*, *Ramusculicola* and *Teichospora*. In particular, Tennakoon et al. (2021) included as many species as possible and strains within a species from different geographic locations, along with the type species. For instance, 15 strains were from the *Magnibotryascoma* clade and ten strains of *Teichospora*. Seven genera now containing more than one species are recognised. In their phylogenetic tree, all nine resurrected genera were monophyletic forming distinct clades, most of which are strongly supported (bootstrap ML support over 90%) (Tennakoon et al. 2021). Therefore, in light of the broader taxon sampling, monophyly of all genera, use of multiple genetic markers and statistical support, Tennakoon et al. (2021) argued for a narrow generic concept in *Teichosporaceae*.

Jaklitsch et al. (2016b) criticised the introduction of new genera in *Xylariales*. Several recent studies have shown *Anthostomella* to be highly polyphyletic (Daranagama et al. 2015, 2016, Konta et al. 2021a, Samarakoon et al. 2022). Konta et al. (2020b, 2021a) revisited and introduced a new genus for conspicuous stromatic species of *Xylaria* featuring conspicuous stromata. Samarakoon et al. (2022) re-examined and re-sequenced previous taxa and provided fresh collections of xylarialean taxa. With the addition of several new genera for anthostomella-like taxa, Samarakoon et al. (2022) provided well-resolved taxonomic placements for xylarialean taxa, many of which were especially those that were previously placed in *Xylariomycetidae incertae sedis*. It is important to have a critical appreciation of the morphology and reliable molecular data associated with such introductions. What we suggest here is that authors try to be less subjective in their actions and reserve their conclusions until more data is available. There is no reason for researchers to be critical of other researchers, and changes should only be made after sufficient molecular evidence is available. Any taxonomic changes are invited to be submitted to the Outline of Fungi and Fungus-like organisms which will be published yearly and updated in the webpage for this publication series (Wijayawardene et al. 2020a, b). Undoubtedly, it is essential to discuss and criticise the opinions or theories for the sake of the advancement of a particular discipline.

One very good example of subjective placement of genera in a single genus in a single family is that of Jiang et al. (2021a) who introduced a new species in *Ophioceras* (*Ophioceraceae*). The phylogenetic tree included 15 strains in *Ophioceraceae* and the authors considered that the two genera and one species belonging to a different genus in the tree represented a single genus (*Ophioceras*). With so few taxa in the tree, the molecular data provided evidence for a single genus, but the authors did not look closely at the morphology. Since we presently may know approximately only 10% of the species (Hyde et al. 2020a) and probably even less (approximately 2-4%) are sequenced, further studies would likely result in numerous taxa being found in this family. It is, therefore, most likely that the present genera in *Ophioceraceae* are accepted and will be well-resolved with further data. Unfortunately, future studies finding novel species in *Ophioceraceae* will follow Jiang et al. (2021a) and probably will not consider morphology when introducing new species and the situation will be confounded. Therefore, we believe that it was premature to synonymise all genera under *Ophioceras* and we maintain this genus in the present outline in this paper. A thorough study of the family is needed and should include a polyphasic approach.



There are many genera and species with similar unresolved situations and our advice to authors is to not make definitive conclusions or arguments for synonymies, until the genera or species are thoroughly studied with molecular data using the best-established genes and a polyphasic approach.

We have discussed the need to read the publications on ‘*what is a species?*’ in the recent issue of Fungal Diversity (Boekhout et al. 2021, Chethana et al. 2021a, Maharachchikumbura et al. 2021a, Voigt et al. 2021). Authors should only publish names of new taxa if they have followed recommendations carefully to avoid introducing unnecessary names. Similarly, definitive decisions should not be made as to species being synonyms or not unless detailed studies have been carried out. *Colletotrichum* is a good example of a well-studied pathogenic genus (Jayawardena et al. 2019, 2021, Bhunjun et al. 2021a, b), where the numbers of extant species can relatively confidently be predicted. However, there are many plants and geographical regions or countries where the genus has not been researched, so even in this genus we could expect new taxa to be discovered, mainly associated with non-economic crops (Bhunjun et al. 2021a, b). However, most saprobic genera such as *Hermatomyces* have not been well-studied (Chethana et al. 2021b). It is not even clear if species of *Hermatomyces* are endophytes or saprobes, which would be important to determine whether species are host/genus/family specific or generalists. Therefore, we should not make conclusions concerning species until a thorough molecular and morphological study has been carried out based on the best genes for resolving species in the genus.

## Updated outline

In this updated outline, we provide the current higher-level classification of the Kingdom *Fungi*. According to Index Fungorum (2021) (access date 30.09.2021), ca. 5000 species have been described in 2020 and 2021. In Table 1, we summarize the number of taxa introduced in 2020 and 2021. Table 2 and 3 provide summary of higher taxonomic ranks of *Fungi* and fungus-like taxa respectively.

**Table 1** Number of taxa introduced in 2020-2021.

Year	Taxa					
	Phyla	Classes	Orders	Families	Genera	Species
2020	-	1	21	52	311	3091
2021 (up to 31.12.2021)	1	2	13	37	193	3566

**Table 2** Classes, orders and families of Kingdom *Fungi*. The number of genera in each family is provided inside the brackets after the family name.

Phylum	Class	Order	Family
<i>Aphelidiomycota</i>	<i>Aphelidiomycetes</i>	<i>Aphelidiales</i>	<i>Aphelidiaceae</i> (4)
<i>Ascomycota</i>	<i>Archaeorhizomycetes</i>	<i>Archaeorhizomycetales</i>	<i>Archaeorhizomycetaceae</i> (1)
			<i>Andreiomycetaceae</i> (1)
			<i>Arthoniaceae</i> (26)
			<i>Chrysotrichaceae</i> (3)
			<i>Lecanographaceae</i> (8)
			<i>Opegraphaceae</i> (15)
			<i>Roccellaceae</i> (42)
			<i>Roccellographaceae</i> (3)
			<i>Arthoniales</i> genera <i>incertae sedis</i> (21)
			<i>Lichenostigmatales</i>
	<i>Candelariomycetes</i>	<i>Candelariales</i>	<i>Phaeococcomycetaceae</i> (3)
			<i>Candelariaceae</i> (7)
			<i>Pycnoraceae</i> (1)
			<i>Coniocybaceae</i> (2)
	<i>Coniocybomycetes</i>	<i>Coniocybales</i>	<i>Coniocybaceae</i> (2)
	<i>Dothideomycetes</i>	<i>Abrothallales</i>	<i>Lichenoniaceae</i> (2)

**Table 2** Continued.

Phylum	Class	Order	Family
		<i>Acrospermales</i>	<i>Acrospermaceae</i> (4)
		<i>Acrospermales</i> genus <i>incertae sedis</i> (1)	
		<i>Asterinales</i>	<i>Asterinaceae</i> (18)
			<i>Asterotexaceae</i> (1)
			<i>Cylindrohyalosporaceae</i> (1)
			<i>Hemigraphaceae</i> (1)
			<i>Lembosiaceae</i> (2)
			<i>Melaspileellaceae</i> (1)
			<i>Morenoinaceae</i> (1)
			<i>Neobueliellaceae</i> (1)
			<i>Oblongohyalosporaceae</i> (1) <sup>#</sup>
			<i>Stictographaceae</i> (5)
		<i>Arthoniales</i> genera <i>incertae sedis</i> (21)	
		<i>Aulographales</i> <sup>#</sup>	<i>Aulographaceae</i> (4)
		<i>Botryosphaeriales</i>	<i>Aplosporellaceae</i> (2)
			<i>Botryosphaeriaceae</i> (22)
			<i>Melanopsaceae</i> (1)
			<i>Phyllostictaceae</i> (2)
			<i>Planistromellaceae</i> (2)
			<i>Saccharataceae</i> (3)
		<i>Aureoconidiellales</i> <sup>#</sup>	<i>Aureoconidiellaceae</i> (1) <sup>#</sup>
		<i>Botryosphaeriales</i> genera <i>incertae sedis</i> (10)	
		<i>Capnodiales</i>	<i>Aeminiaceae</i> (1)
			<i>Antennulariellaceae</i> (3)
			<i>Capnodiaceae</i> (10)
			<i>Euantennariaceae</i> (7)
			<i>Johansoniaceae</i> (2)
			<i>Metacapnodiaceae</i> (3)
			<i>Neoantennariellaceae</i> (3) <sup>#</sup>
			<i>Piedraiaceae</i> (1)
			<i>Readeriellipsoidaceae</i> (6) <sup>#</sup>
			<i>Xenodevriesiaceae</i> (1)
		<i>Capnodiales</i> genera <i>incertae sedis</i> (10)	
		<i>Catinellales</i>	<i>Catinellaceae</i> (1)
		<i>Cladoriellales</i>	<i>Cladoriellaceae</i> (1)
		<i>Cladosporiales</i>	<i>Cladosporiaceae</i> (8)
		<i>Collemopsidiales</i>	<i>Xanthopyreniaceae</i> (7)
		<i>Comminutisporales</i>	<i>Comminutisporaceae</i> (1)
		<i>Coniosporiales</i> <sup>#</sup>	<i>Coniosporiaceae</i> (1) <sup>#</sup>
		<i>Dothideales</i>	<i>Dothideaceae</i> (14)
			<i>Neocelosporiaceae</i> (3)
			<i>Saccotheciaceae</i> (8)
			<i>Zalariaceae</i> (1)
		<i>Dothideales</i> genera <i>incertae sedis</i> (6)	
		<i>Dyfolomycetales</i>	<i>Pleurotremataceae</i> (3)
		<i>Eremithallales</i>	<i>Melaspileaceae</i> (2)
		<i>Eremomycetales</i>	<i>Eremomycetaceae</i> (2)

**Table 2** Continued.

Phylum	Class	Order	Family
		<i>Eremomycetales</i> genus <i>incertae sedis</i> (1)	
		<i>Gloniales</i>	<i>Gloniaceae</i> (3)
		<i>Holmiellales</i>	<i>Holmiellaceae</i> (1)
		<i>Homortomycetales</i>	<i>Homortomycetaceae</i> (1)
		<i>Hysteriales</i>	<i>Hysteriaceae</i> (13)
		<i>Hysteriales</i> genus <i>incertae sedis</i> (1)	
		<i>Jahnulales</i>	<i>Aliquandostipitaceae</i> (8)
			<i>Manglicolaceae</i> (1)
		<i>Kirschsteiniotheliales</i>	<i>Kirschsteiniotheliaceae</i> (1)
		<i>Kirschsteiniotheliales</i> genera <i>incertae sedis</i> (1)	
		<i>Lembosinales</i>	<i>Lembosinaceae</i> (1)
		<i>Lichenotheliales</i>	<i>Lichenotheliaceae</i> (1)
		<i>Microthyriales</i>	<i>Microthyriaceae</i> (12)
		<i>Microthyriales</i> genera <i>incertae sedis</i> (5)	
		<i>Minutisphaerales</i>	<i>Acrogenosporaceae</i> (1)
			<i>Minutisphaeraceae</i> (1)
		<i>Monoblastiales</i>	<i>Monoblastiaceae</i> (13)
		<i>Murramarangomycetales</i>	<i>Murramarangomycetaceae</i> (1)
		<i>Muyocopronales</i>	<i>Muyocopronaceae</i> (10)
		<i>Mycosphaerellales</i>	<i>Cystocoleaceae</i> (1)
			<i>Dissoconiaceae</i> (5)
			<i>Extremaceae</i> (10)
			<i>Mycosphaerellaceae</i> (119)
			<i>Neodevriesiaceae</i> (2)
			<i>Phaeothecoidiellaceae</i> (9)
			<i>Schizothyriaceae</i> (10)
			<i>Teratosphaeriaceae</i> (67)
		<i>Mycosphaerellales</i> genera <i>incertae sedis</i> (7)	
		<i>Myriangiales</i>	<i>Elsinoaceae</i> (2)
			<i>Myriangiaceae</i> (11)
		<i>Myriangiales</i> genus <i>incertae sedis</i> (1)	
		<i>Mytilinidiales</i>	<i>Mytilinidiaceae</i> (9)
		<i>Natipusillales</i>	<i>Natipusillaceae</i> (1)
		<i>Neophaeothecales</i> <sup>#</sup>	<i>Neophaeothecaceae</i> (1) <sup>#</sup>
		<i>Parmulariales</i>	<i>Parmulariaceae</i> (35)
		<i>Patellariales</i>	<i>Patellariaceae</i> (19)
		<i>Phaeothecales</i> <sup>#</sup>	<i>Phaeothecaceae</i> (1) <sup>#</sup>
		<i>Phaeotrichales</i>	<i>Phaeotrichaceae</i> (3)
		<i>Pleosporales</i>	<i>Acrocallymmaceae</i> (1)
			<i>Aigialaceae</i> (6)
			<i>Amniculicolaceae</i> (6)
			<i>Amorosiaceae</i> (5)
			<i>Anastomitrabeculiaceae</i> (1)
			<i>Anteagloniaceae</i> (4)
			<i>Aquasubmersaceae</i> (1)
			<i>Arthopyreniaceae</i> (2)
			<i>Ascocylindricaceae</i> (1)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Astrosphaeriellaceae</i> (10)
			<i>Bambusicolaceae</i> (4)
			<i>Biatriosporaceae</i> (1)
			<i>Camarosporiaceae</i> (2)
			<i>Camarosporidiellaceae</i> (1)
			<i>Coniothyriaceae</i> (5)
			<i>Corynesporascaceae</i> (2)
			<i>Cryptocoryneaceae</i> (1)
			<i>Cucurbitariaceae</i> (13)
			<i>Cyclothyriellaceae</i> (2)
			<i>Dacampiaceae</i> (6)
			<i>Delitschiaceae</i> (3)
			<i>Diademaceae</i> (1)
			<i>Dictyosporiaceae</i> (17)
			<i>Didymellaceae</i> (44)
			<i>Didymosphaeriaceae</i> (33)
			<i>Dothidotthiaceae</i> (7)
			<i>Fuscostagonosporaceae</i> (1)
			<i>Fusculinaceae</i> (2)
			<i>Halojulellaceae</i> (2)
			<i>Halotthiaceae</i> (6)
			<i>Hermatomycetaceae</i> (1)
			<i>Hypsostromataceae</i> (1)
			<i>Latoruaceae</i> (5)
			<i>Lentimurisporaceae</i> (2)
			<i>Lentitheciaceae</i> (14)
			<i>Leptosphaeriaceae</i> (15)
			<i>Libertasomycetaceae</i> (2)
			<i>Ligninsphaeriaceae</i> (2)
			<i>Lindgomycetaceae</i> (8)
			<i>Lizoniaceae</i> (1)
			<i>Longiostiolaceae</i> (3)
			<i>Longipedicellataceae</i> (3)
			<i>Lophiostomataceae</i> (30)
			<i>Lophiotremataceae</i> (8)
			<i>Macrodiplodiopsidaceae</i> (2)
			<i>Massariaceae</i> (3)
			<i>Massarinaceae</i> (11)
			<i>Melanommataceae</i> (34)
			<i>Morosphaeriaceae</i> (7)
			<i>Mycoporaceae</i> (1)
			<i>Neocamarosporiaceae</i> (2)
			<i>Neohendersoniaceae</i> (5)
			<i>Neomassariaceae</i> (1)
			<i>Neomassariniaceae</i> (2)
			<i>Neophaeosphaeriaceae</i> (1)
			<i>Neopyrenochaetaceae</i> (1)
			<i>Nigrogranaceae</i> (1)
			<i>Occultibambusaceae</i> (5)
			<i>Ohleriaceae</i> (1)
			<i>Parabambusicolaceae</i> (9)
			<i>Paradictyoarthriniaceae</i> (2)
			<i>Paralophiostomataceae</i> (1)
			<i>Parapyrenochaetaceae</i> (2)
			<i>Periconiaceae</i> (4)
			<i>Phaeoseptaceae</i> (2)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Phaeosphaeriaceae</i> (84)
			<i>Pleomassariaceae</i> (6)
			<i>Pleomonodictydaceae</i> (2)
			<i>Pleosporaceae</i> (23)
			<i>Pseudoastrosphaeriellaceae</i> (3)
			<i>Pseudoberkleasmiaceae</i> (1)
			<i>Pseudocoleodictyosporaceae</i> (2)
			<i>Pseudolophiotremataceae</i> (2)
			<i>Pseudomassariniaceae</i> (1)
			<i>Pseudopyrenochaetaceae</i> (1)
			<i>Pyrenochaetopsidaceae</i> (3)
			<i>Roussoellaceae</i> (12)
			<i>Salsugineaceae</i> (2)
			<i>Shiraiaceae</i> (4)
			<i>Sporormiaceae</i> (11)
			<i>Striatiguttulaceae</i> (2)
			<i>Sulcatisoraceae</i> (7)
			<i>Teichosporaceae</i> (17)
			<i>Testudinaceae</i> (10)
			<i>Tetraplosphaeriaceae</i> (9)
			<i>Thyridariaceae</i> (8)
			<i>Torulaceae</i> (7)
			<i>Trematosphaeriaceae</i> (7)
			<i>Tzeananiaceae</i> (1)
			<i>Wicklowiaceae</i> (1)
			<i>Zopfiaceae</i> (6)
		<i>Pleosporales</i> genera <i>incertae sedis</i> (41)	
		<i>Racodiales</i> <sup>#</sup>	<i>Racodiaceae</i> (1)
		<i>Stigmatodiscales</i>	<i>Stigmatodiscaceae</i> (1)
		<i>Strigulales</i>	<i>Strigulaceae</i> (14)
			<i>Tenuitholiascaceae</i> (1)
		<i>Superstratomycetales</i>	<i>Superstratomycetaceae</i> (1)
		<i>Trypetheliales</i>	<i>Polycoccaceae</i> (2)
			<i>Trypetheliaceae</i> (19)
		<i>Tubeufiales</i>	<i>Bezerromycetaceae</i> (3)
			<i>Tubeufiaceae</i> (47)
			<i>Wiesneriomycetaceae</i> (6)
		<i>Valsariales</i>	<i>Valsariaceae</i> (3)
		<i>Venturiales</i>	<i>Cylindrosympodiaceae</i> (5)
			<i>Sympoventuriaceae</i> (17)
			<i>Venturiaceae</i> (16)
		<i>Venturiales</i> genera <i>incertae sedis</i> (2)	
		<i>Zeloasperisporiales</i>	<i>Zeloasperisporiaceae</i> (1)
		<i>Incertae sedis</i>	<i>Alinaceae</i> (1)
			<i>Argynnaceae</i> (2)
			<i>Ascoporiaceae</i> (2)
			<i>Balladynaceae</i> (3)
			<i>Cleistosphaeraceae</i> (1)
			<i>Coccoideaceae</i> (3)
			<i>Cookellaceae</i> (2)
			<i>Dimeriaceae</i> (1)
			<i>Dubujianaceae</i> (1)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Dysrhynchisceae</i> (1)
			<i>Endosporiaceae</i> (2)
			<i>Englerulaceae</i> (8)
			<i>Eremomycetaceae</i> (3)
			<i>Eriomycetaceae</i> (1)
			<i>Hyalomeliolinaceae</i> (1)
			<i>Leptopeltidaceae</i> (4)
			<i>Macrovalsariaceae</i> (1)
			<i>Meliolinaceae</i> (2)
			<i>Mesnieraceae</i> (3)
			<i>Naetrocymbaceae</i> (5)
			<i>Nematotheciaceae</i> (3)
			<i>Neoparodiaceae</i> (1)
			<i>Palawaniaceae</i> (1)
			<i>Paranectriellaceae</i> (2)
			<i>Parodiellaceae</i> (1)
			<i>Perisporiopsidaceae</i> (5)
			<i>Phaeodimeriellaceae</i> (1)
			<i>Pododimeriaceae</i> (2)
			<i>Polyclypeolinaceae</i> (1)
			<i>Polystomellaceae</i> (4)
			<i>Protoscyphaceae</i> (1)
			<i>Pseudoperisporiaceae</i> (4)
			<i>Pseudorobillardaceae</i> (1)
			<i>Pyrenidiaceae</i> (1)
			<i>Rhizodiscinaceae</i> (1)
			<i>Seynesiopeltidaceae</i> (1)
			<i>Stomatogeneceae</i> (1)
			<i>Thyrinulaceae</i> (3)
			<i>Toroaceae</i> (1)
			<i>Trichopeltinaceae</i> (7)
			<i>Trichothyriaceae</i> (4)
			<i>Vizellaceae</i> (3)
	<i>Dothideomycetes</i> genera <i>incertae sedis</i> (274)		
	<i>Eurotiomycetes</i>	<i>Arachnomycetales</i>	<i>Arachnomycetaceae</i> (2)
		<i>Chaetothyriales</i>	<i>Chaetothyriaceae</i> (19)
			<i>Coccodiniaceae</i> (4)
			<i>Cyphellophoraceae</i> (2)
			<i>Epibryaceae</i> (1)
			<i>Herpotrichiellaceae</i> (17)
			<i>Lyrommataceae</i> (1)
			<i>Microtheliopsidaceae</i> (1)
			<i>Paracladophialophoraceae</i> (1)
			<i>Pyrenotrichaceae</i> (2)
			<i>Trichomeriaceae</i> (9)
		<i>Chaetothyriales</i> genera <i>incertae sedis</i> (11)	
		<i>Coryneliales</i>	<i>Coryneliaceae</i> (8)
			<i>Eremascaceae</i> (2)
		<i>Eurotiales</i>	<i>Aspergillaceae</i> (14)
			<i>Elaphomycetaceae</i> (2)
			<i>Penicillaginaceae</i> (1) <sup>#</sup>
			<i>Thermoascaceae</i> (2)
			<i>Trichocomaceae</i> (9)

**Table 2** Continued.

Phylum	Class	Order	Family
		<i>Mycocaliciales</i>	<i>Mycocaliciaceae</i> (7)
		<i>Onygenales</i>	<i>Ajellomycetaceae</i> (7)
			<i>Arthrodermataceae</i> (11)
			<i>Ascosphaeraceae</i> (3)
			<i>Gymnoascaceae</i> (11)
			<i>Nannizziopsidaceae</i> (1)
			<i>Onygenaceae</i> (34)
			<i>Spiromastigaceae</i> (4)
		<i>Onygenales</i> genera <i>incertae sedis</i> (3)	
		<i>Phaeomoniellales</i>	<i>Celotheliaceae</i> (11)
		<i>Phaeomoniellales</i> genera <i>incertae sedis</i> (2)	
		<i>Pyrenulales</i>	<i>Pyrenulaceae</i> (12)
		<i>Pyrenulales</i> genera <i>incertae sedis</i> (2)	
		<i>Sclerococcales</i>	<i>Dactylosporaceae</i> (7)
		<i>Verrucariales</i>	<i>Adelococcaceae</i> (3)
			<i>Sarcopyreniaceae</i> (1)
			<i>Verrucariaceae</i> (52)
		<i>Verrucariales</i> genera <i>incertae sedis</i> (4)	
		<i>Incertae sedis</i>	<i>Rhynchostomataceae</i> (2)
	<i>Eurotiomycetes</i> genus <i>incertae sedis</i> (1)		
	<i>Geoglossomycetes</i>	<i>Geoglossales</i>	<i>Geoglossaceae</i> (7)
	<i>Geoglossomycetes</i> genera <i>incertae sedis</i> (2)		
	<i>Laboulbeniomycetes</i>	<i>Herpomycetales</i>	<i>Herpomycetaceae</i> (1)
		<i>Laboulbeniales</i>	<i>Ceratomycetaceae</i> (12)
			<i>Euceratomycetaceae</i> (6)
			<i>Laboulbeniaceae</i> (128)
		<i>Pyxidiophorales</i>	<i>Pyxidiophoraceae</i> (3)
	<i>Laboulbeniomycetes</i> genera <i>incertae sedis</i> (4)		
	<i>Laboulbeniomycetes</i> genus <i>incertae sedis</i> (1)		
	<i>Lecanoromycetes</i>	<i>Acarosporales</i>	<i>Acarosporaceae</i> (11)
			<i>Eigleraceae</i> (1)
		<i>Acarosporales</i> genus <i>incertae sedis</i> (1)	
		<i>Baeomycetales</i>	<i>Arctomiaceae</i> (5)
			<i>Arthrorhaphidaceae</i> (1)
			<i>Baeomycetaceae</i> (5)
			<i>Cameroniaceae</i> (1)
			<i>Hymeneliaceae</i> (3)
			<i>Protothelenellaceae</i> (3)
			<i>Trapeliaceae</i> (12)
			<i>Xylographaceae</i> (4)
		<i>Caliciales</i>	<i>Caliciaceae</i> (36)
			<i>Physciaceae</i> (18)
		<i>Graphidales</i>	<i>Diploschistaceae</i> (35)
			<i>Fissurinaceae</i> (6)
			<i>Gomphillaceae</i> (26)
			<i>Graphidaceae</i> (32)



**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Redonographaceae</i> (2)
			<i>Thelotrema</i> (7)
		<i>Gyalectales</i>	<i>Coenogoniaceae</i> (1)
			<i>Gyalectaceae</i> (6)
			<i>Phlyctidaceae</i> (2)
			<i>Sagiolechiaceae</i> (1)
			<i>Trichotheliaceae</i> (8)
		<i>Lecanorales</i>	<i>Biatoraceae</i> (1)
			<i>Bruceomycetaceae</i> (2)
			<i>Catillariaceae</i> (5)
			<i>Cladoniaceae</i> (22)
			<i>Gypsoplacaceae</i> (1)
			<i>Haematommataceae</i> (1)
			<i>Lecanoraceae</i> (29)
			<i>Malmideaceae</i> (7)
			<i>Megalariaceae</i> (2)
			<i>Parmeliaceae</i> (70)
			<i>Pilocarpaceae</i> (31)
			<i>Psilolechiaceae</i> (1)
			<i>Psoraceae</i> (6)
			<i>Ramalinaceae</i> (40)
			<i>Ramboldiaceae</i> (1)
			<i>Scoliciosporaceae</i> (1)
			<i>Sphaerophoraceae</i> (6)
			<i>Tephromelataceae</i> (4)
		<i>Lecanorales</i> genera <i>incertae sedis</i> (14)	
		<i>Lecideales</i>	<i>Lecideaceae</i> (29)
			<i>Lopadiaceae</i> (1)
		<i>Leprocaulales</i>	<i>Leprocaulaceae</i> (3)
		<i>Micropeltidales</i>	<i>Micropeltidaceae</i> (12)
		<i>Odontotrematales</i> <sup>#</sup>	<i>Odontotremataceae</i> (10)
		<i>Ostropales</i>	<i>Phaneromycetaceae</i> (1)
			<i>Spirographaceae</i> (1)
			<i>Stictidaceae</i> (30)
		<i>Ostropales</i> genera <i>incertae sedis</i> (5)	
		<i>Peltigerales</i>	<i>Coccocarpiaceae</i> (3)
			<i>Collemataceae</i> (9)
			<i>Koerberiaceae</i> (3)
			<i>Massalongiaceae</i> (3)
			<i>Pannariaceae</i> (30)
			<i>Peltigeraceae</i> (17)
			<i>Placynthiaceae</i> (3)
			<i>Vahliellaceae</i> (1)
		<i>Peltigerales</i> genus <i>incertae sedis</i> (1)	
		<i>Pertusariales</i>	<i>Agyriaceae</i> (2)
			<i>Coccotremataceae</i> (3)
			<i>Icmadophilaceae</i> (9)
			<i>Megasporaceae</i> (6)
			<i>Microcaliciaceae</i> (1)
			<i>Ochrolechiaceae</i> (1)
			<i>Pertusariaceae</i> (3)
			<i>Varicellariaceae</i> (1)
			<i>Variolariaceae</i> (1)

**Table 2** Continued.

Phylum	Class	Order	Family
		<i>Rhizocarpales</i>	<i>Rhizocarpaceae</i> (4)
		<i>Sarrameanales</i>	<i>Sarrameanaceae</i> (2)
		<i>Schaereriales</i>	<i>Schaereriaceae</i> (1)
		<i>Sporastatales</i>	<i>Sporastatiaceae</i> (2)
		<i>Teloschistales</i>	<i>Brigantiaeaceae</i> (2)
			<i>Megalosporaceae</i> (3)
			<i>Teloschistaceae</i> (71)
		<i>Teloschistales</i> genus <i>incertae sedis</i> (1)	
		<i>Thelenellales</i>	<i>Thelenellaceae</i> (3)
		<i>Turquoiseomycetales</i>	<i>Turquoiseomycetaceae</i> (1)
		<i>Umbilicariales</i>	<i>Elixiaceae</i> (2)
			<i>Fuscideaceae</i> (4)
			<i>Ophioparmaceae</i> (3)
			<i>Ropalosporaceae</i> (1)
			<i>Umbilicariaceae</i> (3)
		<i>Incertae sedis</i>	<i>Epigloeaceae</i> (1)
			<i>Helocarpaceae</i> (1)
			<i>Micropeltidaceae</i> (8)
	<i>Lecanoromycetes</i> genera <i>incertae sedis</i> (15)		
	<i>Leotiomycetes</i>	<i>Chaetomellales</i>	<i>Chaetomellaceae</i> (4)
		<i>Helotiales</i>	<i>Amicodiscaceae</i> (1)
			<i>Arachnopezizaceae</i> (5)
			<i>Ascocorticiaceae</i> (3)
			<i>Ascodichaenaceae</i> (2)
			<i>Bloxamiaceae</i> (1)
			<i>Bryoglossaceae</i> (3)
			<i>Calloriaceae</i> (14)
			<i>Cenangiaceae</i> (11)
			<i>Chlorociboriaceae</i> (2)
			<i>Chlorospleniaceae</i> (1)
			<i>Chrysodiscaceae</i> (1)
			<i>Cordieritidaceae</i> (18)
			<i>Cyttariaceae</i> (1)
			<i>Dermateaceae</i> (14)
			<i>Discinellaceae</i> (12)
			<i>Drepanopezizaceae</i> (8)
			<i>Erysiphaceae</i> (20)
			<i>Gelatinodiscaceae</i> (9)
			<i>Godroniaceae</i> (5)
			<i>Helotiaceae</i> (31)
			<i>Heterosphaeriaceae</i> (1)
			<i>Hyaloscyphaceae</i> (38)
			<i>Lachnaceae</i> (17)
			<i>Leptodontidiaceae</i> (1)
			<i>Loramycetaceae</i> (2)
			<i>Mitrulaceae</i> (1)
			<i>Mollisiaceae</i> (19)
			<i>Myxotrichaceae</i> (3)
			<i>Neolauriomycetaceae</i> (3)
			<i>Patellariopsidaceae</i> (1) <sup>#</sup>
			<i>Pezizellaceae</i> (23)
			<i>Ploettnerulaceae</i> (13)
			<i>Rutstroemiaceae</i> (7)
			<i>Sclerotiniaceae</i> (30)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Tricladiaceae</i> (1)
			<i>Vibrisseaceae</i> (6)
		<i>Helotiales</i> genera <i>incertae sedis</i> (144)	
		<i>Lahmiales</i>	<i>Lahmiaceae</i> (1)
		<i>Lauriomycetales</i>	<i>Lauriomycetaceae</i> (1)
		<i>Leotiales</i>	<i>Cochlearomycetaceae</i> (2)
			<i>Leotiaceae</i> (4)
			<i>Lichinodiaceae</i> (1)
			<i>Mniaeciaceae</i> (2)
			<i>Tympanidaceae</i> (7)
		<i>Leotiales</i> genera <i>incertae sedis</i> (3)	
		<i>Marthamycetales</i>	<i>Marthamycetaceae</i> (9)
		<i>Medeolariales</i>	<i>Medeolariaceae</i> (1)
		<i>Micraspidales</i>	<i>Micraspidaceae</i> (1)
		<i>Phacidiales</i>	<i>Helicogoniaceae</i> (7)
			<i>Phacidiaceae</i> (9)
		<i>Phacidiales</i> genus <i>incertae sedis</i> (1)	
		<i>Rhytismatales</i>	<i>Cudoniaceae</i> (2)
			<i>Rhytismataceae</i> (52)
			<i>Triblidiaceae</i> (2)
		<i>Rhytismatales</i> genera <i>incertae sedis</i> (9)	
		<i>Thelebolales</i>	<i>Pseudeurotiaceae</i> (8)
			<i>Thelebolaceae</i> (13)
		<i>Incertae sedis</i>	<i>Porodiplodiaceae</i> (1)
	<i>Leotiomycetes</i> genera <i>incertae sedis</i> (21)		
	<i>Lichinomycetes</i>	<i>Lichinales</i>	<i>Gloeohoppiaceae</i> (3)
			<i>Lichinaceae</i> (43)
			<i>Peltulaceae</i> (1)
	<i>Neoelectomycetes</i>	<i>Neoelectales</i>	<i>Neoelectaceae</i> (1)
	<i>Novakomycetes</i>	<i>Novakomycetales</i>	<i>Novakomycetaceae</i> (1)
	<i>Orbiliomycetes</i>	<i>Orbiliales</i>	<i>Orbiliaceae</i> (14)
		<i>Orbiliales</i> genus <i>incertae sedis</i> (2)	
	<i>Orbiliomycetes</i> genus <i>incertae sedis</i> (1)		
	<i>Pezizomycetes</i>	<i>Pezizales</i>	<i>Ascobolaceae</i> (5)
			<i>Ascodesmidaceae</i> (11)
			<i>Caloscyphaceae</i> (1)
			<i>Chorioactidaceae</i> (6)
			<i>Discinaceae</i> (5)
			<i>Glaziellaceae</i> (1)
			<i>Helvellaceae</i> (5)
			<i>Kallistoskyphaceae</i> (1)
			<i>Karstenellaceae</i> (1)
			<i>Morchellaceae</i> (7)
			<i>Pezizaceae</i> (48)
			<i>Pseudombrophilaceae</i> (4)
			<i>Pulvinulaceae</i> (3)
			<i>Pyronemataceae</i> (65)
			<i>Rhizinaceae</i> (3)
			<i>Sarcoscyphaceae</i> (12)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Sarcosomataceae</i> (9)
			<i>Strobiloscyphaceae</i> (1)
			<i>Tarzettaceae</i> (6)
			<i>Tuberaceae</i> (7)
		<i>Pezizales</i> genera <i>incertae sedis</i> (17)	
	<i>Pezizomycetes</i> genus <i>incertae sedis</i> (1)		
	<i>Pneumocystomyces</i>	<i>Pneumocystidales</i>	<i>Pneumocystidaceae</i> (1)
	<i>Saccharomycetes</i>	<i>Saccharomycetales</i>	<i>Alloascoideaceae</i> (1)
			<i>Ascoideaceae</i> (1)
			<i>Cephaloascaceae</i> (1)
			<i>Debaryomycetaceae</i> (13)
			<i>Dipodascaceae</i> (5)
			<i>Lipomycetaceae</i> (6)
			<i>Metschnikowiaceae</i> (3)
			<i>Phaffomycetaceae</i> (5)
			<i>Pichiaceae</i> (10)
			<i>Saccharomycetaceae</i> (18)
			<i>Saccharomycodaceae</i> (2)
			<i>Saccharomycopsidaceae</i> (2)
			<i>Trichomonascaceae</i> (9)
			<i>Trigonopsidaceae</i> (3)
		<i>Saccharomycetales</i> genera <i>incertae sedis</i> (22)	
	<i>Schizosaccharomycetes</i>	<i>Schizosaccharomycetales</i>	<i>Schizosaccharomycetaceae</i> (1)
	<i>Sordariomycetes</i>	<i>Amphisphaeriales</i>	<i>Amphisphaeriaceae</i> (4)
			<i>Apiosporaceae</i> (4)
			<i>Beltraniaceae</i> (9)
			<i>Castanediellaceae</i> (1)
			<i>Clypeophysalosporaceae</i> (4)
			<i>Hyponectriaceae</i> (17)
			<i>Iodosphaeriaceae</i> (1)
			<i>Melogrammataceae</i> (1)
			<i>Oxydothidaceae</i> (1)
			<i>Phlogicylindriaceae</i> (3)
			<i>Pseudomassariaceae</i> (4)
			<i>Pseudosporidesmiaceae</i> (1)
			<i>Pseudotruncatellaceae</i> (1)
			<i>Sporocadaceae</i> (35)
			<i>Vialaeaceae</i> (1)
		<i>Amphisphaeriales</i> genus <i>incertae sedis</i> (1)	
		<i>Amplistromatales</i>	<i>Amplistromataceae</i> (3)
		<i>Annulatascales</i>	<i>Annulatascaleae</i> (13)
		<i>Annulatascales</i> genus <i>incertae sedis</i> (1)	
		<i>Atractosporales</i>	<i>Atractosporaceae</i> (2)
			<i>Conlariaceae</i> (2)
			<i>Pseudoproboscisporeaceae</i> (2)
		<i>Boliniales</i>	<i>Boliniaceae</i> (9)
		<i>Calosphaeriales</i>	<i>Calosphaeriaceae</i> (4)
			<i>Pleurostomataceae</i> (1)

**Table 2** Continued.

Phylum	Class	Order	Family
		<i>Calosphaeriales</i> genera <i>incertae sedis</i> (3)	
		<i>Cancellidiales</i> <sup>#</sup>	<i>Cancellidiaceae</i> (2) <sup>#</sup>
		<i>Catabotryales</i> <sup>#</sup>	<i>Catabotryaceae</i> (1)
		<i>Cephalothecales</i>	<i>Cephalothecaceae</i> (5)
		<i>Chaetosphaeriales</i>	<i>Chaetosphaeriaceae</i> (52)
			<i>Helminthosphaeriaceae</i> (4)
			<i>Leptosporrellaceae</i> (1)
			<i>Linocarpaceae</i> (3)
		<i>Chaetosphaeriales</i> genera <i>incertae sedis</i> (7)	
		<i>Coniochaetales</i>	<i>Coniochaetaceae</i> (2)
			<i>Cordanaceae</i> (1)
		<i>Coniochaetales</i> genera <i>incertae sedis</i> (2)	
		<i>Conioscyphales</i>	<i>Conioscyphaceae</i> (1)
		<i>Coronophorales</i>	<i>Bertiaceae</i> (2)
			<i>Ceratostomataceae</i> (16)
			<i>Chaetosphaerellaceae</i> (3)
			<i>Coronophoraceae</i> (1)
			<i>Nitschkiaceae</i> (13)
			<i>Scortechiniaceae</i> (11)
		<i>Coronophorales</i> genera <i>incertae sedis</i> (3)	
		<i>Delonicicolales</i>	<i>Delonicicolaceae</i> (2)
			<i>Leptosilliaceae</i> (1)
		<i>Diaporthales</i>	<i>Apiosporopsidaceae</i> (1)
			<i>Apharknessiaceae</i> (2)
			<i>Asterosporiaceae</i> (1)
			<i>Auratiopycnidiellaceae</i> (1)
			<i>Coryneaceae</i> (2)
			<i>Cryphonectriaceae</i> (27)
			<i>Cytosporaceae</i> (6)
			<i>Diaporthaceae</i> (15)
			<i>Diaporthosporellaceae</i> (1)
			<i>Diaporthostomataceae</i> (1)
			<i>Dwiroopaceae</i> (1)
			<i>Erythrogloeaceae</i> (4)
			<i>Foliocryphiaceae</i> (2) <sup>#</sup>
			<i>Gnomoniaceae</i> (37)
			<i>Harknessiaceae</i> (2)
			<i>Juglanconidaceae</i> (2)
			<i>Lamproconiaceae</i> (2)
			<i>Macrohilaceae</i> (1)
			<i>Mastigosporrellaceae</i> (1)
			<i>Melanconidaceae</i> (1)
			<i>Melanconiellaceae</i> (7)
			<i>Neomelanconiellaceae</i> (1)
			<i>Phaeoappendicosporaceae</i> (2)
			<i>Prosopidicolaceae</i> (1)
			<i>Pseudomelanconidaceae</i> (3)
			<i>Pseudoplagiostomataceae</i> (1)
			<i>Pyrisporaceae</i> (1)
			<i>Schizoparmaceae</i> (1)
			<i>Stilbosporaceae</i> (4)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Sydowiellaceae</i> (16)
			<i>Synnemasporiaceae</i> (1)
			<i>Tubakiaceae</i> (8)
		<i>Diaporthales</i> genera <i>incertae sedis</i> (36)	
		<i>Distoseptisporales</i>	<i>Distoseptisporaceae</i> (1)
		<i>Falcocladales</i>	<i>Falcocladiaceae</i> (1)
		<i>Fuscosporellales</i>	<i>Fuscosporellaceae</i> (6)
		<i>Glomerellales</i>	<i>Australiascaceae</i> (1)
			<i>Glomerellaceae</i> (1)
			<i>Malaysiascaceae</i> (1)
			<i>Plectosphaerellaceae</i> (24)
			<i>Reticulascaceae</i> (4)
		<i>Glomerellales</i> genus <i>incertae sedis</i> (1)	
		<i>Hypocreales</i>	<i>Bionectriaceae</i> (47)
			<i>Calcarisporiaceae</i> (1)
			<i>Clavicipitaceae</i> (50)
			<i>Cocoonihibitaceae</i> (1)
			<i>Cordycipitaceae</i> (21)
			<i>Cylindriaceae</i> (1)
			<i>Flammocladidiellaceae</i> (1)
			<i>Hypocreaceae</i> (17)
			<i>Myrotheciomycetaceae</i> (4)
			<i>Nectriaceae</i> (70)
			<i>Niessliaceae</i> (21)
			<i>Ophiocordycipitaceae</i> (12)
			<i>Sarocladiaceae</i> (2)
			<i>Stachybotryaceae</i> (39)
			<i>Tilachlidiaceae</i> (3)
		<i>Hypocreales</i> genera <i>incertae sedis</i> (30)	
		<i>Jobellisiales</i>	<i>Jobellisaceae</i> (1)
		<i>Koralionastetales</i>	<i>Koralionastetaceae</i> (2)
		<i>Lulworthiales</i>	<i>Lulworthiaceae</i> (16)
		<i>Magnaporthales</i>	<i>Ceratosphaeriaceae</i> (1)
			<i>Magnaporthaceae</i> (24)
			<i>Ophioceraaceae</i> (2)
			<i>Pseudohalonectriaceae</i> (1)
			<i>Pyriculariaceae</i> (11)
		<i>Meliolales</i>	<i>Armatellaceae</i> (1)
			<i>Meliolaceae</i> (8)
		<i>Microascales</i>	<i>Ceratocystidaceae</i> (11)
			<i>Chadefaudiellaceae</i> (2)
			<i>Gondwanamycetaceae</i> (2)
			<i>Graphiaceae</i> (1)
			<i>Halosphaeriaceae</i> (68)
			<i>Microascaceae</i> (23)
			<i>Triadelphiaceae</i> (2)
		<i>Microascales</i> genera <i>incertae sedis</i> (5)	
		<i>Myrmecridiales</i>	<i>Myrmecridiaceae</i> (2)
			<i>Xenodactylariaceae</i> (1)
		<i>Ophiostomatales</i>	<i>Kathistaceae</i> (3)
			<i>Ophiostomataceae</i> (12)
		<i>Pararamichloridiales</i>	<i>Pararamichloridiaceae</i> (1)

**Table 2** Continued.

Phylum	Class	Order	Family
		<i>Parasymphodiellales</i>	<i>Parasymphodiellaceae</i> (1)
		<i>Phomatosporales</i>	<i>Phomatosporaceae</i> (3)
		<i>Phyllachorales</i>	<i>Phaeochoraceae</i> (4)
			<i>Phaeochorellaceae</i> (1)
			<i>Phyllachoraceae</i> (54)
			<i>Telimenaceae</i> (1)
		<i>Phyllachorales</i> genera <i>incertae sedis</i> (2)	
		<i>Pisorisporiales</i>	<i>Pisorisporiaceae</i> (2)
		<i>Pisorisporiales</i> genus <i>incertae sedis</i> (1)	
		<i>Pleurotheciales</i>	<i>Pleurotheciaceae</i> (14)
		<i>Pseudodactylariales</i>	<i>Pseudodactylariaceae</i> (1)
		<i>Savoryellales</i>	<i>Savoryellaceae</i> (6)
		<i>Sordariales</i>	<i>Bombardiaceae</i> (5) <sup>#</sup>
			<i>Chaetomiaceae</i> (42)
			<i>Diplogelasinosporaceae</i> (1) <sup>#</sup>
			<i>Lasiosphaeriaceae</i> (7)
			<i>Lasiosphaeridaceae</i> (1) <sup>#</sup>
			<i>Naviculisporaceae</i> (4) <sup>#</sup>
			<i>Neoschizotheciaceae</i> (8) <sup>#</sup>
			<i>Podosporaceae</i> (3)
			<i>Schizotheciaceae</i> (3) <sup>#</sup>
			<i>Sordariaceae</i> (5)
			<i>Strattoniaceae</i> (1) <sup>#</sup>
			<i>ZygospERMellaceae</i> (2) <sup>#</sup>
		<i>Sordariales</i> genera <i>incertae sedis</i> (29)	
		<i>Spathulosporales</i>	<i>Hispidicarpomycetaceae</i> (1)
			<i>Spathulosporaceae</i> (2)
		<i>Sporidesmiales</i>	<i>Sporidesmiaceae</i> (1)
		<i>Tirisporellales</i>	<i>Tirisporellaceae</i> (3)
		<i>Togniniales</i>	<i>Togniniaceae</i> (2)
		<i>Torpedosporales</i>	<i>Etheiophoraceae</i> (2)
			<i>Juncigenaceae</i> (6)
			<i>Torpedosporaceae</i> (1)
		<i>Tracyllalales</i>	<i>Tracyllaceae</i> (2)
		<i>Vermiculariopsiellales</i>	<i>Vermiculariopsiellaceae</i> (3)
		<i>Xenospadicoidales</i>	<i>Xenospadicoidaceae</i> (5)
		<i>Xylariales</i>	<i>Anungitiomycetaceae</i> (3)
			<i>Barrmaeliaceae</i> (2)
			<i>Cainiaceae</i> (10)
			<i>Clypeosphaeriaceae</i> (7)
			<i>Coniocessiaceae</i> (2)
			<i>Diatrypaceae</i> (22)
			<i>Fasciatisporaceae</i> (1)
			<i>Graphostromataceae</i> (5)
			<i>Hansfordiaceae</i> (1)
			<i>Hypoxylaceae</i> (18)
			<i>Induratiaceae</i> (2)
			<i>Lopadostomataceae</i> (4)
			<i>Microdochiaceae</i> (3)
			<i>Polystigmataceae</i> (1)
			<i>Nothodactylariaceae</i> (1)
			<i>Requienellaceae</i> (4)
			<i>Vamsapriyaceae</i> (1) <sup>#</sup>



**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Xyladictyochaetaceae</i> (2)
			<i>Xylariaceae</i> (38)
			<i>Zygosporiaceae</i> (1)
		<i>Xylariales</i> genera <i>incertae sedis</i> (57)	
		<i>Incertae sedis</i>	<i>Acrodictyaceae</i> (1)
			<i>Aquapteridosporaceae</i> (1) <sup>#</sup>
			<i>Barbatosphaeriaceae</i> (3)
			<i>Batistiaceae</i> (1)
			<i>Junewangiaceae</i> (4)
			<i>Lautosporaceae</i> (1)
			<i>Myelospermataceae</i> (1)
			<i>Obryzaceae</i> (1)
			<i>Papulosaceae</i> (4)
			<i>Rhamphoriaceae</i> (4)
			<i>Thyridiaceae</i> (2)
			<i>Trichosphaeriaceae</i> (11)
			<i>Woswasiaceae</i> (3)
	<i>Sordariomycetes</i> genera <i>incertae sedis</i> (131)		
	<i>Taphrinomycetes</i>	<i>Taphrinales</i>	<i>Protomycetaceae</i> (6)
			<i>Taphrinaceae</i> (1)
	<i>Xylobotryomycetes</i>	<i>Xylobotryales</i>	<i>Cirrosporiaceae</i> (1)
			<i>Xylobotryaceae</i> (1)
	<i>Xylonomycetes</i>	<i>Symbiotaphrinales</i>	<i>Symbiotaphrinaceae</i> (1)
		<i>Xylonales</i>	<i>Xylonaceae</i> (2)
	<i>Incertae sedis</i>	<i>Thelocarpales</i>	<i>Thelocarpaceae</i> (2)
		<i>Vezdaeaales</i>	<i>Vezdaeaceae</i> (1)
	<i>Incertae sedis</i>	<i>Incertae sedis</i>	<i>Aphanopsidaceae</i> (2)
			<i>Diporothecaceae</i> (1)
			<i>Eoterfeziaceae</i> (2)
			<i>Harpidiaceae</i> (2)
			<i>Mucomassariaceae</i> (1)
			<i>Saccardiaceae</i> (6)
			<i>Seuratiaceae</i> (2)
			<i>Strangosporaceae</i> (1)
<i>Ascomycota</i> genera <i>incertae sedis</i> (1466)			
<i>Basidiobolomycota</i>	<i>Basidiobolomycetes</i>	<i>Basidiobolales</i>	<i>Basidiobolaceae</i> (2)
<i>Basidiomycota</i>	<i>Agaricomycetes</i>	<i>Agaricales</i>	<i>Agaricaceae</i> (59)
			<i>Amanitaceae</i> (5)
			<i>Biannulariaceae</i> (7)
			<i>Bolbitiaceae</i> (15)
			<i>Broomeiaceae</i> (1)
			<i>Callistosporiaceae</i> (1) <sup>#</sup>
			<i>Chromocyphellaceae</i> (1)
			<i>Clavariaceae</i> (10)
			<i>Cortinariaceae</i> (5)
			<i>Crassisporiaceae</i> (2)
			<i>Crepidotaceae</i> (6)
			<i>Cyphellaceae</i> (16)
			<i>Cystostereaceae</i> (7)
			<i>Entolomataceae</i> (8)
			<i>Hemigasteraceae</i> (1)
			<i>Hydnangiaceae</i> (4)
			<i>Hygrophoraceae</i> (27)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Hymenogastraceae</i> (10)
			<i>Inocybaceae</i> (7)
			<i>Limnoperdaceae</i> (1)
			<i>Lycoperdaceae</i> (7)
			<i>Lyophyllaceae</i> (19)
			<i>Macrocystidiaceae</i> (1)
			<i>Marasmiaceae</i> (10)
			<i>Mycenaceae</i> (15)
			<i>Mythicomycetaceae</i> (2)
			<i>Niaceae</i> (9)
			<i>Omphalotaceae</i> (16)
			<i>Phyllotopsidaceae</i> (3) <sup>#</sup>
			<i>Physalacriaceae</i> (28)
			<i>Pleurotaceae</i> (5)
			<i>Pluteaceae</i> (3)
			<i>Porotheleaceae</i> (3)
			<i>Psathyrellaceae</i> (21)
			<i>Pseudoclitocybaceae</i> (7)
			<i>Pterulaceae</i> (12)
			<i>Radulomycetaceae</i> (2) <sup>#</sup>
			<i>Sarcomyxaceae</i> (1) <sup>#</sup>
			<i>Schizophyllaceae</i> (3)
			<i>Stephanosporaceae</i> (5)
			<i>Strophariaceae</i> (12)
			<i>Tricholomataceae</i> (10)
			<i>Tubariaceae</i> (7)
			<i>Typhulaceae</i> (3)
		<i>Agaricales</i> genera <i>incertae sedis</i> (133)	
		<i>Amylocorticiales</i>	<i>Amylocorticiaceae</i> (12)
		<i>Atheliales</i>	<i>Atheliaceae</i> (20)
			<i>Lobuliciaceae</i> (1) <sup>#</sup>
		<i>Auriculariales</i>	<i>Auriculariaceae</i> (12)
			<i>Hyaloriaceae</i> (3)
		<i>Auriculariales</i> genera <i>incertae sedis</i> (36)	
		<i>Boletales</i>	<i>Boletaceae</i> (95)
			<i>Boletinellaceae</i> (2)
			<i>Calostomataceae</i> (1)
			<i>Coniophoraceae</i> (6)
			<i>Diplocystidiaceae</i> (4)
			<i>Gasterellaceae</i> (1)
			<i>Gomphidiaceae</i> (4)
			<i>Gyroporaceae</i> (1)
			<i>Hygrophoropsidaceae</i> (2)
			<i>Paxillaceae</i> (10)
			<i>Protogastraceae</i> (1)
			<i>Rhizopogonaceae</i> (3)
			<i>Sclerodermataceae</i> (5)
			<i>Serpulaceae</i> (3)
			<i>Suillaceae</i> (2)
			<i>Tapinellaceae</i> (3)
		<i>Boletales</i> genera <i>incertae sedis</i> (4)	
		<i>Cantharellales</i>	<i>Aphelariaceae</i> (3)
			<i>Botryobasidiaceae</i> (6)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Ceratobasidiaceae</i> (6)
			<i>Hydnaceae</i> (22)
			<i>Oliveoniaceae</i> (1)
			<i>Tulasnellaceae</i> (2)
		<i>Cantharellales</i> genera <i>incertae sedis</i> (8)	
		<i>Corticiales</i>	<i>Corticaceae</i> (13)
			<i>Dendrominiaceae</i> (1)
			<i>Punctulariaceae</i> (3)
			<i>Vuilleminiaceae</i> (3)
		<i>Corticiales</i> genera <i>incertae sedis</i> (7)	
		<i>Gaeastrales</i>	<i>Gaeastraceae</i> (7)
			<i>Sclerogastraceae</i> (1)
		<i>Gaeastrales</i> genus <i>incertae sedis</i> (1)	
		<i>Gloeophyllales</i>	<i>Gloeophyllaceae</i> (12)
		<i>Gloeophyllales</i> genus <i>incertae sedis</i> (1)	
		<i>Gomphales</i>	<i>Clavariadelphaceae</i> (2)
			<i>Gomphaceae</i> (14)
			<i>Lentariaceae</i> (3)
		<i>Hymenochaetales</i>	<i>Hymenochaetaceae</i> (42)
			<i>Neoantrodidiellaceae</i> (1)
			<i>Nigrofomitaceae</i> (1)
			<i>Oxyporaceae</i> (1)
			<i>Rickenellaceae</i> (9)
			<i>Schizoporaceae</i> (14)
		<i>Hymenochaetales</i> genera <i>incertae sedis</i> (15)	
		<i>Hysterangiales</i>	<i>Gallaceaceae</i> (3)
			<i>Hysterangiaceae</i> (4)
			<i>Mesophelliaceae</i> (8)
			<i>Phallogastraceae</i> (2)
			<i>Trappeaceae</i> (3)
		<i>Jaapiiales</i>	<i>Jaapiaceae</i> (1)
		<i>Lepidostromatales</i>	<i>Lepidostromataceae</i> (3)
		<i>Phallales</i>	<i>Claustulaceae</i> (5)
			<i>Gastrosporiaceae</i> (1)
			<i>Phallaceae</i> (26)
		<i>Phallales</i> genera <i>incertae sedis</i> (2)	
		<i>Polyporales</i>	<i>Cerrenaceae</i> (4)
			<i>Dacryobolaceae</i> (7)
			<i>Fomitopsidaceae</i> (25)
			<i>Fragiliporiaceae</i> (1)
			<i>Ganodermataceae</i> (3)
			<i>Gelatoporiaceae</i> (4)
			<i>Grifolaceae</i> (2)
			<i>Hyphodermataceae</i> (1)
			<i>Incrustoporiaceae</i> (5)
			<i>Irpicaceae</i> (15)
			<i>Ischnodermataceae</i> (1)
			<i>Laetiporaceae</i> (3)
			<i>Meripilaceae</i> (3)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Meruliaceae</i> (22)
			<i>Panaceae</i> (2)
			<i>Phanerochaetaceae</i> (18)
			<i>Podoscyphaceae</i> (3)
			<i>Polyporaceae</i> (90)
			<i>Sparassidaceae</i> (3)
			<i>Steccherinaceae</i> (23)
		<i>Polyporales</i> genera <i>incertae sedis</i> (67)	
		<i>Russulales</i>	<i>Albatrellaceae</i> (8)
			<i>Auriscalpiaceae</i> (6)
			<i>Bondarzewiaceae</i> (9)
			<i>Echinodontiaceae</i> (3)
			<i>Hericiaceae</i> (6)
			<i>Hybogasteraceae</i> (1)
			<i>Peniophoraceae</i> (16)
			<i>Russulaceae</i> (7)
			<i>Stereaceae</i> (22)
			<i>Terrestriporiaceae</i> (1)
			<i>Xenasmataceae</i> (3)
		<i>Russulales</i> genera <i>incertae sedis</i> (15)	
		<i>Sebacinales</i>	<i>Sebacinaceae</i> (8)
			<i>Serendipitaceae</i> (1)
		<i>Stereopsidales</i>	<i>Stereopsidaceae</i> (1)
		<i>Thelephorales</i>	<i>Bankeraceae</i> (5)
			<i>Thelephoraceae</i> (9)
		<i>Thelephorales</i> genus <i>incertae sedis</i> (1)	
		<i>Trechisporales</i>	<i>Hydnodontaceae</i> (13)
		<i>Trechisporales</i> genus <i>incertae sedis</i> (1)	
		<i>Tremellodendropsidales</i>	<i>Tremellodendropsidaceae</i> (1)
	<i>Agaricomycetes</i> genera <i>incertae sedis</i> (41)		
	<i>Agaricostilbomycetes</i>	<i>Agaricostilbales</i>	<i>Agaricostilbaceae</i> (3)
			<i>Chionosphaeraceae</i> (6)
			<i>Jianyuniaceae</i> (3) <sup>#</sup>
			<i>Kondoaceae</i> (2)
			<i>Ruineniaceae</i> (1)
		<i>Agaricostilbales</i> genus <i>incertae sedis</i> (1)	
	<i>Agaricostilbomycetes</i> genus <i>incertae sedis</i> (1)		
	<i>Atractiellomycetes</i>	<i>Atractiellales</i>	<i>Atractogloeaceae</i> (1)
			<i>Hoehnelomycetaceae</i> (2)
			<i>Phleogenaceae</i> (7)
	<i>Bartheletiomycetes</i>	<i>Bartheletiales</i>	<i>Bartheletiaceae</i> (1)
	<i>Classiculomycetes</i>	<i>Classiculales</i>	<i>Classiculaceae</i> (2)
	<i>Cryptomycocolacomycetes</i>	<i>Cryptomycocolacales</i>	<i>Cryptomycocolacaceae</i> (2)
	<i>Cystobasidiomycetes</i>	<i>Buckleyzymales</i>	<i>Buckleyzymaceae</i> (1)
		<i>Cystobasidiales</i>	<i>Cystobasidiaceae</i> (3)
		<i>Cystobasidiales</i> genera <i>incertae sedis</i> (2)	
		<i>Erythrobasidiales</i>	<i>Erythrobasidiaceae</i> (2)

**Table 2** Continued.

Phylum	Class	Order	Family
		<i>Erythrobasidiales</i> genera <i>incertae sedis</i> (3)	
		<i>Naohideales</i>	<i>Naohideaceae</i> (1)
		<i>Sakaguchiales</i>	<i>Sakaguchiaceae</i> (1)
		<i>Incertae sedis</i>	<i>Microsporomycetaceae</i> (2)
			<i>Symmetrosporaceae</i> (1)
	<i>Cystobasidiomycetes</i> genus <i>incertae sedis</i> (1)		
	<i>Dacrymycetes</i>	<i>Dacrymycetales</i>	<i>Cerinomycetaceae</i> (1)
			<i>Dacrymycetaceae</i> (9)
		<i>Unilacrymales</i>	<i>Unilacrymaceae</i> (1)
		<i>incertae sedis</i>	<i>Dacryonaemataceae</i> (1)
	<i>Exobasidiomycetes</i>	<i>Ceraceosorales</i>	<i>Ceraceosoraceae</i> (1)
		<i>Doassansiales</i>	<i>Doassansiaceae</i> (11)
			<i>Melaniellaceae</i> (1)
			<i>Rhamphosporaceae</i> (1)
		<i>Entylomatales</i>	<i>Entylomataceae</i> (2)
		<i>Exobasidiales</i>	<i>Brachybasidiaceae</i> (6)
			<i>Cryptobasidiaceae</i> (6)
			<i>Exobasidiaceae</i> (4)
			<i>Graphiolaceae</i> (2)
			<i>Laurobasidiaceae</i> (1)
		<i>Georgefischeriales</i>	<i>Eballistraceae</i> (1)
			<i>Georgefischeriaceae</i> (2)
			<i>Gjaerumiaceae</i> (1)
			<i>Tilletiariaceae</i> (3)
		<i>Golubeviales</i>	<i>Golubeviaceae</i> (1)
		<i>Microstromatales</i>	<i>Microstromataceae</i> (1)
			<i>Quambalariaceae</i> (1)
			<i>Volvocisporiaceae</i> (1)
		<i>Microstromatales</i> genera <i>incertae sedis</i> (4)	
		<i>Robbauerales</i>	<i>Robbaueraceae</i> (1)
		<i>Tilletiales</i>	<i>Erratomycetaceae</i> (1)
			<i>Tilletiaceae</i> (6)
	<i>Malasseziomycetes</i>	<i>Malasseziales</i>	<i>Malasseziaceae</i> (1)
	<i>Microbotryomycetes</i>	<i>Heitmaniales</i> <sup>#</sup>	<i>Heitmaniaceae</i> (1) <sup>#</sup>
		<i>Heterogastridiales</i>	<i>Heterogastridiaceae</i> (3)
		<i>Kriegeriales</i>	<i>Camptobasidiaceae</i> (3)
			<i>Kriegeriaceae</i> (4)
		<i>Leucosporidiales</i>	<i>Leucosporidiaceae</i> (1)
		<i>Microbotryales</i>	<i>Microbotryaceae</i> (5)
			<i>Ustilentylomataceae</i> (4)
		<i>Rosettozymales</i> <sup>#</sup>	<i>Rosettozymaceae</i> (1) <sup>#</sup>
		<i>Sporidiobolales</i>	<i>Sporidiobolaceae</i> (3)
		<i>Incertae sedis</i>	<i>Chrysozymaceae</i> (4)
			<i>Colacogloeaceae</i> (1)
	<i>Microbotryomycetes</i> genera <i>incertae sedis</i> (15)		
	<i>Mixiomycetes</i>	<i>Mixiales</i>	<i>Mixiaceae</i> (1)
	<i>Moniliellomycetes</i>	<i>Moniliellales</i>	<i>Moniliellaceae</i> (1)
	<i>Pucciniomycetes</i>	<i>Helicobasidiales</i>	<i>Helicobasidiaceae</i> (2)
		<i>Pachnocybales</i>	<i>Pachnocybaceae</i> (1)
		<i>Platyglloeales</i>	<i>Eocronartiaceae</i> (5)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Platyglloeaceae</i> (4)
		<i>Pucciniales</i>	<i>Araucariomycetaceae</i> (1) <sup>#</sup>
			<i>Chaconiaceae</i> (8)
			<i>Coleosporiaceae</i> (7)
			<i>Cronartiaceae</i> (3)
			<i>Crossosporaceae</i> (6) <sup>#</sup>
			<i>Endoraeciaceae</i> (1) <sup>#</sup>
			<i>Gymnosporangiaceae</i> (1) <sup>#</sup>
			<i>Melampsoraceae</i> (1)
			<i>Mikronegeriaceae</i> (3)
			<i>Milesinaceae</i> (4) <sup>#</sup>
			<i>Neophysopellaceae</i> (1) <sup>#</sup>
			<i>Ochropsoraceae</i> (2) <sup>#</sup>
			<i>Phakopsoraceae</i> (12)
			<i>Phragmidiaceae</i> (13)
			<i>Pileolariaceae</i> (2)
			<i>Pucciniaceae</i> (20)
			<i>Pucciniastraceae</i> (6)
			<i>Pucciniosiraceae</i> (10)
			<i>Raveneliaceae</i> (24)
			<i>Rogerpetersoniaceae</i> (1) <sup>#</sup>
			<i>Skierkaceae</i> (1) <sup>#</sup>
			<i>Sphaerophragmiaceae</i> (2)
			<i>Tranzscheliaceae</i> (2) <sup>#</sup>
			<i>Uncolaceae</i> (2)
			<i>Uromycladiaceae</i> (1) <sup>#</sup>
			<i>Uropyxidaceae</i> (13)
		<i>Pucciniales</i> genera <i>incertae sedis</i> (25)	
		<i>Septobasidiales</i>	<i>Septobasidiaceae</i> (6)
	<i>Spiculogloeomycetes</i>	<i>Spiculogloeales</i>	<i>Spiculogloeaceae</i> (2)
	<i>Spiculogloeomycetes</i> genus <i>incertae sedis</i> (1)		
	<i>Tremellomycetes</i>	<i>Chionasterales</i> <sup>#</sup>	<i>Chionasteraceae</i> (1) <sup>#</sup>
		<i>Cystofilobasidiales</i>	<i>Cystofilobasidiaceae</i> (1)
			<i>Mrakiaceae</i> (7)
		<i>Filobasidiales</i>	<i>Filobasidiaceae</i> (5)
			<i>Piskurozymaceae</i> (2)
		<i>Holtermanniales</i>	<i>Holtermanniaceae</i> (2)
		<i>Tremellales</i>	<i>Bulleraceae</i> (4)
			<i>Bulleribasidiaceae</i> (6)
			<i>Carcinomycetaceae</i> (1)
			<i>Cryptococcaceae</i> (3)
			<i>Cuniculitremaeae</i> (3)
			<i>Naemateliaceae</i> (2)
			<i>Phaeotremellaceae</i> (2)
			<i>Phragmoxenidiaceae</i> (1)
			<i>Rhynchogastremaceae</i> (3)
			<i>Sirobasidiaceae</i> (1)
			<i>Tremellaceae</i> (3)
			<i>Trimorphomycetaceae</i> (4)
		<i>Tremellales</i> genera <i>incertae sedis</i> (8)	
		<i>Trichosporonales</i>	<i>Tetragonomycetaceae</i> (3)
			<i>Trichosporonaceae</i> (8)

**Table 2** Continued.

Phylum	Class	Order	Family
	<i>Tremellomycetes</i> genera <i>incertae sedis</i> (3)		
	<i>Tritirachiomycetes</i>	<i>Tritirachiales</i>	<i>Tritirachiaceae</i> (2)
	<i>Ustilaginomycetes</i>	<i>Uleiellales</i>	<i>Uleiellaceae</i> (1)
		<i>Urocystidales</i>	<i>Doassansiopsidaceae</i> (1)
			<i>Fereydouniaceae</i> (1)
			<i>Floromycetaceae</i> (2)
			<i>Glomosporiaceae</i> (1)
			<i>Mycosyringaceae</i> (1)
			<i>Urocystidaceae</i> (7)
		<i>Ustilaginales</i>	<i>Anthracoideaceae</i> (20)
			<i>Clintamraceae</i> (1)
			<i>Geminaginaceae</i> (1)
			<i>Melanotaeniaceae</i> (3)
			<i>Pericladiaceae</i> (1)
			<i>Ustilaginaceae</i> (24)
			<i>Websdaneaceae</i> (2)
		<i>Violaceomycetales</i>	<i>Violaceomycetaceae</i> (1)
	<i>Ustilaginomycetes</i> genera <i>incertae sedis</i> (2)		
	<i>Wallemiomycetes</i>	<i>Geminibasidiales</i>	<i>Geminibasidiaceae</i> (2)
		<i>Wallemiales</i>	<i>Wallemiaceae</i> (1)
	<i>Wallemiomycetes</i> genus <i>incertae sedis</i> (1)		
<i>Basidiomycota</i> genera <i>incertae sedis</i> (11)			
<i>Blastocladiomycota</i>	<i>Blastocladiomycetes</i>	<i>Blastocladales</i>	<i>Blastocladiaceae</i> (3)
			<i>Catenariaceae</i> (2)
			<i>Paraphysodermataceae</i> (1)
			<i>Sorochytriaceae</i> (1)
		<i>Blastocladales</i> genus <i>incertae sedis</i> (1)	
		<i>Callimastigales</i>	<i>Callimastigaceae</i> (1)
		<i>Catenomycetales</i>	<i>Catenomycetaceae</i> (1)
			<i>Coelomomycetaceae</i> (2)
	<i>Blastocladiomycetes</i> genus <i>incertae sedis</i> (1)		
	<i>Physodermatomyces</i>	<i>Physodermatales</i>	<i>Physodermataceae</i> (1)
<i>Calcarisporiellomycota</i>	<i>Calcarisporiellomycetes</i>	<i>Calcarisporiellales</i>	<i>Calcarisporiellaceae</i> (2)
<i>Caulochytriomycota</i>	<i>Caulochytriomycetes</i>	<i>Caulochytriales</i>	<i>Caulochytriaceae</i> (1)
<i>Chytridiomycota</i>	<i>Chytridiomycetes</i>	<i>Chytridiales</i>	<i>Asterophlyctaceae</i> (2)
			<i>Chytridiaceae</i> (6)
			<i>Chytriomycetaceae</i> (11)
			<i>Phlyctochytriaceae</i> (1)
			<i>Phlyctorhizaceae</i> (1)
			<i>Pseudorhizidiaceae</i> (1)
			<i>Scherffeliomycetaceae</i> (1)
			<i>Zygorhizidiaceae</i> (1)
		<i>Chytridiales</i> genus <i>incertae sedis</i> (1)	
		<i>Nephridiophagales</i>	<i>Nephridiophagaceae</i> (4)
		<i>Polyphagales</i>	<i>Polyphagaceae</i> (1)
		<i>Saccopodiales</i>	<i>Saccopodiaceae</i> (1)
		<i>Incertae sedis</i>	<i>Amoebochytriaceae</i> (1)
			<i>Sparrowiaceae</i> (1)
			<i>Sphaeromonadaceae</i> (1)



**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Tetrachytriaceae</i> (1)
			<i>Thalassochytriaceae</i> (1)
	<i>Chytridiomycetes</i> genera <i>incertae sedis</i> (39)		
	<i>Cladochytriomycetes</i>	<i>Cladochytriales</i>	<i>Catenochytridiaceae</i> (1)
			<i>Cladochytriaceae</i> (1)
			<i>Endochytriaceae</i> (2)
			<i>Nowakowskiellaceae</i> (1)
			<i>Septochytriaceae</i> (1)
		<i>Cladochytriales</i> genera <i>incertae sedis</i> (3)	
	<i>Lobulomycetes</i>	<i>Lobulomycetales</i>	<i>Alogomycetaceae</i> (1)
			<i>Lobulomycetaceae</i> (4)
		<i>Lobulomycetales</i> genus <i>incertae sedis</i> (1)	
	<i>Mesochytriomycetes</i>	<i>Gromochytriales</i>	<i>Gromochytriaceae</i> (1)
		<i>Mesochytriales</i>	<i>Mesochytriaceae</i> (1)
	<i>Polychytriomycetes</i>	<i>Polychytriales</i>	<i>Arkayaceae</i> (1)
			<i>Polychytriaceae</i> (4)
	<i>Rhizophyidiomycetes</i>	<i>Rhizophydiales</i>	<i>Alphamycetaceae</i> (3)
			<i>Angulomycetaceae</i> (1)
			<i>Aquamycetaceae</i> (1)
			<i>Batrachochytriaceae</i> (1)
			<i>Collimycetaceae</i> (1)
			<i>Coralloidiomycetaceae</i> (1)
			<i>Dinomycetaceae</i> (1)
			<i>Ericiomycetaceae</i> (1) <sup>#</sup>
			<i>Globomycetaceae</i> (2)
			<i>Gorgonomycetaceae</i> (1)
			<i>Halomycetaceae</i> (4)
			<i>Kappamycetaceae</i> (1)
			<i>Operculomycetaceae</i> (1)
			<i>Pateramycetaceae</i> (1)
			<i>Protrudomycetaceae</i> (1)
			<i>Rhizophydiaceae</i> (1)
			<i>Staurastrumycetaceae</i> (1)
			<i>Terramycetaceae</i> (2)
			<i>Uebelmesseromycetaceae</i> (1)
		<i>Rhizophydiales</i> genus <i>incertae sedis</i> (1)	
	<i>Rhizophlyctidomycetes</i>	<i>Rhizophlyctidales</i>	<i>Arizonaphlyctidaceae</i> (1)
			<i>Borealphlyctidaceae</i> (1)
			<i>Rhizophlyctidaceae</i> (1)
			<i>Sonoraphlyctidaceae</i> (1)
	<i>Spizellomycetes</i>	<i>Spizellomycetales</i>	<i>Powellomycetaceae</i> (4)
			<i>Spizellomycetaceae</i> (8)
	<i>Synchytriomycetes</i>	<i>Synchytriales</i>	<i>Synchytriaceae</i> (4)
		<i>Synchytriales</i> genus <i>incertae sedis</i> (1)	
	<i>incertae sedis</i>	<i>incertae sedis</i>	<i>Quaeritorhizaceae</i> (1) <sup>#</sup>
<i>Chytridiomycota</i> genera <i>incertae sedis</i> (3)			
<i>Entomophthoromycota</i>	<i>Entomophthoromycetes</i>	<i>Entomophthorales</i>	<i>Ancylistaceae</i> (5)
			<i>Completoriaceae</i> (1)
			<i>Entomophthoraceae</i> (11)
			<i>Meristacraceae</i> (1)

**Table 2** Continued.

Phylum	Class	Order	Family
	<i>Neozygitomycetes</i>	<i>Neozygiales</i>	<i>Neozygitaceae</i> (3)
<i>Entorrhizomycota</i>	<i>Entorrhizomycetes</i>	<i>Entorrhizales</i>	<i>Entorrhizaceae</i> (1)
		<i>Talbotiomyetales</i>	<i>Talbotiomyetaceae</i> (1)
<i>Glomeromycota</i>	<i>Archaeosporomycetes</i>	<i>Archaeosporales</i>	<i>Ambisporaceae</i> (1)
			<i>Archaeosporaceae</i> (3)
			<i>Geosiphonaceae</i> (1)
			<i>Polonosporaceae</i> (1) <sup>#</sup>
			<i>Acaulosporaceae</i> (1)
	<i>Glomeromycetes</i>	<i>Diversisporales</i>	<i>Diversisporaceae</i> (7)
			<i>Pacisporaceae</i> (1)
			<i>Sacculosporaceae</i> (1)
			<i>Gigasporales</i>
			<i>Dentiscutataceae</i> (3)
			<i>Gigasporaceae</i> (1)
			<i>Intraornatosporaceae</i> (2)
			<i>Racocetraceae</i> (2)
			<i>Scutellosporaceae</i> (3)
			<i>Glomerales</i>
			<i>Entrophosporaceae</i> (3)
			<i>Glomeraceae</i> (17)
	<i>Paraglomeromycetes</i>	<i>Paraglomerales</i>	<i>Paraglomeraceae</i> (2)
			<i>Pervetustaceae</i> (1)
<i>Kickxellomycota</i>	<i>Asellariomycetes</i>	<i>Asellariales</i>	<i>Asellariaceae</i> (1)
		<i>Asellariales</i> genus <i>incertae sedis</i> (1)	
	<i>Barbatosporomycetes</i>	<i>Barbatosporales</i>	<i>Barbatosporaceae</i> (1)
	<i>Dimargaritomycetes</i>	<i>Dimargaritales</i>	<i>Dimargaritaceae</i> (3)
		<i>Dimargaritales</i> genus <i>incertae sedis</i> (1)	
	<i>Harpellomycetes</i>	<i>Harpellales</i>	<i>Harpellaceae</i> (6)
			<i>Legeriomycetaceae</i> (38)
			<i>Harpellales</i> genus <i>incertae sedis</i> (1)
	<i>Kickxellomycetes</i>	<i>Kickxellales</i>	<i>Kickxellaceae</i> (11)
	<i>Ramicandelabromycetes</i>	<i>Ramicandelaberales</i>	<i>Ramicandelaberaceae</i> (1)
<i>Monoblepharomycota</i>	<i>Hyaloraphidiomycetes</i>	<i>Hyaloraphidiales</i>	<i>Hyaloraphidiaceae</i> (1)
	<i>Monoblepharidomycetes</i>	<i>Monoblepharidales</i>	<i>Gonapodyaceae</i> (2)
			<i>Harpochytriaceae</i> (1)
			<i>Monoblepharidaceae</i> (1)
			<i>Oedogoniomycetaceae</i> (1)
			<i>Telasphaerulaceae</i> (1)
<i>Mortierellomycota</i>	<i>Mortierellomycetes</i>	<i>Mortierellales</i>	<i>Mortierellaceae</i> (13)
<i>Mucoromycota</i>	<i>Endogonomycetes</i>	<i>Endogonales</i>	<i>Densosporaceae</i> (1)
			<i>Endogonaceae</i> (6)
	<i>Mucoromycetes</i>	<i>Mucorales</i>	<i>Backusellaceae</i> (1)
			<i>Choanephoraceae</i> (4)
			<i>Cunninghamellaceae</i> (6)
			<i>Lentamycetaceae</i> (1)
			<i>Lichtheimiaceae</i> (9)
			<i>Mucoraceae</i> (20)
			<i>Mycocladaceae</i> (1)
			<i>Mycotyphaceae</i> (1)
			<i>Phycomycetaceae</i> (2)
			<i>Pilobolaceae</i> (2)
			<i>Radiomycetaceae</i> (1)
			<i>Rhizopodaceae</i> (3)
			<i>Saksenaeaceae</i> (2)
			<i>Syncephalastraceae</i> (2)

**Table 2** Continued.

Phylum	Class	Order	Family
	<i>Umbelopsidomycetes</i>	<i>Umbelopsidales</i>	<i>Pygmaeomycetaceae</i> (1) <sup>#</sup>
			<i>Umbelopsidaceae</i> (1)
<i>Mucoromycota</i> genus <i>incertae sedis</i> (1)			
<i>Neocallimastigomycota</i>	<i>Neocallimastigomycetes</i>	<i>Neocallimastigales</i>	<i>Neocallimastigaceae</i> (19)
<i>Olpidiomycota</i>	<i>Olpidiomycetes</i>	<i>Olpidiales</i>	<i>Olpidiaceae</i> (4)
<i>Rozellomycota</i>	<i>Rudimicrosporea</i>	<i>Metchnikovellida</i>	<i>Amphiacanthidae</i> (1)
			<i>Metchnikovellidae</i> (4)
	<i>Microsporidea</i>	<i>Amblyosporida</i>	<i>Amblyosporidae</i> (17)
			<i>Caudosporidae</i> (10)
			<i>Gurleyidae</i> (13)
		<i>Amblyosporida</i> genera <i>incertae sedis</i> (5)	
		<i>Neopereziiida</i>	<i>Berwaldiidae</i> (2)
			<i>Neopereziiidae</i> (6)
			<i>Tubulinosematidae</i> (3)
		<i>Neopereziiida</i> genera <i>incertae sedis</i> (2)	
		<i>Ovavesiculida</i>	<i>Ovavesiculidae</i> (3)
		<i>Ovavesiculida</i> genus <i>incertae sedis</i> (1)	
		<i>Glugeida</i>	<i>Facilisporidae</i> (1)
			<i>Glugeidae</i> (9)
			<i>Myosporidae</i> (1)
			<i>Pereziiidae</i> (4)
			<i>Pleistophoridae</i> (7)
			<i>Spragueidae</i> (7)
			<i>Thelohaniidae</i> (15)
			<i>Unikaryonidae</i> (4)
		<i>Glugeida</i> genus <i>incertae sedis</i> (1)	
		<i>Nosematida</i>	<i>Encephalitozoonidae</i> (2)
			<i>Enterocytozoonidae</i> (6)
			<i>Heterovesiculidae</i> (1)
			<i>Mrazekiidae</i> (9)
			<i>Nosematidae</i> (2)
			<i>Ordosporidae</i> (1)
		<i>Nosematida</i> genera <i>incertae sedis</i> (16)	
		<i>Incertae sedis</i>	<i>Abelsporidae</i> (1)
			<i>Areosporiidae</i> (1)
			<i>Burenellidae</i> (3)
			<i>Cougourdellidae</i> (1)
			<i>Cylindrosporidae</i> (1)
			<i>Duboscqiidae</i> (5)
			<i>Golbergiidae</i> (3)
			<i>Microfilidae</i> (1)
			<i>Neonosemoidiidae</i> (1)
			<i>Pleistosporidiidae</i> (1)
			<i>Pseudopleistophoridae</i> (2)
			<i>Striatosporidae</i> (1)
			<i>Telomyxidae</i> (1)
			<i>Toxoglugeidae</i> (2)
			<i>Tuzetiidae</i> (4)
	<i>Incertae sedis</i>	<i>Chytridiopsida</i>	<i>Buxtehudiidae</i> (2)
			<i>Chytridiopsidae</i> (4)

**Table 2** Continued.

Phylum	Class	Order	Family
			<i>Hesseidae</i> (1)
<i>Rozellomycota</i> genera <i>incertae sedis</i> (4)			
<i>Sanchytriomycota</i> <sup>#</sup>	<i>Sanchytriomycetes</i>	<i>Sanchytriales</i>	<i>Sanchytriaceae</i> (2)
<i>Zoopagomycota</i>	<i>Zoopagomycetes</i>	<i>Zoopagales</i>	<i>Cochlonemataceae</i> (7)
			<i>Helicocephalidaceae</i> (4)
			<i>Piptocephalidaceae</i> (3)
			<i>Sigmoideomycetaceae</i> (4)
			<i>Zoopagaceae</i> (7)
		<i>Zoopagales</i> genus <i>incertae sedis</i> (1)	

(Orders/Families could be listed under different subclasses in the outline. In the table, we do not consider auxiliary (intermediate) taxonomic ranks. Newly introduced taxa are indicated by #).

**Table 3** Classes, subclasses, orders and families of the *Eumycetozoa* with number of genera (in brackets).

Class	Subclass	Order	Family
<i>Dictyosteliomycetes</i>		<i>Acytosteliales</i>	<i>Acytosteliaceae</i> (3)
			<i>Cavenderiaceae</i> (1)
		<i>Dictyosteliales</i>	<i>Dictyosteliaceae</i> (2)
			<i>Raperosteliaceae</i> (4)
			<i>Incertae sedis</i> (1)
<i>Ceratiomyxomycetes</i>		<i>Ceratiomyxales</i>	<i>Ceratiomyxaceae</i> (1)
			<i>Protosporangiidae</i> (2)
<i>Myxomycetes</i>	<i>Lucisporomycetidae</i>	<i>Cribrariales</i>	<i>Cribrariaceae</i> (3)
		<i>Reticulariales</i>	<i>Reticulariaceae</i> (4)
		<i>Liceales</i>	<i>Liceaceae</i> (2)
		<i>Trichiales</i>	<i>Dianemataceae</i> (4)
			<i>Trichiaceae</i> (8)
		<i>Incertae sedis</i> (4)	
	<i>Columellomycetidae</i>	<i>Echinosteliopsidales</i>	<i>Echinosteliopsidaceae</i> (1)
		<i>Echinosteliales</i>	<i>Echinosteliaceae</i> (3)
		<i>Clastodermatales</i>	<i>Clastodermataceae</i> (1)
		<i>Meridermatales</i>	<i>Meridermataceae</i> (1)
		<i>Stemonitidales</i>	<i>Amaurochaetaceae</i> (7)
			<i>Stemonitidaceae</i> (3)
		<i>Physarales</i>	<i>Lamprodermataceae</i> (5)
			<i>Didymiaceae</i> (4)
			<i>Physaraceae</i> (9)
		<i>Incertae sedis</i> (5)	

## Materials & Methods

### Kingdom Fungi

We used Kirk et al. (2008, 2013) Lumbsch & Huhndorf (2010), Hyde et al. (2011, 2013), Humber (2012), Wijayawardene et al. (2012, 2017a, b, 2018a, b), Species Fungorum (2021), Catalogue of Life (<http://www.catalogueoflife.org/>), Benny et al. (2016), Lücking et al. (2016), Spatafora et al. (2016), Desirò et al. (2017), Kraichak et al. (2018) and Tedersoo et al. (2018) to compile genera and other higher taxonomic ranks into a single outline. Index Fungorum (2021),

LIAS names (<http://liasnames.lias.net/>) and MycoBank (<http://www.mycobank.org/>) were consulted for supplementary information on synonyms. Number of species accepted in each genus is given in brackets. Notes are provided for recently introduced genera as well as changes in classification (marked with an asterisk in the outline).

The subdivision of *Rozellomycota* at the order and family levels is interpreted according to the phylogenetic relationships of the respective type genera representatives and follows Wijayawardene et al. (2020a). The style of higher-rank taxa names of *Rozellomycota* reflects the fact that historically *Microsporidia* were considered as a part of the *Protozoa* phylum within the Animalia kingdom (Issi 2020). The list of genera is updated in accordance with the acknowledged checklists (Becnel et al. 2014, Cali et al. 2017, Sokolova et al. 2018) and recent introductions of novel genera (Bojko et al. 2020, 2021, Yakovleva et al. 2020) and species as well as some papers missing from the compendium (Vavra et al. 2016).

### **Classification of the *Glomeromycota***

Classification of *Glomeromycota*, which includes all arbuscular mycorrhizal fungi (AMF) and *Geosiphon pyriforme* (Kütz.) F. Wettst., has been discussed for a long time with some disagreements (Kaonongbua et al. 2010, Morton & Msiska 2010, Oehl et al. 2011a, b, Goto et al. 2012, Redecker et al. 2013, Tedersoo et al. 2018, Wijayawardene et al. 2020a). We provide the latest classification system (phyla to genera) based on the phylogenetic evidence available up to now, using the available multigene phylogenies to confirm the supported taxa ranking (Jobim et al. 2019, Blaszkowski et al. 2019, 2020, 2021a, b).

### **Fungus-like taxa**

The classification systems used for the *Dictyosteliomycetes* and *Myxomycetes* as presented herein are based on the critical revisions of Sheikh et al. (2018) and Leontyev et al. (2019), respectively. In each paper, the taxonomy of the particular group was strongly revised based on original 18S rDNA phylogenies and analyses of morphological synapomorphies. The separation of the order *Echinosteliopsidales* is based on phylogeny, published by Shchepin et al. (2019).

In this classification, we have included all genera of the *Eumycetozoa* accepted as valid in the nomenclatural database of Lado (2005–2021), although some of the smaller myxomycete genera will probably be incorporated into larger ones based on phylogenetic data (Leontyev et al. 2019). This is likely to be the case for such genera as *Arcyodes*, *Badhamia*, *Collaria*, *Colloderma*, *Cornuvia*, *Elaeomyxa*, *Metatrachia*, *Diacheopsis*, *Listerella*, *Oligonema* and *Semimorula*.

The monophyly of the genus *Stemonitis* was recently called into question based on the single-gene phylogeny (Strelow et al. 2020). In the tree presented by these authors *Stemonitis* splits into two branches, one of which belongs to the family *Stemonitidaceae*, and the other to *Amaurochateaceae*. The second branch contains the type species of the genus, *S. fusca* Roth, and this makes further use of the name *Stemonitidaceae* impossible. However, these data contradict previous phylogenies, based on the same gene (18S rDNA). Therefore, at this state of knowledge we have refrained from corresponding taxonomic rearrangements in the group.

### **Phylogenetic methods**

#### **a. Multi-gene tree for Kingdom *Fungi***

A dataset from Wijayawardene et al. (2020a) was used to generate a phylogeny for the Kingdom *Fungi*. This dataset was complemented with 18S rRNA (SSU), 28S rRNA (LSU), *rpb1* and *rpb2* sequences from one representative of each of the orders which have been introduced recently (i.e. *Aureoconidiellales*, *Cancellidiales*, *Catabotryales*, *Comminutisporales*, *Coniosporiales*, *Heitmaniales*, *Holmiellales*, *Homortomycetales*, *Lineaolatales*, *Neophaeothecales*, *Phaeothecales*, *Racodiales*, *Rosettozymales*, *Triblidiales* and *Xylonomycetales*). The new sequences of each gene region were aligned separately using MAFFT v. 7.407 (Katoh & Standley 2013) and then manually incorporated into the Wijayawardene et al. (2020a) dataset. The final supermatrix

included 448 taxa and 7699 positions. A maximum likelihood phylogeny was inferred using RAXML v. 8.2.10 (Stamatakis 2014) with 100 bootstrap replicates treating each gene region as a separate partition.

#### **b. *Glomeromycota***

The LSU rDNA sequences were retrieved from GenBank, aligned and processed as described by de Souza et al. (2018). Maximum likelihood phylogenetic trees were calculated using IQ-Tree (<http://www.iqtree.org/>) with 1000 standard bootstraps (Minh et al. 2020) under the evolutionary model GTR+F+R3 (Kalyaanamoorthy et al. 2017). The Bayesian inference was calculated using MrBayes (Ronquist et al. 2012) under Mixed models with 4 chains and 2 runs, 50000000 generations, sampled every 1000 generations. That analysis was run online using the CIPRES gateway (Miller et al. 2010). The generated tree is displayed in the discussion (Fig. 2).

### **Results**

#### **Phylogenetic analyses**

The newly generated tree is displayed in Fig. 1. Placements of newly introduced orders agree with the original publications.

#### **Outline of fungi**

***APHELIDIOMYCOTA*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Aphelidiomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Aphelidiales*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Aphelidiaceae*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

*Amoeboaphelidium* Scherff. (5)

*Aphelidium* Zopf (7)

*Paraphelidium* Karpov, Moreira, López-García (2)

*Pseudaphelidium* Schweikert & Schnepf (1)

***ASCOMYCOTA*** Caval.-Sm.

**Subphylum *PEZIZOMYCOTINA*** O.E. Erikss. & Winka

**Class *Arthoniomycetes*** O.E. Erikss. & Winka

***Arthoniales*** Henssen ex D. Hawksw. & O.E. Erikss.

***Andreiomycetaceae*** B.P. Hodk. & Lendemer

*Andreiomyces* B.P. Hodk. & Lendemer (2)

***Arthoniaceae*** Reichenb. ex Reichenb.

*Amazonomyces* Bat. (2)

*Arthonia* Ach. (ca. 50 + ca. 300 orphaned)

*Arthothelium* A. Massal. (10 + ca. 100 orphaned)

*Briancoppinsia* Diederich, Ertz, Lawrey & van den Boom (1)

*Coniarthonia* Grube (12)

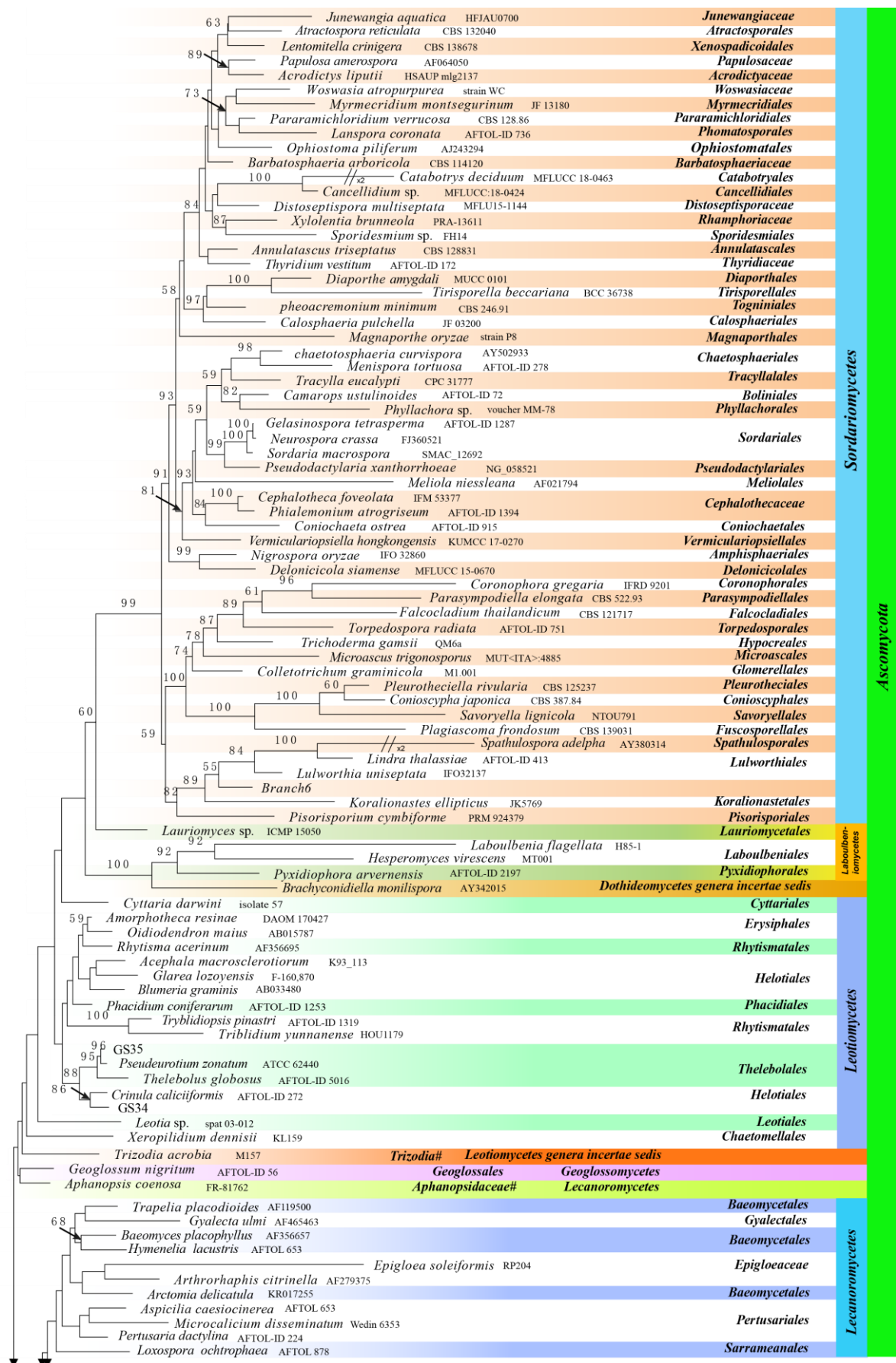
*Coniocarpon* DC. (6)

*Cryphonina* Frisch & G. Thor (16)

*Cryptophaea* Van den Broeck & Ertz (1)

*Cryptothecia* Stirt. (ca. 65)

*Diarthonis* Clem. (1)\*



**Figure 1** – Maximum likelihood phylogeny of the kingdom fungi based on nRNA LSU, nRNA SSU, RPB1 and RPB2 sequence data. Numbers above branches indicate bootstrap support, only values >50% are included.



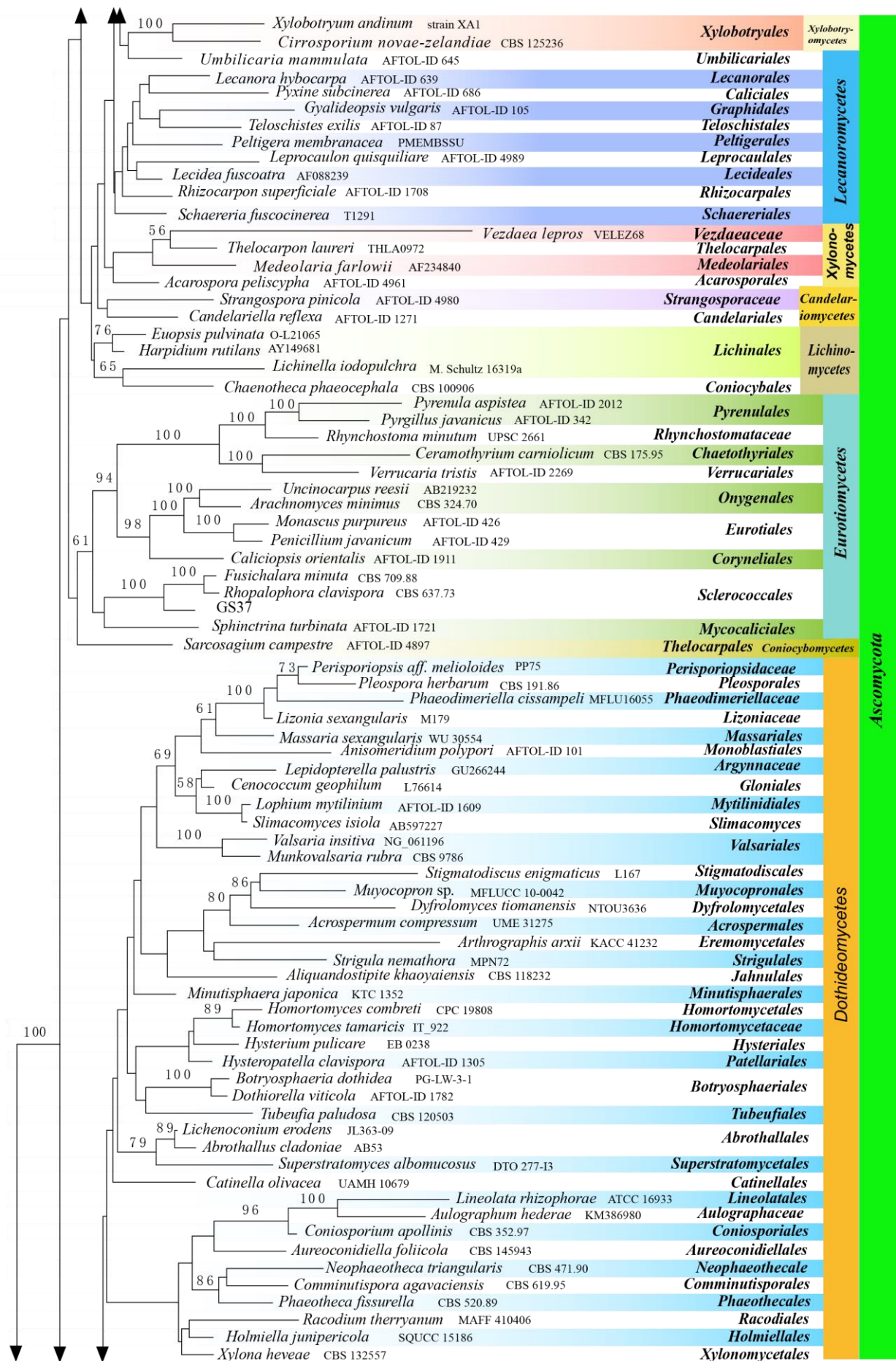


Figure 1 – Continued.

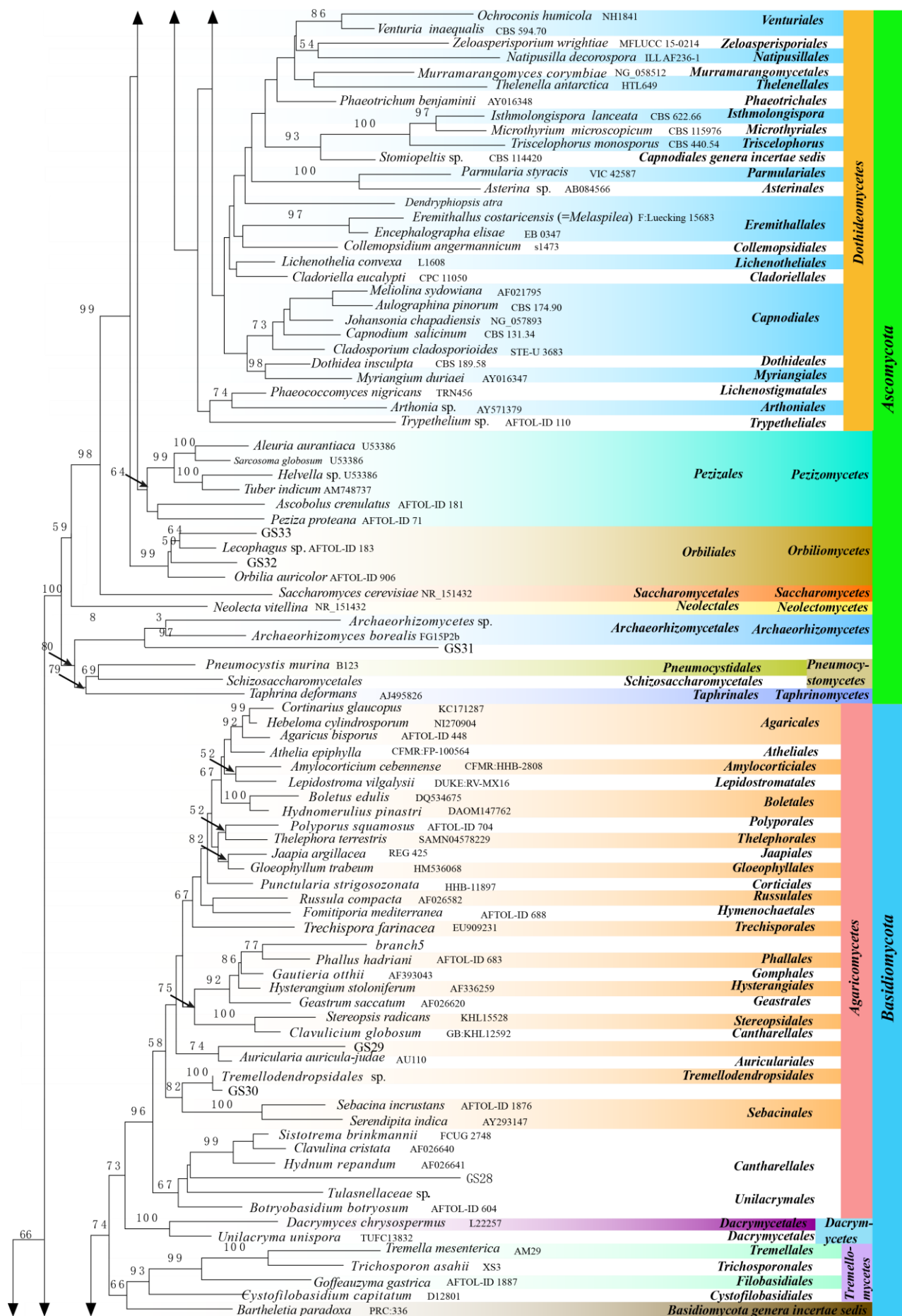


Figure 1 – Continued.



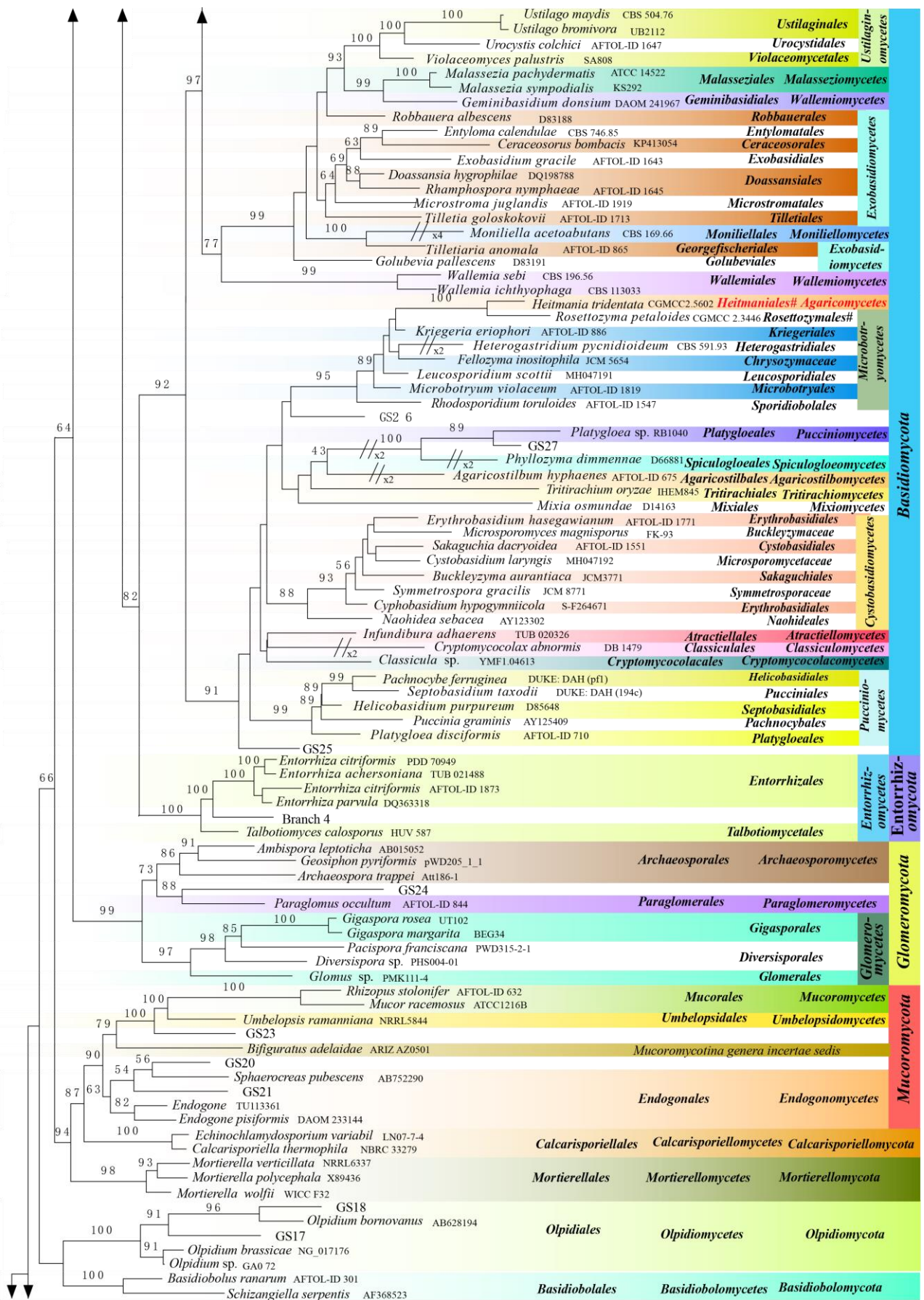


Figure 1 – Continued.

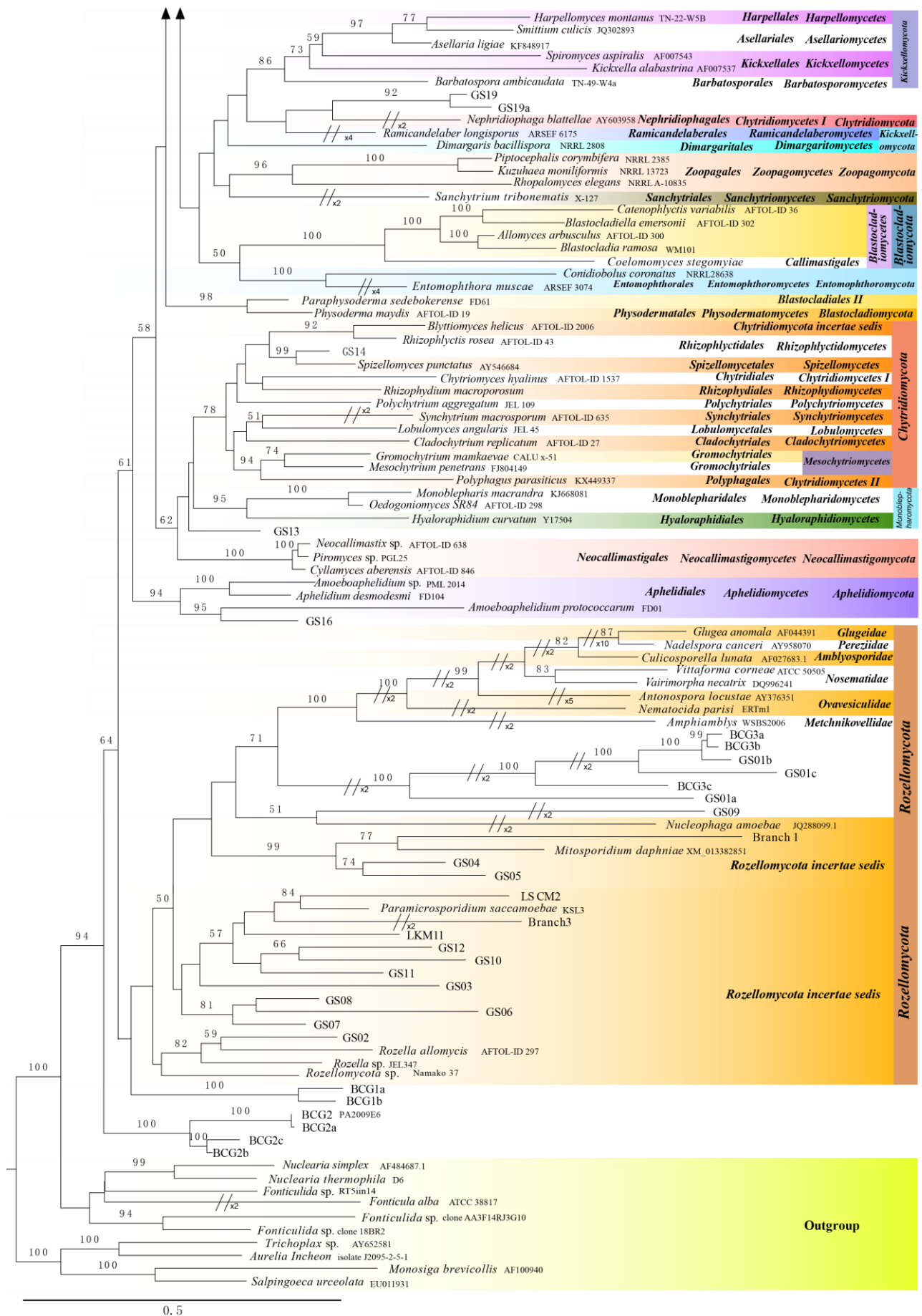


Figure 1 – Continued.

*Eremothecella* Syd. & P. Syd. (8)  
*Glomerulophoron* Frisch, Ertz & G. Thor (1)  
*Helicobolomyces* Matzer (2)  
*Herpothallon* Tobler (ca. 50)  
*Inoderma* (Ach.) Gray (5)  
*Leprantha* Dufour ex Körb. (1)  
*Myriostigma* Kremp. (7)  
*Naevia* Fr. (3)\*  
*Pachnolepia* A. Massal. (1)  
*Reichlingia* Diederich & Scheid. (7)  
*Snippocia* Ertz, Kukwa & Sanderson (1)  
*Sporodophoron* Frisch (4)  
*Staurospora* Grube (1)\*  
*Stirtonia* A.L. Sm. (ca. 25)  
*Synarthonia* Müll. Arg. (22)\*  
*Tylophoron* Nyl. ex Stizenb. (8 + 3 orphaned in *Sporodochiolichen* Aptroot & Sipman)

***Chrysotrichaceae*** Zahlbr.

*Chrysothrix* Mont. (ca. 19)  
*Galbinothrix* Frisch, G. Thor, K. H. Moon & Y. Ohmura (1)  
*Melarthonis* Frisch & G. Thor (1)

***Lecanographaceae*** Ertz, Tehler, G. Thor & Frisch

*Alyxoria* Ach. (18)  
*Heterocyphelium* Vain. (2)  
*Lecanographa* Egea & Torrente (ca. 40)  
*Mixtoconidium* Etayo (2)  
*Phacographa* Hafellner (3)  
*Phoebus* R.C. Harris & Ladd (1)\*  
*Plectocarpon* Fée (ca. 40)  
*Zwackhia* Körb. (6)

***Opegraphaceae*** Körb. ex Stizenb.

*Combea* De Not. (1)  
*Dictyographa* Müll. Arg. (2)  
*Dolichocarpus* R. Sant. (2)  
*Fouragea* Trevis. (6)  
*Ingaderia* Darb. (2)  
*Llimonaea* Egea & Torrente (3)  
*Nyungwea* Sérus., Eb. Fisch. & Killmann (4)  
*Opegrapha* Ach. (= *Kalaallia* Alstrup & D. Hawksw.) (ca. 100 + ca. 200 orphaned)  
*Paraingaderia* Ertz & Tehler (1)  
*Paralecanographa* Ertz & Tehler (1)  
*Paraschismatomma* Ertz & Tehler (1)  
*Pentagenella* Darb. (6)  
*Schizopelte* Th. Fr. (4)  
*Sclerophyton* Eschw. (ca. 15)  
*Sparria* Ertz & Tehler (2)

***Roccellaceae*** Chevall.

*Ancistrosporella* G. Thor (5)  
*Austrographa* Sparrius, Elix & A.W. Archer (3)

*Austrorocella* Tehler & Ertz (1)  
*Baidera* Ertz & Diederich (1)\*  
*Chiodecton* Ach. (ca. 22)  
*Cresponea* Egea & Torrente (21)  
*Crocellina* Tehler & Ertz (1)  
*Dendrographa* Darb. (7)  
*Dichosporidium* Pat. (8)  
*Dirina* Fr. (24)  
*Diromma* Ertz & Tehler (1)  
*Enterodictyon* Müll. Arg. (2)  
*Enterographa* Fée (ca. 55)  
*Erythrodecton* G. Thor (3)  
*Follmanniella* Peine & Werner (1)  
*Gorgadesia* Tav. (1)  
*Graphidastra* (Redinger) G. Thor (4)  
*Gyrographa* Ertz & Tehler (3)  
*Gyronactis* Ertz & Tehler (2)  
*Halographis* Kohlm. & Volkm.-Kohlm. (1)  
*Haplodina* Zahlbr. (3)  
*Isalonactis* Ertz, Tehler, Eb. Fisch., Killmann, Razafindr. & Sérus. (1)  
*Lecanactis* Körb. (ca. 30)  
*Mazosia* A. Massal. (27)  
*Neosergipea* M. Cáceres, Ertz & Aptroot (4)  
*Ocellomma* Ertz & Tehler (1)  
*Protorocella* Follmann ex Follmann (2)  
*Pseudolecanactis* Zahlbr. (1)  
*Pseudoschismatomma* Ertz & Tehler (1)  
*Psoronactis* Ertz & Tehler (1)  
*Pulvinodecton* Henssen & G. Thor (2)  
*Roccella* DC. (24)  
*Roccellina* Darb. (29)  
*Sagenidiopsis* R.W. Rogers & Hafellner (5)  
*Schismatomma* Flot. & Körb. ex A. Massal. (10)  
*Sigridea* Tehler (6)  
*Simonyella* J. Steiner (1)  
*Sipmania* Egea & Torrente (1)  
*Streimannia* G. Thor (1)  
*Syncesia* Taylor (ca. 25)  
*Tania* Egea, Torrente & Sipman (2)  
*Vigneronia* Ertz (5)

***Roccellographaceae*** Ertz & Tehler

*Dimidiographa* Ertz & Tehler (3)  
*Fulvophyton* Ertz & Tehler (11)  
*Roccellographa* J. Steiner (4)

***Arthoniales*** genera *incertae sedis*

*Angiactis* Aptroot & Sparrius (3)  
*Arthophacopsis* Hafellner (2)  
*Bactrospora* A. Massal. (35)  
*Bryostigma* Poelt & Döbbeler (15)  
*Catarraphia* A. Massal. (1)

*Felipes* Frisch & G. Thor (1)  
*Glyphopsis* Aptroot (1)  
*Gossypiothallon* Aptroot (1)  
*Helminthocarpon* Fee (3)  
*Hormosphaeria* Lév. (1)  
*Minksia* Müll. Arg. (2)  
*Nipholepis* Syd. (1)  
*Paradoxomyces* Matzer (1)  
*Perigrapha* Hafellner (5)  
*Phacothecium* Trevis. (1)  
*Sporostigma* Grube (1)  
*Synarthothelium* Sparrius (2)  
*Tarbertia* Dennis (1)  
*Trichophyma* Rehm (2)  
*Tylophorella* Vain. (1)  
*Wegea* Aptroot & Tibell (1)

***Lichenostigmatales*** Ertz, Diederich & Lawrey

***Phaeococcomycetaceae*** McGinnis & Schell

*Etayoa* Diederich & Ertz (1)

*Lichenostigma* Hafellner (= *Phaeosporobolus* D. Hawksw. & Hafellner) (5 and 26 orphaned species)

*Phaeococcomyces* de Hoog (5)

**Class *Candelariomycetes*** Voglmayr & Jaklitsch

**Subclass *Candelariomycetidae*** Timdal & M. Westb.

***Candelariales*** Miadl., Lutzoni & Lumbsch.

***Candelariaceae*** Hakul.

*Candelaria* A. Massal. (7)

*Candelariella* Müll. Arg. (ca. 50)

*Candelina* Poelt (3)

*Candelinella* S.Y. Kondr (1)\*

*Opeltiella* S.Y. Kondr. (4)\*

*Placomaronea* Räsänen (6)

*Protocandelariella* Poelt, D. Liu, Hur & S.Y. Kondr. (2)\*

***Pycnoraceae*** Bendiksby & Timdal

*Pycnora* Hafellner (3)

**Class *Coniocybomycetes*** M. Prieto & Wedin

***Coniocybales*** M. Prieto & Wedin

***Coniocybaceae*** Rchb.

*Chaenotheca* (Th. Fr.) Th. Fr. (ca. 25)

*Sclerophora* Chevall. (6)

**Class *Dothideomycetes*** sensu O.E. Erikss & Winka

**Subclass *Dothideomycetidae*** P.M. Kirk, P.F. Cannon, J.C. David & Stalpers ex C.L. Schoch, Spatafora, Crous & Shoemaker

***Aureoconidiellales*** Hern.-Restr. & Crous\*

***Aureoconidiellaceae*** Hern.-Restr. & Crous\*

*Aureoconidiella* Hern.-Restr. & Crous (1)\*

**Capnodiales** Woron.

**Aeminiaceae** J. Tová, I. Tiago & A. Portugal

*Aeminium* J. Tová, I. Tiago & A. Portugal (1)

**Antennulariaceae** Woron.

*Achaetobotrys* Bat. & Cif. (1)

*Antennulariella* Woron. (1)

*Eumela* Syd. (4)

**Capnodiaceae** (Sacc.) Höhn. ex Theiss.

*Capnodium* Mont. (83)

*Chaetocapnodium* Hongsanan & K.D. Hyde (1)

*Conidiocarpus* Woron. (8)

*Heteroconium* Petr. (21)

*Kosmimatomyces* Bianchin., Reinoso-Fuentealba, Rodr.-Andr., Cano & Stchigel (1)

*Leptoxyphium* Speg. (19)

*Limacinaseta* D.R. Reynolds (1)

*Phragmocapnias* Theiss. & Syd. (2)

*Polychaeton* (Pers.) Lév. (1?)

*Scoriadopsis* Mend (1)

**Euantennariaceae** Hughes & Corlett

*Capnokyma* S. Hughes (2)

*Euantennaria* Speg. (9)

*Hormisciomyces* Bat. & Nascim. (3)

*Plokamidomyces* Bat., C.A.A. Costa & Cif. (1)

*Rasutoria* M.E. Barr (2)

*Strigopodia* Bat. (= *Chaetosaccardinula* Bat.) (2)

*Trichothallus* F. Stevens (2)

**Johansoniaceae** Doilom, Phook. & K.D. Hyde

*Johansonia* Sacc. (13)

*Orthobellus* Silva & Cavalc. (3)

**Metacapnodiaceae** Hughes & Corlett

*Capnobotrys* S. Hughes (10)

*Hyphosoma* Syd. (6)

*Metacapnodium* Speg. (14)

**Neoantennariellaceae** Abdollahz. & Crous\*

*Fumiglobus* D.R. Reynolds & G.S. Gilbert (10)

*Neoantennariella* Abdollahz. & Crous (1)

*Neoasbolisia* Abdollahz. & Crous (1)\*

**Piedraiaceae** Viégas ex Cif., Bat. & S. Camposa

*Piedraia* Fons. & Leao (2)

**Readerielliopsidaceae** Abdollahz. & Crous

*Alloscorias* Haituk & Cheew (1)

*Fumagospora* G. Arnaud (4)\*

*Phaeoxyphiella* Bat. & Cif. (9)\*

*Readerielliopsis* Crous & Decock (2)



*Scolecoxyphium* Cif. & Bat (8).

*Scorias* Fr. (13)

***Xenodevriesiaceae*** Crous

*Xenodevriesia* Crous (1)

***Capnodiales*** genera *incertae sedis*

*Anariste* Syd. (1)

*Catenulomyces* Egidi & de Hoog (1)

*Perusta* Egidi & Stielow (1)

*Plurispermopsis* Pereira-Carv., Inácio & Dianese (1)

*Pseudoepicoccum* M.B. Ellis (4)

*Racoleus* R. Sant. & D. Hawksw. (1)

*Ramimonilia* Stielow & Quaedvl. (1)

*Rosaria* N. Carter (1)

*Stigmatodothis* Syd. & P. Syd. (1)

*Stomiopeltis* Theiss. (25)

***Cladosporiales*** Abdollahz. & Crous\*

***Cladosporiaceae*** Chalm. & R.G. Archibald

*Acroconidiella* J.C. Lindq. & Alippi (5)

*Cladosporium* Link (237 accepted species, 631 legitimate names at species level)

*Davidiellomyces* Crous (1)

*Graphiopsis* Trail (11)

*Neocladosporium* J.D.P. Bezerra, Sandoval-Denis, C.M. Souza-Motta & Crous (1)

*Rachicladosporium* Crous, U. Braun & C.F. Hill (14)

*Toxicocladosporium* Crous & U. Braun (14)

*Verrucocladosporium* K. Schub., Aptroot & Crous (2)

***Comminutisporales*** Abdollahz. & Crous\*

***Comminutisporaceae*** Abdollahz. & Crous

*Comminutispora* A.W. Ramaley (1)

***Dothideales*** Lindau (= *Neocelosporiales* Crous *fide* Hongsan et al. 2020)

***Dothideaceae*** Chevall.

*Delphinella* (Sacc.) Kuntze (7)

*Dictyodothis* Theiss. & Syd. (8)

*Dothidea* Fr. (ca. 20)

*Dothiora* Fr. (= *Neophaeocryptopus* Wanas. et al.) (50<)

*Endoconidioma* Tsuneda (2)

*Endodothiora* Petr. (1)

*Kabatina* R. Schneid. & Arx (5)

*Neocylindroseptoria* Thambug. & K.D. Hyde (1)

*Neodothiora* Crous, G.C. Adams & Winton (1)\*

*Phaeocryptopus* Naumov (6)

*Plowrightia* Sacc. (50)

*Stylodothis* Arx & E. Müll. (2)

*Sydowia* Bres. (11)

*Uleodothis* Theiss. & Syd. (4)

***Neocelosporiaceae*** Crous

*Celosporium* Tsuneda & Davey (1)

*Muellerites* L. Holm (1)  
*Neocelosporium* Crous (2)

***Sacchettoeciaceae*** Bonord.

*Aureobasidium* Viala & G. Boyer (23)  
*Columnosphaeria* Munk (4)  
*Kabatiella* Bubák (19)  
*Moringomyces* Crous (1)\*  
*Pseudoseptoria* Speg. (8)  
*Pseudosydowia* Thambug. & K.D. Hyde (1)  
*Sacchettoecium* Fr. (9)  
*Selenophoma* Maire (ca. 13)

***Zalariaceae*** Visagie, Z. Humphries & Seifert  
*Zalaria* Visagie, Z. Humphries & Seifert (2)

***Dothideales*** genera *incertae sedis*

*Asteromellopsis* H.E. Hess & E. Müll. (1)  
*Botryochora* Torrend (1)\*  
*Coniozoma* Crous (1)  
*Hormonema* Lagerb. & Melin (7)  
*Pringsheimia* Schulzer (17)  
*Rhizosphaera* L. Mangin & Har. (8)

***Mycosphaerellales*** (Nannf.) P.F. Cannon

***Cystocoleaceae*** Locq. ex Lücking, B.P. Hodk. & S.D. Leav.  
*Cystocoleus* Thwaites (1)

***Dissoconiaceae*** Crous & de Hoog

*Dissoconium* de Hoog, Oorschot & Hijwegen (5)  
*Globoramichloridium* Y. Marín & Crous (1)  
*Pseudoveronaea* Crous & Batzer (2)  
*Ramichloridium* Stahel ex de Hoog (35)  
*Uwebraunia* Crous & M.J. Wingf. (7)

***Extremaceae*** Quaedvl. & Crous

*Castanedospora* G. Delgado & A.N. Mill. (1)  
*Eriosporella* Höhn. (2)  
*Extremopsis* G. Delgado & Maciá-Vicente (1)  
*Extremus* Quaedvl. & Crous (2)  
*Paradevriesia* Crous (3)  
*Petrophila* de Hoog & Quaedvl. (1)  
*Pseudoramichloridium* Cheew. & Crous (3)  
*Saxophila* Selbmann & de Hoog (1)  
*Staninwardia* B. Sutton (2)  
*Vermiconidia* Egidi & Onofri (4)

***Mycosphaerellaceae*** Lindau (**based on molecular data**)

*Acervuloseptoria* Crous & Jol. Roux (2)  
*Amicosphaerella* Quaedvl. & Crous (2)  
*Annelosympodiella* Crous & Assefa (1)  
*Apseudocercosporella* Videira & Crous (1)

*Asperisporium* Maubl. (24)  
*Australosphaerella* Videira & Crous (1)  
*Brunneosphaerella* Crous (3)  
*Brunswickiella* Videira & Crous (1)  
*Camptomeriphila* Crous & M.J. Wingf. (1)  
*Caryophylloseptoria* Verkley, Quaedvl. & Crous (4)  
*Catenulocercospora* C. Nakash., Videira & Crous (1)  
*Cercoramularia* Videira, H.D. Shin, C. Nakash. & Crous (1)  
*Cercospora* Fresen. ex Fuckel (c. 1125)  
*Cercosporella* Sacc. (ca. 100)  
*Cercosporidium* Earle (ca. 10)  
*Chuppomyces* Videira & Crous (1)  
*Cladocillium* Chun-Hao Chen & R. Kirschner (1)\*  
*Clarohilum* Videira & Crous (1)  
*Clypeosphaerella* Guatim., R.W. Barreto & Crous (3)  
*Collapsimycopappus* A. Hashim., Y. Harada & Kaz. Tanaka (1)  
*Collarispora* Videira & Crous (1)  
*Coremiopassalora* U. Braun, C. Nakash., Videira & Crous (2)  
*Cytostagonospora* Bubák (5)  
*Deightonomyces* Videira & Crous (1)  
*Devonomyces* Videira & Crous (1)  
*Dictyosporina* L.M. Abreu, R.F. Castañeda & O.L. Pereira (1)  
*Distocercospora* N. Pons & B. Sutton (4)  
*Distocercosporaster* Videira, H.D. Shin, C. Nakash. & Crous (1)  
*Distomycovellosiella* U. Braun, C. Nakash., Videira & Crous (1)  
*Dothistroma* Hulbary (5)  
*Epicoleosporium* Videira & Crous (1)  
*Exosporium* Link (123)  
*Exutisphaerella* Videira & Crous (1)  
*Filiella* Videira & Crous (1)  
*Fulvia* Cif. (2)  
*Fusoidiella* Videira & Crous (2)  
*Graminopassalora* U. Braun, C. Nakash., Videira & Crous (1)  
*Hippopotamyces* Crous (1)\*  
*Hyalocercosporidium* Videira & Crous (1)  
*Hyalozasmidium* U. Braun, C. Nakash., Videira & Crous (2)  
*Janetia* M.B. Ellis (22)  
*Juncomyces* Crous (2)  
*Lecanosticta* Syd. (8)  
*Madagascarymyces* U. Braun, C. Nakash., Videira & Crous (1)  
*Microcyclosporella* J. Frank, Schroers & Crous (1)  
*Micronematomyces* U. Braun, C. Nakash., Videira & Crous (2)  
*Miuraea* Hara (1)  
*Mycodiella* Crous (3)  
*Mycosphaerelloides* Videira & Crous (1)  
*Mycovellosiella* Rangel (ca. 1)  
*Neoceratosperma* Crous & Cheew. (6)  
*Neocercospora* Bakhshi, Arzanlou, Babai-ahari & Crous (1)  
*Neocercosporidium* Videira & Crous (1)  
*Neodeightoniella* Crous & W.J. Swart (1)  
*Neokirramyces* Crous (1)\*  
*Neomycosphaerella* Crous (1)

*Neopenidiella* Quaedvl. & Crous (1)  
*Neophloeospora* U. Braun, C. Nakash., Videira & Crous (1)  
*Neopseudocercospora* Crous (2)  
*Neopseudocercospora* Videira & Crous (2)  
*Neoramichloridium* Phook., Thambug. & K.D. Hyde (1)  
*Neoseptoria* Quaedvl., Verkley & Crous (1)  
*Neosonderhenia* Crous (2)  
*Nothopassalora* U. Braun, C. Nakash., Videira & Crous (1)  
*Nothopericoniella* Videira & Crous (1)  
*Nothophaeocryptopus* Videira, C. Nakash. & Crous (1)  
*Nothoseptoria* Crous & Bulgakov (1)\*  
*Pachyramichloridium* Videira & Crous (1)  
*Pallidocercospora* Crous (9)  
*Pantospora* Cif. (1)  
*Paracercospora* Deighton (5)  
*Paracercosporidium* Videira & Crous (2)  
*Paramycosphaerella* Crous & Jol. Roux (17)  
*Paramycovellosiella* Videira, H.D. Shin & Crous (1)  
*Parapallidocercospora* Videira, Crous, U. Braun & C. Nakash. (2)  
*Passalora* Fr. (ca. 250)  
*Pedrocrousiella* Rajeshkumar, U. Braun & J.Z. Groenew (1)  
*Phaeocercospora* Crous (2)  
*Phaeophleospora* Rangel (31)  
*Phaeoramularia* Munt.-Cvetk. (ca. 10)  
*Phloeospora* Wallr. (141)  
*Piricauda* Bubák (8)\*  
*Pleopassalora* Videira & Crous (2)  
*Pleuropassalora* U. Braun, C. Nakash., Videira & Crous (1)  
*Pluripassalora* Videira & Crous (1)  
*Plurivorosphaerella* O. Hassan & T.H. Chang (1)  
*Polyphialoseptoria* Quaedvl., R.W. Barreto, Verkley & Crous (2)  
*Polythrincium* Kunze (5)  
*Protostegia* Cooke (2)  
*Pruniphilomyces* Crous & Bulgakov (1)\*  
*Pseudocercospora* Speg. (ca. 1000)  
*Pseudocercospora* Deighton (127)  
*Pseudopericoniella* Videira & Crous (1)  
*Pseudophaeophleospora* C. Nakash., Videira & Crous (2)  
*Pseudozasmidium* Videira & Crous (4)  
*Ragnhildiana* Solheim (18)  
*Ramularia* Unger (100<)  
*Ramulariopsis* Speg. (5)  
*Ramulispora* Miura (18)  
*Rhachisphaerella* U. Braun, C. Nakash., Videira & Crous (1)  
*Rosisphaerella* Videira & Crous (1)  
*Ruptoseptoria* Quaedvl., Verkley & Crous (1)  
*Scolecostigmina* U. Braun (23)  
*Septoria* Sacc. (200<)  
*Sonderhenia* H.J. Swart & J. Walker (2)  
*Sphaerulina* Sacc. (65)  
*Stromatoseptoria* Quaedvl., Verkley & Crous (1)  
*Sultanimyces* Videira & Crous (1)

*Trochophora* R.T. Moore (2)  
*Uwemyces* Hern.-Restr., Sarria & Crous (1)  
*Virosphaerella* Videira & Crous (3)  
*Walkaminomyces* Crous & Carnegie (1)  
*Xenomycosphaerella* Quaedvl. & Crous (3)  
*Xenopassalora* Crous (1)  
*Xenoramularia* Videira, H.D. Shin & Crous (3)  
*Xenosonderhenia* Crous (2)  
*Xenosonderhenioides* Videira & Crous (1)  
*Zasmidium* Fr. (= *Periconiella* Sacc. *fide* Quaedvlieg et al. 2013) (ca. 150)  
*Zymoseptoria* Quaedvl. & Crous (8)

***Neodevriesiaceae*** Quaedvl. & Crous  
*Neodevriesia* Quaedvl. & Crous (21)  
*Tripospermum* Speg. (27)

***Phaeothecoidiellaceae*** K.D. Hyde & Hongsanan (= *Nowamycetaceae* Crous)  
*Chaetothyria* Theiss. (6)  
*Exopassalora* Videira & Crous (1)  
*Houjia* G.Y. Sun & Crous (2)  
*Neochaetothyria* Crous (1)  
*Nowamycetes* Crous (2)  
*Phaeothecoidiella* Batzer & Crous (2)  
*Rivilata* Kohlm., Volkm.-Kohlm. & O.E. Erikss. (1)  
*Sporidesmajora* Batzer & Crous (1)  
*Translucidithyrium* X.Y. Zeng & K.D. Hyde (1)

***Schizothyriaceae*** Höhn. ex Trotter, Sacc., D. Sacc. & Traverso  
*Amazonotheca* Bat. & H. Maia (2)  
*Hexagonella* F. Stevens & Guba ex F. Stevens (1)  
*Kerniomyces* Toro (1)  
*Lecideopsella* Höhn. (10)  
*Metathyriella* Syd. (3)  
*Mycerema* Bat., J.L. Bezerra & Cavalc. (1)  
*Myriangiella* Zimm. (5)  
*Plochrompeltis* Theiss. (5)  
*Schizothyrium* Desm. (= *?Zygophiala* E.W. Mason) (69)  
*Vonarxella* Bat., J.L. Bezerra & Peres (1)

***Teratosphaeriaceae*** Crous & U. Braun  
*Acidiella* Hujslová & M. Kolařík (3)  
*Acidomyces* B.J. Baker, M.A. Lutz, S.C. Dawson, P.L. Bond & Banfield ex Selbmann, de Hoog & De Leo (2)  
*Acrodontium* de Hoog (17)  
*Apenidiella* Quaedvl. & Crous (1)  
*Araucasphaeria* Crous & M.J. Wingf. (1)  
*Arboricolonus* S. Bien & Damm (1)\*  
*Aulographina* Arx & E. Müll. (2)  
*Austroafricana* Quaedvl. & Crous (3)  
*Austrostigmidium* Pérez-Ort. & Garrido-Benavent (1)  
*Batcheloromyces* Marasas, P.S. van Wyk & Knox-Dav. (5)  
*Baudoinia* J.A. Scott & Unter. (5)

*Bryochiton* Döbbeler & Poelt (5)  
*Caatingomyces* T.G.L. Oliveira, Souza-Motta, O.M.C. Magalh. & J.D.P. Bezerra (1)\*  
*Camarosporula* Petr. (1)  
*Capnobotryella* Sugiy. (6)  
*Catenulostroma* Crous & U. Braun (7)  
*Constantinomyces* Egidi & Onofri (4)  
*Davisoniella* H.J. Swart (1)  
*Devriesia* Seifert & N.L. Nick. (11)  
*Elasticomyces* Zucconi & Selbmann (1)  
*Eupenidiella* Quaedvl. & Crous (1)  
*Euteratosphaeria* Quaedvl. & Crous (1)  
*Friedmanniomyces* Onofri (2)  
*Haniomyces* J.C. Xu (1)\*  
*Hispidiconidioma* Tsuneda & Davey (2)  
*Hortaea* Nishim. & Miyaji (2)  
*Hyweljonesia* R.G. Shivas, Y.P. Tan, Marney & Abell (2)  
*Incertomyces* Egidi & Zucconi (2)  
*Lapidomyces* de Hoog & Stielow (1)  
*Lawreya* Ertz, Common, Diederich & U. Braun (1)  
*Leptomelanconium* Petr. (7)  
*Meristemomyces* Isola & Onofri (2)  
*Microcyclospora* J. Frank, Schroers & Crous (5)  
*Monticola* Selbmann & Egidi (1)  
*Muriphila* Jurjević, Čmoková & Hubka (1)\*  
*Myrtapenidiella* Quaedvl. & Crous (8)  
*Neocatenulostroma* Quaedvl. & Crous (3)  
*Neophaeothecoidea* Quaedvl. & Crous (1)  
*Neotrimmatostroma* Quaedvl. & Crous (3)  
*Nothotrimmatostroma* Crous (2)\*  
*Oleoguttula* Selbmann & de Hoog (1)  
*Pachysacca* Syd. (3)  
*Palmeiomyces* D.R.S. Pereira & A.J.L. Phillips (1)\*  
*Parapenidiella* Crous & Summerell (2)  
*Parateratosphaeria* Quaedvl. & Crous (6)  
*Penidiella* Crous & U. Braun (4)  
*Penidiellomyces* Crous, Attili-Angelis, A.P.M. Duarte, Pagnocca & J.Z. Groenew. (2)  
*Penidiellopsis* Sand.-Den., Gené, Deanna A. Sutton & Guarro (2)  
*Phaeothecoidea* Crous (5)  
*Placocrea* Syd. (1)  
*Pseudotaeniolina* J.L. Crane & Schokn. (2)  
*Pseudoteratosphaeria* Quaedvl. & Crous (6)  
*Queenslandipenidiella* Quaedvl. & Crous (1)  
*Readeriella* Syd. & P. Syd. (ca. 23)  
*Recurvomyces* Selbmann & de Hoog (1)  
*Simplicidiella* Crous, Attili-Angelis, A.P.M. Duarte, Pagnocca & J.Z. Groenew. (1)  
*Stenella* Syd. (ca. 45)  
*Suberoteratosphaeria* Quaedvl. & Crous (3)  
*Teratoramularia* Videira, H.D. Shin & Crous (4)  
*Teratosphaeria* Syd. & P. Syd. (58)  
*Teratosphaericola* Quaedvl. & Crous (1)  
*Teratosphaeriopsis* Quaedvl. & Crous (1)  
*Xanthoriicola* D. Hawksw. (1)

*Xenoconiothyrium* Crous & Marinc. (1)  
*Xenopenidiella* Quaedvl. & Crous (7)  
*Xenophacidiella* Crous (1)  
*Xenoteratosphaeria* Quaedvl. & Crous (1)

***Mycosphaerellales* genera incertae sedis**

*Arthrocatena* Egidi & Selbmann (1)  
*Brunneomycosphaerella* Dissan., Jian K. Liu & K.D. Hyde (1)  
*Hyphoconis* Egidi & Quaedvl. (1)  
*Mucomyosphaerella* Quaedvl. & Crous (1)  
*Mycophycias* Kohlm. & Volkm.-Kohlm (2)  
*Neohortaea* Quaedvl. & Crous (1)  
*Ramopenidiella* Crous & R.G. Shivas (1)

***Myriangiales* Starbäck**

***Elsinoaceae*** Höhn. ex Sacc. & Trotter  
*Elsinoe* Racib. (ca. 40)  
*Mollerella* G. Winter (4)

***Myriangiaceae* Nyl.**

*Anhellia* Racib. (9)  
*Ascostratum* Syd. & P. Syd. (2)  
*Butleria* Sacc. (1)  
*Dictyocyclus* Sivan., W.H. Hsieh & Chi Y. Chen (1)  
*Eurytheca* De Seynes (3)  
*Hemimyriangium* J. Reid & Piroz (1)  
*Mendogia* Racib. (7)  
*Micularia* Boedijn (2)  
*Myriangium* Mont. & Berk. (ca. 10)  
*Uleomyces* P. Henn. (12)  
*Zukaliopsis* Henn. (2)

***Myriangiales* genus incertae sedis**

*Dictyonella* Höhn. (7)

***Neophaeothecales* Abdollahz. & Crous\***

***Neophaeothecaceae*** Abdollahz. & Crous\*  
*Neophaeotheca* Abdollahz. & Crous (2)\*  
*Nothophaeotheca* Crous (1)

***Phaeothecales* Abdollahz. & Crous**

***Phaeothecaceae*** Darveaux  
*Phaeotheca* Sigler, Tsuneda & J.W. Carmich. (4)

***Racodiales* Abdollahz. & Crous\***

***Racodiaceae*** Link  
*Racodium* Fr. (5)

**Subclass *Pleosporomycetidae* C.L. Schoch, Spatafora, Crous & Shoemaker**

***Gloniales*** Jayasiri & K.D. Hyde  
***Gloniaceae*** (Corda) E. Boehm, C.L. Schoch & Spatafora  
*Cenococcum* Moug. & Fr. (5)

*Glonium* Mühl. (ca. 13)  
*Purpurepithecium* Jayasiri & K.D. Hyde (2)

***Hysteriales*** Lindau

***Hysteriaceae*** Chevall.

*Actidiographium* Lar. N. Vassiljeva (1)  
*Glioniella* Sacc. (12)  
*Gloniopsis* De Not. (ca. 17)  
*Hysterium* Pers. (14)  
*Hystero brevium* E.W.A. Boehm & C.L. Schoch (6)  
*Hystero carina* Zogg (1)  
*Hystero difractum* D.A.C. Almeida, Gusmão & A.N. Mill. (1)  
*Hystero glonium* Rehm ex Lindau (2)  
*Oedohysterium* E.W.A. Boehm & C.L. Schoch (3)  
*Ostreichnion* Duby (4)  
*Pseudoscypha* J. Reid & Piroz. (1)  
*Psiloglonium* Höhn. (ca. 15)  
*Rhytidhysteron* Speg. (19)

***Hysteriales*** genus *incertae sedis*

*Graphyllum* Clem. (11)

***Mytilinidiales*** E. Boehm, C.L. Schoch & Spatafora

***Mytilinidiaceae*** Kirschst.

*Actidium* Fr. (ca. 6)  
*Lophium* Fr. (ca. 6)  
*Mytilinidion* Duby (12)  
*Ostreola* Darker (8)  
*Peyronelia* Cif. & Gonz. Frag. (6 or 7)  
*Pseudocamaropycnis* Crous (1)  
*Quasiconcha* M.E. Barr & M. Blackw. (1)  
*Zoggium* Lar.N. Vassiljeva (1)

***Pleosporales*** Luttrell ex M.E. Barr

***Acrocalymmaceae*** Crous & Trakun.

*Acrocalymma* Alcorn & J.A.G. Irwin (11)

***Aigialaceae*** Suetrong, Sakay., E.B.G. Jones, Kohlm., Volkm.-Kohlm. & C.L. Schoch

*Aigialus* S. Schatz & Kohlm. (5)  
*Ascocratera* Kohlm. (1)  
*Fissuroma* Jian K. Liu, Phook., E.B.G. Jones & K.D. Hyde (11)  
*Neoastrosphaeriella* Jian K. Liu, E.B.G. Jones & K.D. Hyde (3)  
*Posidoniomyces* Vohník & Réblová (1)  
*Rimora* Kohlm., Volkm.-Kohlm., Suetrong, Sakay. & E.B.G. Jones (1)

***Amniculicolaceae*** Y. Zhang ter, C.L. Schoch, J. Fourn., Crous & K.D. Hyde

*Amniculicola* Y. Zhang ter & K.D. Hyde (4)  
*Fusififormispora* Phukhams. & K.D. Hyde (1)  
*Murispora* Y. Zhang ter, J. Fourn. & K.D. Hyde (7)  
*Neomassariosphaeria* Y. Zhang ter, J. Fourn. & K.D. Hyde (1)  
*Pseudomassariosphaeria* Phukhams., Ariyaw., Camporesi & K.D. Hyde (2)  
*Vargamyces* Tóth (1)



***Amorosiaceae*** Thambug. & K.D. Hyde

*Alfoldia* D.G. Knapp, Imrefi & Kovács (1)

*Amorosia* Mantle & D. Hawksw. (1)

*Amorocoelophoma* Jayasiri, E.B.G. Jones & K.D. Hyde (1)

*Angustimassarina* Thambug., Kaz. Tanaka & K.D. Hyde (10)

*Neothyrostroma* Crous (1)\*

***Anastomitrabeculiaceae*** Bhunjun, Phukhams. & K.D. Hyde\*

*Anastomitrabeculia* Bhunjun, Phukhams. & K.D. Hyde (1)\*

***Anteagloniaceae*** K.D. Hyde, Jian K. Liu & A. Mapook

*Anteaglonium* Mugambi & Huhndorf (7)

*Flammeascoma* Phook. & K.D. Hyde (2)

*Neolophiotrema* G.C. Ren & K.D. Hyde (1)\*

*Purpureofaciens* W. Dong, H. Zhang & K.D. Hyde (1)\*

***Aquasubmersaceae*** A. Hashim. & Kaz. Tanaka

*Aquasubmersa* K.D. Hyde & Huang Zhang (2)

***Arthopyreniaceae*** W. Watson

*Arthopyrenia* A. Massal. (= *Arthopyreniomyces* Cif. & Tomas.) (5 + ca. 100 orphaned)

*Mycomicrothelia* Keissl. (ca. 10)

***Ascocylindricaceae*** Abdel-Wahab, Bahkali, E.B.G. Jones, Ariyaw. & K.D. Hyde

*Ascocylindrica* Abdel-Wahab, Bahkali & E.B.G. Jones (1)

***Astrosphaeriellaceae*** Phook. & K.D. Hyde (= *Caryosporaceae* Huang Zhang, K.D. Hyde & Ariyaw.)

*Aquatospora* W. Dong, H. Zhang & K.D. Hyde (1)\*

*Astrosphaeriella* Syd. & P. Syd. (ca. 10)

*Astrosphaerellopsis* Phook., Jian K. Liu & K.D. Hyde (2)

*Caryospora* De Not. (19)

*Javaria* Boise (2)

*Mycopepon* Boise (5)

*Pithomyces* Berk. & Broome (ca. 40)

*Pteridiospora* Penz. & Sacc. (8)

*Quercicola* Jayasiri, E.B.G. Jones & K.D. Hyde (2)

*Xenoastrosphaeriella* Jayasiri, E.B.G. Jones & K.D. Hyde (2)

***Bambusicolaceae*** D.Q. Dai & K.D. Hyde

*Bambusicola* D.Q. Dai & K.D. Hyde (14)

*Corylicola* Wijesinghe, Camporesi, Yong Wang bis & K.D. Hyde (1)\*

*Leucaenicola* Jayasiri, E.B.G. Jones & K.D. Hyde (2)

*Palmiascoma* Phook. & K.D. Hyde (1)

***Biatriosporaceae*** K.D. Hyde

*Biatriospora* K.D. Hyde & Borse (6)

***Camarosporiaceae*** Wanas., Wijayaw., K.D. Hyde & Crous

*Camarosporium* Schulzer (100+)

*Camarosporomyces* Crous (1)

***Camarosporidiellaceae*** Wanas., Wijayaw., Crous & K.D. Hyde  
*Camarosporidiella* Wanas., Wijayaw., K.D. Hyde (21)

***Coniothyriaceae*** W.B. Cooke  
*Coniothyrium* Corda (ca. 50)  
*Foliophoma* Crous (1)  
*Neoconiothyrium* Crous (3)  
*Ochrocladosporium* Crous & U. Braun (3)  
*Staurosphaeria* Rabenh. (= *Hazslinszkyomyces* Crous & R.K. Schumach.) (12)

***Corynesporascaceae*** Sivan.  
*Corynespora* Güssow (ca. 130)  
*Corynesporasca* Sivan. (1)

***Cryptocoryneaceae*** A. Hashim. & Kaz. Tanaka  
*Cryptocoryneum* Fuckel (ca. 20)

***Cucurbitariaceae*** G. Winter (= *Fenestellaceae* M.E. Barr)  
*Allocucurbitaria* Valenz.-Lopez, Stchigel, Guarro & Cano (1)  
*Astragalicola* Jaklitsch & Voglmayr (2)  
*Cucitella* Jaklitsch & Voglmayr (1)  
*Cucurbitaria* Gray (ca. 40)  
*Fenestella* Tul. & C. Tul. (= *Pleurostromella* Petr.) (ca. 4)  
*Neocucurbitaria* Wanas., E.B.G. Jones & K.D. Hyde (21)  
*Paracucurbitaria* Valenz.-Lopez, Stchigel, Guarro & Cano (2)  
*Parafenestella* Jaklitsch & Voglmayr (3)  
*Protofenestella* Jaklitsch & Voglmayr (1)  
*Rhytidiella* Zalasky (4)  
*Seltsamia* Jaklitsch & Voglmayr (1)  
*Syncarpella* Theiss. & Syd. (ca. 6)  
*Synfenestella* Jaklitsch & Voglmayr (2)

***Cyclothyriellaceae*** Jaklitsch & Voglmayr  
*Cyclothyriella* Jaklitsch & Voglmayr (1)  
*Massariosphaeria* (E. Müll.) Crivelli (25)

***Dacampiaceae*** Körb.  
*Aaosphaeria* Aptroot (1)  
*Dacampia* A. Massal. (15)  
*Eopyrenula* R.C. Harris (6)  
*Leptocucurthis* Aptroot (1)  
*Pseudonitschkia* Coppins & S.Y. Kondr. (1)  
*Weddellomyces* D. Hawksw. (12)

***Delitschiaceae*** M.E. Barr  
*Delitschia* Auersw. (ca. 50)  
*Ohleriella* Earle (1)  
*Semidelitschia* Cain & Luck-Allen (3)

***Diademaceae*** Shoemaker & C.E. Babc.  
*Diadema* Shoemaker & C.E. Babc. (8)

**Dictyosporiaceae** Boonmee & K.D. Hyde

*Aquadictyospora* Z.L. Luo, K.D. Hyde & H.Y. Su (1)

*Aquaticheirospora* Kodsueb & W.H. Ho (1)

*Cheirosporium* L. Cai & K.D. Hyde (2)

*Dendryphiella* Bubák & Ranoj. (12)

*Dictyocheirospora* M.J. D'souza, Boonmee & K.D. Hyde (23)

*Dictyopalmispora* Pinruan, Boonmee & K.D. Hyde (1)

*Dictyosporium* Corda (58)

*Digitodesmium* P.M. Kirk (6)

*Gregarithecium* Kaz. Tanaka & K. Hiray. (1)

*Jalapriya* M.J. D'souza, Hong Y. Su, Z.L. Luo & K.D. Hyde (3)

*Neodendryphiella* Iturrieta-González, Dania García & Gené (3)

*Paradictyocheirospora* Rajeshkumar, R.K. Verma, Boonmee, K.D. Hyde, Chandrasiri & Wijayaw. (1)

*Pseudocoleophoma* Kaz. Tanaka & K. Hiray. (3)

*Pseudoconiothyrium* Crous & R.K. Schumach. (1)

*Pseudodictyosporium* Matsush. (4)

*Sajamaea* Flakus, Piątek & Rodr. Flakus (1)\*

*Vikalpa* M.J. D'souza, Boonmee, Bhat & K.D. Hyde (4)

**Didymellaceae** Gruyter, Aveskamp & Verkley (=Microsphaeropsidaceae Qian Chen et al.)

*Allophoma* Q. Chen & L. Cai (9)

*Anthodidymella* Phukhams., Camporesi & K.D. Hyde (3)

*Ascochyta* Lib. (= *Heracleicola* Tibpromma, Camporesi & K.D. Hyde) (ca. 400)

*Boeremia* Aveskamp, Gruyter & Verkley (22)

*Briansuttonomyces* Crous (1)

*Calophoma* Q. Chen & L. Cai (8)

*Chaetasbolisia* Speg. (7)

*Cumuliphoma* Valenz.-Lopez, Stchigel, Crous, Guarro & Cano (3)

*Didymella* Sacc. ex D. Sacc. (ca. 100)

*Didysimulans* Tibpromma, Camporesi & K.D. Hyde (2)

*Dimorphoma* L.W. Hou, L. Cai & Crous (1)\*

*Ectodidymella* L.W. Hou, L. Cai & Crous (1)\*

*Ectophoma* Valenz.-Lopez, Cano, Crous, Guarro & Stchigel (2)

*Epicoccum* Link (16)

*Heterophoma* Q. Chen & L. Cai (6)

*Juxtiphoma* Valenzuela-Lopez, Cano, Crous, Guarro & Stchigel (1)

*Leptosphaerulina* McAlpine (30)

*Longididymella* L.W. Hou, L. Cai & Crous (2)\*

*Macroascochyta* L.W. Hou, L. Cai & Crous (1)\*

*Macroventuria* Aa (2)

*Microsphaeropsis* Höhn. (37)

*Mixtura* O.E. Erikss. & J.Z. Yue (1)

*Monascostroma* Höhn. (ca. 5)

*Neoascochyta* Q. Chen & L. Cai (12)

*Neodidymella* Phook., R.H. Perera & K.D. Hyde (1)

*Neodidymelliopsis* Q. Chen & L. Cai (9)

*Neomicrosphaeropsis* Thambug., Camporesi & K.D. Hyde (= *Didymellocomarosporium* Wijayaw. & K.D. Hyde) (10)\*

*Neoscirrhia* Crous & R.K. Schumach. (2)\*

*Nothomicrosphaeropsis* Crous (1)\*

*Nothophoma* Q. Chen & L. Cai (9)

*Paraboeremia* Q. Chen & L. Cai (6)  
*Paramicrosphaeropsis* L.W. Hou, L. Cai & Crous (1)\*  
*Phoma* Sacc. (100)  
*Phomatodes* Q. Chen & L. Cai (2)  
*Platychora* Petr. (1)  
*Pseudoascochyta* Valenz.-Lopez, Stchigel, Cano-Canals, Guarro & Cano (2)  
*Pseudopeyronellaea* L.W. Hou, L. Cai & Crous (1)\*  
*Remotididymella* Valenz.-Lopez (2)  
*Sclerotiophoma* L.W. Hou, L. Cai & Crous (1)\*  
*Similiphoma* Valenz.-Lopez, Crous, Cano, Guarro & Stchigel (1)  
*Stagonosporopsis* Died. (22)  
*Vacuiphoma* Valenz.-Lopez, Cano, Crous, Guarro & Stchigel (2)  
*Vandijkomycella* Hern.-Restr., L.W. Hou, L. Cai & Crous (2)\*  
*Xenodidymella* Q. Chen & L. Cai (5)

### ***Didymosphaeriaceae* Munk**

*Alloconiothyrium* Verkley & Stielow (1)  
*Austropleospora* R.G. Shivas & L. Morin (1)  
*Barria* Z.Q. Yuan (1)  
*Bimuria* D. Hawksw., Chea & Sheridan (1)  
*Chromolaenicola* Mapook & K.D. Hyde (6)  
*Curreya* Sacc. (2)  
*Cylindroaseptospora* Jayasiri, E.B.G. Jones & K.D. Hyde (2)  
*Deniquelata* Ariyaw. & K.D. Hyde (2)  
*Didymocrea* Kowalski (1)  
*Didymosphaeria* Fuckel (ca. 25)  
*Kalmusia* Niessl (15)  
*Kalmusibambusa* Phook., Tennakoon, Thambug. & K.D. Hyde (1)  
*Karstenula* Speg. (16)  
*Laburnicola* Wanas., Camporesi, E.B.G. Jones & K.D. Hyde (4)  
*Letendraea* Sacc. (ca. 3)  
*Lineostroma* H.J. Swart (1)  
*Montagnula* Berl. (ca. 30)  
*Neokalmusia* Ariyaw. & K.D. Hyde (5)  
*Neptunomyces* M. Gonçalves, T. Vicente & A. Alves (1)  
*Paracamarosporium* Wijayaw. & K.D. Hyde (7)  
*Paraconiothyrium* Verkley (19)  
*Paramassariosphaeria* Wanas., E.B.G. Jones & K.D. Hyde (2)  
*Paraphaeosphaeria* O.E. Erikss. (33)  
*Phaeodothis* Syd. & P. Syd. (5)  
*Pseudocamarosporium* Wijayaw. & K.D. Hyde (13)  
*Pseudodidymocyrtis* Flakus, Rodr. Flakus & Etayo (1)  
*Pseudopithomyces* Ariyaw. & K.D. Hyde (10)  
*Pseudotrichia* Kirschst. (ca. 8)  
*Spegazzinia* Sacc. (ca. 30)  
*Tremateia* Kohlm., Volkm.-Kohlm. & O.E. Erikss. (3)  
*Verrucoconiothyrium* Crous (4)  
*Vicosamyces* Firmino, Machado & Pereira (1)  
*Xenocamarosporium* Crous & M.J. Wingf. (1)

### ***Dothidotthiaceae* Crous & A.J.L. Phillips**

*Belizeana* Kohlm. & Volkm. (1)\*

*Dothidotthia* Höhn. (ca. 10)  
*Mycocentrospora* Deighton (12)  
*Phaeomycocentrospora* Crous, H.D. Shin & U. Braun (1)  
*Pleiochaeta* (Sacc.) S. Hughes (4)  
*Thyrostroma* Höhn. (ca. 45)\*  
*Wilsonomyces* Adask., J.M. Ogawa & E.E. Butler (1)

***Fuscostagonosporaceae*** Jayasiri, Camporesi & K.D. Hyde  
*Fuscostagonospora* Kaz. Tanaka & K. Hiray. (2)

***Fusculinaceae*** Crous  
*Fusculina* Crous & Summerell (2)  
*Gordonomyces* Crous & Marinc. (1)

***Halojulellaceae*** Suetrong, K.D. Hyde & E.B.G. Jones  
*Halojulella* Suetrong, K.D. Hyde & E.B.G. Jones (1)  
*Omania* Maharachch., Wanas. & Al-Sadi (1)\*

***Halotthiaceae*** Ying Zhang, J. Fourn. & K.D. Hyde  
*Brunneoclavispora* Phook. & K.D. Hyde (1)  
*Halotthia* Kohlm. (1)  
*Mauritiana* Poonyth, K.D. Hyde, Aptroot & Peerally (1)  
*Neolophiostoma* S. Boonmee & K.D. Hyde (1)  
*Pontoporeia* Kohlm. (1)  
*Sulcosporium* Phook. & K.D. Hyde (1)

***Hermatomycetaceae*** Locq.  
*Hermatomyces* Speg. (ca. 20)

***Hypsostromataceae*** Huhndorf  
*Hypsostroma* Huhndorf (2)

***Latoruaceae*** Crous  
*Latorua* Crous (1)  
*Matsushimamyces* Rahul Sharma & Rohit Sharma (2)  
*Polyschema* H.P. Upadhyay (22)  
*Pseudoasteromassaria* M. Matsum. & Kaz. Tanaka (3)  
*Triseptata* Boonmee & Phookamsak (1)\*

***Lentimurisporaceae*** N.G. Liu, J.K. Liu & K.D. Hyde  
*Bahusandhika* Subram. (9)  
*Lentimurispora* N.G. Liu, Bhat & K.D. Hyde (1)

***Lentitheciaceae*** Y. Zhang ter, C.L. Schoch, J. Fourn., Crous & K.D. Hyde  
*Darksidea* D.G. Knapp, Kovács, J.Z. Groenew. & Crous (6)  
*Halobyssothecium* Dayar., E.B.G. Jones & K.D. Hyde (9)\*  
*Katumotoa* Kaz. Tanaka & Y. Harada (1)  
*Keissleriella* Höhn. (ca. 36)  
*Lentithecium* K.D. Hyde, J. Fourn. & Ying Zhang (5)  
*Murilentithecium* Wanas., Camporesi, E.B.G. Jones & K.D. Hyde (3)  
*Neophiosphaerella* Kaz. Tanaka & K. Hiray. (1)  
*Phragmocamarosporium* Wijayaw., Yong Wang bis & K.D. Hyde (2)

*Pleurophoma* Höhn. (ca. 9)  
*Poaceascoma* Phook. & K.D. Hyde (4)  
*Pseudomurilentithecium* Mapook & K.D. Hyde (2)  
*Setoseptoria* Quaedvl., Verkley & Crous (7)  
*Tingoldi* K. Hiray. & Kaz. Tanaka (1)  
*Towyspora* Wanas., E.B.G. Jones & K.D. Hyde (1)

***Leptosphaeriaceae*** M.E. Barr

*Alloleptosphaeria* Ariyaw., Wanas. & K.D. Hyde (1)  
*Alternariaster* E.G. Simmons (4)  
*Chaetoplea* (Sacc.) Clem. (ca. 20)  
*Heterosporicola* Crous (2)  
*Leptosphaeria* Ces. & De Not. (151)\*  
*Neoleptosphaeria* Ariyaw. & K.D. Hyde (2)  
*Ochraceocephala* Voglmayr & Aiello (1)\*  
*Paraleptosphaeria* Gruyter, Aveskamp & Verkley (= *Acicuseptoria* Quaedvl. et al. 2013 *fide* Hongsanan et al. 2020) (7)  
*Plenodomus* Preuss (18)  
*Praeclarispora* Doilom, W. Dong, K. D. Hyde & C. F. Liao (1)\*  
*Pseudoleptosphaeria* Ariyaw. & K.D. Hyde (1)  
*Querciphoma* Crous (2)  
*Sclerenchymomyces* Phukhams. & K.D. Hyde (2)  
*Sphaerellopsis* Cooke (6)  
*Subplenodomus* Gruyter, Aveskamp & Verkley (6)\*

***Libertasomycetaceae*** Crous

*Libertasomyces* Crous & Roets (3)  
*Neoplatysporoides* Crous & M.J. Wingf. (1)

***Ligninsphaeriaceae*** K.D. Hyde & Ariyaw.

*Ligninsphaeria* Jin F. Zhang, Jian K. Liu, K.D. Hyde & Zi Y. Liu (1)  
*Ligninsphaeriopsis* Phukhams., J.F. Zhang & K.D. Hyde (1)

***Lindgomycetaceae*** K. Hiray., Kaz. Tanaka & Shearer

*Aquimassariosphaeria* W. Dong & Doilom (2)\*  
*Arundellina* Wanas., E.B.G. Jones & K.D. Hyde (1)  
*Clohesyomyces* K.D. Hyde (1)  
*Hongkongomyces* C.C.C. Tsang, J.F.W. Chan, Trend.-Sm., A.H.Y. Ngan, I.W.H. Ling, S.K.P. Lau & P.C.Y. Woo (5)  
*Lindgomassariosphaeria* W. Dong, H. Zhang & K.D. Hyde (1)  
*Lindgomyces* K. Hiray., Kaz. Tanaka & Shearer (14)  
*Lolia* Abdel-Aziz & Abdel-Wahab (1)  
*Neolindgomyces* Jayasiri, E.B.G. Jones & K.D. Hyde (4)

***Lizoniaceae*** Boonmee & K.D. Hyde

*Lizonia* (Ces. & De Not.) De Not. (24)

***Longiostiaceae*** Phukhams., Doilom & K.D. Hyde

*Crassiperidium* Matsum. & Kaz. Tanaka (2)  
*Longiostiolum* Doilom, Ariyaw. & K.D. Hyde (1)  
*Shearia* Petr. (2)

**Longipedicellataceae** Phukhams., Bhat & K.D. Hyde  
*Longipedicellata* H. Zhang, K.D. Hyde & Jian K. Liu (2)  
*Pseudoxylomyces* Kaz. Tanaka & K. Hiray. (2)  
*Submersispora* W. Dong, H. Zhang & K.D. Hyde (1)\*

**Lophiostomataceae** Sacc.

*Alpestrisphaeria* Thambug. & K.D. Hyde (2)  
*Biappendiculispora* Thambug., Kaz. Tanaka & K.D. Hyde (1)  
*Capulatispora* Thambug. & K.D. Hyde (1)  
*Coelodictyosporium* Thambug. & K.D. Hyde (3)  
*Crassiclypeus* A. Hashim., K. Hiray. & Kaz. Tanaka (1)  
*Desertiserpentina* Maharachch., Wanas. & Al-Sadi (1)\*  
*Dimorphiopsis* Crous (1)  
*Flabellascoma* A. Hashim., K. Hiray. & Kaz. Tanaka (4)  
*Guttulispora* Thambug., Qing Tian & K.D. Hyde (1)  
*Kiskunsagia* D.G. Knapp, Imrefi & Kovács (1)  
*Lentistoma* A. Hashim., K. Hiray. & Kaz. Tanaka (2)  
*Leptoparies* A. Hashim., K. Hiray. & Kaz. Tanaka (1)  
*Lophiohelichrysum* Dayar., Camporesi & K.D. Hyde (1)  
*Lophiomurispota* Wanas. & Mortimer (1)\*  
*Lophiopoacea* Ariyaw., Thambug. & K.D. Hyde (2)  
*Lophiostoma* Ces. & De Not. (ca. 100)  
*Magnopulchromyces* L.B. Conc., Gusmão & R.F. Castañeda (1)\*  
*Neopaucispora* Wanas., Gafforov & K.D. Hyde (2)  
*Neotrematosphaeria* Thambug., Kaz. Tanaka & K.D. Hyde (1)  
*Neovaginatispota* A. Hashim., K. Hiray. & Kaz. Tanaka (2)  
*Parapaucispora* A. Hashim., K. Hiray. & Kaz. Tanaka (1)  
*Paucispora* Thambug., Kaz. Tanaka & K.D. Hyde (3)  
*Platystomum* Trevis. (ca. 20)  
*Pseudocapulatispora* Mapook & K.D. Hyde (2)  
*Pseudolophiostoma* Thambug., Kaz. Tanaka & K.D. Hyde (5)  
*Pseudopaucispora* A. Hashim., K. Hiray. & Kaz. Tanaka (1)  
*Pseudoplatystomum* Thambug. & K.D. Hyde (1)  
*Quintaria* Kohlm. & Volkm.-Kohlm (3)  
*Sigarispota* Thambug. & K.D. Hyde (18)  
*Vaginatispota* K.D. Hyde (8)

**Lophiotremataceae** K. Hiray. & Kaz.

*Atrocalyx* A. Hashim. & Kaz. Tanaka (6)  
*Crassimassarina* A. Hashim. & Kaz. Tanaka (1)  
*Cryptoclypeus* A. Hashim. & Kaz. Tanaka (2)  
*Decaisnella* Fabre (13)  
*Galeaticarpa* A. Hashim. & Kaz. Tanaka (1)  
*Koordersiella* Höhn. (6)\*  
*Lophiotrema* Sacc. (17)  
*Pseudocryptoclypeus* A. Hashim. & Kaz. Tanaka (1)

**Macrodiplodiopsidaceae** Voglmayr, Jaklitsch & Crous

*Macrodiplodiopsis* Petr. (2)  
*Pseudochaetosphaeronema* Punith. (4)

**Massariaceae** Nitschke

*Massaria* De Not. (31)

*Massarioramusclicola* Huanral., Thambug. & K.D. Hyde (1)

*Paramassaria* Samarak., & K.D. Hyde (1)

***Massarinaceae*** Munk

*Byssothecium* Fuckel (8)\*

*Haplohelminthosporium* Konta & K.D. Hyde (1)\*

*Helminthosporiella* Konta & K.D. Hyde (1)\*

*Helminthosporium* Link (= *Helminthosporiella* Hern.-Restr., G.A. Sarria & Crous *fide* Hongsanan et al. 2020) (ca. 416)

*Massarina* Sacc. (ca. 100)

*Mirohelminthosporium* K. Zhang, D.W. Li & R.F. Castañeda (1)\*

*Pseudodidymosphaeria* Thambug. & K.D. Hyde (2)

*Pseudosplanchnonema* Chethana & K.D. Hyde (1)

*Semifissispora* H.J. Swart (5)

*Stagonospora* (Sacc.) Sacc. (220)

*Suttonomyces* Wijayaw., Camporesi & K.D. Hyde (2)

***Melanommataceae*** G. Winter (= *Pseudodidymellaceae* A. Hashim. & Kaz. Tanaka)

*Alpinaria* Jaklitsch & Voglmayr (1)

*Aposphaeria* Sacc. (189)

*Asymmetricospora* J. Fröhl. & K.D. Hyde (1)

*Bertiella* (Sacc.) Sacc. & P. Syd. (2)

*Bicrouania* Kohlm. & Volkm.-Kohlm. (1)

*Byssosphaeria* Cooke (27)

*Calyptronectria* Speg. (3)

*Camposporium* Harkn (24)

*Exosporiella* P. Karst. (1)

*Fusiconidium* Jun F. Li, Phook. & K.D. Hyde (3)

*Herpotrichia* Fuckel (101)

*Mamillisphaeria* K.D. Hyde, S.W. Wong & E.B.G. Jones (1)

*Marjia* Wanas., Gafforov & K.D. Hyde (1)

*Melanocamarosporioides* D. Pem, R. Jeewon, Gafforov & K.D. Hyde (1)\*

*Melanocamarosporium* Wijayaw., Camporesi, Bhat & K.D. Hyde (2)

*Melanocucurbitaria* Wanas., Gafforov & K.D. Hyde (1)

*Melanodiplodia* Wanas., Gafforov & K.D. Hyde (1)

*Melanomma* Nitschke ex Fuckel (ca. 30)

*Monoseptella* Wanas., Gafforov & K.D. Hyde (1)

*Muriformistrickeria* Q. Tian, Wanas., Camporesi & K.D. Hyde (2)

*Navicella* Fabre (5)

*Neobyssosphaeria* Wanas., E.B.G. Jones & K.D. Hyde (1)

*Petrakia* Syd. & P. Syd. (6)

*Phragmotrichum* Kunze (5)

*Pleotrichocladium* Hern.-Restr., R.F. Castañeda & Gené (1)

*Praetumpfia* Jaklitsch & Voglmayr (1)

*Pseudobyssosphaeria* H.B. Jiang & K.D. Hyde (1)

*Pseudodidymella* C.Z. Wei, Y. Harada & Katum. (2)

*Pseudotrickeria* Q. Tian, Wanas., Camporesi & K.D. Hyde (3)

*Sarimanas* M. Matsum., K. Hiray. & Kaz. Tanaka (2)

*Seifertia* Partr. & Morgan-Jones (2)

*Tumularia* Descals & Marvanová (2)

*Uzbekistanica* Wanas., Gafforov & K.D. Hyde (3)

*Xenostigmina* Crous (2)



***Morosphaeriaceae*** Suetrong, Sakay., E.B.G. Jones & C.L. Schoch

*Aegeanispora* E.B.G. Jones & Abdel-Wahab (1)

*Aquihelicascus* W. Dong, H. Zhang & Doilom (3)\*

*Aquilomyces* D.G. Knapp, Kovács, J.Z. Groenew. & Crous (2)

*Clypeolocus* Kaz. Tanaka & K. Hiray. (4)

*Helicascus* Kohlm. (3)

*Morosphaeria* Suetrong, Sakay., E.B.G. Jones & C.L. Schoch (4)

*Neohelicascus* W. Dong, H. Zhang, K.D. Hyde & Doilom (8)\*

***Mycoporaceae*** Zahlbr.

*Mycoporum* Flot. ex Nyl. (ca. 5 + c. 35 orphaned, partly in *Mycoporellum* Müll. Arg.)

***Neocamarosporiaceae*** Wanas., Wijayaw., Crous & K.D. Hyde

*Dimorphosporicola* Crous (1)

*Neocamarosporium* Crous & M.J. Wingf. (15)

***Neohendersoniaceae*** Giraldo & Crous

*Brevicollum* Kaz. Tanaka (2)

*Crassiparies* M. Matsum., K. Hiray. & Kaz. Tanaka (1)

*Medicopsis* Gruyter, Verkley & Crous (2)

*Neohendersonia* Petr. (4)

*Neomedicopsis* Crous & Akulov (1)

***Neomassariaceae*** H.A. Ariyaw., Jaklitsch & Voglmayr

*Neomassaria* Mapook, Camporesi & K.D. Hyde (2)

***Neomassarinaceae*** Mapook & K.D. Hyde

*Neomassarina* Phook., Jayasiri & K.D. Hyde (2)

*Pseudohelminthosporium* Phukhams. & K.D. Hyde (1)

***Neophaeosphaeriaceae*** Ariyaw. & K.D. Hyde

*Neophaeosphaeria* M.P.S. Câmara, M.E. Palm & A.W. Ramaley (6)

***Neopyrenochaetaceae*** Valenz.-Lopez, Crous, Cano, Guarro & Stchigel

*Neopyrenochaeta* Valenz.-Lopez, Crous, Stchigel, Guarro & Cano (5)

***Nigrogranaceae*** Jaklitsch & Voglmayr

*Nigrograna* Gruyter, Verkley & Crous (19)

***Occultibambusaceae*** D.Q. Dai & K.D. Hyde

*Brunneofusispora* S.K. Huang & K.D. Hyde (4)

*Neooccultibambusa* Doilom & K.D. Hyde (6)

*Occultibambusa* D.Q. Dai & K.D. Hyde (8)

*Seriascoma* Phook., D.Q. Dai & K.D. Hyde (2)

*Versicolorisporium* Sat. Hatak., Kaz. Tanaka & Y. Harada (1)

***Ohleriaceae*** Jaklitsch & Voglmayr

*Ohleria* Fuckel (13)

***Parabambusicolaceae*** Kaz. Tanaka & K. Hiray.

*Aquastroma* Kaz. Tanaka & K. Hiray. (1)

*Lonicericola* Phookamsak, Jayasiri & K.D. Hyde (1)  
*Multilocularia* Phook. (1)  
*Multiseptospora* Phook. & K.D. Hyde (2)  
*Neoquastroma* Wanas., E.B.G. Jones & K.D. Hyde (3)  
*Parabambusicola* Kaz. Tanaka & K. Hiray. (3)  
*Paramonodictys* N.G. Liu, K.D. Hyde & J.K. Liu (1)  
*Paratrimmatostroma* Jayasiri, Phookamsak, D.J. Bhat & K.D. Hyde (1)  
*Pseudomonodictys* Doilom, Ariyaw., Bhat & K.D. Hyde (1)

***Paradictyarthrinaceae*** Doilom, Ariyaw., Bhat & K.D. Hyde  
*Paradictyarthrinium* Matsush. (4)  
*Xenomassariosphaeria* Jayasiri, Wanas. & K.D. Hyde (1)

***Paralophiostomataceae*** V.V. Sarma & M. Niranjan.  
*Paralophiostoma* V.V. Sarma & M. Niranjan (1)

***Parapyrenochaetaceae*** Valenz.-Lopez, Crous, Stchigel, Guarro & Cano  
*Parapyrenochaeta* Valenz.-Lopez, Crous, Stchigel, Guarro & Cano (2)  
*Quixadomyces* Cantillo & Gusmão (1)

***Periconiaceae*** Nann.  
*Bambusistroma* D.Q. Dai & K.D. Hyde (1)  
*Flavomyces* D.G. Knapp, Kovács, J.Z. Groenew. & Crous (1)  
*Noosia* Crous, R.G. Shivas & McTaggart (1)  
*Periconia* Tode (45)

***Phaeoseptaceae*** S. Boonmee, Thambugala & K.D. Hyde  
*Phaeoseptum* Ying Zhang, J. Fourn. & K.D. Hyde (6)  
*Pleopunctum* N.G. Liu, K.D. Hyde & J.K. Liu (3)

***Phaeosphaeriaceae*** M.E. Barr  
*Acericola* Wanas., Camporesi, E.B.G. Jones & K.D. Hyde (1)  
*Alloneottiosporina* Nag Raj (3)\*  
*Allophaeosphaeria* Ariyaw., Camporesi & K.D. Hyde (3)  
*Amarenographium* O.E. Erikss. (4)  
*Amarenomyces* O.E. Erikss. (2)  
*Ampelomyces* Ces. ex Schltdl. (ca. 5)  
*Aphanostigme* Syd. (21)  
*Arezzomyces* Y. Marín & Crous (1)  
*Banksiophoma* Crous (1)  
*Bhagirathimyces* S.M. Singh & S.K. Singh (1)  
*Bhatiellae* Wanas., Camporesi & K.D. Hyde (1)  
*Bricookea* M.E. Barr (1)  
*Brunneomurisporea* Phookamsak, Wanas. & K.D. Hyde (1)  
*Camarosporioides* W.J. Li & K.D. Hyde (1)  
*Chaetosphaeronema* Moesz (7)  
*Dactylidina* Wanas., Camporesi & K.D. Hyde (2)  
*Dematiopleospora* Wanas., Camporesi, E.B.G. Jones & K.D. Hyde (8)  
*Didymocyrtis* Vain. (27)  
*Dlhawksworthia* Wanas., Camporesi & K.D. Hyde (3)  
*Edenia* M.C. González, A.L. Anaya, Glenn, Saucedo & Hanlin (2)  
*Elongaticollum* D.S. Tennakoon, C.H. Kuo & K.D. Hyde (1)\*

*Embarria* Wanas., Camporesi & K.D. Hyde (1)  
*Equiseticola* Wanas., Camporesi, E.B.G. Jones & K.D. Hyde (1)  
*Eudarluca* Speg. (8)  
*Galiicola* Tibpromma, Camporesi & K.D. Hyde (3)  
*Hydeomyces* Maharachch., H.A. Ariyaw., Wanas. & Al-Sadi (1)  
*Italica* Wanas., Camporesi & K.D. Hyde (2)  
*Jeremyomyces* Crous & R.K. Schumach. (1)  
*Juncaceicola* Tennakoon, Camporesi, Phook. & K.D. Hyde (8)  
*Kwanghwana* Karun., C.H. Kuo & K.D. Hyde (1)  
*Lautitia* S. Schatz (1)  
*Longispora* Phukhams. & K.D. Hyde (1)  
*Loratospora* Kohlm. & Volkm.-Kohlm. (1)  
*Mauginiella* Cavara (1)  
*Megacoelomyces* Dianese, Guterres, M.D.M. Santos & G.F. Sepúlveda (1)\*  
*Melnikia* Wijayaw., Goonas., Bhat & K.D. Hyde (1)  
*Murichromolaenicola* Mapook & K.D. Hyde (2)  
*Muriphaeosphaeria* Phukhams., Bulgakov & K.D. Hyde (3)  
*Neophiobolus* Mapook & K.D. Hyde (1)  
*Neosetophoma* Gruyter, Aveskamp & Verkley (14)  
*Neosphaerellopsis* Crous & Trakun. (10)  
*Neostagonospora* Quaedvl., Verkley & Crous (6)  
*Neostagonosporella* C.L. Yang, X.L. Xu & K.D. Hyde (1)  
*Neosulcatispora* Crous & M.J. Wingf. (2)  
*Nodulosphaeria* Rabenh. (52)  
*Ophiobolopsis* Phook., Wanas. & K.D. Hyde (1)  
*Ophiobolus* Riess (350)  
*Ophiosimulans* Tibpromma, Camporesi & K.D. Hyde (1)  
*Ophiosphaerella* Speg. (10)  
*Paraleptospora* Mapook & K.D. Hyde (2)  
*Paraloratospora* Bundhun, Tennakoon, Phook. & K.D. Hyde (2)  
*Paraophiobolus* Phook., Wanas. & K.D. Hyde (2)  
*Paraphoma* Morgan-Jones & J.F. White (8)  
*Parastagonospora* Quaedvl., Verkley & Crous (ca. 10)  
*Parastagonosporella* M. Bakhshi, Arzanlou & Crous (1)  
*Phaeopoacea* Thambug., Dissan. & K.D. Hyde (3)  
*Phaeoseptoriella* Crous (1)  
*Phaeosphaeria* I. Miyake (= *Phaeoseptoria* Speg. fide Honsanan 2020) (ca. 95)  
*Phaeosphaeriopsis* M.P.S. Câmara, M.E. Palm & A.W. Ramaley (12)  
*Phaeostagonospora* A.W. Ramaley (1)  
*Piniphoma* Crous & R.K. Schumach. (1)  
*Poaceicola* W.J. Li, Camporesi, Bhat & K.D. Hyde (10)  
*Populocrescentia* Wanas., E.B.G. Jones & K.D. Hyde (3)  
*Pseudoophiobolus* Phook., Wanas. & K.D. Hyde (8)  
*Pseudoophiosphaerella* J.F. Zhang, J.K. Liu & Z.Y. Liu (1)  
*Pseudophaeosphaeria* Jayasiri, Camporesi & K.D. Hyde (1)  
*Pseudostaurosphaeria* Mapook & K.D. Hyde (2)  
*Sclerostagonospora* Höhn. (ca. 15)  
*Scolicosporium* Lib. ex Roum. (13)  
*Septoriella* Oudem. (= *Wojnowicia* Sacc.) (21)  
*Setomelanomma* M. Morelet (1)  
*Setophoma* Gruyter, Aveskamp & Verkley (6)  
*Sulcispora* Shoemaker & C.E. Babcock. (2)

*Tiarospora* Sacc. & Marchal (3)  
*Tintelnotia* S.A. Ahmed, Hofmüller, M. Seibold & de Hoog (2)  
*Vagicola* K.W.T. Chethana & K.D. Hyde (5)  
*Vittaliana* Devadatha, Nikita, A. Baghela & V.V. Sarma (1)  
*Vrystaatia* Quaedvl., W.J. Swart, Verkley & Crous (1)  
*Wingfieldomyces* Y. Marín & Crous (1)  
*Wojnowiciella* Crous, Hern.-Restr. & M.J. Wingf. (9)  
*Xenophaeosphaeria* Crous & M.J. Wingf. (1)  
*Xenophoma* Crous & Trakun. (1)  
*Xenoseptoria* Quaedvl., H.D. Shin, Verkley & Crous (1)  
*Yunnanensis* Karun., Phook. & K.D. Hyde (1)

***Pleomassariaceae* M.E. Barr**

*Beverwykella* Tubaki (3)  
*Lichenopyrenis* Calat., Sanz & Aptroot (1)  
*Myxocyclus* Riess (1)  
*Peridiothelia* D. Hawksw. (3)  
*Prosthemium* Kunze (ca. 8)  
*Splanchnonema* Corda (37)

***Pleomonodictydaceae* Hern.-Restr., J. Mena & Gené**

*Pleomonodictys* Hern.-Restr., J. Mena & Gené (2)  
*Pleohelicoon* Jayasiri, E.B.G. Jones & K.D. Hyde (2)

***Pleosporaceae* Nitschke**

*Allonecta* Syd. (3)  
*Alternaria* Nees (ca. 360)  
*Bipolaris* Shoemaker (69)  
*Clathrospora* Rabenh. (20)  
*Comoclathris* Clem. (30)  
*Curvularia* Boedijn (119)  
*Decorospora* Inderb., Kohlm. & Volkm.-Kohlm. (1)  
*Diademosa* Shoemaker & C.E. Babc. (4)  
*Dichotomophthora* Mehrl. & Fitzp. ex P.N. Rao (6)  
*Exserohilum* K.J. Leonard & Suggs (ca. 30)  
*Extrawettsteinina* M.E. Barr (4)  
*Gibbago* E.G. Simmons (1)\*  
*Johnalcornia* Y.P. Tan & R.G. Shivas (1)  
*Paradendryphiella* Woudenberg & Crous (2)  
*Platysporoides* (Wehm.) Shoemaker & C.E. Babc. (11)  
*Pleoseptum* A.W. Ramaley & M.E. Barr (1)  
*Porocercospora* Amaradasa, Amundsen, Madrid & Crous (1)  
*Prathoda* Subram. (2)  
*Pseudoyuconia* Lar.N. Vassiljeva (1)  
*Pyrenophora* Fr. (= *Marielliotia* Shoemaker) (ca. 95)  
*Stemphylium* Wallr. (ca. 96)  
*Tamaricicola* Thambug., Camporesi & K.D. Hyde (1)  
*Typhicola* Crous (1)

***Pseudoastrosphaeriellaceae* Phook. & K.D. Hyde**

*Carinispora* K.D. Hyde (2)  
*Pseudoastrosphaeriella* Phook., Z.L. Luo & K.D. Hyde (7)

*Pseudoastrosphaeriellopsis* Devadatha, Wanas., Jeewon & V.V. Sarma (1)

***Pseudoberkleasmiaceae*** Phukhams. & K.D. Hyde  
*Pseudoberkleasium* Tibpromma & K.D. Hyde (1)

***Pseudocoleodictyosporaceae*** Doilom & K.D. Hyde  
*Pseudocoleodictyospora* Doilom & K.D. Hyde (3)  
*Subglobosporium* Doilom & K.D. Hyde (1)

***Pseudolophiotremataceae*** K.D. Hyde & Hongsanan  
*Clematidis* Tibpromma, Camporesi & K.D. Hyde (1)  
*Pseudolophiotrema* A. Hashim. & Kaz. Tanaka (1)

***Pseudomassarinae*** Phukhams & K.D. Hyde  
*Pseudomassarina* Phukhams. & K.D. Hyde (1)

***Pseudopyrenochaetaceae*** Valenz.-López, Crous, Stchigel, Guarro & J.F. Cano  
*Pseudopyrenochaeta* Valenzuela-López, Crous, Stchigel, Guarro & Cano (2)

***Pyrenochaetopsidaceae*** Valenz.-López, Crous, Cano, Guarro & Stchigel  
*Neopyrenochaetopsis* Valenz-López, Cano, Guarro & Stchigel (1)  
*Pyrenochaetopsis* Gruyter, Aveskamp & Verkley (7)  
*Xenopyrenochaetopsis* Valenz.-Lopez, Crous, Stchigel, Guarro & Cano (1)

***Roussoellaceae*** Jian K. Liu, Phook., D.Q. Dai & K.D. Hyde  
*Appendispora* K.D. Hyde (2)  
*Cytoplea* Bizz. & Sacc. (5)  
*Elongatopedicellata* Jin F. Zhang, Jian K. Liu, K.D. Hyde & Zi Y. Liu (1)  
*Immotthia* M.E. Barr (2)  
*Neoroussoella* Jian K. Liu, Phook. & K.D. Hyde (7)  
*Pararoussoella* Wanas., E.B.G. Jones & K.D. Hyde (3)  
*Pseudoneoconiothyrium* Wanas., Phukhams., Camporesi & K.D. Hyde (1)  
*Pseudoroussoella* Mapook & K.D. Hyde (2)  
*Roussoella* Sacc. (38)  
*Roussoellopsis* I. Hino & Katum. (3)  
*Setoarthopyrenia* Mapook & K.D. Hyde (1)  
*Xenoroussoella* Mapook & K.D. Hyde (1)

***Salsugineaceae*** K.D. Hyde & Tibpromma  
*Acrocordiopsis* Borse & K.D. Hyde (2)  
*Salsuginea* K.D. Hyde (3)

***Shiraiaceae*** Y.X. Liu, Zi Y. Liu & K.D. Hyde  
*Grandigallia* M.E. Barr, Hanlin, Cedeño, Parra & R. Hern. (1)  
*Neoshiraia* H.A. Ariyaw. (2)\*  
*Rubroshiraia* D.Q. Dai & K.D. Hyde (1)  
*Shiraia* Henn. (1)

***Sporormiaceae*** Munk  
*Chaetopreussia* Locq.-Lin. (1)  
*Forliomyces* Phukhams., Camporesi & K.D. Hyde (1)  
*Pleophragmia* Fuckel (1)

*Preussia* Fuckel (51)  
*Sparticola* Phukhams., Ariyaw., Camporesi & K.D. Hyde (4)  
*Sporormia* De Not. (29)  
*Sporormiella* Ellis & Everh.  
*Sporormurispora* Wanas., Bulgakov, Gafforov & K.D. Hyde (2)  
*Trichophoma* Magaña-Dueñas, Cano & Stchigel (1)\*  
*Westerdykella* Stolk (50)  
*Xenomonodictys* Hern.-Restr., Karimi, Alizadeh & T. Ghanbary (1)\*

***Striatiguttulaceae*** S.N. Zhang, K.D. Hyde & J.K. Liu  
*Longicorpus* S.N. Zhang, K.D. Hyde & J.K. Liu (1)  
*Striatiguttula* S.N. Zhang, K.D. Hyde & J.K. Liu (2)

***Sulcatisporaceae*** Kaz. Tanaka & K. Hiray.  
*Anthosulcatispora* Phukhams. & K.D. Hyde (2)  
*Loculosulcatispora* G.C. Ren & K.D. Hyde (1)\*  
*Magnicamarosporium* Kaz. Tanaka & K. Hiray. (2)  
*Neobambusicola* Crous & M.J. Wingf. (2)  
*Parasulcatispora* Phukhams. & K.D. Hyde (1)  
*Pseudobambusicola* Hern.-Restr. & Crous (1)  
*Sulcatispora* Kaz. Tanaka & K. Hiray. (2)

***Teichosporaceae*** M.E. Barr  
*Asymmetrispora* Thambug. & K.D. Hyde (2)  
*Aurantiascoma* Thambug. & K.D. Hyde (1)  
*Chaetomastia* (Sacc.) Berl. (10)  
*Erichansenia* S.Y. Kondr., Kärnefelt & A. Thell (3)\*  
*Floricola* Kohlm. & Volkm.-Kohlm. (2)  
*Lendemeriella* S.Y. Kondr. (9)  
*Loculohypoxylon* M.E. Barr (1)  
*Magnibotryasca* Thambug. & K.D. Hyde (2)  
*Misturatosphaeria* Mugambi & Huhndorf (2)  
*Paulkirkia* Wijayaw., Wanas., Tangthir., Camporesi & K.D. Hyde (1)  
*Pisutiella* S.Y. Kondr., Lökös & Farkas (6)\*  
*Pseudoaurantiascoma* Thambug. & K.D. Hyde (1)  
*Pseudocyclothyriella* Phukhams. & Phookamsak (1)\*  
*Pseudomisturatosphaeria* Thambug. & K.D. Hyde (1)  
*Ramusculicola* Thambug. & K.D. Hyde (1)  
*Sinodidymella* J.Z. Yue & O.E. Erikss. (5)  
*Teichospora* Fuckel (35)

***Testudinaceae*** Arx  
*Angustospora* Abdel-Aziz (1)  
*Halotestudina* Dayar. & K.D. Hyde (1)\*  
*Lepidosphaeria* Parg.-Leduc (1)  
*Lojkania* Rehm (10)  
*Montanitestudina* Maharachch., Wanas. & Al-Sadi (1)\*  
*Muritestudina* Wanas., E.B.G. Jones & K.D. Hyde (1)  
*Neotestudina* Segretain & Destombes (3)  
*Testudina* Bizz. (1)  
*Ulospora* D. Hawksw., Malloch & Sivan. (1)  
*Verruculina* Kohlm. & Volkm.-Kohlm. (1)

***Tetraplosphaeriaceae*** Kaz. Tanaka & K. Hiray

*Aquatisphaeria* W.L. Li, N.G. Liu & Jian K. Liu (1)\*

*Byssolophis* Clem. (1)\*

*Ernakulamia* Subram. (4)

*Polyplosphaeria* Kaz. Tanaka & K. Hiray. (5)

*Pseudotetraploa* Kaz. Tanaka & K. Hiray. (3)

*Quadricrura* Tanaka, K. Hiray. & Sat. Hatak. (3)

*Shrungabeeja* V.G. Rao & K.A. Reddy (6)

*Tetraploa* Berk. & Broome (21)

*Triplosphaeria* Kaz. Tanaka & K. Hiray (4)

***Thyridariaceae*** Q. Tian & K.D. Hyde

*Chromolaenomyces* Mapook & K.D. Hyde (1)

*Cycasicola* Wanas., E.B.G. Jones & K.D. Hyde (2)

*Liua* Phookamsak & K.D. Hyde (1)

*Parathyridaria* Jaklitsch & Voglmayr (5)

*Parathyridariella* Prigione, A. Poli, E. Bovio & Varese (1)\*

*Pseudothyridariella* Mapook & K.D. Hyde (1)

*Thyridaria* Sacc. (52)

*Thyridariella* Devadatha, V.V. Sarma, K.D. Hyde, Wanas. & E.B.G Jones (2)

***Torulaceae*** Corda

*Cylindrotorula* Rajeshkumar, Wijayaw. & Bhat (1)

*Dendryphion* Wallr. (67)

*Neotorula* Ariyaw., Z.L. Luo & K.D. Hyde (2)

*Rostriconidium* Z.L. Luo, K.D. Hyde & H.Y. Su (2)

*Rutola* J.L. Crane & Schokn. (1)

*Sporidesmioides* Jun F. Li, Phook. & K.D. Hyde (1)

*Torula* Pers. (12)

***Trematosphaeriaceae*** K.D. Hyde, Y. Zhang ter, Suetrong & E.B.G. Jones

*Bryosphaeria* Döbbeler (9)

*Falciformispora* K.D. Hyde (5)

*Fuscosphaeria* D.G. Knapp & Pintye (1)\*

*Hadrospora* Boise (2)

*Halomassarina* Suetrong, Sakay., E.B.G. Jones, Kohlm., Volkm.-Kohlm. & C.L. Schoc (1)

*Raghukumaria* Devadatha, V.V Sarma & E.B.G Jones (1)

*Trematosphaeria* Fuckel (20)

***Tzeananiaceae*** H.A. Ariyaw., A.J.L. Phillips & Chuang

*Tzeanania* H.A. Ariyaw., A.J.L. Phillips & Chuang (1)

***Wicklowiaceae*** Ariyaw. & K.D. Hyde

*Wicklowia* Raja, A. Ferrer & Shearer (3)

***Zopfiaceae*** G. Arnaud ex D. Hawksw.

*Celtidia* J.M. Janse (1)

*Coronopapilla* Kohlm. & Volkm.-Kohlm. (2)

*Rechingeriella* Petr. (2)

*Richonia* Boud. (1)

*Zopfia* Rabenh. (5)

*Zopfiofoveola* D. Hawksw. (1)

***Pleosporales*** genera *incertae sedis*

- Acuminatispora* S.N. Zhang, K.D. Hyde & J.K. Liu (1)  
*Antealophiotrema* A. Hashim. & Kaz. Tanaka (1)  
*Ascorhombispora* L. Cai & K.D. Hyde (1)  
*Atracidymella* Davey & Currah (1)  
*Bactrodesmium* Cooke (ca. 50)  
*Briansuttonia* R.F. Castañeda, Minter & Saikawa (1)  
*Camarographium* Bubák (7)  
*Chaetodiplodia* P. Karst. (9)  
*Chaetophoma* Cooke (ca. 30)  
*Cheiromoniliophora* Tzean & J.L. Chen (4)  
*Cyclothyrium* Petr. (2)  
*Dangeardiella* Sacc. & P. Syd. (2)  
*Daruvedia* Dennis (1)  
*Dokmaia* I. Promputtha (1)  
*Farasanispora* Abdel-Wahab, Bahkali & E.B.G. Jones (1)  
*Fusiformiseptata* W. Dong, H. Zhang & K.D. Hyde (1)\*  
*Glaxoa* P.F. Cannon (1)  
*Hobus* Jaklitsch & Voglmayr (1)  
*Homostegia* Fuckel (2)\*  
*Inflatipora* Y. Zhang ter, J. Fourn. & K.D. Hyde (2)  
*Isthmosporella* Shearer & J.L. Crane (1)  
*Megacapitula* J.L. Chen & Tzean (1)  
*Megatomentella* D.A.C. Almeida, Gusmão & A.N. Mill. (1)  
*Neocurreya* Thambug. & K.D. Hyde (5)  
*Ostropella* (Sacc.) Höhn. (5)  
*Paraepicoccum* Matsush. (1)  
*Paraliomyces* Kohlm. (1)  
*Parameliola* Hongsanan, Peršoh & K.D. Hyde (2)  
*Perthomyces* Crous (1)  
*Phialophorophoma* Linder (1)  
*Pleosphaerellula* Naumov & Czerepan. (2)  
*Pseudohendersonia* Crous & M.E. Palm (2)  
*Pyrenochaeta* De Not. (ca. >50)  
*Rebentischia* P. Karst. (16)  
*Repetophragma* Subram. (38)  
*Scleroramularia* Batzer & Crous (6)  
*Setophaeosphaeria* Crous & Y. Zhang ter (6)  
*Sirodesmium* De Not. (ca. 25)  
*Spiroplana* Voglmayr, M.J. Park & H.D. Shin (1)  
*Stuartella* Fabre (6)  
*Xenolophium* Syd. (7)

***Pleosporomycetidae*** genus *incertae sedis*

- Hysterographium* Corda (3)

***Dothideomycetes*** orders *incertae sedis*

- Abrothallales*** Pérez-Ort. & Suija [= *Lichenoconiales* Diederich, Lawrey & K.D. Hyde]  
***Lichenoconiaceae*** Diederich & Lawrey  
*Abrothallus* De Not (= *Epinephroma* Zhurb.; *Vouauxiomyces* Dyko & D. Hawks.) (43)  
*Lichenonium* Petr. & Syd. (15)



***Acrospermales*** Minter, Peredo & A.T. Watson

***Acrospermaceae*** Fuckel

*Acrospermum* Tode (12)

*Gonatophragmium* Deighton (8)

*Oomyces* Berk. & Broome (10)

*Pseudoacrospermum* Crous (1)\*

***Acrospermales*** genus *incertae sedis*

*Pseudovirgaria* H.D. Shin, U. Braun, Arzanlou & Crous (2)

***Asterinales*** M.E. Barr ex D. Hawksw. & O.E. Erikss. (= *Asterotexales* Firmino)

***Asterinaceae*** Hansf.

*Asterina* Lév. (ca. 1085)

*Asterinella* Theiss. (ca. 39)

*Asterolibertia* G. Arnaud (ca. 30)

*Asterostomella* Speg. (87)

*Batistinula* Arx (1)

*Cirsosia* G. Arnaud (18)

*Dothidasteromella* Höhn. (11)\*

*Echidnodella* Theiss. & Syd. (35)

*Halbania* Racib. (3)

*Meliolaster* Höhn. (3)

*Parasterinopsis* Bat. (3)

*Platypeltella* Petr. (3)

*Prillieuxina* G. Arnaud (66)

*Schenckiella* Henn. (1)

*Trichasterina* G. Arnaud (11)

*Trichopeltospora* Bat. & Cif. (2)

*Uleothyrium* Petr. (3)

*Vizellopsis* Bat., J.L. Bezerra & T.T. Barros (1)

***Asterotexaceae*** Firmino, O.L. Pereira & Crous

*Asterotexis* Arx (2)

***Cylindrohyalosporaceae*** Tennakoon, C.H. Kuo, S. Hongsanan & K.D. Hyde

*Cylindrohyalospora* Tennakoon, C.H. Kuo & K.D. Hyde (1)

***Hemigraphaceae*** D.Q. Dai & K.D. Hyde

*Hemigrapha* (Müll. Arg.) D. Hawksw. (9)

***Lembosiaceae*** Hosag.

*Lembosia* Lév (ca. 200)

*Marthomamyces* Lini K. Mathew, Jacob Thomas and Neeta N. Nair (1)

***Melaspilellaceae*** D.Q. Dai & K.D. Hyde

*Melaspilella* (P. Karst.) Vain. (1)

***Morenoinaceae*** Hongsanan & K.D. Hyde

*Morenoina* Theiss. (ca. 25)

***Neobuelliellaceae*** Hongsanan & K.D. Hyde\*

*Neobuelliella* Hongsanan & K.D. Hyde (1)\*

**Oblongohyalosporaceae** Tennakoon, C.H. Kuo, S. Hongsanan & K.D. Hyde

*Oblongohyalospora* Tennakoon, C.H. Kuo & K.D. Hyde (1)

**Stictographaceae** D.Q. Dai & K.D. Hyde

*Buelliella* Fink (12)

*Karschia* Körb. (4)

*Melaspileopsis* (Müll. Arg.) Ertz & Diederich (1)

*Labrocarpon* Etayo & Pérez-Ort. (1)

*Stictographa* Mudd (2)

**Asterinales** genera *incertae sedis*

*Andamanomyces* Hosag. (1)\*

*Caribaeomyces* Cif. (1)

*Caudella* Syd. & P. Syd. (2)

*Discopycnothyrium* Hongsanan & K.D. Hyde (1)

*Hazslinszkyia* Körb. (4)

*Inocyclus* Theiss. & Syd. (6)

*Melanographa* Müll. Arg. (1)

*Pirozynskiella* S. Hughes (3)

*Vishnumyces* Hosag. (1)

**Aulographales** Crous, Spatafora, Haridas & I.V. Grig.\*

**Aulographaceae** Luttr. ex P.M. Kirk, P.F. Cannon & J.C. David

*Aulographum* Lib. (ca. 30)

*Echidnodes* Theiss. & Syd. (31)

*Lembosiella* Sacc. (1)

*Thyriopsis* Theiss. & Syd. (3)

**Botryosphaeriales** C.L. Schoch, Crous & Shoemaker

**Aplosporellaceae** Slippers, Boissin & Crous

*Alanomyces* Sharma (1)

*Aplosporella* Speg. (= *Bagnisiella* Speg.) (10)

**Botryosphaeriaceae** Theiss. & H. Syd. (= *Endomelanconiopsidaceae* Tao Yang & Crous)

*Alanphillipsia* Crous & M.J. Wingf. (5)

*Barriopsis* A.J.L. Phillips, A. Alves & Crous (5)

*Botryobambusa* Phook., J.K. Liu & K.D. Hyde (2)

*Botryosphaeria* Ces. & De Not. (9)

*Cophinforma* Doilom, J.K. Liu & K.D. Hyde (2)

*Diplodia* Fr. (more than 1000 names in MycoBank, ca. 30 known from culture)

*Dothiorella* Sacc. (= *Spencermartinsia* A.J.L. Phillips, A. Alves & Crous 2008) (389 names in MycoBank, ca. 30 known from culture)

*Endomelanconiopsis* Rojas & Samuels (3)

*Eutiarosporella* Crous (7)

*Lasiodiplodia* Ellis & Everh. (37)

*Macrophomina* Petr. (4)

*Marasasiomyces* Crous (1)

*Mucoharknessia* Crous, R.M. Sánchez & Bianchin (2)

*Neodeightonia* Booth (8)

*Neofusicoccum* Crous, Slippers & A.J.L. Phillips (40)

*Neoscytalidium* Crous & Slippers (1)

*Oblongocollomyces* Tao Yang & Crous (1)

*Phaeobotryon* Theiss. & Syd. (8)  
*Sakireeta* Subram. & K. Ramakr. (1)  
*Sardiniella* Linaldeddu, A. Alves & A.J.L. Phillips (3)  
*Sphaeropsis* Sacc. (more than 600 names in MycoBank, 5 known from culture)  
*Tiarosporella* Höhn. (2)

***Melanopsaceae*** Phillips A.J.L., Slippers, Boissin & Crous  
*Melanops* Nitschke ex Fuckel (105 names in MycoBank, 4 known from culture)

***Phyllostictaceae*** Fr. (= *Pseudofusicoccumaceae* Tao Yang & Crous)  
*Phyllosticta* Pers. (ca. 53)  
*Pseudofusicoccum* Mohali, Slippers & M.J. Wingf. (9)

***Planistromellaceae*** M.E. Barr  
*Kellermania* Ellis & Everh. (ca. 16)  
*Umthunziomyces* Crous & M.J. Wingf. (1)

***Saccharataceae*** Slippers, Boissin & Crous (= *Septorioideaceae* Wyka & Broders)  
*Pileospora* Tanney & Seifert (1)  
*Saccharata* Denman & Crous (= *Neoseptorioides* Crous, Jacq. Edwards & Pascoe *fide* Hongsanan et al. 2020) (20)  
*Septorioides* Quaedvl., Verkley & Crous (2)

***Botryosphaeriales*** genera *incertae sedis*  
*Auerswaldiella* Theiss. & Syd. (7)  
*Coccostromella* Petr. (1)  
*Gibberidea* (Fr.) Rabenh. (ca. 11)\*  
*Mycosphaerellopsis* Höhn. (2)  
*Leptoguignardia* E. Müll. (1)  
*Metameris* Theiss. & Syd. (5)  
*Phyllachorella* Syd. (8)  
*Pilgeriella* Henn. (2)  
*Sivanesania* W.H. Hsieh & Chi Y. Chen (1)  
*Vestergrenia* Rehm (3)

***Catinellales*** Ekanayaka, K.D. Hyde & Ariyaw.  
***Catinellaceae*** Ekanayaka, K.D. Hyde & Ariyaw.  
*Catinella* Boud. (1 or 2)

***Cladoriellales*** Crous  
***Cladoriellaceae*** Crous  
*Cladoriella* Crous (5)

***Collemopsidiales*** Pérez-Ort., Garrido-Ben. & Grube  
***Xanthopyreniaceae*** Zahlbr.  
*Collemopsidium* Nyl. (27)  
*Didymellopsis* (Sacc.) Clem. & Shear (6)  
*Frigidopyrenia* Grube (1)  
*Rhagadodidymellopsis* Fern.-Brime, Gaya, Llimona & Nav.-Ros. (1)\*  
*Xanthopyrenia* Bachm. (4)  
*Zwackhiomacromyces* Etayo & van den Boom (2)  
*Zwackhiomyces* Grube & Hafellner (35)

**Coniosporiales** Crous, Spatafora, Haridas & I.V. Grig.\*  
**Coniosporiaceae** Crous, Spatafora, Haridas & I.V. Grig.\*  
*Coniosporium* Link (ca. 20)

**Dyfrolomycetales** K.L. Pang, K.D. Hyde & E.B.G. Jones  
**Pleurotremataceae** Walt. Watson  
*Dyfrolomyces* K.D. Hyde, K.L. Pang, Alias, Suetrong & E.B.G. Jones (8)  
*Melomastia* Nitschke ex Sacc. (4)  
*Pleurotrema* Müll. Arg. (1)

**Eremithallales** Lücking & Lumbsch  
**Melaspileaceae** W. Watson (= *Eremithallaceae* Lücking & Lumbsch)  
*Encephalographa* A. Massal. (2)  
*Melaspilea* Nyl. (= *Eremithallus* Lücking et al.) (4 + ca. 75 orphaned)

**Eremomycetales** Crous, Spatafora, Haridas & I.V. Grig.  
**Eremomycetaceae** Malloch & Cain  
*Eremomyces* Malloch & Cain (2)  
*Rhexothecium* Samson & Mouch (1)

**Eremomycetales** genus *incertae sedis*  
*Arthrographis* G. Cochet ex Sigler & J.W. Carmich. (12)  
**Holmiellales** Maharachch. & Wanas.\*  
**Holmiellaceae** Maharachch. & Wanas.\*  
*Holmiella* Petrini, Samuels & E. Müll. (4)\*

**Homortomycetales** Maharachch. & Wanas.\*  
**Homortomycetaceae** Thambug., A.J.L. Phillips & K.D. Hyde  
*Homortomyces* Crous & M.J. Wingf. (2)

**Jahnulales** K.L. Pang, Abdel-Wahab, El-Shar., E.B.G. Jones & Sivichai  
**Aliquandostipitaceae** Inderbitzin  
*Aliquandostipite* Inderbitzin (= *Patescospora* Abdel-Wahab & El-Sharouny *fide* Hongsanan et al. 2020) (7)  
*Ascagilis* K.D. Hyde (7)\*  
*Brachiosphaera* Nawawi (2)  
*Jahnula* Kirschst. (19)  
*Megalohypha* A. Ferrer & Shearer (1)  
*Neojahnula* W. Dong, H. Zhang & K.D. Hyde (1)\*  
*Pseudojahnula* W. Dong, H. Zhang & K.D. Hyde (1)\*  
*Xylomyces* Goos, R.D. Brooks & Lamore (8)

**Manglicolaceae** Suetrong & E.B.G. Jones  
*Manglicola* Kohlm. & E. Kohlm. (1)

**Kirschsteiniotheliales** Hern.-Restr., R.F. Castañeda, Gené & Crous  
**Kirschsteiniotheliaceae** Boonmee & K.D. Hyde  
*Kirschsteiniothelia* D. Hawksw. (29)  
**Kirschsteiniotheliales** genera *incertae sedis*  
*Brachysporiella* Bat. (15)  
*Taeniolella* S. Hughes *sensu lato*

**Lembosinales** Crous  
**Lembosinaceae** Crous  
*Lembosina* Theiss. (29)

**Lichenotheliales** K. Knudsen, Muggia & K.D. Hyde  
**Lichenotheliaceae** Henssen  
*Lichenothelia* D. Hawksw. (27)

**Microthyriales** G. Arnaud  
**Microthyriaceae** Sacc.  
*Arnaudiella* Petr. (12)  
*Calothyriopsis* Höhn. (4)  
*Chaetothyriothecium* Hongsanan & K.D. Hyde (1)  
*Hamatispora* L.T.H. Yen, K. Yamag. & K. Ando (1)  
*Microthyrium* Desm. (ca. 180)  
*Neoanungitea* Crous (1)  
*Nothoanungitopsis* Crous (1)\*  
*Paramicrothyrium* H.X. Wu & K.D. Hyde (1)  
*Pseudomicrothyrium* X.Y. Zeng, S. Hongsanan & K.D. Hyde (1)  
*Pseudopenidiella* Crous & Koukol (4)  
*Seynesiella* G. Arnaud (5)  
*Tumidispora* Hongsanan & K.D. Hyde (1)

**Microthyriales** genera *incertae sedis*  
*Heliocephala* V. Rao, K.A. Reddy & de Hoog (8)  
*Mitopeltis* Speg. (1)  
*Neoscolecobasidium* Crous (1)  
*Parazalerion* Madrid, Gené & Cano (1)  
*Thyriodictyella* Cif. (1)

**Minutisphaerales** Raja, Oberlies, Shearer & A.N. Mill.  
**Acrogenosporaceae** Jayasiri & K.D. Hyde  
*Acrogenospora* M.B. Ellis (12)

**Minutisphaeraceae** Raja, Oberlies, Shearer & A.N. Mill.  
*Minutisphaera* Shearer, A.N. Mill. & A. Ferrer (4)

**Monoblastiales** Lücking, M.P. Nelsen & K.D. Hyde  
**Monoblastiaceae** Walt. Watson  
*Acrocordia* A. Massal. (6)  
*Anisomeridium* (Müll. Arg.) M. Choisy (ca. 80)  
*Caprettia* Bat. & H. Maia (8)  
*Funbolia* Crous & Seifert (1)  
*Haudseptoria* Crous & R.K. Schumach. (1)\*  
*Heleiosa* Kohlm., Volkm.-Kohlm. & O.E. Erikss. (1)  
*Italiofungus* Crous (1)\*  
*Megalotremis* Aptroot (12)  
*Monoblastia* Riddle (11)  
*Neoheliosia* Mortimer (1)\*  
*Phellinocrescentia* Crous & Decock (1)  
*Pseudopassalora* Crous (1)  
*Trypetheliopsis* Asahina (6)

***Murramarangomycetales*** Crous  
***Murramarangomycetaceae*** Crous  
*Phaeothyriolum* Syd. (= *Murramarangomyces* Crous) (7)

***Muyocoprionales*** Mapook, Boonmee & K.D. Hyde  
***Muyocoprionaceae*** K.D. Hyde  
*Arxiella* Papendorf (3)  
*Leptodiscella* Papendorf (4)  
*Muyocopron* Speg. (51)  
*Muyocopromyces* G. Worobiec (1)\*  
*Mycoleptodiscus* Ostaz. (20)  
*Neocochlearomyces* Pinruan, Sommai, Suetrong, J.Z. Groenew. & Crous (1)  
*Neomycoleptodiscus* Hern.-Restr., J.D.P. Bezerra & Crous (2)  
*Paramycoleptodiscus* Crous & M.J. Wingf. (1)  
*Pseudopalawania* Mapook & K.D. Hyde (1)  
*Setoapiospora* Mapook & K.D. Hyde (1)

***Natipusillales*** Raja, Shearer, A.N. Mill. & K.D. Hyde  
***Natipusillaceae*** Raja, Shearer & A.N. Mill.  
*Natipusilla* A. Ferrer, A.N. Mill. & Shearer (4)

***Parmulariales*** D.Q. Dai & K.D. Hyde  
***Parmulariaceae*** E. Müll. & Arx ex M.E. Barr  
*Aldona* Racib. (3)  
*Aldonata* Sivan. & A.R.P. Sinha (1)  
*Antoniomyces* Inácio (1)  
*Aulacostroma* Syd. & P. Syd. (5)  
*Campoa* Speg. (4)  
*Cirsosiopsis* Butin & Speer (1)  
*Cocconia* Sacc. (13)  
*Cycloschizon* P. Henn. (13)  
*Cyclostomella* Pat. (4)  
*Dothidasteroma* Höhn. (4)  
*Ferrarisia* Sacc. (ca. 8)  
*Hysterostomella* Speg. (23)  
*Kiehlia* Viégas (2)  
*Mintera* Inácio & P.F. Cannon (1)  
*Pachypatella* Theiss. & Syd. (1)  
*Palawaniella* Doidge (7)  
*Parmularia* Lév. (6)  
*Parmulariopsella* Sivan. (1)  
*Parmulariopsis* Petr. (1)  
*Parmulina* Theiss. & Syd. (6)  
*Placoasterella* Sacc. ex Theiss. & Syd. (4)  
*Placosoma* Syd. (2)  
*Placostromella* Petr. (3)  
*Pleiostomellina* Bat., J.L. Bezerra & H. Maia (1)  
*Polycyclina* Theiss. & Syd. (1)  
*Polycyclus* Höhn. (2)  
*Protothyrium* G. Arnaud (4)  
*Pseudolembosia* Theiss. (4)  
*Rhagadolobiopsis* Guatim. & R.W. Barreto (1)

*Rhagadolobium* P. Henn. & Lindau (10)  
*Rhipidocarpon* (Theiss.) Theiss. & Syd. (1)  
*Symphaeophyma* Speg. (1)  
*Syrropeltis* Bat., J.L. Bezerra & Matta (1)  
*Thallomyces* H.J. Swart (1)  
*Viegasella* Inácio & P.F. Cannon (1)

***Patellariales*** D. Hawksw. & O.E. Erikss.

***Patellariaceae*** Corda

*Baggea* Auersw. (1)  
*Banhegyia* L. Zeller & Tóth (2)  
*Colensoniella* Hafellner (1)  
*Endotryblidium* Petr. (1)  
*Glyphium* Nitschke ex F. Lehm. (ca. 4)  
*Haematomyxa* Sacc (2)  
*Hysteropatella* Rehm (3)  
*Hysteropeltella* Petr. (1)  
*Lahmiomyces* Cif. & Tomas. (1)  
*Lecanidiella* Sherwood (1)  
*Lirellodisca* Aptroot (1)  
*Murangium* Seaver (1)  
*Patellaria* Fr. (12)  
*Poetschia* Körb. (4)  
*Pseudoparodia* Theiss. & Syd. (1)  
*Rimula* Velen. (1)  
*Schrakia* Hafellner (1)  
*Stratisporella* Hafellner (1)  
*Tryblidaria* (Sacc.) Rehm (9)

***Phaeotrichales*** Ariyaw., Jian K. Liu & K.D. Hyde

***Phaeotrichaceae*** Cain

*Echinoascotheca* Matsush. (1)  
*Phaeotrichum* Cain & M.E. Barr (2)  
*Trichodelitschia* Munk (4)

***Stigmatodiscales*** Voglmayr & Jaklitsch

***Stigmatodiscaceae*** Voglmayr & Jaklitsch

*Stigmatodiscus* Voglmayr & Jaklitsch (= *Asterodiscus* Voglmayr) (6)

***Strigulales*** Lücking, M.P. Nelsen & K.D. Hyde

***Strigulaceae*** Zahlbr. (= *Phyllobatheliaceae* Bitter & F. Schill. *fide* Hongsanan 2020)\*

*Dichoporis* Clem. (18)  
*Flagellostrigula* Lücking, S.H. Jiang & Sérus. (1)\*  
*Flavobathelium* Lücking, Aptroot & G. Thor (1)  
*Oletheriostrigula* Huhndorf & R.C. Harris (1)  
*Phyllobathelium* (Müll. Arg.) Müll. Arg. (5)  
*Phyllocharis* Fée (1)  
*Phyllocraterina* Sérus. & Aptroot (2)\*  
*Phylloporis* Clem. (9)  
*Puiggariella* Speg. (4)  
*Raciborskiella* Höhnelt (2)  
*Racoplaca* Fée (5)

*Serusiauxiella* S.H. Jiang, Lücking & J.C. Wei (3)\*

*Strigula* Fr. (ca. 30)

*Swinscowia* S.H. Jiang, Lücking & Sérus. (34)\*

***Tenuitholiascaceae*** S.H. Jiang, Lücking & J.C. Wei

*Tenuitholiascus* S.H. Jiang, Lücking & J.C. Wei. (1)

***Superstratomyces*** van Nieuwenh., Miadl., Houbraken, Adan, Lutzoni & Samson

***Superstratomyces*** van Nieuwenh., Miadl., Houbraken, Adan, Lutzoni & Samson

*Superstratomyces* van Nieuwenh., Miadl. & Samson (4)

***Trypetheliales*** Lücking Aptroot & Sipman.

***Polycoccaceae*** Ertz, Hafellner & Diederich

*Clypeococcum* D. Hawksw. (ca. 10)

*Polycoccum* Saut. ex Körb. (ca. 60)

***Trypetheliaceae*** Zenker (= *Arthopyreniaceae* Walt. Watson)\*

*Alloarthopyrenia* Phukhams Lücking & K.D. Hyde (1)

*Aptrootia* Lücking & Sipman (3)

*Architrypethelium* Aptroot (8)

*Astrothelium* Eschw. (= *Campylothelium* Müll.) (ca. 275)

*Bathelium* Ach. (16)

*Bogoriella* Zahlbr. (= *Distothelia* Aptroot\*; = *Novomicrothelia* Aptroot, M.P. Nelsen & Lücking\*) (29)

*Constrictolumina* Lücking, M.P. Nelsen & Aptroot (9)

*Dictyomeridium* Aptroot, M.P. Nelsen & Lücking (7)

*Julella* Fabre (ca. 20)

*Macroconstrictolumina* Lücking, R. Miranda & Aptroot (4)\*

*Marcelaria* Aptroot (= *Buscalionia* Sambo) (3)

*Nigrovothelium* Lücking, M.P. Nelsen & Aptroot (3)

*Polymeridium* (Müll. Arg.) R.C. Harris (51)

*Polypyrenula* D. Hawksw. (1)

*Pseudobogoriella* Lücking, R. Miranda & Aptroot (16)\*

*Pseudopyrenula* Müll. Arg. (21)

*Schummia* Lücking, R. Miranda & Aptroot (1)\*

*Trypethelium* Sprengel (16)

*Viridothelium* Lücking, M.P. Nelsen & Aptroot (11)

***Tubeufiales*** Boonmee & K.D. Hyde (= *Bezerromycetales* J.D.P. Bezerra; = *Wiesneriomycetales* J.D.P. Bezerra)

***Bezerromycetaceae*** J.D.P. Bezerra, Souza-Motta & Crous

*Bezerromyces* J.D.P. Bezerra, Souza-Motta & Crous (2)

*Neorhamphoria* Boonmee, Hüseyin & Selçuk (1)

*Xiliomyces* J.D.P. Bezerra, Souza-Motta & Crous (1)

***Tubeufiaceae*** M.E. Barr

*Acanthohelicospora* Boonmee & K.D. Hyde (4)

*Acanthophiobolus* Berl. (6)

*Acanthostigma* De Not. (64)

*Acanthostigmina* Höhn. (7)

*Acanthotubeufia* Y.Z. Lu & K.D. Hyde (1)

*Aquaphila* Goh, K.D. Hyde & W.H. Ho (2)



*Berkleasium* Zobel (ca. 40)  
*Bifrontia* Norman (2)  
*Boerlagiomyces* Butzin (9)  
*Camporesiomyces* D.P. Wei & K.D. Hyde (3)  
*Chaetosphaerulina* I. Hino (6)  
*Chlamydotubeufia* Boonmee & K.D. Hyde (8)  
*Dematiohelicoma* Y.Z. Lu, J.C. Kang & K.D. Hyde (2)  
*Dematiohelicomycetes* Y.Z. Lu, Boonmee & K.D. Hyde (1)  
*Dematiohelicosporium* Y.Z. Lu, J.K. Liu & K.D. Hyde (1)  
*Dematiotubeufia* Y.Z. Lu, Boonmee & K.D. Hyde (1)  
*Dictyospora* Brahaman., Y.Z. Lu, Boonmee & K.D. Hyde (1)  
*Discotubeufia* Jayasiri, E.B.G. Jones & K.D. Hyd. (1)  
*Helicangiospora* Boonmee, Bhat & K.D. Hyde (1)  
*Helicoarctatus* Y.Z. Lu, J.C. Kang & K.D. Hyde (1)  
*Helicodochium* J.S. Monteiro, R.F. Castañeda, A.C. Cruz & Gusmão (2)  
*Helicohyalinum* Y.Z. Lu, J.K. Liu & K.D. Hyde (2)  
*Helicoma* Corda (ca. 40)  
*Helicomycetes* Link (14)  
*Helicosporium* Nees (ca. 20)  
*Helicotruncatum* Y.Z. Lu, J.C. Kang & K.D. Hyde (1)  
*Helicotubeufia* Y.Z. Lu & J.K. Liu (3)  
*Kamalomyces* R.K. Verma, N. Sharma & Soni (5)  
*Kevinhydea* N.G. Liu, Y.Z. Lu & J.K. Liu (1)  
*Lichenotubeufia* Etayo (5)  
*Manoharachariella* Bagyan., N.K. Rao & Kunwar (4)  
*Muripulchra* Z.L. Luo, Hong Y. Su & K.D. Hyde (1)  
*Neoacanthostigma* Boonmee, Bhat & K.D. Hyde (8)  
*Neochlamydotubeufia* Y.Z. Lu, Boonmee & K.D. Hyde (2)  
*Neohelicoma* Y.Z. Lu, Boonmee & K.D. Hyde (1)  
*Neohelicomyces* Z.L. Luo, Bhat & K.D. Hyde (11)  
*Neohelicosporium* Y.Z. Lu, J.C. Kang & K.D. Hyde (24)  
*Neotubeufia* Chaiwan, Boonmee, Y.Z. Lu & K.D. Hyde (1)  
*Parahelicomyces* Goh (7)\*  
*Pleurohelicosporium* Y.Z. Lu, J.C. Kang & K.D. Hyde (1)  
*Podonectria* Petch (11)  
*Pseudohelicomyces* Y.Z. Lu, J.K. Liu & K.D. Hyde (5)  
*Pseudohelicoon* Y.Z. Lu & K.D. Hyde (2)  
*Tamhinispora* Rajeshkumar & Rahul Sharma (2)  
*Thaxteriella* Petr. (15)  
*Thaxteriellopsis* Sivan., Panwar & S.J. Kaur (3)  
*Tubeufia* Penz. & Sacc. (ca. 60)

***Wiesneriomycetaceae*** Suetrong, Rungjind., Somrith. & E.B.G. Jones

*Parawiesneriomyces* Crous & M.J. Wingf. (1)  
*Phalangispora* Nawawi & J. Webster (3)  
*Pseudogliophragma* Phadke & V.G. Rao (1)  
*Setosynnema* D.E. Shaw & B. Sutton (2)  
*Speiropsis* Tubaki (8)  
*Wiesneriomyces* Koord. (4)

***Valsariales*** Jaklitsch, K.D. Hyde & Voglmayr

***Valsariaceae*** Jaklitsch, K.D. Hyde & Voglmayr

*Bambusaria* Jaklitsch, D.Q. Dai, K.D. Hyde & Voglmayr (1)  
*Myrmaecium* Nitschke ex Fuckel (ca. 3)  
*Valsaria* Ces. & De Not. (140 epithets)\*

**Venturiales** Y. Zhang ter, C.L. Schoch & K.D. Hyde  
**Cylindrosympodiaceae** Crous, M. Shen & Y. Zhang ter  
*Cylindrosympodium* W.B. Kendr. & R.F. Castañeda (9)  
*Pseudoanungitea* Crous (3)  
*Septonema* Corda (ca. 15)  
*Sympodiella* W.B. Kendr. (5)  
*Tothia* Bat. (2)

**Sympoventuriaceae** Y. Zhang ter, C.L. Schoch & K.D. Hyde  
*Acroconidiellina* M.B. Ellis (4)  
*Bellamyces* Crous, M. Shen & Y. Zhang ter (1)\*  
*Clavatispora* Boonmee & K.D. Hyde (1)  
*Fuscohilum* Crous, M. Shen & Y. Zhang ter (2)\*  
*Fusicladium* Bonord. (75)  
*Matsushimaea* Subram. (4)  
*Mycosisymbrium* Carris (1)  
*Neofusicladium* Crous, M. Shen & Y. Zhang ter (3)  
*Ochroconis* de Hoog & Arx (28)  
*Parafusicladium* Crous, M. Shen & Y. Zhang ter (3)\*  
*Pinaceicola* Crous, M. Shen & Y. Zhang ter (2)\*  
*Scolecobasidium* E.V. Abbott (64)  
*Sterila* Crous, M. Shen & Y. Zhang ter (1)\*  
*Sympoventuria* Crous & Seifert (3)  
*Veronaeopsis* Arzanlou & Crous (1)  
*Verruconis* Samerp., H.J. Choi, van den Ende, Horré & de Hoog (4)  
*Yunnanomyces* Tibpromma & K.D. Hyde (1)

**Venturiaceae** E. Müll. & Arx ex M.E. Barr  
*Apiosporina* Höhn. (6)  
*Atopospora* Petr. (4)  
*Caproventuria* U. Braun (2)  
*Coleroa* (Fr.) Rabenh. (56)  
*Dimeriella* Speg. (51)  
*Dimerosporiopsis* Henn. (1)  
*Fagicola* Crous (1)\*  
*Fraxinicola* Crous (4)\*  
*Magnohelicospora* R.F. Castañeda, Hern.-Restr., Gené & Guarro (2)  
*Metacoleroa* Petr. (1)  
*Neocoleroa* Petr. (6)  
*Protoventuria* Berl. & Sacc. (45)  
*Pseudoparodiella* F. Stevens (1)  
*?Spilodochium* Syd. (4)  
*Tyrannosorus* Unter. & Malloch (1)  
*Venturia* Sacc. (ca. 60)

**Venturiales** genera *incertae sedis*  
*Cylindrosympodioides* Crous & M.J. Wingf. (1)\*  
*Lasiobotrys* Kunze (9)

***Zeloasperisporiales*** Hongsanan & K.D. Hyde  
***Zeloasperisporiaceae*** Crous  
*Zeloasperisporium* R.F. Castañeda (8)

***Dothideomycetes*** families *incertae sedis*  
***Alinaceae*** Boonmee & K.D. Hyde  
*Alina* Racib. (1)

***Argynnaceae*** Shearer & J.L. Crane  
*Argynna* Morgan (1)  
*Lepidopterella* Shearer & J.L. Crane (2)

***Ascoporiaceae*** Kutorga & D. Hawksw.  
*Ascoporia* Samuels & A.I. Romero (1)  
*Pseudosolidum* Lloyd (1)

***Balladynaceae*** Boonmee & K.D. Hyde  
*Balladyna* Racib. (41)  
*Balladynocallia* Bat. (3)  
*Balladynopsis* Theiss. & Syd. (10)  
***Cleistosphaeraceae*** Boonmee & K.D. Hyde  
*Cleistosphaera* Syd. & P. Syd. (1)

***Coccoideaceae*** P. Henn. ex Sacc. & D. Sacc.  
*Coccoidea* P. Henn. (4)  
*Coccoidella* Höhn. (9)  
*Englerodothis* Theiss. & Syd. (3)

***Cookellaceae*** Höhn. ex Saccardo & Trotter  
*Cookella* Sacc. (4)  
*Pycnoderma* Syd. & P. Syd. (2)

***Dimeriaceae*** E. Müll. & Arx ex Arx & E. Müll.  
*Dimerium* (Sacc. & P. Syd.) McAlpine (79)

***Dubujianaceae*** D. Pem, Doilom & K.D. Hyde  
*Dubujiana* D.R. Reynolds & G.S. Gilbert (1)\*

***Dysrhynchiscaeae*** Boonmee & K.D. Hyde  
*Dysrhynchis* Clem. (4)

***Endosporiaceae*** D. Pem  
*Endosporium* Tsuneda (2)\*  
*Gobabebomyces* Crous (1)\*  
***Englerulaceae*** P. Henn.  
*Allosoma* Syd. (5)  
*Digitosarcinella* S. Hughes (1)  
*Englerula* P. Henn. (13)  
*Goosia* B. Song (1)  
*Parenglerula* Höhn. (7)  
*Rhytidenglerula* Höhn. (11)  
*Sarcinella* Sacc. (ca. 70)

*Thrauste* Theiss. (3)

**Eriomycetaceae** Huanraluek & Hyde

*Eriomyces* Huanraluek, Thambug. & K.D. Hyde (1)

**Hyalomeliolinaceae** Boonmee & K.D. Hyde

*Hyalomeliolina* F. Stevens (2)

**Leptopeltidaceae** Höhn. ex Trotter

*Dothiopeltis* E. Müll. (2)

*Leptopeltis* Höhn. (13)

*Ronnigeria* Petr. (1)

*Staibia* Bat. & Peres (1)

**Macrovalsariaceae** D. Pem, Doilom & K.D. Hyde

*Macrovalsaria* Petr. (1)\*

**Meliolinaceae** S. Hughes

*Briania* D.R. Reynolds (1)

*Meliolina* Syd. & P. Syd. (ca. 40)

**Mesnieraceae** Arx & E. Müll.

*Bondiella* Piroz. (1)

*Mesniera* Sacc. & P. Syd. (1)

*Stegasphaeria* Syd. & P. Syd. (3)

**Naetrocymbaceae** Höhn. ex R.C. Harris

*Bonaria* Bat. (4)\*

*Jarxia* D. Hawksw. (2)

*Leptorhaphis* Körb. (14)

*Naetrocymbe* Körb. (1)

*Tomasellia* A. Massal. (ca. 5)

**Nematotheciaceae** Boonmee & K.D. Hyde

*Nematothecium* Syd. & P. Syd. (5)

*Nematostigma* Syd. & P. Syd. (5)

*Ophioparodia* Petr. & Cif. (1)

**Neoparodiaceae** Boonmee & K.D. Hyde

*Neoparodia* Petr. & Cif. (1)

**Palawaniaceae** Mapook & K.D. Hyde

*Palawania* Syd. & P. Syd. (2)

**Paranectriellaceae** S. Boonmee & K.D. Hyde

*Paranectriella* (Henn. ex Sacc. & D. Sacc.) Magnus. (= *Araneomyces* Höhn.) (9)

*Puttemansia* Henn. (18)

**Parodiellaceae** Theiss. & H. Syd. ex M.E. Barr

*Parodiella* Speg. (4)

**Perisporiopsidaceae** E. Müll. & Arx ex R. Kirschner & T.A. Hofm. (= *Parodiopsidaceae* Toro)

*Asteronia* (Sacc.) Henn. (2)\*

*Byssocallis* Syd. (3)\*

*Chevalieropsis* G. Arnaud (1)

*Parodiellina* Henn. ex G. Arnaud (1)

*Perisporiopsis* Henn. (22)

***Phaeodimeriaceae*** Boonmee, Mapook & K.D. Hyde

*Phaeodimeriella* Speg. (30)

***Pododimeriaceae*** Boonmee & K.D. Hyde

*Chaetoscutula* E. Müll. (1)

*Pododimeria* E. Müll. (4)

***Polyclypeolinaceae*** Boonmee & K.D. Hyde

*Polyclypeolina* Bat. & I.H. Lima (1)

***Polystomellaceae*** Theiss. & H. Syd.

*Dermatodothella* Viégas (1)

*Dothidella* Speg. (2)

*Munkiella* Speg. (3)

*Parastigmatia* Doidge (3)

***Protoscyphaceae*** Kutorga & D. Hawksw.

*Protoscypha* Syd. (2)

***Pseudoperisporiaceae*** Toro

*Bryomyces* Döbblers (12)

*Eudimeriolum* Speg. (8)

*Lasiostemma* Theiss. (5)

*Nematostoma* Syd. & P. Syd. (13)

***Pseudorobillardaceae*** Crous

*Pseudorobillarda* M. Morelet (19)

***Pyrenidiaceae*** Zahlbr.

*Pyrenidium* Nyl (1)

***Rhizodiscinaceae*** Crous\*

*Rhizodiscina* Hafellner (1)

***Seynesiopeltidaceae*** K.D. Hyde

*Seynesiopeltis* F. Stevens & R.W. Ryan (1)

***Stomatogeneaceae*** Boonmee & K.D. Hyde

*Stomatogene* Theiss. (3)

***Thyriulaceae*** X.Y. Zeng, Hongsan & K.D. Hyde

*Blastacervulus* H.J. Swart (4)

*Paraopeba* V.P. Abreu, A.A.M. Gomes, Firmino & O.L. Pereira (1)

*Thyriula* Petr. & Syd (5)

***Toroaceae*** Boonmee & K.D. Hyde

*Torora* Syd. (2)

***Trichopeltinaceae*** Bat., C.A.A. Costa & Cif.

*Acrogenotheca* Cif. & Bat. (3)

*Brefeldiella* Speg. (4)

*Saccardinula* Speg. (11)

*Trichopeltella* Höhn. (1)

*Trichopeltheca* Bat. (2)

*Trichopeltina* Theiss. (2)

*Trichothyridula* Petr. (2)

***Trichothyriaceae*** Theiss.

*Lichenopeltella* Höhn. (48)

*Macrographa* Etayo (1)

*Pachythyrium* G. Arnaud ex Spooner & P.M. Kirk (1)

*Trichothyrium* Speg. (12)

***Vizellaceae*** H.J. Swart

*Acarella* Syd.\* (3)

*Blasdalea* Sacc. & P. Syd. (1)

*Vizella* Sacc. (11)

***Dothideomycetes*** genera *incertae sedis*

*Acanthorus* Bat. & Cavalc. (1)

*Acanthostigmella* Höhn. (6)

*Achorella* Theiss. & Syd. (10)

*Actinomyxa* Syd. & P. Syd. (1)

*Alascospora* Raja, Violi & Shearer (1)

*Alysidiella* Crous (4)

*Ampullifera* Deighton (= *Teratoschaeta* Bat. & Fons.) (6)

*Anopeltis* Bat. & Peres (1)

*Arkoola* J. Walker & Stovold (1)

*Armata* W. Yamam. (1)

*Ascominuta* Ranghoo & K.D. Hyde (2)

*Asterodothis* Theiss. (1)

*Asteromassaria* Höhn. (12)

*Asteromella* Pass. & Thüm. (ca. 265)

*Asteroporum* Müll. Arg. (7)

*Auerswaldia* Sacc. (ca. 20)

*Bahusakala* Subram. (4)

*Botryohypoxylon* Samuels & J.D. Rogers (1)

*Brachyconidiella* R.F. Castañeda & W.B. Kendr. (1)

*Brooksia* Hansf. (1)

*Bryorella* Döbbeler (10)

*Bryostroma* Döbbeler (8)

*Bryothele* Döbbeler (2)

*Byssogene* Syd. (2)

*Callebaea* Bat. (1)

*Calyptra* Theiss. & Syd. (5)

*Capillatasporea* K.D. Hyde (1)

*Caryosporella* Kohlm. (1)

*Catulus* Malloch & Rogerson (1)

*Ceramoclasteropsis* Bat. & Cavalc. (2)  
*Ceratophoma* Höhn. (2)  
*Cercidospora* Körb. (101)  
*Cerodopsis* Muthappa (1)  
*Chaetocrea* Syd. (1)  
*Chaetosticta* Petr. & Syd. (3)  
*Chionomyces* Deighton & Piroz. (7)  
*Chuppia* Deighton (2)  
*Cilioplea* Munk (ca. 10)  
*Cirsosina* Bat. & J.L. Bezerra (2)  
*Clavariopsis* De Wild. (ca. 5)  
*Clypeostroma* Theiss. & Syd. (ca. 3)  
*Cocciscia* Norman (2)  
*Coccochora* Höhn. (4)  
*Coccochorina* Hara (2)  
*Coccodopsis* Theiss. & Syd. (2)  
*Comesella* Speg. (1)  
*Crauatamyces* Viégas (1)  
*Crotone* Theiss. & Syd. (1)  
*Cryomyces* Selbmann, de Hoog, Mazzaglia, Friedmann & Onofri (4)  
*Cyclothea* Theiss. (9)  
*Dactuliophora* C.L. Leakey (5)  
*Dawsomyces* Döbbeler (2)  
*Dawsophila* Döbbeler (3)  
*Dermatodopsis* Racib. ex Theiss. & Syd. (6)  
*Dianesea* Inácio & P.F. Cannon (1)  
*Dictyoasterina* Hansf. (1)  
*Dictyodochium* Sivan. (1)  
*Dictyopeltis* Theiss. (6)  
*Dictyostomiopelta* Viégas (1)  
*Dictyothyriella* Speg. (1)  
*Dictyothyria* Theiss. (1)  
*Dictyothyrium* Theiss. (2)  
*Didymocyrtidium* Vain. (2)\*  
*Didymolepta* Munk (2)  
*Didymopleella* Munk (3)  
*Diplochorina* Gutner (1)  
*Dothichiza* Lib. ex Roum. (15)  
*Dothideopsella* Höhn. (1, but more epithets exist)  
*Dothivalsaria* Petr. (1)  
*Dubitatio* Speg. (1)  
*Echinothecium* Zopf (2)  
*Elmerinula* Syd. (1)  
*Epibelonium* E. Müll. (1)  
*Eriomycopsis* Speg. (13)  
*Eriothyrium* Speg. (1, but more epithets exist)  
*Eupelte* Syd. (5)  
*Excipulariopsis* P.M. Kirk & Spooner (1)  
*Exiliseptum* R.C. Harris (1)  
*Extrusotheceum* Matsush. (2)  
*Gibbera* Fr. (ca. 28)  
*Gilletiella* Sacc. & P. Syd. (3)

*Globoa* Bat. & H. Maia (2)  
*Globulina* Speg. (1 *fide* Kirk et al. 2008)  
*Gloeodiscus* Dennis (1)  
*Govindua* Bat. & H. Maia (1)  
*Griggsia* F. Stevens & Dalbey (1)  
*Halokirschsteiniothelia* Boonmee & K.D. Hyde (1)  
*Hansfordiella* S. Hughes (8)  
*Hansfordiellopsis* Deighton (5)  
*Hansfordiopsis* Bat. (1)  
*Harknessiella* Sacc. (1)  
*Helminthopeltis* Sousa da Câmara (1)  
*Heptameria* Rehm & Thuem. (2)  
*Heptaster* Cif., Bat. & Nascim. (3)  
*Heterosphaeriopsis* Hafellner (1)  
*Hidakaea* I. Hino & Katum. (2)  
*Hyalocrea* Syd. & P. Syd. (4)  
*Hyaloscolecostroma* Bat. & J. Oliveira (1)  
*Hyalosphaera* F. Stevens (4)  
*Hyalotheles* Speg. (1)  
*Hypobryon* Döbbeler (7)  
*Hysteropsis* Rehm (4)  
*Isomunkia* Theiss. & Syd. (1)  
*Jaffuela* Speg. (1)  
*Kabatia* Bubák (ca. 10)  
*Keratosphaera* H.P. Upadhyay (6)  
*Kriegeriella* Höhn. (4)  
*Kullhemia* P. Karst. (2)  
*Kusanobotrys* P. Henn. (2)  
*Lanatosphaera* Matzer (2)  
*Lazarenkoa* Zerova (1)  
*Lembosiniella* Crous (2)  
*Lembosiopeltis* Bat. & J.L. Bezerra (2)  
*Leptomeliola* Höhn. (13)  
*Leptospora* Rabenh. (15)  
*Letendraeopsis* K.F. Rodriguez & Samuels (1)  
*Leveillina* Theiss. & Syd. (2)  
*Licopolia* Sacc., Syd. & P. Syd. (2)  
*Lignosphaeria* Boonmee, Thambug. & K.D. Hyde (2)  
*Limaciniopsis* Mend. (1)  
*Lineolata* Kohlm. & Volkm.-Kohlm. (1)  
*Linopeltis* I. Hino & Katum. (2)  
*Longiseptatispora* L.W. Hou & Crous (2)\*  
*Lophiella* Sacc. (1)  
*Lophionema* Sacc. (9)  
*Lucidascocarpa* A. Ferrer, Raja & Shearer (1)  
*Macowaniella* Doidge (2)  
*Maheshwaramyces* Hosag. (2)  
*Maireella* Syd. & Maire (ca. 5)  
*Malacaria* Syd. (2)  
*Manginula* G. Arnaud (ca. 5)  
*Marquesius* L.B. Conç., R.F. Castañeda & Gusmão (1)  
*Massariola* Fülling (2)



*Maublancia* G. Arnaud (1)  
*Melioliphila* Speg. (7)  
*Mendoziopeltis* Bat. (4)  
*Microcyclella* Theiss. (1)  
*Microdothella* Syd. & P. Syd. (2)  
*Monoblastiopsis* R.C. Harris & C.A. Morse (2)  
*Monodictys* S. Hughes (ca. 50)  
*Monorhizina* Theiss. & Syd. (1)  
*Montagnella* Speg. (9)  
*Moriolomyces* Cif. & Tomas. (1)  
*Muricopeltis* Viégas (1)  
*Muroia* I. Hino & Katum. (1)  
*Mycocryptospora* J. Reid & C. Booth (1)  
*Mycodidymella* C.Z. Wei, Y. Harada & Katum. (1)  
*Mycoglaena* Höhn. (16)  
*Mycoporellum* Müll. Arg. (7)  
*Mycoporopsis* Müll. Arg. (ca. 10)  
*Mycothyridium* Petr. (30)  
*Myriangiopsis* P. Henn. (2)  
*Myriostigmella* G. Arnaud (1)  
*Mytilostoma* P. Karst. (2)  
*Myxophora* Döbbeler & Poelt (7)  
*Neodactylaria* Guevara-Suarez, Deanna A. Sutton, Wiederh. & Gené (1)  
*Neopeckia* Sacc. (17)  
*Neosporidesmium* Mercado & J. Mena (15)  
*Neothyriopsis* Crous (1)\*  
*Neottiosporina* Subram. (11)  
*Neoventuria* Syd. & P. Syd. (1)  
*Ocala* Raja & Shearer (1)  
*Omphalospora* Theiss. & Syd. (2)  
*Oncopodiella* G. Arnaud ex Rifai (13)  
*Ophioirenina* Sawada & W. Yamam. (1)  
*Ophiotrichum* Kunze (2)  
*Othia* Nitschke ex Fuckel (11)  
*Parmulariella* P. Henn. (1)  
*Paropodia* Cif. & Bat. (1)  
*Passeriniella* Berl. (7)  
*Passerinula* Sacc. (1)  
*Pauahia* F. Stevens (1)  
*Peltaster* Syd. & P. Syd. (8)  
*Peltasterella* Bat. & H. Maia (1)  
*Pendulispora* M.B. Ellis (1)  
*Perischizon* P. Syd. (3)  
*Peroschaeta* Bat. & A.F. Vital (1)  
*Petrakina* Cif. (3)  
*Petrakiopeltis* Bat., A.F. Vital & Cif. (1)  
*Phacidina* Höhn. (1)  
*Phaeocyrtidula* Vain. (2)  
*Phaeopeltosphaeria* Berl. & Peglion (2)  
*Phaeosclera* Sigler, Tsuneda & J.W. Carmich. (1)  
*Phaeosperma* Nitschke ex Fuckel (1)  
*Phaeostigme* Syd. & P. Syd. (6)

*Phaeotomasellia* Katum. (1)  
*Phanerococculus* Cif. (1)  
*Philobryon* Döbbeler (1)  
*Philonectria* Hara (3)  
*Phragmaspidium* Bat. (3)  
*Phragmogibbera* Samuels & Rogerson (3)  
*Phragmoscutella* Woron. & Abramov ex Woron. (1)  
*Phragmosperma* Theiss. & Syd. (1)  
*Phycorella* Döbbeler (1)  
*Physalosporopsis* Bat. & H. Maia (1)  
*Pirozynskia* Subram. (1)  
*Placoasterina* Toro (1)  
*Placodothis* Syd. (1)  
*Placomelan* Cif. (1)  
*Placosphaeria* (De Not.) Sacc. (1, but several other epithets exist)  
*Plagiostromella* Höhn. (1)  
*Plejobolus* (E. Bommer) O.E. Erikss. (1 or 2 species)  
*Plenotrichaius* Bat. & Valle (1)  
*Pleomerium* Speg. (1)  
*Pleotrichiella* Sivan. (1)  
*Polycyclinopsis* Bat., A.F. Vital & I.H. Lima (1)  
*Polyrhizon* Theiss., Syd. & P. Syd. (2)  
*Polysporidiella* Petr. (1)  
*Polystomellopsis* F. Stevens (1)  
*Proliferosphaera* T.P. Devi (1)  
*Protographum* Le Renard, Upchurch, Stockey & Berbee (1)\*  
*Pseudoarthrographis* Crous & Thangavel (1)  
*Pseudomorfea* Punith. (1)  
*Pseudopleospora* Petr. (1)  
*Punctillum* Petr. & Syd. (1)  
*Pyrenobotrys* Theiss. & Syd. (1)  
*Pyrenochium* Link (1)  
*Pyrenocyclus* Petr. (1)  
*Pyrenostigme* Syd. (1)  
*Quasiphloeospora* B. Sutton, Crous & Shamoun (1)  
*Radulidium* Arzanlou, W. Gams & Crous (3)  
*Rhizotexis* Theiss. & Syd. (1)  
*Rhopoglyphus* Nitschke ex Fuckel (6)  
*Rosellinula* R. Sant. (4)  
*Rosenscheldia* Speg. (1)  
*Roumegueria* (Sacc.) P. Henn. (1)  
*Rupestriomyces* Lei Su, Li Y. Guo & Xing Z. Liu (3)  
*Sapucchaka* K. Ramakr. (2)  
*Saxomyces* L. Selbmann & D. Isola (2)  
*Scleroconidioma* Tsuneda, Currah & Thormann (1)  
*Scolecobonaria* Bat. (2)  
*Scolionema* Theiss. & Syd. (1)  
*Semisphaeria* K. Holm & L. Holm (1)  
*Septoidium* G. Arnaud (ca. 7)  
*Shivamyces* Hosag. (2)  
*Sivanesaniella* Gawande & D.K. Agarwal (1)  
*Solicorynespora* R.F. Castañeda & W.B. Kendr. (29)

*Soloacrosporiella* Crous & M.J. Wingf. (1)  
*Spissiomycetes* Lei Su (2)  
*Stegothyrium* Höhn. (2)  
*Stephanotheca* Syd. & P. Syd. (4)  
*Stigmatophragma* Tehon & G.L. Stout (1)  
*Symphaster* Theiss. & Syd. (1)  
*Taphrophila* Scheuer (4)  
*Teichosporella* (Sacc.) Sacc. (26)  
*Tetracrium* Henn. (7)  
*Thalassoascus* Ollivier (3)  
*Thryptospora* Petr. (1)  
*Tilakiella* Srinivas. (1)  
*Tomeoa* I. Hino (1)  
*Torulopsiella* Bender (2)  
*Trematosphaeriopsis* Elenkin (1)  
*Tretospora* M.B. Ellis (8)  
*Trichodothella* Petr. (1)  
*Trichodothis* Theiss. & Syd. (3)  
*Trichometasphaeria* Munk (8)  
*Trichothyriella* Theiss. (1)  
*Troposporella* P. Karst. (4)  
*Uredinophila* Rossman (2)  
*Wentiomycetes* Koord. (ca. 50)  
*Westea* H.J. Swart (1)  
*Wettsteinina* Höhn. (30)  
*Xenomeris* Syd. (11)  
*Xenosporium* Penz. & Sacc. (18)  
*Xenostomella* Syd. (2)  
*Xylopezia* Höhn. (ca. 3)  
*Yoshinagaia* Henn. (1)  
*Yoshinagella* Höhn. (4)

**Class Eurotiomycetes** Tehler ex O.E. Eriksson & K. Winka

**Subclass Chaetothyriomycetidae** Doweld

**Chaetothyriales** M.E. Barr

**Chaetothyriaceae** Hansf. ex M.E. Barr

*Actinocymbe* Höhn. (3)  
*Aphanophora* Réblová & Unter. (1)  
*Arthrophia* (D.J. Soares, R.W. Barreto & U. Braun) W.S. Lisboa, Meir. Silva & R.W. Barreto (1)  
*Beelia* F. Stevens & R.W. Ryan (3)  
*Camptophora* Réblová & Unter. (2)  
*Ceramothyrium* Bat. & H. Maia (35)  
*Ceratocarpia* Rolland (2)  
*Chaetothyriomyces* Pereira-Carv., Inácio & Dianese (1)  
*Chaetothyrium* Speg. (51)  
*Cyphellophoriella* Crous & A.J. Sm. (1)  
*Eucramia* Bat. & Cif. (3)  
*Hermetothecium* T.F. Nóbrega, B.W. Ferreira, H.C. Evans & R.W. Barreto (1)\*  
*Microcallis* Syd. (10)  
*Nullicamycetes* Crous (1)  
*Phaeosaccardinula* P. Henn. (27)  
*Stanhughesia* Constant. (1)

*Treubiomycetes* Höhn. (7)  
*Vonarxia* Bat. (2)  
*Yatesula* Syd. & P. Syd. (2)

**Coccodiniaceae** Höhn. ex O.E. Erikss.  
*Coccodinium* A. Massal. (4)  
*Dennisiella* Bat. & Cif. (9)  
*Limacinula* Höhn. (17)  
*Microxiphium* (Harv. ex Berk. & Desm.) Thüm. (14)

**Cyphellophoraceae** Réblová & Unter.  
*Anthopsis* Fil. March., A. Fontana & Luppi Mosca (2)  
*Cyphellophora* G.A. de Vries (25)

**Epibryaceae** S. Stenroos & Gueidan  
*Epibryon* Döbbeler (ca. 40)

**Herpotrichiellaceae** Munk  
*Aculeata* W. Dong, H. Zhang & K.D. Hyde (1)  
*Brycekendrickomyces* Crous & M.J. Wingf. (1)  
*Capronia* Sacc. (ca. 81)  
*Cladophialophora* Borelli (35)  
*Exophiala* J.W. Carmich. (51)  
*Fonsecaea* Negroni (8)  
*Marinophialophora* J.F. Li, Phook. & K.D. Hyde (1)  
*Melanoctona* Qing Tian, Doilom & K.D. Hyde (1)  
*Metulocladosporiella* Crous, Schroers, J.Z. Groenew., U. Braun & K. Schub. (6)  
*Minimelanolocus* R.F. Castañeda & Heredia (33)  
*Neosorocybe* Crous & Akulov (1)\*  
*Phialophora* Medlar (7)  
*Pleomelogramma* Speg. (2)  
*Rhinocladiella* Nannf. (17)  
*Sorocybe* Fr. (3)  
*Thysanorea* Arzanlou, W. Gams & Crous (2)  
*Veronaea* Cif. & Montemart. (20)

**Lyrommataceae** Lücking  
*Lyromma* Bat. & H. Maia (7)

**Microtheliopsidaceae** O.E. Erikss.  
*Microtheliopsis* Müll. Arg. (4)

**Paracladophialophoraceae** Crous  
*Paracladophialophora* Crous (2)

**Pyrenotrichaceae** Zahlbr  
*Pyrenothrix* Riddle (2)  
*Neophaeococcomyces* Crous & M.J. Wingf. (2)

**Trichomeriaceae** Chomnunti & K.D. Hyde (= *Strelitzianaceae* Crous & M.J. Wingf.)  
*Arthrocladium* Papendorf (4)  
*Bradomyces* Hubka, Réblová, Selbmann & M. Kolařík (3)

*Incumbomyces* Y. Quan, D. Shi, S.A. Ahmed, Al-Hatmi & de Hoog (2)\*  
*Knufia* L.J. Hutchison & Unter. (13)  
*Lithohypha* Selbmann & Isola (1)  
*Lithophila* Selbmann & Isola (1)  
*Neostrelitziana* Crous & M.J. Wingf. (1)  
*Strelitziana* Arzanlou & Crous (8)  
*Trichomerium* Speg. (28)

***Chaetothyriales* genera incertae sedis**

*Anthracina* L. Su, W. Sun & M.C. Xiang (2)\*  
*Atrokyliindriopsis* Y.R. Ma & X.G. Zhang (1)  
*Bacillicladium* Hubka, Réblová & Thureborn (1)  
*Lichenodiplis* Dyko & D. Hawksw. (= *Laeviomycetes* D. Hawksw.) (13)  
*Lichenodiplisiella* S.Y. Kondr. & Kudratov (1)  
*Melnikomycetes* Crous & U. Braun (1)  
*Minutoexcipula* V. Atienza & D. Hawksw. (7)  
*Muellerella* Hepp ex Müll. Arg. (14)  
*Pleostigma* Kirschst. (9)  
*Sarcinomycetes* Lindner (5)  
*Uncispora* R.C. Sinclair & Morgan-Jones (3)

***Phaeomoniellales* K.H. Chen, A.E. Arnold, Gueidan & Lutzoni**

***Celotheliaceae* Lücking, Aptroot & Sipman (= *Phaeomoniellaceae* P.M. Kirk)**

*Aequabiliella* Crous (1)  
*Celerioriella* Crous (3)  
*Celothelium* A. Massal. (8)  
*Minutiella* Crous (1)  
*Moristroma* A.I. Romero & Samuels (4)  
*Neophaeomoniella* Rooney-Latham & Crous (3)  
*Nothophaeomoniella* Crous (1)  
*Paraphaeomoniella* Crous (1)  
*Phaeomoniella* Crous & W. Gams (2)  
*Pseudophaeomoniella* Nigro, Antelmi & Crous (2)  
*Xenocylindrosporium* Crous & Verkley (1)

***Phaeomoniellales* genera incertae sedis**

*Dolabra* C. Booth & W.P. Ting (1)  
*Vredendaliella* C.F.J. Spies, Moyo, Halleen & L. Mostert (1)\*

***Pyrenulales* Fink ex D. Hawksw. & O.E. Erikss.**

***Pyrenulaceae* Rabenh.**

*Anthracotheceum* Hampe ex A. Massal. (5)  
*Blastodesmia* A. Massal. (1)  
*Clypeopyrenis* Aptroot (2)  
*Granulopyrenis* Aptroot (6)  
*Lithothelium* Müll. Arg. (28)  
*Mazaediotheceum* Aptroot (4)  
*Pyrenographa* Aptroot (1)  
*Pyrenowilmsia* R.C. Harris & Aptroot (1)  
*Pyrenula* Ach. (= *Heufleridium* Müll. Arg.; = *Stromatothelium* Trevis.) (ca. 225)  
*Pyrgillus* Nyl. (8)  
*Serussiauxia* Ertz & Diederich (1)\*

*Sulcopyrenula* H. Harada (5)

***Pyrenulales*** genera *incertae sedis*

*Rhaphidicyrtis* Vain. (1)

*Xenus* Kohlm. & Volkm.-Kohlm. (1)

***Verrucariales*** Mattick ex D. Hawksw. & O.E. Erikss.

***Adelococcaceae*** Triebel

*Adelococcus* Theiss. & Syd. (4)

*Pseudopyrenidium* Nav.-Ros., Zhurb. & Cl. Roux (1)

*Sagediopsis* Sacc. ex Vain. (11)

***Sarcopyreniaceae*** Nav.-Ros. & Cl. Roux

*Sarcopyrenia* Nyl. (11)

***Verrucariaceae*** Zenker

*Agonimia* Zahlbr. (ca. 20)

*Anthracoarpon* Breuss (1)

*Atla* S. Savić & Tibell (10)

*Awasthiella* Kr.P. Singh (1)

*Bagliettoa* A. Massal. (17)

*Bellemerella* Nav.-Ros. & Cl. Roux (4)

*Catapyrenium* Flot. (6)

*Clauzadella* Nav.-Ros. & Cl. Roux (1)

*Clavascidium* Breuss (9)

*Dermatocarpon* Eschw. (20)

*Endocarpon* Hedw. (ca. 75)

*Endococcus* Nyl. (44)

*Flakea* O.E. Erikss. (1)

*Glomerilla* Norman (1)

*Haleomyces* D. Hawksw. & Essl. (1)

*Halospora* (Zschacke) Tomas. & Cif. (4)

*Henrica* de Lesd. (4)

*Heterocarpon* Müll. Arg.

*Heteroplacidium* Breuss (12)

*Hydropunctaria* C. Keller, Gueidan & Thüs (8)

*Involucropyrenium* Breuss (9)

*Mastodia* Hook.f. & Harv. (= *Turgidosculum* Kohlm. & E. Kohlm.) (5)

*Moriola* Norman (ca. 15)

*Neocatapyrenium* H. Harada (5)

*Normandina* Nyl. (= *Lauderlindsaya* J.C. David & D. Hawksw.) (3)

*Norrlinia* Theiss. & Syd. (2)

*Parabagliettoa* Gueidan & Cl. Roux (3)

*Phaeospora* Hepp ex Stein (14)

*Phylloblastia* Vain. (12)

*Placidiopsis* Beltr. (20)

*Placidium* A. Massal. (28)

*Placocarpus* Trevis. (5)

*Placopyrenium* Breuss (22)

*Placothelium* Müll. Arg. (1)

*Plurisperma* Sivan. (1)

*Polyblastia* A. Massal. (ca. 40 + ca. 50 orphaned)

*Psoroglaena* Müll. Arg. (17)  
*Rhabdopsora* Müll. Arg. (2)  
*Scleropyrenium* H. Harada (2)  
*Servitia* M.S. Christ. & Alstrup (1)  
*Spheconisca* (Norman) Norman (ca. 20)  
*Sporodictyon* A. Massal. (5)  
*Staurothele* Norman (ca. 40)  
*Telogalla* Nik. Hoffm. & Hafellner (2)  
*Thelidiopsis* Vain. (4)  
*Thelidium* A. Massal. (ca. 50 + ca. 50 orphaned)  
*Trimmatothele* Norman ex Zahlbr. (3)  
*Verrucaria* Schrad. (ca. 300)  
*Verrucula* J. Steiner (22)  
*Verruculopsis* Gueidan, Nav.-Ros. & Cl. Roux (ca. 10)  
*Wahlenbergiella* Gueidan & Thüs (3)  
*Willeya* Müll. Arg. (12)

***Verrucariales* genera incertae sedis**

*Botryolepraria* Canals, Hern.-Mar., Gómez-Bolea & Llimona (2)  
*Gemmaspora* D. Hawksw. & Halici (1)  
*Kalbiana* Henssen (1)  
*Merismatium* Zopf (10)

***Chaetothyriomycetidae* family incertae sedis**

***Rhynchostomataceae* Winka & O.E. Erikss.**

*Rhynchomeliola* Speg. (3)  
*Rhynchostoma* P. Karst. (23)

**Subclass *Coryneliomycetidae* A.R. Wood, Damm, J.Z. Groenew., Cheew. & Crous**

***Coryneliales* Seaver & Chardon**

***Coryneliaceae* Sacc. ex Berl. & Voglino**

*Caliciopsis* Peck (36)  
*Corynelia* Ach. (16)  
*Coryneliopsis* Butin (2)  
*Coryneliospora* Fitzp. (2)  
*Fitzpatrickella* Benny, Samuelson & Kimbr. (1)  
*Lagenulopsis* Fitzp. (1)  
*Pewenomyces* F. Balocchi, I. Barnes & M.J. Wingfield (1)\*  
*Tripodora* Sacc. ex Berl. & Vogl. (5)

***Eremascaceae* Engl. & E. Gilg**

*Dactylodendron* Stchigel, Rodr.-Andr. & Cano (3)\*  
*Eremascus* Eidam (2)

**Subclass *Eurotiomycetidae* Geiser & Lutzoni**

***Arachnomycetales* Gibas, Sigler & Currah**

***Arachnomycetaceae* Gibas, Sigler & Currah**

*Arachnomyces* Masee & E.S. Salmon (10)  
*Onychocola* Sigler (4)

***Eurotiales* G.W. Martin ex Benny & Kimbr.**

***Aspergillaceae* Link (= *Monascaceae* J. Schröt.)**

*Aspergillago* Samson, Houbraken & Frisvad (1)  
*Aspergillus* P. Micheli ex Haller (428)  
*Dichlaena* Durieu & Mont. (4)  
*Hamigera* Stolk & Samson (9)  
*Leiothecium* Samson & Mouch. (2)  
*Monascus* Tiegh. (38)  
*Penicilliopsis* Solms (15)  
*Penicillium* Link (467)  
*Phialomyces* P.C. Misra & P.H.B. Talbot (5)  
*Pseudohamigera* Houbraken, Frisvad & Samson (1)\*  
*Pseudopenicillium* Guevara-Suarez, Cano & Guarro (3)  
*Sclerocleista* Subram. (2)  
*Xerochrysium* Pitt (2)  
*Xeromyces* Fraser (1)

***Elaphomycetaceae*** Tul. ex Paol.

*Elaphomyces* Nees (101)  
*Pseudotulostoma* O.K. Miller & T. Henkel (2)

***Penicillaginaceae*** Houbraken, Frisvad & Samson

*Penicillago* M. Guevara-Suarez, J. Gené & D. García (4)\*

***Thermoascaceae*** Apinis

*Paecilomyces* Bainier (10)  
*Thermoascus* Miehe (5)

***Trichocomaceae*** E. Fisch.

*Acidotalaromyces* Houbraken et al. (1)\*  
*Ascospirella* Houbraken et al. (1)\*  
*Dendrosphaera* Pat. (1)  
*Evansstolkia* Houbraken et al. (1)\*  
*Rasamsonia* Houbraken & Frisvad (11)  
*Sagenomella* W. Gams (8)  
*Talaromyces* C.R. Benj. (149)  
*Thermomyces* Tsikl. (6)  
*Trichocoma* Jungh. (2)

***Onygenales*** Cif. ex Benny & Kimbr.

***Ajellomycetaceae*** Unter., J.A. Scott & Sigler

*Blastomyces* Gilchrist & W.R. Stokes (= *Ajellomyces* McDonough & A.L. Lewis; *Emmonsia* Cif. & Montemart.) (9)  
*Emergomyces* Dukik, Sigler & de Hoog (5)  
*Emmonsiiellopsis* Y. Marín, Stchigel, Guarro & Cano (2)  
*Histoplasma* Darling  
*Lacazia* Taborda, V.A. Taborda & McGinnis (1)  
*Paracoccidioides* F.P. Almeida (6)  
***Arthrodermataceae*** Currah  
*Arthroderma* Curr. & Berk. (32)  
*Ctenomyces* Eidam (7)  
*Epidermophyton* Sabour. (1)  
*Guarromyces* Y Gräser & de Hoog (1)  
*Lophophyton* Matr. & Dassonv. (1)



*Microsporum* Gruby (3)  
*Nannizzia* Stockdale (9)  
*Paraphyton* Y Gräser, Dukik & de Hoog (3)  
*Shanorella* R.K. Benj. (1)  
*Trichophyton* Malmsten (16)

***Ascosphaeraceae*** L.S. Olive & Spiltoir  
*Arrhenosphaera* Stejskal (1)  
*Ascosphaera* L.S. Olive & Spiltoir (27)  
*Bettsia* Skou (2)

***Gymnoascaceae*** Baran.  
*Aciascus* Doweld (1)  
*Amauroscopsis* Guarro, Gené & De Vroey (1)  
*Arachniotus* J. Schröt. (21)  
*Gymnascella* Peck (9)  
*Gymnoascoideus* G.F. Orr, K. Roy & G.R. Ghosh. (1)  
*Gymnoascus* Baran. (= *Narasimhella* Thirum. & P.N. Mathur) (26)  
*Kraurogymnocarpa* Udagawa & Uchiyama (1)  
*Mallochia* Arx & Samson (4)  
*Oncocladium* Wallr. (1)  
*Orromyces* Sur & G.R. Ghosh (1)

***Nannizziopsidaceae*** Guarro, Stchigel, Deanna A. Sutton & Cano  
*Nannizziopsis* Currah (16)

***Onygenaceae*** Berk.  
*Amauroascus* J. Schröt. (15)  
*Aphanoascus* Zúkal (18)  
*Apinisia* La Touche (3)  
*Arachnotheca* Arx (1)  
*Ascocalvatia* Malloch & Cain (1)  
*Auxarthron* G.F. Orr & Kuehn (13)  
*Auxarthronopsis* Rah. Sharma, Y. Gräser & S.K. Singh (2)  
*Bifidocarpus* Cano, Guarro & R.F. Castañeda (2)  
*Byssoonygena* Guarro, Punsola & Cano (1)  
*Canomyces* Rahul Sharma & Shouche\*  
*Castanedomyces* Cano, L.B. Pitarch & Guarro (1)  
*Chlamydosauromyces* Sigler, Hambl. & Paré (1)  
*Chrysosporium* Corda (66)  
*Coccidioides* G.W. Stiles (6)  
*Currahomyces* Rahul Sharma & Shouche (1)\*  
*Kuehniella* G.F. Orr (2)  
*Leucothecium* Arx & Samson (3)  
*Malbranchea* Sacc. (23)  
*Myotisia* Kubátová, M. Kolařík & Hubka (1)  
*Myriodontium* Samson & Polon. (1)  
*Neoarachnotheca* Ulfig, Cano & Guarro (1)  
*Neogymnomyces* G.F. Orr (2)  
*Onygena* Pers. (10)  
*Ophidiomyces* Sigler, Hambl. & Paré (1)  
*Paranannizziopsis* Sigler (4)

*Pectinotrichum* Varsavsky & G.F. Orr (2)  
*Polytolypa* J.A. Scott & Malloch (1)  
*Pseudoamauroascus* Cano, M. Solé & Guarro (1)  
*Renispora* Sigler & J.W. Carmich. (2)  
*Sporendonema* Desm. (2)  
*Testudomyces* Cano, M. Solé & Guarro (1)  
*Uncinocarpus* Sigler & G.F. Orr (2)  
*Xanthothecium* Arx & Samson (1)

***Spiromastigaceae*** Hirooka

*Pseudospiromastix* Guarro, Stchigel & Cano (1)  
*Sigleria* Hirooka, Tanney & Seifert (2)  
*Spiromastigoides* Doweld (8)  
*Spiromastix* Kuehn & G.F. Orr (5)

***Onygenales*** genera *incertae sedis*

*Arthrospis* Sigler, M.T. Dunn & J.W. Carmich. (4)  
*Ovadendron* Sigler & J.W. Carmich. (1)  
*Sphaerosporium* Schwein. (2)

***Eurotiomycetidae*** genera *incertae sedis*

*Azureothecium* Matsush. (1)  
*Calypetrozyma* Boekhout & Spaay (1)  
*Pisomyxa* Corda (1)  
*Samarospora* Rostr. (1)  
*Veronaia* Benedek (2)

**Subclass *Mycocaliciomycetidae*** Tibell

***Mycocaliciales*** Tibell & Wedin

***Mycocaliciaceae*** A.F.W. Schmidt (= *Sphinctrinaceae* M. Choisy)

*Brunneocarpos* Giraldo & Crous (1)  
*Chaenothecopsis* Vain. (ca. 40)  
*Mycocalicium* Vain. ex Reinke (12)  
*Phaeocalicium* A.F.W. Schmidt (11)  
*Pyrgidium* Nyl. (3)  
*Sphinctrina* Fr. (ca. 9)  
*Stenocybe* (Nyl.) Körb. (14)

**Subclass *Sclerococomycetidae*** Réblová, Unter. & W. Gams

***Sclerococcales*** Réblová, Unter. & W. Gams

***Dactylosporaceae*** Bellem. & Hafellner (= *Sclerococcaceae* Réblová, Unter. & W. Gams)

*Cylindroconidiis* H. Zhang & X.D. Yu (1)  
*Fusichalara* S. Hughes & Nag Raj (5)\*  
*Gamsomyces* Hern.-Restr. & Réblová\*  
*Longimultiseptata* H. Zhang & W. Dong (2)  
*Pseudobactrodesmium* H. Zhang, W. Dong & K.D. Hyde (3)\*  
*Rhopalophora* Réblová, Unter. & W. Gams (1)  
*Sclerococcum* Fr. (= *Dactylospora* Körb.) (ca. 5080)

***Eurotiomycetes*** genus *incertae sedis*

*Neocladophialophora* Crous & R.K. Schumach. (1)

**Class *Geoglossomycetes*** Zheng Wang, C.L. Schoch & Spatafora

***Geoglossales*** Zheng Wang, C.L. Schoch & Spatafora

***Geoglossaceae*** Corda

*Geoglossum* Pers. (40)

*Glutinoglossum* Hustad, A.N. Mill., Dentinger & P.F. Cannon (13)

*Hemileucoglossum* Arauzo (5)

*Leucoglossum* S. Imai (2)

*Maasoglossum* K.S. Thind & R. Sharma (2)

*Sabuloglossum* Hustad, A.N. Mill., Dentinger & P.F. Cannon (1)

*Trichoglossum* Boud. (19)

***Geoglossomycetes* genera incertae sedis**

*Nothomitra* Maas Geest. (3)

*Sarcoleotia* S. Ito & S. Imai (3)

**Class *Laboulbeniomycetes*** Engler

***Herpomyetales*** Haelew. & Pfister

***Herpomycetaceae*** I.I. Tav.

*Herpomyces* Thaxt. (27)\*

***Laboulbeniales*** Lindau

***Ceratomycetaceae*** S. Colla

*Autoicomycetes* Thaxt. (28)

*Ceratomyces* Thaxt. (32)

*Drepanomyces* Thaxt. (1)

*Eusynaptomyces* Thaxt. (5)

*Helodimyces* F. Picard (1)

*Phurmomyces* Thaxt. (1)

*Plectomyces* Thaxt. (1)

*Rhynchophoromyces* Thaxt. (8)

*Synaptomyces* Thaxt. (1)

*Tettigomyces* Thaxt. (16)

*Thaumasiomyces* Thaxt. (3)

*Thripomyces* Speg. (2)

***Euceratomycetaceae*** I.I. Tav.

*Cochliomyces* Speg. (2)

*Colonomyces* R.K. Benj. (2)

*Euceratomyces* Thaxt. (1)

*Euzodimyces* Thaxt. (2)

*Pseudoecteinomyces* W. Rossi (1)

***Laboulbeniaceae*** G. Winter

*Acallomyces* Thaxt. (3)

*Acompsomyces* Thaxt. (6)

*Acrogynomyces* Thaxt. (6)

*Amorphomyces* Thaxt. (15)

*Amphimyces* Thaxt. (1)

*Apatelomyces* Thaxt. (1)

*Apatomyces* Thaxt. (1)

*Aphanandromyces* W. Rossi (1)

*Aporomyces* Thaxt. (11)

*Appendiculina* Berl. (3)  
*Arthrorhynchus* Kolen. (3)  
*Asaphomyces* Thaxt. (2)  
*Autophagomyces* Thaxt. (17)  
*Benjaminiomyces* I.I. Tav. (4)  
*Blasticomyces* I.I. Tav. (3)  
*Bordea* Maire (15)  
*Botryandromyces* I.I. Tav. & T. Majewski (2)  
*Camptomyces* Thaxt. (8)  
*Cantharomyces* Thaxt. (29)  
*Capillistichus* Santam. (1)  
*Carpophoromyces* Thaxt. (1)  
*Cesariella* W. Rossi & Santam. (1)  
*Chaetarthriomyces* Thaxt. (3)  
*Chaetomyces* Thaxt. (2)  
*Chitonomyces* Peyronel (ca. 98)  
*Clematomyces* Thaxt. (5)  
*Clonophoromyces* Thaxt. (2)  
*Columnomyces* R.K. Benj. (1)\*  
*Compsomyces* Thaxt. (7)  
*Coreomyces* Thaxt. (22)  
*Corethromyces* Thaxt. (ca. 85)  
*Corylophomyces* R.K. Benj. (5)  
*Cryptandromyces* Thaxt. (= *Peyerimhoffiella* Maire) (19)  
*Cucujomyces* Speg. (20)  
*Cupulomyces* R.K. Benj. (= *Balazucia* R.K. Benj.) (1)  
*Dermapteromyces* Thaxt. (1)  
*Diandromyces* Thaxt. (2)  
*Diaphoromyces* Thaxt. (5)  
*Diclonomyces* Thaxt. (3)  
*Dimeromyces* Thaxt. (118)  
*Dimorphomyces* Thaxt. (32)  
*Dioicomyces* Thaxt. (32)  
*Diphymyces* I.I. Tav. (25)  
*Diplomyces* Thaxt. (3)  
*Diplopodomyces* W. Rossi & Balazuc (6)  
*Dipodomyces* Thaxt. (2)  
*Distolomyces* Thaxt. (3)  
*Dixomyces* I.I. Tav. (14)  
*Ecteinomyces* Thaxt. (1)  
*Enarthromyces* Thaxt. (1)  
*Eucantharomyces* Thaxt. (26)  
*Euhaplomyces* Thaxt. (1)  
*Eumonoicomyces* Thaxt. (2)  
*Euphoriomyces* Thaxt. (15)  
*Fanniomyces* T. Majewski (2)  
*Filariomyces* Shanor (1)  
*Gloeandromyces* Thaxt. (4)  
*Haplomyces* Thaxt. (3)  
*Hesperomyces* Thaxt. (8)  
*Histeridomyces* Thaxt. (6)  
*Homaromyces* R.K. Benj. (1)

*Hydraeomyces* Thaxt. (1)  
*Hydrophilomyces* Thaxt. (12)  
*Idiomyces* Thaxt. (1)  
*Ilyomyces* F. Picard (2)  
*Ilytheomyces* Thaxt. (15)  
*Kainomyces* Thaxt. (3)  
*Kleidomyces* Thaxt. (4)  
*Kruphaiomyces* Thaxt. (1)  
*Kyphomyces* I.I. Tav. (14)  
*Laboulbenia* Mont. & C.P. Robin (= *Scalenomyces* I.I. Tav.) (ca. 633)  
*Limnaiomyces* Thaxt. (3)  
*Majewskia* Y.B. Lee & Sugiyama (1)  
*Meionomyces* Thaxt. (6)  
*Microsomyces* Thaxt. (2)  
*Mimeomyces* Thaxt. (16)  
*Misgomyces* Thaxt. (4)  
*Monoicomycetes* Thaxt.  
*Nanomyces* Thaxt. (48)  
*Neohaplomyces* R.K. Benj. (3)  
*Nycteromyces* Thaxt. (2)  
*Opilionomyces* Santam., Enghoff, Gruber & Reboleira (1)  
*Ormomyces* I.I. Tav. (1)  
*Osoriomyces* Terada (1)  
*Parvomyces* Santam. (1)  
*Peyritschella* Thaxt. (47)  
*Phalacrichomyces* R.K. Benj. (2)  
*Phaulomyces* Thaxt. (14)  
*Picardella* I.I. Tav. (2)  
*Polyandromyces* Thaxt. (= *Monandromyces* R.K. Benj.) (13)  
*Polyascomyces* Thaxt. (1)  
*Porophoromyces* Thaxt. (1)  
*Prolixandromyces* R.K. Benj. (20)  
*Pselaphidomyces* Speg. (1)  
*Pseudozeugandromyces* De Kesel & Haelew. (1)\*  
*Rhachomyces* Thaxt. (ca. 75)  
*Rhipidiomyces* Thaxt. (1)  
*Rhizomyces* Thaxt. (10)  
*Rhizopodomyces* Thaxt. (7)  
*Rickia* Cavara (144)  
*Rodaucea* W. Rossi & Santam. (2)  
*Rossiomyces* R.K. Benj. (1)  
*Sandersoniomyces* R.K. Benj. (1)  
*Scaphidiomyces* Thaxt. (5)  
*Scelophoromyces* Thaxt. (1)  
*Scepastocarpus* Santam. (1)  
*Siemaszkoa* I.I. Tav. & Maj. (7)  
*Smeringomyces* Thaxt. (4)  
*Sphaleromyces* Thaxt. (3)  
*Stemmatomyces* Thaxt. (2)  
*Stichomyces* Thaxt. (7)  
*Stigmatomyces* H. Karst. (171)  
*Sugiyamaemyces* I.I. Tav. & Balazuc (1)

*Symplectromyces* Thaxt. (3)  
*Sympodomyces* R.K. Benj. (1)  
*Synandromyces* Thaxt. (9)  
*Tanmaurkiella* Santam. (2)\*  
*Tavaresiella* T. Majewski (4)  
*Teratomyces* Thaxt. (11)  
*Tetrandromyces* Thaxt. (6)  
*Thaxterimyces* Santam., Reboleira & Enghoff (1)  
*Trenomyces* Chatton & F. Picard (11)  
*Triainomyces* W. Rossi & A. Weir (1)  
*Triceromyces* T. Majewski (5)  
*Trochoideomyces* Thaxt. (1)  
*Troglomyces* S. Colla (8)  
*Zeugandromyces* Thaxt. (4)  
*Zodiomyces* Thaxt. (4)

***Pyxidiophorales*** P.F. Cannon

***Pyxidiophoraceae*** Arnold

*Gliocephalis* Matr. (2)  
*Mycorhynchidium* Malloch & Cain (1)  
*Pyxidiophora* Bref. & Tavel (21)

***Laboulbeniomycetes*** genera *incertae sedis*

*Coreomycetopsis* Thaxt. (1)  
*Laboulbeniopsis* Thaxt. (1)  
*Subbaromyces* Hesselt. (2)  
*Tetrameronycha* Speg. ex W. Rossi & M. Blackw. (1)

**Class *Lecanoromycetes*** O.E. Erikss. & Winka

**Subclass *Acarosporomycetidae*** V. Reeb, Lutzoni & Cl. Roux

***Acarosporales*** V. Reeb, Lutzoni & Cl. Roux

***Acarosporaceae*** Zahlbr.

*Acarospora* A. Massal. (200)  
*Caeruleum* Arcadia (2)  
*Glypholecia* Nyl. (1)  
*Lithoglypha* Brusse (1)  
*Myriospora* Nägeli ex Uloth (= *Trimmatothelopsis* Zschacke) (ca. 10)  
*Neoacrodontiella* Crous & M.J. Wingf. (1)\*  
*Pleopsidium* Körb. (4)  
*Polysporina* Vězda (10)  
*Sarcogyne* Flot. (ca.30)  
*Thelocarpella* Nav.-Ros. & Cl. Roux (1)  
*Timdalia* Hafellner (1)

***Eigleraceae*** Hafellner

***Eiglera*** Hafellner (2)

***Acarosporales*** genus *incertae sedis*

***Vanderaaea*** Crous (1)\*

***Lecanoromycetidae*** P.M. Kirk, P.F. Cannon, J.C. David & Stalpers ex Miadl., Lutzoni & Lumbsch ex Miadl. & Lutzoni

***Caliciales*** Bessey

***Caliciaceae*** Chevall.

- Acolium* (Ach.) Gray (5)  
*Acroscyphus* Lév. (1)  
*Allocalicium* M. Prieto & Wedin (1)  
*Amandinea* M. Choisy ex Scheid. & M. Mayrhofer (35)  
*Australiaena* Matzer, H. Mayrhofer & Elix (1)  
*Baculifera* Marbach (14)  
*Buellia* De Not. (= *Dirinastrum* Müll. Arg.) (ca. 300)  
*Caliciella* Vain. (1)  
*Calicium* Pers. (= *Cyphelium* Ach.) (ca. 30)  
*Chrismofulvea* Marbach (4)  
*Ciposia* Marbach (1)  
*Cratiria* Marbach (ca. 20)  
*Culbersonia* Essl. (1)  
*Dermatiscum* Nyl. (3)  
*Dermiscellum* Hafellner, H. Mayrhofer & Poelt (1)  
*Dimelaena* Norman (10)  
*Diploicia* A. Massal. (ca. 12)  
*Diplotomma* Flot. (ca. 30)  
*Dirinaria* (Tuck.) Clem. (ca. 35)  
*Endohyalina* Marbach (10)  
*Fluctua* Marbach (1)  
*Gassicurtia* Fée (30)  
*Hypoflavia* Marbach (3)  
*Monerolechia* Trevis. (4)  
*Orcularia* (Malme) Kalb & Giralt (4)  
*Pseudothelomma* M. Prieto & Wedin (2)  
*Pyxine* Fr. (ca. 75)  
*Redonia* C.W. Dodge (2)  
*Santessonia* Hale & Vobis (10)  
*Sculptolumina* Marbach (4)  
*Sphinctrinopsis* Woron. (1)  
*Stigmatochroma* Marbach (9)  
*Tetramelas* Norman (16)  
*Texosporium* Nádv. ex Tibell & Hofsten (1)  
*Thelomma* A. Massal. (5)  
*Tholurna* Norman (1)

***Physciaceae*** Zahlbr.

- Anaptychia* Körb. (ca. 15)  
*Coscinocladium* Kunze (2)  
*Heterodermia* Trevis. (ca. 90)  
*Hyperphyscia* Müll. Arg. (9)  
*Kashiwadia* S.Y. Kondr. (1)  
*Leucodermia* Kalb (10)  
*Mischoblastia* A. Massal. (3)  
*Mobergia* H. Mayrhofer & Sheard (1)  
*Oxnerella* S.Y. Kondr., Lökös & Hur (1)  
*Phaeophyscia* Mob. (66)  
*Phaeorrhiza* H. Mayrhofer & Poelt (2)  
*Physcia* (Schreb.) Michaux (ca. 80)  
*Physciella* Essl. (4)

*Physconia* Poelt (ca. 25)  
*Polyblastidium* Kalb (18)  
*Rinodina* (Ach.) Gray (ca. 300)  
*Rinodinella* H. Mayrhofer & Poelt (6)  
*Tornabea* Oesth. (1)

***Lecanorales*** Nannf.

***Biatorrellaceae*** M. Choisy ex Hafellner & Casares-Porcel  
*Biatorrella* De Not. (ca. 30)

***Bruceomycetaceae*** Rikkinen & A.R. Schmidt  
*Bruceomyces* Rikkinen (4)  
*Resinogalea* Rikkinen & A.R. Schmidt (1)

***Catillariaceae*** Hafellner

*Austrolecia* Hertel (1)  
*Catillaria* A. Massal. (ca. 30 + several orphaned names)  
*Placolecis* Trevis. (1)  
*Solenopsora* A. Massal. (11)  
*Xanthopsorella* Kalb & Hafellner (1)

***Cladoniaceae*** Zenker (= *Squamarinaceae* Hafellner; = *Stereocaulaceae* Chevall.)

*Calathaspis* I.M. Lamb & W.A. Weber (1)  
*Carassea* S. Stenroos (1)  
*Cetradonia* J.C. Wei & Ahti (1)  
*Cladia* Nyl. (ca. 27)  
*Cladonia* Hill ex P. Browne (= *Verrucaster* Tobler) (ca. 500)  
*Gymnoderma* Nyl. (3)  
*Herteliana* P. James (3)  
*Hertelidea* Printzen & Kantvilas (6)  
*Heteromyces* Müll. Arg. (1)  
*Lepraria* Ach. (75)  
*Metus* D.J. Galloway & P. James (3)  
*Notocladonia* S. Hammer (2)  
*Paralecia* Brackel, Greiner, Peršoh & Rambold (1)  
*Pilophorus* Th. Fr. (17)  
*Pulchrocladia* S. Stenroos, Pino-Bodas, Lumbsch & Ahti (3)  
*Pycnothelia* Duf. (2)  
*Sphaerophoropsis* Vain. (2)  
*Squamarina* Poelt (25)  
*Squamella* S. Hammer (1)  
*Stereocaulon* Hoffm. (ca. 140)  
*Thysanothecium* Mont. & Berk. (3)  
*Xyleborus* R.C. Harris & Ladd (1)

***Gypsoplacaceae*** Timdal

*Gypsoplaca* Timdal (5)

***Haematommataceae*** Hafellner

*Haematomma* A. Massal. (ca. 50)

***Lecanoraceae*** Körb. (= *Carbonicolaceae* Bendiksby & Timdal)



*Adelolecia* Hertel & Hafellner (4)  
*Ameliella* Fryday & Coppins (2)  
*Bryodina* Hafellner (2)  
*Bryonora* Poelt (11)  
*Carbonea* (Hertel) Hertel (20)  
*Carbonicola* Bendiksby & Timdal (3)  
*Cladidium* Hafellner (2)  
*Claurouxia* D. Hawksw. (1)  
*Clauzadeana* Cl. Roux (1)  
*Edrudia* W.P. Jordan (1)  
*Frutidella* Kalb (3)  
*Japewia* Tønsberg (3)  
*Japewiella* Printzen (7)  
*Lecanora* Ach. (ca. 550)  
*Lecidella* Körb. (80)  
*Maronina* Hafellner & R.W. Rogers (2)  
*Maronora* Kalb & Aptroot (1)  
*Miriquidica* Hertel & Rambold (30)  
*Palicella* Rodr. Flakus & Printzen (4)  
*Polyozosia* A. Massal. (= *Myriolecis* Clements) (43)  
*Protoparmeliopsis* Choisy (= *Sedelnikovaea* S.Y. Kondr., M.H. Jeong & Hur) (ca. 20)  
*Psorinia* Gotth. Schneid. (2)  
*Pulvinora* Davydov, Yakovch. & Printzen (2)  
*Punctonora* Aptroot (2)  
*Pyrrhospora* Körb. (7)  
*Rhizoplaca* Zopf (11)  
*Sagema* Poelt & Grube (1)  
*Traponora* Aptroot (8)  
*Vainionora* Kalb (9)

***Malmideaceae*** Kalb, Rivas Plata & Lumbsch

*Cheiromycina* B. Sutton (4)  
*Crustospathula* Aptroot (4)  
*Kalbionora* Sodamuk, S.D. Leav. & Lumbsch (1)  
*Malmidea* Kalb, Rivas Plata & Lumbsch (52)  
*Savoronala* Ertz, Eb. Fisch., Killmann, Razafindr. & Sérus (1)  
*Sprucidea* M.Cáceres, Aptroot & Lücking (4)  
*Zhurbenkoa* Flakus, Etayo, Pérez-Ortega & Rodr. Flakus (3)

***Megalariaceae*** Hafellner

*Catillochroma* Kalb (2)  
*Megalaria* Hafellner (ca. 30)

***Pachyascaceae*** Poelt ex P.M. Kirk, P.F. Cannon & J.C. David

*Pachyascus* Poelt & Hertel (1)

***Parmeliaceae*** Zenker

*Alectoria* Ach. (= *Gowardia* Halonen, Myllys, Velmala & Hyvärinen) (9)  
*Allantoparmelia* (Vain.) Essl. (3)  
*Anzia* Stizenb. (34)  
*Arctoparmelia* Hale (5)  
*Asahinea* W.L. Culb. & C.F. Culb. (2)

*Austromelanelixia* Divakar, A. Crespo & Lumbsch (5)  
*Austroparmelia* A. Crespo, Divakar & Elix (13)  
*Brodoa* Goward (3)  
*Bryocaulon* Kärnefelt (4)  
*Bryoria* Brodo & D. Hawksw. (ca. 52)  
*Bulbothrix* Hale (62)  
*Canoparmelia* Elix & Hale (35)  
*Cetraria* Ach. (= *Allocetraria* Kurok. & M.J. Lai, = *Cetrariella* Kärnefelt & Thell, = *Usnocetraria* M.J. Lai & J.C. Wei, = *Vulpicida* Mattson & M.J. Lai) (35)  
*Cetrelia* W.L. Culb. & C.F. Culb. (18)  
*Coelopogon* Brusse & Kärnefelt (2)  
*Cornicularia* (Schreb.) Ach. (1)  
*Crespoa* (D. Hawksw.) Lendemer & B.P. Hodk. (5)  
*Dactylina* Nyl. (2)  
*Davidgallowaya* Aptroot (1)  
*Dolichousnea* (Y. Ohmura) Articus (3)  
*Emodomelanelia* Divakar & A. Crespo (1)  
*Esslingeriana* Hale & M.J. Lai (1)  
*Eumitria* Stirt. (13)  
*Evernia* Ach. (10)  
*Everniopsis* Nyl. (1)  
*Flavoparmelia* Hale (32)  
*Flavopunctelia* Hale (5)  
*Himantormia* I.M. Lamb (2)  
*Hypogymnia* (Nyl.) Nyl. (90)  
*Hypotrachyna* (Vain.) Hale (262)  
*Imshaugia* F.C. Mey. (1)  
*Letharia* (Th. Fr.) Zahlbr. (9)  
*Lethariella* (Motyka) Krog (11)  
*Masonhalea* Kärnefelt (2)  
*Melanelia* Essl. (2)  
*Melanelixia* O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch (11)  
*Melanohalea* O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch (22)  
*Menegazzia* A. Massal. (70)  
*Montanelia* Divakar, A. Crespo, Wedin & Essl. (5)  
*Myelochroa* (Asahina) Elix & Hale (30)  
*Neoprotoparmelia* Garima Singh, Lumbsch & I. Schmitt (23)  
*Nephromopsis* Müll. Arg. (= *Ahtiana* Goward; = *Arctocetraria* Kärnefelt & Thell; = *Cetrariopsis* Kurok.; = *Flavocetraria* Kärnefelt & Thell; = *Flavocetrariella* D.D. Awasthi; = *Kaernefeltia* Thell & Goward; = *Tuckermanella* Essl.; = *Tuckermannopsis* Gyeln.) (62)  
*Nipponoparmelia* (Kurok.) K.H. Moon, Y. Ohmura & Kashiw. (4)  
*Nodobryoria* Common & Brodo (3)  
*Notoparmelia* A. Crespo, Ferencová & Divakar (16)  
*Omphalodium* Meyen & Flot. (4)  
*Omphalora* T.H. Nash & Hafellner (1)  
*Oropogon* Th. Fr. (42)  
*Pannoparmelia* (Müll. Arg.) Darb. (5)  
*Parmelia* Ach (43)  
*Parmelina* Hale (10)  
*Parmelinella* Elix & Hale (8)  
*Parmeliopsis* (Nyl.) Nyl. (3)  
*Parmotrema* A. Massal. (250)

*Parmotremopsis* Elix & Hale (2)  
*Phacopsis* Tul. (10)  
*Platismatia* W.L. Culb. & C.F. Culb. (11)  
*Pleurosticta* Petr. (2)  
*Protoparmelia* M. Choisy (11)  
*Protousnea* (Motyka) Krog (8)  
*Pseudephebe* M. Choisy (2)  
*Pseudevernia* Zopf (4)  
*Pseudoparmelia* Lynge (15)  
*Psiloparmelia* Hale (13)  
*Punctelia* Krog (48)  
*Relicina* (Hale & Kurok.) Hale (59)  
*Remototrachyna* Divakar & A. Crespo (19)  
*Sulcaria* Bystr. (5)  
*Usnea* Dill. ex Adans. (355)  
*Xanthoparmelia* (Vain.) Hale (822)

***Pilocarpaceae*** Zahlbr.

*Aquacidia* Aptroot (3)  
*Badimiella* Malcolm & Vězda (1)  
*Baflavia* Lücking (1)  
*Bapalmuia* Sérus. (22)  
*Barubria* Vězda (2)  
*Brasilicia* Lücking, Kalb & Sérus. (6)  
*Bryogomphus* Lücking, W.R. Buck, Sérus. & L.I. Ferraro (1)  
*Byssolecania* Vain. (7)  
*Byssoloma* Trevis. (60)  
*Calopadia* Vězda (27)  
*Calopadiopsis* Lücking & R. Sant. (2)  
*Eugeniella* Lücking, Sérus. & Kalb (11)  
*Fellhanera* Vězda (ca. 100)  
*Fellhaneropsis* Sérus. & Coppins (9)  
*Kantvilasia* P.M. McCarthy, Elix & Sérus. (1)  
*Lasioloma* R. Sant. (9)  
*Leimonis* R.C. Harris (2)  
*Loflammia* Vězda (5)  
*Loflammiiopsis* Lücking & Kalb (1)  
*Logilvia* Vězda (1)  
*Micarea* Fr. (102)  
*Podotara* Malcolm & Vězda (1)  
*Pseudocalopadia* Lücking (1)  
*Roccellinastrum* Follmann (7)  
*Schadonia* Körb. (4)  
*Septotrapelia* Aptroot & Chaves (4)  
*Sporopodiopsis* Sérus. (2)  
*Sporopodium* Mont. (24)  
*Szczawinskia* A. Funk (5)  
*Tapellaria* Müll. Arg. (23)  
*Tapellariopsis* Lücking (1)

***Psilolechiaceae*** S. Stenroos, Miądl. & Lutzoni

*Psilolechia* A. Massal. (4)

**Psoraceae** Zahlbr.

*Brianaria* S. Ekman & M. Svensson (4)

*Glyphopeltis* Brusse (1)

*Protoblastenia* (Zahlbr.) J. Steiner (30)

*Protomicarea* Hafellner (2)

*Psora* Hoffm. (35)

*Psorula* Gotth. Schneid. (1)

**Ramalinaceae** C. Agardh

*Auriculora* Kalb (1)

*Bacidia* De Not. (= *Bacidiopsora* Kalb) (230)

*Bacidina* Vězda (12)

*Badimia* Vězda (20)

*Bellicidia* Kistenich, Timdal, Bendiksby & Ekman (1)

*Biatora* Fr. (= *Myrionora* R.C. Harris; = *Ivanpisutia* S.Y. Kondr., Lőkös & Hur) (42)

*Bibbya* J.H. Willis (10)

*Bilimbina* De Not. (= *Myxobilimbina* Hafellner) (6)

*Cenozosia* A. Massal. (1)

*Cliostomum* Fr. (25)

*Echidnocymbium* Brusse (1)

*Eschatogonia* Trevis. (7)

*Heppsora* D.D. Awasthi & K. Singh (1)

*Jarmania* Kantvilas (2)

*Kiliasia* Hafellner (9)

*Krogia* Timdal (7)

*Lecania* A. Massal. (50)

*Lithocalla* Orange (2)

*Lueckingia* Aptroot & Umana (1)

*Mycobilimbina* Rehm (5)

*Myelorrhiza* Verdon & Elix (2)

*Namibialina* Spjut & Sérus. (1)\*

*Niebla* Rundel & Bowler (23)

*Parallopsora* Kistenich, Timdal & Bendiksby (3)

*Phyllopsora* Müll. Arg. (= *Crocynia* (Ach.) A. Massal.) (75)

*Physcidia* Tuck. (10)

*Ramalina* Ach. (230)

*Rolfidium* Moberg (3)

*Scutula* Tul. (= *Karsteniomyces* D. Hawksw.; = *Libertiella* Speg. & Roum.) (43)

*Sporacestra* A. Massal. (1)

*Stirtoniella* D.J. Galloway, Hafellner & Elix (1)

*Thalloidima* A. Massal. (17)

*Thamnolecania* (Vain.) Gyeln. (1)

*Tibellia* Vězda & Hafellner (1)

*Toninia* A. Massal. (= *Arthrosporum* A. Massal.) (85)

*Toniniopsis* Frey (7)

*Tyloclitostomum* van den Boom & Magain (1)\*

*Tylothallia* P. James & H. Kiliass (3)

*Vermilacinia* Spjut & Hale (34)

*Waynea* Moberg (7)

**Ramboldiaceae** S. Stenroos, Miadl. & Lutzoni

*Ramboldia* Kantvilas & Elix (34)

***Scoliciosporaceae*** Hafellner  
*Scoliciosporum* A. Massal. (15)

***Sphaerophoraceae*** Fr.  
*Austropeltum* Henssen, H. Döring & Kantvilas (1)  
*Bunodophoron* A. Massal. (25)  
*Calycidium* Stirt. (2)  
*Leifidium* Wedin (1)  
*Neophyllis* F. Wilson (2)  
*Sphaerophorus* Pers. (8)

***Tephromelataceae*** Hafellner  
*Calvitimela* Hafellner (11)  
*Mycoblastus* Norman (10)  
*Tephromela* M. Choisy (ca. 30)  
*Violella* T. Sprib. (2)

***Lecanorales*** genera *incertae sedis*  
*Catinaria* Vain. (2)  
*Compsocladium* I.M. Lamb (2)  
*Coronoplectrum* Brusse (1)  
*Corticiruptor* Wedin & Hafellner (2)  
*Lichenosticta* Zopf (5)  
*Myochroidea* Printzen, T. Sprib. & Tønsberg (4)  
*Neopsoromopsis* Gyeln. (1)  
*Nimislostella* Calat., Barreno & O.E. Erikss. (1)  
*Psoromella* Gyeln. (1)  
*Puttea* S. Stenroos & Huhtinen (4)  
*Ramalea* Nyl. (4)  
*Tasmidella* Kantvilas, Hafellner & Elix (1)  
*Umbilithecium* Etayo (1)  
*Umushamyces* Etayo (1)

***Lecideales*** Vain.  
***Lecideaceae*** Chevall.  
*Amygdalaria* Norman (11)  
*Bahianora* Kalb (1)  
*Bellemerea* Hafellner & Cl. Roux (10)  
*Bryobilimbia* Fryday (9)  
*Catarrhospora* Brusse (2)  
*Cecidonia* Triebel & Rambold (2)  
*Clauzadea* Hafellner & Bellem. (7)  
*Cryptodictyon* A. Massal. (2)  
*Eremastrella* Vogel (2)  
*Farnoldia* Hertel (6)  
*Immersaria* Rambold & Pietschm. (8)  
*Koerberiella* Stein (2)  
*Labyrintha* Malcolm, Elix & Owe-Larss. (1)  
*Lecidea* Ach. (ca. 100)  
*Lecidoma* Gotth. Schneid. & Hertel (1)  
*Melanolecia* Hertel (7)  
*Pachyphysis* R.C. Harris & Ladd (1)

*Paraporpidia* Rambold & Pietschm. (3)  
*Poeltiaria* Hertel (8)  
*Poeltidea* Hertel & Hafellner (3)  
*Porpidia* Körb. (51)  
*Porpidinia* Timdal (2)  
*Pseudopannaria* (B. de Lesd.) Zahlbr. (1)  
*Rhizolecia* Hertel (1)  
*Romjularia* Timdal (1)  
*Schizodiscus* Brusse (1)  
*Stenhammarella* Hertel (1)  
*Stephanocyclos* Hertel (1)  
*Xenolecia* Hertel (2)

***Lopadiaceae*** Hafellner

*Lopadium* Körb. (10)

***Leprocaulales*** Lendemer & B.P. Hodk.

***Leprocaulaceae*** Lendemer & B.P. Hodk.

*Halecania* M. Mayrhofer (23)

*Leprocaulon* Nyl. (11)

*Speerschneidera* Trevis. (1)

***Peltigerales*** W. Watson

***Coccocarpiaceae*** Henssen ex Henssen

*Coccocarpia* Pers. (ca. 50)

*Peltularia* R. Sant. (4)

*Spilonema* Bornet (4)

***Collemataceae*** Zenker

*Blennothallia* Trevis. (4)

*Callome* Otálora & Wedin (1)

*Collema* F.H. Wigg. (ca. 35)

*Enchylium* (Ach.) Gray (11)

*Lathagrium* (Ach.) Gray (10)

*Leptogium* (Ach.) Gray (ca. 110)

*Pseudoleptogium* Müll. Arg. (1)

*Rostania* Trevis. (ca. 6)

*Scytinium* (Ach.) Gray (49)

***Koerberiaceae*** T. Sprib. & Muggia

*Henssenia* Ertz, R.S. Poulsen & Söchting (4)

*Koerberia* A. Massal. (2)

*Tingiopsidium* Werner (= *Vestergrenopsis* Gyeln.) (3)

***Massalongiaceae*** Wedin, P.M. Jørg. & E. Wiklund.

*Leptochidium* M. Choisy (2)

*Massalongia* Körb. (2, and 6 orphaned species)

*Polychidium* (Ach.) Gray (1)

***Pannariaceae*** Tuck.

*Atrophysma* T. Sprib. (1)\*

*Austrella* P.M. Jørg. (3)

*Degelia* Arv. & D.J. Galloway (16)  
*Erioderma* Feé (32)  
*Fuscoderma* (D.J. Galloway & P.M. Jørg.) P.M. Jørg. & D.J. Galloway (5)  
*Fuscopannaria* P.M. Jørg. (= *Kroswia* P.M. Jørg.) (55)  
*Gibbosporina* Elvebakk, S.G. Hong & P.M. Jørg. (14)  
*Hispidopannaria* Elvebakk, S.G. Hong & C.H. Park (2)\*  
*Homothecium* A. Massal. (5)  
*Joergensenia* Passo, S. Stenroos & Calvelo (1)  
*Leciophysma* Th. Fr. (ca. 4)  
*Leightoniella* Henssen (1)  
*Leioderma* Nyl. (ca. 9)  
*Lepidocollema* Vain. (22)  
*Leptogidium* Nyl. (3)  
*Nebularia* P.M. Jørg. (2)  
*Nevesia* P.M. Jørg, L. Lindblom, Wedin & S. Ekman (1)  
*Pannaria* Del. ex Bory (ca. 40)  
*Parmeliella* Müll. Arg. (ca. 40)  
*Pectenaria* P.M. Jørg. (4)  
*Phormopsora* Elvebakk, S.G. Hong & C.H. Park (1)\*  
*Physma* A. Massal. (12)  
*Protopannaria* (Gyeln.) P.M. Jørg. & S. Ekman (7)  
*Psoroma* Michaux (ca. 70)  
*Psoromaria* Nyl. ex Nyl. (= *Degeliella* P.M. Jørg.) (2)  
*Psoromidium* Stirt. (2)  
*Ramalodium* Nyl. (6)  
*Siphulastrum* Müll. Arg. (4)  
*Staurolemma* Körb. (3)  
*Steineropsis* T. Sprib. & Muggia (2)

***Peltigeraceae*** Dumort. (= *Lobariaceae* Chevall.; = *Nephromataceae* Wetm. ex J.C. David & D. Hawksw.)

*Crocodia* Link (5)  
*Dendriscosticta* Moncada & Lücking (5)  
*Emmanuelia* Ant. Simon, Lücking & Goffinet (12)  
*Lobaria* (Schreb.) Hoffm. (ca. 60)  
*Lobariella* Yoshim. (29)  
*Lobarina* Nyl. ex Cromb. (15)  
*Nephroma* Ach. (ca. 36)  
*Parmostictina* Nyl. (3)  
*Peltigera* Willd. (ca. 100)  
*Podostictina* Clem. (13)  
*Pseudocyphellaria* Vain. (ca. 100)  
*Ricasolia* De Not. (15)  
*Sinuicella* D.F. Stone, McCune & Miadl. (1)\*  
*Solorina* Ach. (ca. 10)  
*Sticta* (Schreb.) Ach. (ca. 200)  
*Yarrumia* D.J. Galloway (2)  
*Yoshimuriella* Moncada & Lücking (9)

***Placynthiaceae*** Å.E. Dahl

*Hertella* Henssen (3)  
*Placynthiopsis* Zahlbr. (1)

*Placynthium* (Ach.) Gray (ca. 20)

**Vahliellaceae** Wedin

*Vahliella* P.M. Jørg. (9)

**Peltigerales** genus *incertae sedis*

*Erinacellus* T. Sprib., Muggia & Tønsberg (2)

**Rhizocarpales** Miadl. & Lutzoni ex Miadl. & Lutzoni ex Miadl. & Lutzoni ex Miadl. & Lutzoni

**Rhizocarpaceae** M. Choisy & Hafellner

*Catolechia* Flot. (1)

*Epilichen* Clem. (3)

*Poeltinula* Hafellner (3)

*Rhizocarpon* Ramond ex DC. (225)

**Sporastatiales** Lumbsch & Leavitt

**Sporastatiaceae** Bendiksby & Timdal

*Sporastatia* A. Massal. (4)

*Toensbergia* Bendiksby & Timdal (3)

**Teloschistales** D. Hawksw. & O.E. Erikss.

**Brigantiaeaceae** Hafellner & Bellem. (= *Letrouitiaceae* Bellem. & Hafellner)

*Brigantiaea* Trevis. (26)

*Letrouitia* Hafellner & Bellem. (18)

**Megalosporaceae** Vězda ex Hafellner & Bellem.

*Megaloblastenia* Sipman (2)

*Megalospora* Meyen (36)

*Sipmaniella* Kalb (1)

**Teloschistaceae** Zahlbr.

*Amundsenia* Søchting, Garrido-Ben., Arup & Frödén (2)

*Andina* Wilk, Pabijan & Lücking (1)\*

*Apatoplaca* Poelt & Hafellner (1)

*Aridoplaca* Wilk, Pabijan & Lücking (1)\*

*Athallia* Arup, Frödén & Søchting (= ?*Coppinsiella* S. Y. Kondr. et al.; = ?*Fominiella* S. Y. Kondr., Upreti & Hur) (17)

*Austroplaca* Søchting, Frödén & Arup (10)

*Blastenia* A. Massal. (11)

*Brownliella* S.Y. Kondr., Kärnefelt, Elix, A. Thell & Hur (4)

*Bryoplaca* Søchting, Frödén & Arup (3)

*Calogaya* Arup, Frödén & Søchting (= *Lazarenkoella* S.Y. Kondr. et al.; = *Seawardiella* S.Y. Kondr. et al.) (19)

*Caloplaca* Th. Fr. (351)

*Catenarina* Søchting, Søgaaard, Arup, Elvebakk & Elix (3)

*Cephalophysia* (Hertel) H. Kiliass (1)

*Cerothallia* Arup, Frödén & Søchting (4)

*Charcotiana* Søchting, Garrido-Ben. & Arup (1)

*Cinnabaria* Wilk, Pabijan & Lücking (1)\*

*Dijigiella* S.Y. Kondr. & L. Lököss (2)

*Dufourea* Ach. (= *Xanthodactylon* P.A. Duvign.) (25)

*Eilifdahlia* S.Y. Kondr., Kärnefelt, Elix, A. Thell & Hur (2)



*Fauriea* S.Y. Kondr., Lökös & Hur (2)  
*Filsoniana* S.Y. Kondr., Kärnefelt, Elix, A. Thell & Hur (= *Harusavskia* S.Y. Kondr.; = *Nevilleiella* S.Y. Kondr. & Hur; = *Thelliana* S.Y. Kondr. et al.) (9)  
*Flavoplaca* Arup, Söchting & Frödén (28)  
*Follmannia* C.W. Dodge (2)  
*Franwilsia* S.Y. Kondr., Kärnefelt, Elix, A. Thell & Hur (3)  
*Gondwania* Söchting, Frödén & Arup (4)  
*Gyalolechia* A. Massal. (= *Hanstrassia* S.Y. Kondr.; = *Laundonia* S. Y. Kondr., L. Lökös & Hur; = *Lazarenkoioopsis* S.Y. Kondr., L. Lökös & Hur; = *Opeltia* S.Y. Kondr. & L. Lökös; = *Oxneriopsis* S.Y. Kondr., D. Upreti & Hur) (40)  
*Haloplaca* Arup, Söchting & Frödén (31) 1169  
*Hosseusiella* S.Y. Kondr., L. Lökös, Kärnefelt & A. Thell (3)  
*Huneckia* S.Y. Kondr., Elix, Kärnefelt, A. Thell & Hur (2)  
*Ioplaca* Poelt (2)  
*Jasonhuria* S.Y. Kondr., Lökös & S.O. Oh (1)  
*Josefpoeltia* S.Y. Kondr. & Kärnefelt (3)  
*Kaernefia* S.Y. Kondr., Elix, A. Thell & Hur (3)  
*Lacrima* Bungartz, Arup & Söchting (4)\*  
*Leproplaca* (Nyl.) Nyl. (7)  
*Loekoesia* S.Y. Kondr., S.O. Oh & Hur (1)  
*Marchantiana* S.Y. Kondr., Kärnefelt, Elix, A. Thell & Hur (= *Streimanniella* S.Y. Kondr. et al.) (5)  
*Oceanoplaca* Arup, Söchting & Bungartz (6)\*  
*Olegblumia* S.Y. Kondr., Lökös & Hur (1)  
*Orientophila* Arup, Söchting & Frödén (4)  
*Pachypeltis* Söchting, Arup & Frödén (7)  
*Parateichospora* Crous (1)  
*Parvoplaca* Arup, Söchting & Frödén (6)  
*Phaeoplaca* Söchting, Arup & Bungartz (3)\*  
*Polycauliona* Hue (= ? *Tomnashia* S.Y. Kondr. & Hur) (18)  
*Pyrenodesmia* A. Massal. (6)  
*Rufoplaca* Arup, Söchting & Frödén (6)  
*Rusavskia* S.Y. Kondr. & Kärnefelt (= ? *Zeroviella* S.Y. Kondr. & J.-S. Hur) (19)  
*Scutaria* Söchting, Arup & Frödén (1)  
*Seiophora* Poelt (ca. 8)  
*Shackletonia* Söchting, Frödén & Arup (5)  
*Sirenophila* Söchting, Arup & Frödén (= *Elixjohnia* S.Y. Kondr. & Hur; = *Tarasginia* S.Y. Kondr. et al.) (14)  
*Solitaria* Arup, Söchting & Frödén (1)  
*Squamulea* Arup, Söchting & Frödén (= *Huriella* S.Y. Kondr. & D. Upreti) (17)  
*Stellarangia* Frödén, Arup & Söchting (3)  
*Sucioplaca* Bungartz, Söchting & Arup (1)\*  
*Tassiloa* S.Y. Kondr., Kärnefelt, A. Thell, Elix & Hur (2)  
*Tayloriellina* S.Y. Kondr., Kärnefelt, A. Thell, Elix & Hur (2)  
*Teloschistes* Norman (ca. 24)  
*Teloschistopsis* Frödén, Söchting & Arup (3)  
*Teuvoahtiana* S.Y. Kondr. & Hur (3)  
*Upretia* S.Y. Kondr., A. Thell & Hur  
*Usnochroma* Söchting, Arup & Frödén (2)  
*Variospora* Arup, Söchting & Frödén (17)  
*Villophora* Söchting, Arup & Frödén (= *Raesaeneniana* S.Y. Kondr., Kärnefelt, A. Thell, Elix & Hur, *Tayloriella* S.Y. Kondr. et al.) (9)

*Wetmoreana* Arup, Søchting & Frödén (= *Fulgogasparrea* S.Y. Kondr., M.H. Jeong, Kärnefelt, Elix, A. Thell & Hur ?) (4)  
*Xanthocarpia* A. Massal. & De Not. (12)  
*Xanthomendoza* S.Y. Kondr. & Kärnefelt (20)  
*Xanthopeltis* R. Sant. (1)  
*Xanthoria* (Fr.) Th. Fr. (10)  
*Yoshimuria* S.Y. Kondr., Kärnefelt, Elix, A. Thell & Hur (= *Ikaeria* S.Y. Kondr., D. Upreti & Hur) (2)

***Teloschistales*** genus *incertae sedis*  
*Malcolmiella* Vězda (1)

***Lecanoromycetidae*** family *incertae sedis*  
***Helocarpaceae*** Hafellner  
*Helocarpon* Fr. (3)

**Subclass *Ostropomycetidae*** V. Reeb, Lutzoni & Cl. Roux  
***Baeomycetales*** Lumbsch, Huhndorf & Lutzoni. (= *Arctomiales* S. Stenroos, Miädl. & Lutzoni; = *Hymeneliales* S. Stenroos, Miädl. & Lutzoni; = *Trapeliales* B.P. Hodk. & Lendemer)  
***Arctomiaceae*** Th. Fr.  
*Arctomia* Th. Fr. (9)  
*Gabura* Adans. (3)  
*Gregorella* Lumbsch (1)  
*Steinera* Zahlbr. (14)  
*Wawea* Henssen & Kantvilas (1)

***Arthrorhaphidaceae*** Poelt & Hafellner  
*Arthrorhaphis* Th. Fr. (13)

***Baeomycetaceae*** Dumort.  
*Ainoa* Lumbsch & I. Schmitt (2)  
*Anamylopsora* Timdal (3)  
*Baeomyces* Pers. (10)  
*Parainoa* Resl & T. Sprib. (1)  
*Phyllobaeis* Gierl & Kalb (6)

***Cameroniaceae*** Kantvilas & Lumbsch  
*Cameronia* Kantvilas (2)

***Hymeneliaceae*** Körb.  
*Hymenelia* Kremp. (26)  
*Ionaspis* Th. Fr. (7)  
*Tremolecia* M. Choisy (6)

***Protothelenellaceae*** Vězda, H. Mayrhofer & Poelt (= *Thrombiaceae* Poelt & Vězda ex J.C. David & D. Hawksw.)  
*Mycowinteria* Sherwood (3)  
*Protothelenella* Räsänen (11)  
*Thrombium* Wallr. (5)

***Trapeliaceae*** M. Choisy ex Hertel  
*Amylora* Rambold (1)

*Aspiciliopsis* (Müll. Arg.) M. Choisy (1)  
*Coppinsia* Lumbsch & Heibel (1)  
*Ducatina* Ertz & Söchting (1)  
*Lignoscripta* B.D. Ryan (1)  
*Orceolina* Hertel (2)  
*Placopsis* (Nyl.) Linds. (ca. 60)  
*Placynthiella* Elenkin (7)  
*Rimularia* Nyl. (4)  
*Sarea* Fr. (2)  
*Trapelia* M. Choisy (24)  
*Trapeliopsis* Hertel & Gotth. Schneid. (20)

***Xylographaceae*** Tuck.

*Lambiella* Hertel (15)  
*Lithographa* Nyl. (10)  
*Ptychographa* Nyl. (1)  
*Xylographa* (Fr.) Fr. (20)

***Graphidales*** Bessey

***Diploschistaceae*** Zahlbr.

*Acanthothecis* Clem. (ca. 60)  
*Acanthotrema* Frisch (6)  
*Aggregatorygma* M. Cáceres, Aptroot & Lücking (2)  
*Ampliotrema* Kalb ex Kalb (17)  
*Asteristion* Leight. (7)  
*Austrotrema* I. Medeiros, Lücking & Lumbsch (3)  
*Borinquenotrema* Merc.-Díaz, Lücking & Parnmen (1)  
*Byssotrema* M. Cáceres (1)  
*Carbacanthographis* Staiger & Kalb (28)  
*Compositrema* Rivas Plata, Lücking & Lumbsch (4)  
*Corticorygma* M. Cáceres, S.C. Feuerst., Aptroot & Lücking (1)  
*Diploschistes* Norman (33)  
*Fibrillithecis* A. Frisch (15)  
*Gintarasia* Kraichak, Lücking & Lumbsch (8)  
*Glaucotrema* Rivas Plata & Lumbsch (5)  
*Gyrotrema* A. Frisch (6)  
*Heiomasia* Nelsen, Lücking & Rivas Plata (5)  
*Melanotopelia* Lumbsch & Mangold (4)  
*Melanotrema* A. Frisch (12)  
*Myriochapsa* M. Cáceres, Lücking & Lumbsch (3)  
*Myriotrema* Fée (55)  
*Nadvornikia* Tibell (5)  
*Nitidochapsa* Parnmen, Lücking & Lumbsch (5)  
*Ocellularia* G. Mey. (ca. 400)  
*Phaeographopsis* Sipman (3)  
*Pseudoramonia* Kantvilas & Vězda (4)  
*Redingeria* A. Frisch (9)  
*Reimnitzia* Kalb (1)  
*Rhabdodiscus* Vain. (36)  
*Sanguinotrema* Lücking (1)  
*Schizotrema* Mangold & Lumbsch (8)  
*Stegobolus* Mont. (16)

*Topeliopsis* Kantvilas & Vězda (20)  
*Wirthiotrema* Rivas Plata, Kalb, Frisch & Lumbsch (5)  
*Xalocoa* Kraichak, Lücking & Lumbsch (1)

***Fissurinaceae*** (Rivas Plata, Lücking & Lumbsch) B.P. Hodk.

*Clandestinotrema* Rivas Plata, Lücking & Lumbsch (17)  
*Cruentotrema* Rivas Plata, Paping, Lumbsch & Lücking (7)  
*Dyplolabia* A. Massal. (5)  
*Enigmatrema* Lücking (1)  
*Fissurina* Fée (ca. 155)  
*Pycnotrema* Rivas Plata & Lücking (2)

***Gomphillaceae*** Walt. Watson

*Actinoplaca* Müll. Arg. (2)  
*Aderkomyces* Bat. (30)  
*Aplanocalenia* Lücking, Sérus. & Vězda (1)  
*Arthotheliopsis* Vain. (5)  
*Asterothyrium* Müll. Arg. (32)  
*Aulaxina* Fée (14)  
*Calenia* Müll. Arg. (30)  
*Caleniopsis* Vězda & Poelt (2)  
*Corticifraga* D. Hawksw. & R. Sant. (9)  
*Diploschistella* Vain. (4)  
*Echinoplaca* Fée (40)  
*Ferraroa* Lücking, Sérus. & Vězda (1)  
*Gomphillus* Nyl. (6)  
*Gyalectidium* Müll. Arg. (52)  
*Gyalidea* Lettau (50)  
*Gyalideopsis* Vězda (91)  
*Hippocrepidea* Sérus. (1)  
*Jamesiella* Lücking, Sérus. & Vězda (4)  
*Lithogyalideopsis* Lücking, Sérus. & Vězda (4)  
*Paragyalideopsis* Etayo (4)  
*Paratracharia* Lücking (1)  
*Phyllogyalidea* Lücking & Aptroot (2)  
*Psorotheciopsis* Rehm (7)  
*Rolueckia* Paping, Thammath. & Boonpr. (3)  
*Taitaia* Suija, Kaasalainen, Kirika & Rikkinen (1)  
*Tricharia* Fée (ca. 30)

***Graphidaceae*** Dumort.

*Allographa* Chevall. (ca. 185)  
*Amazonotrema* Kalb & Lücking (1)  
*Anomalographis* Kalb (2)  
*Anomomorpha* Nyl. ex Hue (8)  
*Creographa* A. Massal. (2)  
*Cryptoschizotrema* Aptroot et al (2)  
*Diaphorographis* A.W. Archer & Kalb (2)  
*Diorygma* Eschw. (77)  
*Flegographa* A. Massal. (1)  
*Glyphis* Ach. (7)  
*Graphis* Adans. (ca. 275)

*Halegrapha* Rivas Plata & Lücking (9)  
*Hemithecium* Trevis. (ca. 50)  
*Jocatoa* R. Miranda (1)\*  
*Kalbographa* Lücking (5)  
*Leiorreuma* Eschw. (18)  
*Malmographina* M. Cáceres, Rivas Plata & Lücking (1)  
*Mangoldia* Lücking, Parnmen & Lumbsch (2)  
*Pallidogramme* Staiger, Kalb & Lücking (14)  
*Phaeographis* Müll. Arg. (ca. 180)  
*Platygramme* Fée (30)  
*Platythecium* Staiger (27)  
*Pliariona* A. Massal. (= *Phaeographina* Müll. Arg.) (1)  
*Polistroma* Clemente (1)  
*Pseudochapsa* Parnmen, Lücking & Lumbsch (19)  
*Pseudotopeliopsis* Parnmen, Lücking & Lumbsch (4)  
*Sarcographa* Fée (37)  
*Sarcographina* Müll. Arg. (6)  
*Schistophoron* Stirt. (5)  
*Thalloloma* Trevis. (20)  
*Thecaria* Fée (4)  
*Thecographa* A. Massal. (3)

***Redonographaceae*** (Lücking, Tehler & Lumbsch) Lumbsch  
*Gymnographopsis* C.W. Dodge (3)  
*Redonographa* Lücking, Tehler & Lumbsch (5)

***Thelotrema*** Stizenb.  
*Astrochapsa* Parnmen, Lücking & Lumbsch (29)  
*Chapsa* A. Massal. (ca. 60)  
*Chroodiscus* (Müll. Arg.) Müll. Arg. (17)  
*Crutarndina* Parnmen, Lücking & Lumbsch (1)  
*Leucodecton* A. Massal. (31)  
*Paratopeliopsis* Merc.-Díaz, Lücking & Parnmen (1)  
*Thelotrema* Ach. (= *Tremotylum* Nyl.) (106)

***Gyalectales*** Henssen ex D. Hawksw. & O.E. Erikss.  
***Coenogoniaceae*** (Fr.) Stizenb.  
*Coenogonium* Ehrenb. ex Nees (ca. 91)

***Gyalectaceae*** (A. Massal.) Stizenb.  
*Cryptolechia* A. Massal. (11)  
*Francisrosea* Ertz & Sanderson (1)\*  
*Gyalecta* Ach. (50)  
*Neopetractis* Ertz (2)\*  
*Ramonia* Stizenb. (24)  
*Semigyalecta* Vain. (1)

***Phlyctidaceae*** Poelt & Vězda ex J.C. David & D. Hawksw.  
*Phlyctis* (Wallr.) Flot. (20)  
*Psathyrophlyctis* Brusse (1)

***Sagiolechiaceae*** Baloch, Lücking, Lumbsch & Wedin *Rhexophiale* Th. Fr. (1)

*Sagiolechia* A. Massal. (3)

***Trichotheliaceae*** Bitter & F. Schill. (= *Porinaceae* Walt. Watson; = *Porinaceae* Rchb.)

*Clathroporina* Müll. Arg. (ca. 25)

*Flabelloporina* Sobreira, M. Cáceres & Lücking (1)

*Myeloconis* P.M. McCarthy & Elix (4)

*Porina* Müll. Arg. (ca. 145)

*Pseudosagedia* (Müll. Arg.) Choisy (80)

*Saxiloba* Lücking, Moncada & Viñas (2)\*

*Segestria* Fr. (70)

*Trichothelium* Müll. Arg. (40)

***Odontotrematales*** Lücking\*

***Odontotremataceae*** D. Hawksw. & Sherwood

*Claviradulomyces* P.R. Johnst., D.C. Park, H.C. Evans, R.W. Barreto & D.J. Soares (1)

*Coccomycetella* Höhn. (2)

*Odontotrema* Nyl. (7)

*Odontura* Clem. (1)

*Paschelkiella* Sherwood (1)

*Potriphila* Döbbeler (3)

*Rogellia* Döbbeler (2)

*Stromatothecia* D.E. Shaw & D. Hawksw. (1)

*Tryblis* Clem. (2)

*Xerotrema* Sherwood & Coppins (2)

***Ostropales*** Nannf.

***Phaneromycetaceae*** Gamundí & Spinedi\*

*Phaneromyces* Speg. & Har. ex Speg. (2)

***Spirographaceae*** Flakus, Etayo & Miadlikowska\*

*Spirographa* Zahlbr. (= *Asteroglobulus* Brackel; = *Cornutispora* Piroz.) (24)

***Stictidaceae*** Fr.

*Absconditella* Vězda (16)

*Acarosporina* Sherwood (5)

*Biostictis* Petr. (5)

*Carestiella* Bres. (1)

*Conotremopsis* Vězda (1)

*Cryptodiscus* Corda (= *Lettauia* D. Hawksw. & R. Sant.) (10)

*Cyanodermella* O.E. Erikss. (2)

*Delpontia* Penz. & Sacc. (1)

*Dendroseptoria* Alcalde (3)

*Fitzroyomyces* Crous (1)

*Geisleria* Nitschke (1)

*Glomerobolus* Kohlm. & Volkm.-Kohlm. (1)

*Ingvariella* Guderley & Lumbsch (1)

*Karstenia* Fr. (10)

*Lillicoa* Sherwood (4)

*Nanostictis* M.S. Christ. (ca. 8)

*Neofitzroyomyces* Crous (1)

*Neostictis* Ekanayaka & K.D. Hyde (1)\*

*Ostropa* Fr. (1)

*Ostropomyces* Thiyagaraja, Lücking, Ertz & K.D. Hyde (2)\*  
*Propoliopsis* Rehm (1)  
*Robergea* Desm. (8)  
*Schizoxylon* Pers. (ca. 35)  
*Sphaeropezia* Sacc. (= *Lethariicola* Grumann) (19)  
*Stictis* Pers. (4)  
*Stictophacidium* Rehm (3)  
*Thelopsis* Nyl. (9)  
*Topelia* P.M. Jørg. & Vězda (6)  
*Trinathotrema* Lücking, Rivas Plata & Mangold (3)  
*Xyloschistes* Vain. ex Zahlbr. (1)

***Ostropales* genera incertae sedis**

*Aabaarnia* Diederich (1)  
*Biazrovia* Zhurb. & Etayo (1)  
*Elongaticonidia* W.J. Li & Camporesi & K.D. Hyde\*  
*Normanogalla* Diederich (1)  
*Paraethariicola* Calat., Etayo & Diederich (1)

***Pertusariales*** M. Choisy ex D. Hawksw. & O.E. Erikss.  
***Agyriaceae*** Corda (= *Miltideaceae* Hafellner)  
*Agyrium* Fr. (3)  
*Miltidea* Stirt. (1)

***Coccotremataceae*** Henssen ex J.C. David & D. Hawksw.  
*Coccotrema* Müll. Arg. (16)  
*Gyalectaria* I. Schmitt, Kalb & Lumbsch (3)  
*Parasiphula* Kantvilas & Grube (7)

***Icmadophilaceae*** Triebel

*Dibaeis* Clem. (ca. 14)  
*Endocena* Cromb. (= *Chirleja* Lendemer & B.P. Hodk.) (2)  
*Icmadophila* Trevis. (4)  
*Knightiellastrum* L. Ludw. & Kantvilas (1)\*  
*Pseudobaeomyces* M. Satì (2)  
*Siphula* Fr. (26)  
*Siphulella* Kantvilas, Elix & P. James (1)  
*Siphulopsis* Kantvilas & A.R. Nilsen (1)\*  
*Thamnotia* Ach. ex Schaerer (4)  
***Megasporaceae*** Lumbsch  
*Aspicilia* A. Massal. (ca. 200)  
*Circinaria* Link (ca. 40)  
*Lobothallia* (Clauzade & Cl. Roux) Hafellner (12)  
*Megaspora* (Clauzade & Cl. Roux) Hafellner & V. Wirth (4)  
*Sagedia* Ach. (ca. 30)  
*Teuvoa* Sohrabi & S. Leavitt (5)

***Microcaliciaceae*** Tibell

*Microcalicium* Vain. (4)

***Ochrolechiaceae*** R.C. Harris ex Lumbsch & I. Schmitt

*Ochrolechia* A. Massal. (60)

***Pertusariaceae*** Körb. ex Körb.

*Loxosporopsis* Henssen (1)

*Pertusaria* DC. (ca. 400)

*Thamnochrolechia* Aptroot & Sipman (1)

***Varicellariaceae*** B.P. Hodk., R.C. Harris & Lendemer ex Lumbsch & Leavitt

*Varicellaria* Nyl. (8)

***Variolariaceae*** Fée ex Zenker

*Lepra* Scop. (= *Marfloraea* S.Y. Kondr. et al.) (94)

***Sarrameanales*** B.P. Hodk. & Lendemer

***Sarrameanaceae*** Hafellner

*Loxospora* A. Massal. (14)

*Sarrameana* Vězda & P. James (1)

***Schaereriales*** Lumbsch & Leavitt

***Schaereriaceae*** M. Choisy ex Hafellner

*Schaereria* Körb. (= *Hafellnera* Houmeau & Cl. Roux) (16)

***Thelenellales*** Lumbsch & Leavitt

***Thelenellaceae*** O.E. Erikss. ex H. Mayrhofer

*Aspidothelium* Vain. (17)

*Chromatochlamys* Trevis. (3)

*Thelenella* Nyl. (30)

***Ostropomycetidae*** familia incertae sedis

***Epigloeaceae*** Zahlbr.

*Epigloea* Zúkal (12)

***Ostropomycetidae*** genera incertae sedis

*Amphorotheccium* P.M. McCarthy, Kantvilas & Elix

*Anzina* Scheid. (1)

*Aspilidea* Hafellner (1)

*Bachmanniomyces* D. Hawksw. (= *Phaeopyxis* Rambold & Triebel) (8)

*Dictyocatenulata* Finley & E.F. Morris (1)

*Malvinia* Döbbeler (1)

*Pleiopatella* Rehm (1)

**Subclass *Umbilicariomycetidae*** Bendiksby, Hestmark & Timdal

***Umbilicariales*** Lumbsch

***Elixiaaceae*** Lumbsch

*Elixia* Lumbsch (2)

*Meridianelia* Kantvilas & Lumbsch (1)

***Fuscideaceae*** Hafellner

*Fuscidea* V. Wirth & Vězda (ca. 40)

*Hueidea* Kantvilas & P.M. McCarthy (1)

*Maronea* A. Massal. (13)

*Orphniospora* Körb. (4)

***Ophioparmaceae*** R.W. Rogers & Hafellner

*Boreoplaca* Timdal (1)



*Hypocenomyce* M. Choisy (3)  
*Ophioparma* Norman (9)

***Ropalosporaceae*** Hafellner  
*Ropalospora* A. Massal. (9)

***Umbilicariaceae*** Chevall.  
*Fulgidea* Bendiksby & Timdal (2)  
*Umbilicaria* Hoffm. (= *Lasallia* Mérat) (ca. 90)  
*Xylopsora* Bendiksby & Timdal (3)

***Lecanoromycetes*** order *incertae sedis*  
***Turquoiseomycetales*** Crous  
***Turquoiseomycetaceae*** Crous  
*Turquoiseomyces* Crous (1)

***Lecanoromycetes*** families *incertae sedis*  
***Micropeltidaceae*** Clem. & Shear  
*Cyclopeltella* Petr. (1)  
*Dictyopeltella* Bat. & I.H. Lima (2)  
*Haplopeltthea* Bat., J.L. Bezerra & Cavalc. (1)  
*Micropeltis* Mont. (ca. 110)  
*Neopeltella* Petr. (1)  
*Scolecopeltidium* F. Stevens & Manter (ca. 80)  
*Stomiopeltopsis* Bat. & Cavalc. (2)  
*Stomiotheca* Bat. (2)

***Lecanoromycetes*** genera *incertae sedis*  
*Argopsis* Th. Fr. (1)  
*Ascographa* Velen. (1)  
*Bartlettella* D.J. Galloway & P.M. Jørg. (1)  
*Bouvetiella* Øvstedal (1)  
*Buelliastrum* Zahlbr. (1)  
*Haploloma* Trevis. (1)  
*Hosseusia* Gyeln. (3)  
*Korfiomyces* Iturr. & D. Hawksw. (1)  
*Maronella* M. Steiger (1)  
*Notolecidea* Hertel (1)  
*Petractis* Fr. (3)  
*Piccolia* A. Massal. (10)  
*Ravenelula* Speg. (2)  
*Robincola* Velen. (1)  
*Roburnia* Velen. (1)

**Class *Leotiomyces*** O.E. Erikss. & Winka  
***Chaetomellales*** Crous & Denman  
***Chaetomellaceae*** Baral, P.R. Johnst. & Rossman  
*Chaetomella* Fuckel (26)  
*Pilidium* Kunze (23)  
*Sphaerographium* Sacc. (23)  
*Synchaetomella* Decock & Seifert (3)

***Helotiales*** Nannf. ex Korf & Lizoň (= *Cyttariales* Luttr. ex Gamundí)\*

***Amorphothecaceae*** Parbery

*Amorphotheca* Parbery (21)

***Arachnopezizaceae*** Hosoya, J.G. Han & Baral

*Arachnopeziza* Fuckel (35)

*Arachnoscypha* Boud. (1)

*Austropezia* Spooner (1)

*Eriopezia* (Sacc.) Rehm (21)

*Parachnopeziza* Korf (8)

***Ascocorticiaceae*** J. Schrot

*Ascocorticiellum* Julich & B. de Vries (1)

*Ascocorticium* Bref. (2)

*Ascosorus* P. Henn. & Ruhland (1)

***Ascodichaenaceae*** D. Hawksw. & Sherwood

*Ascodichaena* Butin (2)

*Delpinoina* Kuntze (1)

***Bloxamiaceae*** Locq.

*Bloxamia* Berk. & Broome (10)

***Bryoglossaceae*** Ekanayaka & Hyde

*Bryoclaviculus* L. Ludw., P.R. Johnst. & Steel (1)

*Bryoglossum* Redhead (2)

*Neocudoniella* S. Imai (3)

***Calloriaceae*** Marchand

*Aivenia* Svrcek (4)

*Calloria* Fr. (28)

*Chaetonaevia* Arx (3)

*Diplonaevia* Sacc. (33)

*Duebenia* Fr. (6)

*Eupropolella* Hohn. (8)

*Hyalacrotus* (Korf & L.M. Kohn) Raitv. (5)

*Iridinea* Velen. (2)

*Laetinaevia* Nannf. (19)

*Loricella* Velen. (6)

*Micropodia* Boud. (15)

*Naeviella* (Rehm) Clem. (3)

*Naeviopsis* B. Hein (14)

*Ploettnera* Henn. (6)

***Cenangiaceae*** Rehm (= *Hemiphacidiaceae* Korf)

*Cenangiopsis* Rehm (9)

*Cenangium* Fr. (47)

*Chlorencoelia* J.R. Dixon (4)

*Crumenulopsis* J.W. Groves (3)

*Encoelia* (Fr.) P. Karst. (38)

*Fabrella* Kirschst. (1)

*Heyderia* Link (4)

*Rhabdocline* Syd. (7)  
*Sarcotrochila* Hohn. (7)  
*Trochila* Fr. (37)\*  
*Velutarina* Korf (3)

***Chlorociboriaceae*** Baral & P.R. Johnst.  
*Brahmaculus* P.R. Johnst. (4)\*  
*Chlorociboria* Seaver ex C.S. Ramamurthi, Korf & L.R. Batra (23)

***Chlorospleniaceae*** Ekanayaka & Hyde  
*Chlorosplenium* Fr. (17)

***Chrysodiscaceae*** Baral & Haelew.  
*Chrysodisca* Baral, Polhorský & G. Marson (1)

***Cordieritidaceae*** Sacc.  
*Ameghiniella* Speg. (2)  
*Annabella* Fryar, Haelew. & D.E.A. Catches. (1)  
*Austrocenangium* Gamundí (2)  
*Cordierites* Mont. (5)  
*Diplocarpa* Massee (1)  
*Diplolaeviopsis* Giralt & D. Hawksw. (3)  
*Ionomidotis* E.J. Durand ex Thaxt. (4)  
*Lawreyella* Etayo, Kukwa & Rodr. Flakus (1)  
*Llimoniella* Hafellner & Nav.-Ros. (21)  
*Macroskyttea* Etayo, Flakus, Suija & Kukwa (1)  
*Midotiopsis* Henn. (2)  
*Neobaryopsis* Flakus, Etayo, Kukwa & Rodr. Flakus (1)  
*Rhymbocarpus* Zopf (10)  
*Sabahriopsis* Crous & M.J. Wingf. (1)  
*Skyttea* Sherwood, D. Hawksw. & Coppins (31)  
*Skyttella* D. Hawksw. & R. Sant. (2)  
*Thamnogalla* D. Hawksw. (1)  
*Unguiculariopsis* Rehm (29)

***Cyttariaceae*** Speg.  
*Cyttaria* Berk. (13)

***Dermateaceae*** Fr.  
*Coleophoma* Hohn. (= *Parafabraea* Chen Chen, Verkley & Crous) (30)  
*Corniculariella* P. Karst. (3)  
*Dermea* Fr. (24)  
*Gelatinoamylaria* Prasher & R. Sharma (1)  
*Neodermea* W.J. Li, D.J. Bhat & K.D. Hyde (2)  
*Neofabraea* H.S. Jacks. (9)  
*Neogloeosporidina* W.J. Li, Camporesi & K.D. Hyde (1)  
*Pezicula* Tul. & C. Tul. (92)  
*Phlyctema* Desm. (60)  
*Pseudofabraea* Chen Chen, Verkley & Crous (1)  
*Rhizodermea* Verkley & Zijlstra (1)  
*Schizothyrioma* Hohn (4)  
*Verkleyomyces* Y. Marin & Crous (1)

*Xenochalara* M.J. Wingf. & Crous (1)

***Discinellaceae*** Ekanayaka & K.D. Hyde

*Articulospora* Ingold (6)  
*Cladochasiella* Marvanova (1)  
*Discinella* Boud. (13)  
*Fontanospora* Dyko (4)  
*Gyoerffyella* Kol (10)  
*Lemonniera* De Wild. (8)  
*Margaritispora* Ingold (2)  
*Naevula* B. Hein (5)  
*Pezoloma* Clem. (14)  
*Pseudopezicula* Korf (2)  
*Tetrachaetum* Ingold (1)  
*Varicosporium* W. Kegel (9)

***Drepanopezizaceae*** Baral

*Blumeriella* Arx (7)  
*Diplocarpon* F.A. Wolf (7)  
*Drepanopeziza* (Kleb.) Hohn. (5)  
*Felisbertia* Viegas (7)  
*Leptotrochila* P. Karst. (15)  
*Pseudopeziza* Fuckel (2)  
*Spilopodia* Boud. (4)  
*Spilopodiella* E. Mull. (1)

***Erysiphaceae*** Tul. & C. Tul.

*Arthrocladiella* Vassilkov (1)  
*Blumeria* Golovin ex Speer (1)  
*Brasiliomyces* Viegas (6)  
*Bulbomicroidium* Marm., S. Takam. & U. Braun (1)  
*Caespitotheca* S. Takam. & U. Braun (1)  
*Cystotheca* Berk. & Curtis (9)  
*Erysiphe* DC. (478)  
*Golovinomyces* (U. Braun) Heluta (66)  
*Leveillula* G. Arnaud (49)  
*Microidium* (To-anun & S. Takam.) To-anun & S. Takam. (3)  
*Neoerysiphe* U. Braun (15)  
*Parauncinula* S. Takam. & U. Braun (4)  
*Phyllactinia* Lev. (117)  
*Pleochaeta* Sacc. & Speg. (5)  
*Podosphaera* Kunze (124)  
*Pseudoidium* Y.S. Paul & J.N. Kapoor (80)  
*Queirozia* Viegas & Cardoso (1)  
*Sawadaea* Miyabe (10)  
*Takamatsuella* U. Braun & A. Shi (1)  
*Typhulochaeta* Ito & Hara (4)

***Gelatinodiscaceae*** S.E. Carp

*Ascocoryne* J.W. Groves & D.E. Wilson (8)  
*Ascotremella* Seaver (2)  
*Chloroscypha* Seaver (14)

*Didymocoryne* Sacc. & Trotter (1)  
*Neobulgaria* Petr. (11)  
*Ombrophila* Fr. (11)  
*Phaeangellina* Dennis (1)  
*Skyathea* Spooner & Dennis (1)  
*Xerombrophila* Baral (1)

***Godroniaceae*** Baral

*Ascocalyx* Naumov (4)  
*Atropellis* Zeller & Goodd. (4)  
*Godronia* Moug. & Lev. (30)  
*Gremmeniella* M. Morelet (3)  
*Grovesiella* M. Morelet (2)

***Helotiaceae*** Rehm

*Ascoconidium* Seaver (3)  
*Bisporella* Sacc. (19)  
*Bryoscyphus* Spooner (19)  
*Calycella* (Sacc.) Sacc. (1)  
*Cudoniella* Sacc. (31)  
*Cyathicula* De Not. (30)  
*Dicephalospora* Spooner (4)  
*Dimorphospora* Tubaki (1)  
*Discorehmia* Kirschst. (5)  
*Eubelonis* Hohn. (2)  
*Filosporella* Nawawi (6)  
*Geniculospora* Sv. Nilsson ex Marvanová & Sv. Nilsson (2)  
*Glarea* Bills & Palaez (2)  
*Gloeotinia* M. Wilson, Noble & E.G. Gray (2)  
*Graddon* Dennis (7)  
*Gremmenia* Korf (4)  
*Helicodendron* Peyronel (3)  
*Hymenoscyphus* Gray (170)  
*Hymenotorrendiella* P.R. Johnst., Baral & R. Galán (9)  
*Muscicola* Velen. (1)  
*Mycofalcella* Marvanová, Om-Kalth. & J. Webster (2)  
*Mytilodiscus* Kropp & S.E. Carp. (1)  
*Neocrinula* Crous (2)  
*Phaeohelotium* Kanouse (41)  
*Pithyella* Boud. (8)  
*Pseudoniptera* Velen. (25)  
*Roesleria* Thüm. & Pass. (4)  
*Scytalidium* Pesante (30)  
*Symphyosirinia* E.A. Ellis (6)  
*Tatraea* Svrcek (2)  
*Xylogramma* Wallr. (18)

***Heterosphaeriaceae*** Rehm

*Heterosphaeria* Grev. (7)

***Hyaloscyphaceae*** Nannf.

*Aeruginoscyphus* Dougoud (7)

*Ambrodiscus* S.E. Carp. (1)  
*Amicodisca* Svrcek (6)  
*Arbusculina* Marvanova & Descals (3)  
*Asperopilum* Spooner (1)  
*Clathrosphaerina* Beverw. (2)  
*Crucellisporiopsis* Nag Raj (3)  
*Dematioscypha* Svrcek (4)  
*Dimorphotricha* Spooner (1)  
*Echinula* Graddon (1)  
*Endoscypha* Syd. (1)  
*Fuscolachnum* J.H. Haines (7)  
*Gamarada* D.J. Midgley & Tran-Dinh (1)  
*Graddonidiscus* Raitv. & R. Galan (3)  
*Grahamiella* Spooner (3)  
*Haplographium* Berk. & Broome (15)  
*Hegermila* Raitv. (4)  
*Hyalopeziza* Fuckel (15)  
*Hyaloscypha* Boud. (45)  
*Hyphodiscus* Kirschst. (16)  
*Hyphopeziza* J.G. Han, Hosoya & H.D. Shin (1)  
*Incrupila* Raitv. (10)  
*Meliniomyces* Hambl. & Sigler (3)  
*Mimicoscypha* T. Kosonen, Huhtinen & K. Hansen (3)\*  
*Mycoarthris* Marvanova & P.J. Fisher (1)  
*Olla* Velen. (2)  
*Polaroscyphus* Huhtinen (1)  
*Proprioscypha* Spooner (1)  
*Protounguicularia* Raitv. & Galan (10)  
*Pseudaegerita* J.L. Crane & Schokn. (7)  
*Psilocistella* Svrcek (10)  
*Resinoscypha* T. Kosonen, Huhtinen & K. Hansen (2)\*  
*Rhizoscyphus* W.Y. Zhuang & Korf (1)  
*Scolecolachnum* Guatim., R.W. Barreto & Crous (2)  
*Thindiomycetes* Arendh. & R. Sharma (1)  
*Unguiculariella* K.S. Thind & R. Sharma (1)  
*Unguiculella* Hohn (17)  
*Venturiocistella* Raitv (7)

***Lachnaceae*** (Nannf.) Raitv.

*Albotricha* Raitv. (19)  
*Belonidium* Mont. & Dur. (1)  
*Brunnipila* Baral (10)  
*Capitotricha* (Raitv.) Baral (10)  
*Dasyscyphella* Tranzschel (1)  
*Erioscyphella* Kirschst. (10)  
*Incrucipulum* Baral (6)  
*Lachnellula* P. Karst. (40)  
*Lachnopsis* Guatim., R.W. Barreto & Crous (2)  
*Lachnum* Retz. (50)  
*Lasiobelonium* Ellis & Everh. (20)  
*Neodasyscypha* Sukova & Spooner (2)  
*Perrotia* Boud. (19)

*Proliferodiscus* J.H. Haines & Dumont (8)  
*Solenopezia* Sacc. (7)  
*Trichopeziza* Fuckel (30)  
*Tubolachnum* Velen (2)

***Leptodontidiaceae*** Hern.-Restr., Crous & Gené  
*Leptodontidium* de Hoog. (11)

***Loramycetaceae*** Dennis ex Digby & Goos  
*Loramyces* W. Weston (2)  
*Obtectodiscus* E. Müll., Petrini & Samuels (2)

***Mitrulaceae*** Rchb.  
*Mitrula* Fr. (16)

***Mollisiaceae*** Rehm  
*Barrenia* E. Walsh & N. Zhang (2)  
*Belonopsis* (Sacc.) Rehm (ca. 30)  
*Bulbomollisia* Graddon (1)  
*Cheirospora* Moug. & Fr. (2)  
*Cystodendron* Bubak (2)  
*Discocurtisia* Nannf. (12)  
*Fuscosclera* Hern.-Restr., J. Mena & Gené (1)  
*Mollisia* (Fr.) P. Karst. (130)  
*Neotapesia* E. Mull. & Hutter (3)  
*Niptera* Fr. (10)  
*Nipterella* Starback ex Dennis (2)  
*Phialocephala* W.B. Kendr. (37)  
*Pseudonaevia* Dennis & Spooner (2)  
*Sarconiptera* Raitv. (1)  
*Scutobelonium* Graddon (1)  
*Scutomollisia* Nannf. (14)  
*Tapesia* (Pers.) Fuckel (110)  
*Trimmatostroma* Corda (34)  
*Variocladium* Descals & Marvanova (1)

***Myxotrichaceae*** Currah  
*Byussoascus* Arx (1)  
*Myxotrichum* Kunze (17)  
*Oidiodendron* Robak (26)

***Neolauriomycetaceae*** Crous  
*Exochalara* W. Gams & Hol.-Jech. (3)  
*Lareunionomyces* Crous & M.J. Wingf. (4)  
*Neolauriomycetes* Crous (1)

***Patellariopsisidaceae*** Karun., Camporesi & K.D. Hyde\*  
*Patellariopsis* Dennis (5)

***Pezizellaceae*** Velen.  
*Allophylaria* (P. Karst.) P. Karst. (6)  
*Antinoa* Velen. (8)

*Calycellina* Hohn (45)  
*Calycina* Nees ex Gray (30)  
*Chalara* (Corda) Rabenh. (99)  
*Ciliolarina* Svrcek (1)  
*Curvoclavula* G. Delgado, F.A. Fernández & A.N. Mill. (1)  
*Hamatocanthoscypha* Svrcek (3)  
*Hyalodendriella* Crous (1)  
*Micropeziza* Fuckel (12)  
*Microscypha* Syd. & P. Syd. (6)  
*Mollisia* Hohn. ex Weese (11)  
*Mollisinopsis* Arendh. & R. Sharma (3)  
*Moserella* Poder & Scheuer (1)  
*Phaeoscypha* Spooner (1)  
*Phialina* Höhn. (6)  
*Poculinia* Spooner (1)  
*Psilachnum* Hohn. (28)  
*Rodwayella* Spooner (3)  
*Scleropezicula* Verkley (6)  
*Velutaria* Fuckel (1)  
*Xenopolyscytalum* Crous (1)  
*Zymochalara* Guatim., R.W. Barreto & Crous (2)

***Ploettnerulaceae* Kirschst.**

*Cadophora* Lagerb. & Melin (15)  
*Collembolispora* Marvanova & Pascoal (2)  
*Cylindrosporium* Grev. (168)  
*Dennisiodiscus* Svrcek (10)  
*Lasiomollisia* Raitv. & Vesterh. (1)  
*Mastigosporium* Riess (4)  
*Mycochaetophora* Hara & Ogawa (2)  
*Neospermospora* Crous & U. Braun (1)\*  
*Nothophacidium* J. Reid & Cain (1)  
*Oculimacula* Crous & W. Gams (6)  
*Pirottaea* Sacc. (28)  
*Pyrenopeziza* Fuckel (3)  
*Rhynchosporium* Heinsen ex A.B. Frank (5)

***Rutstroemiaceae* Holst-Jensen, L.M. Kohn & T. Schumach.**

*Bicornispora* Checa, Barrasa, M.N. Blanco & A.T. Martínez (2)  
*Dencoeliopsis* Korf (2)  
*Lambertella* Hohn. (6)  
*Lanzia* Sacc. (1)  
*Pseudolanzia* Baral & G. Marson (1)  
*Rutstroemia* P. Karst. (100)  
*Torrendiella* Boud. & Torrend (3)

***Sclerotiniaceae* Whetzel ex Whetzel**

*Amphobotrys* Hennebert (1)  
*Botrytis* P. Micheli ex Pers. (3)  
*Ciboria* Fuckel (21)  
*Ciborinia* Whetzel (16)  
*Cristulariella* Hohn. (5)



*Cudoniopsis* Speg. (1)  
*Dumontinia* L.M. Kohn (5)  
*Elliottinia* L.M. Kohn (1)  
*Grovesinia* M.N. Cline, J.L. Crane & S.D. Cline (2)  
*Haradamyces* Masuya, Kusunoki, Kosaka & Aikawa (1)  
*Kohninia* Holst-Jensen, Vrålstad & T. Schumach. (1)  
*Martininia* Dumont & Korf (1)  
*Monilinia* Honey (30)  
*Mycopappus* Redhead & G.P. White (3)  
*Myrioconium* Syd. & P. Syd. (10)  
*Myriosclerotinia* N.F. Buchw. (10)  
*Ovulinia* Weiss (9)  
*Phaeosclerotinia* Hori (1)  
*Pseudociboria* Kanouse (1)  
*Pycnopeziza* W.L. White & Whetzel (5)  
*Redheadia* Y. Suto & Suyama (1)  
*Sclerencoelia* Pärtel & Baral (3)  
*Scleromitula* S. Imai (6)  
*Sclerotinia* Fuckel (15)  
*Sclerotium* Tode (100)  
*Seaverinia* Whetzel (2)  
*Septotinia* Whetzel ex J.W. Groves & M.E. Elliott (2)  
*Streptotinia* Whetzel (3)  
*Stromatinia* (Boud.) Boud. (15)  
*Valdensia* Peyronel (3)

***Tricladiaceae*** P.R. Johnst. & Baschien\*  
*Tricladium* Ingold (25)

***Vibrisseaceae*** Korf  
*Acephala* Grunig & T.N. Sieber (2)  
*Chlorovibrissea* L.M. Kohn (4)  
*Leucovibrissea* (A. Sanchez) Korf (1)  
*Pocillum* De Not. (1)  
*Srinivasanomyces* S. Rana & S.K. Singh (1)\*  
*Vibrissea* Fr (34)

***Helotiales*** genera *incertae sedis*  
*Acidea* Hujislova & M. Kolarík (1)  
*Acidomelania* E. Walsh & N. Zhang (1)  
*Algincola* Velen. (1)  
*Amylocarpus* Curr. (1)  
*Angelina* Fr. (1)  
*Aphanodesmium* Réblová & Hern.-Restr.\*  
*Apiculospora* Wijayaw., Camporesi, A.J.L. Phillips & K.D. Hyde (1)  
*Aquadiscula* Shearer & J.L. Crane (2)  
*Aquapoterium* Raja & Shearer (1)  
*Ascluella* DiCosmo, Nag Raj & W.B. Kendr. (1)  
*Ascoclavulina* Otani (8)  
*Banksiamyces* G. Beaton (4)  
*Belonioscyphella* Hohn. (4)  
*Benguetia* Syd. & P. Syd. (1)

*Bioscypha* Syd. (2)  
*Brachyalara* Reblova & W. Gams (1)  
*Brefeldochium* Verkley (1)  
*Bulgariella* P. Karst. (4)  
*Bulgariopsis* Henn. (2)  
*Calycellinopsis* W.Y. Zhuang (1)  
*Capillipes* R. Sant. (1)  
*Capricola* Velen. (1)  
*Cashiella* Petr. (3)  
*Cejpia* Velen. (3)  
*Cenangiumella* J. Frohl. & K.D. Hyde (1)  
*Chloroepilichen* Etayo (1)  
*Chlorospleniella* P. Karst. (1)  
*Chondroderris* Maire (1)  
*Ciliella* Sacc. & P. Syd. (1)  
*Cistella* Quel. (50)  
*Clathrosporium* Nawawi & Kuthub. (1)  
*Coleosperma* Ingold (1)  
*Colipila* Baral & Guy Garcia (2)  
*Comesia* Sacc. (3)  
*Cornuntum* Velen. (1)  
*Coronellaria* P. Karst. (4)  
*Criserosphaeria* Speg. (1)  
*Crocicreas* Fr. (4)  
*Crucellisporium* M.L. Farr (3)  
*Crumenella* P. Karst. (1)  
*Cryptohymenium* Samuels & L.M. Kohn (1)  
*Cryptopezia* Hohn. (1)  
*Dactylaria* Sacc. (100)  
*Dawsicola* Dobbeler (1)  
*Dermateopsis* Nannf. (2)  
*Didonia* Velen. (5)  
*Didymascella* Maire & Sacc. (5)  
*Discomycella* Hohn. (1)  
*Durella* Tul. & C. Tul. (22)  
*Echinodiscus* Etayo & Diederich (2)  
*Encoeliopsis* Nannf. (4)  
*Episclerotium* L.M. Kohn (2)  
*Erikssonopsis* M. Morelet (1)  
*Fulvoflamma* Crous (1)  
*Gloeopeziza* Zukal (8)  
*Godroniopsis* Diehl & E.K. Cash (3)  
*Gorgoniceps* (P. Karst.) P. Karst. (3)  
*Grimmicola* Dobbeler & Hertel (1)  
*Grovesia* Dennis (1)  
*Hemiglossum* Pat. (2)  
*Humicolopsis* Cabral & S. Marchand (2)  
*Hydrocina* Scheuer (1)  
*Hymenobolus* Durieu & Mont. (3)  
*Hyphoscypha* Velen. (1)  
*Hysteronaevia* Nannf. (12)  
*Hysteropezizella* Hohn. (26)

*Hysterostegiella* Hohn. (10)  
*Infundichalara* Reblova & W. Gams (2)  
*Involucroscypha* Raitv. (10)  
*Jacobsonia* Boedijn (1)  
*Korfia* J. Reid & Cain (1)  
*Larissia* Raitv. (1)  
*Lasseria* Dennis (1)  
*Lemalis* Fr. (3)  
*Libartania* Nag Raj (2)  
*Livia* Velen. (1)  
*Masseea* Sacc. (4)  
*Melanopeziza* Velen. (1)  
*Merodontis* Clem. (1)  
*Microdiscus* Sacc. (1)  
*Mitrulinia* Spooner (1)  
*Monochaetiellopsis* B. Sutton & DiCosmo (2)  
*Mycosphaerangium* Verkley (3)  
*Obconicum* Velen. (2)  
*Obscurodiscus* Raitv. (1)  
*Orbiliopsis* (Sacc. & D. Sacc.) Syd. & P. Syd. (2)  
*Otwaya* G. Beaton (12)  
*Pachydisca* Boud. (32)  
*Parencoelia* Petr. (4)  
*Patinellaria* H. Karst. (1)  
*Peltigeromyces* A. Möller (3)  
*Pestalopezia* Seaver (3)  
*Pezolepis* Syd. (2)  
*Pezomela* Syd. (1)  
*Phacidiella* P. Karst. (1)  
*Phaeofabraea* Rehm (1)  
*Phaeopyxis* Rambold & Triebel (1)  
*Phragmonaevia* Rehm (16)  
*Piceomphale* Svrček (1)  
*Pleoscutula* Vou. (3)  
*Podophacidium* Niessl (2)  
*Polydesmia* Boud. (7)  
*Polyphilus* D.G. Knapp, Ashrafi, W. Maier & Kovács (2)  
*Populomyces* Hern.-Restr. (1)\*  
*Potridiscus* Dobbeler & Triebel (1)  
*Pseudohelotium* Fuckel (50)  
*Pseudolachnum* Velen. (1)  
*Pseudomitula* Gamundi (1)  
*Pseudopeltis* L. Holm & K. Holm (1)  
*Pseudotryblidium* Rehm (1)  
*Psilophana* Syd. (1)  
*Pteromyces* E. Bommer, M. Rousseau & Sacc. (1)  
*Pubigera* Baral, Gminder & Svrček (1)  
*Radotinea* E. Bommer, M. Rousseau & Sacc. (1)  
*Rhexocercosporidium* U. Braun (2)  
*Rhizocladosporium* Crous & U. Braun (1)  
*Rhizothyrium* Naumov (1)  
*Rommelaarsia* Baral & Haelew. (1)

*Roseodiscus* Baral (4)  
*Sageria* A. Funk (1)  
*Sambucina* Velen. (1)  
*Sarcomyces* Massee (1)  
*Sclerocrana* Samuels & L.M. Kohn (4)  
*Scutulopsis* Velen. (1)  
*Soosiella* Hujslova & M. Kolarik (1)  
*Sorokina* Sacc. (1)  
*Sorokinella* J. Frohl. & K.D. Hyde (2)  
*Spirosphaera* Beverw. (8)  
*Stamnaria* Fuckel (7)  
*Stilbopeziza* Speg. (1)  
*Strossmayeria* Schulzer (20)  
*Tetracladium* De Wild. (10)  
*Thegonia* B. Sutton (6)  
*Themisia* Velen. (8)  
*Tovariella* Syd. (1)  
*Trichohelotium* Killerm. (2)  
*Triposporium* Corda (14)  
*Unguicularia* Hohn. (7)  
*Urceolella* Boud. (44)  
*Vandijckella* Sand.-Den. (1)  
*Waltonia* Saho (1)  
*Woodiella* Sacc. & P. Syd. (3)  
*Xeromedulla* Korf & W.Y. Zhuang (3)  
*Zugazaea* Korf, Iturr. & Lizoň (1)

***Lahmiales*** O.E. Erikss.  
***Lahmiaceae*** O.E. Erikss.  
*Lahmia* Korb. (2)

***Lauriomycetales*** Hern.-Restr., R.F. Castañeda & Guarro  
***Lauriomycetaceae*** Hern.-Restr., R.F. Castañeda & Guarro  
*Lauriomyces* R.F. Castaneda (11)

***Leotiales*** Korf & Lizoň (= *Lichinodiales* M. Prieto, M. Schultz, Olariaga & Wedin)\*  
***Leotiaceae*** Corda  
*Halenospora* E.B.G. Jones (1)  
*Leotia* Pers. (23)  
*Microglossum* Gillet (26)  
*Miniancora* Marvanova & Barl. (1)

***Lichinodiaceae*** M. Prieto, M. Schultz, Olariaga & Wedin  
*Lichinodium* Nyl. (4)

***Mniaeciaceae*** Baral  
*Epithamnolia* Zhurb. (8)  
*Mniaecia* Boud. (3)

***Tympanidaceae*** Baral & Quijada  
*Claussenomyces* Kirschst. (15)  
*Collophorina* Damm & Crous (7)

*Durandiella* Seaver (15)  
*Gelatinosporium* Peck (12)  
*Myriodiscus* Boedijn (2)  
*Pragmopora* A. Massal. (8)  
*Tympanis* Fr. (64)  
***Leotiales*** genera *incertae sedis*  
*Alatospora* Ingold (4)  
*Aotearoamyces* P.R. Johnst., J.A. Cooper & Quijada (1)  
*Flagellospora* Ingold (6)

***Marthamycetales***. R. Johnst. & Baral  
***Marthamycetaceae*** Baral, Lantz, Hustad & Minter  
*Cyclaneusma* DiCosmo, Peredo & Minter (2)  
*Marthamyces* Minter (18)  
*Mellitiosporiella* Hohn. (3)  
*Mellitiosporium* Corda (10)  
*Naemacyclus* Fuckel (13)  
*Phragmiticola* Sherwood (1)  
*Propolina* Sacc. (1)  
*Propolis* (Fr.) Corda (8)  
*Ramomarthamyces* P.R. Johnst. (4)

***Medeolariales*** Korf  
***Medeolariaceae*** Korf  
*Medeolaria* Thaxt (1)

***Micraspidales*** Quijada & Tanney  
***Micraspidaceae*** Quijada & Tanney  
*Micraspis* Darker (3)

***Phacidiales*** C.E. Bessey  
***Helicogoniaceae*** Baral  
*Calloriopsis* Syd. & P. Syd. (1)  
*Eleutheromycella* Hohn. (1)  
*Eleutheromyces* Fuckel (2)  
*Gelatinipulvinella* Hosoya & Y. Otani (1)  
*Gelatinopsis* Rambold & Triebe (8)  
*Geltingia* Alstrup & D. Hawksw. (1)  
*Helicogonium* W.L. White (19)

***Phacidiaceae*** Fr.  
*Allantophomopsiella* Crous (1)  
*Allantophomopsis* Petr. (4)  
*Bulgaria* Fr. (12)  
*Darkera* H.S. Whitney, J. Reid & Piroz. (5)  
*Lophophacidium* Lagerb. (2)  
*Phacidiopycnis* Potebnia (6)  
*Phacidium* Fr. (40)  
*Pseudophacidium* P. Karst. (11)  
*Starbaeckia* Rehm ex Starback (1)

***Phacidiales*** genus *incertae sedis*

*Coma* Nag Raj & W.B. Kendr. (1)

***Rhytismatales*** M.E. Barr ex Minter

***Cudoniaceae*** P.F. Cannon

*Cudonia* Fr. (20)

*Spathularia* Pers. (10)

***Rhytismataceae*** Chevall.

*Bifusella* Hohn. (9)

*Bifusepta* Darker (1)

*Bivallum* P.R. Johnst. (7)

*Canavirgella* W. Merr, Wenner & Dreisbach (1)

*Cavaraella* Speg. (1)

*Ceratophacidium* J. Reid & Piroz. (1)

*Cerion* Masee (2)

*Coccomyces* De Not. (119)

*Colpoma* Wallr. (14)

*Criella* (Sacc.) Sacc. & P. Syd. (2)

*Cryptomyces* Grev. (3)

*Davisomycella* Darker (11)

*Discocainia* J. Reid & A. Funk (4)

*Duplicaria* Fuckel (1)

*Duplicariella* B. Erikss. (1)

*Elytroderma* Darker (3)

*Gelineostroma* H.J. Swart (2)

*Heufleria* Auersw. (2)

*Hypoderma* De Not. (56)

*Hypodermella* Tubeuf (3)

*Hypodermellina* Höhn. (1)

*Hypohelion* P.R. Johnst. (4)

*Lasiostictella* Sherwood (1)

*Lirula* Darker (12)

*Lophodermella* Hohn. (9)

*Lophodermium* Chevall. (185)

*Macroderma* Hohn. (2)

*Meloderma* Darker (5)

*Moutoniella* Penz. & Sacc. (1)

*Mycomelanea* Velen. (1)

*Myriophacidium* Sherwood (6)

*Nematococcomyces* C.L. Hou, M. Piepenbr. & Oberw. (2)

*Neococcomyces* Y.R. Lin, C.T. Xiang & Z.Z. Li (3)

*Neophacidium* Petr. (2)

*Nothorhytisma* Minter, P.F. Cannon, A.I. Romero & Peredo (1)

*Parvacoccum* R.S. Hunt & A. Funk (1)

*Phaeophacidium* P. Henn. & Lindau (3)

*Ploioderma* Darker. (8)

*Propolidium* Sacc. (15)

*Pseudographis* Nyl. (10)

*Pseudorhytisma* Juel (1)

*Pureke* P.R. Johnst. (1)

*Rhytisma* Fr. (30)

*Soleella* Darker (7)

*Sporomega* Corda (1)  
*Terriera* B. Erikss. (34)  
*Therrya* Sacc. (7)  
*Tryblidiopsis* P. Karst. (5)  
*Virgella* Darker (1)  
*Vladracula* P.F. Cannon, Minter & Kamal (2)  
*Xyloschizon* Syd. (2)  
*Zeus* Minter & Diamandis (1)

***Triblidiaceae*** Rehm

*Huangshania* O.E. Erikss. (2)  
*Triblidium* Rebent. (13)

***Rhytismatales*** genera *incertae sedis*

*Apiodiscus* Petr. (1)  
*Bonanseja* Sacc. (1)  
*Didymascus* Sacc. (2)  
*Haplophyse* Theiss. (1)  
*Irydyonia* Racib. (1)  
*Laquearia* Fr. (2)  
*Mycosymbiocytes* J.L. Frank (1)  
*Nymanomyces* P. Henn. (2)  
*Pseudotrochila* Hohn. (1)

***Thelebolales*** P.F. Cannon

***Pseudeurotiaceae*** Malloch & Cain

*Connersia* Malloch (1)  
*Geomyces* Traaen (9)  
*Gymnostellatospora* Udagawa, Uchiy. & Kamiya (6)  
*Leuconeurospora* Malloch & Cain (2)  
*Neelakesa* Udaiyan & Hosag. (3)  
*Pleuroascus* Massee & E.S. Salmon (3)  
*Pseudeurotium* J.F.H. Beyma (8)  
*Pseudogymnoascus* Raillo (12)

***Thelebolaceae*** (Brumm.) Eckblad

*Antarctomyces* Stchigel & Guarro (2)  
*Ascophanus* Boud. (56)  
*Ascozonus* (Renny) E.C. Hansen (9)  
*Caccobius* Kimbr. (1)  
*Carneothele* Fryday, T. Sprib. & M. Svenss. (1)\*  
*Cleistothelebolus* Malloch & Cain (1)  
*Coprobolus* Cain & Kimbr. (1)  
*Inopinatum* Haelew. & Aime. (1)\*  
*Leptokalpion* Brumm. (1)  
*Pseudascozonus* Brumm. (1)  
*Ramgea* Brumm. (2)  
*Solomyces* Zhi Y. Zhang, Y.F. Han & Z.Q. Liang (3)\*  
*Thelebolus* Tode (16)

***Leotiomycetes*** family *incertae sedis*

***Porodiplodiaceae*** Crous

*Porodiplodia* Crous (1)

***Leotiomyces* genera incertae sedis**

*Adelodiscus* Syd. (1)

*Bagnisimitrula* S. Imai (1)

*Callerascus* Whitton, K.D. Hyde & McKenzie (1)

*Deltopyxis* Baral & G. Marson (1)

*Epicladonia* D. Hawksw. (5)

*Gorgomyces* M. Gonczol & Revay (2)

*Helicocentralis* Sri-indr., Chuaseehar., Boonyuen, K. Yamag., Suetrong & C.K.M. Tsui (1)

*Helotiella* Sacc. (17)

*Holwaya* Sacc. (2)

*Leohumicola* N.L. Nick. (7)

*Melanormia* Korb. (1)

*Metapezizella* Petr. (1)

*Nannfeldtia* Petr. (2)\*

*Ocotomyces* H.C. Evans & Minter (1)

*Patinella* Sacc. (25)

*Phyllopezis* Petr. (1)

*Physmatomyces* Rehm (1)

*Polydiscina* Syd. (1)

*Psilothecium* Clem. (1)

*Schnablia* Sacc. & P. Syd. (1)

*Trullula* Ces. (5)

**Class *Lichinomycetes* V. Reeb, Lutzoni & Cl. Roux**

***Lichinales* Henssen & Büdel**

***Gloeoheppiaceae* Henssen**

*Gloeoheppia* Gyeln. (5)

*Gudelia* Henssen (1)

*Pseudopeltula* Henssen (1)

***Lichinaceae* Nyl.**

*Anema* Nyl. ex Forssell (21)

*Calotrichopsis* Vain. (4)

*Corynecystis* Brusse (1)

*Cryptothele* Th. Fr. (7)

*Digitothyrea* P. Moreno & Egea (3)

*Edwardiella* Henssen (1)

*Ephebe* Fr. (13)

*Finkia* Vain. (1)

*Gyrocollema* Vain. (2)

*Heppia* Nägeli (4)

*Jenmania* W. Wächt. (2)

*Lecidopyrenopsis* Vain. (1)

*Lemmopsis* (Vain.) Zahlbr. (3)

*Lempholemma* Körb. (35)

*Leprocollema* Vain. (3)

*Lichina* C. Agardh (9)

*Lichinella* Nyl. (30)

*Mawsonia* C.W. Dodge (1)

*Metamelanea* Henssen (3)



*Paulia* Feé (10)  
*Peccania* A. Massal. ex Arnold (3)  
*Phloeopeccania* J. Steiner (4)  
*Phylliscidiopsis* Sambo (1)  
*Phylliscidium* Forssell (1)  
*Phyllisciella* Henssen & Büdel (3)  
*Phylliscum* Nyl. (8)  
*Porocyphus* Körb. (8)  
*Pseudarctomia* Gyeln. (1)  
*Pseudoheppia* Zahlbr. (1)  
*Pseudopaulia* M. Schultz (1)  
*Psorotichia* A. Massal. (50)  
*Pterygiopsis* Vain. (17)  
*Pyrenocarpon* Trevis. (1)  
*Pyrenopsis* Nyl. (40)  
*Solorinaria* (Vain.) Gyeln. (1)  
*Stromatella* Henssen (1)  
*Synalissa* Fr. (30)  
*Thallinocarpon* A.E. Dahl (2)  
*Thelignya* A. Massal. (2)  
*Thermutis* Fr. (2)  
*Thermutopsis* Henssen (1)  
*Thyrea* A. Massal. (13)  
*Zahlbrucknerella* Herre (10)

#### ***Peltulaceae* Büdel**

*Peltula* Nyl. (32)

#### **Class *Orbiliomycetes* O.E. Erikss. & Baral**

***Orbiliales* Baral, O.E. Erikss., G. Marson & E. Weber**

#### ***Orbiliaceae* Nannf.**

*Arthrobotrys* Corda (ca. 100+)  
*Dactylella* Grove (31)  
*Dactylellina* M. Morelet (= *Gamsylella* M. Scholler et al.)  
*Drechslerella* Subram. (ca. 7)  
*Dwayaangam* Subram. (8)  
*Helicoon* Morgan (ca. 15)  
*Hyalorbilia* Baral & G. Marson (40)  
*Liladisca* Baral (1)  
*Lilapila* Baral & G. Marson (3)  
*Orbilia* Fr. (ca. 400)  
*Pseudorbilia* Y. Zhang, ZF Yu, Baral & K-Q Zhang (1)  
*Pseudotriporiconidium* Z.F. Yu & K.Q. Zhang (1)  
*Retiarius* D.L. Olivier (4)  
*Vermispora* Deighton & Piroz. (7)

#### ***Orbiliales* genera *incertae sedis***

*Bryorbilia* Baral & E. Rubio (1)\*  
*Microdochiella* Hern.-Restr. & Crous (1)

#### ***Orbiliomycetidae* genus *incertae sedis***

*Amphosoma* Baral (5)\*

***Orbiliomycetes*** genus *incertae sedis*  
*Mycoceros* D. Magyar & Z. Merényi (1)

**Class *Pezizomycetes*** O.E. Erikss. & Winka  
***Pezizales*** J. Schröt.

***Ascobolaceae*** Boud. ex Sacc.

*Ascobolus* Pers. (ca. 70)

*Cleistoiodophanus* J.L. Bezerra & Kimbr. (1)

*Cubonia* Sacc. (ca. 7)

*Saccobolus* Boud. (33)

*Thecotheus* Boud. (23)

***Ascodesmidaceae*** J. Schröt.

*Ascodesmis* Tiegh. (ca. 10)

*Cephaliphora* Thaxt. (2)

*Chalazion* Dissing & Sivertsen (3)

*Coprotiella* Jeng & J.C. Krug (1)

*Dictyocoprotus* J.C. Krug & R.S. Khan (1)

*Eleutherascus* Arx (4)

*Lasiobolus* Sacc. (11)

*Luciotrichus* R. Galán & Raitv. (1)

*Ochotrichobolus* Kimbr. & Korf (1)

*Trichobolus* (Sacc.) Kimbr. & Cain (6)

***Caloscyphaceae*** Harmaja

*Caloscypha* Boud. (2)

***Chorioactidaceae*** Pfister

*Chorioactis* Kupfer ex Eckblad (1)

*Desmazierella* Lib. (2)

*Neournula* Paden & Tylutki (2)

*Pseudosarcosoma* M. Carbone, Agnello & P. Alvarado (1)

*Trichaleurina* Rehm (3)

*Wolfina* Seaver ex Eckblad (2)

***Discinaceae*** Benedix

*Discina* (Fr.) Fr. (20)

*Gymnohydnотrya* B.C. Zhang & Minter (3)

*Gyromitra* Fr. (25)

*Hydnотrya* Berk. & Broome (11)

*Pseudorhizina* Jacz. (3)

***Glaziellaceae*** J.L. Gibson

*Glaziella* Berk. (1)

***Helvellaceae*** Fr.

*Balsamia* Vittad. (18)

*Barssia* Gilkey (6)

*Helvella* L. (ca. 80)

*Underwoodia* Peck (2)

*Wynnella* Boud. (3)

***Kallistoskyphaceae*** Ekanayaka, K.D. Hyde, Q. Zhao & E.B.G. Jones  
*Kallistoskypha* Pfister, Agnello, Lantieri & LoBuglio (1)

***Karstenellaceae*** Harmaja  
*Karstenella* Harmaja (1)

***Morchellaceae*** H.G.L. Reichenbach  
*Disciotis* Boud. (3)  
*Fischerula* Mattir. (2)  
*Imaia* Trappe & Kovács (1)  
*Kalapuya* M.J. Trappe, Trappe & Bonito (1)  
*Leucangium* Quél. (1)  
*Morchella* Dill. ex Pers. (ca. 60)  
*Verpa* Sw. (4)

***Pezizaceae*** Dumort. (= *Carbomycetaceae* Trappe)  
*Adelphella* Pfister, Matočec & I. Kušan (1)  
*Ahmadea* Aman, Khalid & Moncalvo (1)\*  
*Amylascus* Trappe (1)  
*Antrelloides* P.S. Catches. & D.E.A. Catches. (1)  
*Aquapeziza* D.M. Hu, L. Cai & K.D. Hyde (1)  
*Babosia* D.G. Knapp, Zagyva, Trappe & Kovács (1)\*  
*Boudiera* Cooke (ca. 25)  
*Calongea* Healy, Bonito & Trappe (1)  
*Carbomyces* Gilkey (3)  
*Cazia* Trappe (2)  
*Chromelosporiopsis* Hennebert (2)\*  
*Delastria* Tul. & C. Tul. (2)  
*Elaiopezia* Van Vooren (6)\*  
*Elderia* McLennan (1)  
*Eremiomyces* Trappe & Kagan-Zur (3)  
*Galactinia* (Cooke) Boud. (ca. 10)  
*Hansenopezia* Matočec, I. Kušan & Jadan (2)\*  
*Hapsidomyces* J.C. Krug & Jeng (1)  
*Hydnobolites* Tul. & C. Tul. (ca. 6)  
*Hydnotryopsis* Gilkey (4)  
*Iodophanus* Korf (15)  
*Iodowynnea* Medel, Guzmán & S. Chacón (1)  
*Ionopezia* Van Vooren (2)\*  
*Kalaharituber* Trappe & Kagan-Zur (1)  
*Legaliana* Van Vooren (6)\*  
*Lepidotia* Boud. (1)  
*Luteoamylascus* Cabero, P. Alvarado & G. Moreno (1)  
*Malvipezia* Van Vooren (4)\*  
*Marcelleina* Brumm., Korf & Rifai (11)  
*Mattirolomyces* E. Fisch. (6)  
*Mycoclelandia* Trappe & G.W. Beaton (2)  
*Pachyella* Boud. (12)  
*Pachyphlodes* Zobel (ca. 10)  
*Paragalactinia* Van Vooren (8)\*  
*Peziza* Dill. ex Fr. (ca. 120)  
*Phylloscypha* Van Vooren (7)\*

*Plicaria* Fuckel (10)  
*Plicariella* (Sacc.) Rehm (2)  
*Rhodopeziza* Hohmeyer & Moravec (1)  
*Ruhlandiella* P. Henn. (7)  
*Sarcopeziza* Loizides, Agnello & P. Alvarado (1)  
*Sarcosphaera* Auersw. (4)  
*Sphaerozone* Zobel (1)  
*Stouffera* Kovács & Trappe (1)  
*Temperantia* K. Hansen, Healy & Kovács (1)  
*Terfezia* (Tul. & C. Tul.) Tul. & C. Tul. (19)  
*Tirmania* Chatin (3)  
*Ulurua* Trappe, Claridge & Kovács (1)

***Pseudombrophilaceae*** Ekanayaka, K.D. Hyde, Q. Zhao & E.B.G. Jones

*Heydenia* Fresen. (3)  
*Lasiobolidium* Malloch & Cain (7)  
*Orbicula* Cooke (1)  
*Pseudombrophila* Boud. (37)

***Pulvinulaceae*** Ekanayaka, K.D. Hyde, Q. Zhao & E.B.G. Jones

*Lazuardia* Rifai (1)  
*Pseudoboubovia* U. Lindem., M. Vega, B. Perić & R. Tena (1)  
*Pulvinula* Boud. (ca. 30)

***Pyronemataceae*** Corda (= *Otideaceae* Eckblad)

*Acervus* Kanouse (9)  
*Aleuria* Fuckel (ca. 10)  
*Aleurina* Masee (ca. 10)  
*Anthracobia* Boud. (ca. 10)  
*Arpinia* Berthet (4)  
*Ascosparassis* Kobayasi (1)  
*Aurantiolachnea* Van Vooren\*  
*Byssonectria* P. Karst. (7)  
*Chaetothiersia* B.A. Perry & Pfister (1)  
*Cheilymenia* Boud. (67)  
*Cupulina* Dougoud, Van Vooren & M. Vega (2)  
*Diehliomyces* Gilkey (1)  
*Eoaleurina* Korf & W.Y. Zhuang (1)  
*Galeoscypha* Svrček & J. Moravec (1)  
*Genabea* Tul. & C. Tul. (4)  
*Genea* Vittad. (ca. 40)  
*Geneosperma* Rifai (2)  
*Geopora* Harkn. (ca. 20)  
*Gilkeya* M.E. Sm., Trappe & Rizzo (1)  
*Hoffmannoscypha* Stielow, Göker & Klenk (1)  
*Humaria* Fuckel (ca. 10)  
*Jafnea* Korf (2)  
*Lamprospora* De Not. (ca. 50)  
*Lasiocupulina* Van Vooren & M. Vega (1)  
*Lathraeodiscus* Dissing & Sivertsen (1)  
*Lotinia* Pérez-Butrón Fern.-Vic. & P. Alvarado (1)  
*Melastiza* Boud. (ca. 10)

*Micronematobotrys* Xiang Sun & L.D. Guo (1)  
*Miladina* Svrček (1)  
*Monascella* Guarro & Arx (1)  
*Myrmecocystis* Harkn. (7)  
*Neottiella* (Cooke) Sacc. (ca. 5)  
*Octospora* Hedw. (ca. 50)  
*Octosporopsis* U. Lindem. & M. Vega (2)  
*Otidea* (Pers.) Bonord. (ca. 52)  
*Oviascoma* Y.J. Yao & Spooner (1)  
*Parascutellinia* Svrček (6)  
*Paratrifarina* Van Vooren, U. Lindemann, M. Vega, Ribes, Illescas & Matočec (1)  
*Paratrichophaea* Trigaux (5)  
*Parawilcoxina* Van Vooren (1)\*  
*Perilachnea* Van Vooren (3)\*  
*Petchiomyces* E. Fisch. & Mattir. (1)  
*Picoa* Vittad. (2)  
*Planamyces* Crous & Decock (1)  
*Pseudaleuria* Lusk (2)  
*Pseudotrifarina* Van Vooren, Tello & M. Vega (3)  
*Pyronema* Carus (3)  
*Pyropyxis* Egger (1)  
*Ramsbottomia* W.D. Buckley (3)  
*Rhizoblepharia* Rifai (2)  
*Scutellinia* (Cooke) Lambotte (70)  
*Selenaspora* R. Heim & Le Gal (1)  
*Sepultariella* Van Vooren, U. Lindemann & Healy (2)  
*Smardaea* Svrček (9)  
*Smarodsia* Raitv. & Vimba (1)  
*Sowerbyella* Nannf. (17)  
*Sphaerosporella* (Svrček) Svrček & Kubička (3)  
*Spooneromyces* T. Schumach. & J. Moravec (5)  
*Trifarina* Eckblad (= *Ascorhizoctonia* Chin S. Yang & Korf) (12)  
*Trichophaea* Boud. (26)  
*Trichophaeopsis* Korf & Erb (4)  
*Warcupia* Paden & J.V. Cameron (1)  
*Wenyingia* Zheng Wang & Pfister (1)  
*Wilcoxina* Chin S. Yang & Korf (5)

***Rhizinaceae*** Bonord.

*Phymatotrichopsis* Hennebert (1)  
*Psilopezia* Berk. (7)  
*Rhizina* Fr. (1)

***Sarcoscyphaceae*** LeGal ex Eckblad

*Aurophora* Rifai (1)  
*Cookeina* Kuntze (11)  
*Geodina* Denison (1)  
*Komposcypha* Pfister (4)  
*Microstoma* Bernstein (7)  
*Nanoscypha* Denison (8)  
*Phillipsia* Berk. (ca. 20)  
*Pithya* Fuckel (2)  
*Pseudopithyella* Seaver (2)

*Sarcoscypha* (Fr.) Boud. (18)  
*Thindia* Korf & Waraitch (1)  
*Wynnea* Berk. & M.A. Curtis (7)

***Sarcosomataceae*** Kobayasi

*Conoplea* Pers. (11)  
*Donadinia* Bellem. & Mel.-Howell (4)  
*Galiella* Nannf. & Korf (9)  
*Korfiella* D.C. Pant & V.P. Tewari (1)  
*Plectania* Fuckel (ca. 20)  
*Pseudoplectania* Fuckel (4)  
*Sarcosoma* Casp. (5)  
*Strumella* Fr.  
*Urnula* Fr. (9)

***Strobiloscyphaceae*** Ekanayaka, K.D. Hyde, Q. Zhao & E.B.G. Jones  
*Strobiloscypha* N.S. Weber & Denison (2)

***Tarzettaceae*** Ekanayaka, K.D. Hyde, Q. Zhao & E.B.G. Jones

*Densocarpa* Gilkey (2)  
*Geopyxis* (Pers.) Sacc. (7)  
*Hydnocystis* Tul. (= *Stephensia* Tul. & C. Tul.) (5)  
*Hypotarzetta* Donadini (1)  
*Paurocotylis* Berk. (4)  
*Tarzetta* (Cooke) Lambotte (ca. 10)

***Tuberaceae*** Dumort.

*Choiromyces* Vittad. (5)  
*Dingleya* Trappe (6)  
*Labyrinthomyces* Boedijn (1)  
*Nothojafnea* Rifai (2)  
*Paradoxa* Mattir. (2)  
*Reddellomyces* Trappe, Castellano & Malajczuk (4)  
*Tuber* P. Micheli ex F.H. Wigg. (ca. 120)

***Pezizales*** genera *incertae sedis*

*Aparaphysaria* Speg. (1)  
*Ascocalathium* Eidam ex J. Schröt. (1)  
*Boubovia* Svrček (5)  
*Boudierella* Sacc. (1)  
*Cidaris* Fr. (1)  
*Coprotus* Korf ex Korf & Kimbr. (33)  
*Dennisiopsis* Subram. & Chandras. (2)  
*Filicupula* Y.J. Yao & Spooner (1)  
*Hiemsia* Svrček (2)  
*Leucoscypha* Boud (4)  
*Microeurotium* Ghatak (1)  
*Moravecia* Benkert, Caillet & Moyne (2)  
*Mycoarctium* K.P. Jain & Cain (2)  
*Mycogalopsis* Gjurašin (1)  
*Octosporella* Döbbeler (9)  
*Orcadia* G.K. Sutherl. (1)

*Sphaerosoma* Klotzsch (3)

***Pezizomycetes*** genus *incertae sedis*

*Hogelandia* Hern.-Restr. (1)\*

**Class *Sordariomycetes*** O.E. Erikss. & Winka

**Subclass *Diaporthomycetidae*** Senan., Maharachch. & K.D. Hyde

***Annulatascales*** M.J. D'souza, Maharachch. & K.D. Hyde

***Annulatascaceae*** S.W. Wong, K.D. Hyde & E.B.G. Jones

*Annulatascus* K.D. Hyde (18)

*Annulusmagnus* J. Campb. & Shearer (1)

*Aqualignicola* Ranghoo, C.K.M. Tsui & K.D. Hyde (2)

*Ascitendus* J. Campb. & Shearer (2)

*Ayria* Fryar & K.D. Hyde (2)

*Cataractispora* K.D. Hyde, S.W. Wong & E.B.G. Jones (5)

*Chaetorostrum* Zelski, Raja, A.N. Mill. & Shearer (1)

*Fusoidigranularius* W. Dong, H. Zhang & K.D. Hyde (1)\*

*Longicollum* Zelski (1)

*Longivarius* W. Dong, H. Zhang & K.D. Hyde (1)\*

*Pseudoannulatascus* Z.L. Luo, Maharachch. & K.D. Hyde (1)

*Submersisphaeria* K.D. Hyde (5)

*Vertexicola* K.D. Hyde, Ranghoo & S.W. Wong (3)

***Annulatascales*** genus *incertae sedis*

*Clohiesia* K.D. Hyde (3)

***Atractosporales*** H. Zhang, K.D. Hyde & Maharachch.

***Atractosporaceae*** H. Zhang, K.D. Hyde & Maharachch.

*Atractospora* Réblová & J. Fourn. (5)

*Rubellisphaeria* Réblová & J. Fourn. (1)

***Conlariaceae*** H. Zhang, K.D. Hyde & Maharachch.

*Conlarium* F. Liu & L. Cai (3)

*Riomyces* A. Ferrer, A.N. Mill., Sarmiento & Shearer (1)

***Pseudoproboscisporaceae*** H. Zhang, K.D. Hyde & Maharachch.

*Diluviicola* K.D. Hyde, S.W. Wong & E.B.G. Jones (2)

*Neodiluviicola* W. Dong & H. Zhang (1)\*

*Pseudoproboscispora* Punith. (3)

***Calosphaeriales*** M.E. Barr

***Calosphaeriaceae*** Munk

*Calosphaeria* Tul. & C. Tul. (114)

*Flabellascus* Réblová (1)

*Jattaea* Berl (27)

*Togniniella* Réblová, L. Mostert, W. Gams & Crous (1)

***Pleurostomataceae*** Réblová, L. Mostert, W. Gams & Crous

*Pleurostoma* Tul. & C. Tul. (7)

***Calosphaeriales*** genera *incertae sedis*

*Calosphaeriopsis* Petr. (1)

*Enchnoa* Fr. (21)

*Kacosphaeria* Speg. (1)

***Diaporthales*** Nannf.

***Apiosporopsidaceae*** Senan., Maharachch. & K.D. Hyde

*Apiosporopsis* (Traverso) Mariani. (3)

***Apharknessiaceae*** Senan., Maharachch. & K.D. Hyde

*Apharknessia* Crous & S.J. Lee (3)

*Lasmenia* Speg. (5)

***Asterosporiaceae*** Senan., Maharachch. & K.D. Hyde

*Asterosporium* Kunze (5)

***Auratiopycnidiellaceae*** Senan., Maharachch. & K.D. Hyde

*Auratiopycnidiella* Crous & Summerell (1)

***Coryneaceae*** Corda (= *Pseudovalsaceae* M.E. Barr)

*Coryneum* Nees (30)

*Hyaloterminalis* Rathnayaka, C.H. Kuo & K.D. Hyde (1)\*

***Cryphonectriaceae*** Gryzenh. & M.J. Wingf.

*Amphilogia* Gryzenh., H.F. Glen & M.J. Wingf. (2)

*Aurantioportha* G. Beier & R.A. Blanchette (1)

*Aurantiosacculus* Dyko & B. Sutton (3)

*Aurapex* Gryzenh. & M.J. Wingf. (1)

*Aurifilum* Begoude, Gryzenh. & Jol. Roux (1)

*Capillaureum* M.E.S. Oliveira (1)

*Celoporthe* Nakab., Gryzenh., Jol. Roux & M.J. Wingf. (2)

*Chromendothia* Lar.N. Vassiljeva (2)

*Chrysolia* Crous & M.J. Wingf. (1)

*Chrysomorbus* S.F. Chen (1)

*Chrysoporthe* Gryzenh. & M.J. Wingf. (9)

*Corticomorbus* S.F. Chen & M.J. Wingf. (1)

*Cryphonectria* (Sacc.) Sacc. & D. Sacc. (1)

*Cryptometrion* Gryzenh. & M.J. Wingf. (1)

*Diversimorbus* S.F. Chen & J. Roux (1)

*Endothia* Fr. (2)

*Eriocamporesia* R.H. Perera, Samarak. & K.D. Hyde (1)

*Holocryphia* Gryzenh. & M.J. Wingf. (1)

*Immersioporthe* S.F. Chen, M.J. Wingf. & Jol. Roux (1)

*Latruncellus* M. Verm., Gryzenh. & Jol. Roux (1)

*Luteocirrhus* C.F. Crane & T.I. Burgess (1)

*Microthia* Gryzenh. & M.J. Wingf. (2)

*Myrtonectria* Marinc., D.B. Ali & J. Roux (1)

*Parvomorbus* Wen Wang & S.F. Chen (2)\*

*Rostraureum* Gryzenh. & M.J. Wingf. (2)

*Ursicollum* Gryzenh. & M.J. Wingf. (1)

*Wuestneia* Auersw. ex Fucke (13)

***Cytosporaceae*** Fr. (= *Valsaceae* Tul. & C. Tul.)

*Cryptascoma* Ananthap. (2)



*Cytospora* Ehrenb. (123)  
*Pachytrype* Berl. ex M.E. Barr, J.D. Rogers & Y.M. Ju (1)  
*Paravalsa* Ananthap. (1)  
*Waydora* B. Sutton (1)  
*Xenotypa* Petr. (1)

***Diaporthaceae*** Höhn. ex Wehm.

*Apioporthella* Petr. (1)  
*Apiosphaeria* Höhn. (5)  
*Chaetoconis* Clem. (1)  
*Chiangraiomycetes* Senan. & K.D. Hyde (1)  
*Diaporthe* Nitschke (= *Allantoporthes* Petr.; = *Clypeoporthella* Petr.) (173)  
*Hyaliappendispora* Senan., Camporesi & K.D. Hyde (1)  
*Leucodiaporthe* M.E. Barr & Lar.N. Vassiljeva (1)  
*Massariothea* Syd. (10)  
*Mazzantia* Mont. (4)  
*Ophiidiaporthe* Y.M. Ju, H.M. Hsieh, C.H. Fu, Chi Y. Chen & T.T. Chang (1)  
*Paradiaporthe* Senan., Camporesi & K.D. Hyde (1)  
*Phaeocytostroma* Petr. (4)  
*Phaeodiaporthe* Petr. (2)  
*Pustulomyces* D.Q. Dai, Bhat & K.D. Hyde (1)  
*Stenocarpella* Syd. & P. Syd. (2)

***Diaporthostomataceae*** X.L. Fan & C.M. Tian

*Diaporthostoma* X.L. Fan & C.M. Tian (1)

***Diaporthosporellaceae*** C.M. Tian & Q. Yang

*Diaporthosporella* C.M. Tian & Q. Yang (1)

***Dwiroopaceae*** K.V. Xavier, A.N. KC, J.Z. Groenew., Vallad & Crous

*Dwiroopa* Subram. & Muthumary (3)

***Erythrogloeaceae*** Senan., Maharachch. & K.D. Hyde

*Chrysocrypta* Crous & Summerell (1)  
*Dendrostoma* X.L. Fan & C.M. Tian (4)  
*Disculoides* Crous, Pascoe, I.J. Porter & Jacq. Edwards (2)  
*Erythrogloeum* Petr. (2)

***Foliocryphiaceae*** C.M. Tian, N. Jiang & Crous\*

*Foliocryphia* Cheew. & Crous (2)  
*Neocryphonectria* C.M. Tian, N. Jiang & Crous (2)\*

***Gnomoniaceae*** G. Winter

*Alnecium* Voglmayr & Jaklitsch (2)  
*Ambarignomonina* Sogonov (1)  
*Amphiporthes* Petr. (= *Amphicytostroma* Petr.) (2)  
*Anisomyces* Theiss. & Syd. (5)  
*Apiognomonina* Höhn. (= *Discula* Sacc.) (28)  
*Apioplagiostoma* M.E. Barr (3)  
*Asteroma* DC. (54)  
*Bagcheea* E. Müll. & R. Menon (2)  
*Chadefaudiomyces* Kamat (1)

*Clypeoporthe* Höhn. (5)  
*Cryphognomonia* C.M. Tian & N. Jiang (1)\*  
*Cryptosporella* Sacc. (ca. 26)  
*Dictyoporthe* Petr. (4)  
*Diplacella* Syd. (2)  
*Ditopella* De Not. (16)  
*Ditopellopsis* J. Reid & C. Booth (4)  
*Gloeosporidina* Petr. (6)  
*Gnomonia* Ces. & De Not. (ca. 70)  
*Gnomoniella* Sacc. (= *Cylindrosporella* Höhn.) (ca. 70)  
*Gnomoniopsis* Berl. (25)  
*Maculatipalma* J. Fröhlich & K.D. Hyde (1)  
*Mamianiella* Höhn. (= *Anisogramma* Theiss. & Syd.; = *Mamiania* Ces & De Not.) (2)  
*Marsupiomycetes* Senan. & K.D. Hyde (2)  
*Millerburtonia* Cif. (1)  
*Neognomoniopsis* Crous (1)\*  
*Occultocarpon* L.C. Mejía & Zhu L. Yang (1)  
*Ophiognomonia* (Sacc.) Sacc. (49)  
*Phragmoporthe* Petr. (1)  
*Phylloporthe* Syd. (2)  
*Plagiostoma* Fuckel (52)  
*Pleuroceras* Riess. (12)  
*Sirococcus* Preuss (5)  
*Spataporthe* Bronson, Klymiuk, Stockey & Tomescu (1)  
*Tenuignomonia* Minosh., D.M. Walker & Hirooka (1)  
*Uleoporthe* Petr. (1)  
*Valsalnicola* D.M. Walker & Rossman (1)  
*Vismaya* V.V. Sarma & K.D. Hyde (1)

#### ***Harknessiaceae*** Crous

*Harknessia* Cooke (ca. 50)  
*Mebarría* J. Reid & C. Booth (1)

#### ***Juglanconidaceae*** Voglmayr & Jaklitsch

*Juglanconis* Voglmayr & Jaklitsch (4)  
*Melanosporella* C.M. Tian & Z. Du (1)

#### ***Lamproconiaceae*** Norph., T.C. Wen & K.D. Hyde

*Hercospora* Fr. (= *Rabenhorstia* Fr.) (1)  
*Lamproconium* (Grove) Grove (1)

#### ***Macrohilaceae*** Crous

*Macrohilum* H.J. Swart (1)

#### ***Mastigosporiaceae*** C.M. Tian, N. Jiang & Crous\*

*Mastigospora* Höhn. (5)

#### ***Melanconidaceae*** G. Winter

*Melanconis* Tul. & C. Tul. (1)

#### ***Melanconiellaceae*** Senan., Maharachch. & K.D. Hyde

*Dicarpella* Syd. & P. Syd. (7)

*Greeneria* Scribn. & Viala (3)  
*Massariovalsa* Sacc. (= *Melanconiopsis* Ellis & Everh.) (4)  
*Melanconiella* Sacc. (2)  
*Microascospora* Senan. & K.D. Hyde (2)  
*Septomelanconiella* Samarak. & K.D. Hyde (1)  
*Sheathospora* X.L. Fan (1)  
*Sphaeronaemella s. lato* (10)

***Neomelanconiellaceae*** Crous  
*Neomelanconiella* Crous (1)

***Phaeoappendicosporaceae*** Crous & M.J. Wingf.  
*Neophaeoappendicospora* Crous & M.J. Wingf. (1)  
*Phaeoappendicospora* Senan., Q.R. Li & K.D. Hyde (1)

***Prosopidicolaceae*** Senan. & K.D. Hyde  
*Prosopidicola* Crous & C.L. Lennox (2)

***Pseudomelanconidaceae*** C.M. Tian & X.L. Fan  
*Micromelanconis* C.M. Tian & N. Jiang (1)\*  
*Neopseudomelanconis* C.M. Tian & N. Jiang (1)  
*Pseudomelanconis* C.M. Tian & X.L. Fan (1)

***Pseudoplagiostomataceae*** Cheew., M.J. Wingf. & Crous  
*Pseudoplagiostoma* Cheew., M.J. Wingf. & Crous (7)

***Pyrisporaceae*** C.M. Tian & N. Jiang\*  
*Pyrispora* C.M. Tian & N. Jiang (1)\*

***Schizoparmaceae*** Rossman  
*Coniella* Höhn. (34)

***Stilbosporaceae*** Link  
*Crinitospora* B. Sutton & Alcorn (1)  
*Natarajania* Pratibha & Bhat (1)  
*Stegonsporium* Corda (8)  
*Stilbospora* Pers. (20)  
***Sydowiellaceae*** Lar.N. Vassiljeva  
*Alborbis* Senan. & K.D. Hyde (1)  
*Breviappendix* Senan. & K.D. Hyde (3)  
*Cainiella* E. Müll. (2)  
*Calosporella* J. Schröt (1)  
*Caudospora* Starbäck (2)  
*Chapeckia* M.E. Barr (2)  
*Hapalocystis* Auersw. ex Fuckel (9)  
*Italiomyces* Senan., Camporesi & K.D. Hyde (1)  
*Lambro* Racib. (3)  
*Paragnomonina* Senan. & K.D. Hyde (1)  
*Ranulospora* Senan., Camporesi & K.D. Hyde (1)  
*Rossmania* Lar.N. Vassiljeva (2)  
*Sillia* P. Karst. (9)  
*Sydowiella* Petr. (11)

*Tenuiappendicula* Senan., Camporesi & K.D. Hyde (1)

*Tortilispora* Senan. & K.D. Hyde (3)

***Synnemasporellaceae*** X.L. Fan & J.D.P. Bezerra (1)

*Synnemasporella* X.L. Fan & J.D.P. Bezerra (2)

***Tubakiaceae*** U. Braun, J.Z. Groenew. & Crous

*Apiognomonioides* U. Braun, J.Z. Groenew. & Crous (1)

*Involutscutellula* U. Braun & C. Nakash. (1)

*Oblongisporothyrium* U. Braun & C. Nakash. (1)

*Paratubakia* U. Braun & C. Nakash. (2)

*Racheliella* Crous & U. Braun (2)

*Saprothyrium* U. Braun, Crous & J.Z. Groenew. (1)

*Sphaerosporothyrium* U. Braun, Crous, O. Moreno-Rico & Marm. (1)

*Tubakia* B. Sutton (25)

***Diaporthales*** genera *incertae sedis*

*Ceratoportha* Petr. (1)

*Cryptoleptosphaeria* Petr. (1)

*Cryptonectriella* (Höhn.) Weese (2)

*Cryptonectriopsis* (Höhn.) Weese (1)

*Cytomelanconis* Naumov (1)

*Diaporthella* Petr. (5)

*Diatrypoidiella* Manohar., Kunwar & D.K. Agarwa (1)

*Ditopellina* J. Reid & C. Booth (1)

*Durispora* K.D. Hyde (2)

*Exormatostoma* Gray (10 epithets in Index Fungorum 2019)

*Fremineavia* Nieuwl. (1)

*Gibellia* Sacc. (1)

*Gyrostroma* Naumov (3)

*Hyalorostratum* Raja & Shearer (1)

*Hypophloeda* K.D. Hyde & E.B.G. Jones (1)

*Hypospilina* (Sacc) Traverso (4)

*Kapooria* J. Reid & C. Booth (1)

*Keinstirschia* J. Reid & C. Booth (1)

*Kensinjia* J. Reid & C. Booth (1)

*Lollipopaia* Inderb. (1)

*Macrodiaportha* Petr. (1)

*Melanamphora* Lafl. (1)

*Phragmodiaportha* Wehm. (3)

*Phruensis* Pinruan (1)

*Plagiophiale* Petr. (2)

*Plagiostigme* Syd. (1)

*Prostratus* Sivan., W.H. Hsieh & Chi Y. Chen (1)

*Pseudocryptosporella* J. Reid & C. Booth (1)

*Pseudothis* Theiss. & Syd. (12)

*Pseudovalsella* Höhn. (2)

*Savulescua* Petr. (1)

*Skottsbergiella* Petr. (1)

*Sphaerognomoniella* Naumov & Kusnezowa (1)

*Stioclettia* Dennis (1)

*Trematovalsa* Jacobesco (1)

*Wehmeyera* J. Reid & C. Booth (1)

***Distoseptisporales*** Z.L. Luo, K.D. Hyde & H.Y. Su

***Distoseptisporaceae*** K.D. Hyde & McKenzie

*Distoseptispora* K.D. Hyde, McKenzie & Maharachch. (33)

***Jobellisiales*** M.J. D'souza & K.D. Hyde

***Jobellisiaceae*** Réblová

*Jobellisia* M.E. Barr (8)

***Magnaporthales*** Thongk., Vijaykr. & K.D. Hyde

***Ceratospaeriaceae*** Z.L. Luo, H.Y. Su & K.D. Hyde

*Ceratospaeria* Niessl (24)

***Magnaporthaceae*** P.F. Cannon

*Aquafiliformis* Z.L. Luo, K.D. Hyde & H.Y. Su (1)

*Atripes* F.A. Custódio & O.L. Pereira (1)

*Bifusispora* R.M.F. Silva, R.J.V. Oliveira, J.D.P. Bezerra, Souza-Motta & G.A. Silva (1)

*Budhanggurabania* P. Wong, Khemmuk & R.G. Shivas (1)

*Buergenerula* Syd. (1)

*Bussabanomyces* Klaubauf, M.-H. Lebrun & Crous (1)

*Clasterosphaeria* Sivan. (2)

*Clasterosporium* Schwein (41)

*Clavatispora* K.D. Hyde (1)

*Falciphora* J. Luo & N. Zhang (1)

*Falciphoriella* M. Hern.-Restr. & Crous (1)

*Gaeumannomyces* M. Hern.-Restr. & Crous (2)

*Gaeumannomyces* Arx & D.L. Olivier (20)

*Herbampulla* Scheuer & Nogrsek (1)

*Kohlmeyeriopsis* Klaubauf, M.-H. Lebrun & Crous (1)

*Magnaporthiopsis* J. Luo & N. Zhang (7)

*Muraeriata* Huhndorf, Greif, Mugambi & A.N. Mill. (2)

*Nakataea* Hara (8)

*Neogaeumannomyces* D.Q. Dai & K.D. Hyde (1)

*Omnidemptus* P.F. Cannon & Alcorn (3)

*Plagiosphaera* Petr. (1)

*Pseudophialophora* J. Luo & N. Zhang (9)

*Pyriculariopsis* M.B. Ellis (9)

*Slopeiomyces* Klaubauf, M.-H. Lebrun & Crous (1)

***Ophioceraceae*** Klaubauf, E.G. LeBrun & Crous

*Ceratospaerella* Huhndorf, Greif, Mugambi & A.N. Mill. (2)\*

*Ophioceras* Sacc. (ca. 50)

***Pseudohalonectriaceae*** Hongsanan & K.D. Hyde

*Pseudohalonectria* Minoura & T. Muroi (16)

***Pyriculariaceae*** Klaubauf, E.G. LeBrun & Crous

*Bambusicularia* Klaubauf, M.-H. Lebrun & Crous (1)

*Barretomyces* Klaubauf, M.-H. Lebrun & Crous (1)

*Deightoniella* S. Hughes (20)

*Macgarvieomyces* Klaubauf, M.-H. Lebrun & Crous (3)

*Neocordana* Hern.-Rest. & Crous (6)  
*Neopyricularia* Klaubauf, M.-H. Lebrun & Crous (1)  
*Proxiptyricularia* Klaubauf, M.-H. Lebrun & Crous (2)  
*Pseudopyricularia* Klaubauf, M.-H. Lebrun & Crous (7)  
*Pyricularia* Sacc. (84)  
*Pyriculariomyces* Y. Marín, M.J. Wingf. & Crous (1)  
*Xenopyricularia* Klaubauf, M.-H. Lebrun & Crous (1)

***Myrmecridiales*** Crous

***Myrmecridiaceae*** Crous

*Myrmecridium* Arzanlou, W. Gams & Crous (14)  
*Neomyrmecridium* Crous (1)

***Xenodactylariaceae*** Crous

*Xenodactylaria* Crous (1)

***Ophiostomatales*** Benny & Kimbr.

***Kathistaceae*** Malloch & M. Blackw.

*Kathistes* Malloch & M. Blackw. (3)  
*Mattirolella* S. Colla (2)  
*Termitariopsis* M. Blackw., Samson & Kimbr. (1)

***Ophiostomataceae*** Nannf.

*Afroraffaele* C.C. Bateman, Y.T. Huang & D.R. Simmons (1)  
*Aureovirg* J.A. van der Linde, Z.W. de Beer & Jol. Roux (1)  
*Ceratocystiopsis* H.P. Upadhyay & W.B. Kendr. (5)  
*Fragosphaeria* Shear (2)  
*Graphilbum* H.P. Upadhyay & W.B. Kendr. (13)  
*Hawksworthiomyces* Z.W. de Beer, Marinc. & M.J. Wingf. (4)  
*Klasterskya* Petr. (3)  
*Leptographium* Lagerb. & Melin (= *Grosmannia* Gold.) (74)  
*Ophiostoma* Syd. & P. Syd. (= *Hyalorhinocladiella* H.P. Upadhyay & W.B. Kendr.; = *Pesotum* J.L. Crane & Schokn.) (134)  
*Raffaelea* Arx & Hennebert (33)  
*Sporothrix* Hektoen & C.F. Perkins (79)  
*Spumatoria* Masee & E.S. Salmon (1)

***Pararamichloridiales*** Crous

***Pararamichloridiaceae*** Crous

*Pararamichloridium* Crous (2)

***Phomatosporales*** Senan., Maharachch. & K.D. Hyde

***Phomatosporaceae*** Senan. & K.D. Hyde

*Lanspora* K.D. Hyde & E.B.G. Jones (1)  
*Phomatospora* Sacc. (ca. 100)  
*Tenuimurus* Senan., Camporesi & K.D. Hyde (1)

***Sporidesmiales*** Crous

***Sporidesmiaceae*** Fr.

*Sporidesmium* Link (ca. 330)

***Tirisporellales*** Suetrong, E.B.G. Jones & K.L. Pang

***Tirisporellaceae*** Suetrong, E.B.G. Jones & K.L. Pang  
*Bacusphaeria* Norlail., Alias & Suetrong (1)  
*Thailandiomyces* Pinruan, Sakay., K.D. Hyde & E.B.G. Jones (1)  
*Tirisporella* E.B.G. Jones, K.D. Hyde & Alias (1)

***Togniniales*** Senan., Maharachch. & K.D. Hyde  
***Togniniaceae*** Réblová, L. Mostert, W. Gams & Cro  
*Phaeoacremonium* W. Gams, Crous & M.J. Wingf. (65)

***Xenospadicoidales*** Hern.-Restr., J. Mena & Gené  
***Xenospadicoidaceae*** Hern.-Restr., J. Mena & Gené (= *Lentomitellaceae* H. Zhang, K.D. Hyde & Maharachch.)  
*Calyptosphaeria* Réblová & A.N. Mill. (4)  
*Lentomitella* Höhn. (13)  
*Neospadicoides* Z.L. Luo (3)  
*Spadicoides* S. Hughes (58)  
*Torrentispora* K.D. Hyde, W.H. Ho, E.B.G. Jones (9)

***Diaporthomycetidae*** families *incertae sedis*  
***Barbatosphaeriaceae*** H. Zhang, K.D. Hyde & Maharachch.  
*Barbatosphaeria* Réblová (9)  
*Ceratostomella* Sacc. (18)  
*Xylomelasma* Réblová (4)

***Papulosaceae*** Winka & O.E. Erikss.  
*Brunneosporella* V.M. Raghoo & K.D. Hyde (1)  
*Fluminicola* S.W. Wong, K.D. Hyde & E.B.G. Jones (5)  
*Papulosa* Kohlm & Volkm-Kohlm (1)  
*Wongia* Khemmuk, Geering & R.G. Shivas. (3)

***Rhamphoriaceae*** Réblová  
*Rhamphoria* Niessl (15)  
*Rhamphoriopsis* Réblová & Gardiennet (1)  
*Rhodoveronaea* Arzanlou, W. Gams & Crous (1)  
*Xylolentia* Réblová (1)

***Thyridiaceae*** O.E. Erikss & J.Z. Yue  
*Pleurocytospora* Petr. (3)  
*Thyridium* Nitschke (34)

***Trichosphaeriaceae*** G. Winter  
*Aquidictyomyces* W. Dong, H. Zhang & K.D. Hyde (1)\*  
*Brachysporium* Sacc. (25)  
*Collematospora* Jeng & Cain (1)  
*Coniobrevicolla* Réblová (1)  
*Eriosphaeria* Sacc. (24)  
*Koorchaloma* Subram. (= *Kananascus* Nag Raj) (11)  
*Rizalia* Syd. & P. Syd. (6)  
*Schweinitziella* Speg. (4)  
*Setocampanula* Sivan. & W.H. Hsieh (1)  
*Trichosphaeria* Fuckel (20)  
*Unisetosphaeria* Pinnoi, E.B.G. Jones, McKenzie & K.D. Hyde (1)

**Woswasiaceae** H. Zhang, K.D. Hyde & Maharachch.

*Cyanoannulus* Raja, J. Campb. & Shearer (1)

*Woswasia* Jaklitsch, Réblová & Voglmayr (1)

*Xylochrysis* Réblová (1)

**Diaporthomycetidae** genera *incertae sedis*

*Aquimonospora* J. Yang & K.D. Hyde (1)

*Aquaticola* W.H. Ho, C.K.M. Tsui, Hodgkiss & K.D. Hyde (5)

*Fusoidispora* D. Vijaykr., Jeewon & K.D. Hyde (1)

*Kaarikia* C. Mayers & T.C. Harr. (1)\*

*Platytrachelon* Réblová (1)

*Proliferophorum* G.N. Wang, H. Zhang & Senan. (1)

*Pseudoconlarium* N.G. Liu, K.D. Hyde & J.K. Liu (1)

*Pseudostanjehughesia* J. Yang & K.D. Hyde (1)

**Subclass Hypocreomycetidae** O.E. Erikss. & Winka

**Cancellidiales** K.D. Hyde & Hongsanan

**Cancellidiaceae** K.D. Hyde & Hongsanan

*Cancellidium* Tubaki (6)

*Obliquiminima* W. Dong, H. Zhang & K.D. Hyde (1)\*

**Coronophorales** Nannf. (= *Melanosporales* N. Zhang & M. Blackw.)

**Bertiaceae** Smyk

*Bertia* De Not. (48)

*Gaillardielliella* Pat. (6)

**Ceratostomataceae** G. Winter

*Arxiomyces* P.F. Cannon & D. Hawksw. (3)

*Dactylidispora* Y. Marín, Stchigel, Guarro & Cano (3)

*Echinusithea* Y. Marín, Stchigel, Dania García, Guarro, A.N. Mill. & Cano (1)

*Erythrocarpon* Zúkal (1)

*Gonatobotrys* Corda (ca. 10)\*

*Harzia* Costantin (10)

*Melanospora* Corda (69)

*Microthecium* Corda (= *Pteridiosperma* J.C. Krug & Jeng) (ca. 20)

*Neotrotteria* Sacc. (1)\*

*Pseudomicrothecium* Y. Marín, Stchigel, Guarro & Cano (1)

*Pustulipora* P.F. Cannon (1)

*Rhytidospora* Jeng & Cain (5)

*Scopinella* Lév. (9)

*Setiferothera* Matsush. (1)

*Syspastospora* P.F. Cannon & D. Hawksw. (4)

*Vittatispora* P. Chaudhary, J. Campb., D. Hawksw. & K.N. Sastry (1)

**Chaetosphaerellaceae** Huhndorf, A.N. Mill. & F.A. Fernández

*Chaetosphaerella* E. Müll. & C. Booth (4)

*Crassochaeta* Réblová (2)

*Spinulosphaeria* Sivan. (2)

**Coronophoraceae** Höhn.

*Coronophora* Fuckel (2)



***Nitschkiaceae*** (Fitzp.) Nannf.

*Acanthonitschkea* Speg. (10)

*Biciliosporina* Subram. & Sekar (1)

*Botryola* Bat. & J.L. Bezerra (1)

*Fracchiacea* Sacc. (35)

*Groenhiella* Jørg. Koch, E.B.G. Jones & S.T. Moss (1)

*Janannfeldtia* Subram. & Sekar (1)

*Lasiosphaeriopsis* D. Hawksw. & Sivan. (7)

*Loranitschkia* Lar.N. Vassiljeva (1)

*Neochaetosphaerella* Lar.N. Vassiljeva, S.L. Stephenson & Chernyshev (4)

*Nitschkia* G.H. Otth ex P. Karst. (66)

*Rhagadostoma* Körb. (7)

*Rhagadostomella* Etayo (1)

*Tortulomyces* Lar.N. Vassiljeva, S.L. Stephenson, Chernyshev & K.D. Hyde (1)

***Scortechiniaceae*** Huhndorf, A.N. Mill. & F.A. Fernández

*Biciliospora* Petr. (1)

*Coronophorella* Höhn. (1)

*Euacanthia* Theiss. (2)

*Neocryptosphaerella* S.K. Huang & K.D. Hyde (2)\*

*Neofracchiacea* Teng (1)

*Pseudocatenomyces* Crous & L.A. Shuttlew. (1)

*Pseudocryptosphaerella* S.K. Huang & K.D. Hyde (4)\*

*Scortechinia* Sacc. (9)

*Scortechiniella* Arx & E. Müll. (1)

*Scortechiniellopsis* Sivan. (1)

*Tympanopsis* Starbäck (1)

***Coronophorales*** genera *incertae sedis*

*Papulaspora* Preuss (33)

*Sphaerodes* Clem. (9)

*Tengiomyces* Réblová (1)\*

***Falcocladiales*** R.H. Perera, Maharachch., Somrith., Suetrong & K.D. Hyde

***Falcocladiaceae*** Somrith., E.B.G. Jones & K.L. Pang

*Falcocladium* S.F. Silveira, Alfenas, Crous & M.J. Wingf. (5)

***Glomerellales*** Chadeff. ex Réblová, W. Gams & Seifert

***Australiascaceae*** Réblová & W. Gams

*Monilochaetes* Halst. ex Harter (8)

***Glomerellaceae*** Locq. ex Seifert & W. Gams

*Colletotrichum* Corda (ca. 900)

***Malaysiascaceae*** Tibpromma & K.D. Hyde

*Malaysiasca* Crous & M.J. Wingf. (1)

***Plectosphaerellaceae*** W. Gams, Summerb. & Zare

*Acremoniisimulans* Tibpromma & K.D. Hyde (1)

*Acrostalagmus* Corda (13)

*Brunneochlamydosporium* Giraldo López & Crous (4)

*Brunneomyces* A. Giraldo, Gené & Guarro (3)

*Chlamydosporiella* Giraldo López & Crous (1)  
*Chordomyces* Bilanenko, Georgieva & Grum-Grzhim. (2)  
*Furcasterigmium* Giraldo López & Crous (1)  
*Gibellulopsis* Bat. & H. Maia (3)  
*Lectera* P.F. Cannon (6)  
*Longitudinalis* Tibpromma & K.D. Hyde (1)  
*Musicillium* Zare & W Gams (2)  
*Musidium* Giraldo López & Crous (1)  
*Nigrocephalum* Giraldo López & Crous (1)  
*Paragibellulopsis* Giraldo López & Crous (1)  
*Paramusicillium* Giraldo López & Crous (1)  
*Phialoparvum* Giraldo López & Crous (1)  
*Plectosphaerella* Kleb. (17)  
*Sayamraella* Giraldo López & Crous (1)  
*Sodiomyces* A.A. Grum-Grzhim., Debets & Bilanenko (5)  
*Stachylidium* Link (7)  
*Summerbellia* Giraldo López & Crous (1)  
*Theobromium* Giraldo López & Crous (1)  
*Verticillium* Nees (81)  
*Xenoplectosphaerella* Jayaward., Phukhams. & K.D. Hyde (1)\*

***Reticulascaceae*** Réblová & W. Gams

*Blastophorum* Matsush. (5)  
*Cylindrotrichum* Bonord. (23)  
*Kylindria* DiCosmo, S.M. Berch & W.B. Kendr. (11)  
*Sporoschismopsis* Hol-Jech. & Hennebert (8)

***Glomerellales*** genus *incertae sedis*

*Ascocodinaea* Samuels, Cand. & Magni (2)

***Hypocreales*** Lindau

***Bionectriaceae*** Samuels & Rossman

*Acremonium* Link (ca. 150)  
*Anthonectria* Döbbeler (1)  
*Aphanotria* Döbbeler (1)  
*Battarrina* (Sacc.) Clem. & Shear (1)  
*Bryocentria* Döbbeler (15)  
*Bryotria* Döbbeler & P.G. Davison (2)  
*Bullanockia* Crous (1)  
*Chrysonectria* Lechat & J. Fourn. (1)  
*Clibanites* (P. Karst.) P. Karst. (1)  
*Clonostachys* Corda (78)  
*Dimerosporiella* Speg. (8)  
*Fusariella* Sacc. (17)  
*Geonectria* Lechat & J. Fourn. (1)  
*Geosmithia* J. Pitt (24)  
*Gliomastix* Guég. (24)  
*Globonectria* Etayo (1)  
*Gracilistilbella* Seifert (4)  
*Halonectria* E.B.G. Jones (1)  
*Heleococcum* P.M. Jørg. (5)  
*Hydropisphaera* Dumort (29)

*Ijuhya* Starbäck (22)  
*Kallichroma* Kohlm. & Volkm.-Kohlm. (4)  
*Laniatria* Döbbeler & P.G. Davison (1)  
*Lasionectria* (Sacc.) Cooke (23)  
*Lasionectriella* Lechat & J. Fourn. (2)  
*Mycoarachis* Malloch & Cain (2)  
*Mycocitrus* Möller (3)  
*Nectriella* Nitschke ex Fuckel (84)  
*Nectriopsis* Maire (70)  
*Nigrosabulum* Malloch & Cain (1)  
*Ochronectria* Rossman & Samuels (3)  
*Ovicuculispora* Etayo (2)  
*Paracylindrocarpon* Crous, Roets & L. Lombard (4)  
*Paranectria* Sacc. (4)  
*Periantria* Döbbeler & P.G. Davison (2)  
*Peristomialis* (W. Phillips) Boud. (6)  
*Pronectria* Clem. (44)  
*Protocreopsis* Yoshim Doi (12)  
*Roumegueriella* Speg. (4)  
*Selinia* P. Karst. (6)  
*Stephanonectria* Schroers & Samuels (1)  
*Stilbocrea* Pat. (7)  
*Stromatonectria* Jaklitsch & H. Voglmayr (1)  
*Synnemellisia* N.K. Rao, Manohar. & Goos (2)  
*Trichonectria* Kirschst. (19)  
*Verrucostoma* Hirooka, Tak. Kobay. & P. Chaverri (2)  
*Xanthonectria* Lechat, J. Fourn. & P.-A. Moreau (1)

***Calcarisporiaceae*** Jing Z. Sun, X.Z. Liu & K.D. Hyde  
*Calcarisporium* Preuss (8)

***Clavicipitaceae*** (Lindau) Earle ex Rogerson  
*Aciculosporium* I. Miyake (= *Neoclaviceps* J.F. White, Bills, S.C. Alderman & Spatafora) (4)  
*Aschersonia* Mont. (= *Hypocrella* Sacc. *fide* Hyde et al. 2020) (170+)  
*Atkinsonella* Diehl (2)  
*Balansia* Speg. (49)  
*Cavimalum* Yoshim. Doi, Dargan & K.S. Thind (2)  
*Claviceps* Tul. (111)  
*Collarina* A. Giraldo, Gené & Guarro (1)  
*Commelinaceomyces* E. Tanaka (4)\*  
*Conoideocrella* D. Johnson, G.H. Sung, Hywel-Jones & Spatafora (3)  
*Corallocytostroma* Y.N. Yu & Z.Y. Zhang (2)  
*Dussiella* Pat. (3)  
*Ephelis* Fr. (4)  
*Epichloe* (Fr.) Tul. & C. Tul. (75)  
*Epicrea* Petr. (1)  
*Helicocollum* Luangsa-ard (3)  
*Helminthascus* Tranzschel (1)  
*Heteroepichloe* E. Tanaka, C. Tanaka, Gafur & Tsuda (2)  
*Keithomyces* Samson, Luangsa-ard & Houbraken (3)\*  
*Konradia* Racib. (2)  
*Loculistroma* F. Patt & Charles (1)

*Marquandomyces* Samson, Houbraken & Luangsa-ard (1)\*  
*Metapochonia* Kepler, S.A. Rehner & Humber (6)  
*Metarhiziopsis* D.W. Li, R.S. Cowles & C.R. Vossbrinck (1)  
*Metarhizium* Sorokīn (= *Chamaeleomyces* Sigler; = *Metacordyceps* G.H. Sung, J.M. Sung, Hywel-Jones & Spatafora; = *Nomuraea* Maubl.; = *Stereocrea* Syd. & P. Syd.) (78)  
*Moelleriella* Bres. (57)  
*Mycomalus* A. Möller (1)  
*Mycophilomyces* Crous & M.J. Wingf. (1)  
*Myriogenospora* G.F. Atk. (4)  
*Neobarya* Lowen (12)  
*Neocordyceps* Kobayasi (1)  
*Nigelia* Luangsa-ard (2)  
*Nigrocornus* Ryley & Langdon (1)  
*Orbiocrella* D. Johnson, G.H. Sung, Hywel-Jones & Spatafora (1)  
*Papiliomyces* Luangsa-ard, Samson & Thanakitp. (2)\*  
*Parepichloe* J.F. White & P.V. Reddy (4)  
*Periglandula* U. Steiner, E. Leistner & Leuchtm. (2)  
*Petchia* Thanakitp., Mongkols. & Luangsa-ard (2)\*  
*Pochonia* Bat. & O.M. Fonseca (4)  
*Pseudomeria* G.L. Barron (1)  
*Purpureomyces* Luangsa-ard, Samson & Thanakitp. (3)\*  
*Regiocrella* Chaverri & K.T. Hodge (2)  
*Romanoa* Thirum. (1)  
*Rotiferophthora* G.L. Barron (27)  
*Samuelsia* Chaverri & K.T. Hodge (6)  
*Shimizuomyces* Kobayasi (2)  
*Sphaerocordyceps* Kobayasi (2)  
*Sungia* Luangsa-ard, Samson & Thanakitp. (1)\*  
*Tyrannicordyceps* Kepler & Spatafora (5)  
*Ustilaginoidea* Bref. (19)  
*Yosiokobayasia* Samson, Luangsa-ard & Thanakitp (1)\*

***Cocoonihabitaceae*** W.Y. Zhuang & Z.Q. Zeng  
*Cocoonihabitatus* W.Y. Zhuang & Z.Q. Zeng (1)

***Cordycipitaceae*** Kreisel ex G.H. Sung, J.M. Sung, Hywel-Jones & Spatafora  
*Akanthomyces* Lebert (= *Torrubiella* Boud.; = *Lecanicillium* W. Gams & Zare) (21)  
*Amphichorda* Fr. (1)  
*Ascopolyporus* Möller (7)  
*Beauveria* Vuill. (54)  
*Beejasamuha* Subram. & Chandrash. (1)  
*Blackwellomyces* Spatafora & Luangsa-ard (2)  
*Cordyceps* (Fr.) Link (= *Isaria* Pers.; = *Microhilum* H.Y. Yip & A.C. Rath) (498)  
*Coremiopsis* Sizova & Suprun (2)  
*Engyodontium* de Hoog (5)  
*Flavocillium* H. Yu, Y.B. Wang, Y. Wang, Q. Fan & Zhu L. Yang (4)\*  
*Gamszarea* Z.F. Zhang & L. Cai (8)\*  
*Gibellula* Cavara (= *Granulomanus* de Hoog & Samson) (29)  
*Hevansia* Luangsa-ard, Hywel-Jones & Spatafora (8)  
*Hyperdermium* J.F. White, R.F. Sullivan, Bills & Hywel-Jones (3)  
*Leptobacillium* Zare & W. Gams (1)  
*Liangia* H. Yu, Y.B. Wang, Y. Wang, Z.H. Chen & Zhu L. Yang (1)\*

*Neotorrubiella* Tasan., Thanakitp. & Luangsa-ard\*

*Parengyodontium* C.C. Tsang, J.F.W. Chan, W.M. Pong, J.H.K. Chen, A.H.Y. Ngan, M. Cheung, C.K.C. Lai, D.N.C. Tsang, S.K.P. Lau & P.C.Y. Woo (1)

*Pseudogibbellula* Samson & H.C. Evans (1)

*Samsoniella* Mongkols., Noisrip., Thanakitp., Spatafora & Luangsa-ard (3)

*Simplicillium* W. Gams & Zare (12)

**Cylindriaceae** Crous & L. Lombard

*Cylindrium* Bonord (6)

**Flammocladiellaceae** Crous, L. Lombard & R.K. Schumach.

*Flammocladiella* Crous, L. Lombard & R.K. Schumach. (2)

**Hypocreaceae** De Not.

*Arachnocrea* Z. Moravec. (3)

*Dialhypocrea* Speg. (1)

*Escovopsioides* H.C. Evans & J.O. Augustin (1)

*Escovopsis* J.J. Muchovej & Della Lucia (14)

*Hypocreopsis* P. Karst. (14)

*Hypomyces* (Fr.) Tul. & C. Tul. (ca. 150)

*Kiflimonium* Summerb., J.A. Scott, Guarro & Crous (1)

*Lichenobarya* Etayo, Diederich & Lawrey (1)

*Mycogone* Link (28)

*Protocrea* Petch (6)

*Rogersonia* Samuels & Lodge (1)

*Sepedonium* Link (13)

*Sphaerostilbella* (Henn.) Sacc. & D. Sacc (13)

*Sporophagomyces* K. Pöldmaa & Samuels (3)

*Stephanoma* Wallr. (?6)

*Trichoderma* Pers. (400+)

*Verticimonosporium* Matsush. (3)

**Myrotheciomycetaceae** Crous

*Emericellopsis* J.F.H. Beym (23)

*Leucosphaerina* Arx (2)

*Myrotheciomyces* Crous (1)

*Trichothecium* Link (9)

**Nectriaceae** Tul. & C. Tul.

*Albonectria* Rossman & Samuels (1)

*Allantonectria* Earle (1)

*Allonectella* Petr. (2)

*Aphanocladium* W. Gams (4)

*Aquanectria* L. Lombard & Crous (3)

*Atractium* Link (3)

*Baipadisphaeria* Pinruan (1)

*Bisifusarium* L. Lombard, Crous & W. Gams (7)

*Calonectria* De Not. (400)

*Calostilbe* Sacc. & Syd. (4)

*Campylocarpon* Halleen, Schroers & Crous (3)

*Chaetonectrioides* Matsush. (1)

*Chaetopsina* Rambelli (19)

*Coccinonectria* Lombard & Crous (2)  
*Corallomycetella* Henn. (4)  
*Corallonectria* C. Herrera & P. Chaverri (1)  
*Corinectria* C. González & P. Chaverri (3)  
*Cosmospora* Rabenh. (50)  
*Cosmosporella* S.K. Huang, R. Jeewon & K.D. Hyde (1)  
*Curviciadiella* Decock & Crous (1)  
*Cyanochyta* Höhn. (1)  
*Cyanonectria* Samuels & Chaverri (2)  
*Cyanophomella* Höhn. (1)  
*Cylindrocladiella* Boesew. (45)  
*Cylindrodendrum* Bonord. (4)  
*Dacryoma* Samuels (2)  
*Dactylonectria* L. Lombard & Crous (14)  
*Dematiocladium* Allegr., Aramb., Cazau & Crous (2)  
*Fusarium* Link (ca. 120)\*  
*Fusicolla* Bonord (18)  
*Geejayessia* Schroers, Gräfenhan & Seifert (7)  
*Gliocephalotrichum* J.J. Ellis & Hesselt. (13)  
*Gliocladiopsis* S.B. Saksena (15)  
*Ilyonectria* P. Chaverri & C. Salgado (23)  
*Macroconia* (Wollenw.) Gräfenhan, Seifert & Schroers (5)  
*Mariannaea* G. Arnaud ex Samson (22)  
*Microcera* Desm. (4)  
*Murinectria* M. Niranjana & V.V. Sarma (4)  
*Nalanthamala* Subram. (6)  
*Nectria* (Fr.) Fr. (29)  
*Neocalonectria* Crous (1)\*  
*Neocosmospora* E.F. Sm. (84)  
*Neonectria* Wollenw. (30)  
*Neothyronectria* Crous & Thangavel (2)  
*Ophionectria* Sacc. (39)  
*Pandanaceomyces* Tibpromma & K.D. Hyde (1)  
*Paracremonium* L. Lombard & Crous (5)  
*Payosphaeria* W.F. Leong (1)  
*Penicillifer* Emden (7)  
*Persiciospora* P.F. Cannon & D. Hawksw. (4)  
*Pleiocarpon* L. Lombard & D. Aiello (3)  
*Pleogibberella* Sacc. (3)  
*Pleurocolla* Petr. (1)  
*Pseudoachroistachys* Tibpromma & K.D. Hyde (1)  
*Pseudocosmospora* C. Herrera & P. Chaverri (13)  
*Pseudonectria* Seaver (17)  
*Rectifusarium* L. Lombard, Crous & W. Gams (2)  
*Rugonectria* P. Chaverri & Samuels (5)  
*Sarcopodium* Ehrenb. (22)  
*Stylonectria* Höhn. (5)  
*Thelonectria* P. Chaverri & C.G. Salgado (46)  
*Thyronectria* Sacc. (41)  
*Varicosporella* Lechat & J. Fourn. (1)  
*Varicosporellopsis* Lechat & J. Fourn. (1)  
*Volutella* Fr. (127)

*Xenoacremonium* Lombard & Crous (2)  
*Xenocylindrocladium* Decock, Hennebert & Crous (3)  
*Xenogliocladiopsis* Crous & W.B. Kendr. (2)  
*Xenoleptographium* Marinc., T.A. Duong, Z.W. de Beer & M.J. Wingf. (1)  
*Xenonectriella* Weese (18)

**Niessliaceae** Kirschst.

*Atronectria* Etayo (2)  
*Circinoniesslia* Samuels & M.E. Barr (1)  
*Cryptoniesslia* Scheuer (1)  
*Eucasphaeria* Crous (2)  
*Malmeomyces* Starb. (1)  
*Melchioria* Penz. & Sacc. (6)  
*Miyakeomyces* Hara (1)  
*Myrmaeciella* Lindau (2)  
*Myrtacremonium* Crous (1)  
*Neoeucasphaeria* Crous (1)  
*Niesslia* Auersw. (= *Hyaloseta* A.W. Ramaley) (43)\*  
*Nitschkiopsis* Nannf. & R. Sant. (1)\*  
*Paraniesslia* K.M. Tsui, K.D. Hyde & Hodgkiss (2)  
*Pseudohyaloseta* Tibpromma & K.D. Hyde (1)  
*Pseudonectriella* Petr. (1)  
*Pseudorhynchia* Höhn. (2)  
*Rosasphaeria* Jaklitsch & Voglmayr (1)  
*Taiwanascus* Sivan & H.S. Chang (2)  
*Trichosphaerella* E. Bommer, M. Rousseau & Sacc. (= *Neorehmia* Höhn.; = *Oplothecium* Syd.) (4)  
*Valetoniella* Höhn. (3)  
*Valetoniellopsis* Samuels & M.E. Barr (1)

**Ophiocordycipitaceae** G.H. Sung, J.M. Sung, Hywel-Jones & Spatafora

*Drechmeria* W. Gams & H.B. Jansson (12)  
*Hantamomyces* Crous (1)\*  
*Harposporium* Lohde (37)  
*Hirsutella* Pat. (50+)  
*Hymenostilbe* Petch (12)  
*Ophiocordyceps* Petch (263)  
*Paraisaria* Samson & B.L. Brady (11)  
*Perennicordyceps* Matošec & I. Kušan (4)  
*Pleurocordyceps* Y.J. Yao, Y.H. Wang, S. Ban, W.J. Wang, Yi Li, Ke Wang & P.M. Kirk (10)\*  
*Polycephalomycetes* Kobayasi (18)  
*Purpureocillium* Luangsa-ard, Hywel-Jones, Houbraken & Samson (5)  
*Tolypocladium* W. Gams (47)

**Sarocladiaceae** L. Lombard

*Parasarocladium* Summerb., J.A. Scott, Guarro & Crous (4)  
*Sarocladium* W. Gams & D. Hawksw. (22)

**Stachybotryaceae** L. Lombard & Crous

*Achroiostachys* L. Lombard & Crous (6)  
*Albifimbria* L. Lombard & Crous (5)  
*Albosynnema* E.F. Morris (2)  
*Alfaria* Crous, Montañó-Mata & García-Jim. (13)

*Alfariacладиella* Crous & R.K. Schumach. (1)  
*Brevistachys* L. Lombard & Crous (5)  
*Capitofimbria* L. Lombard & Crous (1)  
*Cymostachys* L. Lombard & Crous (3)  
*Didymostilbe* Henn. (14)  
*Digitiseta* Gordillo & Decock (4)  
*Dimorphiseta* L. Lombard & Crous (1)  
*Globobotrys* L. Lombard & Crous (1)  
*Grandibotrys* L. Lombard & Crous (3)  
*Gregatothecium* L. Lombard & Crous (1)  
*Hyalinostachys* C.G. Lin & K.D. Hyde (1)  
*Inaequalispora* L. Lombard & Crous (3)  
*Kastanostachys* L. Lombard & Crous (1)  
*Koorchalomella* Chona, Munjal & J.N. Kapoor (2)  
*Melanopsamma* Niessl (ca. 5)  
*Memnoniella* Höhn. (9)  
*Myrothecium* Tode (2)  
*Myxospora* L. Lombard & Crous (6)  
*Neomyrothecium* L. Lombard & Crous (1)  
*Paramyrothecium* L. Lombard & Crous (14)  
*Parasarcopodium* Melnik, S.J. Lee & Crous (3)  
*Parvothecium* L. Lombard & Crous (2)  
*Peethambara* Subram. & Bhat (1)  
*Pseudoornatispora* Tibpromma & K.D. Hyde (1)  
*Septomyrothecium* Matsush. (4)  
*Sirastachys* L. Lombard & Crous (9)  
*Smaragdiniseta* L. Lombard & Crous (1)  
*Stachybotrys* Corda (12 phylogenetically studied, 81 epithets remain to be studied)  
*Striatibotrys* L. Lombard & Crous (7)  
*Striaticonidium* L. Lombard & Crous (5)  
*Tangerinosporium* L. Lombard & Crous (1)  
*Virgatospora* Finley (2)  
*Xenomyrothecium* L. Lombard & Crous (1)  
*Xepicula* Nag Raj (4)  
*Xepiculopsis* Nag Raj (2)

#### ***Tilachlidiaceae*** Lombard & Crous

*Psychronectria* J. Pawłowska, Istel, Wrzosek, D. Hawksw. (47)  
*Septofusidium* W. Gams (5)  
*Tilachlidium* Preuss (1)

#### ***Hypocreales*** genera *incertae sedis*

*Acremoniopsis* A. Giraldo, Gené & Guarro (1)  
*Berkelella* (Sacc.) Sacc. (2)  
*Bulbithecium* Udagawa & T Muroi (1)  
*Cephalosporiopsis* Peyronel (10)  
*Chondronectria* Etayo, Flakus & Kukwa (1)  
*Cylindronectria* Etayo (1)  
*Diploöspora* Grove (ca. 7)  
*Gynonectria* Döbbeler (1)  
*Hapsidospora* Malloch & Cain (2)  
*Haptospora* G.L. Barron (3)



*Illosporiosis* D. Hawksw. (1)  
*Illosporium* Mart. (17)  
*Leptobarya* Etayo (2)  
*Lichenopenicillus* Etayo (1)  
*Metadothella* Henn. (1)  
*Munkia* Speg. (4)  
*Neomunkia* Petr. (1)  
*Peloronectria* Möller (3)  
*Pseudoacremonium* Crous (1)  
*Pseudoidriella* Crous & R.G. Shivas (1)  
*Pseudomeliola* Speg. (10)  
*Rodentomyces* Doveri, Pecchia, Sarrocco & Vannacci (1)  
*Roselliniella* Vain (19)  
*Saksenamyces* A.N. Rai & P.N. Singh (1)  
*Sedecimiella* K.L. Pang, Alias & E.B.G. Jones (1)  
*Stanjemonium* W. Gams, O'Donnell, Schroers & M. Chr. (4)  
*Stilbella* Lindau (61)  
*Sulcatistroma* A.W. Ramaley (1)\*  
*Ticonectria* Döbbeler (3)  
*Tilakidium* Vaidya, C.D. Naik & Rathod (1)

***Microascales*** Luttr. ex Benny & Kimbr.

***Ceratocystidaceae*** Locq. ex Réblová, W. Gams & Seifert  
*Ambrosiella* Brader ex Arx & Hennebert (10)  
*Berkeleyomyces* W.J. Nel, Z.W. de Beer, T.A. Duong & M.J. Wingf. (2)  
*Bretziella* Z.W. de Beer, Marinc., T.A. Duong & M.J. Wingf. (1)  
*Ceratocystis* Ellis & Halst. (105)  
*Chalaropsis* Peyronel (3)  
*Davidsoniella* Z.W. de Beer, T.A. Duong & M.J. Wingf. (4)  
*Endoconidiophora* Münch (9)  
*Huntiella* Z.W. de Beer, T.A. Duong & M.J. Wingf. (29)  
*Meredithiella* McNew, C. Mayers & T.C. Harr. (3)  
*Phialophoropsis* L.R. Batra emend. T.C. Harr. (2)  
*Thielaviopsis* Went. (7)

***Chadefaudiellaceae*** Faurel & Schotter ex Benny & Kimbr.

*Chadefaudiella* Faurel & Schotter (2)  
*Faurelina* Locq-Lin. (4)

***Gondwanamycetaceae*** Réblová, W. Gams & Seifert

*Custingophora* Stolk (5)  
*Knoxdaviesia* M.J. Wingf., P.S. van Wyk & Marasas. (5)

***Graphiaceae*** De Beer

*Graphium* Corda (20)

***Halosphaeriaceae*** E. Müll & Arx ex Kohlm.

*Alisea* J. Dupont & E.B.G. Jones (1)  
*Amphitrite* S. Tibell (1)  
*Aniptodera* Shearer & M. Miller (21)  
*Aniptosporopsis* K.L. Pang, C.L. Lu, W.T. Ju & E.B.G. Jones (1)  
*Anisostagma* K.R.L. Petersen & Jørg. Koch (1)

*Antennospora* Meyers (2)  
*Appendichordella* R.G. Johnson, E.B.G. Jones & S.T. Moss (1)  
*Arenariomyces* Höhnk (5)  
*Ascosacculus* J. Campbell, J.L. Anderson & Shearer (1)  
*Bathyascus* Kohlm. (5)  
*Carbosphaerella* I. Schmidt (2)  
*Ceriosporopsis* Linder (9)  
*Chadefaudia* Feldm.-Maz. (6)  
*Cirrenalia* Meyers & R.T. Moore (ca. 10)\*  
*Corallicola* Volkm.-Kohlm. & Kohlm. (1)  
*Corollospora* Werderm (= *Sigmoidea* J.L. Crane) (26)  
*Cucullosporella* K.D. Hyde & E.B.G. Jones (1)  
*Cucurbitinus* L.L. Liu & Z.Y. Liu, in Liu, Liu, Yang, Chen & Liu (2)  
*Ebullia* K.L. Pang (1)  
*Fluviatispora* K.D. Hyde (3)  
*Gesasha* Abdel-Wahab & Nagah. (3)  
*Haiyanga* K.L. Pang & E.B.G. Jones (1)  
*Haligena* Kohlm. (1)  
*Halosarpheia* Kohlm. & E. Kohlm. (8)  
*Halosphaeria* Linder (1)  
*Halosphaeriopsis* T.W. Johnson (1)  
*Havispora* K.L. Pang & Vrijmoed (1)  
*Iwilsoniella* E.B.G. Jones (1)  
*Kitesporella* Jheng & K.L. Pang (1)  
*Kochiella* Sakay., K.L. Pang & E.B.G. Jones (1)  
*Lautisporopsis* E.B.G. Jones, Yusoff & S.T. Moss (1)  
*Lignincola* Höhnk (2)  
*Limacospora* Jørg. Koch & E.B.G. Jones (1)  
*Luttrellia* Shearer (4)  
*Magnisphaera* J. Campb., J.L. Anderson & Shearer (2)  
*Marinospora* A.R. Caval. (2)  
*Moana* Kohlm. & Volkm.-Kohlm. (1)  
*Morakotiella* Sakay. (1)  
*Nais* Kohlm. (3)  
*Natantispora* J. Campb., J.L. Anderson & Shearer (3)  
*Nautosphaeria* E.B.G. Jones (1)  
*Neptunella* K.L. Pang & E.B.G. Jones (1)  
*Nereiospora* E.B.G. Jones, R.G. Johnson & S.T. Moss. (2)  
*Nimbospora* Jørg. Koch (1)  
*Nohea* Kohlm. & Volkm.-Kohlm. (3)  
*Oceanitis* Kohlm. (4)  
*Ocostaspora* E.B.G. Jones, R.G. Johnson & S.T. Moss (1)  
*Okeanomyces* K.L. Pang & E.B.G. Jones (1)  
*Ondiniella* E.B.G. Jones, R.G. Johnson & S.T. Moss (1)  
*Ophiodeira* Kohlm. & Volkm.-Kohlm. (1)  
*Panorbis* J. Campb., J.L. Anderson & Shearer (1)  
*Paraaniptodera* K.L. Pang, C.L. Lu, W.T. Ju & E.B.G. Jones (1)  
*Phaeonectriella* R.A. Eaton & E.B.G. Jones (1)  
*Pileomyces* K.L. Pang & Jheng (1)  
*Praelongicaulis* E.B.G. Jones, Abdel-Wahab & K.L. Pang (1)  
*Pseudolignincola* Chatmala & E.B.G. Jones (1)  
*Remispora* Linder (5)

*Saagaromyces* K.L. Pang & E.B.G. Jones (3)  
*Sablicola* E.B.G. Jones, K.L. Pang & Vrijmoed (1)  
*Thalassogena* Kohlm. & Volkm.-Kohlm. (1)  
*Thalespora* Chatmala & E.B.G. Jones (1)  
*Tinhaudeus* K.L. Pang, S.Y. Guo & E.B.G. Jones (1)  
*Tirisporea* E.B.G. Jones & Vrijmoed (1)  
*Toriella* Sakay., K.L. Pang & E.B.G. Jones (1)  
*Trailia* G.K. Sutherl. (1)  
*Trichomaris* Hibbits, G.C. Hughes & Sparks (1)  
*Tubakiella* Sakay., K.L. Pang & E.B.G. Jones (1)  
*Tunicatispora* K.D. Hyde (1)

***Microascaceae*** Luttr. ex Malloch

*Acaulium* Sopp (4)  
*Brachyconidiellopsis* Decock, R.F. Castañeda & Adhikari (1)  
*Canariomyces* Arx (3)  
*Cephalotrichum* Link (37)  
*Doratomyces* Corda (3)  
*Echinobotryum* Corda (2)  
*Enterocarpus* Locq.-Lin. (2)  
*Fairmania* Sacc. (1)  
*Gamsia* M. Morelet (5)  
*Kernia* Nieuwl. (14)  
*Lomentospora* Hennebert & B.G. Desai (1)  
*Lophotrichus* R.K. Benj. (8)  
*Microascus* Zukal (60)  
*Parascadosporium* Gilgado, Gené, Cano & Guarro (2)  
*Petriella* Curzi (8)  
*Pseudallescheria* Negroni & I. Fisch. (8)  
*Pseudoscopulariopsis* Sand.-Den., Gené & Guarro (2)  
*Rhinocladium* Sacc. & Marchal (11)  
*Scadosporium* Sacc. ex Castell. & Chalm. (12)  
*Scopulariopsis* Bainier (87)  
*Wardomyces* F.T. Brooks & Hansf. (11)  
*Wardomycopsis* Udagawa & Furuya (5)  
*Yunnanina* H.Z. Kong (3)

***Triadelphiaceae*** Y.Z. Lu, J.K. Liu, Z.L. Luo & K.D. Hyde

*Triadelphia* Shearer & J.L. Crane (18)  
*Synnematotriadelphia* Chuaseehar., Somrith., Nuankaew & Boonyuen (2)\*

***Microascales*** genera *incertae sedis*

*Bisporostilbella* Brandsb. & E.F. Morris (1)  
*Cephalotrichiella* Crous (1)  
*Cornuvesica* C.D. Viljoen, M.J. Wingf. & K. Jacobs (4)  
*Gabarnaudia* Samson & W. Gams (2)  
*Sporendocladia* G. Arnaud ex Nag Raj & W.B. Kendr. (7)

***Parasymphodiellales*** Hern.-Restr., Gené, R.F. Castañeda & Crous

***Parasymphodiellaceae*** Hern.-Restr., Gené, Guarro & Crous  
*Parasymphodiella* Ponnappa (10)

***Torpedosporales*** E.B.G. Jones, Abdel-Wahab & K.L. Pang

***Etheiophoraceae*** Rungjind., Somrith. & Suetrong

*Etheiophora* Kohlm. & Volkm.-Kohlm. (3)

*Swampomyces* Kohlm. & Volkm. (2)

***Juncigenaceae*** E.B.G. Jones, Abdel-Wahab & K.L. Pang

*Elbamycella* A. Poli, E. Bovio, V. Prigione & G.C. Varese (1)

*Fulvocentrum* E.B.G. Jones & Abdel-Wahab (3)

*Juncigena* Kohlm Kohlm., Volkm.-Kohlm. & O.E. Erikss. (2)

*Khaleijomyces* Abdel-Wahab (1)

*Marinokulati* E.B.G. Jones & K.L. Pang (1)

*Moheitospora* Abdel-Wahab, Abdel-Aziz & Nagah. (2)

***Torpedosporaceae*** E.B.G. Jones & K.L. Pang

*Torpedospora* Meyers (3)

***Hypocreomycetidae*** genera *incertae sedis*

*Campylospora* Ranzoni (5)

*Dendroclathra* Voglmayr & G. Delgado (2)

**Subclass *Lulworthiomycetidae*** Dayar., E.B.G. Jones & K.D. Hyde

***Koralionastetales*** Kohlm., Volkm.-Kohlm., J. Campb. & Inderb.

***Koralionastetaceae*** Kohlm. & Volkm.-Kohlm.

*Koralionastes* Kohlm. & Volkm.-Kohlm.

*Pontogeneia* Kohlm.

***Lulworthiales*** Kohlm., Spatafora & Volkm.-Kohlm.

***Lulworthiaceae*** Kohlm., Spatafora & Volkm.-Kohlm.

*Cumulospora* I. Schmidt (2)

*Halazoon* Abdel-Aziz, Abdel-Wahab & Nagah. (2)

*Haloguignardia* A. Cribb & J. Cribb (1)

*Hydea* K.L. Pang & E.B.G. Jones (1)

*Kohlmeyeriella* E.B.G. Jones, R.G. Johnson & S.T. Moss (2)

*Lindra* I. Wilson (2)

*Lulwoana* Kohlm., Volkm.-Kohlm., J. Campb., Spatafora & Gräfenhan (= *Zalerion* R.T. Moore & Meyers (6)

*Lulwoidea* Kohlm., Volkm.-Kohlm., J. Campb., Spatafora & Gräfenhan (1)

*Lulworthia* G.K. Sutherl (32)

*Matsusporium* E.B.G. Jones & K.L. Pang (1)

*Moleospora* Abdel-Wahab, Abdel-Aziz & Nagah (1)

*Moromyces* Abdel-Wahab, K.L. Pang, Nagah., Abdel-Aziz & E.B.G. Jones (1)

*Orbimyces* Linder (1)

*Paralulworthia* A. Poli, E. Bovio, L. Ranieri, G.C. Varese & V. Prigione (3)\*

*Rostrupiella* Jørg Koch, K.L. Pang & E.B.G. Jones. (1)

*Sammeyersia* S.Y. Guo, E.B.G. Jones & K.L. Pang (1)

**Subclass *Pisorisporiomycetidae*** Bundhun, Maharachch. & K.D. Hyde

***Pisorisporiales*** Réblová & J. Fourn.

***Pisorisporiaceae*** Réblová & J. Fourn.

*Achroceratosphaeria* Réblová, Fourn., K.D. Hyde & Ranghoo (2)

*Pisorisporium* Réblová & J. Fourn. (2)

***Pisorisporiales*** genus *incertae sedis*

*Brocciosphaera* K. Yamag., Chuaseehar. & Nakagiri (3)\*

**Subclass *Savoryellomycetidae*** Hongsanan, K.D. Hyde & Maharachch.

***Conioscyphales*** Réblová & Seifert

***Conioscyphaceae*** Réblová & Seifert

*Conioscypha* Höhn. (15)

***Fuscosporellales*** Jing Yang, Bhat & K.D. Hyde

***Fuscosporellaceae*** Jing Yang, Bhat & K.D. Hyde

*Bactrodesmiastrum* Hol.-Jech. (5)

*Fuscosporella* J. Yang (2)

*Mucispora* J. Yang (2)

*Parafuscosporella* J. Yang & K.D. Hyde (3)

*Plagiascoma* Réblová & J. Fourn. (1)

*Pseudoascotaiwania* Jing Yang, Bhat & K.D. Hyde (1)

***Pleurotheciales*** Réblová & Seifert

***Pleurotheciaceae*** Réblová & Seifert

*Adelosphaeria* Réblová (1)

*Anapleurothecium* Hern.-Restr., R.F. Castañeda & Gené (1)

*Helgardiomycetes* Crous (1)\*

*Helicoön* Morgan (28)

*Melanotriconum* Réblová (1)

*Monotosporella* S. Hughes (4)

*Neomonodictys* Y.Z. Lu, C.G. Lin & K.D. Hyde (1)

*Phaeoisaria* Höhn. (23)

*Phragmocephala* E.W. Mason & S. Hughes (15)

*Pleurotheciella* Réblová (11)

*Pleurothecium* Höhn. (11)

*Rhynchobrunnera* B.A. McDonald, U. Braun & Crous (2)\*

*Saprodesmium* W. Dong & Doilom (1)

*Sterigmatobotrys* Oudem. (6)

***Savoryellales*** Boonyuen, Suetrong, Sivichai, K.L. Pang & E.B.G. Jones

***Savoryellaceae*** Jaklitsch & Réblová

*Ascotaiwania* Sivan. & H.S. Chang (= *Neoascotaiwania* Hern.-Restr., R.F. Castañeda & Guarro *vide* Dayarathne et al. 2019) (9)

*Canalisporium* Nawawi & Kuthub. (= *Ascothailandia* Sri-indr., Boonyuen, Sivichai & E.B.G. Jones) (14)

*Kaseifertia* Réblová, Hern.-Restr. & J. Fourn. (1)\*

*Obliquifusoideum* W. Dong & Doilom (1)

*Rhexoacrodictys* W.A. Baker & Morgan-Jones (5)

*Savoryella* E.B.G. Jones & R.A. Eaton (11)

**Subclass *Sordariomycetidae*** O.E. Erikss & Winka (= *Meliolomycetidae* P.M. Kirk & K.D. Hyde)

***Boliniales*** P.F. Cannon

***Boliniaceae*** Rick

*Apiocamarops* Samuels & J.D. Rogers (4)

*Apiorhynchostoma* Petr. (4)

*Camaropella* Lar.N. Vassiljeva (2)

*Camarops* P. Karst. (= *Bolinia* (Nitschke) Sacc.) (28)

*Cornipulvina* Huhndorf, A.N. Mill., F.A. Fernández & Lodge (1)  
*Endoxyla* Fuckel (3)  
*Mollicamarops* Lar.N. Vassiljeva (1)  
*Neohypodiscus* J.D. Rogers, Y.M. Ju & Læssøe (3)  
*Pseudovalsaria* Spooner (3)

***Cephalothecales*** Maharachch. & K.D. Hyde

***Cephalothecaceae*** Höhn.

*Albertiniella* Kirschst. (2)  
*Cephalotheca* Fuckel (ca. 10)  
*Cryptendoxyla* Malloch & Cain (2)  
*Phialemonium* W. Gams & McGinnis (6)  
*Victoriomyces* D. Davolos, B. Pietrangeli, A.M. Persiani & O. Maggi (1)

***Chaetosphaeriales*** Huhndorf, A.N. Mill. & F.A. Fernández

***Chaetosphaeriaceae*** Réblová, M.E. Barr & Samuels

*Achrochaeta* Réblová & Hern.-Restr. \*  
*Adautomilanezia* Gusmão, S.S. Silva, Fiuza, L.A. Costa & T.A.B. Santos (1)  
*Anacacumisporium* Y.R. Ma & X.G. Zhang (1)  
*Arcuatosporea* Réblová & Hern.-Restr. (2)  
*Ascochalara* Réblová (1)  
*Bahusutrabeeja* Subram. & Bhat (6)  
*Brunneodinemasporium* Crous & R.F. Castañeda (2)  
*Catenularia* Grove (13)  
*Chaetosphaeria* Tul. & C. Tul. (ca. 150)  
*Chloridium* Link (ca. 30)  
*Codinaea* Maire (15)  
*Conicomycetes* R.C. Sinclair, Eicker & Morgan-Jones (4)  
*Craspedodidymum* Hol.-Jech. (14)  
*Cryptophiale* Piroz. (ca. 20)  
*Cryptophialoidea* Kuthub. & Nawawi (5)  
*Dendrophoma* Sacc. (ca. 100)  
*Dictyochaeta* Speg. (84)  
*Dictyochaetopsis* Aramb. & Cabello (14)  
*Dinemasporium* Lév. (35)  
*Ericiosphaeria* Réblová & Hern.-Restr. (1)  
*Eucalyptostroma* Crous & M.J. Wingf. (2)  
*Exserticlava* S. Hughes (7)  
*Flectospora* Réblová & Hern.-Restr. (1)  
*Fuscocatenula* Réblová & A.N. Mill. (2)  
*Hemicorynespora* M.B. Ellis (12)  
*Infundibulomyces* Plaingam, Somrith. & E.B.G. Jones (2)  
*Kionochaeta* P.M. Kirk & B. Sutton (13)  
*Lecythothecium* Réblová & Winka (1)  
*Menispora* Pers. (14)  
*Menisporopsis* S. Hughes (ca. 10)  
*Miyoshiella* Kawam. (3)  
*Morrisiella* Saikia & A.K. Sarbhoy (1)  
*Nawawia* Marvanová (7)  
*Neopseudolachnella* A. Hashim. & Kaz. Tanaka (3)  
*Paliphora* Sivan. & B. Sutton (7)  
*Phaeonawawia* Goh (1)\*

*Phialolunulospora* Z.F. Yu & R.F. Castañeda (1)\*  
*Phialosporostilbe* Mercado & J. Mena (5)  
*Phialoturbella* Réblová & Hern.-Restr. (3)  
*Polynema* Lév. (13)  
*Pseudodinemasporium* A. Hashim. & Kaz. Tanaka (1)  
*Pseudolachnea* Ranoj. (5)  
*Pseudolachnella* Teng (18)  
*Pyrigemmula* D. Magyar & R. Shoemaker (1)  
*Rattania* Prabhug. & Bhat (1)  
*Sporoschisma* Berk. & Broome (15)  
*Striatosphaeria* Samuels & E. Müll. (1)  
*Tainosphaeria* F.A. Fernández & Huhndorf (3)  
*Thozetella* Kuntze (22)  
*Umbrinosphaeria* Réblová (1)  
*Verhulstia* Hern.-Rest. (1)  
*Zanclospora* S. Hughes & W.B. Kendr. (10)

***Helminthosphaeriaceae*** Samuels, Cand. & Magni.  
*Echinosphaeria* A.N. Mill. & Huhndorf (14)  
*Helminthosphaeria* Fuckel (ca. 20)  
*Hilberina* Huhndorf & A.N. Mill. (ca. 20)  
*Ruzenia* O. Hilber (1)

***Leptosporaceae*** Konta & K.D. Hyde  
*Leptospora* Penz. & Sacc. (17)

***Linocarpaceae*** Konta & K.D. Hyde  
*Claviformispora* X.L. Xu & C.L. Yang (1)  
*Linocarpon* Syd. & P. Syd. (42)  
*Neolinocarpon* K.D. Hyde (13)

***Chaetosphaeriales*** genera *incertae sedis*  
*Calvolachnella* Marinc., T.A. Duong & M.J. Wingf. (1)  
*Caudatispora* J. Fröhl. & K.D. Hyde (2)  
*Erythromada* Huhndorf, A.N. Mill., F.A. Fernández & Lodge (1)  
*Lasiosphaeriella* Sivan. (6)  
*Neoleptospora* Phukhams., Perera & K.D. Hyde (2)  
*Neonawawia* Jing Yang, K.D. Hyde & J.K. Liu (1)  
*Rimaconus* Huhndorf, F.A. Fernández, Joanne E. Taylor & K.D. Hyde (2)

***Coniochaetales*** Huhndorf, A.N. Mill. & F.A. Fernández (= *Cordanales* M. Hern.-Rest. & Crous)  
***Coniochaetaceae*** Malloch & Cain  
*Barrina* A.W. Ramaley (1)  
*Coniochaeta* (Sacc.) Cooke (81)

***Cordanaceae*** Nann.  
*Cordana* Preuss (19)

***Coniochaetales*** genera *incertae sedis*  
*Cannonia* J.E. Taylor & K.D. Hyde  
*Pseudogliomastix* W. Gams (1)

**Meliolales** Gäum. ex D. Hawksw. & O.E. Erikss.  
**Armatellaceae** Hosag.  
*Armatella* Theiss. & Syd. (19)

**Meliolaceae** G.W. Martin ex Hansf.  
*Amazonia* Theiss. (60)  
*Appendiculella* Höhn. (70)  
*Asteridiella* McAlpine (2)  
*Cryptomeliola* S. Hughes & Piroz. (3)  
*Endomeliola* S. Hughes & Piroz. (1)  
*Irenopsis* F. Stevens (150)  
*Meliola* Fr. (1700)  
*Setameliola* D.R. Reynolds (17)

**Phyllachorales** M.E. Barr  
**Phaeochoraceae** K.D. Hyde, P.F. Cannon & M.E. Barr  
*Cocoicola* K.D. Hyde (5)  
*Phaeochora* Höhn. (4)  
*Phaeochoropsis* K.D. Hyde & P.F. Cannon (4)  
*Serenomyces* Petr. (4)

**Phaeochorellaceae** Guterres, Galvão-Elias & Dianese  
*Phaeochorella* Theiss. & Syd. (6)

**Phyllachoraceae** Theiss. & H. Syd.  
*Ascovaginospora* Fallah, Shearer & W.D. Chen (1)  
*Brobdingnagia* K.D. Hyde & P.F. Cannon (4)  
*Camarotella* Theiss. & Syd. (8)  
*Coccodiella* Hara (27)  
*Cyclodomus* Höhn. (5)  
*Deshpandiella* Kamat & Ullasa (1)  
*Diachora* Müll. Arg. (4)  
*Diatractium* Syd. & P. Syd. (4)  
*Erikssonina* Penz. & Sacc. (5)  
*Frematomyces* P.F. Cannon & H.C. Evans (2)  
*Geminispora* Pat. (2)  
*Gibellina* Pass. Ex Roum. (2)  
*Imazekia* Tak. Kobay. & Y. Kawabe (1)  
*Isothea* Fr. (4)  
*Lichenochora* Hafellner (44)  
*Lindauella* Rehm (1)  
*Linochora* Höhn. (37)  
*Lohwagia* Petr. (3)  
*Maculatifrondes* K.D. Hyde (1)  
*Malthomyces* K.D. Hyde & P.F. Cannon (2)  
*Muelleromyces* Kamat & Anahosur (1)  
*Neoflageoletia* J. Reid & C. Booth (1)  
*Neophyllachora* Dayar. & K.D. Hyde (4)  
*Ophiodothella* (Henn.). Höhn. (31)  
*Ophiodothis* Sacc. (6)  
*Orphnodactylis* Malloch & Mallik (2)  
*Oxodeora* K.D. Hyde & P.F. Cannon (1)



*Parberya* C.A. Pearce & K.D. Hyde (2)  
*Petrakiella* Syd. (1)  
*Phycomelaina* Kohlm. (1)  
*Phyllachora* Nitschke ex Fuckel (1513)  
*Phylleutypa* Petr. (3)  
*Phyllocrea* Höhn. (3)  
*Pseudothiella* Petr. (1)  
*Pseudothiopsella* Petr. (1)  
*Pterosporidium* W.H. Ho & K.D. Hyde (2)  
*Rehmiodothis* Theiss. & Syd. (10)  
*Retroa* P.F. Cannon (2)  
*Rhodosticta* Woron. (2)  
*Rikatlia* P.F. Cannon (1)  
*Schizochora* Syd. & P. Syd. (3)  
*Sphaerodothella* C.A. Pearce & K.D. Hyde (1)  
*Sphaerodothis* (Sacc. & P. Syd.) Shear (43)  
*Stigmatula* (Sacc.) Syd. & P. Syd. (10)  
*Stigmochora* Theiss. & Syd. (12)  
*Stromaster* Höhn. (1)  
*Tamsiniella* S.W. Wong, K.D. Hyde, W.H. Ho & S.J. Stanley (1)  
*Telimenella* Petr. (3)  
*Telimenochora* Sivan. (1)  
*Trabutia* Sacc. & Roum. (1)  
*Tribulatia* J.E. Taylor, Hyde & E.B.G. Jones (1)  
*Uropolystigma* Maubl. (1)  
*Vitreostroma* P.F. Cannon (3)  
*Zimmermanniella* Henn. (1)

***Telimenaceae*** Mardones, T. Trampe & M. Piepenbr  
*Telimena* Racib. (14)

***Phyllachorales*** genera *incertae sedis*

*Marinosphaera* K.D. Hyde (1)  
*Neoxylomyces* M.S. Calabon, Boonmee, E.B.G. Jones & K.D. Hyde (1)\*

***Pseudodactylariales*** Crous

***Pseudodactylariaceae*** Crous

*Pseudodactylaria* Crous (2)

***Sordariales*** Chad. ex D. Hawksw. & O.E. Erikss.

***Bombardiaceae*** S.K. Huang & K.D. Hyde\*

*Apodospora* Cain & J.H. Mirza (6)  
*Bombardia* (Fr.) P. Karst. (43)  
*Bombardioidea* C. Moreau ex N. Lundqv. (5)  
*Fimetariella* N. Lundq. (9)  
*Ramophialophora* M. Caldusch, Stchigel, Gené & Guarro (4)

***Chaetomiaceae*** G. Winter

*Achaetomium* J.N. Rai, Tewari & Mukerji (16)  
*Acrophialophora* Edward (17)  
*Allobotryotrichum* M. Raza & L. Cai (1)  
*Allocanariomyces* Mehrabi, Asgari & Zare (1)\*

*Amesia* X. Wei Wang, Samson & Crous (4)  
*Arcopilus* X. Wei Wang, Samson & Crous (5)  
*Arxotrichum* A. Nováková & M. Kolařík (2)  
*Batnamyces* Noumeur (1)\*  
*Botryotrichum* Sacc. & Marchal (11)  
*Brachychaeta* X. Wei Wang & Houbraken (1)  
*Carteria* X. Wei Wang & Houbraken (1)  
*Chaetomium* Kunze (359)  
*Chrysanthotrichum* X. Wei Wang & Houbraken (4)  
*Chrysocorona* X. Wei Wang & Houbraken (1)  
*Collariella* X. Wei Wang, Samson & Crous (9)  
*Condenascus* X. Wei Wang & Houbraken (1)  
*Corynascella* Arx & Hodges (1)  
*Crassicarpon* Y. Marín, Stchigel, Guarro & Cano (3)  
*Dichotomopilus* X. Wei Wang, Samson & Crous (12)  
*Floropilus* X. Wei Wang & Houbraken (1)  
*Guanomyces* M.C. Gonzáles, Hanlin & Ulloa (1)  
*Humicola* Traaen (86)  
*Hyalosphaerella* X. Wei Wang & Houbraken (1)  
*Madurella* Brumpt (15)  
*Melanocarpus* Arx (5)  
*Microthielavia* X. Wei Wang & Houbraken (1)  
*Myceliophthora* Costantin (4)  
*Ovatospora* X. Wei Wang, Samson & Crous (6)  
*Parachaetomium* Mehrabi, Asgari & Zare (3)\*  
*Parathielavia* X. Wei Wang & Houbraken (3)  
*Parvabulbium* K.S. Landry & A.N. Mill. (1)\*  
*Pseudothielavia* X. Wei Wang & Houbraken (4)  
*Remersonia* Samson & Seifert (2)  
*Retroconis* de Hoog & Bat. Vegte (1)  
*Staphylotrichum* J.A. Mey. & Nicot (8)  
*Stellatospora* T. Ito & A. Nakagiri (1)\*  
*Stolonocarpus* X. Wei Wang & Houbraken (1)  
*Subramaniula* Arx (9)  
*Thermothelomyces* Y. Marín, Stchigel, Guarro & Cano (4)  
*Thermothielavioides* X. Wei Wang & Houbraken (1)  
*Thielavia* Zopf (47)  
*Trichocladium* Harz (44)

***Diplogelasinosporaceae*** Y. Marin & Stchigel\*

*Diplogelasinospora* Cain (4)

***Lasiosphaeriaceae*** Nannf.

*Anopodium* Lundq. (2)

*Bellojisia* Réblová (1)

*Corylomyces* Stchigel, M. Calduch & Guarro (1)

*Lasiosphaeria* Ces. & De Not. (229)

*Mammaria* Ces. ex Rabenh. (2)

*Thaxteria* Sacc. (8)

*Zopfiella* G. Winter (22)

***Lasiosphaeridaceae*** S.K. Huang & K.D. Hyde\*

*Lasiosphaeris* Clem. (3)

***Naviculisporaceae*** Y. Marin & Stchigel\*

*Areotheca* Y. Marín & Stchigel (2)\*

*Naviculispora* Stchigel, Y. Marín, Cano & Guarro (1)\*

*Pseudorhizophila* Y. Marín & Stchigel (3)\*

*Rhizophila* Y. Marín, A.N. Mill. & Guarro (4)\*

***Neoschizotheciaceae*** S.K. Huang & K.D. Hyde\*

*Apodus* Malloch & Cain (2)

*Cercophora* Fuckel (77)

*Echria* (N. Lundq.) Kruys, Huhndorf & A.N. Mill. (2)

*Immersiella* A.N. Mill. & Huhndorf (2)

*Jugulospora* N. Lundq. (1)

*Neoschizothecium* S.K. Huang & K.D. Hyde (10)

*Rinaldiella* Deanna A. Sutton, Y. Marín, Guarro & E.H. Thomps (1)

*Zygopleurage* Boedijn (3)

***Podosporaceae*** X. Wei Wang & Houbraken

*Cladorrhinum* Sacc. & Marchal (13)

*Podospora* Ces. (= *Schizothecium* Corda) (92)\*

*Triangularia* Boedijn (= *Apiosordaria* Arx & W. Gams) (7)\*

***Schizotheciaceae*** Y. Marin & Stchigel\*

*Lundqvistomyces* Y. Marin & Stchigel (2)\*

*Pseudoechria* Y. Marín & Stchigel (4)\*

*Pseudoschizothecium* Y. Marín, A.N. Mill. & Stchigel (1)\*

***Sordariaceae*** G. Winter

*Boothiella* Lodhi & Mirza (1)\*

*Guilliermondia* Boud. (1)

*Neurospora* Shear & B.O. Dodge (= *Gelasinospora* Dowding) (60)

*Pseudoneurospora* Dania García, Stchigel & Guarro (2)

*Sordaria* Ces. & De Not. (37)

***Strattoniaceae*** S.K. Huang & K.D. Hyde

*Strattonia* Cif. (11)\*

***Zygospermellaceae*** S.K. Huang & K.D. Hyde\*

*Episternus* Górz & Boroń (1)

*Zygospermella* Cain (3)

***Sordariales*** genera *incertae sedis*

*Abyssomyces* Kohlm (1)

*Acanthotheciella* Höhn. (3)

*Arnium* Nitschke ex G. Winter (34)\*

*Ascolacicola* Ranghoo & K.D. Hyde (1)

*Biconiosporella* Schaumann (1)\*

*Bombardiella* Höhn. (1)

*Camptosphaeria* Fuckel (4)\*

*Coronatomyces* Dania García, Stchigel & Guarro (1)

*Cuspidatispora* Shearer & Bartolata (1)

*Diffractella* Guarro, P.F. Cannon & Aa (1)\*

*Embleospora* Jeng & J.C. Krug (2)\*

*Eosphaeria* Höhn. (2)\*

*Globosphaeria* D. Hawksw. (1)  
*Isia* D. Hawksw & Manohar (2)  
*Lockerbia* K.D. Hyde (2)  
*Lunulospora* Ingold (2)  
*Onygenopsis* Henn. (1)  
*Periamphisporea* J.C. Krug (1)\*  
*Phaeosporis* Clem. (2)  
*Reconditella* Matzer & Hafellner (1)  
*Rhexodenticula* W.A. Baker & Morgan-Jones (5)\*  
*Rhexosporium* Udagawa & Furuya (1)  
*Roselliniomyces* Matzer & Hafellner (7)  
*Roselliniopsis* Matzer & Hafellner (7)  
*Stromatographium* Höhn. (= *Fluviostroma* Samuels & E. Müll.) (2)  
*Synaptospora* Cain (5)\*  
*Tripterosporella* Subram. & Lodha (5)\*  
*Utriascus* Réblová (1)  
*Ypsilonia* Lév. (3)

***Sordariomycetidae* families *incertae sedis***

***Aquapteridosporaceae*** K.D. Hyde & Hongsanan  
*Aquapteridospora* Jiao Yang, K.D. Hyde & Maharachch. (3)\*

***Batistiaceae* Samuels & K.F. Rodrigues**

*Batistia* Cif. (1)

***Sordariomycetidae* genera *incertae sedis***

*Arecacicola* Joanne E. Taylor, J. Fröhl. & K.D. Hyde (1)  
*Bullimyces* A. Ferrer, A.N. Mill., Sarmiento & Shearer (3)  
*Ceratolenta* Réblová (1)  
*Chaetosphaerides* Matsush. (1)  
*Cryptophyllachora* L. Kiss, Kovács & R.G. Shivas (2)  
*Hanliniomyces* Raja & Shearer (1)  
*Hydromelitis* A. Ferrer, A.N. Mill., Sarmiento & Shearer (1)  
*Merugia* Rogerson & Samuels (1)  
*Mycomedusiospora* G.C. Carroll & Munk (1)  
*Myxocephala* G. Weber, Spaaij & Oberw. (1)  
*Nigromammilla* K.D. Hyde & J. Fröhl. (1)  
*Phaeotrichosphaeria* Sivan. (4)  
*Phragmodiscus* Hansf. (2)  
*Pseudobotrytis* Krzemien. & Badura (2)  
**Subclass *Xylariomycetidae*** O.E. Erikss & Winka  
***Amphisphaeriales*** D. Hawksw. & O.E. Erikss.  
***Amphisphaeriaceae*** G. Winter  
*Amphisphaeria* Ces. & De Not. (88)  
*Griphosphaerioma* Höhn. (2)  
*Lepteutypa* Petr. (15)  
*Trochilisporea* V.P. Abreu, A.W.C. Rosado & O.L. Pereira (1)\*

***Apiosporaceae* K.D. Hyde, J. Fröhl., Joanne E. Taylor & M.E. Barr**

*Appendicospora* K.D. Hyde (2)  
*Arthrinium* Kunze (73)  
*Dictyoarthrinium* S. Hughes (6)

*Nigrospora* Zimm. (25)

***Beltraniaceae*** Nann.

*Beltrania* Penz. (17)

*Beltraniella* Subram. (25)

*Beltraniopsis* Bat. & J.L. Bezerra (11)

*Hemibeltrania* Piroz. (13)

*Parapleurotheciopsis* P.M. Kirk (5)

*Porobeltraniella* Gusmão (2)

*Pseudobeltrania* Henn. (9)

*Pseudosubramaniomyces* Crous (1)

*Subsessila* C.G. Lin & K.D. Hyde (1)

***Castanediellaceae*** Hern.-Restr., Guarro & Crous

*Castanediella* Hern.-Restr., Crous & M.J. Wingf. (16)

***Clypeophysalosporaceae*** Giraldo & Crous

*Bagadiella* Cheew. & Crous (4)

*Clypeophysalospora* H.J. Swart (1)

*Neophysalospora* Crous & M.J. Wingf. (1)

*Plectosphaera* Theiss. (27)

***Hyponectriaceae*** Petr.

*Apiothyrium* Petr. (2)

*Arecomyces* K.D. Hyde (10)

*Arwidssonina* B. Erikss. (2)

*Cesatiella* Sacc. (3)

*Chamaeascus* L. Holm, K. Holm & M.E. Barr (1)

*Discosphaerina* Höhn. (21)

*Exarmidium* P. Karst. (14)

*Frondicola* K.D. Hyde (1)

*Hyponectria* Sacc. (30)

*Lichenoverruculina* Etayo (1)

*Micronectria* Speg. (4)

*Papilionovela* Aptroot (1)

*Pellucida* Dulym., Sivan., P.F. Cannon & Peerally (1)

*Phragmitensis* M.K.M. Wong, Poon & K.D. Hyde (2)

*Physalospora* Niessl (37)

*Rachidicola* K.D. Hyde & J. Fröhl. (1)

*Xenothecium* Höhn. (1)

***Iodosphaeriaceae*** O. Hilber

*Iodosphaeria* Samuels (8)

***Melogrammataceae*** G. Winter

*Melogramma* Fr. (17)

***Oxydothidaceae*** Konta & K.D. Hyde

*Oxydothis* Penz. & Sacc. (79)

***Phlogicylindriaceae*** Senan. & K.D. Hyde

*Ciferriascosea* Senan., Bhat, Camporesi & K.D. Hyde (2)

*Idriellomyces* Crous (1)

*Phlogicylindrium* Crous, Summerb. & Summerell (5)

***Pseudomassariaceae*** Senan. & K.D. Hyde

*Leiosphaerella* Höhn. (14)

*Pseudapiospora* Petr. (3)

*Pseudomassaria* Jacz. (24)

*Pseudomassariella* Petr. (1)

***Pseudosporidesmiaceae*** Crous

*Pseudosporidesmium* K.D. Hyde & McKenzie (2)

***Pseudotruncatellaceae*** Crous

*Pseudotruncatella* R.H. Perera, Camporesi, Maharachch. & K.D. Hyde (2)

***Sporocadaceae*** Corda

*Allelochaeta* Petr. (50)

*Annellolacinia* B. Sutton (2)

*Bartalinia* Tassi (19)

*Broomella* Sacc. (2)

*Ciliochorella* Syd. (4)

*Dilophospora* Desm. (ca. 2 + few orphaned names)

*Diploceras* (Sacc.) Died (2)

*Disaeta* Bonar (1)

*Discosia* Lib. (ca. 17)

*Distononappendiculata* F. Liu, L. Cai & Crous (3)

*Diversimediispora* F. Liu, L. Cai & Crous (1)

*Doliomyces* Steyaert (3)

*Heterotruncatella* F. Liu, L. Cai & Crous (17)

*Hyalotiella* Papendorf (6)

*Hymenoplella* Munk (= *Dyrithiopsis* L. Cai, Jeewon & K.D. Hyde; = *Neotruncatella* Hyang B. Lee & T.T.T. Nguyen) (7)

*Immersidiscosia* Kaz. Tanaka, Okane & Hosoya (1)

*Millesimomyces* Crous & M.J. Wingf. (1)

*Monochaetia* (Sacc.) Allesch. (ca. 30)

*Morinia* Berl. & Bres. (= *Zetiasplozina* Nag Raj) (2)

*Neopestalotiopsis* Maharachch., K.D. Hyde & Crous (33)

*Nonappendiculata* F. Liu, L. Cai & Crous (1)

*Nothoseiridium* Crous (1)

*Parabartalinia* F. Liu, L. Cai & Crous (1)

*Pestalotiopsis* Steyaert (ca. 100)

*Pseudopestalotiopsis* Maharachch., K.D. Hyde & Crous (12)

*Pseudosarcostroma* F. Liu, L. Cai & Crous (1)

*Robillarda* Sacc. (ca. 15)

*Sarcostroma* Cooke (28)

*Seimatosporium* Corda (ca. 100)

*Seiridium* Nees (20)

*Sporocadus* Corda (49)

*Strickeria* Körb. (10)

*Synnemapestaloides* T. Handa & Y. Harada (2)

*Truncatella* Steyaert (13)

*Xenoseimatosporium* F. Liu, L. Cai & Crous (1)

**Vialaeaceae** P.F. Cannon

*Vialaea* Sacc. (50)

**Amphisphaeriales** genus *incertae sedis*

*Chitonospora* E. Bommer, M. Rousseau & Sacc. (1)

**Delonicicolales** R.H. Perera, Maharachch. & K.D. Hyde

**Delonicicolaceae** R.H. Perera, Maharachch. & K.D. Hyde

*Delonicicola* R.H. Perera, Maharachch. & K.D. Hyde (1)

*Furfurella* Voglmayr & Jaklitsch (3)

**Leptosilliaceae** Voglmayr & Jaklitsch

*Leptosillia* Höhn. (11)

**Xylariales** Nannf.

**Anungitiomycetaceae** Crous

*Anungitiomyces* Crous (1)

*Nothoramichloridium* Crous (1)\*

*Strelitzomyces* Crous (1)\*

**Barrmaeliaceae** Voglmayr & Jaklitsch

*Barrmaelia* Rappaz. (8)

*Entosordaria* (Sacc.) Höhn. (ca. 18)

**Cainiaceae** J.C. Krug

*Alishanica* Karun., C.H. Kuo & K.D. Hyde (1)

*Amphibambusa* D.Q. Dai & K.D. Hyde (1)

*Areophila* K.D. Hyde (14)

*Atrotriquata* Kohlm. & Volkm.-Kohlm. (2)

*Burrowsia* Fryday & I. Medeiros (1)\*

*Cainia* Arx & E. Müll. (6)

*Endocalyx* Berk. & Broome (7)

*Longiappendispora* Mapook & K.D. Hyde (1)\*

*Seynesia* Sacc. (ca. 46)

*Vesiculozygosprium* Crous (1)\*

**Clypeosphaeriaceae** G. Winter

*Aquasphaeria* K.D. Hyde (1)

*Apioclypea* K.D. Hyde (7)

*Brunneiapiospora* K.D. Hyde, J. Fröhl. & Joanne E. Taylor (9)

*Clypeosphaeria* Fuckel (37)

*Crassoascus* Checa, Barrasa & A.T. Martínez (3)

*Ommatomyces* Kohlm., Volkm.-Kohlm. & O.E. Erikss (3)

*Palmaria* K.D. Hyde, J. Fröhl. & Joanne E. Taylor (1)

**Coniocessiaceae** Asgari & Zare

*Coniocessia* Dania García, Stchigel, D. Hawksw. & Guarro (5)

*Paraxylaria* Wanas., E.B.G. Jones, Gafforov & K.D. Hyde (1)

**Diatrypaceae** Nitschke

*Allocryptovalsa* Senwanna, Phook. & K.D. Hyde (2)

*Allodiatrype* Konta & K.D. Hyde (4)\*

*Anthostoma* Nitschke (ca. 101)  
*Cryptosphaeria* Ces. & De Not. (48)  
*Cryptovalsa* Ces. & De Not. ex Fuckel (43)  
*Diatrypasimilis* J.J. Zhou & Kohlm. (1)  
*Diatrype* Fr. (ca. 244)  
*Diatrypella* (Ces. & De Not.) De Not. (ca. 115)  
*Echinomyces* Rappaz (2)  
*Endoxylina* Romell (16)  
*Eutypa* Tul. & C. Tul. (ca. 131)  
*Eutypella* (Nitschke) Sacc. (ca. 196)  
*Halocryptovalsa* Dayar. & K.D. Hyde (2)  
*Halodiatrype* Dayar. & K.D. Hyde (3)  
*Leptoperidia* Rappaz (4)  
*Libertella* Desm. (ca. 72)  
*Monosporascus* Pollack & Uecker (4)  
*Neoeutypella* M. Raza, Q.J. Shang, Phookamsak & L. Cai (1)  
*Paraeutypella* L.S. Dissan., J.C. Kang, Wijayaw. & K.D. Hyde (3)\*  
*Pedumispora* K.D. Hyde & E.B.G. Jones (1)  
*Peroneutypa* Berl. (30)  
*Quaternaria* Tul. & C. Tul. (14)

***Fasciatisporaceae*** S.N. Zhang, K.D. Hyde & J.K. Liu  
*Fasciatispora* K.D. Hyde (10)

***Graphostromataceae*** M.E. Barr, J.D. Rogers & Y.M. Ju  
*Biscogniauxia* Kuntze (ca. 76)  
*Camillea* Fr. (50)  
*Graphostroma* Piroz. (1)  
*Obolarina* Pouzar (2)  
*Vivantia* J.D. Rogers, Y.M. Ju & Cand. (1)

***Hansfordiaceae*** Crous  
*Hansfordia* S. Hughes (7)

***Hypoxylaceae*** DC.  
*Annulohypoxylon* Y.M. Ju, J.D. Rogers & H.M. Hsieh (ca. 60)  
*Chlorostroma* A.N. Mill., Lar.N. Vassiljeva & J.D. Rogers (3)  
*Daldinia* Ces. & De Not. (58)  
*Durotheca* Læssøe, Srikit., Luangsa-ard & M. Stadler (4)  
*Entonaema* Möller (5)  
*Hypomontagnella* Sir, L. Wendt & C. Lamb. (6)\*  
*Hypoxylon* Bull. (147)  
*Jackrogersella* L. Wendt, Kuhnert & M. Stadler (6)  
*Phylacia* Lév. (11)  
*Pyrenomyxa* Morgan (3)  
*Pyrenopolyporus* Lloyd (5)  
*Rhopalostroma* D. Hawksw. (11)  
*Rostrohypoxylon* J. Fourn. & M. Stadler (1)  
*Ruwenzoria* J. Fourn., M. Stadler, Læssøe & Decock (1)  
*Thamnomycetes* Ehrenb. (11)  
*Theissenia* Maubl. (8)  
*Thuemenella* Penz. & Sacc. (10)



**Induratiaceae** Samarak., Thongbai, K.D. Hyde & M. Stadler  
*Emarcea* Duong, Jeewon & K.D. Hyde (3)  
*Induratia* Samuels, E. Müll. & Petrini (26)

**Lopadostomataceae** Daranag. & K.D. Hyde  
*Creosphaeria* Theiss. (3)  
*Jumillera* J.D. Rogers, Y.M. Ju & F. San Martín (8)  
*Lopadostoma* (Nitschke) Traverso (27)  
*Whalleya* J.D. Rogers, Y.M. Ju & F. San Martín (2)

**Microdochiaceae** Hern.-Restr., Crous & J.Z. Groenew.  
*Idriella* P.E. Nelson & S. Wilh. (= *Monographella* Petr.) (24)  
*Microdochium* Syd. (38)  
*Selenodriella* R.F. Castañeda & W.B. Kendr (7)

**Nothodactylariaceae** Crous  
*Nothodactylaria* Crous (1)

**Polystigmataceae** Höhn. ex Nannf. (*nom. inval.*)  
*Polystigma* DC. (23)

**Requienellaceae** Boise  
*Acrocordiella* O.E. Erikss. (2)  
*Lacrymospora* Aptroot (1)  
*Parapyrenis* Aptroot (8)  
*Requienella* Fabre (8)

**Vamsapriyaceae** Y.R. Sun, Yong Wang bis & K.D. Hyde  
*Vamsapriya* Gawas & Bhat (11)

**Xyladictyochaetaceae** Crous & Hern.-Restr  
*Brachiampulla* Réblová & Hern.-Restr. (1)\*  
*Xyladictyochaeta* Hern.-Restr., R.F. Castañeda & Gené (1)

**Xylariaceae** Tul. & C. Tul. (= *Clypeosphaeriaceae* G. Winter)  
*Abieticola* Hyang B. Lee (1)  
*Amphirosellinia* Y.M. Ju, J.D. Rogers, H.M. Hsieh & Lar.N. Vassiljeva (6)  
*Anthostomella* Sacc. (ca. 100)  
*Anthostomelloides* Tibpromma & K.D. Hyde (5)  
*Ascotricha* Berk. (27)  
*Astrocystis* Berk. & Broome (24)  
*Atrozythia* J.K. Mitch., Quijada, Garrido-Ben. & Pfister (2)\*  
*Brunneiperidium* Daranag., Camporesi & K.D. Hyde (2)  
*Catenuliconidia* N.G. Liu & K.D. Hyde (1)\*  
*Collodiscula* I. Hino & Katum. (5)  
*Coniolarrella* Dania García, Stchigel & Guarro (5)  
*Diabolocovidia* Crous (1)\*  
*Engleromyces* Henn. (2)\*  
*Entalbostroma* J.D. Rogers & P.R. Johnst. (1)  
*Entoleuca* Syd. (3)  
*Euepoxylon* Fülling (2)  
*Halorosellinia* Whalley, E.B.G. Jones, K.D. Hyde & Læssøe (3)

*Helicogermislita* Lodha & D. Hawksw. (9)  
*Hypocopra* (Fr) J. Kickx f. (58)  
*Hypocreodendron* Henn. (1)  
*Kretzschmaria* Fr. (ca. 57)  
*Kretzschmariella* Viégas (2)  
*Leprieuria* Læssøe, J.D. Rogers & Whalley (1)  
*Linosporeopsis* Voglmayr & Beenken (4)\*  
*Linteromyces* Crous (1)\*  
*Lunatiannulus* Daranag., Camporesi & K.D. Hyde (1)  
*Nemania* Gray (57)  
*Neoxylaria* Konta & K.D. Hyde (3)\*  
*Podosordaria* Ellis & Holw. (35)  
*Poronia* Willd. (ca. 24)  
*Rosellinia* De Not. (ca. 359)  
*Sarcoxylon* Cooke (6)  
*Squamotubera* Henn. (1)  
*Stilbohypoxyton* Henn. (12)  
*Virgaria* Nees (6?)  
*Wawelia* Namysl. (5)  
*Xylaria* Hill ex Schrank (ca. 572)

**Zygosporiaceae** J.F. Li, Phook. & K.D. Hyde  
*Zygosporium* Mont. (25)

**Xylariales** genera incertae sedis

*Adomia* S. Schatz (1)  
*Alloanthostomella* Daranag., Camporesi & K.D. Hyde (1)  
*Anungitea* B. Sutton (22)  
*Ascotrichella* Valldos. & Guarro (1)  
*Basifimbria* Subram. & Lodha (1)  
*Biporispora* J.D. Rogers, Y.M. Ju & Cand. (1)  
*Castellaniomyces* Senan., Camporesi & K.D. Hyde (1)  
*Chaenocarpus* Rebent. (4)  
*Circinotrichum* Nees (15)  
*Cryptostroma* P.H. Greg. & S. Waller (1)  
*Cyanopulvis* J. Fröhl. & K.D. Hyde (1)  
*Diamantina* A.N. Mill., Læssøe & Huhndorf (1)  
*Gigantospora* B.S. Lu & K.D. Hyde (1)  
*Guayaquilina* R.F. Castañeda, Magdana, D. Sosa & Hern.-Restr. (1)\*  
*Guestia* G.J.D. Sm. & K.D. Hyde (1)  
*Gyrothrix* (Corda) Corda (22)  
*Hadrotrichum* Fuckel (22)  
*Haploanthostomella* Konta & K.D. Hyde (1)\*  
*Idriellopsis* Hern.-Restr. & Crous (1)  
*Kirstenboschia* Quaedvl., Verkley & Crous (1)  
*Lanceispora* Nakagiri, Okane, Tad. Ito & Katum. (2)  
*Lasiobertia* Sivan. (2)  
*Leptomassaria* Petr. (4)  
*Natonodosa* Heredia, R.F. Castañeda & D.W. Li (1)  
*Neoanthostomella* D.Q. Dai & K.D. Hyde (2)  
*Neoidriella* Hern.-Restr. & Crous (1)  
*Neotrichosphaeria* Crous & Carnegie (1)\*

*Nipicola* K.D. Hyde (4)  
*Occultitheca* J.D. Rogers & Y.M. Ju (1)  
*Ophiorosellinia* J.D. Rogers, A. Hidalgo, F.A. Fernández & Huhndorf (1)  
*Palmicola* K.D. Hyde (4)  
*Pandanicola* K.D. Hyde (2)  
*Paraidriella* Hern.-Restr. & Crous (1)  
*Paramphisphaeria* F.A. Fernández, J.D. Rogers, Y.M. Ju, Huhndorf & L. Umaña (1)  
*Paraphysalospora* Crous (1)  
*Paucithecium* Lloyd (1)  
*Pidoplitchkoviella* Kiril. (1)  
*Polyancora* Voglmayr & Yule (1)  
*Polyscytalum* Riess (28)  
*Poroleprieuria* M.C. González, Hanlin, Ulloa & Elv. Aguirre (1)  
*Pseudoanthostomella* Daranag., Camporesi & K.D. Hyde (5)  
*Pseudophloeospora* Crous & R.G. Shivas (2)  
*Pulmosphaeria* Joanne E. Taylor, K.D. Hyde & E.B.G. Jones (1)  
*Pyriformiascoma* Daranag., Camporesi & K.D. Hyde (1)  
*Roselymyces* Fiuza, C.R. Silva, R.F. Castañeda & Gusmão (1)  
*Sabalicola* K.D. Hyde (1)  
*Spirodecospora* B.S. Lu, K.D. Hyde & W.H. Ho (2)  
*Sporidesmina* Subram. & Bhat (1)  
*Striatodecospora* D.Q. Zhou, K.D. Hyde & B.S. Lu (1)  
*Stromatoneurospora* S.C. Jong & E.E. Davis (2)  
*Surculiseria* Okane (1)  
*Synnemadiella* Crous & M.J. Wingf. (1)  
*Tristratiperidium* Daranag., Camporesi & K.D. Hyde (1)  
*Xenoanthostomella* Mapook & K.D. Hyde (1)  
*Xylocrea* Möller (2)  
*Xylotumulus* J.D. Rogers, Y.M. Ju & Cand.  
*Yuea* O.E. Erikss. (1)

***Xylariomycetidae* families *incertae sedis***

***Myelospermataceae*** K.D. Hyde & S.W. Wong  
*Myelosperma* Syd. & P. Syd. (5)

***Xylariomycetidae* genus *incertae sedis***

*Calceomyces* Udagawa & S. Ueda (1)

***Sordariomycetes* orders *incertae sedis***

***Amplistromatales*** M.J. D'souza, Maharachch. & K.D. Hyde  
***Amplistromataceae*** Huhndorf, A.N. Mill., Greif & Samuels  
*Acidothrix* Hujšlová & M. Kolařík (1)  
*Amplistroma* Huhndorf, A.N. Mill., Greif & Samuels (9)  
*Wallrothiella* Sacc. (ca. 10)

***Catabotryales* K.D. Hyde & Senan.\***

***Catabotrydaceae*** Petr. ex M.E. Barr  
*Catabotrys* Theiss. & Syd. (3)

***Spathulosporales* Kohlm.**

***Hispidicarpomycetaceae*** Nakagiri  
*Hispidicarpomyces* Nakagiri (1)

***Spathulosporaceae*** Kohlm.

*Retrostium* Nakagiri & Tad Ito (1)

*Spathulospora* A.R. Caval. & T.W. Johnson (4)

***Tracyllalales*** Crous

***Tracyllaceae*** Crous

*Neotracylla* Crous (1)\*

*Tracylla* (Sacc.) Tassi (3)

***Vermiculariopsiellales*** Hern.-Restr., J. Mena, Gené & Crous

***Vermiculariopsiellaceae*** Hern.-Restr., J. Mena, Gené & Crous

*Vermiculariopsiella* Bender (22)

*Tubulicolla* Réblová & Hern.-Restr. (1)\*

*Stephanophorella* Réblová & Hern.-Restr. (1)\*

***Sordariomycetes*** families *incertae sedis*

***Acrodictyaceae*** J.W. Xia & X.G. Zhang

*Acrodictys* M.B. Ellis (25)

***Junewangiaceae*** J.W. Xia & X.G. Zhang

*Dictyosporella* Abdel-Aziz (1)

*Junewangia* W.A. Baker & Morgan-Jones (8)

*Jennwenomyces* Goh & C.H. Kuo (1)\*

*Sporidesmiella* P.M. Kirk (32)\*

***Lautosporaceae*** Kohlm., Volkm.-Kohlm. & O.E. Erikss

*Lautospora* K. D. Hyde & E.B.G. Jones (2)

***Obryzaceae*** Körb.

*Obryzum* Wallr. (3)

***Sordariomycetes*** genera *incertae sedis*

*Acerbiella* Sacc. (4)

*Acropermoides* Miller & G.E. Thomps. (2)

*Ameromassaria* Hara (1)

*Amphisphaerellula* Gucevič (1)

*Amphisphaerina* Höhn. (3 epithets in Index Fungorum 2019)

*Amphorulopsis* Petr. (1 epithets in Index Fungorum 2019)

*Amylis* Speg. (1)

*Anisomycopsis* I. Hino & Katum. (1)

*Antennopsis* R. Heim (1)

*Anthostomaria* (Sacc.) Theiss. & Syd. (1)

*Anthostomellina* L.A. Kantsch. (2)

*Apodothina* Petr. (1)

*Apogaeumannomyces* Matsush. (1)

*Aquadulciospora* Fallah & Shearer (1)

*Areolospora* S.C. Jong & E.E. Davis (2 epithets in Index Fungorum 2019)

*Aropsiclus* Kohlm. & Volkm.-Kohlm. (1)

*Ascorhiza* Lecht.-Trinka (1)

*Ascoyunnania* L. Cai & K.D. Hyde (1)

*Atrogeniculata* J.S. Monteiro, Gusmão & R.F. Castañeda (1)

*Aulospora* Speg. (1)

*Azbukinia* Lar.N. Vassiljeva (1)

*Bactrosphaeria* Penz. & Sacc. (1)  
*Basidiobotrys* Höhn. (1)  
*Biciliopsis* Diederich (2)  
*Bombardiastrum* Pat. (1)  
*Botryosporium* Corda (11)  
*Brenesiella* Syd. (1)  
*Byrsomyces* Cavalc. (1)  
*Byssotheciella* Petr. (2)  
*Caleutypa* Petr. (1)  
*Caproniella* Berl. (1)  
*Chaetoamphisphaeria* Hara (1)  
*Charonectria* Sacc. (3)  
*Ciliofusospora* Bat. & J.L. Bezerra (1)  
*Clypeoceriospora* Sousa da Câmara (1)  
*Clypeosphaerulina* Sousa da Câmara (1)  
*Conidiotheca* Réblová & L. Moster (1)\*  
*Cryptoascus* Petri (2)  
*Cryptomycella* Höhn. (2)  
*Cryptomycina* Höhn. (2)  
*Cryptosphaerella* Sacc. (20)\*  
*Cucurbitopsis* Bat. & Cif. (1)  
*Curvatispora* V.V. Sarma & K.D. Hyde (1)  
*Dasysphaeria* Speg. (1)  
*Delpinoella* Sacc. (1)  
*Diacrochordon* Petr. (1)  
*Didymobotryum* Sacc. (6)  
*Duradens* Samuels & Rogerson (1)  
*Ellisembia* Subram. (ca. 60)  
*Esfandiaromyces* Ershad (1)  
*Fantasmomyces* Dong Hyeon Lee, Marinc., Z.W. de Beer & M.J. Wingf. (1)  
*Farrowia* D. Hawksw. (3)  
*Fassia* Dennis (1)  
*Flammispora* Pinruan, Sakay., K.D. Hyde & E.B.G. Jones (2)  
*Frondisphaeria* K.D. Hyde (2)  
*Hapsidascus* Kohlm. & Volkm.-Kohlm. (1)  
*Hasea* Zahlbr. (1)  
*Heliastrum* Petr. (1)  
*Hyaloderma* Speg. (1)  
*Hyalotiopsis* Punith. (1)  
*Hydronectria* Kirschst. (1)  
*Immersisphaeria* Jaklitsch (1)  
*Iraniella* Petr. (1)  
*Konenia* Hara (1)  
*Kravtzevia* Schwartzman (1)  
*Kurssanovia* Kravtzev (1)  
*Lecythiomyces* Doweld (1)  
*Leptosacca* Syd. (1)  
*Leptosphaerella* Speg. (14 epithets in Index Fungorum 2019)  
*Mangrovispora* K.D. Hyde & Nageire (1)  
*Marisolaris* Jørg. Koch & E.B.G. Jones (1)  
*Microcyclephaeria* Bat. (1)  
*Mirannulata* Huhndorf, F.A. Fernández, A.N. Mill. & Lodge (2)

*Mycothermus* D.O. Natvig, J.W. Taylor, A. Tsang, M.I. Hutch. & A.J. Powell ex X. Wei Wang, Houbaken & D.O. Natvig (2)  
*Natantiella* Réblová (1)  
*Naumovella* Kravtzev (2)  
*Neocryptospora* Petr. (1)  
*Neoeriomycopsis* Crous & M.J. Wingf. (1)  
*Neolamproconium* Crous & Akulov (1)\*  
*Neolamyia* Theiss. & Syd. (3)  
*Neothyridaria* Petr. (1)  
*Ophiomassaria* Jacz. (1)  
*Ophiomeliola* Starbäck (3)  
*Paoayensis* Cabanela, Jeewon & K.D. Hyde (2)  
*Paradipliococcium* Hern.-Restr., J. Mena & Gené (1)  
*Paramicrodochium* Hern.-Restr. & Crous (1)  
*Pareutypella* Y.M. Ju & J.D. Rogers (2)  
*Phialemoniopsis* Perdomo, Dania García, Gené, Cano & Guarro (6)  
*Phragmeriella* Hansf. (1)  
*Phyllocelis* Syd. (2)  
*Pleocryptospora* J. Reid & C. Booth (1)  
*Pleosphaeria* Speg. (24)  
*Pleurophragmium* Costantin (22)  
*Protocucurbitaria* Naumov (1)  
*Pulvinaria* Bon. (2)  
*Pumilus* Viala & Marsais (1)  
*Rehmiomycella* E. Müll. (1)  
*Rhamphosphaeria* Kirschst. (1)  
*Rhizophila* K.D. Hyde & E.B.G. Jones (1)  
*Rhopographella* (Henn.) Sacc. & Trotter (2)  
*Rhynchospaeria* (Sacc.) Berl. (5)  
*Rivulicola* K.D. Hyde (3)  
*Romellina* Petr. (1)  
*Saccardoella* Speg. (15)  
*Sartorya* Vuill. (1 epithets in Index Fungorum 2022)  
*Scharifia* Petr. (1)  
*Scoliocarpon* Nyl. (1?)  
*Scotiosphaeria* Sivan. (1)  
*Selenosporella* G. Arnaud ex MacGarvie (12)  
*Servazziella* J. Reid & C. Booth (1)  
*Sporoctomorpha* J.V. Almeida & Sousa da Câmara (1)  
*Stanjehughesia* Subram. (16)  
*Stearophora* L. Mangin & Viala (1)  
*Steganopycnis* Syd. & P. Syd. (1)  
*Stegophorella* Petr. (1)  
*Stellosetifera* Matsush. (1)  
*Stereosphaeria* Kirschst. (1)  
*Stomatogenella* Petr. (1)  
*Sungaiicola* Fryar & K.D. Hyde (1)  
*Synsphaeria* Bon. (1 epithets in Index Fungorum 2022)  
*Teracosphaeria* Réblová & Seifert (1)  
*Thelidiella* Fink (1)  
*Thyridella* (Sacc.) Sacc. (3)  
*?Thyrotheca* Kirschst. (1 epithet in Index Fungorum 2022)

*Trichospermella* Speg. (2)  
*Trichosphaeropsis* Bat. & Nasc. (1)  
?*Tunstallia* Agnihotr. (1 epithet in Index Fungorum 2022)  
*Urosporella* G.F. Atk. (5)  
*Urupe* Viégas (1)  
*Vleugelia* J. Reid & C. Booth (1)  
*Xenodium* Syd. (1)

***Xylobotryomycetes*** Voglmayr & Jaklitsch  
***Xylobotryales*** Voglmayr & Jaklitsch  
***Cirrosporiaceae*** Voglmayr & Jaklitsch  
*Cirrosporium* S. Hughes (1)

***Xylobotryaceae*** Voglmayr & Jaklitsch  
*Xylobotryum* Pat. (2)

***Xylonomycetes*** Gazis & P. Chaverri  
***Symbiotaphrinales*** Baral & E. Weber  
***Symbiotaphrinaceae*** Baral & E. Weber  
*Symbiotaphrina* Kühlw. & Jurzitza ex W. Gams & Arx (17)

***Xylonales*** Gazis & P. Chaverri  
***Xylonaceae*** Gazis & P. Chaverri  
*Trinosporium* Crous & Decock (1)  
*Xylona* Gazis & P. Chaverri (1)

***Pezizomycotina*** orders *incertae sedis*  
***Thelocarpales*** Lücking & Lumbsch  
***Thelocarpaceae*** Zúkal  
*Sarcosagium* A. Massal. (1)  
*Thelocarpon* Nyl (25)

***Vezdaeales*** Lumbsch & Lücking  
***Vezdaeaceae*** Poelt & Vězda ex J.C. David & D. Hawksw.  
*Vezdaea* Tsch.-Woess & Poelt (12)

***Pezizomycotina*** family *incertae sedis*  
***Harpidiaceae*** Vězda ex Hafellner  
*Euopsis* Nyl. (2)  
*Harpidium* Körb. (3)

***Pezizomycotina*** genera *incertae sedis*  
*Angatia* Syd. (5)  
*Biatoridium* J. Lahm ex Körb. (3)  
*Cyanoporina* Groenh. (1)  
*Melanophloea* P. James & Vězda (1)  
*Milospium* D. Hawksw. (4)  
*Oevstedalia* Ertz & Diederich (1)  
*Psammia* Sacc. & M. Rousseau ex E. Bommer & M. Rousseau (8)  
*Pygmaeosphaera* Etayo & Diederich (3)  
*Pyrenocollema* Reinke (1)  
*Solanella* Vaňha (1)

*Wadeana* Coppins & P. James (2)

**Subphylum SACCHAROMYCOTINA** O.E. Erikss. & Winka

*Saccharomycetes* O.E. Erikss. & Winka

*Saccharomycetales* Kudryavtsev

*Alloascoideaceae* Kurtzman & Robnett

*Alloascoidea* Kurtzman & Robnett (2)

*Ascoideaceae* J. Schröter

*Ascoidea* Bref. (4)

*Cephaloascaceae* L.R. Batra

*Cephaloascus* Hanawa (2)

*Debaryomycetaceae* Kurtzman & M. Suzuki

*Babjeviella* Kurtzman & M. Suzuki (1)

*Debaryomyces* Lodder & Kreger-van Rij (15)

*Hemisphaerica spora* Hui, Ren, Chen, Li, Zhan & Niu (2)

*Kurtzmaniella* M.A. Lachance & W.T. Starmer (5)

*Lodderomyces* Van der Walt (2)

*Meyerozyma* Kurtzman & M. Suzuki (8)

*Millerozyma* Kurtzman & M. Suzuki (5)

*Priceomyces* Kurtzman & M. Suzuki (8)

*Scheffersomyces* Kurtzman & M. Suzuki (21)

*Schwanniomyces* Klöcker emend. M. Suzuki & Kurtzman (7)

*Spathaspora* N.H. Nguyen, S.O. Suh & M. Blackwell (18)

*Suhyomyces* M. Blackwell & Kurtzman (27)

*Yamadazyma* Billon-Grand (27)

*Dipodascaceae* Engl. & E. Gilg

*Dipodascus* Lagerh. (14)

*Galactomyces* Redhead & Malloch (5)

*Geotrichum* Link (8)

*Magnusiomyces* Zender (7)

*Saprochaete* Coker & Shanor ex D.T.S. Wagner & Dawes (10)

*Lipomycetaceae* E.K. Novák & Zsolt

*Babjevia* Van der Walt & M.T. Sm. (3)\*

*Dipodascopsis* Batra & P. Millner emend. Kurtzman, Albertyn & Basehoar-Powers (2)

*Kockiozyma* Jindam., Yukphan & Y. Yamada (1)

*Limtongia* Jindam., Am-in, Yukphan & Y. Yamada (1)

*Lipomyces* Lodder & Kreger (28)

*Myxozyma* Van der Walt, Weijman & von Arx (12)

*Metschnikowiaceae* T. Kamienski

*Clavispora* Rodr. Mir. (5)

*Kodamaea* Y. Yamada, T. Suzuki, Matsuda & Mikata emend. Rosa, Lachance, Starmer, Barker, Bowles & Schlag-Edler (8)

*Metschnikowia* T. Kamienski (65)

*Phaffomycetaceae* Y. Yamada, H. Kawas., Nagats., Mikata & Tats. Seki

*Barnettozyma* Kurtzman, Robnett & Basehoar-Powers (10)



*Cyberlindnera* Minter (29)\*  
*Phaffomyces* Y. Yamada (4)  
*Starmera* Y. Yamada, Higashi, Ando & Mikata (9)  
*Wickerhamomyces* Kurtzman, Robnett & Basehoar-Powers (32)

***Pichiaceae* Zender**

*Brettanomyces* Kufferath & van Laer (3)  
*Dekkera* Van der Walt (2)  
*Komagataella* Y. Yamada, Matsuda, Maeda & Mikata (6)  
*Kregervanrija* Kurtzman (3)  
*Kuraishia* Y. Yamada, Maeda & Mikata (9)  
*Martiniozyma* Kurtzman (2)  
*Ogataea* Y. Yamada, K. Maeda & Mikata (46)  
*Pachysolen* Boidin & Adzet (1)  
*Pichia* E.C. Hansen (27)  
*Saturnispora* Z.W. Liu & Kurtzman (22)

***Saccharomycetaceae* G. Winter**

*Citeromyces* Santa Maria (4)  
*Cyniclomyces* Van der Walt & D.B. Scott (1)  
*Eremothecium* Borzi emend. Kurtzman (5)  
*Grigorovia* Gouliamova & Dimitrov (4)\*  
*Hagleromyces* Sousa, Morais, Lachance & Rosa (1)  
*Kazachstania* Zubcova (40)  
*Kluyveromyces* Van der Walt (7)  
*Lachancea* Kurtzman (10)  
*Nakaseomyces* Kurtzman (2)  
*Naumovozyma* Kurtzman (3)  
*Saccharomyces* Meyen (10)  
*Savitreea* Sakpuntoon, Angchuan, Boonmak, Khunnamw., N. Jacques, Grondin, Casareg. & Srisuk (1)\*  
*Tetrapisispora* Ueda-Nishimura & K. Mikata emend. Kurtzman (9)  
*Torulaspora* Lindner (9)  
*Vanderwaltozyma* Kurtzman (7)  
*Yueomyces* Q.M. Wang, L. Wang, M. Groenewald & T. Boekhout (1)  
*Zygosaccharomyces* B.T.P. Barker (11)  
*Zygotorulaspora* Kurtzman (6)

***Saccharomycodaceae* Kudryavtsev**

*Hanseniaspora* Zikes (18)  
*Saccharomycodes* E.C. Hansen (3)

***Saccharomycopsidaceae* Arx & Van der Walt**

*Ambrosiozyma* Van der Walt (14)  
*Saccharomycopsis* Schiønning (20)

***Trichomonascaceae* Kurtzman & Robnett**

*Blastobotrys* Klopotek (25)  
*Diddensiella* Péter, Dlačny & Kurtzman (1)  
*Groenewaldozyma* Kurtzman (3)  
*Spencermartinsiella* Péter, Dlačny, Tornai-Lehoczki, M. Suzuki & Kurtzman (4)  
*Starmerella* Rosa & Lachance (45)

*Sugiyamaella* Kurtzman & Robnett (27)  
*Trichomonascus* H.S. Jackson emend. Kurtzman & Robnett (6)  
*Wickerhamiella* Van der Walt (42)  
*Zygoascus* M.T. Sm. (8)

***Trigonopsidaceae*** M.A. Lachance & C.P. Kurtzman  
*Botryozyma* Shann & M.T. Sm. emend. Lachance & Kurtzman (4)  
*Tortispora* Lachance & Kurtzman (8)  
*Trigonopsis* Schachner emend. Kurtzman & Robnett (4)

***Saccharomycetales*** genera *incertae sedis*  
*Aciculoconidium* D.S. King & S.C. Jong (1)  
*Candida* Berkhout (314)  
*Coccidiascus* Chatton (1)  
*Conidiascus* Holterm. (1)  
*Danielozyma* Kurtzman & Robnett (2)  
*Deakozyma* Kurtzman & Robnett (2)  
*Diutina* Khunnamwong, Lertwattanasakul, Jindam., Limtong & Lachance (9)  
*Endomyces* Reess (4)  
*Hyphopichia* von Arx & van der Walt (13)  
*Limtongozyma* Boontham, Angchuan, Boonmak & Srisuk (2)\*  
*Macrorhabdus* Tomaszewski, Logan, Snowden, Kurtzman & Phalen. (1)  
*Metahyphopichia* Sipiczki & Pfliegler (1)  
*Middelhovenomyces* Kurtzman & Robnett (2)  
*Nadsonia* Syd. (3)  
*Nakazawaea* Y. Yamada, Maeda & Mikata (13)  
*Oscarbrefeldia* Holterm. (1)  
*Peterozyma* Kurtzman & Robnett (2)  
*Phialoascus* Redhead & Malloch (1)  
*Sporopachydermia* Rodr. Mir. (3)  
*Teunomyces* Kurtzman & M. Blackwell (14)  
*Wickerhamia* Soneda (1)  
*Yarrowia* Van der Walt & Arx (12)

**Subphylum TAPHRINOMYCOTINA** O.E. Erikss. & Winka

***Archaeorhizomycetes*** Rosling & T.Y. James  
***Archaeorhizomycetales*** Rosling & T.Y. James  
***Archaeorhizomycetaceae*** Rosling & T.Y. James  
*Archaeorhizomyces* Rosling & T.Y. James (2)

***Neolectomycetes*** O.E. Erikss. & Winka  
***Neolectales*** Landvik, O.E. Erikss., Gargas & P. Gust.  
***Neolectaceae*** Redhead  
*Neolecta* Speg. (3)

***Novakomycetes*** Dlačhy, Péter & Čadež\*  
***Novakomycetales*** Dlačhy, Péter & Čadež\*  
***Novakomycetaceae*** Dlačhy, Péter & Čadež\*  
*Novakomyces* Dlačhy, Péter & Čadež (1)\*

***Pneumocystomycetes*** O.E. Erikss. & Winka  
***Pneumocystidales*** O.E. Erikss.

***Pneumocystidaceae*** O.E. Erikss.

*Pneumocystis* P. Delanoë & Delanoë (5)

***Schizosaccharomycetes*** O.E. Erikss. & Winka

***Schizosaccharomycetales*** O.E. Erikss.

***Schizosaccharomycetaceae*** Beij. ex Klöcker

*Schizosaccharomyces* Lindner (4)

***Taphrinomycetes*** O.E. Erikss. & Winka

***Taphrinales*** Gäum. & C.W. Dodge

***Protomycetaceae*** Gray

*Buerenia* M.S. Reddy & C.L. Kramer (4)

*Protomyces* Unger (ca. 10)

*Protomycopsis* Magnus (5)

*Saitoella* Goto, Sugiy., Hamam. & Komag. (2)

*Taphridium* Lagerh. & Juel ex Juel (2)

*Volkartia* Maire (1)

***Taphrinaceae*** Gäum.

*Taphrina* Fr. (ca. 95)

***Ascomycota*** families *incertae sedis*

***Aphanopsidaceae*** Printzen & Rambold

*Aphanopsis* Nyl. ex Syd. (1)

*Steinia* Körb. (3)

***Diporothecaceae*** R.K. Mibey & D. Hawksw.

*Diporotheca* C.C. Gordon & C.G. Shaw (4)

***Eoterfeziaceae*** G.F. Atk.

*Acanthogymnomycetes* Udagawa & Uchiyama (1)

*Eoterfezia* G.F. Atk. (2)

***Mucomassariaceae*** Petr. & Cif.

*Mucomassaria* Petr. (1)

***Saccardiaceae*** Höhn.

*Ascolectus* Samuels & Rogerson (1)

*Cyanodiscus* E. Müll. & M.L. Farr (2)

*Henningsiella* Rehm (2)

*Phillipsiella* Cooke (7)

*Pseudodiscus* Arx & E. Müll. (1)

*Saccardia* Cooke (3)

***Seuratiaceae*** Vuill. ex M.E. Barr

*Seuratia* Pat. (5)

*Seuratiopsis* Woron. (1)

***Strangosporaceae*** S. Stenroos, Miädl. & Lutzoni

*Strangospora* Körb. (ca. 11)

***Ascomycota*** genera *incertae sedis*

- Abropelta* B. Sutton (1)  
*Acarellina* Bat. & H. Maia (1)  
*Acaroconium* Kocourk. & D. Hawksw. (1)  
*Acarocybe* Syd. (3)  
*Acarocybella* M.B. Ellis (1)  
*Acarocybellina* Subram. (1)  
*Acarocybiopsis* J. Mena, A. Hern.-Gut. & Mercado (1)  
*Acaropeltis* Petr. (1)  
*Achoropeltis* Syd. (1)  
*Acleistia* Bayl. Ell. (1)  
*Acontium* Morgan (4)  
*Acrodictyella* W.A. Baker & Partr. (1)  
*Acrodictyopsis* P.M. Kirk (1)  
*Acrodontiella* U. Braun & Scheuer (1)  
*Acrophragmis* Kiffer & Reisinger (4)  
*Acrospeira* Berk. & Broome (1)  
*Acrostaurus* Deighton & Piroz. (1)  
*Actinocladium* Ehrenb. (6)  
*Actinotexis* Arx (1)  
*Actinothecium* Ces. (5)  
*Actinothyrium* Kunze (10)  
*Acumispora* Matsush. (5)  
*Agaricodochium* X.J. Liu (1)  
*Agarwalomyces* R.K. Verma & Kamal (1)  
*Agrabeeja* Subram. (1)  
*Agyriella* Sacc. (2)  
*Agyriellopsis* Höhn. (3)  
*Ahmadia* Syd. (1)  
*Ajrekarella* Kamat & Kalani (1)  
*Alatosessilispora* K. Ando & Tubaki (1)  
*Alciphila* Harmaja (1)  
*Algonquinia* R.F. Castañeda & W.B. Kendr. (1)  
*Allophoron* Nádv. (1)  
*Allothyriella* Bat., Cif. & Nascim. (3)  
*Allothyrina* Bat. & J.L. Bezerra (1)  
*Allothyriopsis* Bat., Cif. & H. Maia (1)  
*Alpakesa* Subram. & K. Ramakr. (4)  
*Alpakesiopsis* Abbas, B. Sutton, Ghaffar & A. Abbas (1)  
*Alveariospora* Meir. Silva, R.F. Castañeda, O.L. Pereira & R.W. Barreto (1)  
*Alveophoma* Alcalde (1)  
*Alysidiopsis* B. Sutton (5)  
*Amallospora* Penz. (1)  
*Amblyosporium* Fresen. (4)  
*Ameroconium* U. Braun & Zhurb. (1)  
*Amerodiscosiella* M.L. Farr (1)  
*Amerodiscosiellina* Bat. & Cavalc. (1)  
*Amerosporiopsis* Petr. (2)  
*Amerosympodula* Matsush. (1)  
*Amoenodochium* Peláez & R.F. Castañeda (1)  
*Amoenomyces* R.F. Castañeda, Saikawa & Hennebert (1)  
*Amphichaetella* Höhn. (1)

*Amphophialis* R.F. Castañeda, W.B. Kendr. & Guarro (1)  
*Amphoropycnium* Bat. (1)  
*Ampullicephala* R.F. Castañeda, Minter & M. Stadler (1)  
*Ampulliferina* B. Sutton (2)  
*Amylogalla* Suija, Motiej. & Kantvilas (1)  
*Anabahusakala* Carmo, J.S. Monteiro, Gusmão & R.F. Castañeda (1)  
*Anacraspedodidymum* C.R. Silva, R.F. Castañeda & Gusmão (2)  
*Anaexserticlava* Santa Izabel, R.F. Castañeda & Gusmão (1)  
*Anaphysmene* Bubák (2)  
*Anarhyma* M.H. Pei & Z.W. Yuan (1)  
*Anaselenosporella* Heredia, R.F. Castañeda & R.M. Arias (2)  
*Anaseptoidium* R.F. Castañeda, Heredia & R.M. Arias (1)  
*Anasporidesmiella* K. Zhang, R.F. Castañeda, Heredia & Jian Ma (2)\*  
*Anaverticicladus* P.O. Costa, Malosso & R.F. Castañeda (1)  
*Ancoraspora* Mig. Rodr. (1)  
*Ancoraspora* J. Mena, Mercado & Heredia (1)  
*Angiopomopsis* Höhn. (1)  
*Angulimaya* Subram. & Lodha (1)  
*Angulospora* Sv. Nilsson (1)  
*Annellodentimyces* Matsush. (1)  
*Annellodochium* Deighton (1)  
*Anellophorella* Subram. (5)  
*Anellospormospora* P.R. Johnst. (1)  
*Antennatula* Fr. ex F. Strauss (10)  
*Anthracoderma* Speg. (3)  
*Antimanoa* Syd. (1)  
*Antromyces* Fresen. (4)  
*Anulohypha* Cif. (1)  
*Anungitopsis* R.F. Castañeda & W.B. Kendr. (7)  
*Aoria* Cif. (1)  
*Aphanofalx* B. Sutton (2)  
*Apiocarpella* Syd. & P. Syd. (8)  
*Apiotypa* Petr. (1)  
*Apogloeum* Petr. (1)  
*Apomelasmia* Grove (8)  
*Aporellula* B. Sutton (2)  
*Apospora* Thaxt. (1)  
*Apostrasseria* Nag Raj (2)  
*Arachnophora* Hennebert (11)  
*Arachnosporella* R.F. Castañeda, Minter & Camino (1)  
*Arborillus* Munt.-Cvetk. & Gómez-Bolea (1)  
*Arborispora* K. Ando (4)  
*Arcuadendron* Sigler & J.W. Carmich. (2)  
*Ardhachandra* Subram. & Sudha (3)  
*Argentinomyces* Peña & Arambarri (1)  
*Argopericonia* B. Sutton & Pascoe (2)  
*Aristastoma* Tehon (1)  
*Arthrobotryum* Ces. (5)  
*Arthrocrustula* Sigler, M.T. Dunn & J.W. Carmich. (1)  
*Arthromoniliphora* S.S. Silva, Gusmão & R.F. Castañeda (1)  
*Arthrosporium* Sacc. (2)  
*Arthrowallemia* R.F. Castañeda, Dania García & Guarro (2)

*Articulophora* C.J.K. Wang & B. Sutton (1)  
*Artocarpomyces* Subram. (1)\*  
*Ascochytopsis* Henn. (5)  
*Ascochytulina* Petr. (3)  
*Ascofascicula* Matsush. (6)  
*Ascomauritiana* V.M. Ranghoo & K.D. Hyde (1)  
*Ascsubramania* Rajendran (1)  
*Ashtaangam* Subram. (1)  
*Aspilaima* Bat. & H. Maia (1)  
*Astelechia* Cif. (2)  
*Asterinothyriella* Bat. & Cif. (3)  
*Asterinothyrium* Bat., Cif. & H. Maia (1)  
*Asteroconium* Syd. & P. Syd. (2)  
*Asteromyces* F. Moreau & V. Moreau (1)  
*Asterophoma* D. Hawksw. (1)  
*Asteroscutula* Petr. (1)  
*Asterostomopora* Bat. & H. Maia (1)  
*Asterostomopsis* Bat., Cif. & H. Maia (1)  
*Asterostomula* Theiss. (4)  
*Asterostomulina* Bat., J.L. Bezerra & H. Maia (1)  
*Astomella* Thirum. (1)  
*Astronatelia* Bat. & H. Maia (1)  
*Atractilina* Dearn. & Barthol. (2)  
*Atractobolus* Tode (1)  
*Atrosetaphiale* Matsush. (1)  
*Atrosynnema* J.W. Xia, X.G. Zhang & Z. Li (1)  
*Aurospheeria* Sun J. Lee, Strobel, Eisenman, Geary, P.N. Vargas & S.A. Strobel (1)  
*Avesicladiella* W.P. Wu, B. Sutton & Gange (2)  
*Avettaea* Petr. & Syd. (3)  
*Bacillopeltis* Bat. (1)  
*Bactridium* Kunze (15)  
*Bactrodesmiella* M.B. Ellis (2)  
*Baculospora* Zukal (1)  
*Badarisama* Kunwar, J.B. Manandhar & J.B. Sinclair (1)  
*Bahuchashaka* Subram. (1)  
*Bahugada* K.A. Reddy & Vasant Rao (2)  
*Bahukalasa* Subram. & Chandrash. (1)  
*Balaniopsis* P.M. Kirk (4)  
*Balanium* Wallr. (1)  
*Barbarosporina* Kirulis (1)  
*Barnettella* D. Rao & P. Rag. Rao (1)  
*Basauxia* Subram. (1)  
*Batistina* Peres (1)  
*Batistospora* J.L. Bezerra & M.M.P. Herrera (1)  
*Beauveriphora* Matsush. (1)  
*Beccopycnidium* F. Stevens (1)  
*Beejadwaya* Subram. (1)  
*Belemnospora* P.M. Kirk (7)  
*Bellulicauda* B. Sutton (2)  
*Beltramon* Rashmi Dubey, A.K. Pandey bis & Manohar. (1)  
*Beltraniomyces* Manohar., D.K. Agarwal & Rao (1)  
*Beniowskia* Racib. (4)

*Benjpalia* Subram. & Bhat (1)  
*Berggrenia* Cooke (2)  
*Bhadradiella* Nagaraju, Kunwar & Manohar. (1)  
*Bhadradiomyces* Sureshk., Manohar. & Kunwar (1)  
*Bharatheeya* D'Souza & Bhat (3)  
*Bhatia* W.A. Baker & Morgan-Jones (2)  
*Bibanasiella* R.F. Castañeda & W.B. Kendr. (1)  
*Bicoloromyces* Heuchert, U. Braun & D. Hawksw. (1)  
*Biflagellospora* Matsush. (1)  
*Biflagellosporella* Matsush. (1)  
*Biflua* Jørgen Koch & E.B.G. Jones (1)  
*Bimeris* Petr. (1)  
*Bioconiosporium* Bat. & J.L. Bezerra (2)  
*Biophomopsis* Petr. (3)  
*Bisbyopeltis* Bat. & A.F. Vital (1)  
*Bispora* Corda (31)  
*Bisseomyces* R.F. Castañeda (1)  
*Blastocatena* Subram. & Bhat (2)  
*Blastodictys* M.B. Ellis (1)  
*Blastofusarioides* Matsush. (1)  
*Blastophorella* Boedijn (1)  
*Blastophragma* Subram. (4)  
*Blastophragmia* Jian Ma, L.G. Ma, X.G. Zhang & R.F. Castañeda (1)\*  
*Blennoria* Moug. & Fr. (4)  
*Blennoriopsis* Petr. (1)  
*Bleptosporium* Steyaert (4)  
*Blodgettia* Harv. (2)  
*Bostrichonema* Ces. (4)  
*Botryoderma* Papendorf & H.P. Upadhyay (4)  
*Botryodiplodina* Dias & Sousa da Câmara (1)  
*Botryomonilia* Goos & Piroz. (1)  
*Botryostroma* Höhn. (2)  
*Brachycephala* J.S. Monteiro, Gusmão & R.F. Castañeda (1)  
*Brachydesmiella* G. Arnaud ex S. Hughes (8)  
*Brachysporiellina* Subram. & Bhat (2)  
*Brachysporiopsis* Yanna, W.H. Ho & K.D. Hyde (1)  
*Braunomyces* V.A. Melnik & Crous (1)  
*Brefeldiopycnis* Petr. & Cif. (1)  
*Brencklea* Petrak (1)  
*Brevicatenospora* R.F. Castañeda, Minter & Saikawa (1)  
*Briosia* Cavara (6)  
*Brycekendrickia* Nag Raj (1)  
*Brykendrickia* Rajn. K. Verma, Prasher, Rajeshk., Sushma, A.K. Gautam & R.F. Castañeda (1)\*  
*Bryophytomyces* Cif. (1)  
*Bulbilopycnis* Matsush. (1)  
*Bulbocatenospora* R.F. Castañeda & Iturr. (1)  
*Bullaserpens* Bat., J.L. Bezerra & Cavalc. (1)  
*Cacumisporium* Preuss (9)  
*Caeruleoconidia* Zhurb. & Pino-Bodas (= *Caeruleoconidia* Zhurb. & Diederich 2015 nom. inv.) (2)  
*Calcarispora* Marvanová & Marvan (1)  
*Calceispora* Matsush. (2)  
*Callistospora* Petr. (1)

*Calocline* Syd. (1)  
*Calongeomyces* D. Hawksw. & Etayo (1)  
*Camaroglobulus* Speer (1)  
*Camaropycnis* E.K. Cash (1)  
*Camarosporellum* Tassi (1)  
*Camarosporiopsis* Abbas, B. Sutton & Ghaffar (1)  
*Camposporidium* Nawawi & Kuthub. (3)  
*Candelabrum* Beverw. (7)  
*Candelosynnema* K.D. Hyde & Seifert (1)  
*Capitorostrum* Bat. (1)  
*Capnocheirides* J.L. Crane & S. Hughes (1)  
*Capnofrasera* S. Hughes (1)  
*Capsicumyces* Gamundí, Aramb. & Gaiotti (1)  
*Carnegieispora* Etayo & F. Berger (1)  
*Carnia* Bat. (1)  
*Carrismyces* R.F. Castañeda & Heredia (1)  
*Casaresia* Gonz. Frag. (1)  
*Castanedaea* W.A. Baker & Partr. (1)  
*Catenocuneiphora* Matsush. (1)  
*Catenophora* Luttr. (3)  
*Catenophoropsis* Nag Raj & W.B. Kendr. (1)  
*Catenosubulispora* Matsush. (1)  
*Catenosynnema* Kodsueb, K.D. Hyde & W.H. Ho (1)  
*Catenulaster* Bat. & C.A.A. Costa (1)  
*Catinopeltis* Bat. & C.A.A. Costa (1)  
*Cecidiomyces* U. Braun & Zhurb. (1)  
*Ceeveesubramaniomyces* J. Pratibha, K.D. Hyde & Bhat (1)  
*Ceratocladium* Corda (2)  
*Ceratophorum* Sacc. (2)  
*Ceratopycnis* Höhn. (2)  
*Ceratosporella* Höhn. (19)  
*Ceratosporium* Schwein. (11)  
*Ceuthodiplospora* Died. (1)  
*Ceuthosira* Petr. (1)  
*Ceuthosporella* Petr. & Syd. (1)  
*Chaetendophragma* Matsush. (7)  
*Chaetoblastophorum* Morgan-Jones (1)  
*Chaetochalara* B. Sutton & Piroz. (7)  
*Chaetocytostroma* Petr. (1)  
*Chaetodiplis* Clem. (1)  
*Chaetodiplodina* Speg. (2)  
*Chaetopeltaster* Katum. (1)  
*Chaetophiophoma* Speg. (1)  
*Chaetoplaca* Syd. & P. Syd. (1)  
*Chaetopsis* Grev. (7)  
*Chaetopyrena* Pass. (2)  
*Chaetoseptoria* Tehon. (1)  
*Chalarodendron* C.J.K. Wang & B. Sutton (1)  
*Chalarodes* McKenzie (2)  
*Chantransiopsis* Thaxt. (3)  
*Characonidia* Bat. & Cavalc. (1)  
*Charomyces* Seifert (2)



*Chasakopama* Manohar., Bagyan., N.K. Rao & Kunwar (1)  
*Cheilaria* Lib. (1)  
*Cheiroidea* W.A. Baker & Morgan-Jones (1)  
*Cheiromyella* Höhn. (3)  
*Cheiromycesopsis* Mercado & J. Mena (1)  
*Cheiromyces* Berk. & M.A. Curtis (6)  
*Cheiropolyschema* Matsush. (2)  
*Chiastospora* Riess (1)  
*Chithramia* Nag Raj (1)  
*Chlamydopsis* Hol.-Jech. & R.F. Castañeda (1)  
*Choanatiara* DiCosmo (2)  
*Choreospora* Constant. & R. Sant. (1)  
*Chrysachne* Cif. (2)  
*Chrysalidopsis* Steyaert (1)  
*Chryseidea* Onofri (1)  
*Ciferria* Gonz. Frag. (1)  
*Ciferrina* Petr. (1)  
*Ciferriopeltis* Bat. & H. Maia (1)  
*Ciferrioxypium* Bat. & H. Maia (2)  
*Ciliochora* Höhn. (2)  
*Ciliophora* Petr. (2)  
*Ciliophorella* Petr. (2)  
*Ciliosporella* Petr. (2)  
*Circinoconiopsis* A. Hern.-Gut. (1)  
*Circinoconis* Boedijn (1)  
*Cissococcomyces* Brain (1)  
*Civisubramaniania* Vittal & Dorai (2)  
*Cladoconidium* Bandoni & Tubaki (1)  
*Cladoniicola* Diederich, van den Boom & Aptroot (2)  
*Cladosphaera* Dumort. (1)  
*Cladosporiopsis* S.C. Ren & X.G. Zhang (1)  
*Clasteropycnis* Bat. & Cavalc. (1)  
*Clathroconium* Samson & H.C. Evans (2)  
*Clauzadeomyces* Diederich (1)  
*Clavariana* Nawawi (1)  
*Cleistocystis* Sousa da Câmara (1)  
*Cleistonium* Speer (1)  
*Cleistophoma* Petr. & Syd. (2)  
*Clypeochorella* Petr. (1)  
*Clypeolum* Speg. (8)  
*Clypeopatella* Petr. (1)  
*Clypeophialophora* Bat. & Peres (1)  
*Clypeopycnis* Petr. (3)  
*Clypeoseptoria* F. Stevens & P.A. Young (3)  
*Clypeostagonospora* Punith. (1)  
*Coccogloeum* Petr. (1)  
*Codonmyces* Calat. & Etayo (1)  
*Colemaniella* Agnihothr. (1)  
*Coleodictyospora* Charles (2)  
*Coleoseptoria* Petr. (1)  
*Colispora* Marvanová (3)  
*Collettoconis* de Hoog & Aa (1)

*Colletosporium* Link (1)  
*Collostroma* Petr. (1)  
*Columnodomus* Petr. (1)  
*Columnothyrium* Bubák (1)  
*Comatospora* Piroz. & Shoemaker (1)  
*Comocephalum* Syd. (1)  
*Complexipes* C. Walker (2)  
*Condylospora* Nawawi (4)  
*Coniambigua* Etayo & Diederich (1)  
*Conioscyphopsis* Goh & K.D. Hyde (1)  
*Coniothyria* Syd. (1)  
*Conjunctospora* Udagawa & Uchiy. (1)  
*Conostoma* Bat. & J.L. Bezerra (2)  
*Conostroma* Moesz (3)  
*Consetiella* Hol.-Jech. & Mercado (1)  
*Copromyces* N. Lundq. (1)\*  
*Coremiella* Bubák & K. Krieg. (1)  
*Cornucopiella* Höhn. (2)  
*Cornutostilbe* Seifert (1)  
*Coronospora* M.B. Ellis (4)  
*Corynecercospora* V.K. Pal, M. Akhtar, N. Ahmad, Kamal & D.K. Agarwal (1)  
*Coryneliella* Har. & P. Karst. (1)  
*Corynesporella* Munjal & H.S. Gill (11)  
*Corynesporina* Subram. (1)  
*Corynesporopsis* P.M. Kirk (16)  
*Costanettoa* Bat. & J.L. Bezerra (1)  
*Crandallia* Ellis & Sacc. (4)  
*Craneomyces* Morgan-Jones, R.C. Sinclair & Eicker (1)  
*Craspedodidimella* F.R. Barbosa, R.F. Castañeda & Gusmão (1)  
*Creodiplodina* Petr. (1)  
*Creonecte* Petr. (1)  
*Creoseptoria* Petr. (1)  
*Creothyriella* Bat. & C.A.A. Costa (1)  
*Cribropeltis* Tehon (1)  
*Crinigera* I. Schmidt (1)  
*Crousobrauniella* Sh. Kumar, Raghv. Singh, D.P. Singh & Kamal (1)  
*Crustodiplodina* Punith. (1)  
*Cryptoceuthospora* Petr. (2)  
*Cryptocoryneopsis* B. Sutton (1)  
*Cryptosporium* Kunze (25)  
*Cryptumbellata* Udagawa & Uchiy. (1)  
*Ctenosporium* R. Kirschner (1)  
*Cubasina* R.F. Castañeda (2)  
*Culicidospora* R.H. Petersen (2)  
*Culicinomyces* Couch, Romney & B. Rao (3)  
*Curucispora* Matsush. (3)  
*Curvulariopsis* M.B. Ellis (1)  
*Cyanopatella* Petr. (1)  
*Cyanopyrenia* Harada (1)  
*Cyclomarsonina* Petr. (1)  
*Cylindrogloeum* Petr. (1)  
*Cylindromyces* Manohar., D.K. Agarwal & N.K. Rao (1)\*

*Cylindrothyrium* Maire (1)  
*Cylindroxypium* Bat. & Cif. (1)  
*Cyrtidium* Vain (1)  
*Cyrtidula* Minks (ca. 5)  
*Cyrtopsis* Vain. (1)  
*Cystodium* Fée (1)  
*Cystotricha* Berk. & Broome (1)  
*Cytodiscula* Petr. (1)  
*Cytogloeum* Petr. (1)  
*Cytonaema* Höhn. (2)  
*Cytoplacosphaeria* Petr. (2)  
*Cytosphaera* Died. (2)  
*Cytosporella* Sacc. (32)  
*Cyttariella* Palm (1)  
*Dactylifera* Alcorn (1)  
*Dactylosporium* Harz (2)  
*Dasysticta* Speg. (2)  
*Davisiella* Petr. (2)  
*Deichmannia* Alstrup & D. Hawksw. (1)  
*Delortia* Pat. & Gaillard (3)  
*Dendrodomus* Bubák (1)  
*Dendrographiella* Agnihothr. (1)  
*Dendrographium* Massee (8)  
*Dendrospora* Ingold (10)  
*Dendrosporium* Plakidas & Edgerton ex J.L. Crane (2)  
*Dendryphiosphaera* Lunghini & Rambelli (4)  
*Dennisographium* Rifai (2)  
*Dentocircinomyces* R.F. Castañeda & W.B. Kendr. (1)  
*Descalsia* A. Roldán & Honrubia (1)  
*Desertella* Mouch. (2)  
*Desmidiospora* Thaxt. (3)  
*Dexhowardia* J.J. Taylor (1)  
*Diaboliumbilicus* I. Hino & Katum. (1)  
*Diademospora* B.E. Söderstr. & Bååth (1)  
*Diarimella* B. Sutton (3)  
*Dichelostroma* Bat. & Peres (1)  
*Dicholobodigitus* G.P. White & Illman (1)  
*Dichotomophthoropsis* M.B. Ellis (2)  
*Dichotophora* Whitton, K.D. Hyde & McKenzie (2)  
*Dictyoceratosporella* Y.R. Ma & X.G. Zhang (3)  
*Dictyophrynella* Bat. & Cavalc. (1)  
*Dictyopolyschema* M.B. Ellis (1)  
*Dictyorostrella* U. Braun (1)  
*Dictyospiropes* M.B. Ellis (1)  
*Dictyotrichocladium* Fiuza, Gusmão & R.F. Castañeda (1)  
*Didymochaetina* Bat. & J.L. Bezerra (1)  
*Didymopsis* Sacc. & Marchal (5)  
*Didymosporina* Höhn. (1)  
*Diedickeia* Syd. & P. Syd. (3)  
*Digitatenosporium* S.M. Leão, Gusmão & R.F. Castañeda (1)  
*Digitodochium* Tubaki & Kubono (1)  
*Digitopodium* U. Braun, Heuchert & K. Schub. (1)

*Digitoramispora* R.F. Castañeda & W.B. Kendr. (4)  
*Dimastigosporium* Faurel & Schotter (2)  
*Diplocladiella* G. Arnaud ex M.B. Ellis (8)  
*Diplodinis* Clem. (1)  
*Diplodinula* Tassi (1)  
*Diploplenodomus* Died. (2)  
*Diplosporonema* Höhn. (1)  
*Diplozythiella* Died. (1)  
*Dipyrgis* Clem. (1)  
*Discogloeum* Petr. (1)  
*Discomycetoidea* Matsush. (1)  
*Discosiellina* Subram. & K.R.C. Reddy (1)  
*Discosporina* Höhn. (1)  
*Discotheciella* Syd. & P. Syd (1)  
*Discozythia* Petr. (1)  
*Dissitimurus* E.G. Simmons, McGinnis & Rinaldi (1)  
*Distobactrodesmium* Z. Niu, K. Zhang & R.F. Castañeda (1)\*  
*Distophragmia* R.F. Castañeda, S.M. Leão & Gusmão (1)  
*Ditangifibula* G.C. Adams (1)  
*Domingoella* Petr. & Cif. (4)  
*Dothideodiplodia* Murashk. (1)  
*Dothioropsis* Riedl (1)  
*Drepanospora* Berk. & M.A. Curtis (1)  
*Drudeola* Kuntze (1)  
*Drumopama* Subram. (1)  
*Dryosphaera* Jørg. Koch & E.B.G. Jones (3)  
*Dualomyces* Matsush. (2)  
*Dwayabeeja* Subram. (3)  
*Dwayaloma* Subram. (1)  
*Dwayalomella* Brisson, Piroz. & Pauzé (1)  
*Dwibahubeeja* N. Srivast., A.K. Srivast. & Kamal (1)  
*Dwibeeja* Subram. (1)  
*Dwiroopella* Subram. & Muthumary (1)  
*Ebollia* Minter & Caine (1)  
*Echinocatena* R. Campb. & B. Sutton (1)  
*Echinochondrium* Samson & Aa (1)  
*Echinoconidiophorum* Pereira-Carv. & Dianese (1)  
*Effetia* Bartoli, Maggi & Persiani (1)\*  
*Eiona* Kohlm. (1)  
*Elachopeltella* Bat. & Cavalc. (2)  
*Elattopycnis* Bat. & Cavalc. (1)  
*Elegantimycetes* Goh, C.K.M. Tsui & K.D. Hyde (1)  
*Ellisembiopsis* T.S. Santa Izabel & Gusmão (2)  
*Ellismarsporium* R.F. Castañeda & X.G. Zhang (7)  
*Elotespora* R.F. Castañeda & Heredia (1)  
*Embryonispora* G.Z. Zhao (1)  
*Enantioptera* Descals (2)  
*Endobotrya* Berk. & M.A. Curtis (1)  
*Endobotryella* Höhn. (1)  
*Endocolium* Syd. (1)  
*Endoconospora* Gjaerum (2)  
*Endocoryneum* Petr. (3)

*Endogenospora* R.F. Castañeda, O. Morillo & Minter (1)  
*Endomelanconium* Petr. (4)  
*Endophragmiella* B. Sutton (ca. 80)\*  
*Endophragmiopsis* M.B. Ellis (2)  
*Endoplacodium* Petr. (1)  
*Endoramularia* Petr. (1)  
*Endosporoideus* W.H. Ho, Yanna, K.D. Hyde & Goh (1)  
*Endozythia* Petr. (1)  
*Enerthidium* Syd. (1)  
*Engelhardtiella* A. Funk (1)  
*Enridescalsia* R.F. Castañeda & Guarro (1)  
*Enthallopycnidium* F. Stevens (1)  
*Entoderma* Hanula, Andreadis & M. Blackw. (1)  
*Epaphroconidia* Calat. & V. Atienza (1)  
*Ephelidium* C.W. Dodge & E.D. Rudolph (1)  
*Epiclinium* Fr. (2)  
*Epicoccospora* Budathoki & S.K. Singh (2)  
*Episporogoniella* U. Braun (1)  
*Epistigme* Syd. (2)  
*Epithyrium* (Sacc.) Trotter (2)  
*Eriocercospora* Deighton (3)  
*Eriospore* Berk. & Broome (1)  
*Erispora* Pat. (1)  
*Esteya* J.Y. Liou, J.Y. Shih & Tzean (1)  
*Evanidomus* Caball. (1)  
*Everhartia* Sacc. & Ellis (6)  
*Everniicola* D. Hawksw. (1)  
*Eversia* J.L. Crane & Schokn. (2)  
*Excipularia* Sacc. (2)  
*Exophoma* Weedon (1)  
*Exosporella* Höhn. (1)  
*Exosporodiella* Ganie, Azam & A.H. Wani (1)  
*Fairmaniella* Petr. & Syd. (1)  
*Farriolla* Norman (1)  
*Favostroma* B. Sutton & E.M. Davison (1)  
*Feltgeniomyces* Diederich (4)  
*Fenestroconidia* Calat. & Etayo (1)  
*Fissuricella* Pore, D'Amatao & Ajello (1)  
*Flabellocladia* Nawawi (2)  
*Flabellospora* Alas. (6)  
*Flosculomyces* B. Sutton (2)  
*Frigidispora* K.D. Hyde & Goh (1)  
*Fujimyces* Minter & Caine (2)  
*Fuligomyces* Morgan-Jones & Kamal (4)  
*Fumagopsis* Speg. (2)  
*Furcaspora* Bonar (2)  
*Fusamen* (Sacc.) P. Karst. (2)  
*Fuscophialis* B. Sutton (4)  
*Fusticeps* J. Webster & R.A. Davey (5)  
*Gaeumanniella* Petr. (1)  
*Gallaicolichen* Serux. & Lücking (1)  
*Gampsonema* Nag Raj (1)

*Gangliophora* Subram. (1)  
*Gangliostilbe* Subram. & Vittal (5)  
*Garnaudia* Borowska (3)  
*Gaubaea* Petr. (2)  
*Gelatinocrinis* Matsush. (1)  
*Gelatinopycnis* Dyko & B. Sutton (1)  
*Geminoarcus* K. Ando (3)  
*Gemmulina* Descals & Marvanová (1)  
*Geohypha* (Fr.) Hennebert (1)\*  
*Gilmaniella* G.L. Barron (9)  
*Glaphyriopsis* B. Sutton & Pascoe (2)  
*Glioannellodochium* Matsush. (1)  
*Glioblastocladium* Matsush. (1)  
*Globoconidiopsis* G.F. Sepúlveda, Pereira-Carv. & Dianese (1)  
*Globoconidium* G.F. Sepúlveda, Pereira-Carv. & Dianese (1)  
*Gloeocoryneum* Weindlm. (3)  
*Gloeodes* Colby (1)  
*Gloeosporiella* Cavara (1)  
*Gloiosphaera* Höhn. (2)  
*Glutinium* Fr. (2)  
*Goidanichiella* G.L. Barron ex W. Gams (5)  
*Gonatobotryum* Sacc. (4)  
*Goniopila* Marvanová & Descals (1)  
*Goosiella* Morgan-Jones, Kamal & R.K. Verma (1)  
*Goosiomyces* N.K. Rao & Manohar. (2)  
*Grallomyces* F. Stevens (1)  
*Graphiothecium* Fuckel (6)  
*Groveolopsis* Boedijn (6)  
*Guarroa* M. Caldusch, Gené, Heredia & R.F. Castañeda (1)  
*Guedea* Rambelli & Bartoli (3)  
*Guelichia* Speg. (6)  
*Gymnoxyphium* Cif., Bat. & I.J. Araújo (6)  
*Gyrophthorus* Hafellner & Sancho (3)  
*Hadronema* Syd. & P. Syd. (4)  
*Hadrosporium* Syd. (2)  
*Halysiomyces* E.G. Simmons (1)  
*Hansfordiopeltis* Bat. & C.A.A. Costa (5)  
*Hansfordiopeltopsis* M.L. Farr (1)  
*Hapalosphaeria* Syd. (1)  
*Haplariopsis* Oudem. (2)  
*Haplobasidium* Erikss. (3)  
*Haplolepis* Syd. (3)  
*Haptocara* Drechsler (1)  
*Harmoniella* V.N. Boriss. (2)  
*Harpographium* Sacc. (5)  
*Harpostroma* Höhn. (1)  
*Heimiodora* Nicot (1)  
*Helensiella* Minter, R.F. Castañeda & Heredia (1)  
*Helhonia* B. Sutton (1)  
*Helicofilia* Matsush. (2)  
*Helicogoosia* Hol.-Jech. (1)  
*Helicominopsis* Deighton (2)

*Helicorhoidion* S. Hughes (6)  
*Helicosingula* P.S. van Wyk, Marasas, Baard & Knox-Dav. (1)  
*Helicothyrium* I. Hino & Katum. (1)  
*Helicoubisia* Lunghini & Rambelli (1)  
*Heliscella* Marvanová (2)  
*Heliscina* Marvanová (2)  
*Helminthosporiomyces* G.F. Sepúlveda, Pereira-Carv. & Dianese (1)  
*Helochora* Sherwood (1)  
*Hemicorynesporella* Subram. (1)  
*Hemidothis* Syd. & P. Syd. (1)  
*Hemisphaeropsis* Petr. (1)  
*Hendersoniella* Tassi (1)  
*Hendersonina* E.J. Butler (1)  
*Hendersoniopsis* Höhn. (1)  
*Hendersonula* Speg. (20)  
*Hendersonulina* Petr. (1)  
*Henfellra* Halici, D. Hawksw., Z. Kocak. & M. Kocak (1)  
*Henicospora* P.M. Kirk & B. Sutton (6)  
*Herposira* Syd. (1)  
*Herreromyces* R.F. Castañeda & W.B. Kendr. (1)  
*Heterocephalum* Thaxt. (2)  
*Heterosporiopsis* Petr. (1)  
*Heuflera* Bail (1)  
*Hexacladium* D.L. Olivier (1)  
*Himantia* Pers. (4)  
*Hinoa* Hara & I. Hino (2)  
*Hirudinaria* Ces. (2)  
*Hobsoniopsis* D. Hawksw. (1)  
*Hoehneliella* Bres. & Sacc. (2)  
*Holubovaea* Mercado (2)  
*Homalopeltis* Bat. & Valle (1)  
*Hoornsmania* Crous (1)  
*Hormiactis* Preuss (5)  
*Hormiscioideus* M. Blackw. & Kimbr. (1)  
*Hormocephalum* Syd. (1)  
*Hormographis* Guarro, Punsola & Arx (1)  
*Hughesinia* J.C. Lindq. & Gamundí (3)  
*Hyalobelemnospora* Matsush. (1)  
*Hyalocamposporium* Révay & J. Gönczöl (4)  
*Hyaloccephalotrichum* Nagaraju, Kunwar, Sureshk. & Manohar. (1)  
*Hyalocladium* Mustafa (1)  
*Hyalocylindrophora* J.L. Crane & Dumont (3)  
*Hyalodermella* Speg. (1)  
*Hyalodictyum* Woron. (1)  
*Hyalohelicomina* T. Yokoy. (1)  
*Hyalopleiochaeta* R.F. Castañeda, Guarro & Cano (1)  
*Hyalopyrenia* H. Harada (1)  
*Hyalosynnema* Matsush. (1)  
*Hyalothyridium* Tassi (1)  
*Hydrometrospora* J. Gönczöl & Révay(1)  
*Hymenella* Fr. (11)  
*Hymeniopeltis* Bat. (3)

*Hymenobactron* (Sacc.) Höhn.  
*Hymenobia* Nyl. (1)  
*Hymenopsis* Sacc. (13)  
*Hyphodiscosia* Lodha & K.R.C. Reddy (5)  
*Hyphodiscosoides* Matsush. (1)  
*Hyphopolynema* Nag Raj (6)  
*Hyphostereum* Pat. (1)  
*Hyphothyrium* B. Sutton & Pascoe (1)  
*Hyphozyma* de Hoog & M.T. Sm. (4)  
*Hypnotheca* Tommerup (1)  
*Hypocline* Syd. (1)  
*Hypodermina* Höhn. (1)  
*Hypogloeum* Petr. (1)  
*Hypotrachynicola* Etayo (1)  
*Hysteridium* P. Karst. (1)  
*Hysterodiscula* Petr. (1)  
*Hysteropycnis* Hilitzer (1)  
*Ialomitzia* Gruia (1)  
*Idiocercus* B. Sutton (2)  
*Igneocumulus* A.W. Ramaley (10)  
*Imicles* Shoemaker & Hambl. (6)  
*Impudentia* Vujanović (1)  
*Inesiosporium* R.F. Castañeda & W. Gams (2)  
*Inifatiella* R.F. Castañeda (1)  
*Intercalarispora* J.L. Crane & Schokn. (1)  
*Intralichen* D. Hawksw. & M.S. Cole (4)  
*Ionophragmium* Peres (1)  
*Irpicomycetes* Deighton (3)  
*Ischnostroma* Syd. & P. Syd. (1)  
*Isthmoconidium* Etayo & Fr. Berger (1)  
*Isthmolongispora* Matsush. (11)  
*Isthmophragmospora* Kuthub. & Nawawi (2)  
*Isthmotricladia* Matsush. (3)  
*Ityorhoptrum* P.M. Kirk (4)  
*Iyengarina* Subram. (3)  
*Javonarxia* Subram. (2)  
*Jayarambhatia* J. Pratibha (1)  
*Jerainum* Nawawi & Kuthub. (1)  
*Jubispora* B. Sutton & H.J. Swart (1)  
*Junctospora* Minter & Hol.-Jech. (1)  
*Kalamarospora* G. Delgado (1)  
*Kalchbrenneriella* Diederich & M.S. Christ. (1)  
*Kaleidosporium* Van Warmelo & B. Sutton (1)  
*Kamatella* Anahosur (1)  
*Kamatia* V.G. Rao & Subhedar (1)  
*Kameshwaromyces* Kamal, R.K. Verma & Morgan-Jones (2)  
*Katherinomyces* Khodos. (1)  
*Keissleriomyces* D. Hawksw. (1)  
*Kendrickiella* K. Jacobs & M.J. Wingf. (1)  
*Ketubakia* Kamat, Varghese & V.G. Rao (1)  
*Kiliophora* Kuthub. & Nawawi (3)  
*Kionocephala* P.M. Kirk (1)



*Kmetia* Bres. & Sacc. (1)  
*Kmetiopsis* Bat. & Peres (1)  
*Knemiothyrium* Bat. & J.L. Bezerra (1)  
*Kodonospora* K. Ando (1)  
*Kolletes* Kohlm. & Volkm.-Kohlm. (1)  
*Kontospora* A. Roldán, Honrubia & Marvanová (1)  
*Korunomyces* Hodges & F.A. Ferreira (3)  
*Kostermansinda* Rifai (4)  
*Kostermansindiopsis* R.F. Castañeda (1)  
*Kramabeeja* G.V. Rao & K.A. Reddy (1)  
*Kramasamuha* Subram. & Vittal (1)  
*Kreiseliella* Braun (1)  
*Kumanasamuha* P. Rag. Rao & D. Rao (5)  
*Kutilakesa* Subram. (2)  
*Kyphophora* B. Sutton (1)  
*Lacellina* Sacc. (3)  
*Lacellinopsis* Subram. (3)  
*Laciniocladium* Petri (1)  
*Lagenomyces* Cavalc. & A.A. Silva (1)  
*Lambdasporium* Matsush. (3)  
*Lambinonia* Sérus. & Diederich (1)  
*Laocoön* J.C. David (1)  
*Lappodochium* Matsush. (1)  
*Lasiodiplodiella* Zambett. (3)  
*Lasiothyrium* Syd. & P. Syd. (1)  
*Lasmeniella* Petr. & Syd. (13)  
*Latericonis* G.V. Rao, K.A. Reddy & de Hoog (1)  
*Lateriramulosa* Matsush. (5)  
*Laterispora* Uecker, W.A. Ayers & P.B. Adams (1)  
*Lawalreea* Diederich (1)  
*Lecaniocola* Brain (1)  
*Leeina* Petr. (1)  
*Leightonimyces* D. Hawksw. & B. Sutton (2)  
*Lembuncula* Cif. (1)  
*Lemkea* Morgan-Jones & R.C. Sinclair (1)  
*Lepisticola* W. Gams (1)  
*Leprieurinella* Bat. & H. Maia (1)  
*Leptascospora* Speg. (1)  
*Leptochlamys* Died. (1)  
*Leptodermella* Höhn. (1)  
*Leptophyllosticta* I.E. Brezhnev (2)  
*Leptostromella* (Sacc.) Sacc. (2)  
*Leptothyrella* Sacc. (10)  
*Leptothyrina* Höhn. (1)  
*Leptothyrium* Kunze (2)  
*Leucoconiella* Bat., H. Maia & Peres (1)  
*Leucoconis* Theiss. & Syd. (1)  
*Leucodochium* Syd. & P. Syd. (1)  
*Leuliisinea* Matsush. (2)  
*Lichenobactridium* Diederich & Etayo (1)  
*Lichenohendersonia* Calat. & Etayo (4)  
*Lichenopeziza* Zúkal (1)

*Lichenophoma* Keissl. (2)  
*Lichenopuccinia* D. Hawksw. & Hafellner (1)  
*Lichenostella* Calat. & Etayo (1)  
*Linkosia* A. Hern. Gut. & B. Sutton (12)  
*Linochorella* Syd. & P. Syd. (1)  
*Linodochium* Höhn. (5)  
*Listeromyces* Penz. & Sacc. (1)  
*Lithopythium* Bornet & Flahault (3)  
*Lobatopedis* P.M. Kirk (5)  
*Loliomyces* Maire (1)  
*Lomaantha* Subram. (3)  
*Lomachashaka* Subram. (5)  
*Lonavalomyces* Rashmi Dubey (*nom. inval.*) (1)\*  
*Ludwigomyces* Kirschst. (1)  
*Luxuriomyces* R.F. Castañeda (1)  
*Luzfridiella* R.F. Castañeda & W.B. Kendr. (1)  
*Lylea* Morgan-Jones (6)  
*Lysotheca* Cif. (6)  
*Mackenziella* Yanna & K.D. Hyde (1)  
*Macroallantina* Speer (1)  
*Macrodiplodia* Sacc. (2)  
*Macrotrichum* Grev. (2)  
*Magmopsis* Nyl. (1)  
*Mahabalella* B. Sutton & S.D. Patil (4)  
*Manginella* Bat. & H. Maia (2)  
*Mapletonia* B. Sutton (1)  
*Margarinomyces* Laxa (1 *fide* Kirk et al. 2008)  
*Martinellisia* V.G. Rao & Varghese (1)  
*Massalongina* Bubák (2)  
*Matsushimiella* R.F. Castañeda & Heredia (2)  
*Matsushimomyces* V.G. Rao & Varghese (2)  
*Medusamyces* G.L. Barron & Szijarto (1)  
*Megalodochium* Deighton (4)  
*Melanocephala* S. Hughes (5)  
*Melanophoma* Papendorf & J.W. du Toit (1)  
*Melophia* Sacc. (4)  
*Menidochium* R.F. Castañeda & W.B. Kendr. (1)  
*Mercadomyces* J. Mena (1)  
*Merismella* Syd. (6)  
*Mesocorynespora* Jian Ma, X.G. Zhang & R.F. Castañeda (1)\*  
*Metadiplodia* Syd. (40)  
*Metazythia* Petr. (1)  
*Metazythiopsis* M. Morelet (1)  
*Microblastosporon* Cif. (1)  
*Microclava* F. Stevens (5)  
*Microdiscula* Höhn. (2)  
*Microdothiorella* C.A.A. Costa & Sousa da Câmara (1)  
*Microhendersonula* Dias & Sousa da Câmara (1)  
*Micromastia* Speg. (2)  
*Microporella* Höhn. (1)  
*Micropustulomyces* R.W. Barreto (1)  
*Microtyle* Speg. (1)

*Microxyphiella* Speg. (15)  
*Microxyphiopsis* Bat. (2)  
*Mindoa* Petr. (2)  
*Minimidochium* B. Sutton (8)  
*Minteriella* Heredia, R.F. Castañeda & R.M. Arias (1)  
*Minutophoma* D. Hawksw. (1)  
*Mirandina* G. Arnaud ex Matsush. (ca. 10)  
*Miricata* Punith. & Spooner (2)  
*Mirimyces* Nag Raj (1)  
*Monochaetiella* E. Castell. (3)  
*Monochaetinula* Muthumary, Abbas & B. Sutton (6)  
*Monochaetopsis* Pat. (1)  
*Monodia* Breton & Faurel (2)  
*Monodidymaria* U. Braun (5)  
*Monodisma* Alcorn (1)  
*Monostichella* Höhn. (15)  
*Moorella* P. Rag. Rao & D. Rao (3)  
*Moralesia* Urries (1)  
*Morrisographium* M. Morelet (8)  
*Mucosetospora* M. Morelet (1)  
*Muiogone* Thaxt. (2)  
*Muirella* R. Sprague (1)  
*Murogenella* Goos & E.F. Morris (3)  
*Mycelephas* R.F. Castañeda (2)  
*Mycocentrodochium* K. Matsush. & Matsush. (1)  
*Mycoenterolobium* Goos (3)  
*Mycohypallage* B. Sutton (2)  
*Mycopara* Bat. & J.L. Bezerra (1)  
*Mycospraguea* U. Braun & Rogerson (1)  
*Mycosticta* Höhn. (1)  
*Mycosylva* M.C. Tulloch (3)  
*Mycotodea* Kirschst. (14)  
*Mycousteria* M.L. Farr (2)  
*Myiocoprula* Petr. (2)  
*Myriellina* Höhn. (2)  
*Myrmecomycetes* Jouvenaz & Kimbr. (1)  
*Myrotheciastrum* Abbas & B. Sutton (1)  
*Mystrosporiella* Munjal & Kulshr. (4)  
*Myxoparaphysella* Caball. (2)  
*Myxosporella* Sacc. (1)  
*Myxosporidiella* Negru (1)  
*Myxostomellina* Syd. (1)  
*Myxothyriopsis* Bat. & A.F. Vital (1)  
*Myxothyrium* Bubák & Kabát (1)  
*Naemosphaera* P. Karst. (1)  
*Naemosphaerella* Höhn. (2)  
*Nagrajia* R.F. Castañeda & W.B. Kendr. (1)  
*Nagrajomyces* Mel'nik (1)  
*Nakatopsis* Whitton, McKenzie & K.D. Hyde (2)  
*Nanoschema* B. Sutton (1)  
*Naothyrsium* Bat. (1)  
*Necraphidium* Cif. (1)

*Nematogonum* Desm. (1)  
*Nematographium* Goid. (5)  
*Nemozythiella* Höhn. (1)  
*Neoalpakesa* Punith. (1)  
*Neoarbuscula* B. Sutton (1)  
*Neobarclaya* Sacc. (2)  
*Neodiplodina* Petr. (1)  
*Neofuckelia* Zeller & Goodd. (1)  
*Neoheteroceras* Nag Raj (2)  
*Neojohnstonia* B. Sutton (2)  
*Neoligniella* Naumov (4)  
*Neomarssoniella* U. Braun (1)  
*Neomelanconium* Petr. (3)  
*Neopeltis* Syd. (3)  
*Neopericonia* Kamal, A.N. Rai & Morgan-Jones (1)  
*Neophoma* Petr. & Syd. (2)  
*Neoplaconema* B. Sutton (2)  
*Neopodoconis* Rifai (3)  
*Neospegazzinia* Petr. & Syd. (2)  
*Neottiospora* Desm. (2)  
*Neozythia* Petr. (1)  
*Neta* Shearer & J.L. Crane (10)  
*Nidulispora* Nawawi & Kuthub. (1)  
*Nigrolentilocus* R.F. Castañeda & Heredia (6)  
*Nigromacula* Etayo (1)  
*Nigropuncta* D. Hawksw. (2)  
*Nosophloea* Fr. (3)  
*Nothospora* Peyronel (1)  
*Novozymia* W.P. Wu (1)  
*Nummospora* E. Müll. & Shoemaker (1)  
*Nusia* Subram. (2)  
*Nyctalospora* E.F. Morris (1)  
*Nypaella* K.D. Hyde & B. Sutton (2)  
*Obeliospora* Nawawi & Kuthub. (5)  
*Obstipipilus* B. Sutton (1)  
*Octopodotus* Kohlm. & Volkm.-Kohlm. (1)  
*Odontodictyospora* Mercado (1)  
*Ojibwaya* B. Sutton (1)  
*Omega* B. Sutton & Minter (1)  
*Oncopodium* Sacc. (12)  
*Oncospora* Kalchbr. (8)  
*Oncosporella* P. Karst. (1)  
*Oncostroma* Bat. & Marasas (1)  
*Onychophora* W. Gams, P.J. Fisher & J. Webster (1)  
*Oothyrium* Syd. (1)  
*Ophiosira* Petr. (1)  
*Orphanocoela* Nag Raj (3)  
*Ostracoderma* Fr. (3)  
*Ostracodermidium* Mukerji (1)  
*Oswaldina* Rangel (1)  
*Paathramaya* Subram. (5)  
*Pachycladina* Marvanová (3)

*Palawaniopsis* Bat., Cif. & Nascim. (1)  
*Papilionospora* V.G. Rao & B. Sutton (1)  
*Pappimyces* B. Sutton & Hodges (1)  
*Paraaoria* R.K. Verma & Kamal (1)  
*Paraarthrocladium* Matsush. (1)  
*Parablastocatena* Y.D. Zhang & X.G. Zhang (1)  
*Paraceratocladium* R.F. Castañeda (6)  
*Parachionomyces* Thaung (1)  
*Paracostantinella* Subram. & Sudha (1)  
*Paracryptophiale* Kuthub. & Nawawi (2)  
*Paracytospira* Petr. (1)  
*Paradendryphiopsis* M.B. Ellis (5)  
*Paradidymobotryum* C.J.K. Wang & B. Sutton (1)  
*Paradiplodia* Speg. ex Trotter (6)  
*Paradischloridium* Bhat & B. Sutton (1)  
*Paradiscula* Petr. (1)  
*Parafulvia* Kamal, A.N. Rai & Morgan-Jones (1)  
*Parahaplotrichum* W.A. Baker & Partr. (1)  
*Paraharknessia* Matsush. (1)  
*Parahyalotiopsis* Nag Raj (1)  
*Paramassariothea* Subram. & Muthumary (1)  
*Paramenisporopsis* Matsush. (1)  
*Parapericonia* M.B. Ellis (2)  
*Parapericoniella* U. Braun, Heuchert & K. Schub. (1)  
*Paraphaeoisaria* de Hoog & Morgan-Jones (1)  
*Parapithomyces* Thaung (1)  
*Parapyricularia* M.B. Ellis (4)  
*Pararobillarda* Matsush. (1)  
*Parasphaeropsis* Petr. (1)  
*Parastigmatellina* Bat. & C.A.A. Costa (1)  
*Paratetraploa* M.K.M. Wong & K.D. Hyde (1)  
*Paratomenticola* M.B. Ellis (2)  
*Paratrichoconis* Deighton & Piroz. (4)  
*Paraulocladium* R.F. Castañeda (2)  
*Paspalomyces* Linder (1)  
*Patriciomyces* D. Hawksw. (1)  
*Pazschkeella* Syd. & P. Syd.  
*Peethasthabeeja* P. Rag. Rao (1)  
*Pellionella* (Sacc.) Sacc. (1)  
*Peltasterinostroma* Punith. (1)  
*Peltasteropsis* Bat. & H. Maia (7)  
*Peltistroma* Henn. (1)  
*Peltistromella* Höhn. (1)  
*Peltosoma* Syd. (1)  
*Peltostromellina* Bat. & A.F. Vital (1)  
*Peltostromopsis* Bat. & A.F. Vital (1)  
*Penzigomyces* Subram. (13)  
*Perelegamyces* R.F. Castañeda & W.B. Kendr. (1)  
*Perizomella* Syd. (1)  
*Pestalozziella* Sacc. & Ellis ex Sacc. (4)  
*Petrakiopsis* Subram. & K.R.C. Reddy (1)  
*Phacostroma* Petr. (1)

*Phacostromella* Petr. (1)  
*Phaeoblastophora* Partr. & Morgan-Jones (2)  
*Phaeocandelabrum* R.F. Castañeda, Gusmão, Guarro & Iturr. (3)  
*Phaeodactylium* Agnihothr. (7)  
*Phaeodiscula* Cub. (1)  
*Phaeodomus* Höhn. (3)  
*Phaeohiratsukaea* Udagawa & Iwatsu (1)  
*Phaeoidiomyces* Dorn.-Silva & Dianese (2)  
*Phaeolabrella* Speg. (1)  
*Phaeomonilia* R.F. Castañeda, Heredia & R.M. Arias (5)  
*Phaeomonostichella* Keissl. ex Petr. (1)  
*Phaeophomopsis* Höhn. (1)  
*Phaeoschizotrichum* C.R. Silva, Gusmão & R.F. Castañeda (1)  
*Phaeostalagmus* W. Gams (7)  
*Phaeostilbelloides* Armando, Z.M. Chaves & Dianese (1)  
*Phaeothyrium* Petr. (1)  
*Phaeotrichoconis* Subram. (8)  
*Phellostroma* Syd. & P. Syd. (1)  
*Phialoarthrobotryum* Matsush. (2)  
*Phialogeniculata* Matsush. (4)  
*Phialophaeosisaria* Matsush. (1)  
*Phialostele* Deighton (1)  
*Phialotubus* R.Y. Roy & Leelav. (1)  
*Phloeosporina* Höhn. (1)  
*Phomachora* Petr. & Syd. (2)  
*Phomachorella* Petr. (1)  
*Phomatosporella* Tak. Kobay. & K. Sasaki (1)  
*Phomyces* Clem. (1)  
*Phragmoconidium* G.F. Sepúlveda, Pereira-Carv. & Dianese (1)  
*Phragmopeltis* Henn. (5)  
*Phragmospahtula* Subram. & N.G. Nair (3)  
*Phragmospahtulella* J. Mena & Mercado (1)  
*Phthora* d'Hérelle (1)  
*Phylloedium* Fr. (1)  
*Phyllohendersonia* Tassi (25)  
*Physalidiella* Rulamort (2)  
*Physalidiopsis* R.F. Castañeda & W.B. Kendr. (1)  
*Piggotia* Berk. & Broome (3)  
*Pinatubo* J.B. Manandhar & Mew (1)  
*Piperivora* Siboe, P.M. Kirk & P.F. Cannon (1)  
*Piricaudilium* Hol.-Jech. (2)  
*Piricaudiopsis* J. Mena & Mercado (1)  
*Pirispota* Faurel & Schotter (1)  
*Piostomella* Sacc. (2)  
*Pithosira* Petr. (1)  
*Pittostroma* Kowalski & T.N. Sieber (1)  
*Placella* Syd. (1)  
*Placodiplodia* Bubák (2)  
*Placonema* (Sacc.) Petr. (3)  
*Placonemina* Petr. (1)  
*Placosphaerina* Maire (1)  
*Placotheca* Syd. (1)

*Placothyrium* Bubák (1)  
*Plasia* Sherwood (1)  
*Plectonaemella* Höhn. (1)  
*Plectopeltis* Syd. (1)  
*Plectophomopsis* Petr. (1)  
*Plectopycnis* Bat. & A.F. Vital (4)  
*Plectosira* Petr. (1)  
*Plectronidiopsis* Nag Raj (1)  
*Plectronidium* Nag Raj (4)  
*Plenocatenulis* Bat. & Cif. (1)  
*Plenophysa* Syd. & P. Syd. (1)  
*Plenotrichopsis* Bat. (1)  
*Plenotrichum* Syd. (2)  
*Plenozythia* Syd. & P. Syd. (2)  
*Pleocouturea* G. Arnaud (2)  
*Plesiospora* Drechsler (1)  
*Pleurodesmospora* Samson, W. Gams & H.C. Evans (1)  
*Pleurodiscula* Höhn. (1)  
*Pleurodomus* Petr. (1)  
*Pleuropedium* Marvanová & S.H. Iqbal (3)  
*Pleurophomopsis* Petr. (7)  
*Pleuroplaconema* Petr. (2)  
*Pleuroplacosphaeria* Syd. (1)  
*Pleurotheciopsis* B. Sutton (6)  
*Pleurothyriella* Petr. & Syd. (1)  
*Pocillopycnis* Dyko & B. Sutton (1)  
*Podoplaconema* Petr. (1)  
*Podosporiella* Ellis & Everh. (4)  
*Podosporiopsis* Jian Ma, X.G. Zhang & R.F. Castañeda (2)  
*Podosporium* Schwein. (67)  
*Poikilosperma* Bat. & J.L. Bezerra (1)  
*Polybulbophiale* Goh & K.D. Hyde (1)  
*Polychaetella* Speg. (3)  
*Polycladium* Ingold (1)  
*Polydesmus* Mont. (14)  
*Polyetron* Bat. & Peres (1)  
*Polylobatispora* Matsush. (3)  
*Polyrostrata* T.P. Devi & N. Mathur (2)  
*Polystomellomyces* Bat. (1)  
*Polystratorictus* Matsush. (2)  
*Polytretophora* Mercado (3)  
*Porocladium* Descals (1)  
*Poroisariopsis* M. Morelet (1)\*  
*Poropeltis* Henn. (1)  
*Porophilomyces* U. Braun (1)  
*Porosubramania* Hol.-Jech. (2)  
*Porrectotheca* Matsush. (1)  
*Potamomyces* K.D. Hyde (1)  
*Proboscispora* Punith. (1)  
*Protostegiomyces* Bat. & A.F. Vital (1)  
*Protostroma* Bat. (1)  
*Pseudoacrodictys* W.A. Baker & Morgan-Jones (14)

*Pseudoanguillospora* S.H. Iqbal (3)  
*Pseudoaristastoma* Suj. Singh (1)  
*Pseudoasperisporium* U. Braun (3)  
*Pseudobasidiospora* Dyko & B. Sutton (1)  
*Pseudocanalisorium* R.F. Castañeda & W.B. Kendr. (1)  
*Pseudocenangium* P. Karst. (1)  
*Pseudochuppia* Kamal, A.N. Rai & Morgan-Jones (1)  
*Pseudoclathrosphaerina* Voglmayr (2)  
*Pseudoconium* Petr. (1)  
*Pseudocytoplacosphaeria* Punith. & Spooner (1)  
*Pseudocytospora* Petr. (1)  
*Pseudodichomera* Höhn. (3)  
*Pseudodiplodia* (P. Karst.) Sacc. (45)  
*Pseudodiscula* Laubert (2)  
*Pseudofuscophialis* Sivan. & H.S. Chang (1)  
*Pseudogaster* Höhn. (1)  
*Pseudographiella* E.F. Morris (3)  
*Pseudohepatica* P.M. Jørg. (1)  
*Pseudomicrodochium* B. Sutton (8)  
*Pseudoneottiospora* Faurel & Schotter (2)  
*Pseudopatellina* Höhn. (1)  
*Pseudopeltistroma* Katum. (1)  
*Pseudoperitheca* Elenkin (1)  
*Pseudopetrakia* M.B. Ellis (2)  
*Pseudophloeospora* U. Braun (1)  
*Pseudophragmotrichum* W.P. Wu, B. Sutton & Gange (1)  
*Pseudopolystigma* Murashk. (2)  
*Pseudoramularia* Matsush. (2)  
*Pseudorhizopogon* Kobayasi (1)  
*Pseudoschizothyra* Punith. (1)  
*Pseudosigmoidea* K. Ando & N. Nakam. (2)  
*Pseudostegia* Bubák (1)  
*Pseudothyrium* Höhn. (1)  
*Pseudotorula* Subram. (3)  
*Pseudotracylla* B. Sutton & Hodges (2)  
*Pseudotrichoconis* W.A. Baker & Morgan-Jones (1)  
*Pseudozythia* Höhn. (1)  
*Psilosphaeria* Cooke (1)  
*Pteromycula* P. Cannon (1)  
*Pterulopsis* Wakef. & Hansf. (1)  
*Pterygosporopsis* P.M. Kirk (2)  
*Pucciniospora* Speg. (1)  
*Pulchromyces* Hennebert (1)  
*Pullospora* Faurel & Schotter (2)  
*Pulvinella* A.W. Ramaley (1)  
*Punctillina* Toro (1)  
*Pycmaeosphaera* Etayo & Diederich (3)  
*Pycnidioarxiella* Punith. & N.D. Sharma (1)  
*Pycnidiopeltis* Bat. & C.A.A. Costa (1)  
*Pycnis* Bref. (1)  
*Pycnodactylus* Bat., A.A. Silva & Cavalc. (1)  
*Pycnodallia* Kohlm. & Volkm.-Kohlm. (1)



*Pycnoharknessia* Matsush. (1)  
*Pycnomma* Syd. (1)  
*Pycnomoreletia* Rulamort (2)  
*Pycnoseynesia* Kuntze (1)  
*Pycnothera* N.D. Sharma & G.P. Agarwal (1)  
*Pycnothyriella* Bat. (2)  
*Pycnothyrium* Diederich (6)  
*Pyramidospora* Sv. Nilsson (9)  
*Pyrenyllum* Clem. (2)  
*Pyrgostroma* Petr. (2)  
*Pyriptomycetes* Cavalc. (1)  
*Quadracaea* Lunghini, Pinzari & Zucconi (3)  
*Quadricladium* Nawawi & Kuthub. (1)  
*Quasidiscus* B. Sutton (1)  
*Queenslandia* Bat. & H. Maia (5)  
*Quezelia* Faurel & Schotter (1)  
*Raciborskiomyces* Siemaszko (4)  
*Radiatispora* Matsush. (1)  
*Raizadenia* S.L. Srivast. (1)  
*Ramakrishnanella* Kamat & Ullasa ex Ullasa (1)  
*Ramicapitulum* Whitton, K.D. Hyde & McKenzie (1)  
*Ramicephala* Voglmayr & G. Delgado (1)  
*Ramiphialis* F.R. Barbosa, Fiúza & R.F. Castañeda (1)\*  
*Ramoconidiifera* B. Sutton, Carmarán & A.I. Romero (2)  
*Redbia* Deighton & Piroz. (5)  
*Refractohilum* D. Hawksw. (5)  
*Repetoblastiella* R.F. Castañeda, Minter & M. Stadler (1)  
*Rhabdoclema* Syd. (2)  
*Rhabdogloeopsis* Petr. (2)  
*Rhabdostromella* Höhn. (1)  
*Rhabdostromina* Died. (3)  
*Rhexoampullifera* P.M. Kirk (3)  
*Rhexoprolifer* Matsush. (1)  
*Rhinotrichella* G. Arnaud ex de Hoog (4)  
*Rhipidocephalum* Trail (2)  
*Rhizosphaerina* B. Sutton (2)  
*Rhodesia* Grove (2)  
*Rhodesiopsis* B. Sutton & R. Campb. (2)  
*Rhodothallus* Bat. & Cif. (2)  
*Rhombostilbella* Zimm. (2)  
*Rhopalocladium* Schroers, Samuels & W. Gams (1)  
*Rhynchodiplodia* Briosi & Farneti (1)  
*Rhynchomyces* Willk. (1)  
*Rhynchoseptoria* Unamuno (1)  
*Rhynchosporina* Arx (2)  
*Riclaretia* Peyronel (1)  
*Rileya* A. Funk (1)  
*Robakia* Petr. (1)  
*Rogergoosiella* A. Hern.-Gut. & J. Mena (1)  
*Roscoepoundia* Kuntze (1)  
*Rosulomyces* S. Marchand & Cabral (1)  
*Rota* Bat., Cif. & Nascim. (1)

*Ruggieria* Cif. & Montemart. (1)  
*Saania* Zhurb. (1)  
*Sadasivania* Subram. (3)  
*Sanjuanomyces* R.F. Castañeda & W.B. Kendr. (1)  
*Sarcinosporon* D.S. King & S.C. Jong (1)  
*Sarcoexcipula* Etayo (1)  
*Sarcophoma* Höhn. (3)  
*Sarophorum* Syd. & P. Syd. (1)  
*Satchmopsis* B. Sutton & Hodges (1)  
*Sativumoides* S.C. Ren, Jian Ma & X.G. Zhang (1)  
*Scaphidium* Clem. (1)  
*Sceptrifera* Deighton (1)  
*Schizothyra* Bat. & C.A.A. Costa (1)  
*Schizothyrella* Thüm. (1)  
*Schizothyropsis* Bat. & A.F. Vital (1)  
*Schizotrichum* McAlpine (1)  
*Schroeteria* G. Winter (1)  
*Schwarzmannia* Pisareva (1)  
*Scirrhophoma* Petr. (1)  
*Sclerographiopsis* Deighton (1)  
*Sclerographium* Berk. (4)  
*Scleromeris* Syd. (3)  
*Sclerophoma* Höhn. (30)  
*Scleropycnis* Syd. & P. Syd. (2)  
*Sclerozythia* Petch (1)  
*Scolecobasidiella* M.B. Ellis (2)  
*Scolecobeltrania* Iturr., R.F. Castañeda & Rob. Fernández (1)  
*Scolecodoichium* K. Matsush. & Matsush. (1)  
*Scolecosporiella* Petr. (6)  
*Scolecotheca* Söchting & B. Sutton (1)  
*Scolecozythia* Curzi (1)  
*Scoliotidium* Bat. & Cavalc. (1)  
*Scopaphoma* Dearn. & House (1)  
*Scopulariella* Gjaerum (1)  
*Scothelius* Bat., J.L. Bezerra & Cavalc. (1)  
*Scutisporus* K. Ando & Tubaki (1)  
*Scutopeltis* Bat. & H. Maia (2)  
*Scutopycnis* Bat. (2)  
*Seimatosporiopsis* B. Sutton, Ghaffer & Abbas (2)  
*Selenosira* Petr. (1)  
*Selenosporopsis* R.F. Castañeda & W.B. Kendr. (1)  
*Septocytella* Syd. (1)  
*Septogloeum* Sacc. (2)  
*Septomyxella* (Höhn.) Höhn. (1)  
*Septosporiopsis* W.A. Baker & Morgan-Jones (1)  
*Septosporium* Corda (5)  
*Septotrullula* Höhn. (2)  
*Sessiliospora* D. Hawksw. (1)  
*Setolibertella* Punith. & Spooner (1)  
*Setophiale* Matsush. (1)  
*Setosporella* Mustafa & Abdul-Wahid (1)  
*Seychellomyces* Matsush. (1)

*Seynesiopsis* Henn. (1)  
*Shawiella* Hansf. (1)  
*Sheariella* Petr. (1)  
*Sheathnema* Dubey & Moonambeth (2)  
*Shivomyces* Hosag. (2)  
*Siamia* V. Robert, Decock & R.F. Castañeda (1)  
*Sigmatomyces* Sacc. & P. Syd. (1)  
*Similitrichoconis* R.F. Castañeda, M. Vera & D. Sosa (1)\*  
*Simmonsella* J.L. Crane & A.N. Mill. (1)  
*Sirexipula* Bubák (1)  
*Sirocyphis* Clem. (1)  
*Sirogloea* Petr. (1)  
*Siroligniella* Naumov (1)  
*Sirophoma* Höhn. (3)  
*Siroplacodium* Petr. (6)  
*Siropleura* Petr. (1)  
*Siroscyphellina* Petr. (2)  
*Sirosperma* Syd. & P. Syd. (2)  
*Sirosphaera* Syd. & P. Syd. (2)  
*Sirosporaemella* Naumov (1)  
*Sirothecium* P. Karst. (3)  
*Sirothyriella* Höhn. (2)  
*Sirothyrium* Syd. & P. Syd. (1)  
*Sirozythia* Höhn. (2)  
*Sirozythiella* Höhn. (1)  
*Sitochora* H.B.P. Upadhyay (1)  
*Slimacomycetes* Minter (2)  
*Soloacrospora* W.B. Kendr. & R.F. Castañeda (2)  
*Solosympodiella* Matsush. (8)  
*Solotermiospora* Matsush. (1)  
*Spermatoloncha* Speg. (1)  
*Spermochaetella* Cif. (1)  
*Spermosporella* Deighton (4)  
*Sphaeridium* Fresen. (5)  
*Sphaeriodium* Bubák (1)  
*Sphaeriodium* Bubák (2)  
*Sphaeromma* H.B.P. Upadhyay (2)  
*Sphaeromaema* Fr. (50)  
*Sphaerophoma* Petr. (2)  
*Sphaerulomyces* Marvanová (1)  
*Spinulosporella* Deighton (1)  
*Spiralum* J.L. Mulder (2)  
*Spiropes* Cif. (ca. 40)  
*Splanchochlopora* Lar.N. Vassiljeva (1)  
*Spondylocyadiella* Linder (2)  
*Spondylocyadiopsis* M.B. Ellis (2)  
*Sporhaplus* H.B.P. Upadhyay (1)  
*Sporidesmiopsis* Subram. & Bhat (6)  
*Sporoglena* Sacc. (1)  
*Sporophiala* P. Rag. Rao (3)  
*Sporotretophora* Whitton, McKenzie & K.D. Hyde (1)

*Stachybotryella* Ellis & Barthol. (3)  
*Stachybotryna* Tubaki & T. Yokoy. (6)  
*Stagonopatella* Petr. (1)  
*Stagonopsis* Sacc. (4)  
*Stagonosporina* Tassi (1)  
*Stagonostromella* Petr. & Syd. (1)  
*Staheliella* Emden (2)  
*Stalagmochaetia* Cif. & Bat. (2)  
*Stanhughesiella* R.F. Castañeda & D.W. Li (1)  
*Stauronema* (Sacc.) Syd., P. Syd. & E.J. Butler (5)  
*Stauronematopsis* Abbas, B. Sutton & Ghaffar (1)  
*Staurophoma* Höhn. (1)  
*Stegonsporiopsis* Van Warmelo & B. Sutton (1)  
*Stellifraga* Alstrup & Olech (1)  
*Stellomyces* Morgan-Jones, R.C. Sinclair & Eicker (2)  
*Stellopeltis* Bat. & A.F. Vital (2)  
*Stellospora* Alcorn & B. Sutton (2)  
*Stellothyriella* Bat. & Cif. (2)  
*Stenocephalopsis* Chamuris & C.J.K. Wang (1)  
*Stenocladiella* Marvanová & Descals (1)  
*Stenospora* Deighton (1)  
*Stephembruneria* R.F. Castañeda (1)  
*Stevensonula* Petr. (1)  
*Stictopatella* Höhn. (1)  
*Stigmatellina* Bat. & H. Maia (1)  
*Stigmaea* Fr. (1)  
*Stigmella* Lév. (28)  
*Stigmopeltis* Syd. (2)  
*Stilbellula* Boedijn (1)  
*Stilbodendron* Syd. & P. Syd. (1)  
*Stilbophoma* Petr. (1)  
*Strasseriopsis* B. Sutton & Tak. Kobay. (1)  
*Stratiphoromyces* Goh & K.D. Hyde (2)  
*Striosphaeropsis* Verkley & Aa (1)  
*Stromatocrea* W.B. Cooke (1)  
*Stromatopogon* Zahlbr. (3)  
*Stromatopycnis* A.F. Vital (1)  
*Stromatostysanus* Höhn. (3)  
*Strongylothallus* Bat. & Cif. (1)  
*Stygiomyces* Coppins & S.Y. Kondr. (1)  
*Stylaspergillus* B. Sutton, Alcorn & P.J. Fisher (1)  
*Subhysteropycnis* Wedin & Hafellner (1)  
*Subicularium* M.L. Farr & Goos (1)  
*Subulispora* Tubaki (8)  
*Suttoniella* S. Ahmad (3)  
*Suttonina* H.C. Evans (1)  
*Syamithabeeja* Subram. & Natarajan (1)  
*Sylviacollaea* Cif. (1)  
*Symphysos* Bat. & Cavalc. (1)  
*Sympodiocladium* Descals (1)  
*Sympodioclathra* Voglmayr (1)  
*Sympodioplanus* R.C. Sinclair & Boshoff (3)

*Sympodiosynnema* J.W. Xia & X.G. Zhang (1)  
*Synchronoblastia* Uecker & F.L. Caruso (1)  
*Syncladium* Rabenh. (1)  
*Synnemacrodictys* W.A. Baker & Morgan-Jones (1)  
*Synnemaseimatoides* K. Matsush. & Matsush. (1)  
*Synnematomyces* Kobayasi (1)  
*Synostomina* Petr. (1)  
*Syphosphaera* Dumort. (1)  
*Systremmopsis* Petr. (1)  
*Taeniolina* M.B. Ellis (6)  
*Talekpea* Lunghini & Rambelli (1)  
*Talpapellis* Alstrup & M.S. Cole (5)  
*Tandonea* M.D. Mehrotra (1)  
*Tarsodisporus* Bat. & A.A. Silva (1)  
*Tectacervulus* A.W. Ramaley (1)  
*Telioclipeum* Viégas (1)  
*Temerariomyces* B. Sutton (1)  
*Teratosperma* Syd. & P. Syd. (11)  
*Teratospermopsis* Jian Ma, X.G. Zhang & R.F. Castañeda (1)\*  
*Termitaria* Thaxt. (6)  
*Tetrabrachium* Nawawi & Kuthub. (1)  
*Tetrabrunneospora* Dyko (1)  
*Tetracoccosporium* Szabó (4)  
*Tetranacriella* Kohlm. & Volkm.-Kohlm. (1)  
*Tetranacrium* H.J. Huds. & B. Sutton (1)  
*Tetraposporium* S. Hughes (2)  
*Textotheca* Matsush. (1)  
*Thaptospora* B. Sutton & Pascoe (3)  
*Thirumalacharia* Rathaiah (1)  
*Tholomyces* Matsush. (1)  
*Thoracella* Oudem. (1)  
*Thrinacospora* Petr. (1)  
*Thyriostromella* Bat. & C.A.A. Costa (1)  
*Thyrostromella* Höhn. (3)  
*Thyrsidiella* Höhn. ex Höhn. (2)  
*Thyrsidina* Höhn. (1)  
*Tiarosporellivora* Punith. (1)  
*Ticogloea* G. Weber, Spaaij & W. Gams (2)  
*Ticosynnema* R.F. Castañeda, Granados & Mardones (1)  
*Titaea* Sacc. (23)  
*Titaeopsis* B. Sutton & Deighton (1)  
*Titaeospora* Bubák (2)  
*Tomenticola* Deighton (1)  
*Tompetchia* Subram. (1)  
*Toxosporiella* B. Sutton (1)  
*Toxosporiopsis* B. Sutton & Sellar (1)  
*Toxosporium* Vuill. (2)  
*Trematophoma* Petr. (2)  
*Tremellidium* Petr. (1)  
*Tretendophragmia* Subram. (1)  
*Tretocephala* Subram. (1)  
*Tretolylea* Cantillo, R.F. Castañeda & Gusmão (1)

*Tretospeira* Piroz. (1)  
*Tretovularia* Deighton (1)  
*Tribolospira* D.A. Reid (1)  
*Tricellula* Beverw. (8)  
*Trichobolbus* Bat. (1)  
*Trichobotrys* Penz. & Sacc. (4)  
*Trichoconis* Clem. (21)  
*Trichodiscula* Vouaux (1)  
*Trichodochium* Syd. (3)  
*Trichomatoclava* G.F. Sepúlveda, Pereira-Carv. & Dianese (1)  
*Trichomatomyces* Dorn.-Silva & Dianese (1)  
*Trichomatosphaera* Pereira-Carv., G.F. Sepúlveda & Dianese (1)  
*Trichopeltulum* Speg. (1)  
*Trichoseptoria* Cavara (2)  
*Trichosporiella* Kamyschko (4)  
*Trichosporodochium* Dorn.-Silva & Dianese (1)  
*Trichotheca* P. Karst. (1)  
*Tricladiella* K. Ando & Tubaki (1)  
*Tricladiopsis* Descals (2)  
*Tricladiospora* Nawawi & Kuthub. (3)  
*Tricornispora* Bonar (1)  
*Trifurcospora* K. Ando & Tubaki (2)  
*Trigonosporium* Tassi (2)  
*Tripoconidium* Subram. (1)  
*Triposporina* Höhn. (2)  
*Triramulispora* Matsush. (3)  
*Triscelophorus* Ingold (8)  
*Triscelosporium* Nawawi & Kuthub. (1)  
*Trisulcosporium* H.J. Huds. & B. Sutton (1)  
*Tromeropsis* Sherwood (1)  
*Troposporium* Harkn. (1)  
*Troposporopsis* Whitton, McKenzie & K.D. Hyde (2)  
*Tryblidiopycnis* Höhn. (1)  
*Tryssglobulus* B. Sutton & Pascoe (1)  
*Tuberculispora* Deighton & Piroz. (1)  
*Tulipispora* Révay & Gönczöl (1)\*  
*Tunicago* B. Sutton & Pollack (2)  
*Turturconchata* J.L. Chen, T.L. Huang & Tzean (2)  
*Tympanosporium* W. Gams (1)  
*Uberispora* Piroz. & Hodges (4)  
*Ubrizsya* Negru (1)  
*Ulocoryphus* Michaelides, L. Hunter & W.B. Kendr. (1)  
*Umbellidion* B. Sutton & Hodges (1)  
*Uniseta* Ciccar. (1)  
*Urohendersonia* Speg. (5)  
*Urohendersoniella* Petr. (1)  
*Uvarispora* Goos & Piroz. (1)  
*Vagnia* D. Hawksw. & Miądl. (1)  
*Vanakripa* Bhat, W.B. Kendr. & Nag Raj (9)  
*Vanbeverwijkia* Agnihothr. (1)  
*Vanderystiella* Henn. (1)  
*Vanterpoolia* A. Funk (1)

*Varioseptispora* L. Qiu, Jian Ma, R.F. Castañeda & X.G. Zhang (4)\*  
*Vasudevella* Chona, Munjal & Bajaj (1)  
*Velloziomyces* Armando, Z.M. Chaves & Dianese (1)  
*Velutipila* D. Hawksw. (1)  
*Ventrographium* H.P. Upadhyay, Cavalc. & A.A. Silva (1)  
*Venustocephala* Matsush. (2)  
*Venustosynnema* R.F. Castañeda & W.B. Kendr. (3)  
*Veracruzomyces* Mercado, Guarro, Heredia & J. Mena (1)  
*Veramycella* G. Delgado (1)  
*Veramyces* Matsush. (1)  
*Verdipulvinus* A.W. Ramaley (1)  
*Veronaella* Subram. & K.R.C. Reddy (1)  
*Veronidia* Negru (1)  
*Verrucariella* S. Ahmad (1)  
*Verrucophragmia* Crous, M.J. Wingf. & W.B. Kendr. (1)  
*Verticicladius* Matsush. (3)  
*Vesicladiella* Crous & M.J. Wingf. (1)  
*Vesiculohyphomyces* Armando, Pereira-Carv. & Dianese (1)  
*Vestigium* Piroz. & Shoemaker (2)  
*Virgariella* S. Hughes (11)  
*Viridiannula* Etayo (1)  
*Vittalia* Gaws & Bhat (1)  
*Vizellopsidites* M.A. Khan, M. Bera & Bera (1)  
*Vouauxiella* Petr. & Syd. (3)  
*Waihonghopes* Yanna & K.D. Hyde (1)  
*Wardinella* Bat. & Peres (1)  
*Websteromyces* W.A. Baker & Partr. (2)  
*Weufia* Bhat & B. Sutton (1)  
*Wolkia* Ramsb. (1)  
*Xenidiocercus* Nag Raj (1)  
*Xenochora* Petr. (1)  
*Xenodomus* Petr. (1)  
*Xenoheteroconium* Bhat, W.B. Kendr. & Nag Raj (1)  
*Xenokylindria* DiCosmo, S.M. Berch & W.B. Kendr. (2)  
*Xenomyxa* Syd. (1)  
*Xenopeltis* Syd. & P. Syd. (1)  
*Xenoplaca* Petr. (1)  
*Xenostroma* Höhn. (1)  
*Xeroconium* D. Hawksw. (1)  
*Xiphomyces* Syd. & P. Syd. (2)  
*Xiuguozhangia* K. Zhang, R.F. Castañeda, Jian Ma & L.G. Ma (5)  
*Xylochia* B. Sutton (2)  
*Xyloglyphis* Clem. (1)  
*Xylohypha* (Fr.) E.W. Mason (6)  
*Xylohyphopsis* W.A. Baker & Partr. (3)  
*Yalomyces* Nag Raj (6)  
*Yinmingella* Goh, C.K.M. Tsui & K.D. Hyde (1)  
*Ypsilomyces* D.A.C. Almeida & Gusmão (1)  
*Yuccamyces* Gour, Dyko & B. Sutton (6)  
*Zakatoshia* B. Sutton (2)  
*Zebrospora* McKenzie (1)  
*Zelandiocoela* Nag Raj (1)

*Zelodactylaria* A.C. Cruz, Gusmão & R.F. Castañeda (1)  
*Zelopelta* B. Sutton & R.D. Gaur (1)  
*Zelosatchmopsis* Nag Raj (1)  
*Zetesimomyces* Nag Raj (1)  
*Zevadia* J.C. David & D. Hawksw. (1)  
*Zilingia* Petr. (1)  
*Zinzipegasa* Nag Raj (1)  
*Zopheromyces* B. Sutton & Hodges (1)  
*Zunura* Nag Raj (1)  
*Zythia* Fr. (1)  
*Zyxiphora* B. Sutton (1)

**BASIDIOMYCOTA** Doweld

**Basidiobolomycetes** Doweld

**Basidiobolales** Jacz. & P.A. Jacz.

**Basidiobolaceae** Engl. & E. Gilg

*Basidiobolus* Eidam (10)

*Schizangiella* J. Dwyer, B. Burwell, Humber, C. Mcleod, M. Fleetwood & T. Johnson bis (1)

**BASIDIOMYCOTA** R.T. Moore

**Subphylum Agaricomycotina** Doweld

**Agaricomycetes** Doweld

**Agaricales** Underw.

**Agaricaceae** Chevall.

*Abstoma* G. Cunn. (8)

*Acutocapillitium* P. Ponce de León (3)

*Agaricus* L. (ca. 500)

*Arachnion* Schwein. (13)

*Barcheria* T. Lebel (1)

*Battarrea* Pers. (3)

*Battarreoides* T. Herrera (1)

*Calvatiopsis* Hollós (1)

*Chamaemyces* Battarra ex Earle (2)

*Chlamydopus* Speg. (1)

*Chlorolepiota* Sathe & S.D. Deshp. (3)

*Chlorophyllum* Masee (19)

*Clarkeinda* Kuntze (5)

*Clavogaster* Henn. (2)

*Coniolepiota* Vellinga (1)

*Coprinus* Pers. (ca. 17)

*Crucispora* E. Horak (2)

*Cystolepiota* Singer (ca. 12)

*Dictyocephalos* L.M. Underwood ex V.S. White (1)

*Disciseda* Czern. (15)

*Echinoderma* (Locq. ex Bon) Bon (ca. 15)

*Endolepiotula* Singer (1)

*Eriocybe* Vellinga (1)

*Gasterellopsis* Routien (1)

*Glyptoderma* R. Heim & Perr.-Bertr. (1)

*Heinemannomyces* Watling (2)

*Hiatulopsis* Singer & Grinling (2)

*Holocotylon* Lloyd (3)



*Hymenagaricus* Heinem. (20)  
*Janauaria* Singer (1)  
*Japonogaster* Kobayasi (1)  
*Lepiota* (Pers.) Gray (ca. 450)  
*Leucoagaricus* Locq. ex Singer (ca. 135)  
*Leucocoprinus* Pat. (ca. 50)  
*Lycoperdopsis* Henn. (1)  
*Macrolepiota* Singer (ca. 40)  
*Melanophyllum* Velen. (3)  
*Metrodia* Raithelh. (2)  
*Micropsalliota* Höhn. (ca. 70)  
*Montagnea* Fr. (5)  
*Mycenastrum* Desv. (18)  
*Neosecotium* Singer & A.H. Sm. (2)  
*Panaeolopsis* Singer (4)  
*Phellorinia* Berk. (1)  
*Phyllogaster* Pegler (1)  
*Podaxis* Desv. (10)  
*Pseudoauricularia* Kobayasi (1)  
*Pseudolepiota* Z.W. Ge (1)  
*Queletia* Fr. (2)  
*Rugosospora* Heinem. (2)  
*Schinzinia* Fayod (1)  
*Schizostoma* Ehrenb. ex Lév. (1)  
*Singerina* Sathe & S.D. Deshp. (1)  
*Smithiogaster* J.E. Wright (1)  
*Smithiomyces* Singer (3)  
*Termiticola* E. Horak (1)  
*Tulostoma* Pers. (ca. 83)  
*Xanthagaricus* (Heinem.) Little Flower, Hosag. & T.K. Abraham (12)  
*Xerocoprinus* Maire (1)

***Amanitaceae*** E.-J. Gilbert

*Amanita* Pers. (ca. 570)  
*Catatrama* Franco-Mol. (2)  
*Limacella* Earle (ca. 15)  
*Limacellopsis* Zhu L. Yang, Q. Cai & Y.Y. Cui (2)  
*Zhuliangomyces* Redhead (5)

***Biannulariaceae*** Jülich

*Anupama* K.N.A. Raj, K.P.D. Latha & Manim. (1)\*  
*Callistosporium* Singer (14)  
*Catathelasma* Lovejoy (4)  
*Guyanagarika* Sánchez-García, T.W. Henkel & Aime (3)  
*Macrocybe* Pegler & Lodge (7)  
*Pleurocollybia* Singer (6)  
*Pseudolaccaria* Vizzini, Contu & Z.W. Ge (1)

***Bolbitiaceae*** Singer

*Agrogaster* D.A. Reid (1)  
*Bolbitius* Fr. (ca. 70)  
*Conocybe* Fayod (ca. 221)

*Cyttarophylloopsis* R. Heim (1)  
*Descolea* Singer (ca. 15)  
*Galerella* Earle (8)  
*Galeropsis* Velen. (9)  
*Gymnoglossum* Massee (1)  
*Pholiotina* Fayod (56)  
*Ptychella* Roze & Boud. (1)  
*Rhodoarrhenia* Singer (8)  
*Tubariella* E. Horak & Hauskn. (1)  
*Tubariopsis* R. Heim (1)  
*Tympanella* E. Horak (1)  
*Wielandomyces* Raithelh. (1)

***Broomeiaceae*** Zeller  
*Broomeia* Berk. (2)

***Callistosporiaceae*** Vizzini, Consiglio, M. Marchetti & P. Alvarado  
*Xerophorus* (Bon) Vizzini, Consiglio & M. Marchetti (3)

***Chromocyphellaceae*** Knudsen  
*Chromocyphella* De Toni & Levi (5)

***Clavariaceae*** Chevall.  
*Camarophylloopsis* Herink (26)  
*Clavaria* Vaill. ex L. (32)  
*Clavicornia* Doty (10)  
*Clavulinopsis* Overeem (34)  
*Hirticlavula* J.H. Petersen & Læssøe (1)  
*Hodophilus* R. Heim (13)  
*Hyphodontiella* Å. Strid (2)  
*Lamelloclavaria* Birkebak & Adamčík (1)  
*Ramariopsis* (Donk) Corner (48)  
*Setigeroclavula* R.H. Petersen (1)

***Cortinariaceae*** R. Heim ex Pouzar  
*Cortinarius* (Pers.) Gray (ca. 2250)  
*Protoglossum* Massee (8)  
*Pyrrhoglossum* Singer (12)  
*Quadrispora* Bougher & Castellano (3)  
*Stephanopus* M.M. Moser & E. Horak (5)

***Crassisporiaceae*** Vizzini, Consiglio & M. Marchetti  
*Crassisporium* Matheny, P.-A. Moreau & Vizzini (3)  
*Romagnesiella* Contu, Matheny, P.-A. Moreau, Vizzini & A. de Haan (2)

***Crepidotaceae*** (S. Imai) Singer  
*Crepidotus* (Fr.) Staude (ca. 200)  
*Episphaeria* Donk (1)  
*Nanstelocephala* Oberw. & R.H. Petersen (1)  
*Pellidiscus* Donk (3)  
*Pleuroflammula* Singer (10)  
*Simocybe* P. Karst. (26)

**Cyphellaceae** Lotsy

- Asterocyphella* W.B. Cooke (3)  
*Campanophyllum* Cifuentes & R.H. Petersen (1)  
*Catilla* Pat. (1)  
*Cheimonophyllum* Singer (4)  
*Chondrostereum* Pouzar (4)  
*Cunninghammyces* Stalpers (2)  
*Cyphella* Fr. (2)  
*Gloeocorticiu*m Hjortstam & Ryvarde

**Cystostereaceae** Jülich

- Cericium* Hjortstam (1)  
*Crustomyces* Jülich (3)  
*Cystidiodontia* Hjortstam (2)  
*Cystostereum* Pouzar (7)  
*Parvobasidium* Jülich (3)  
*Parvodontia* Hjortstam & Ryvarde

**Entolomataceae** Kotl. & Pouzar

- Calliderma* (Romagn.) Largent (7)\*  
*Clitocella* Kluting, T.J. Baroni & Bergemann (6)  
*Clitopilopsis* Maire (2)  
*Clitopilus* (Fr. ex Rabenh.) P. Kumm. (ca. 140)  
*Entocybe* T.J. Baroni, V. Hofst. & Largent (10)  
*Entoloma* P. Kumm. (ca. 1800)  
*Rhodocybe* Maire (ca. 50)  
*Rhodophana* Kühner (7)

**Hemigasteraceae** Gäum. & C.W. Dodge

- Hemigaster* Juel (1)

**Hydnangiaceae** Gäum. & C.W. Dodge

- Hydnangium* Wallr. (ca. 20)  
*Laccaria* Berk. & Broome (ca. 85)  
*Maccagnia* Mattir. (1)  
*Podohyd*ngium G.W. Beaton, Pegler & T.W.K. Young (1)

**Hygrophoraceae** Lotsy

- Acantholichen* P.M. Jørg. (6)  
*Aeruginospora* Höhn. (2)  
*Ampulloclitocybe* Redhead, Lutzoni, Moncalvo & Vilgalys (3)  
*Aphroditeola* Redhead & Manfr. Binder (1)  
*Arrhenia* Fr. (ca. 36)

*Cantharocybe* H.E. Bigelow & A.H. Sm. (3)  
*Chromosera* Redhead, Ammirati & Norvell (5)  
*Chrysomphalina* Clémenton (4)  
*Cora* Fr. (189)  
*Corella* Vain. (2)  
*Cuphophyllus* (Donk) Bon (ca. 25)  
*Cyphellostereum* D.A. Reid (9)  
*Dictyonema* C. Agardh ex Kunth (28)  
*Eonema* Redhead, Lücking & Lawrey (1)  
*Gliophorus* Herink (ca. 17)  
*Haasiella* Kotl. & Pouzar (2)  
*Humidicutis* (Singer) Singer (12)  
*Hygroaster* Singer (3)  
*Hygrocybe* (Fr.) P. Kumm. (ca. 120)  
*Hygrophorus* Fr. (ca. 200)  
*Lichenomphalia* Redhead, Lutzoni, Moncalvo & Vilgalys (14)  
*Neohygrocybe* Herink (5)  
*Porpolomopsis* Bresinsky (5)  
*Pseudoarmillariella* Singer (3)  
*Semiomphalina* Redhead (1)  
*Sinohygrocybe* C.Q. Wang, Ming Zhang & T.H. Li (1)  
*Spodocybe* Z.M. He & Zhu L. Yang (6)\*

***Hymenogastraceae* Vittad.**

*Anamika* K.A. Thomas, Peintner, M.M. Moser & Manim. (3)  
*Flammula* (Fr.) P. Kumm. (ca. 10)  
*Galerina* Earle (ca. 250)  
*Gymnopilus* P. Karst. (ca. 200)  
*Hebeloma* (Fr.) P. Kumm. (ca. 190)  
*Hymenogaster* Vittad. (ca. 170)  
*Naucoria* (Fr.) P. Kumm. (30)  
*Phaeocollybia* R. Heim (ca. 80)  
*Psathyroma* Soop, J.A. Cooper & Dima (2)  
*Psilocybe* (Fr.) P. Kumm. (ca. 326)

***Inocybaceae* Jülich**

*Auritella* Matheny & Bougher (8)  
*Inocybe* (Fr.) Fr. (ca. 1000)  
*Inosperma* (Kühner) Matheny & Esteve-Rav. (71)  
*Mallocybe* (Kuyper) Matheny, Vizzini & Esteve-Rav. (62)  
*Nothocybe* Matheny & K.P.D. Latha (1)  
*Pseudosperma* Matheny & Esteve-Rav. (93)  
*Tubariomyces* Esteve-Rav. & Matheny (3)

***Limnoperdaceae* G.A. Escobar**

*Limnoperdon* G.A. Escobar (1)

***Lycoperdaceae* Chevall.**

*Apioperdon* (Kreisel & D. Krüger) Vizzini (1)  
*Bovista* Pers. *Bryoperdon* Vizzini (ca. 58)  
*Calbovista* Morse ex M.T. Seidl (1)  
*Calvatia* Fr. (ca. 43)

*Gastropila* Homrich & J.E. Wright (4)  
*Lycoperdon* Pers. (ca. 55)  
*Morganella* Zeller (7)

***Lyophyllaceae* Jülich**

*Asterophora* Ditmar (3)  
*Blastosporella* T.J. Baroni & Franco-Mol. (1)  
*Calocybe* Kühner ex Donk (46)  
*Calocybella* Vizzini, Consiglio & Setti (4)  
*Clitolyophyllum* Sesli, Vizzini & Contu (1)  
*Gerhardtia* Bon (ca. 10)  
*Hypsizygus* Singer (3)  
*Lyophyllopsis* Sathe & J.T. Daniel (1)  
*Lyophyllum* P. Karst. (ca. 60)  
*Myochromella* V. Hofst., Cléménçon, Moncalvo & Redhead (2)  
*Ossicaulis* Redhead & Ginns (4)  
*Rugosomyces* Raithelh. (ca. 12)  
*Sagaranella* V. Hofst., Cléménçon, Moncalvo & Redhead (4)  
*Sphagnurus* Redhead & V. Hofst. (1)  
*Tephrocybe* Donk (ca. 47)  
*Tephrocybella* Picillo, Vizzini & Contu (1)  
*Termitomyces* R. Heim (ca. 34)  
*Tricholomella* Zerova ex Kalamees (1)  
*Tricholyophyllum* Qing Cai, G. Kost & Zhu L. Yang (1)\*

***Macrocytidiaceae* Kühner**

*Macrocytidia* Joss. (5)  
***Marasmiaceae* Roze ex Kühner**  
*Amyloflagellula* Singer (4)  
*Brunneocorticium* Sheng H. Wu (1)  
*Campanella* Henn. (ca. 39)  
*Chaetocalathus* Singer (ca. 20)  
*Crinipellis* Pat. (ca. 65)  
*Hymenogloea* Pat. (1)  
*Marasmius* Fr. (ca. 600)  
*Moniliophthora* H.C. Evans, Stalpers, Samson & Benny (7)  
*Neocampanella* Nakasone, Hibbett & Goranova (1)  
*Tetrapyrgos* E. Horak (18)

***Mycenaceae* Overeem**

*Atheniella* Redhead, Moncalvo, Vilgalys, Desjardin & B.A. Perry (7)  
*Cruentomyцена* R.H. Petersen, Kovalenko & O.V. Morozova (3)  
*Decapitatus* Redhead & Seifert (1)  
*Favolaschia* (Pat.) Pat. (ca. 54)  
*Flabellimycena* Redhead (1)  
*Heimiomyces* Singer (ca. 7)  
*Hemimycena* Singer (ca. 60)  
*Hydropus* Kühner ex Singer (ca. 100)  
*Mycena* (Pers.) Roussel (ca. 600)  
*Mycopan* Redhead, Moncalvo & Vilgalys (1)  
*Panellus* P. Karst. (ca. 55)  
*Resinomyцена* Redhead & Singer (ca. 10)  
*Roridomyces* Rexer (9)

*Tectella* Earle (3)  
*Xeromphalina* Kühner & Maire (ca. 32)

***Mythicomycetaceae*** Vizzini, Consiglio & M. Marchetti  
*Mythicomycetes* Redhead & A.H. Sm. (1)  
*Stagnicola* Redhead & A.H. Sm. (1)

***Niaceae*** Jülich  
*Digitatispora* Doguet (2)  
*Flagelloscypha* Donk (ca. 25)  
*Halocyphina* Kohlm. & E. Kohlm. (1)  
*Lachnella* Fr. (6)  
*Maireina* W.B. Cooke (ca. 18)  
*Merismodes* Earle (20)  
*Nia* R.T. Moore & Meyers (3)  
*Peyronelina* P.J. Fisher, J. Webster & D.F. Kane (1)  
*Woldmaria* W.B. Cooke (1)

***Omphalotaceae*** Bresinsky  
*Anthracophyllum* Ces. (12)  
*Caripia* Kuntze (1)  
*Connopus* R.H. Petersen (1)  
*Gymnopanella* Sand.-Leiva, J.V. McDonald & Thorn (1)  
*Gymnopus* (Pers.) Gray (ca. 325)  
*Hymenoporus* Tkalčec, Mešić & Chun Y. Deng (1)  
*Lentinula* Earle (8)  
*Marasmiellus* Murrill (ca. 260)  
*Mycetinis* Earle (15)  
*Neonothopanus* R.H. Petersen & Krisai (4)  
*Omphalotus* Fayod (6)  
*Paragymnopus* J.S. Oliveira (6)  
*Paramycetinis* R.H. Petersen (2)\*  
*Pseudomarasmius* R.H. Petersen & K.W. Hughes (8)\*  
*Pusillomyces* J.S. Oliveira (3)  
*Rhodocollybia* Singer (ca. 35)

***Phyllotopsidaceae*** Locquin ex Olariaga, Huhtinen, Læssøe, J.H. Petersen & K. Hansen\*  
*Macrotyphula* R.H. Petersen (6)  
*Phyllotopsis* E.-J. Gilbert & Donk ex Singer (5)  
*Pleurocybella* Singer (5)

***Physalacriaceae*** Corner  
*Anastrophella* E. Horak & Desjardin (3)  
*Armillaria* (Fr.) Staude (39)  
*Cibaomyces* Zhu L. Yang, Y.J. Hao & J. Qin (1)  
*Cribbea* A.H. Sm. & D.A. Reid (5)  
*Cryptomarasmius* T.S. Jenkinson & Desjardin (15)  
*Cylindrobasidium* Jülich (7)  
*Cyptotrama* Singer (16)  
*Dactylosporina* (Cléménçon) Dörfelt (5)  
*Desarmillaria* (Herink) R. A. Koch & Aime (2)  
*Epicnaphus* Singer (2)

*Flammulina* P. Karst. (14)  
*Gloiocephala* Massee (ca. 40)  
*Guyanagaster* T.W. Henkel, M.E. Sm. & Aime (2)  
*Hymenopellis* R.H. Petersen (ca. 50)  
*Laccariopsis* Vizzini (1)  
*Manuripia* Singer (1)  
*Mucidula* Pat. (2)  
*Mycaureola* Maire & Chemin (1)  
*Naiadolina* Redhead, Labbé & Ginns (1)  
*Oudemansiella* Speg. (ca. 20)  
*Paraxerula* R.H. Petersen (4)  
*Physalacria* Peck (33)  
*Ponticulomyces* R.H. Petersen (2)  
*Protoxerula* R.H. Petersen (1)  
*Rhizomarasmus* R.H. Petersen (5)  
*Rhodotus* Maire (2)  
*Strobilurus* Singer (10)  
*Xerula* Maire (ca. 17)

***Pleurotaceae* Kühner**

*Agaricochaete* Eichelb. (4)  
*Hohenbuehelia* Schulzer (ca. 50)  
*Lignomyces* R.H. Petersen & Zmitr. (1)  
*Pleurotus* (Fr.) P. Kumm. (25)  
*Resupinatus* Nees ex Gray (33)

***Pluteaceae* Kotl. & Pouzar**

*Pluteus* Fr. (ca. 500)  
*Volvariella* Speg. (ca. 50)  
*Volvopluteus* Vizzini, Contu & Justo (4)

***Porotheleaceae* Murrill**

*Phloeomana* Redhead (6)  
*Porotheleum* Fr. (ca. 16)  
*Pulverulina* Matheny & K.W. Hughes (1)\*

***Psathyrellaceae* Vilgalys, Moncalvo & Redhead**

*Britzelmayria* D. Wächt. & A. Melzer (2)\*  
*Candolleomyces* D. Wächt. & A. Melzer (ca. 30)\*  
*Coprinellus* P. Karst. (70)  
*Coprinopsis* P. Karst. (ca. 150)  
*Cystoagaricus* Singer (7)  
*Gasteroagaricoides* D.A. Reid (1)  
*Hausknechtia* D. Wächt. & A. Melzer (1)\*  
*Heteropsathyrella* T. Bau & J.Q. Yan (1)\*  
*Homophron* (Britzelm.) Örstadius & E. Larss. (3)  
*Hormographiella* Guarro & Gené (3)  
*Kauffmania* Örstadius & E. Larss. (1)  
*Lacrymaria* Pat. (14)  
*Macrometrula* Donk & Singer (1)  
*Narcissea* D. Wächt. & A. Melzer (2)\*  
*Olotia* D. Wächt. & A. Melzer (1)\*

*Parasola* Redhead, Vilgalys & Hopple (ca. 27)  
*Psathyrella* (Fr.) Quél. (ca. 420)  
*Punjabia* D. Wächt. & A. Melzer (1)\*  
*Rhacophyllus* Berk. & Broome (1)  
*Tulosesus* D. Wächt. & A. Melzer (ca. 40)\*  
*Typhrasa* Örstadius & E. Larss. (2)

***Pseudoclitocybaceae*** Vizzini, Consiglio, P.-A. Moreau & P. Alvarado  
*Bonomyces* Vizzini (3)  
*Cleistocybe* Ammirati, A.D. Parker & Matheny (5)  
*Clitopaxillus* G. Moreno, Vizzini, Consiglio & P. Alvarado (2)  
*Harmajaea* Dima, P. Alvarado & Kekki (3)  
*Musumecia* Vizzini & Contu (4)  
*Pogonoloma* (Singer) Sánchez-García (3)  
*Pseudoclitocybe* (Singer) Singer (16)

***Pterulaceae*** Corner  
*Actiniceps* Berk. & Broome (6)  
*Allantula* Corner (1)  
*Chaetotrophula* Corner (7)  
*Coronicium* J. Erikss. & Ryvarden (5)  
*Deflexula* Corner (ca. 11)  
*Lepidomyces* Jülich (2)  
*Merulicium* J. Erikss. & Ryvarden (1)  
*Myrmecopterula* Leal-Dutra, Dentinger & G.W. Griff. (3)\*  
*Parapterulicium* Corner (3)  
*Pterula* Fr. (ca. 50)  
*Pterulicium* Corner (1)  
*Radulotubus* Y.C. Dai, S.H. He & C.L. Zhao (1)

***Radulomycetaceae*** Leal-Dutra, Dentinger & G.W. Griff.  
*Aphanobasidium* Jülich (17)  
*Radulomyces* M.P. Christ. (10)

***Sarcomyaceae*** Olariaga, Huhtinen, Læssøe, J.H. Petersen & K. Hansen\*  
*Sarcomyxa* P. Karst. (2)

***Schizophyllaceae*** Quél.  
*Auriculariopsis* Maire (3)  
*Porodisculus* Murrill (2)  
*Schizophyllum* Fr. (6)

***Stephanosporaceae*** Oberw. & E. Horak  
*Athelidium* Oberw. (3)  
*Cristinia* Parmasto (10)  
*Lindtneria* Pilát (10)  
*Mayamontana* Castellano, Trappe & Lodge (1)  
*Stephanospora* Pat. (6)

***Strophariaceae*** Singer & A.H. Sm.  
*Agrocybe* Fayod (ca. 100)  
*Bogbodia* Redhead (1)



*Brauniella* Rick ex Singer (1)  
*Deconica* (W.G. Sm.) P. Karst. (44)  
*Hypholoma* (Fr.) P. Kumm. (ca. 45)  
*Leratiomyces* Bresinsky & Manfr. Binder ex Bridge, Spooner, Beever & D.C. Park (13)  
*Melanotus* Pat. (ca. 33)  
*Pholiota* (Fr.) P. Kumm. (ca. 160)  
*Protostropharia* Redhead, Moncalvo & Vilgalys (14)  
*Pseudogymnopilus* Raithelh. (1)  
*Pyrrohulomyces* E.J. Tian & Matheny (2)\*  
*Stropharia* (Fr.) Quél. (ca. 20)

***Tricholomataceae*** R. Heim ex Pouzar

*Albomagister* Sánchez-García, Birkebak & Matheny (2)  
*Corneriella* Sánchez-García (3)  
*Dennisiomyces* Singer (5)  
*Dermoloma* J.E. Lange ex Herink (ca. 25)  
*Leucopaxillus* Boursier (ca. 16)  
*Porpoloma* Singer (ca. 13)  
*Pseudobaeospora* Singer (ca. 26)  
*Pseudoporpoloma* Vizzini & Consiglio (1)  
*Pseudotracholoma* (Singer) Sánchez-García & Matheny (2)  
*Tricholoma* (Fr.) Staude (ca. 210)

***Tubariaceae*** Vizzini

*Cyclocybe* Velen. (6)  
*Flammulaster* Earle (10)  
*Hemistropharia* Jacobsson & E. Larss. (1)  
*Pachylepyrium* Singer (1)  
*Phaeomarasmius* Scherff. (ca. 20)  
*Pleuromyces* Dima, P.-A. Moreau & V. Papp (1)  
*Tubaria* (W.G. Sm.) Gillet (ca. 21)

***Typhulaceae*** Jülich

*Lutypha* Khurana, K.S. Thind & Berthier (1)  
*Tygervalleomyces* Crous (1)  
*Typhula* (Pers.) Fr. (ca. 100)

***Agaricales*** genera *incertae sedis*

*Acanthocorticium* Baltazar, Gorjón & Rajchenb. (1)  
*Acinophora* Raf. (1)  
*Albocoprinus* Voto (1)\*  
*Aleurocystis* Lloyd ex G. Cunn. (3)  
*Amparoina* Singer (2)  
*Amylrolepiota* Harmaja (1)  
*Aphyllotus* Singer (1)  
*Arthromyces* T.J. Baroni & Lodge (2)  
*Arthrosporella* Singer (1)  
*Asproinocybe* R. Heim (5)  
*Aspropaxillus* Kühner & Maire (3)  
*Atractosporocybe* P. Alvarado, G. Moreno & Vizzini (2)  
*Austroclitocybe* Raithelh. (2)  
*Austroomphaliaster* Garrido (1)

*Baeospora* Singer (13)  
*Callistodermatium* Singer (1)  
*Calyprella* Quél. (20)  
*Caulorhiza* Lennox (3)  
*Cellypha* Donk (10)  
*Cephaloscypha* Agerer (1)  
*Cercopemyces* T.J. Baroni, Kropp & V.S. Evenson (3)  
*Clavomphalia* E. Horak (1)  
*Clitocybe* (Fr.) Staude (ca. 300)  
*Clitocybula* (Singer) Singer ex Métrod (25)  
*Coccobotrys* Boud. & Pat. (2)  
*Collybia* (Fr.) Staude (3)  
*Conchomyces* Overeem (2)  
*Crucibulum* Tul. & C. Tul. (7)  
*Cyathus* Haller (ca. 59)  
*Cymatella* Pat. (4)  
*Cymatellopsis* Parmasto (1)  
*Cynema* Maas Geest. & E. Horak (1)  
*Cyphellocalathus* Agerer (1)  
*Cystoderma* Fayod (ca. 36)  
*Cystodermella* Harmaja (16)  
*Deigloria* Agerer (5)  
*Delicatula* Fayod (ca. 3)  
*Dendrocollybia* R.H. Petersen & Redhead (1)  
*Dendrothele* Höhn. & Litsch. (58)  
*Disporotrichum* Stalpers (1)  
*Fayodia* Kühner (ca. 10)  
*Fibulochlamys* A.I. Romero & Cabral (2)  
*Fissolimbus* E. Horak (1)  
*Fistulina* Bull. (9)  
*Floccularia* Pouzar (6)  
*Gamundia* Raithelh. (ca. 7)  
*Gerronema* Singer (58)  
*Giacomia* Vizzini & Contu (1)  
*Glabrocypella* W.B. Cooke (12)  
*Gloioxanthomyces* Lodge, Vizzini, Ercole & Boertm. (2)  
*Gramincola* Velen. (1)  
*Hemipholiota* (Singer) Bon (2)  
*Henningsomyces* Kuntze (ca. 21)  
*Hispidocalyprella* E. Horak & Desjardin (1)  
*Hygrophorocybe* Vizzini & Contu (1)  
*Infundibulicybe* Harmaja (22)  
*Lactocollybia* Singer (20)  
*Lecanocybe* Desjardin & E. Horak (1)  
*Lepista* (Fr.) W.G. Sm. (ca. 50)  
*Lepistella* T.J. Baroni & Ovrebo (ca. 50)  
*Leucocalocybe* X.D. Yu & Y.J. Yao (1)  
*Leucocortinarius* (J.E. Lange) Singer (1)  
*Leucocybe* Vizzini, P. Alvarado, G. Moreno & Consiglio (3)  
*Leucoinocybe* Singer ex Antonín, Borovička, Holec & Kolařík (3)  
*Leucopholiota* (Romagn.) O.K. Mill., T.J. Volk & Bessette (2)  
*Lignomphalia* Antonín, Borovička, Holec & Kolařík (1)

*Lulesia* Singer (3)  
*Lycogalopsis* E. Fisch. (1)  
*Megacollybia* Kotl. & Pouzar (9)  
*Melanoleuca* Pat. (ca. 60)  
*Melanomphalia* M.P. Christ. (1)  
*Meotatomyces* Vizzini (1)  
*Mesophelliopsis* Bat. & A.F. Vital (1)  
*Metraria* (Cooke) Cooke & Massee (2)  
*Metulocyphella* Agerer (2)  
*Mucronella* Fr. (8)  
*Mycenella* (J.E. Lange) Singer (10)  
*Mycoalvimia* Singer (1)  
*Mycocalia* J.T. Palmer (7)  
*Mycospongia* Velen. (1)  
*Myxomphalia* Hora (ca. 2)  
*Neoclitocybe* Singer (11)  
*Neopaxillus* Singer (6)  
*Nidula* V.S. White (6)  
*Nidularia* Fr. (3)  
*Nochascypha* Agerer (3)  
*Notholepista* Vizzini & Contu (1)  
*Omphaliaster* Lamoure (7)  
*Omphalina* Quél. (ca. 50)  
*Palaeocephala* Singer (1)  
*Panaeolina* Maire (2)  
*Panaeolus* (Fr.) Quél. (15)  
*Paralepistopsis* Vizzini (2)  
*Peglerochaete* Sarwal & Locq. (1)  
*Pegleromyces* Singer (1)  
*Phaeodepas* D.A. Reid (2)  
*Phaeolepiota* Maire ex Konrad & Maubl. (1)  
*Phaeomycena* R. Heim ex Singer & Digilio (5)  
*Phaeopholiota* Locq. & Sarwal (1)  
*Phlebonema* R. Heim (1)  
*Phlebophyllum* R. Heim (1)  
*Physocystidium* Singer (1)  
*Pleurella* E. Horak (1)  
*Plicatura* Peck (1)  
*Polygaster* Fr. (1)  
*Pseudoclitopilus* Vizzini & Contu (2)  
*Pseudofistulina* O. Fidalgo & M. Fidalgo (3)  
*Pseudohiatula* (Singer) Singer (ca. 5)  
*Pseudohygrophorus* Velen. (1)  
*Pseudolasiobolus* Agerer (1)  
*Pseudoomphalina* (Singer) Singer (ca. 6)  
*Pseudotypula* Corner (1)  
*Radulomycetopsis* Dhingra, Priyanka & J. Kaur (1)  
*Rectipilus* Agerer (11)  
*Rhizocybe* Vizzini, G. Moreno, P. Alvarado & Consiglio (4)  
*Rimbachia* Pat. (11)  
*Ripartitella* Singer (1)  
*Ripartites* P. Karst. (5)

*Secotium* Kunze (ca. 10)  
*Singerocybe* Harmaja (7)  
*Skepperiella* Pilát (4)  
*Squamanita* Imbach (10)  
*Stanglomyces* Raithelh. (1)  
*Stemastrum* Raf. (1)  
*Stromatocyphella* W.B. Cooke (3)  
*Tephroderma* Contu & Musumeci (1)  
*Trichocybe* Vizzini (1)  
*Tricholomopsis* Singer (ca. 33)  
*Tricholosporum* Guzmán (7)  
*Trogia* Fr. (ca. 94)  
*Ugola* Adans. (3)  
*Vanromburghia* Holterm. (1)  
*Verrucospora* E. Horak (2)

***Amylocorticiales* K.H. Larss., Manfr. Binder & Hibbett**

***Amylocorticiaceae* Jülich**

*Amyloathelia* Hjortstam & Ryvarden (3)  
*Amyloceraceomyces* S.H. He (1)\*  
*Amylocorticiellum* Spirin & Zmitr. (4)  
*Amylocorticium* Pouzar (11)  
*Amyloxenasma* (Oberw.) Hjortstam & Ryvarden (6)  
*Anomoloma* Niemelä & K.H. Larss. (6)  
*Anomoporia* Pouzar (8)  
*Ceraceomyces* Jülich (16)  
*Irpicodon* Pouzar (1)  
*Plicaturopsis* D.A. Reid (2)  
*Podoserpula* D.A. Reid (2)  
*Serpulomyces* (Zmitr.) Zmitr. (1)

***Atheliales* Jülich**

***Atheliaceae* Jülich**

*Amphinema* P. Karst. (4)  
*Athelia* Pers. (32)  
*Athelium* K.H. Larss. & Hjortstam (2)  
*Athelocystis* Hjortstam & Ryvarden (1)  
*Athelopsis* Oberw. ex Parmasto (14)  
*Butlerelfia* Weresub & Illman (1)  
*Byssocorticium* Bondartsev & Singer (11)  
*Elaphocephala* Pouzar (1)  
*Fibulomyces* Jülich (4)\*  
*Hypochnella* J. Schröt. (2)  
*Hypochniciellum* Hjortstam & Ryvarden (1)  
*Leptosporomyces* Jülich (15)  
*Lyoathelia* Hjortstam & Ryvarden (1)  
*Melzerium* Hauerslev (3)  
*Mycostigma* Jülich (1)  
*Piloderma* Jülich (6)  
*Pteridomyces* Jülich (4)  
*Taeniospora* Marvanová (2)  
*Tretomyces* K.H. Larss., Kotir. & Saaren. (2)

*Tylospora* Donk (2)

***Lobuliciaceae*** Sulistyo, K.H. Larss. & M. Ryberg

*Lobulicium* K.H. Larss. & Hjortstam (1)

***Auriculariales*** J. Schröt.

***Auriculariaceae*** Fr.

*Amphistereum* Spirin & Malysheva (2)

*Auricularia* Bull. (ca. 21)

*Eichleriella* Bres. (ca. 14)

*Elmerina* Bres. (7)

*Exidia* Fr. (ca. 26)

*Exidiopsis* (Bref.) Möller (ca. 30)

*Fibulosebacea* K. Wells & Raitv. (1)

*Heterochaete* Pat. (ca. 40)

*Heteroradulum* Lloyd ex Spirin & Malysheva (7)

*Protodaedalea* Imazeki (2)

*Pseudostypella* McNabb (1)

*Sclerotrema* Spirin & Malysheva (1)

***Hyaloriaceae*** Lindau

*Helicomysa* R. Kirschner & Chee J. Chen (1)

*Hyaloria* Möller (3)

*Myxarium* Wallr. (14)

***Auriculariales*** genera *incertae sedis*

*Adustochaete* Alvarenga & K.H. Larss. (3)

*Basidiodendron* Rick (ca. 15)

*Bourdotia* (Bres.) Bres. & Torrend (1)

*Ceratosebacina* P. Roberts (3)

*Crystallodon* Alvarenga (1)

*Dendrogloeon* Spirin & Miettinen (1)

*Ductifera* Lloyd (ca. 11)

*Endoperplexa* P. Roberts (6)

*Gelacantha* V. Malysheva & Spirin (1)

*Grammatus* H.S. Yuan & C. Decock (2)

*Guepinia* Fr. (1)

*Hauerslevia* P. Roberts (1)

*Heterorepetobasidium* Chee J. Chen & Oberw. (2)

*Heteroscypha* Oberw. & Agerer (1)

*Hyalodon* V. Malysheva & Spirin (2)

*Hydrophana* V. Malysheva & Spirin (1)

*Metabourdotia* L.S. Olive (1)

*Metulochaete* R.L.M. Alvarenga (1)

*Microsebacina* P. Roberts (2)

*Mycostilla* Spirin & V. Malysheva (1)

*Myxariellum* Spirin & V. Malysheva (2)

*Ofella* Spirin & V. Malysheva (1)

*Porpopycnis* R. Kirschner (1)

*Proterochaete* Spirin & V. Malysheva (1)

*Protoacia* Spirin & V. Malysheva (1)

*Protodontia* Höhn. (3)

*Protograndinia* Rick (1)  
*Protohydnum* Möller (3)  
*Protomerulius* Möller (7)  
*Protoradulum* Rick (1)  
*Pseudohydnum* P. Karst. (1)  
*Psilochaete* V. Spirin & V. Malysheva (1)  
*Renatobasidium* Hauerslev (1)  
*Stypella* Möller (4)  
*Stypellopsis* Spirin & V. Malysheva (2)  
*Tremellacantha* Jülich (1)

## **Boletales** E.-J. Gilbert

### **Boletaceae** Chevall.

*Afroboletus* Pegler & T.W.K. Young (8)  
*Afrocastellanoa* M.E. Sm. & Orihara (1)  
*Alessioporus* Gelardi, Vizzini & Simonini (2)  
*Aureoboletus* Pouzar (33)  
*Australopilus* Halling & N.A. Fechner (1)  
*Austroboletus* (Corner) Wolfe (ca. 36)  
*Baorangia* G. Wu & Zhu L. Yang (4)  
*Binderoboletus* T.W. Henkel & M.E. Sm. (1)  
*Boletellus* Murrill (ca. 50)  
*Boletochaete* Singer (5)  
*Boletus* L. (ca. 350)  
*Borofutus* Hosen & Zhu L. Yang (1)  
*Bothia* Halling, T.J. Baroni & Manfr. Binder (2)  
*Buchwaldoboletus* Pilát (11)  
*Butyriboletus* Arora & J.L. Frank (ca. 25)  
*Cacaoporus* Raspé & Vadthanarat (2)  
*Caloboletus* Vizzini (14)  
*Carolinigaster* M.E. Sm. & S. Cruz (1)  
*Castellanea* T.W. Henkel & M.E. Sm. (1)  
*Chalciporus* Bataille (ca. 30)  
*Chamonixia* Rolland (8)  
*Chiua* Y.C. Li & Zhu L. Yang (4)  
*Corneroboletus* N.K. Zeng & Zhu L. Yang (1)  
*Costatisporus* T.W. Henkel & M.E. Sm. (1)  
*Crocinoletus* N.K. Zeng, Zhu L. Yang & G. Wu (2)  
*Cupreoboletus* Simonini, Gelardi & Vizzini (1)  
*Cyanoboletus* Gelardi, Vizzini & Simonini (7)  
*Durianella* Desjardin, A.W. Wilson & Manfr. Binder (1)  
*Erythrophylloporus* Ming Zhang & T.H. Li (1)  
*Fistulinella* Henn. (ca. 25)  
*Gastroboletus* Lohwag (14)  
*Gastroleccinum* Thiers (1)  
*Guyanaporus* T.W. Henkel & M.E. Sm. (1)  
*Gymnogaster* J.W. Cribb (1)  
*Harrya* Halling, Nuhn & Osmundson (6)  
*Heimioporus* E. Horak (14)  
*Heliogaster* Orihara & K. Iwase (1)  
*Hemileccinum* Šutara (5)  
*Hortiboletus* Simonini, Vizzini & Gelardi (7)

*Hourangia* Xue T. Zhu & Zhu L. Yang (4)  
*Hymenoboletus* Y.C. Li & Zhu L. Yang (1)  
*Imleria* Vizzini (5)  
*Imperator* G. Koller, Assyov, Bellanger, Bertéa, Loizides, G. Marques, P.-A. Moreau, J.A. Muñoz, Oppicelli, Puddu & F. Richard (3)  
*Indoporus* A. Parihar, K. Das, Hembrom & Vizzini (1)  
*Ionosporus* O. Khmelnitsky (2)  
*Jimtrappea* T.W. Henkel, M.E. Sm. & Aime (2)  
*Kombocles* Castellano, T.W. Henkel & Dentinger (1)  
*Lanmaoa* G. Wu & Zhu L. Yang (7)  
*Leccinellum* Bresinsky & Manfr. Binder (17)  
*Leccinum* Gray (ca. 130)  
*Longistriata* Sulzbacher, Orihara, Grebenc, M.P. Martín & Baseia (1)\*  
*Mackintoshia* Pacioni & Sharp (1)  
*Mucilopilus* Wolfe (1)  
*Mycoamaranthus* Castellano, Trappe & Malajczuk (3)  
*Neoboletus* Gelardi, Simonini & Vizzini (11)  
*Nigroboletus* Gelardi, Vizzini, E. Horak, T.H. Li & Ming Zhang (1)  
*Octaviania* Vittad. (ca. 40)  
*Parvixerocomus* G. Wu & Zhu L. Yang (2)  
*Paxillogaster* E. Horak (1)  
*Phylloboletellus* Singer (1)  
*Phyllobolites* Singer (1)  
*Phylloporus* Quél. (ca. 90)  
*Porphyrellus* E.-J. Gilbert (ca. 20)  
*Pseudoaustroboletus* Y.C. Li & Zhu L. Yang (3)  
*Pseudoboletus* Šutara (2)  
*Pulchroboletus* Gelardi, Vizzini & Simonini (1)  
*Pulveroboletus* Murrill (38)  
*Retiboletus* Manfr. Binder & Bresinsky (12)  
*Rheubarbariboletus* Vizzini, Simonini & Gelardi (2)  
*Rhodactina* Pegler & T.W.K. Young (3)  
*Rossbeevera* T. Lebel, Orihara & N. Maek. (10)  
*Royoungia* Castellano, Trappe & Malajczuk (6)  
*Rubroboletus* Kuan Zhao & Zhu L. Yang (14)  
*Rugiboletus* G. Wu & Zhu L. Yang (2)  
*Setogyroporus* Heinem. & Rammeloo (1)  
*Singerocomus* T.W. Henkel & M.E. Sm. (2)  
*Singeromyces* M.M. Moser (1)  
*Soliococcus* Trappe, Osmundson, Manfr. Binder, Castellano & Halling (1)  
*Spongiforma* Desjardin, Manfr. Binder, Roekring & Flegel (2)  
*Spongispora* G. Wu, S.M.L. Lee, E. Horak & Zhu L. Yang (1)  
*Strobilomyces* Berk. (ca. 27)  
*Suilellus* Murrill (23)  
*Sutorius* Halling, Nuhn & N.A. Fechner (2)  
*Tengioboletus* G. Wu & Zhu L. Yang (2)  
*Tubosaeta* E. Horak (6)  
*Turmalinea* Orihara & N. Maek. (4)  
*Tylocinum* Y.C. Li & Zhu L. Yang (1)  
*Tylopilus* P. Karst. (ca. 100)  
*Veloboletus* limbatus Fechner & Halling (1)\*  
*Veloporphyrillus* L.D. Gómez & Singer (7)

*Wakefieldia* Corner & Hawker (2)  
*Xanthoconium* Singer (10)  
*Xerocomellus* Šutara (17)  
*Xerocomus* Quél. (ca. 120)  
*Zangia* Y.C. Li & Zhu L. Yang (6)

***Boletinellaceae*** P.M. Kirk, P.F. Cannon & J.C. David  
*Boletinellus* Murrill (1)  
*Phlebopus* (R. Heim) Singer (14)

***Calostomataceae*** E. Fisch.  
*Calostoma* Desv. (16)

***Coniophoraceae*** Ulbr.  
*Chrysoconia* McCabe & G.A. Escobar (1)  
*Coniophora* DC. (20)  
*Coniophoropsis* Hjortstam & Ryvarden (2)  
*Gyrodontium* Pat. (3)  
*Penttilamyces* Zmitr., Kalinovskaya & Myasnikov (3)  
*Sedecula* Zeller (1)

***Diplocystidiaceae*** Kreisel  
*Astraeus* Morgan (11)  
*Diplocystis* Berk. & M.A. Curtis (2)  
*Endogonopsis* R. Heim (1)  
*Tremellogaster* E. Fisch. (1)

***Gasterellaceae*** Zeller  
*Gasterella* Zeller & L.B. Walker (1)

***Gomphidiaceae*** Maire ex Jülich  
*Chroogomphus* (Singer) O.K. Mill. (25)  
*Cystogomphus* Singer (1)  
*Gomphidius* Fr. (10)  
*Gomphogaster* O.K. Mill. (1)

***Gyroporaceae*** (Singer) Manfr. Binder & Bresinsky  
*Gyroporus* Quél. (24)

***Hygrophoropsidaceae*** Kühner  
*Hygrophoropsis* (J. Schröt.) Maire ex Martin-Sans (16)  
*Leucogyrophana* Pouzar (13)

***Paxillaceae*** Lotsy  
*Alpova* C.W. Dodge (16)  
*Austrogaster* Singer (4)  
*Gyrodon* Opat. (10)  
*Hoehnelogaster* Lohwag (1)  
*Hydnomerulius* Jarosch & Besl (1)  
*Meiorganum* R. Heim (3)  
*Melanogaster* Corda (ca. 26)  
*Neoalpova* Vizzini (3)  
*Paragyrodon* (Singer) Singer (1)



*Paxillus* Fr. (19)

***Protogastraceae*** Zeller

*Protogaster* Thaxt. (1)

***Rhizopogonaceae*** Gäum. & C.W. Dodge

*Fevansia* Trappe & Castellano (1)

*Rhizopogon* Fr. (ca. 157)

*Rhopalogaster* J.R. Johnst. (1)

***Sclerodermataceae*** Corda

*Chlorogaster* Læssøe & Jalink (1)

*Favillea* Fr. (2)

*Horakiella* Castellano & Trappe (2)

*Pisolithus* Alb. & Schwein. (17)

*Scleroderma* Pers. (ca. 46)

***Serpulaceae*** Jarosch & Bresinsky

*Austropaxillus* Bresinsky & Jarosch (9)

*Gymnopaxillus* E. Horak (4)

*Serpula* (Pers.) Gray (ca. 11)

***Suillaceae*** Besl & Bresinsky

*Psiloboletinus* Singer (1)

*Suillus* Gray (ca. 60)

***Tapinellaceae*** C. Hahn

*Bondarcevomyces* Parmasto (1)

*Pseudomerulius* Jülich (4)

*Tapinella* E.-J. Gilbert (2)

***Boletales*** genera *incertae sedis*

*Corditubera* Henn. (5)

*Corneromyces* Ginns (2)

*Marthanella* States & Fogel (1)

*Phaeoradulum* Pat. (1)

***Cantharellales*** Gäum.

***Aphelariaceae*** Corner

*Aphelaria* Corner (20)

*Phaeoaphelaria* Corner (1)

*Tumidapexus* D.A. Crawford (1)

***Botryobasidiaceae*** Jülich

*Acladium* Link (20)

*Allescheriella* Henn. (5)

*Alysidium* Kunze (4)

*Botryobasidium* Donk (ca. 58)

*Neoaccladium* P.N. Singh & S.K. Singh (1)\*

*Suillosporium* Pouzar (4)

***Ceratobasidiaceae*** G.W. Martin

*Ceratobasidium* D.P. Rogers (ca. 19)

*Ceratoporia* Ryvarden & de Meijer (1)  
*Ceratorhiza* R.T. Moore (7)  
*Rhizoctonia* DC. (ca. 50)  
*Scotomyces* Jülich (1)  
*Thanatephorus* Donk (12)

***Hydnaceae*** Chevall.

*Bergerella* Diederich & Lawrey (1)\*  
*Burgella* Diederich & Lawrey (2)  
*Burgellopsis* Diederich & Lawrey (1)  
*Burgoa* Goid. (9)  
*Cantharellus* Adans.ex Fr. (ca. 300)  
*Clavulina* J. Schröt. (ca. 75)  
*Corallofungus* Kobayasi (2)  
*Craterellus* Pers. (ca. 80)  
*Gloeomucro* R.H. Petersen (10)  
*Hydnum* L. (49)  
*Ingoldiella* D.E. Shaw (3)  
*Membranomyces* Jülich (1)  
*Multiclavula* R.H. Petersen (13)  
*Neoburgoa* Diederich, E. Zimm. & Lawrey (1)  
*Osteomorpha* G. Arnaud ex Watling & W.B. Kendr. (1)  
*Parastereopsis* Corner (1)  
*Paullicorticium* J. Erikss. (5)  
*Repetobasidiellum* J. Erikss. & Hjortstam (1)  
*Repetobasidium* J. Erikss. (12)  
*Rogersiomyces* J.L. Crane & Schokn. (2)  
*Sistotrema* Fr. (ca. 55)  
*Sistotremella* Hjortstam (3)

***Oliveoniaceae*** P. Roberts

*Oliveonia* Donk (5)

***Tulasnellaceae*** Juel

*Pseudotulasnella* Lowy (1)  
*Tulasnella* J. Schröt. (ca. 70)

***Cantharellales*** genera *incertae sedis*

*Boidinella* Nakasone (2)  
*Bryoclavula* H. Masumoto & Y. Degawa\*  
*Bulbilla* Diederich, Flakus & Etayo (1)  
*Clavulicium* Boidin (3)  
*Minimedusa* Weresub & P.M. LeClair (3)  
*Odontiochaete* Rick (1)  
*Radulochaete* Rick (2)  
*Schildia* Franchi & M. Marchetti (1)  
*Stilbotulasnella* Oberw. & Bandoni (1)

***Corticiales*** K.H. Larss.

***Corticaceae*** Herter

*Basidiodesertica* Maharachch., Wanas. & Al-Sadi (1)\*  
*Capillosclerotium* Prameela & Deeba (1)

*Corticirama* Pilát (2)  
*Corticium* Pers. (25)  
*Erythricium* J. Erikss. & Hjortstam (6)  
*Galzinia* Bourdot (9)  
*Giulia* Tassi (1)  
*Laetisaria* Burds. (7)  
*Lawreymyces* Lücking & Moncada (7)  
*Marchandiomyces* Diederich & D. Hawksw. (3)  
*Necator* Massee (1)  
*Tretopileus* B.O. Dodge (3)  
*Waitea* Warcup & P.H.B. Talbot (1)

***Dendrominiaceae*** Ghobad-Nejhad  
*Dendrominia* Ghobad-Nejhad & Duhem (4)

***Punctulariaceae*** Donk  
*Dendrocorticium* M.J. Larsen & Gilb. (9)  
*Punctularia* Pat. (2)  
*Punctulariopsis* Ghobad-Nejhad (4)

***Vuilleminiaceae*** Maire ex Lotsy  
*Australovuilleminia* Ghobad-Nejhad & Hallenb. (1)  
*Cytidia* Quél. (5)  
*Vuilleminia* Maire (8)

***Corticiales*** genera *incertae sedis*  
*Ambivina* Katz (1)  
*Amylobasidium* Ginns (1)  
*Leptocorticium* Hjortstam & Ryvarden (8)  
*Melzerodontia* Hjortstam & Ryvarden (3)  
*Nothocorticium* Gresl. & Rajchenb. (1)  
*Papyrodiscus* D.A. Reid (1)  
*Ripexicium* Hjortstam (1)

***Geastrales*** K. Hosaka & Castellano

***Geastraceae*** Corda  
*Geasteroides* Long (1)  
*Geastrum* Pers. (130)  
*Myriostoma* Desv. (5)  
*Nidulariopsis* Greis (2)  
*Phialastrum* Sunhede (1)  
*Schenella* T. Macbr. (4)  
*Sphaerobolus* Tode (3)

***Sclerogastraceae*** Locq. ex P. M. Kirk  
*Sclerogaster* R. Hesse (11)

***Geastrales*** genus *incertae sedis*  
*Boninogaster* Kobayasi (1)

***Gloeophyllales*** Thorn  
***Gloeophyllaceae*** Jülich

*Boreostereum* Parmasto (4)  
*Campylomyces* Nakasone (2)  
*Chaetodermella* Rauschert (1)  
*Gloeophyllum* P. Karst. (13)  
*Griseoporia* Ginns (2)  
*Heliocybe* Redhead & Ginns (1)  
*Hispidaedalea* Y.C. Dai & S.H. He (1)  
*Mycothele* Jülich (1)  
*Neolentinus* Redhead & Ginns (14)  
*Osmoporus* Singer (2)  
*Stiptophyllum* Ryvarden (1)  
*Veluticeps* Cooke (12)

***Gloeophyllales*** genus *incertae sedis*  
*Pileodon* P. Roberts & Hjortstam (2)

***Gomphales*** Jülich  
***Clavariadelphaceae*** Corner  
*Beenakia* D.A. Reid (7)  
*Clavariadelphus* Donk (20)

***Gomphaceae*** Donk  
*Araecoryne* Corner (1)  
*Ceratellopsis* Konrad & Maubl. (9)  
*Delentaria* Corner (1)  
*Destuntzia* Fogel & Trappe (5)  
*Gautieria* Vittad. (37)  
*Gloeocantharellus* Singer (12)  
*Gomphus* Pers. (7)  
*Phaeoclavulina* Brinkmann (41)  
*Protogautieria* A.H. Sm. (2)  
*Pseudogomphus* R. Heim (1)  
*Ramaria* Fr. ex Bonord. (230)  
*Ramaricium* J. Erikss. (5)  
*Terenodon* Maas Geest. (1)  
*Turbinellus* Earle (5)

***Lentariaceae*** Jülich  
*Hydnocristella* R.H. Petersen (2)  
*Kavinia* Pilát (4)  
*Lentaria* Corner (19)

***Hymenochaetales*** Oberw.  
***Hymenochaetaceae*** Donk  
*Arambarria* Rajchenb. & Pildain (1)  
*Asterodon* Pat. (1)  
*Aurificaria* D.A. Reid (2)  
*Botryodontia* (Hjortstam & Ryvarden) Hjortstam (6)  
*Clavariachaete* Corner (2)  
*Coltricia* Gray (40)  
*Coltriciella* Murrill (13)  
*Coniferiporia* L.W. Zhou & Y.C. Dai (3)

*Cylindrosporus* L.W. Zhou (1)  
*Deviodontia* (Parmasto) Hjortstam & Ryvarden (1)  
*Dichochaete* Parmasto (2)  
*Erythromyces* Hjortstam & Ryvarden (1)  
*Fomitiporella* Murrill (13)  
*Fomitiporia* Murrill (46)  
*Fulvifomes* Murrill (33)  
*Fulvoderma* L.W. Zhou & Y.C. Dai (2)  
*Fuscoporia* Murrill (62)  
*Hastodontia* (Parmasto) Hjortstam & Ryvarden (2)  
*Hydnochaete* Bres. (1)  
*Hymenochaete* Lév. (149)  
*Hymenochaetopsis* S.H. He & Jiao Yang (16)  
*Inocutis* Fiasson & Niemelä (9)  
*Inonotopsis* Parmasto (1)  
*Inonotus* P. Karst. (120)  
*Mensularia* Lázaro Ibiza (6)  
*Neomensularia* F. Wu, L.W. Zhou & Y.C. Dai (4)  
*Nothophellinus* Rajchenb. (1)  
*Onnia* P. Karst. (8)  
*Phellinidium* (Kotl.) Fiasson & Niemelä (5)  
*Phellinopsis* Y.C. Dai (10)  
*Phellinotus* Drechsler-Santos, Robledo & Rajchenb. (2)  
*Phellinus* Quéf. (202)  
*Phellopilus* Niemelä, T. Wagner & M. Fisch. (1)  
*Phylloporia* Murrill (38)  
*Porodaedalea* Murrill (14)  
*Pseudoinonotus* T. Wagner & M. Fisch. (8)  
*Pyrrhoderma* Imazeki (2)  
*Rajchenbergia* Salvador-Montoya, Popoff & Drechsler-Santos (3)\*  
*Sanguangporus* Sheng H. Wu, L.W. Zhou & Y.C. Dai (13)  
*Tropicoporus* L.W. Zhou, Y.C. Dai & Sheng H. Wu (12)  
*Tubulicrinis* Donk (34)  
*Xanthoporia* Murrill (3)

***Neoantrodiellaceae*** Y.C. Dai, B.K. Cui, Jia J. Chen & H.S. Yuan  
*Neoantrodiella* Y.C. Dai, B.K. Cui, Jia J. Chen & H.S. Yuan (2)

***Nigrofomitaceae*** Jülich  
*Nigrofomes* Murrill (3)

***Oxyporaceae*** Zmitr. & V. Malysheva  
*Oxyporus* (Bourdot & Galzin) Donk (18)

***Rickenellaceae*** Vizzini  
*Alloclavaria* Dentinger & D. J. McLaughlin (1)  
*Atheloderma* Parmasto (2)  
*Bryopistillaria* Olariaga, Huhtinen, Læssøe, J.H. Petersen & K. Hansen (1)\*  
*Contumyces* Redhead, Moncalvo, Vilgalys & Lutzoni (3)  
*Cotylidia* P. Karst. (10)  
*Globulicium* Hjortstam (1)  
*Peniophorella* P. Karst. (25)

*Resinicium* Parmasto (8)

*Rickenella* Raithelh. (10)

***Schizoporaceae*** Jülich

*Alutaceodontia* (Parmasto) Hjortstam & Ryvarden (1)

*Basidioradulum* Nobles (1)

*Echinoporia* Ryvarden (3)

*Fasciodontia* Yurchenko & Riebesehl (2)\*

*Fibrodontia* Parmasto (6)

*Hyphodontia* J. Erikss. (86)

*Lagarobasidium* Jülich (5)

*Leucophellinus* Bondartsev & Singer (1)

*Odontiopsis* Hjortstam & Ryvarden (2)

*Paratrichaptum* Corner (1)

*Poriodontia* Parmasto (1)

*Rogersella* Liberta & A.J. Navas (1)

*Schizopora* Velen. (7)

*Xylodon* (Pers.) Gray (60)

***Hymenochaetales*** genera *incertae sedis*

*Caeruleomyces* Stalpers (1)

*Cantharellopsis* Kuyper (1)

*Cyanotrama* Ghobad-Nejhad & Y.C. Dai (1)

*Fibricium* J. Erikss. (5)

*Ginnsia* Sheng H. Wu & Hallenb. (1)

*Gyroflexus* Raithelh. (1)

*Kurtia* Karasiński (3)

*Lawrynomycetes* Karasiński (1)

*Muscinipta* Redhead, Lücking & Lawrey (1)

*Physodontia* Ryvarden & H. Solheim (1)

*Sidera* Miettinen & K.H. Larss. (6)

*Skvortzovia* Bononi & Hjortstam (1)

*Subulicium* Hjortstam & Ryvarden (3)

*Trichaptum* Murrill (27)

*Tsugacorticium* Nakasone & Burds. (1)

***Hysterangiales*** K. Hosaka & Castellano

***Gallaceaceae*** Locq. ex P. M. Kirk

*Austrogautieria* E.L. Stewart & Trappe (7)

*Gallacea* Lloyd (6)

*Hallingea* Castellano (3)

***Hysterangiaceae*** E. Fisch.

*Aroramyces* Castellano & Verbeken (5)

*Circulocolumella* S. Ito & S. Imai (1)

*Clathrogaster* Petri (2)

*Hysterangium* Vittad. (54)

***Mesophelliaceae*** Jülich

*Andebbia* Trappe, Castellano & Amar. (1)

*Castoreum* Cooke & Massee (3)

*Chondrogaster* Maire (2)

*Gummiglobus* Trappe, Castellano & Amar. (2)  
*Gummivena* Trappe & Bougher (1)  
*Malajczukia* Trappe & Castellano (8)  
*Mesophellia* Berk. (15)  
*Nothocastoreum* G.W. Beaton (1)

**Phallogastraceae** Locq.  
*Phallogaster* Morgan (1)  
*Protubera* Möller (13)

**Trappeaceae** P.M. Kirk  
*Phallobata* G. Cunn. (1)  
*Restingomyces* Sulzbacher, Grebenc & Baseia (1)  
*Trappea* Castellano (1)

**Jaapiales** Manfr. Binder, K.H. Larss. & Hibbett  
**Jaapiaceae** Manfr. Binder, K.H. Larss. & Hibbett  
*Jaapia* Bres. (2)

**Lepidostromatales** B.P. Hodk. & Lücking  
**Lepidostromataceae** Ertz, Eb. Fisch., Killmann, Sérus. & Lawrey  
*Ertzia* B.P. Hodk. & Lücking (1)  
*Lepidostroma* Mägd. & S. Winkl. (1)  
*Sulzbacheromyces* B.P. Hodk. & Lücking (6)

**Phallales** E. Fisch.  
**Claustulaceae** G. Cunn.  
*Claustula* K.M. Curtis (1)  
*Gelopellis* Zeller (6)  
*Kjeldsenia* W. Colgan, Castellano & Bougher (1)  
*Phlebogaster* Fogel (2)  
*Pseudogelopellis* K. Tao & B. Liu (1)

**Gastrosporiaceae** Pilát  
*Gastrosporium* Mattir. (2)

**Phallaceae** Corda  
*Abrachium* Baseia & T.S. Cabral (1)  
*Aporophallus* Möller (1)  
*Aseroe* Labill. (2)  
*Blumenavia* Möller (3)  
*Calvarula* Zeller (1)  
*Clathrus* P. Micheli ex L. (20)  
*Colus* Cavalier & Séchier (4)  
*Echinophallus* Henn. (1)  
*Endoclathrus* B. Liu, Yin H. Liu & Z.J. Gu (1)  
*Endophallus* M. Zang & R.H. Petersen (1)  
*Ileodictyon* Tul. & C. Tul. (2)  
*Itajahya* Möller (4)  
*Kobayasia* S. Imai & A. Kawam. (1)  
*Laternea* Turpin (2)  
*Ligiella* J.A. Sáenz (1)

*Lysurus* Fr. (30)  
*Mutinus* Fr. (21)  
*Neolysurus* O.K. Mill., Ovrebo & Burk (1)  
*Phallus*Junius ex L. (34)  
*Protuberella* S. Imai & A. Kawam. (1)  
*Pseudoclathrus* B. Liu & Y.S. Bau (5)  
*Pseudocolus* Lloyd (2)  
*Staheliomyces* E. Fisch. (1)  
*Staurophallus* Mont. (1)  
*Stephanophallus* MacOwan (1)  
*Xylophallus* (Schltdl.) E. Fisch. (2)

***Phallales* genera incertae sedis**

*Saprogaster* Fogel & States (1)  
*Vandasias* Velen. (1)

***Polyporales* Gäum.**

***Cerrenaceae* Miettinen, Justo & Hibbett**

*Cerrena* Gray (7)  
*Irpiciporus* Murrill (1)  
*Pseudolagarobasidium* J.C. Jang & T. Chen (7)  
*Radulodon* Ryvarden (11)

***Dacryobolaceae* Jülich**

*Amylocystis* Bondartsev & Singer ex Singer (1)  
*Dacryobolus* Fr. (7)  
*Jahnoporus* Nuss (4)  
*Oligoporus* Bref. (15)  
*Osteina* Donk (1)  
*Postia* Fr. (40)  
*Spongiporus* Murrill (7)

***Fomitopsidaceae* Jülich**

*Adustoporia* Audet (1)  
*Anthoporia* Karasiński & Niemelä (1)  
*Antrodia* P. Karst. (80)  
*Antrodiopsis* Audet (1)  
*Brunneoporus* Audet (5)  
*Buglossoporus* Kotl. & Pouzar (9)  
*Daedalea* Pers. (12)  
*Dentiporus* Audet (1)  
*Flavidoporia* Audet (3)  
*Fomitopsis* P. Karst. (40)  
*Fragifomes* B. K. Cui, M.L. Han & Y.C. Dai (1)  
*Laricifomes* Kotl. & Pouzar (1)  
*Lentoporia* Audet (1)  
*Neoantrodia* Audet (13)  
*Neolentiporus* Rajchenb. (2)  
*Niveoporofomes* B.K. Cui, M.L. Han & Y.C. Dai (1)  
*Ranadivia* Zmitr. (5)  
*Resinoporia* Audet (11)  
*Rhizoporia* Audet (1)



*Rhodofomes* Kotl. & Pouzar (5)  
*Rhodofomitopsis* B.K. Cui, M.L. Han & Y.C. Dai (4)  
*Rubellofomes* B.K. Cui, M.L. Han & Y.C. Dai (2)  
*Subantrodia* Audet (2)  
*Ungulidaedalea* B.K. Cui, M.L. Han & Y.C. Dai (1)  
*Wolfiporia* Ryvarden & Gilb. (6)

***Fragiliporiaceae*** Y.C. Dai, B.K. Cui & C.L. Zhao  
*Fragiliporia* Y.C. Dai, B.K. Cui & C.L. Zhao (1)

***Ganodermataceae*** Donk  
*Cristatopora* Robledo & Costa-Rezende (2)\*  
*Ganoderma* P. Karst. (Ca. 180)  
*Sanguinoderma* Y.F. Sun, D.H. Costa & B.K. Cui (10)\*

***Gelatoporiaceae*** Miettinen, Justo & Hibbett  
*Cinereomyces* Jülich (2)  
*Gelatoporia* Niemelä (2)  
*Obba* Miettinen & Rajchenb. (2)  
*Sebipora* Miettinen (1)

***Grifolaceae*** Jülich  
*Aegis* Gómez-Montoya, Rajchenb. & Robledo (1)  
*Grifola* Gray (5)

***Hyphodermataceae*** Jülich  
*Hyphoderma* Fr. (20)

***Incrustoporiaceae*** Jülich  
*Gloeoporellus* Zmitr. (1)  
*Incrustoporia* Domanski (5)  
*Piloporia* Niemelä (2)  
*Skeletocutis* Kotl. & Pouzar (40)  
*Tyromyces* P. Karst. (41)

***Irpicaceae*** Spirin & Zmitr.  
*Byssomerulius* Parmasto (8)  
*Ceriporia* Donk (ca. 50)  
*Crystallicutis* El-Gharabawy, Leal-Dutra & G.W. Griff. (3)\*  
*Cytidiella* Pouzar (2)  
*Efibula* Sheng H. Wu (18)  
*Emmia* Zmitr., Spirin & Malysheva (2)  
*Flavodon* Ryvarden (3)  
*Gloeoporus* Mont. (13)  
*Hydnopolyporus* D.A. Reid (2)  
*Irpex* Fr. (10)  
*Leptoporus* Quél. (1)  
*Meruliopsis* Bondartsev (4)  
*Raduliporus* Spirin & Zmitr. (1)  
*Resiniporus* Zmitr. (2)  
*Trametopsis* Tomšovský (4)

***Ischnodermataceae* Jülich**

*Ischnoderma* P. Karst. (10)

***Laetiporaceae* Jülich**

*Kusaghiporia* J. Hussein, S. Tibell & Tubuhwa (1)

*Laetiporus* Murrill (15)

*Phaeolus* (Pat.) Pat. (3)

***Meripilaceae* Jülich**

*Meripilus* P. Karst. (5)

*Pseudonadsoniella* T.O. Kondr. & S.Y. Kondr. (1)

*Rigidoporus* Murrill (30)

***Meruliaceae* Rea**

*Aurantipileus* Ginns, D.L. Lindner & T.J. Baroni (3)

*Aurantiporus* Murrill (6)

*Ceriporiopsis* Domański (40)

*Climacodon* P. Karst. (7)

*Crustodontia* Hjortstam & Ryvarden (1)

*Geesterania* Westphalen, Tomšovský & Rajchenb. (2)

*Hermanssonia* Zmitr. (1)

*Hydnophanerochaete* Sheng H. Wu & C.C. Chen (1)

*Hydnophlebia* Parmasto (5)

*Lilaceophlebia* (Parmasto) Spirin & Zmitr. (2)

*Luteoporia* F. Wu, Jia J. Chen & S. H. He (1)

*Merulius* Fr. (150)

*Mycoacia* Donk (16)

*Mycoaciella* J. Erikss. & Ryvarden (5)

*Odoria* V. Papp & Dima (1)

*Pappia* Zmitr. (1)

*Phlebia* Fr. (60)

*Phlebiporia* Jia J. Chen, B.K. Cui & Y.C. Dai (1)

*Physisporinus* P. Karst. (15)

*Sarcodontia* Schulzer (1)

*Scopuloides* (Masse) Höhn. & Litsch. (5)

*Stereophlebia* Zmitr. (1)

***Panaceae* Miettinen, Justo & Hibbett**

*Cymatoderma* Jungh. (11)

*Panus* Fr. (20)

***Phanerochaetaceae* Jülich**

*Bjerkandera* P. Karst. (5)

*Crepatura* C.L. Zhao (1)

*Donkia* Pilát (1)

*Efibulella* Zmitr. (1)

*Geliporus* Yuan Yuan, Jia J. Chen & S.H. He (1)

*Hapalopilus* P. Karst. (11)

*Hyphodermella* J. Erikss. & Ryvarden (7)

*Odontofibula* C.C. Chen & Sheng H. Wu (1)

*Oxychaete* Miettinen (1)

*Phaeophlebiopsis* D. Floudas & Hibbett (3)

*Phanerina* Miettinen (1)  
*Phanerochaete* P. Karst. (80)  
*Phlebiopsis* Jülich (22)  
*Pirex* Hjortstam & Ryvarden (1)  
*Porostereum* Pilát (15)  
*Rhizochaete* Gresl., Nakasone & Rajchenb. (13)  
*Riopa* D.A. Reid (3)  
*Terana* Adans. (1)

***Podoscyphaceae*** D.A. Reid

*Abortiporus* Murrill (4)  
*Podoscypha* Pat. (36)  
*Pouzaroporia* Vampola (1)

***Polyporaceae*** Fr. ex Corda

*Abundisporus* Ryvarden (8)  
*Amauroderma* Murrill (40)  
*Amaurodermellus* Costa-Rezende, Drechsler-Santos & Góes-Neto (2)\*  
*Amylosporia* B.K. Cui, C.L. Zhao & Y.C. Dai (1)  
*Atroporus* Ryvarden (3)  
*Australoporus* P.K. Buchanan & Ryvarden (1)  
*Bresadolia* Speg. (4)  
*Cerarioporia* F. Wu, L.W. Zhou & J. Si (1)  
*Cerioporus* Quél. (15)  
*Cinereomycetella* Zmitr. (1)  
*Colospora* Miettinen & Spirin (2)  
*Coriolopsis* Murrill (19)  
*Crassisporus* B.K. Cui & Xing Ji (4)  
*Cryptoporus* (Peck) Shear (2)  
*Daedaleopsis* J. Schröt. (7)  
*Datronia* Donk (9)  
*Datroniella* B.K. Cui, Hai J. Li & Y.C. Dai (6)  
*Dentocorticium* (Parmasto) M.J. Larsen & Gilb. (3)  
*Dextrinoporus* H.S. Yuan (1)  
*Dichomitus* D.A. Reid (13)  
*Donkioporia* Kotl. & Pouzar (2)  
*Donkioporiella* L.W. Zhou (1)  
*Earliella* Murrill (1)  
*Echinochaete* D.A. Reid (5)  
*Endopandanicola* Tibpromma & K.D. Hyde (1)  
*Epithele* (Pat.) Pat. (17)  
*Epithelopsis* Jülich (2)  
*Favolus* Fr. (20)  
*Flammeopellis* Y.C. Dai, B.K. Cui & C.L. Zhao (1)  
*Fomes* (Fr.) Fr. (3)  
*Fomitella* Murrill (2)  
*Foraminispora* Robledo, Costa-Rezende & Drechsler-Santos (1)  
*Funalia* Pat. (10)  
*Furtadoa* Costa-Rezende, Robledo & Drechsler-Santos (3)  
*Globifomes* Murrill (1)  
*Grammothele* Berk. & M.A. Curtis (20)  
*Grammothelopsis* Jülich (7)

*Haddowia* Steyaert (3)  
*Haploporus* Bondartsev & Singer (13)  
*Hexagonia* Fr. (17)  
*Hirticrusta* Matozaki, T. Hatt. & Sotome (2)\*  
*Hornodermoporus* Teixeira (2)  
*Humphreya* Steyaert (4)  
*Laccocephalum* Mc Alpine & Tepper (5)  
*Leifiporia* Y.C. Dai, F. Wu & C.L. Zhao (2)  
*Lentinus* Fr. (55)  
*Lignosus* Lloyd ex Torrend (8)  
*Lopharia* Kalchbr. & MacOwan (7)  
*Megasporia* B.K. Cui, Y.C. Dai & Hai J. Li (10)  
*Megasporoporia* Ryvarden & J.E. Wright (3)  
*Megasporoporiella* B.K. Cui, Y.C. Dai & Hai J. Li (5)  
*Melanoderma* B.K. Cui & Y.C. Dai (2)  
*Microporellus* Murrill (20)  
*Microporus* P. Beauv. (13)  
*Mollicarpus* Ginns (1)  
*Murinicarpus* B.K. Cui & Y.C. Dai (2)  
*Myriothele* Nakasone (1)  
*Navisporus* Ryvarden (8)  
*Neodatronia* B.K. Cui, Hai J. Li & Y.C. Dai (2)  
*Neodictyopus* Palacio, Robledo, Reck & Drechsler-Santos (3)  
*Neofavolus* Sotome & T. Hatt. (4)  
*Neofomitella* Y.C. Dai, Hai J. Li & Vlasák (3)  
*Pachykytospora* Kotl. & Pouzar (4)  
*Perenniporia* Murrill (100)  
*Perenniporiella* Decock & Ryvarden (5)  
*Perenniporiopsis* C.L. Zhao (1)  
*Phaeotrametes* Lloyd ex J. E. Wright (1)  
*Picipes* Zmitr. & Kovalenko (16)  
*Pilatotrampa* Zmitr. (1)  
*Podofomes* Pouzar (3)  
*Polyporopsis* Audet (1)  
*Polyporus* [P. Micheli ex Adans.] Fr. (35)  
*Porogramme* (Pat.) Pat. (4)  
*Pseudofavolus* Pat. (4)  
*Pseudomegasporoporia* X.H. Ji & F. Wu (1)  
*Pseudopiptoporus* Ryvarden (2)  
*Pyrofomes* Kotl. & Pouzar (8)  
*Rubroporus* Log.-Leite, Ryvarden & Groposo (1)  
*Sparsitubus* L.W. Hsu & J.D. Zhao (1)  
*Szczepkamycetes* Zmitr. (1)  
*Theleporus* Fr. (9)  
*Thermophymatospora* Udagawa, Awao & Abdullah (1)  
*Tinctoporellus* Ryvarden (4)  
*Tomophagus* Murrill (2)  
*Trametes* Fr. (70)  
*Truncospora* Pilát (23)  
*Vanderbylia* D.A. Reid (7)  
*Yuchengia* B.K. Cui & K.T. Steffen (1)

***Sparassidaceae*** Jülich

*Crustoderma* Parmasto (16)

*Pycnoporellus* Murrill (2)

*Sparassis* Fr. (7)

***Steccherinaceae*** Parmasto

*Antella* Miettinen (3)

*Antrodiella* Ryvarden & I. Johans. (50)

*Atraporiella* Ryvarden (2)

*Austeria* Miettinen (1)

*Butyrea* Miettinen (2)

*Cabalodontia* Piątek (5)

*Caudicicola* Miettinen, M. Kulju & Kotir. (1)

*Citripora* Miettinen (2)

*Elaphroporia* Z.Q. Wu & C.L. Zhao (1)

*Flabellophora* G. Cunn. (18)

*Flaviporus* Murrill (14)

*Frantisekia* Spirin & Zmitr. (4)

*Junghuhnia* Corda (35)

*Lamelloporus* Ryvarden (1)

*Loweomyces* (Kotl. & Pouzar) Jülich (6)

*Metuloidea* G. Cunn. (5)

*Mycorrhaphium* Maas Geest. (6)

*Niemelaea* Zmitr., Ezhov & Khimich (5)

*Nigroporus* Murrill (3)

*Rhomboidia* C.L. Zhao (1)\*

*Steccherinum* Gray (40)

*Trullella* Zmitr. (6)

*Xanthoporus* Audet (2)

***Polyporales*** genera *incertae sedis*

*Aegeritopsis* Höhn. (1)

*Amaropostia* B.K. Cui, L.L. Shen & Y.C. Dai (2)

*Amaurohydnum* Jülich (1)

*Amauromyces* Jülich (1)

*Amethicium* Hjortstam (1)

*Amyloporia* Singer (5)

*Aquascypha* D.A. Reid (1)

*Auriporia* Ryvarden (4)

*Australicium* Hjortstam & Ryvarden (2)

*Australohydnum* Jülich (2)

*Austrolentinus* Ryvarden (1)

*Bourdotiella* Duhem & Schultheis (1)

*Bulbillomyces* Jülich (1)

*Calcipostia* B.K. Cui, L.L. Shen & Y.C. Dai (1)

*Candelabrochaete* Boidin (12)

*Climacocystis* Kotl. & Pouzar (2)

*Columnodontia* Jülich (1)

*Conohypha* Jülich (2)

*Coralloderma* D.A. Reid (2)

*Cordochaete* Sanyal, Samita, Dhingra & Avn. P. Singh (1)

*Cryptomphalina* R. Heim (1)

*Cyanodontia* Hjortstam (1)  
*Cyanosporus* McGinty (1)  
*Cystidiopostia* B.K. Cui, L.L. Shen & Y.C. Dai (3)  
*Dendrophlebia* Dhingra & Priyanka (1)  
*Diacanthodes* Singer (3)  
*Diplomitoporus* Domański (25)  
*Erastia* Niemelä & Kinnunen (1)  
*Faerberia* Pouzar (1)  
*Fibroporia* Parmasto (10)  
*Fuscopostia* B.K. Cui, L.L. Shen & Y.C. Dai (4)  
*Gilbertsonia* Parmasto (1)  
*Globosomyces* Jülich (1)  
*Globuliciopsis* Hjortstam & Ryvarden (2)  
*Gyrophanopsis* Jülich (2)  
*Henningsia* Möller (5)  
*Hymenogramme* Mont. & Berk. (1)  
*Hyphodontiastra* Hjortstam (1)  
*Hypochnicium* J. Erikss. (30)  
*Inflatostereum* D.A. Reid (2)  
*Irpicochaete* Rick (1)  
*Laetifomes* T. Hatt. (1)  
*Macrohyporia* I. Johans. & Ryvarden (2)  
*Meruliophana* Duhem & Buyck (1)  
*Mycoleptodonoides* Nikol. (4)  
*Mycorrhaphoides* Hembrom, K. Das & Hallenb. (1)  
*Nigrohydnum* Ryvarden (1)  
*Phanerodontia* Hjortstam & Ryvarden (4)  
*Phaneroites* Hjortstam & Ryvarden (1)  
*Phlebiella* P.Karst. (20)  
*Piptoporellus* B.K. Cui, M.L. Han & Y.C. Dai (3)  
*Pseudofibroporia* Yuan Y. Chen, B.K. Cui & Y.C. Dai (1)  
*Repetobasidiopsis* Dhingra & Avn. P. Singh (1)  
*Rhodonina* Niemelä (1)  
*Rickiopora* Westphalen, Tomšovský & Rajchenb. (1)  
*Roseofavolus* T. Hatt. (1)  
*Roseograndinia* Hjortstam & Ryvarden (1)  
*Ryvardenia* Rajchenb. (2)  
*Sarcoporia* P. Karst. (9)  
*Skeletohydnum* Jülich (1)  
*Sparassiella* Schwarzman (1)  
*Spathulina* Pat. (1)  
*Spongioides* Lázaro Ibiza (1)  
*Spongipellis* Pat. (8)  
*Stegiakantha* Maas Geest. (1)  
*Taiwanofungus* Sheng H. Wu, Z.H. Yu, Y.C. Dai & C.H. Su (2)  
*Uncobasidium* Hjortstam & Ryvarden (2)

***Russulales*** Kreisel ex P. M. Kirk, P. F. Cannon & J. C. David

***Albatrellaceae*** Nuss

*Albatrellopsis* Teixeira (8)

*Albatrellus* Gray (22)

*Byssoporia* M.J. Larsen & Zak (1)

*Leucogaster* R. Hesse (20)  
*Leucophleps* Harkn. (3)  
*Mycolevis* A.H. Sm. (1)  
*Polyporoletus* Snell (4)  
*Scutiger* Paulet (10)

***Auriscalpiaceae*** Maas Geest.

*Amylonotus* Ryvarden (6)  
*Artomyces* Jülich (17)  
*Auriscalpium* Gray (8)  
*Dentipratulum* Domański (3)  
*Lentinellus* P. Karst. (30)  
*Stalpersia* Parmasto (1)

***Bondarzewiaceae*** Kotl. & Pouzar

*Amylaria* Corner (1)  
*Amylosporus* Ryvarden (12)  
*Bondarzewia* Singer (14)  
*Gloiodon* P. Karst. (3)  
*Heterobasidion* Bref. (15)  
*Laurilia* Pouzar (2)  
*Lauriliella* Nakasone & S.H. He (2)  
*Stecchericum* D.A. Reid (7)  
*Wrightoporia* Pouzar (32)

***Echinodontiaceae*** Donk

*Echinodontiellum* S.H. He & Nakasone (1)  
*Echinodontium* Ellis & Everh. (4)  
*Larssoniporia* Y.C. Dai, Jia J. Chen & B.K. Cui (2)

***Hericiaceae*** Donk

*Dentipellicula* Y.C. Dai & L.W. Zhou (3)  
*Dentipellis* Donk (7)  
*Hericum* Pers. (23)  
*Laxitextum* Lentz (3)  
*Pseudowrightoporia* Y.C. Dai, Jia J. Chen & B.K. Cui (10)  
*Wrightoporiopsis* Y.C. Dai, Jia J. Chen & B.K. Cui (5)

***Hybogasteraceae*** Jülich

*Hybogaster* Singer (1)

***Peniophoraceae*** Lotsy

*Amylofungus* Sheng H. Wu (2)  
*Asterostroma* Massee (19)  
*Baltazaria* Leal-Dutra, Dentinger & G.W. Griff. (4)  
*Dendrophora* (Parmasto) Chamuris (3)  
*Dichostereum* Pilát (11)  
*Duportella* Pat. (13)  
*Entomocorticium* H.S. Whitney, Bandoni & Oberw. (1)  
*Gloiothele* Bres. (12)  
*Lachnocladium* Lév. (40)  
*Licrostroma* P.A. Lemke (1)

*Metulodontia* Parmasto (1)  
*Peniophora* Cooke (60)  
*Sceptrulum* K.H. Larss. (1)  
*Scytinostroma* Donk (35)  
*Vararia* P. Karst. (50)  
*Vesiculomyces* E. Hagstr. (1)

***Russulaceae*** Lotsy

*Boidinia* Stalpers & Hjortstam (11)  
*Gloeopeniophorella* Rick (6)  
*Lactarius* Pers. (450)  
*Lactifluus* (Pers.) Roussel (207)  
*Multifurca* Buyck & V. Hofst. (12)  
*Pseudoxenasma* K.H. Larss. & Hjortstam (1)  
*Russula* Pers. (3000<)

***Stereaceae*** Pilát

*Acanthobasidium* Oberw. (6)  
*Acanthofungus* Sheng H. Wu, Boidin & C.Y. Chien (6)  
*Acanthophysellum* Parmasto (14)  
*Acanthophysium* (Pilát) G. Cunn. (20)  
*Aleurobotrys* Boidin (10)  
*Aleurodiscus* Rabenh. ex J. Schröt. (27)  
*Aleuromyces* Boidin & Gilles (1)  
*Amylohyphus* Ryvarden (1)  
*Amylosporomyces* S. S. Rattan (2)  
*Confertextum* Priyanka & Dhingra (2)  
*Conferticium* Hallenb. (4)  
*Dextrinocystidium* Sheng H. Wu (2)  
*Gloeocystidiellum* Donk (8)  
*Gloeocystidiopsis* Jülich (1)  
*Gloeomyces* Sheng H. Wu (3)  
*Gloeosoma* Bres. (1)  
*Matula* Masee (2)  
*Megalocystidium* Jülich (7)  
*Neoaleurodiscus* Sheng H. Wu (2)  
*Scotoderma* Jülich (1)  
*Stereum* Hill ex Pers. (40)  
*Xylobolus* P. Karst. (10)

***Terrestriporiaceae*** Y.C. Dai, B.K. Cui, F. Wu, Y. Yuan & Jia J. Chen\*

*Terrestriporia* Y.C. Dai, B.K. Cui, F. Wu, Y. Yuan & Jia J. Chen (1)\*

***Xenasmataceae*** Oberw.

*Xenasma* Donk (16)  
*Xenasmatella* Oberw. (14)  
*Xenosperma* Oberw. (4)

***Russulales*** genera *incertae sedis*

*Aleurocystidiellum* P.A. Lemke (3)  
*Dentipellopsis* Y.C. Dai & L.W. Zhou (1)  
*Dichantharellus* Corner (2)



*Dichopleurops* D.A. Reid (1)  
*Gloeasterostroma* Rick (1)  
*Gloeodontia* Boidin (8)  
*Gloeohypochnicium* (Parmasto) Hjortstam (2)  
*Haloaleurodiscus* N. Maek., Suhara & K. Kinjo (1)  
*Laeticutis* Audet (1)  
*Neoalbatrellus* Audet (4)  
*Perplexostereum* Ryvarden & S. Tutka (1)  
*Polypus* Audet (1)  
*Scopulodontia* Hjortstam (3)  
*Scytinostromella* Parmasto (6)  
*Xerocephus* Audet (2)

***Sebacinales*** M. Weiss, Selosse, Rexer, A. Urb. & Oberw.

***Sebacinaceae*** K. Wells & Oberw.

*Chaetospermum* Sacc. (4)  
*Ditangium* P. Karst. (3)  
*Efibulobasidium* K. Wells (1)  
*Globulisebacina* Oberw., Garnica & K. Riess (2)  
*Helvellosebacina* Oberw., Garnica & K. Riess (2)  
*Paulisebacina* Oberw., Garnica & K. Riess (1)  
*Sebacina* Tul. & C. Tul. (17)  
*Tremelloscypha* D.A. Reid (4)

***Serendipitaceae*** M. Weiss, Waller, A. Zuccaro & Selosse

*Serendipita* P. Roberts (11)

***Stereopsidales*** Sjökvist, E. Larss., B.E. Pfeil & K.H. Larss.

***Stereopsidaceae*** Sjökvist, E. Larss., B.E. Pfeil & K.H. Larss.

*Stereopsis* D.A. Reid (15)

***Thelephorales*** Corner ex Oberw.

***Bankeraceae*** Donk

*Bankera* Coker & Beers ex Pouzar (8)

*Boletopsis* Fayod (10)

*Corneroporus* T. Hatt. (1)

*Hydnellum* P. Karst. (39)

*Sarcodon* Quél. ex P. Karst. (49)

***Thelephoraceae*** Chevall.

*Amaurodon* J. Schröt (10)

*Lenzitopsis* Malençon & Bertault (2)

*Phellodon* P. Karst. (18)

*Polyozellus* Murrill (1)

*Pseudotomentella* Svrček (17)

*Skepperia* Berk. (5)

*Thelephora* Ehrh. ex Willd. (50)

*Tomentella* Pers. ex Pat. (100)

*Tomentellopsis* Hjortstam (8)

***Thelephorales*** genus *incertae sedis*

*Thelephorella* P. Karst. (1)

***Trechisporales*** K.H. Larss.

***Hydnodontaceae*** Jülich

*Brevicellicium* K. H. Larss. & Hjortstam (13)

*Dextrinocystis* Gilb. & M. Blackw. (2)

*Dextrinodontia* Hjortstam & Ryvarden (1)

*Hydnodon* Banker (1)

*Litschauerella* Oberw. (3)

*Luellia* K.H. Larss. & Hjortstam (3)

*Porpomyces* Jülich (1)

*Scytinopogon* Singer (5)

*Sistotremastrum* J. Erikss. (6)

*Sphaerobasidium* Oberw. (3)

*Subulicystidium* Parmasto (20)

*Trechispora* P. Karst. (67)\*

*Tubulicium* Oberw. (7)

***Trechisporales*** genus *incertae sedis*

*Sertulicium* Spirin, Volobuev & K.H. Larss. (6)\*

***Tremellodendropsidales*** Vizzini

***Tremellodendropsidaceae*** Jülich

*Tremellodendropsis* (Corner) D.A. Crawford (8)

***Agaricomycetes*** genera *incertae sedis*

*Akenomyces* G. Arnaud ex D. Hornby (1)

*Aldridgea* Masee (1)

*Amnocyttis* K.H. Larss. (1)\*

*Arthrodochium* R.F. Castañeda & W.B. Kendr. (1)

*Arualis* Katz (1)

*Blasiphalia* Redhead (1)

*Bridgeoporus* T.J. Volk, Burds. & Ammirati (2)

*Cenangiomycetes* Dyko & B. Sutton (1)

*Ceraceopsis* Hjortstam & Ryvarden (1)

*Cilicia* Fr. (2)

*Corticomyces* A.I. Romero & S. E. López (1)

*Cruciger* R. Kirschner & Oberw. (1)

*Dendrosporomyces* Nawawi, J. Webster & R.A. Davey (1)

*Ellula* Nag Raj (1)

*Fibulocoela* Nag Raj (1)

*Fibulotaeniella* Marvanová & Bär. (1)

*Geotrichopsis* Tzean & Estey (1)

*Gloeosynnema* Seifert & G. Okada (2)

*Glomerulomyces* A.I. Romero & S.E. López (1)

*Glutinoaggar* Sivan. & Watling (1)

*Hallenbergia* Dhingra & Priyanka (1)

*Heteroacanthella* Oberw. (3)

*Intextomyces* J. Erikss. & Ryvarden (4)

*Korupella* Hjortstam & P. Roberts (1)

*Loreleia* Redhead, Moncalvo, Vilgalys & Lutzoni (3)

*Minostrocyta* Hjortstam & Ryvarden (1)

*Myliotopsis* Pat. (1)

*Myriococcum* Fr. (1)

*Odonticium* Parmasto (7)  
*Pagidospora* Drechsler (1)  
*Phlyctibasidium* Jülich (1)  
*Purpureocorticiu*m S.H. Wu (1)  
*Pycnovellomyces* R.F. Castañeda (1)  
*Riessia* Fresen. (5)  
*Riessiella* Jülich (2)  
*Taiwanoporia* T.T. Chang & W.N. Chou (1)  
*Titaeella* G. Arnaud ex K. Ando & Tubaki (1)  
*Trechinothus* E.C. Martini & Trichiès (1)  
*Trimitiella* Dhingra (1)  
*Tubulicrinopsis* Hjortstam & Kotir. (4)  
*Xerotus* Fr. (4)

***Bartheletiomycetes*** Thines

***Bartheletiales*** Thines

***Bartheletiaceae*** R. Bauer, Scheuer, M. Lutz & Grube

*Bartheletia* G. Arnaud ex Scheuer, R. Bauer, M. Lutz, Stabenth., Melnik & Grube (1)

***Dacrymycetes*** Doweld

***Dacrymycetales*** Henn.

***Cerinomycetaceae*** Jülich

*Cerinomyces* G. W. Martin (13)

***Dacrymycetaceae*** J. Schröt.

*Calocera* (Fr.) Fr. (18)

*Cerinosterus* R.T. Moore (1)

*Dacrymyces* Nees (50)

*Dacryopinax* G.W. Martin (24)

*Dacryoscyphus* R. Kirschner & Zhu L. Yang (1)

*Ditiola* Fr. (10)

*Femsjon*ia Fr. (7)

*Guepiniopsis* Pat. (8)

*Heterotextus* Lloyd (6)

***Unilacrymales*** Shirouzu, Tokum. & Oberw.

***Unilacrymaceae*** Shirouzu, Tokum. & Oberw.

*Unilacryma* Shirouzu, Tokum. & Oberw. (1)

***Dacrymycetes*** family *incertae sedis*

***Dacryonaemataceae*** J.C. Zamora & S. Ekman

*Dacryonaema* Nannf. (1)

***Tremellomycetes*** Doweld

***Chionasterales*** N.A.T. Irwin, C.S. Twynstra, V. Mathur & P.J. Keeling

***Chionasteraceae*** N.A.T. Irwin, C.S. Twynstra, V. Mathur & P.J. Keeling

*Chionaster* Wille (2)

***Cystofilobasidiales*** Fell, Roeljmans & Boekhout

***Cystofilobasidiaceae*** K. Wells & Bandoni

*Cystofilobasidium* Oberw. & Bandoni (8)

**Mrakiaceae** X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout

*Itersonilia* Derx (3)

*Krasilnikovozyma* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (3)

*Mrakia* Y. Yamada & Komag. (12)

*Phaffia* M.W. Mill., Yoney. & Soneda (3)

*Tausonia* Babeva (3)

*Udeniomyces* Nakase & Takem. (4)

*Vustinia* Kachalkin, Turchetti & Yurkov (1)

**Filobasidiales** Jülich

**Filobasidiaceae** L.S. Olive

*Filobasidium* L.S. Olive (9)

*Goffeauzyma* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (6)

*Heterocephalacria* Berthier (8)

*Naganishia* S. Goto (8)

*Syzygospora* G.W. Martin (2)

**Piskurozymaceae** X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout

*Piskurozyma* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (12)

*Solicoccozyma* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (7)

**Holtermanniales** Libkind, Wuczk., Turchetti & Boekhout

**Holtermanniaceae** Redhead

*Holtermannia* Sacc. & Traverso (8)

*Holtermanniella* Libkind, Wuczk., Turchetti & Boekhout (5)

**Tremellales** Fr.

**Bulleraceae** X. Zh. Liu, F.Y. Bai, M. Groenew. & Boekhout

*Bullera* Derx (4)

*Fonsecazyma* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (3)

*Genolevuria* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (4)

*Pseudotremella* X.Z. Liu, F.Y. Bai, A.M. Yurkov, M. Groenew. & Boekhout (4)

**Bulleribasidiaceae** X. Z. Liu, F.Y. Bai, M. Groenew. & Boekhout

*Bulleribasidium* J.P. Samp., M. Weiss & R. Bauer (11)

*Derxomyces* F.Y. Bai & Q.M. Wang (24)

*Dioszegia* Zsolt (18)

*Hannaella* F.Y. Bai & Q.M. Wang (11)

*Nielozyma* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout 2020 (= *Nielozyma* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout 2015) (2)

*Vishniacozyma* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (11)

**Carcinomycetaceae** Oberw. & Bandoni

*Carcinomyces* Oberw. & Bandoni (3)

**Cryptococcaceae** Kütz. ex Castell. & Chalm.

*Cryptococcus* Vuill. (12)

*Kwoniella* Statzell & Fell (14)

*Teunia* Q.M. Wang & F.Y. Bai (8)\*

**Cuniculitremaeae** J.P. Samp., R. Kirschner & M. Weiss

*Fellomyces* Y. Yamada & I. Banno (4)

*Kockovaella* Nakase, I. Banno & Y. Yamada (19)

*Sterigmatosporidium* G. Kraep. & U. Schulze (1)

***Naemateliaceae*** X. Z. Liu, F. Y. Bai, M. Groenew. & Boekhout

*Dimennazyma* X. Z. Liu, F. Y. Bai, M. Groenew. & Boekhout (1)

*Naematelia* Fr. (4)

***Phaeotremellaceae*** A.M. Yurkov & Boekhout

*Gelidatrema* A.M. Yurkov, X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (1)

*Phaeotremella* Rea (11)

***Phragmoxenidiaceae*** Oberw. & R. Bauer

*Phragmoxenidium* Oberw. (1)

***Rhynchogastremaceae*** Oberw. & B. Metzler

*Papiliotrema* J.P. Samp., M. Weiss & R. Bauer (30)

*Rhynchogastrema* B. Metzler & Oberw. (9)

*Tetragoniomyces* Oberw. & Bandoni (1)

***Sirobasidiaceae*** Lindau

*Fibulobasidium* Bandoni (3)

***Tremellaceae*** Fr.

*Hormomyces* Bonord. (6)

*Mycocryptococcus* Pollacci & Nann. (1)

*Tremella* Pers. (>500)

***Trimorphomycetaceae*** X. Z. Liu, F.Y. Bai, M. Groenew. & Boekhout

*Carlosrosaea* A.M. Yurkov, X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (3)

*Saitozyma* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (4)

*Sugitazyma* A.M. Yurkov, X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (1)

*Trimorphomyces* Bandoni & Oberw. (2)

***Tremellales*** genera *incertae sedis*

*Biatoropsis* Räsänen (4)

*Dictyotremella* Kobayasi (1)

*Neotremella* Lowy (1)

*Sigmogloea* Bandoni & J.C. Krug (1)

*Sirobasidium* Lagerh. & Pat. (8)

*Sirotrema* Bandoni (3)

*Tremellina* Bandoni (1)

*Xenolachne* D.P. Rogers (2)

***Trichosporonales*** Boekhout & Fell

***Tetragoniomycetaceae*** Oberw. & Bandoni

*Bandonia* A.M. Yurkov, X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (1)

*Cryptotrichosporon* Okoli & Boekhout (5)

*Takashimella* Q.M. Wang (4)

***Trichosporonaceae*** Nann.

*Apiotrichum* Stautz (21)

*Cutaneotrichosporon* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (15)

*Effuseotrichosporon* A.M. Yurkov, X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (1)  
*Haglerozyma* X.Z. Liu, F.Y. Bai, M. Groenew. & Boekhout (1)  
*Pascua* Takashima, Manabe, Nishimura, Sriswasdi, Ohkuma, Iwasaki & Sugita (1)  
*Prillingeria* Takashima, Manabe, Nishimura, Sriswasdi, Ohkuma, Iwasaki & Sugita (1)  
*Trichosporon* Behrend (12)  
*Vanrija* R. T. Moore (9)

***Tremellomycetes* genera incertae sedis**

*Heteromycophaga* P. Roberts (2)  
*Phyllopta* (Fr.) Fr. (1)  
*Trichosporonoides* Haskins & J.F.T. Spencer (6)

***Wallemiomycetes* Zalar, de Hoog & Schroers**

***Geminibasidiales*** H.D.T. Nguyen, N.L. Nick. & Seifert  
***Geminibasidiaceae*** H.D.T. Nguyen, N.L. Nick. & Seifert  
*Basidioascus* Matsush. (3)  
*Geminibasidium* H.D.T. Nguyen, N.L. Nick. & Seifert (2)

***Wallemiales* Zalar, de Hoog & Schroers**

***Wallemiaceae*** R.T. Moore  
*Wallemia* Johan-Olsen (8)

***Wallemiomycetes* genus incertae sedis**

*Chernovia* A.M. Yurkov & Begerow (1)

**Subphylum *Pucciniomycotina*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.

***Agaricostilbomycetes*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.  
***Agaricostilbales*** Oberw. & R. Bauer  
***Agaricostilbaceae*** Oberw. & R. Bauer  
*Agaricostilbum* J.E. Wright (4)  
*Pseudobensingtonia* F.Y. Bai, Q.M. Wang, M. Groenewald & Boekhout (2)  
*Sterigmatomyces* Fell (5)

***Chionosphaeraceae*** Oberw. & Bandoni

*Ballistosporomyces* Nakase, G. Okada & Sugiy. (4)  
*Boekhoutia* Q.M. Wang & F.Y. Bai (1)\*  
*Chionosphaera* D.E. Cox (6)  
*Cystobasidiopsis* R. Bauer, B. Metzler, Begerow & Oberw. (3)  
*Kurtzmanomyces* Y. Yamada, Itoh, H. Kawas., I. Banno & Nakase (4)  
*Stilbum* Tode (10)

***Jianyuniaceae*** Q.M. Wang & F.Y. Bai\*

*Jianyunia* Q. M. Wang, F. Y. Bai, M. Groenew. & Boekhout (1)  
*Sterigmatospora* Q.M. Wang & F.Y. Bai (1)\*  
*Pseudosterigmatospora* Q.M. Wang & F.Y. Bai (1)\*

***Kondoaceae*** R. Bauer, Begerow, J. P. Samp., M. Weiss & Oberw.

*Bensingtonia* Ingold (5)  
*Kondoa* Y. Yamada, Nakagawa & I. Banno (10)

***Ruineniaceae*** Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout

*Ruinenia* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (5)

***Agaricostilbales*** genus *incertae sedis*

*Mycogloea* L. S. Olive (7)

***Agaricostilbomycetes*** genus *incertae sedis*

*Crittendenia* Diederich, Millanes, M. Westb., Etayo, J.C. Zamora & Wedin (2)\*

***Atractiellomycetes*** R. Bauer, Begerow, J. P. Samp., M. Weiss & Oberw.

***Atractiellales*** Oberw. & Bandoni

***Atractogloeaceae*** Oberw. & R. Bauer

*Atractogloea* Oberw. & Bandoni (1)

***Hoehnelomycetaceae*** Jülich

*Basidiopycnis* Oberw., R. Kirschner, R. Bauer, Begerow & Arenal (1)

*Proceropycnis* M. Villarreal, Arenal, V. Rubio, Begerow, R. Bauer, R. Kirschner & Oberw. (2)

***Phleogenaceae*** Gäum.

*Atractidochium* Oono, Urbina & Aime (1)

*Atractiella* Sacc. (7)

*Bourdotigloea* Aime (9)

*Helicogloea* Pat. (25)

*Hobsonia* Berk. ex Masee (2)

*Phleogena* Link (1)

*Saccosoma* Spirin (9)

***Classiculomycetes*** R. Bauer, Begerow, J. P. Samp., M. Weiss & Oberw.

***Classiculales*** R. Bauer, Begerow, Oberw. & Marvanová

***Classiculaceae*** R. Bauer, Begerow, Oberw. & Marvanová

*Classicula* R. Bauer, Begerow, Oberw. & Marvanová (2)

*Jaculispora* H. J. Huds. & Ingold (1)

***Cryptomycocolacomycetes*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.

***Cryptomycocolacales*** Oberw. & R. Bauer

***Cryptomycocolacaceae*** Oberw. & R. Bauer

*Colacosiphon* R. Kirschner, R. Bauer & Oberw. (1)

*Cryptomycocolax* Oberw. & R. Bauer (1)

***Cystobasidiomycetes*** R. Bauer, Begerow, J. P. Samp., M. Weiss & Oberw.

***Buckleyzymales*** R.L. Zhao & K.D. Hyde

***Buckleyzymaceae*** Q. M. Wang, F.Y. Bai, M. Groenew. & Boekhout

*Buckleyzyma* Q. M. Wang, F.Y. Bai, M. Groenew. & Boekhout (5)

***Cystobasidiales*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.

***Cystobasidiaceae*** Gäum.

*Cystobasidium* (Lagerh.) Neuhoff (20)

*Halobasidium* Z. Guo, Y.R. Wang, Q.C. Hou, W.C. Li, H. J. Zhao, Z. H. Sun & Z.D. Zhang (1)

*Occultifur* Oberw. (9?)

***Cystobasidiales*** genera *incertae sedis*

*Robertozyma* Q.M. Wang & F.Y. Bai (1)\*

*Begerowomyces* Q.M. Wang & F.Y. Bai (1)\*

***Erythrobasidiales*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.

***Erythrobasidiaceae*** Denchev

*Bannoa* Hamam. (4)

*Erythrobasidium* Hamam, Sugiy. & Komag. (3)

***Erythrobasidiales*** genera *incertae sedis*

*Cyphobasidium* Millanes, Diederich & Wedin (2)

*Cyrenella* Goch. (1)

*Hasegawazyma* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (1)

***Naohideales*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.

***Naohideaceae*** Denchev

*Naohidea* Oberw. (1)

***Sakaguchiales*** R.L. Zhao & K. D. Hyde

***Sakaguchiaceae*** Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout

*Sakaguchia* Y. Yamada, K. Maeda & Mikata (5)

***Cystobasidiomycetes*** families *incertae sedis*

***Microsporomycetaceae*** Q.M. Wang, F. Y. Bai, M. Groenew. & Boekhout

*Microsporomyces* Q.M. Wang, F. Y. Bai, M. Groenew. & Boekhout (= *Lichenozyma* Černajová & Škaloud) (4)

***Symmetrosporaceae*** Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout

*Symmetrospora* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (10)

***Cystobasidiomycetes*** genus *incertae sedis*

*Queiroziella* C.R. Félix, J.D.P. Bezerra, R.P. Neves & Landell (1)

***Microbotryomycetes*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.

***Heitmaniales*** Q.M. Wang & F.Y. Bai\*

***Heitmaniaceae*** Q.M. Wang & F.Y. Bai\*

*Heitmania* X.Z. Liu, F.Y. Bai, M. Groenew. & T. Boekhout (3)

***Heterogastridiales*** Oberw. & R. Bauer

***Heterogastridiaceae*** Oberw. & R. Bauer

*Hyalopycnis* Höhn. (1)

*Krieglsteinera* Pouzar (1)

*Pycnopulvinus* Toome & Aime (1)

***Kriegeriales*** Toome & Aime

***Camptobasidiaceae*** R.T. Moore

*Camptobasidium* Marvanová & Suberkr. (1)

*Cryolevonia* A. Pontes, Ruethi, B. Frey & J.P. Samp. (2)\*

*Glaciozyma* Turchetti, Connell, Thomas-Hall & Boekhout (4)

***Kriegeriaceae*** Toome & Aime

*Kriegeria* Bres. (1)

*Meredithblackwellia* Toome & Aime (1)

*Phenoliferia* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (4)

*Yamadamyces* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (1)



***Leucosporidiales*** Sampaio, M. Weiss & Bauer  
***Leucosporidiaceae*** Sampaio, M. Weiss & Bauer  
*Leucosporidium* Fell, Statzell, I.L. Hunter & Phaff (11)

***Microbotryales*** R. Bauer & Oberw.  
***Microbotryaceae*** R.T. Moore  
*Bauerago* Vánky (9)  
*Microbotryum* Lév. (100)  
*Sphacelotheca* de Bary (50)  
*Kalmanago* T. Denchev, Denchev, Kemler & Begerow (4)\*  
*Zundeliomyces* Vánky (1)

***Ustilentylomataceae*** R. Bauer & Oberw.  
*Aurantiosporium* M. Piepenbr., Vánky & Oberw. (4)  
*Fulvisporium* Vánky (1)  
*Microbotryozyma* S.O. Suh, D.A. Maslov, Molestina & J.J. Zhou (1)  
*Ustilentyloma* Savile (4)

***Rosettozymales*** Q.M. Wang & F.Y. Bai\*  
***Rosettozymaceae*** Q.M. Wang & F.Y. Bai\*  
*Rosettozyma* Q.M. Wang & F.Y. Bai (3)\*

***Sporidiobolales*** Doweld  
***Sporidiobolaceae*** R.T. Moore  
*Rhodosporidiobolus* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (11)  
*Rhodotorula* F.C. Harrison (15)  
*Sporobolomyces* Kluyver & C.B. Niel (10)

***Microbotryomycetes*** families *incertae sedis*  
***Chrysozymaceae*** Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout  
*Bannozya* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (2)  
*Chrysozyma* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (2)  
*Fellozyma* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (1)  
*Hamamotoa* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (4)

***Colacogloeaceae*** Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout  
*Colacogloea* Oberw. & Bandoni (13)

***Microbotryomycetes*** genera *incertae sedis*  
*Atractocolax* R. Kirschner, R. Bauer & Oberw. (1)  
*Curvibasidium* Samp. & Golubev (3)  
*Libkindia* Mašínová, A. Pontes, J.P. Samp. & Baldrian (1)  
*Oberwinklerozyma* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (3)  
*Pseudohyphozyma* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (3)  
*Pseudoleucosporidium* V. de Garcia, M.A. Coelho, T. Maia, L.H. Rosa, A.B.M. Vaz, C.A. Rosa, J.P. Samp., P. Gonç., M.R. Van Broock & Libkind (1)  
*Psychromyces* L. Perini & Zalar (1)\*  
*Sampaiozyma* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (2)  
*Slooffia* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (4)  
*Spencerozyma* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (1)  
*Trigonosporomyces* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (1)  
*Udeniozyma* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (1)

*Vonarxula* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (1)  
*Yunzhangia* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (2)  
*Yurkovia* Mašínová, A. Pontes, J.P. Samp. & Baldrian (1)

***Mixiomycetes*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.  
***Mixiales*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.  
***Mixiaceae*** C.L. Kramer  
*Mixia* C.L. Kramer (1)

***Pucciniomycetes*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.  
***Helicobasidiales*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.  
***Helicobasidiaceae*** P.M. Kirk  
*Helicobasidium* Pat. (6)  
*Tuberculina* Tode ex Sacc. (26)

***Pachnocybales*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.  
***Pachnocybaceae*** Oberw. & R. Bauer  
*Pachnocybe* Berk. (1)

***Platyglloeales*** R.T. Moore  
***Eocronartiaceae*** Jülich  
*Eocronartium* G.F. Atk. (1)  
*Herpobasidium* Lind (6)  
*Jola* Möller (1)  
*Platycarpa* Couch (2)  
*Ptechetelium* Oberw. & Bandoni (1)

***Platyglloeaceae*** Racib.  
*Glomerogloea* Doweld (1)  
*Glomopsis* D.M. Hend. (2)  
*Insolibasidium* Oberw. & Bandoni (1)  
*Platyglloea* J. Schröt. (16)

***Pucciniales*** Clem. & Shear  
***Araucariomycetaceae*** Aime & McTaggart\*  
*Araucariomyces* Aime & McTaggart (2)\*

***Chaconiaceae*** Cummins & Y. Hirats.  
*Achrotelium* Syd. (5)  
*Botryorhiza* Whetzel & Olive (1)  
*Ceraceopsora* Kakish., T. Sato & S. Sato (1)  
*Chaconia* Juel (12)  
*Goplana* Racib. (13)  
*Maravalia* Arthur (41)  
*Olivea* Arthur (8)  
*Telomapea* G.F. Laundon (1)

***Coleosporiaceae*** Dietel  
*Ceropsora* B.K. Bakshi & Suj. Singh (1)  
*Chrysomyxa* Unger (38)  
*Coleosporium* Lév. (125)  
*Diaphanopellis* P.E. Crane (2)

*Gallowaya* Arthur (3)  
*Quasipucciniastrum* X.H. Qi, P. Zhao & L. Cai (1)  
*Rossmatomyces* Aime & McTaggart (3)\*

***Cronartiaceae*** Dietel

*Cronartium* Fr. (34)  
*Endocronartium* Y. Hirats. (2)  
*Peridermium* (Link) J.C. Schmidt & Kunze (50)

***Crossopsoraceae*** Aime & McTaggart\*

*Angiopsora* Mains (ca. 3)  
*Catenulopsora* Mundk. (2)  
*Crossopsora* Syd. & P. Syd. (16)  
*Dasturella* Mundk. & Khesw. (3)  
*Kweilingia* Teng (4)  
*Neolivea* Aime & McTaggart (1)\*

***Endoraeciaceae*** P. Zhao & L. Cai

*Endoraecium* Hodges & D.E. Gardner (22)

***Gymnosporangiaceae*** P. Zhao & L. Cai

*Gymnosporangium* R. Hedw. ex DC. (64)

***Melampsoraceae*** Dietel

*Melampsora* Castagne (100)

***Mikronegeriaceae*** Cummins & Y. Hirats.

*Blastospora* Dietel (5)  
*Chrysocelis* Lagerh. & Dietel (5)  
*Mikronegeria* Dietel (3)

***Milesinaceae*** Aime & McTaggart\*

*Milesia* F.B. White (20)  
*Milesina* Magnus (65)  
*Naohidemyces* S. Sato, Katsuya & Y. Hirats. (2)  
*Uredinopsis* Magnus (30)

***Neophysopellaceae*** P. Zhao & L. Cai

*Neophysopella* Jing X. Ji & Kakish. (16)

***Ochropsoraceae*** Aime & McTaggart\*

*Aplopsora* Mains (6)  
*Ochropsora* Dietel (3)

***Phakopsoraceae*** Cummins & Hirats. f.

*Aeciure* Buriticá & J.F. Hennen (1)  
*Arthuria* H.S. Jacks. (6)  
*Cerotelium* Arthur (27)  
*Macabuna* Buriticá & J.F. Hennen (7)  
*Monosporidium* Barclay (3)  
*Newinia* Thaung (3)  
*Nothoravenelia* Dietel (3)

*Phakopsora* Dietel (116)  
*Phragmidiella* Henn. (8)  
*Pucciniostele* Tranzschel & K.L. Kom. (4)  
*Scalarispora* Buriticá & J.F. Hennen (1)  
*Uredopeltis* Henn. (7)

***Phragmidiaceae*** Corda

*Arthuriomyces* Cummins & Y. Hirats. (3)  
*Campanulospora* Salazar-Yepes, Pardo-Card. & Buriticá (1)  
*Gerwasia* Racib. (19)  
*Gymnoconia* Lagerh. (4)  
*Hamaspora* Körn. (15)  
*Joerstadia* Gjaerum & Cummins (4)  
*Kuehneola* Magnus (22)  
*Morispora* Salazar-Yepes, Pardo-Card. & Buriticá (1)  
*Phragmidium* Link (100)  
*Physonema* Lév. (1)  
*Scutelliformis* Salazar-Yepes, Pardo-Card. & Buriticá (1)  
*Trachyspora* Fuckel (5)  
*Xenodochus* Schltdl. (2)

***Pileolariaceae*** Cummins & Y. Hirats.

*Atelocauda* Arthur & Cummins (3)  
*Pileolaria* Castagne (16)

***Pucciniaceae*** Chevall.

*Allodus* Arthur (1)  
*Chrysella* Syd. (1)  
*Chrysocyclus* Syd. (3)  
*Chrysopsora* Lagerh. (1)  
*Cleptomyces* Arthur (1)  
*Coleopucciniella* Hara ex Hirats. (2)  
*Corbulopsora* Cummins (3)  
*Cumminsiella* Arthur (8)  
*Cystopsora* E.J. Butler (2)  
*Endophyllum* Lév. (43)  
*Kernella* Thirum. (1)  
*Miyagia* Miyabe ex Syd. & P. Syd. (3)  
*Polioma* Arthur (5)  
*Puccinia* Pers. (ca. 3300)  
*Ramakrishnania* Ramachar & Bhagyan. (1)  
*Roestelia* Rebent. (15)  
*Stereostratum* Magnus (1)  
*Uromyces* (Link) Unger (ca. 1500)  
*Xenostele* Syd. & P. Syd. (4)  
*Zaghouania* Pat. (2)

***Pucciniastraceae*** Gäum. ex Leppik

*Hyalopsora* Magnus (21)  
*Melampsorella* J. Schröt. (2)  
*Melampsoridium* Kleb. (11)  
*Peridiopsora* Kamat & Sathe (2)

*Pucciniastrum* G.H. Otth (50)  
*Thekopsora* Magnus (7)  
***Pucciniosiraceae*** Cummins & Y. Hirats.  
*Alveolaria* Lagerh. (2)  
*Baeodromus* Arthur (6)  
*Ceratocoma* Buriticá & J.F. Hennen (1)  
*Chardoniella* F. Kern (4)  
*Cionothrix* Arthur (5)  
*Didymopsora* Dietel (6)  
*Dietelia* Henn. (13)  
*Gambleola* Massee (1)  
*Pucciniosira* Lagerh. (17)  
*Trichopsora* Lagerh. (1)

***Raveneliaceae*** Leppik  
*Allotelium* Syd. (1)  
*Anthomyces* Dietel (1)  
*Anthomycetella* Syd. & P. Syd. (1)  
*Apra* J.F. Hennen & F.O. Freire (1)  
*Bibulocystis* J. Walker, Beilharz, Pascoe & Priest (3)  
*Crossopsorella* E.S.C. Souza, Aime, Galvão-Elias & Dianese (1)  
*Cumminsina* Petr. (1)  
*Cystomyces* Syd. (1)  
*Diabole* Arthur (1)  
*Diabolidium* Berndt (1)  
*Dicheirinia* Arthur (14)  
*Diorchidiella* J.C. Lindq. (2)  
*Diorchidium* Kalchbr. (20)  
*Esalque* J.F. Hennen, Figueiredo & A.A. Carvalho (1)  
*Hapalophragmium* Syd. & P. Syd. (18)  
*Kernkampella* Rajendren (8)  
*Lipocystis* Cummins (1)  
*Nyssopsora* Arthur (11)  
*Ravenelia* Berk. (250)  
*Sphenospora* Dietel (6)  
*Spumula* Mains (7)  
*Triphragmiopsis* Naumov (3)  
*Triphragmium* Link (7)  
*Ypsilospora* Cummins (3)

***Rogerpetersoniaceae*** Aime & McTaggart\*  
*Rogerpetersonia* Aime & McTaggart (1)\*

***Skierkaceae*** Aime & McTaggart\*  
*Skierka* Racib. (13)

***Sphaerophragmiaceae*** Cummins & Y. Hirats.  
*Austropuccinia* Beenken (1)  
*Sphaerophragmium* Magnus (24)

***Tranzscheliaceae*** Aime & McTaggart\*  
*Leucotelium* Tranzschel (3)

*Tranzschelia* Arthur (19)

***Uncolaceae*** Buriticá

*Calidion* Syd. & P. Syd. (4)

*Uncol* Buriticá & P.A. Rodr. (1)

***Uromycladiaceae*** P. Zhao & L. Cai

*Uromycladium* McAlpine (11)

***Uropyxidaceae*** (P. Syd. & Syd.) Cummins & Y. Hirats.

*Canasta* A.A. Carvalho & J.F. Hennen (3)

*Dasyspora* Berk. & M.A. Curtis (13)

*Didymopsorella* Thirum. (2)

*Dipyxis* Cummins & J.W. Baxter (2)

*Kimuromyces* Dianese, L.T.P. Santos, R.B. Medeiros & Furlan. (1)

*Macruropyxis* Azbukina (2)

*Mimema* H.S. Jacks. (1)

*Phragmopyxis* Dietel (4)

*Poliomopsis* A.W. Ramaley (1)

*Porotenus* Viégas (7)

*Prospodium* Arthur (84)

*Sorataea* Syd. (8)

*Uropyxis* J. Schröt. (15)

***Pucciniales*** genera *incertae sedis*

*Aecidiconium* Vuill. (1)

*Aecidiolum* Unger (12)

*Aecidium* Pers. (ca. 800)

*Caeoma* Link (ca. 50)

*Caetea* Salazar-Yepes & A.A. Carvalho (1)

*Cerradoa* J.F. Hennen & Y. Ono (1)

*Coleopuccinia* Pat. (1)

*Desmella* Syd. & P. Syd. (4)

*Desmellopsis* J.M. Yen (1)

*Desmosorus* Ritschel, Oberw. & Berndt (1)

*Edythea* H.S. Jacks. (5)

*Elateraecium* Thirum., F. Kern & B.V. Patil (3)

*Flaminia* Sacc. & P. Syd. (1)

*Hemileia* Berk. & Broome (55)

*Hennenia* Buriticá (1)

*Intrapes* J.F. Hennen & Figueiredo (1)

*Masseella* Dietel (6)

*Mehtamyces* Mundk. & Thirum. (1)

*Neopuccinia* A. Martins (1)

*Phragmotelium* Syd. (10)

*Puccorchidium* Beenken (2)

*Schroeteriaster* Magnus (4)

*Sphenorchidium* Beenken (2)

*Uraecium* Arthur (12)

*Uredo* Pers. (600)

***Septobasidiales*** Couch ex Donk

***Septobasidiaceae*** Racib.

*Aphelariopsis* Jülich (2)

*Auriculoscypha* D.A. Reid & Manim. (1)

*Coccidioidictyon* Oberw. (1)

*Johncouchia* S. Hughes & Cavalc. (1)

*Septobasidium* Pat. (200)

*Uredinella* Couch (2)

***Spiculogloeomycetes*** Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout

***Spiculogloales*** R. Bauer, Begerow, J.P. Samp., M. Weiss & Oberw.

***Spiculogloeaceae*** Denchev

*Phyllozyma* Q.M. Wang, F.Y. Bai, M. Groenew. & Boekhout (7)

*Spiculogloea* P. Roberts (5)

***Spiculogloeomycetes*** genus *incertae sedis*

*Meniscomyces* Q.M. Wang & F.Y. Bai (1)\*

***Tritirachiomycetes*** Aime & Schell

***Tritirachiales*** Aime & Schell

***Tritirachiaceae*** Aime & Schell

*Tritirachium* Limber (4)

*Paratritirachium* Beguin, Pyck & Detandt (2)

***Pucciniomycotina*** genera *incertae sedis*

*Kryptastrina* Oberw (1)

*Paraphelaria* Corner (2)

*Zygogloea* P. Roberts (1)

**Subphylum *Ustilaginomycotina*** Doweld

***Exobasidiomycetes*** Begerow, M. Stoll & R. Bauer

***Ceraceosorales*** Begerow, M. Stoll & R. Bauer

***Ceraceosoraceae*** Denchev & R.T. Moore

*Ceraceosorus* B.K. Bakshi (3)

***Doassansiales*** R. Bauer & Oberw.

***Doassansiaceae*** R.T. Moore ex P.M. Kirk, P.F. Cannon & J.C. David

*Burrillia* Setch. (4)

*Doassansia* Cornu (12)

*Doassinga* Vánky, R. Bauer & Begerow (1)

*Entylomaster* Vánky & R.G. Shivas (2)

*Heterodoassansia* Vánky (8)

*Nannfeldtiomyces* Vánky (2)

*Narasimhania* Thirum. & Pavgi (1)

*Pseudodermatosorus* Vánky (2)

*Pseudodoassansia* (Setch.) Vánky (2)

*Pseudotracya* Vánky (1)

*Tracya* Syd. & P. Syd. (2)

***Melaniellaceae*** R. Bauer, Vánky, Begerow & Oberw.

*Melaniella* R. Bauer, Vánky, Begerow & Oberw. (2)

**Rhamphosporaceae** R. Bauer & Oberw.

*Rhamphospora* D.D. Cunn. (2)

**Entylomatales** R. Bauer & Oberw.

**Entylomataceae** R. Bauer & Oberw.

*Entyloma* de Bary (163)

*Tilletiopsis* Derx (3)

**Exobasidiales** Henn.

**Brachybasidiaceae** Gäum.

*Brachybasidium* Gäum. (1)

*Dicellomyces* L.S. Olive (4)

*Kordyana* Racib. (8)

*Meira* Boekhout, Scorzetti, Gerson & Szejnb. (6)

*Marantokordyana* M. Piepenbr., Maike Hartmann, T.A. Hofm. & M. Lutz (2)\*

*Proliferobasidium* J.L. Cunn. (1)

**Cryptobasidiaceae** Malençon ex Donk

*Acaromyces* Boekhout, Scorzetti, Gerson & Szejnb. (1)

*Botryoconis* Syd. & P.Syd. (2)

*Clinoconidium* Pat. (6)

*Coniodictyum* Har. & Pat. (1)

*Drepanoconis* J. Schröt. & Henn. (3)

*Phacellula* Syd. (1)

**Exobasidiaceae** J. Schröt.

*Arcticomyces* Savile (1)

*Austrobasidium* Palfner (1)

*Exobasidium* Woronin (51)

*Muribasidiospora* Kamat & Rajendren (3)

**Graphiolaceae** Clem. & Shear

*Graphiola* Poit. (12)

*Stylina* Syd. & P. Syd. (1)

**Laurobasidiaceae** Pinruan, Sommai, Suetrong, Somrith. & E.B.G. Jones

*Laurobasidium* Jülich (2)

**Georgefischeriales** R. Bauer, Begerow & Oberw.

**Eballistraceae** R. Bauer, Begerow, A. Nagler & Oberw.

*Eballistra* R. Bauer, Begerow, A. Nagler & Oberw. (4)

**Georgefischeriaceae** R. Bauer, Begerow & Oberw.

*Georgefischeria* Thirum. & Naras. (4)

*Jamesdicksonia* Thirum., Pavgi & Payak (20)

**Gjaerumiaceae** R. Bauer, M. Lutz & Oberw.

*Gjaerumia* R. Bauer, M. Lutz & Oberw. (3)

**Tilletiariaceae** R.T. Moore

*Phragmotenium* R. Bauer, Begerow, A. Nagler & Oberw. (5)

*Tilletiaria* Bandoni & B.N. Johri (1)



*Tolyposporella* G.F. Atk. (6)

***Golubeviales*** Q.M. Wang, Begerow, F.Y. Bai & Boekhout

***Golubeviaceae*** Q.M. Wang, F.Y. Bai, Begerow & Boekhout

*Golubevia* Q.M. Wang, F.Y. Bai, Begerow & Boekhout (1)

***Microstromatales*** R. Bauer & Oberw.

***Microstromataceae*** Jülich

*Microstroma* Niessl (16)

***Quambalariaceae*** Z.W. de Beer, Begerow & R. Bauer

*Quambalaria* J.A. Simpson (7)

***Volvocisporiaceae*** Begerow, R. Bauer & Oberw.

*Volvocisporium* Begerow, R. Bauer & Oberw. (2)

***Microstromatales*** genera *incertae sedis*

*Jaminaea* Sipiczki & Kajdacs ex T. Kij. & Aime (4)

*Parajaminaea* T. Kij. & Aime (2)

*Pseudomicrostroma* T. Kij. & Aime (3)

*Sympodiomycopsis* Sugiy., Tokuoka & Komag. (3)

***Robbauerales*** Boekhout, Begerow, Q.M. Wang & F.Y. Bai

***Robbaueraceae*** Boekhout, Begerow, Q.M. Wang & F.Y. Bai

*Robbauera* Boekhout, Begerow, Q.M. Wang & F.Y. Bai (1)

***Tilletiales*** Kreisel ex R. Bauer & Oberw.

***Erratomycetaceae*** Denchev & T. Denchev

*Erratomyces* M. Piepenbr. & R. Bauer (5)

***Tilletiaceae*** J. Schröt.

*Conidiosporomyces* Vánky (3)

*Ingoldiomyces* Vánky (1)

*Neovossia* Körn. (1)

*Oberwinkleria* Vánky & R. Bauer (1)

*Salmacisia* D.R. Huff & A. Chandra (1)

*Tilletia* Tul. & C. Tul. (179)

***Malasseziomycetes*** Q.M. Wang & F.Y. Bai

***Malasseziales*** R.T. Moore

***Malasseziaceae*** Denchev & R.T. Moore

*Malassezia* Baillon (18)

***Moniliellomycetes*** Q.M. Wang, F.Y. Bai & Boekhout

***Moniliellales*** Q.M. Wang, F.Y. Bai & Boekhout

***Moniliellaceae*** Q.M. Wang, F.Y. Bai & Boekhout

*Moniliella* Stolk & Dakin (15)

***Ustilaginomycetes*** R. Bauer, Oberw. & Vánky

***Uleiellales*** Garnica, K. Riess, M. Schön, H. Butin, M. Lutz, Oberw. & R. Bauer

***Uleiellaceae*** Vánky

*Uleiella* J. Schröt. (2)

***Urocystidales*** R. Bauer & Oberw.  
***Doassansiopsidaceae*** Begerow, R. Bauer & Oberw.  
*Doassansiopsis* (Setch.) Dietel (14)  
***Fereydouniaceae*** S. Nasr, Soudi, H.D.T. Nguyen, M. Lutz & Piątek  
*Fereydounia* S. Nasr, M.R. Soudi, H.D.T. Nguyen, M. Lutz & Piątek (1)

***Floromycetaceae*** S. Nasr, Soudi, H.D.T. Nguyen, M. Lutz & Piątek  
*Antherospora* R. Bauer, M. Lutz, Begerow, Piątek & Vánky (12)  
*Floromyces* Vánky, M. Lutz & R. Bauer (1)

***Glomosporiaceae*** Cif.  
*Thecaphora* Fingerh. (61)

***Mycosyringaceae*** R. Bauer & Oberw.  
*Mycosyrinx* Beck (4)

***Urocystidaceae*** Begerow, R. Bauer & Oberw.  
*Flamingomyces* R. Bauer, M. Lutz, Piątek, Vánky & Oberw. (1)  
*Melanoxa* M. Lutz, Vánky & R. Bauer (2)  
*Melanustilospora* Denchev (2)  
*Mundkurella* Thirum. (5)  
*Urocystis* Rabenh. ex Fuckel (166)  
*Ustacystis* Zundel (2)  
*Vankya* Ershad (3)

***Ustilaginales*** G. Winter  
***Anthracoideaceae*** Denchev  
*Anthracoidea* Bref. (112)  
*Cintractia* Cornu (13)  
*Dermatosorus* Sawada ex L. Ling (6)  
*Farysia* Racib. (23)  
*Farysporium* Vánky (1)  
*Heterotolypoosporium* Vánky (2)  
*Kukwaea* Suija, Motiej. & Zhurb. (1)  
*Kuntzeomyces* Henn. Ex Sacc. & P. Syd. (2)  
*Leucocintractia* M. Piepenbr., Begerow & Oberw. (4)  
*Moreaua* Liou & H.C. Cheng (39)  
*Orphanomyces* Savile (3)  
*Pilocintractia* Vánky (2)  
*Planetella* Savile (1)  
*Portalia* V. González, Vánky & Platas (1)  
*Schizonella* J. Schröt. (5)  
*Stegocintractia* M. Piepenbr., Begerow & Oberw. (6)  
*Testicularia* Klotzsch (3)  
*Tolypoosporium* Woronin ex J. Schröt. (5)  
*Trichocintractia* M. Piepenbr. (1)  
*Ustanciosporium* Vánky (22)

***Clintamraceae*** Vánky  
*Clintamra* Cordas & Durán (1)

***Geminaginaceae*** Vánky

*Geminago* Vánky & R. Bauer (1)

***Melanotaeniaceae*** Begerow, R. Bauer & Oberw.

*Exoteliospora* R. Bauer, Oberw. & Vánky (1)

*Melanotaenium* de Bary (9)

*Yelsemia* J. Walker (4)

***Pericladiaceae*** Vánky

*Pericladium* Pass. (3)

***Ustilaginaceae*** Tul. & C. Tul.\*

*Ahmadiago* Vánky (1)

*Aizoago* Vánky (2)

*Anomalomyces* Vánky, M. Lutz & R.G. Shivas (2)

*Anthracocystis* Bref. (134)

*Bambusiomycetes* Vánky (1)

*Centrolepidosporium* R.G. Shivas & Vánky (1)

*Dirkmeia* F.Y. Bai, Q.M. Wang, Begerow & Boekhout (1)

*Eriocaulago* Vánky (2)

*Eriomoeszia* Vánky (1)

*Franzpetrakia* Thirum. & Pavgi (3)

*Kalmanozyma* Q.M. Wang, F.Y. Bai, Begerow & Boekhout (3)

*Langdonia* McTaggart & R.G. Shivas (8)

*Macalpinomyces* Langdon & Full. (41)

*Melanopsichium* Beck (2)

*Moesziomyces* Vánky (7)

*Parvulago* R. Bauer, M. Lutz, Piątek, Vánky & Oberw. (1)

*Pattersoniomyces* Piątek, M. Lutz & C.A. Rosa (1)

*Shivasia* Vánky, M. Lutz & Piątek (1)

*Sporisorium* Ehrenb. ex Link (195)

*Stollia* McTaggart & R.G. Shivas (5)

*Tranzscheliella* Lavrov (17)

*Triodiomyces* McTaggart & R.G. Shivas (6)

*Ustilago* (Pers.) Roussel (170)

*Yunchangia* L. Guo & B. Xu (1)

***Websdaneaceae*** Vánky

*Restiosporium* Vánky (21)

*Websdanea* Vánky (1)

***Violaceomycetales*** Albu, Toome & Aime

***Violaceomycetaceae*** Albu, Toome & Aime

*Violaceomyces* Albu, Toome & Aime (1)

***Ustilaginomycetes*** genera *incertae sedis*

*Capitulocladosporium* L.Y. Sun, X. Sun & L.D. Guo (1)

*Eriocortex* Vánky & R.G. Shivas (1)

***Ustilaginomycotina*** order *incertae sedis*

***Cintractiellales*** McTaggart & R.G. Shivas

***Cintractiellaceae*** Vánky

*Cintractiella* Boedijn (2)

***Basidiomycota*** genera *incertae sedis*

*Anastomyces* W.P. Wu, B. Sutton & Gange (1)

*Anguillomyces* Marvanová & Bär. (1)

*Arcispora* Marvanová & Bär. (1)

*Arrasia* Bernicchia, Gorjón & Nakasone (1)

*Brevicellopsis* Hjortstam & Ryvarden (1)

*Celatogloea* P. Roberts (1)

*Cystogloea* P. Roberts (1)

*Microstella* K. Ando & Tubaki (1)

*Neotyphula* Wakef. (1)

*Radulodontia* Hjortstam & Ryvarden (1)

*Restilago* Vánky (1)

***Blastocladiomycota*** T.Y. James

***Blastocladiomycetes*** Doweld

***Blastocladiales*** H.E. Petersen

***Blastocladiaceae*** H.E. Petersen

*Allomyces* E.J. Butler (13)

*Blastocladia* Reinsch (31)

*Blastocladiopsis* Sparrow (2)

***Catenariaceae*** Couch

*Catenophlyctis* Karling (2)

*Nematoceromyces* Doweld (3)

***Paraphysodermataceae*** Doweld

*Paraphysoderma* Boussiba, Zarka & T.Y. James (1)

***Sorochytriaceae*** Dewel

*Sorochytrium* Dewel (1)

***Blastocladiales*** genus *incertae sedis*

*Endoblastidium* Codreanu (1)

***Callimastigales*** Doweld

***Callimastigaceae*** Fonseca

*Callimastix* Weissenb. (2)

***Catenomycetales*** Doweld

***Catenomycetaceae*** Doweld

*Catenomyces* A.M. Hanson (2)

***Coelomomycetaceae*** Couch

*Coelomomyces* Keilin (66)

*Coelomycidium* Debais. (2)

***Blastocladiomycetes*** genus *incertae sedis*

*Microallomyces* R. Emers. & J.A. Robertson (1)

***Physodermatomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Physodermatales*** Caval.-Sm.  
***Physodermataceae*** Sparrow  
*Physoderma* Wallr. (99)  
***CALCARISPORIELLOMYCOTA*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Calcarisporiellomycotina*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Calcarisporiellomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Calcarisporiellales*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Calcarisporiellaceae*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
*Calcarisporiella* de Hoog (1)  
*Echinochlamydosporium* X.Z. Jiang, H.Y. Yu, M.C. Xiang, X.Y. Liu & Xing Z. Liu (1)  
  
***CAULOCHYTRIOMYCOTA*** Doweld  
***Caulochytriomycetes*** Doweld  
***Caulochytriales*** Doweld  
***Caulochytriaceae*** Subram.  
*Caulochytrium* Voos & L.S. Olive (2)  
  
***CHYTRIDIOMYCOTA*** Doweld  
***Chytridiomycetes*** Caval.-Sm.  
***Chytridiales*** Cohn  
***Asterophlyctaceae*** Doweld  
*Asterophlyctis* H.E. Petersen (2)  
*Wheelerophlyctis* P.M Letcher, M.J. Powell, W.J. Davis (2)  
  
***Chytridiaceae*** Nowak.  
*Chytridium* A. Braun (143)  
*Dendrochytridium* Letcher, Longcore & M.J. Powell (1)  
*Dinochytrium* Lesham, Letcher & M.J. Powell (1)  
*Irineochytrium* Letcher, Longcore & M.J. Powell (1)  
*Polyphlyctis* Karling (3)  
*Zopfochytrium* M.J. Powell, Longcore, Letcher (1)  
***Chytriomycetaceae*** Letcher  
*Avachytrium* Vélez & Letcher (1)  
*Chytriomyces* Karling (33)  
*Entophlyctis* A. Fisch. (29)  
*Fayochytriomyces* W.J. Davis, Letcher, Longcore & M.J. Powell (1)  
*Obelidium* Nowak. (3)  
*Odontochytrium* Vélez & Letcher (1)  
*Pendulichytrium* K. Seto & Degawa (1)  
*Physocladia* Sparrow (1)  
*Podochytrium* Pfitzer (7)  
*Rhizoclosmatium* H.E. Petersen (4)  
*Siphonaria* H.E. Petersen (3)

***Phlyctochytriaceae*** Doweld

*Phlyctochytrium* J. Schröt. (73)

***Phlyctorhizaceae*** Doweld

*Phlyctorhiza* A.M. Hanson (3)

***Pseudorhizidiaceae*** Doweld

*Pseudorhizidium* M.J. Powell, Letcher & Longcore (1)

***Scherffeliomycetaceae*** Doweld

*Scherffeliomyces* Sparrow (4)

***Zygorhizidiaceae*** Doweld

*Zygorhizidium* Löwenthal (12)

***Chytridiales*** genus *incertae sedis*

*Delfinachytrium* Vélez & Letcher (1)

***Nephridiophagales*** Doweld

***Nephridiophagaceae*** R. Radek, Letcher, Wijayaw., P.M. Kirk & K.D. Hyde

*Coleospora* Gibbs (1)

*Nephridiophaga* Ivanić (12)

*Oryctospora* Purrini & Weiser (1)

*Peltomyces* Léger (1)

***Polyphagales*** Doweld

***Polyphagaceae*** F. Maekawa

*Polyphagus* Nowak. (15)

***Saccopodiales*** Doweld

***Saccopodiaceae*** Jacz. & P.A. Jacz.

*Saccopodium* Sorokīn (1)

***Chytridiomycetes*** families *incertae sedis*

***Amoebochytriaceae*** Doweld

*Amoebochytrium* Zopf (1)

***Sparrowiaceae*** Doweld

*Sparrowia* Willoughby (2)

***Sphaeromonadaceae*** Doweld

*Sphaeromonas* E. Liebet. (6)

***Tetrachytriaceae*** Doweld

*Tetrachytrium* Sorokīn (1)

***Thalassochytriaceae*** Doweld

*Thalassochytrium* Nyvall, M. Pedersén & Longcore (1)

***Chytridiomycetes*** genera *incertae sedis*

*Aphanistis* Sorokīn (2)

*Bertramia* Mesnil & Caullery (3)

*Blyttomyces* A.F. Bartsch (11)

*Canteria* Karling (1)  
*Dangeardia* Schröd. (11)  
*Dangeardiana* Valkanov ex A. Batko (4)  
*Dictyomorpha* Mullins (2)  
*Gamolpidium* Vlădescu (2)  
*Ichthyocytrium* Plehn (1)  
*Loborhiza* A.M. Hanson (1)  
*Macrochytrium* Minden (1)  
*Megachytrium* Sparrow (1)  
*Mitocytridium* P.A. Dang. (2)  
*Mucophilus* Plehn (1)  
*Nowakowskia* Borzí (1)  
*Olpidiaster* Pascher (4)  
*Perolpidium* Doweld (2)  
*Physorhizopodium* Scherff. (1)  
*Plasmophagus* De Wild. (3)  
*Pseudopileum* Canter (1)  
*Rhizidiocystis* Sideris (1)  
*Rhizosiphon* Scherff. (4)  
*Rhopalophlyctis* Karling (1)  
*Riethophlyctis* Doweld (1)  
*Saccomyces* Serbinow (2)  
*Sagittospora* Lubinsky (1)  
*Scherffeliomycopsis* Geitler (1)  
*Schizolpidium* Doweld (1)  
*Septolpidium* Sparrow (1)  
*Septosperma* Whiffen ex R.L. Seym. (5)  
*Solutoparies* Whiffen ex W.H. Blackw. & M.J. Powell (1)  
*Sorokinocystis* Doweld (1)  
*Sporophlyctidium* Sparrow (2)  
*Sporophlyctis* Serbinow (2)  
*Trematophlyctis* Pat. (1)  
*Truittella* Karling (1)  
*Volvorax* Doweld (1)  
*Zygochytrium* Sorokīn (1)  
*Zygophlyctis* Doweld (1)

***Cladochytriomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Cladochytriales*** Mozl.-Standr.  
***Catenochytridiaceae*** Doweld  
*Catenochytridium* Berdan (6)

***Cladochytriaceae*** J. Schröt.  
*Cladochytrium* Nowak. (51)

***Endochytriaceae*** Sparrow ex D.J.S. Barr  
*Diplophlyctis* J. Schröt. (12)  
*Endochytrium* Sparrow (7)

***Nowakowskiellaceae*** Sparrow ex Mozl.-Standr.  
*Nowakowskiella* J. Schröt. (18)

***Septochytriaceae*** Mozl.-Standr.

*Septochytrium* Berdan (5)

***Cladochytriales*** genera *incertae sedis*

*Allochytridium* D.J.S. Barr & Désauln. (2)

*Cylindrochytridium* Karling (2)

*Nephrochytrium* Karling (8)

***Lobulomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Lobulomycetales*** D.R. Simmons

***Alogomycetaceae*** Doweld

*Alogomyces* D.R. Simmons & Letcher (1)

***Lobulomycetaceae*** D.R. Simmons

*Clydaea* D.R. Simmons (1)

*Cyclopsomyces* K. Seto & Degawa (1)

*Lobulomyces* D.R. Simmons (2)

*Maunachytrium* D.R. Simmons (1)

***Lobulomycetales*** genus *incertae sedis*

*Algochytrops* Doweld (1)

***Mesochytriomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Gromochytriales*** Karpov & Aleoshin

***Gromochytriaceae*** Karpov & Aleoshin

*Gromochytrium* Karpov & Aleoshin (1)

***Mesochytriales*** Doweld

***Mesochytriaceae*** Doweld

*Mesochytrium* B.V. Gromov, Mamkaeva & Pljusch (1)

***Polychytriomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Polychytriales*** Longcore & D.R. Simmons

***Arkayaceae*** Doweld

*Arkaya* Longcore & D.R. Simmons (2)

***Polychytriaceae*** Doweld

*Karlingiomyces* Sparrow (8)

*Lacustromyces* Longcore (1)

*Neokarlingia* Longcore & D.R. Simmons (1)

*Polychytrium* Ajello (1)

***Rhizophydiomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Rhizophydiales*** Letcher

***Alphamycetaceae*** Letcher

*Alphamyces* Letcher (1)

*Betamyces* Letcher (1)

*Gammamyces* Letcher (1)



***Angulomycetaceae*** Letcher

*Angulomyces* Letcher (1)

***Aquamycetaceae*** Letcher

*Aquamycetes* Letcher (1)

***Batrachochytriaceae*** Doweld

*Batrachochytrium* Longcore, Pessier & D.K. Nichols (2)

***Collimycetaceae*** K. Seto & Degawa

*Collimyces* K. Seto & Degawa (1)

***Coralloidiomycetaceae*** Doweld

*Coralloidiomyces* Letcher (1)

***Dinomycetaceae*** Karpov & Guillou

*Dinomyces* Karpov & Guillou (1)

***Ericiomycetaceae*** Karpov & Reñé

*Ericiomyces* Karpov & Reñé (1)\*

***Globomycetaceae*** Letcher

*Globomyces* Letcher (1)

*Urceomyces* Letcher (1)

***Gorgonomycetaceae*** Letcher

*Gorgonomyces* Letcher (1)

***Halomycetaceae*** Letcher & M.J. Powell

*Halomyces* Letcher & M.J. Powell (1)

*Paludomyces* Letcher & M.J. Powell (1)

*Paranomyces* Letcher & M.J. Powell (1)

*Ulkenomyces* Letcher & M.J. Powell (1)

***Kappamycetaceae*** Letcher

*Kappamyces* Letcher & M.J. Powell (1)

***Operculomycetaceae*** Doweld

*Operculomyces* M.J. Powell, Letcher & Longcore (1)

***Pateramycetaceae*** Letcher

*Pateramyces* Letcher (1)

***Protrudomycetaceae*** Letcher

*Protrudomyces* Letcher (1)

***Rhizophydiaceae*** Letcher

*Rhizophydium* Schenk ex Rabenh. (218)

***Staurastrumycetaceae*** S. Van den Wyngaert, K. Seto & K. Rojas

*Staurastrumyces* Van den Wyngaert, K. Seto & K. Rojas (1)

***Terramycetaceae*** Letcher

*Boothiomyces* Letcher (1)

*Terramyces* Letcher (1)

***Uebelmesseromycetaceae*** M.J. Powell & Letcher

*Uebelmesseromyces* M.J. Powell & Letcher (1)

***Rhizophydiales*** genus *incertae sedis*

*Homolaphlyctis* Longcore, Letcher & T.Y. James (1)

***Rhizophlyctidomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Rhizophlyctidales*** Letcher

***Arizonaphlyctidaceae*** Letcher

*Arizonaphlyctis* Letcher (1)

***Borealophlyctidaceae*** Letcher

*Borealophlyctis* Letcher (2)

***Rhizophlyctidaceae*** H.E. Petersen

*Rhizophlyctis* A. Fisch. (31)

***Sonoraphlyctidaceae*** Letcher

*Sonoraphlyctis* Letcher (1)

***Spizellomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Spizellomycetales*** D.J.S. Barr

***Powellomycetaceae*** D.R. Simmons

*Fimicolochytrium* D.R. Simmons & Longcore (2)

*Geranomyces* D.R. Simmons (4)

*Powellomyces* Longcore (2)

*Thoreauomyces* D.R. Simmons & Longcore (1)

***Spizellomycetaceae*** D.J.S. Barr

*Barromyces* M.J. Powell & Letcher (1)

*Brevicalcar* Letcher & M.J. Powell (1)

*Bulbosomyces* Letcher & Longcore (1)

*Gaertneriomyces* D.J.S. Barr (4)

*Gallinipes* Letcher & M.J. Powell (3)

*Kochiomyces* D.J.S. Barr (1)

*Spizellomyces* D.J.S. Barr (8)

*Triparticalcar* D.J.S. Barr (2)

***Synchytriomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Synchytriales*** Doweld

***Synchytriaceae*** J. Schröt.

*Carpenterophlyctis* Doweld (2)

*Endodesmidium* Canter (1)

*Johnkarlingia* Pavgi & S.L. Singh (1)

*Synchytrium* de Bary & Woronin (255)

***Synchytriales*** genus *incertae sedis*

*Micromyces* P.A. Dang. (19)

***Chytridiomycota*** family *incertae sedis*

***Quaeritorhizaceae*** Longcore, D.R. Simmons & T.Y. James\*

*Quaeritorhiza* Longcore, D.R. Simmons & T.Y. James (1)\*

***Chytridiomycota*** genera *incertae sedis*

*Achlyella* Lagerh. (1)

*Coenomyces* K.N. Deckenb. (1)

*Achlyogeton* Schenk (4)

**ENTOMOPHTHOROMYCOTA** Humber

***Entomophthoromycotina*** Humber

***Entomophthoromycetes*** Humber

***Entomophthorales*** G. Winter

***Ancylistaceae*** J. Schröt.

*Ancylistes* Pfitzer (6)

*Capillidium* B. Huang & Y. Nie (7)\*

*Conidiobolus* Bref. (54)

*Macrobotophthora* Reukauf (2)

*Neoconidiobolus* B. Huang & Y. Nie (13)\*

***Completoriaceae*** Humber

*Completoria* Lohde (1)

***Entomophthoraceae*** Nowak.

*Batkoa* Humber (10)

*Entomophaga* A. Batko (22)

*Entomophthora* Fresen. (63)

*Erynia* (Nowak. ex A. Batko) Remaud. & Hennebert (27)

*Eryniopsis* Humber (5)

*Furia* (A. Batko) Humber (16)

*Massospora* Peck (15)

*Orthomyces* Steinkr., Humber & J.B. Oliv. (1)

*Strongwellsea* A. Batko & J. Weiser (3)

*Tarichium* Cohn *sensu stricto* (26)

*Zoophthora* A. Batko (38)

***Meristacraceae*** Humber

*Meristacrum* Drechsler (= *Tabanomyces* Couch, R.J. Andrejeva, Laird & Nolan) (2)

***Neozygitomycetes*** Humber

***Neozygiales*** Humber

***Neozygitaceae*** Ben Ze'ev, R.G. Kenneth & Uziel

*Apterivorax* S. Keller (2)

*Neozygites* Witlaczil (22)

*Thaxterosporium* Ben Ze'ev & R.G. Kenneth (1)

**ENTORRHIZOMYCOTA** R. Bauer, Garnica, Oberw., Riess, Weiß & Begerow

***Entorrhizomycetes*** Begerow, M. Stoll & R. Bauer

***Entorrhizales*** R. Bauer & Oberw.

***Entorrhizaceae*** R. Bauer & Oberw.

*Entorrhiza* C.A. Weber (ca.15)

***Talbotiomycetales*** K. Riess, R. Bauer, R. Kellner, Kemler, Piątek, Vánky & Begerow

***Talbotiomycetaceae*** K. Riess, R. Bauer, R. Kellner, Kemler, Piątek, Vánky & Begerow

*Talbotiomyces* Vánky, R. Bauer & Begerow (1)

***GLOMEROMYCOTA*** C. Walker & A. Schüssler

***Archaeosporomycetes*** Sieverd., G.A. Silva, B.T. Goto & Oehl

***Archaeosporales*** C. Walker & A. Schüssler

***Ambisporaceae*** C. Walker, Vestberg & A. Schüssler (= *Appendicisporaceae* C. Walker, Vestberg & A. Schüssler)

*Ambispora* C. Walker, Vestberg & A. Schüssler (basionym *Appendicispora* Spain, Oehl & Sieverding) (11)

***Archaeosporaceae*** J.B. Morton & D. Redecker

*Archaeospora* J.B. Morton & D. Redecker (6)

*Intraspora* Oehl & Sieverd. (1)\*

*Palaeospora* Oehl, Palenz., Sánchez-Castro & G.A. Silva (1)\*

***Geosiphonaceae*** Engl. & E. Gilg

*Geosiphon* F. Wettst. (1)

***Polonosporaceae*** Błaszk., Niezgoda, B.T. Goto, Magurno\*

*Polonospora* Błaszk., Niezgoda, B.T. Goto, Magurno (1)\*

***Glomeromycetes*** Caval.-Sm. emend. Oehl, G.A. Silva, B.T. Goto & Sieverd.

***Diversisporales*** C. Walker & A. Schüssler emend. Oehl, G.A. Silva & Sieverd.

***Acaulosporaceae*** J.B. Morton & Benny

*Acaulospora* Gerd. & Trappe (= *Kuklospora* Oehl & Sieverd.) (58)

***Diversisporaceae*** C. Walker & A. Schüssler

*Corymbiglomus* Błaszk. & Chwat (3)

*Desertispora* Błaszk., Kozłowska, Ryszka, Al-Yahya'ei & Symanczik (1)

*Diversispora* C. Walker & A. Schüssler (21)

*Otospora* Oehl, Palenz. & N. Ferrol (1)\*

*Redeckera* C. Walker & A. Schüssler (6)

*Sieverdingia* Błaszk., Niezgoda & B.T. Goto (1)

*Tricispora* Oehl, Sieverd., G.A. Silva & Palenz. (1)

***Pacisporaceae*** C. Walker, Błaszk., A. Schüssler & Schwarzott

*Pacispora* Sieverd. & Oehl (7)

***Sacculosporaceae*** Oehl, Sieverd., G.A. Silva, B.T. Goto, Sánchez-Castro & Palenz.

*Sacculospora* Oehl, Sieverd., G.A. Silva, B.T. Goto, I.C. Sánchez & Palenz. (2)

***Gigasporales*** S.P. Gautam & U.S. Patel (= *Gigasporales* Sieverd., G.A. Silva, B.T. Goto & Oehl)

***Dentiscutataceae*** F.A. Souza, Oehl & Sieverd.

*Dentiscutata* Sieverd., F.A. Souza & Oehl (9)

*Fuscutata* Oehl, F.A. Souza & Sieverd. (5)\*

*Quatunica* F.A. Souza, Sieverd. & Oehl (1)\*

***Gigasporaceae*** J.B. Morton & Benny

*Gigaspora* Gerd. & Trappe (7)

***Intraornatosporaceae*** B.T. Goto & Oehl

*Intraornatospora* B.T. Goto, Oehl & G.A. Silva (1)

*Paradentiscutata* B.T. Goto, Oehl & G.A. Silva (2)

***Racocetraceae*** Oehl, Sieverd. & F.A. Souza

*Cetraspora* Oehl, F. A. Souza & Sieverd. (8)

*Racocetra* Oehl, F.A. Souza & Sieverd. (13)

***Scutellosporaceae*** Sieverd., F.A. Souza & Oehl

*Bulbospora* Oehl & G.A. Silva (1)

*Orbispora* Oehl, G.A. Silva & D.K. Silva (2)

*Scutellospora* C. Walker & F.E. Sanders (11)

***Glomerales*** J.B. Morton & Benny emend. Oehl, G.A. Silva, B.T. Goto & Sieverd.

***Entrophosporaceae*** Oehl & Sieverd.

*Albahypha* Oehl, G.A. Silva, B.T. Goto & Sieverd. (2)

*Claroideoglomus* C. Walker & A. Schüssler (6)

*Entrophospora* R.N. Ames & R.W. Schneid. (2)\*

***Glomeraceae*** Piroz. & Dalpé emend. Oehl, G.A. Silva & Sieverd.

*Dominikia* Błaszcz., Chwat & Kovács (13)

*Epigeocarpum* Błaszcz., B.T. Goto, Jobim, Niezgoda & Marguno (1)\*

*Funneliglomus* Corazon-Guivin, G.A. Silva & Oehl (1)

*Funneliformis* C. Walker & A. Schüssler emend. Oehl, G.A. Silva & Sieverd. (13)

*Glomus* Tul. & C. Tul. emend. Oehl, G.A. Silva & Sieverd. (58)

*Halonatospora* Błaszcz., Niezgoda, B.T. Goto & Kozłowska (1)

*Kamienskia* Błaszcz., Chwat & Kovács (1)

*Microdominikia* Oehl, Corazon-Guivin & G.A. Silva (1)

*Microkamienskia* Corazon-Guivin, G.A. Silva & Oehl (3)

*Nanoglomus* Corazon-Guivin, G.A. Silva & Oehl (1)

*Oehlia* Błaszcz., Kozłowska, Niezgoda, B.T. Goto & Dalpé (1)

*Orientoglomus* G.A. Silva, Oehl & Corazon-Guivin (1)

*Rhizoglomus* Sieverd., G.A. Silva & Oehl (22)

*Sclerocystis* Berk. & Broome (8)

*Sclerocarpum* B.T. Goto, Błaszcz., Niezgoda, Kozłowska & Jobim (1)

*Septoglomus* Sieverd., G.A. Silva & Oehl (14)

*Silvaspora* Błaszcz., Niezgoda, B.T. Goto, Crossay & Magurno (1)\*

***Paraglomeromycetes*** Oehl, G.A. Silva, B.T. Goto & Sieverd.

***Paraglomerales*** C. Walker & A. Schüssler

***Paraglomeraceae*** J.B. Morton & D. Redecker

*Paraglomus* J.B. Morton & D. Redecker (8)

*Innospora* Błaszcz., Kovács, Chwat & Kozłowska (1)

***Pervetustaceae*** Błaszcz., Chwat, Kozłowska, Symanczik & Al-Yahya'ei

*Pervetustus* Błaszcz., Chwat, Kozłowska, Symanczik & Al-Yahya'ei (1)

***KICKXELLOMYCOTA*** Tedersoo, Sanchez-Ramirez, Köljal, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Asellariomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Asellariales*** Manier ex Manier & Lichtw.  
***Asellariaceae*** Manier ex Manier & Lichtw.  
*Asellaria* R.A. Poiss. (9)

***Asellariales*** genus *incertae sedis*  
*Baltomyces* Cafaro (1)

***Barbatosporomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Barbatosporales*** Doweld  
***Barbatosporaceae*** Doweld  
*Barbatospora* M.M. White, Siri & Lichtw. (1)

***Dimargaritomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Dimargaritales*** R.K. Benj.  
***Dimargaritaceae*** R.K. Benj.  
*Dimargaris* Tiegh. (7)  
*Dispira* Tiegh. (4)  
*Tieghemiomyces* R.K. Benj. (2)

***Dimargaritales*** genus *incertae sedis*  
*Spinalia* Vuill. (1)

***Harpellomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Harpellales*** Lichtw. & Manier  
***Harpellaceae*** L. Léger & Duboscq ex P.M. Kirk & P.F. Cannon  
*Carouxella* Manier, Rioux & Whisler (2)  
*Harpella* L. Léger & Duboscq (7)  
*Harpellomyces* Lichtw. & S.T. Moss (4)  
*Klastostachys* Lichtw., M.C. Williams & M.M. White (1)  
*Stachylina* L. Léger & M. Gauthier (40)  
*Stachylinoides* Lichtw. & López-Lastra (1)

***Legeriomycetaceae*** Pouzar  
*Austrosmittium* Lichtw. & M.C. Williams (5)  
*Bactromyces* William & Strongman (1)  
*Baetimyces* L.G. Valle & Santam. (1)  
*Bojamyces* Longcore (3)  
*Capniomyces* S.W. Peterson & Lichtw. (3)  
*Caudomyces* Lichtw., Kobayasi & Indoh (3)  
*Coleopteromyces* Ferrington, Lichtw. & López-Lastra (1)  
*Dacryodiomyces* Lichtw. (1)  
*Ejectosporus* S.W. Peterson, Lichtw. & M.C. Williams (1)  
*Ephemerellomyces* M.M. White & Lichtw. (1)  
*Furculomyces* Lichtw. & M.C. Williams (3)  
*Gauthieromyces* Lichtw. (3)  
*Genistelloides* S.W. Peterson, Lichtw. & B.W. Horn (5)  
*Genistellospora* Lichtw. (6)

*Glotzia* M. Gauthier ex Manier & Lichtw. (7)  
*Graminella* L. Léger & M. Gauthier ex Manier (3)  
*Laculus* William & Strongman (1)  
*Lancisporomyces* Santam. (5)  
*Legerioides* M.M. White (1)  
*Legeriomyces* Pouzar (11)  
*Legeriosimilis* M.C. Williams, Lichtw., M.M. White & J.K. Misra (8)  
*Orphella* L. Léger & M. Gauthier (12)  
*Pennella* Manier (8)  
*Plecopteromyces* Lichtw., Ferrington & López-Lastra (3)  
*Pseudoharpella* Ferrington, M.M. White & Lichtw. (1)  
*Pteromaktron* Whisler (2)  
*Simuliomyces* Lichtw. (1)  
*Sinotrichium* Juan Wang (1)  
*Smittium* R.A. Poiss. (1)  
*Spartiella* Tuzet & Manier ex Manier (3)  
*Stipella* L. Léger & M. Gauthier (2)  
*Stypomyces* Doweld (2)  
*Tectomyces* L.G. Valle & Santam. (3)  
*Trichozygospore* Lichtw. (1)  
*Trifoliellum* Strongman & M.M. White (1)  
*Zancudomyces* Yan Wang, Tretter, Lichtw. & M.M. White (1)  
*Zygopolaris* S.T. Moss, Lichtw. & Manier (2)  
*Zygopolaropsis* Hirok. Sato & Degawa (1)

***Harpellales* genus *incertae sedis***

*Trissocladowmyces* Doweld (1)

***Kickxellomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Kickxellales*** Kreisel ex R.K. Benj.

***Kickxellaceae*** Linder

*Coemansia* Tiegh. & G. Le Monn. (25)

*Dipsacomycetes* R.K. Benj. (1)

*Kickxella* Coem. (1)

*Linderina* Raper & Fennell (2)

*Martensella* Coem. (1)

*Martensiomyces* J.A. Mey. (1)

*Mycoemilia* Kurihara, Degawa & Tokum. (1)

*Myconymphaea* Kurihara, Degawa & Tokum. (1)

*Pinnatocoemansia* Kurihara & Degawa (1)

*Spirodactylon* R.K. Benj. (1)

*Spiromycetes* R.K. Benj. (2)

***Ramicandelaberomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

***Ramicandelaberales*** Doweld

***Ramicandelaberaceae*** Doweld

*Ramicandelaber* Y. Ogawa, S. Hayashi, Degawa & Yaguchi (4)

***Kickxellomycotina* genera *incertae sedis***

*Aenigmatospora* R.F. Castañeda, Saikawa, Guarro & M. Caldich (1)

*Ballocephala* Drechsler (1)  
*Zygnemomyces* K. Miura (2)

**MONOBLEPHAROMYCOTA** Doweld

*Hyaloraphidiomycetes* Doweld

*Hyaloraphidiales* Doweld

*Hyaloraphidiaceae* Doweld

*Hyaloraphidium* Korshikov (1)

*Monoblepharidomycetes* J.H. Schaffn.

*Monoblepharidales* Sparrow

*Gonapodyaceae* H.E. Petersen ex P.M. Kirk, P.F. Cannon & J.C. David

*Gonapodya* A. Fisch. (5)

*Monoblepharella* Sparrow (5)

*Harpochytriaceae* Wille

*Harpochytrium* Lagerh. (12)

*Monoblepharidaceae* A. Fisch.

*Monoblepharis* Cornu (15)

*Oedogoniomycetaceae* D.J.S. Barr

*Oedogoniomyces* Kobayasi & M. Ôkubo (1)

*Telasphaerulaceae* Longcore & T.Y. James

*Telasphaerula* Longcore & T.Y. James (1)

**MORTIERELLOMYCOTA** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

*Mortierellomycotina* Kerst. Hoffm., K. Voigt & P.M. Kirk

*Mortierellomycetes* Doweld

*Mortierellales* Caval.-Sm.

*Mortierellaceae* A. Fisch.

*Aquamortierella* Embree & Indoh (1)

*Benniella* Vandepol & Bonito (1)\*

*Dissophora* Thaxt. (3)

*Entomortierella* Vandepol & Bonito (5)

*Gamsiella* (R.K. Benj.) Benny & M. Blackw. (1)

*Gryganskiella* Vandepol & Bonito (2)\*

*Linnemannia* Vandepol & Bonito (11)\*

*Lobosporangium* M. Blackw. & Benny (1)

*Lunasporangiospora* Vandepol & Bonito (2)\*

*Modicella* Kanouse (2)

*Mortierella* Coem. (112)

*Necromortierella* Vandepol & Bonito (1)\*

*Podila* Stajich, Vandepol & Bonito (7)\*

*Mucoromycotina* Benny

*Endogonomycetes* Doweld

*Endogonales* Jacz. & P.A. Jacz.

*Densosporaceae* Desirò, M.E. Sm., Bidartondo, Trappe & Bonito

*Densospora* McGee (9)



***Endogonaceae*** Paol.

*Endogone* Link (26)

*Jimgerdemannia* Trappe, Desirò, M.E. Sm., Bonito & Bidartondo (2)

*Peridiospora* C.G. Wu & Suh J. Lin (2)

*Sclerogone* Warcup (1)

*Sphaerocreas* Sacc. & Ellis (4)

*Vinositunica* Koh. Yamam., Degawa & A. Yamada (2)\*

***Mucoromycetes*** Doweld

***Mucorales*** Fr.

***Backusellaceae*** K. Voigt & P.M. Kirk

*Backusella* Hesselt. & J.J. Ellis (26)

***Choanephoraceae*** J. Schröt.

*Blakeslea* Thaxt. (2)

*Choanephora* Curr. (2)

*Gilbertella* Hesselt. (2)

*Poitrasia* P.M. Kirk (1)

***Cunninghamellaceae*** Naumov ex R.K. Benj.

*Absidia* Tiegh. (26)

*Chlamydoabsidia* Hesselt. & J.J. Ellis (1)

*Cunninghamella* Matr. (15)

*Gongronella* Ribaldi (9)

*Halteromyces* Shipton & Schipper (1)

*Hesseltinella* H.P. Upadhyay (1)

***Lentamycetaceae*** K. Voigt & P.M. Kirk

*Lentamyces* Kerst. Hoffm. & K. Voigt (4)

***Lichtheimiaceae*** Kerst. Hoffm., Walther & K. Voigt

*Circinella* Tiegh. & G. Le Monn. (11)

*Dichotomocladium* Benny & R.K. Benj. (5)

*Fennellomyces* Benny & R.K. Benj. (4)

*Lichtheimia* Vuill. (7)

*Phascolomyces* Boedijn ex Benny & R.K. Benj. (1)

*Rhizomucor* Lucet & Costantin (6)

*Thamnostylum* Arx & H.P. Upadhyay (4)

*Thermomucor* Subrahm., B.S. Mehrotra & Thirum. (1)

*Zychaea* Benny & R.K. Benj. (1)

***Mucoraceae*** Dumort.

*Actinomucor* Schostak. (1)

*Ambomucor* R.Y. Zheng & X.Y. Liu (3)

*Benjaminiella* Arx (3)

*Chaetocladium* Fresen. (2)

*Cokeromyces* Shanor (1)

*Dicranophora* J. Schröt. (1)

*Ellisomyces* Benny & R.K. Benj. (1)

*Helicostylum* Corda (2)

*Hyphomucor* Schipper & Lunn (1)

*Isomucor* J.I. Souza, Pires-Zottar. & Harakava (2)

*Kirkiana* L.S. Loh, Kuthub. & Nawawi (1)  
*Kirkomyces* Benny (1)  
*Mucor* Fresen. (98)  
*Nawawiella* L.S. Loh & Kuthub. (1)  
*Parasitella* Bainier (1)  
*Pilaira* Tiegh. (7 and 1 subspecies)  
*Pirella* Bainier (2)  
*Rhizopodopsis* Boedijn (1)  
*Thamnidium* Link (1)  
*Tortumyces* L.S. Loh (2)

***Mycocladaceae*** Kerst. Hoffm.  
*Mycocladus* Beauverie (1)

***Mycotyphaceae*** Benny & R.K. Benj.  
*Mycotypha* Fenner (4)

***Phycomycetaceae*** Arx  
*Phycomyces* Kunze (3)  
*Spinellus* Tiegh. (5)

***Pilobolaceae*** Corda  
*Pilobolus* Tode (10 and 1 subspecies)  
*Utharomyces* Boedijn ex P.M. Kirk & Benny (1 sp. and 1 subspecies)

***Radiomycetaceae*** Hesselt. & J.J. Ellis  
*Radiomyces* Embree (3)

***Rhizopodaceae*** K. Voigt & P.M. Kirk  
*Rhizopus* Ehrenb. (13)  
*Sporodiniella* Boedijn (1)  
*Syzygites* Ehrenb. (1)

***Saksenaeaceae*** Hesselt. & J.J. Ellis  
*Apophysomyces* P.C. Misra (6)  
*Saksenaea* S.B. Saksena (5)  
***Syncephalastraceae*** Naumov ex R.K. Benj.  
*Protomycocladus* Schipper & Samson (1)  
*Syncephalastrum* J. Schröt. (3)

***Umbelopsidomycetes*** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov  
***Umbelopsidales*** Spatafora & Stajich  
***Pygmaeomycetaceae*** E. Walsh & N. Zhang\*  
*Pygmaeomyces* E. Walsh & N. Zhang (2)\*

***Umbelopsidaceae*** W. Gams & W. Mey.  
*Umbelopsis* Amos & H.L. Barnett (17)  
***Mucoromycotina*** genera *incertae sedis*  
*Bifiguratus* Torr.-Cruz & Porras-Alfaro (1)  
*Mucorodinium* K.W. Zaleski (1)  
*Palaeoendogone* Strullu-Derr., Kenrick, Pressel, Duckett, J.P. Rioult & Strullu (1)

*Planticonsortium* C. Walker & D. Redecker (1)

***Mucoromycota*** genus *incertae sedis*

*Nothadelphia* Degawa & W. Gams

**NEOCALLIMASTIGOMYCOTA** M.J. Powell

***Neocallimastigomycetes*** M.J. Powell

***Neocallimastigales*** J.L. Li, I.B. Heath & L. Packer

***Neocallimastigaceae*** I.B. Heath (= *Piromonadaceae* Doweld; = *Anaeromycetaceae* Doweld)

*Aestipascuomyces* Stabel, R. Hanafy, Schweitzer, Greif, Aliyu, Flad, D. Young, Lebuhn, Elshahed, Ochsenreither & N.H. Youssef (1)\*

*Agriosomyces* Hanafy, Lanjekar, Dhakephalkar, T.M. Callaghan, Dagar, G.W. Griff., Elshahed & N.H. Youssef (1)\*

*Aklioshbomyces* Hanafy, Lanjekar, Dhakephalkar, T.M. Callaghan, Dagar, G.W. Griff., Elshahed & N.H. Youssef (1)\*

*Anaeromyces* Breton, Bernalier, Dusser, Fonty, B. Gaillard & J. Guillot (4)

*Buwchfawromyces* T.M. Callaghan & G.W. Griff. (1)

*Caecomycetes* J.J. Gold (5)

*Capellomyces* Hanafy, Lanjekar, Dhakephalkar, T.M. Callaghan, Dagar, G.W. Griff., Elshahed & N.H. Youssef (2)\*

*Cyllamyces* Ozkose, B.J. Thomas, D.R. Davies, G.W. Griff. & Theodorou (1)

*Feramyces* Radwa Hanafy, Mostafa Elshahed & Noha Youssef (1)

*Ghazallomyces* Hanafy, Lanjekar, Dhakephalkar, T.M. Callaghan, Dagar, G.W. Griff., Elshahed & N.H. Youssef (1)\*

*Joblinomyces* Hanafy, Lanjekar, Dhakephalkar, T.M. Callaghan, Dagar, G.W. Griff., Elshahed & N.H. Youssef (1)\*

*Khoyollomyces* Hanafy, Lanjekar, Dhakephalkar, T.M. Callaghan, Dagar, G.W. Griff., Elshahed & N.H. Youssef (1)\*

*Liebetanzomyces* Joshi, G.W. Griff. & Dagar (1)

*Neocallimastix* Vávra & Joyon ex I.B. Heath (7)

*Oontomyces* Dagar (1)

*Orpinomyces* D.J.S. Barr, H. Kudo, Jakober & K.J. Cheng (2)

*Pecoromyces* Hanafy, N.H. Youssef, G.W. Griff. & Elshahed (1)

*Piromyces* J.J. Gold, I.B. Heath & Bauchop (= *Piromonas* E. Liebet.) (6)

*Tahromyces* Hanafy, Lanjekar, Dhakephalkar, T.M. Callaghan, Dagar, G.W. Griff., Elshahed & N.H. Youssef (1)\*

**OLPIDIOMYCOTA** Doweld

***Olpidiomycetes*** Doweld

***Olpidiales*** Caval.-Sm.

***Olpidiaceae*** J. Schröt.

*Chytridhaema* Moniez (1)

*Cibdelia* Juel (1)

*Leiolpidium* Doweld (5)

*Olpidium* (A. Braun) J. Schröt. (ca. 50)

**ROZELLOMYCOTA** Doweld

***Rudimicrosporea*** Sprague

***Metchnikovellida*** Vivier

***Amphiacanthidae*** Larsson

*Amphiacantha* Caullery & Mesnil (3)

***Metchnikovellidae*** Caullery & Mesnil emend. Larsson

*Amphiamblys* Caullery & Mesnil (7)

*Caulleryetta* Dogiel (8)

*Desportesia* Issi & Voronin (1)

*Metchnikovella* Caullery & Mesnil (8)

***Microsporidea*** Corliss & Levine

***Amblyosporida*** Tokarev & Issi

***Amblyosporidae*** Weiser emend. Tokarev & Issi

*Aedispora* Kilochitskii (1)

*Amblyospora* Hazard & Oldacre (90)

*Andreanna* Simakova, Vossbrinck & Andreadis (1)

*Becnelia* Tonka & Weiser (1)

*Crepidulospora* Simakova, Pankova & Issi (1)

*Cristulospora* Khodzhaeva & Issi (3)

*Culicospora* Weiser (2)

*Culicosporella* Weiser (1)

*Dimeiospora* Simakova, Pankova & Issi (1)

*Edhazardia* Becnel, V. Sprague & Fukuda (1)

*Hyalinocysta* Hazard & Oldacre (1)

*Intrapredatorus* Chen, Kuo & Wu (1)

*Novothelohania* Andreadis, Simakova, Vossbrinck, Shepard & Yurchenko (1)

*Parastempellia* Khodzhaeva (2)

*Parathelohania* Codreanu (25)

*Trichoctosporea* Larsson (1)

*Tricornia* Pell & Canning (1)

***Caudosporidae*** Weiser emend. Tokarev & Issi

*Binucleospora* Bronnvall & Larsson (1)

*Caudosporina* Weiser, comb. nov. Tokarev & Issi (1)

*Flabelliforma* Canning, Killick-Kendrick & Killick-Kendrick (4)

*Myrmecomorba* Plowes, Becnel, LeBrun, Oi, Valles, Jones & Gilbert (1)

*Neoflabelliforma* Morris & Freeman (2)

*Octosporea* Flu (18)

*Polydispyrenia* Canning & Hazard (2)

*Ringueletium* Garcia (1)

*Scipionospora* Bylén & Larsson (1)

*Weiseria* Doby & Saguez (3)

***Gurleyidae*** Sprague emend. Tokarev & Issi

*Agglomerata* Larsson & Yan (6)

*Binucleata* Refardt, Decaestecker, Johnson & Vávra (1)

*Conglomerata* Vávra, Fiala, Krylova, Petrusek & Hylis (1)

*Episeptum* Larsson (6)

*Gurleya* Doflein (10)

*Lanatospora* Voronin (4)

*Larssonia* Vidtmann & Sokolova (2)

*Marssoniella* Lemmermann (1)

*Norlevinea* Vávra (1)

*Paraepiseptum* Hylis, Oborník, Nebesářová & Vávra (4)

*Pseudoberwaldia* Vávra, Fiala, Krylova, Petrusek & Hylis (1)

*Senoma* Simakova, Pankova, Tokarev & Issi (1)

*Zelenkaia* Hyliš, Oborník, Nebesářová & Vávra (1)

***Amblyosporida*** genera *incertae sedis*

*Alfvenia* Larsson (4)

*Hazardia* Weiser (2)

*Multilamina* Becnel, Scheffrahn, Vossbrinck & Bahder (1)

*Takaokaspora* Andreadis, Takaoka, Otsuka & Vossbrinck (1)

*Trichotuzetia* Vávra, Larsson & Baker (1)

***Neopereziiida*** Tokarev & Issi

***Berwaldiidae*** Simakova, Tokarev & Issi

*Berwaldia* Larsson (4)

*Fibrillanosema* G.M. Johanna, S. Galbreath, J.E. Sm., R.S. Terry, J.J. Becnel & A.M. Dunn (1)

***Neopereziiidae*** Voronin emend. Issi, Tokarev, Seliverstova & Voronin

*Bacillidium* Janda (5)

*Bryonosema* Canning, Refardt, Vossbrinck, Okamura & Curry (2)

*Neoperezia* Issi & Voronin (2)

*Pseudonosema* Canning, Refardt, Vossbrinck, Okamura & Curry (1)

*Schroedera* Morris & Adams (2)

*Trichonosema* Canning, Refardt, Vossbrinck, Okamura & Curry (2)

***Tubulinosematidae*** Franzen, Fischer, Schröder, Schölmerich & Schneuwly emend. Tokarev & Issi

*Anncaliia* Issi, Krylova & Nikolaeva (6)

*Kneallhazia* Sokolova & Fuxa (2)

*Tubulinosema* Franzen, Fischer, Schröder, Schölmerich & Schneuwly (5)

***Neopereziiida*** genera *incertae sedis*

*Janacekia* Larsson (7)

*Systemostrema* Hazard & Oldacre (5)

***Ovavesiculida*** Tokarev & Issi

***Ovavesiculidae*** Sprague, Becnel & Hazard emend. Tokarev & Issi

*Antonospora* Fries, Paxton, Tengo, Slemenda, da Silva & Pieniazek (2)

*Ovavesicula* Andreadis & Hanula (1)

*Paranosema* Sokolova, Dolgikh, Morzhina, Nassonova, Issi, Terry, Ironside & Smith (4)

***Ovavesiculida*** genus *incertae sedis*

*Nematocida* Troemel, Félix, Whiteman, Barrière & Ausubel (1)

***Glugeida*** Gurley emend. Tokarev & Issi

***Facilisporidae*** Jones, Prosperi-Porta & Kim

*Facilispora* Jones, Prosperi-Porta & Kim (1)

***Glugeidae*** Gurley emend. Tokarev & Issi

*Alloglugea* Paperna & Lainson (1)

*Amazonospora* Azevedo & Matos (1)

*Cambaraspora* Bojko, Behringer, Moler, Stratton & Reisinger (1)

*Glugea* Thélohan (41)

*Ichthyosporidium* Caullery & Mesnil (5)

*Johenrea* Lange, Becnel, Razafindratiana, Przybyszewski & Razafindrafara (1)

*Loma* Morrison & Sprague (12)

*Parapleistophora* Issi, Kadyrova, Pushkar, Khodzhaeva & Krylova (1)  
*Pseudoloma* Matthews, Brown, Larison, Bishop-Stewart, Rogers & Kent (6)

***Myosporidae*** Stentiford, Bateman, Small, Moss, Shields, Reece & Tuck  
*Myospora* Stentiford, Bateman, Small, Moss, Shields, Reece & Tuck (1)

***Pereziidae*** Loubes, Maurand, Comps & Campillo emend. Tokarev & Issi  
*Ameson* Sprague (2)  
*Nadelspora* Olson, Tiekotter & Reno (1)  
*Perezia* Léger & Duboscq (12)  
*Pernicivesicula* Bylén & Larsson (1)

***Pleistophoridae*** Doflein emend. Tokarev & Issi  
*Dasyatispora* Diamant, Goren, Yokeş, Galil, Klopman, Huchon, Szitenberg & Karhan (1)  
*Heterosporis* Schubert (4)  
*Myosporidium* Baquero, Rubio, Moura, Pieniazek & Jordana (1)  
*Ovipleistophora* Pekkarinen, Lom & Nilsen (2)  
*Pleistophora* Gurley (10)  
*Trachipleistophora* Hollister, Canning, Weidner, Field, Kench & Marriott (4)  
*Vavraia* Weiser (10)

***Spragueidae*** Weissenberg emend. Tokarev & Issi  
*Apotaspora* Sokolova & Overstreet (1)  
*Inodosporus* Overstreet & Weidner (2)  
*Microgemma* Ralphs & Matthews (6)  
*Spraguea* Weissenberg (2)  
*Potaspora* Casal, Matos, Teles-Grilo & Azevedo (3)  
*Pseudokabatana* Liu, Stentiford, Voronin, Sato, Li & Zhang (1)  
*Tetramicra* Matthews & Matthews (1)

***Thelohaniidae*** Hazard & Oldacre emend. Tokarev & Issi  
*Bohuslavia* Larsson (1)  
*Chapmanium* Hazard & Oldacre (4)  
*Coccospora* Wallr. (1)  
*Cucumispora* Ovcharenko, Bacela, Wilkinson, Ironside, Rigaud & Wattier (2)  
*Hyperspora* Stentiford, Ramilo, Abollo, Kerr, Bateman, Feist, Bass & Villalba (1)  
*Napamichum* Larsson (3)  
*Nudispora* Larsson (1)  
*Octotetraspora* Issi, Kadyrova, Pushkar, Khodzhaeva & Krylova (1)  
*Ormieresia* Vivarès, Bouix & Manier (1)  
*Orthothelohania* Codreanu & Codreanu-Balcescu (1)  
*Paradoxium* Stentiford, Ross, Kerr, Bass & Bateman (1)  
*Pegmatheca* Hazard & Oldacre (2)  
*Resiomeria* Larsson (1)  
*Spherospora* Garcia (1)  
*Thelohania* Henneguy (50)

***Unikaryonidae*** Sprague emend. Tokarev & Issi  
*Canningia* Weiser, Wegensteiner & Žižka (2)  
*Dictyocoela* Terry, Smith, Sharpe, Rigaud, Littlewood, Ironside, Rollinson, Bouchon, MacNeil, Dick & Dunn (8)  
*Larssoniella* Weiser & David (2)

*Unikaryon* Canning, Lai & Lie (19)

***Glugeida*** genus *incertae sedis*

*Triwangia* Wang, Nai, Chih Wang, Solter, Hsu, Wang & Lo (1)

***Nosematida*** Labbe emend. Tokarev & Issi

***Encephalitozoonidae*** Voronin

*Encephalitozoon* Levaditi, Nicolau & Schoen (12)

*Mockfordia* Sokolova, Sokolov & C.E. Carlton (1)

***Enterocytozoonidae*** Cali & Owen emend. Tokarev & Issi

*Desmozoon* Freeman & Sommerville (3)

*Enterocytozoon* Desportes, Le Charpentier, Galian, Bernard, Cochand-Priollet, Lavergne, Ravisce & Modigliani (2)

*Enterospora* Stentiford, Bateman, Longshaw & Feist (2)

*Hepatospora* Stentiford, Bateman, Dubuffet, Chambers & Stone (1)

*Nucleospora* Hedrick, Groff & Baxa (3)

*Obruspora* Diamant, Rothman, Goren, Galil, Yokes, Szitenberg & Huchon (1)

***Heterovesiculidae*** Lange, Macvean, Henry & Streett

*Heterovesicula* Lange, Macvean, Henry & Streett (1)

***Mrazekiidae*** Léger & Hesse emend. Tokarev & Issi

*Agmasoma* Hazard & Oldacre (3)

*Anostracospora* Rode, Landes, Lievens, Flaven, Segard, Jabbour-Zahab, Michalakis, Agnew, Vivarés & Lenormand (1)

*Euplotespora* Fokin, Di Giuseppe, Erra & Dini (1)

*Globosporidium* Yakovleva, Nassonova, Lebedeva, Lanzoni, Petroni, Potekhin & Sabaneyeva (1)

*Helmichia* Larsson (5)

*Hrabyeia* Lom & Dyková (1)

*Jirovecia* Weiser (8)

*Mrazekia* Léger & Hesse (17)

*Rectispora* Larsson (1)

***Nosematidae*** Tokarev, Huang, Solter, Malysh, Becnel & Vossbrinck

*Nosema* Nägeli (20)

*Vairimorpha* Pilley (15)

***Ordosporidae*** Larsson, Ebert & Vávra

*Ordospora* Larsson, Ebert & Vávra (2)

***Nosematida*** genera *incertae sedis*

*Alternosema* Lipa, Tokarev & Issi (1)

*Anisofilariata* Tokarev, Voronin, Seliverstova, Dolgikh, Pavlova, Ignatieva & Issi (1)

*Crispospora* Tokarev, Voronin, Seliverstova, Pavlova & Issi (1)

*Cystosporogenes* Canning, Barker, Nicholas & Page (4)

*Endoreticulatus* Brooks, Becnel & Kennedy (5)

*Enterocytopora* Rode, Landes, Lievens, Flaven, Segard, Jabbour-Zahab, Michalakis, Agnew, Vivarés & Lenormand (1)

*Enteropsectra* Zhang, Sachse, Prevost, Luallen, Troemel & Felix (2)

*Globulispora* Vávra, Hylis, Fiala & Nebesarova (1)

*Glugoides* Larsson, Ebert, Vávra & Voronin (1)

*Liebermannia* Sokolova, Lange & Fuxa (3)

*Orthosomella* Canning, Wigley & Barker (2)  
*Pancytospora* Zhang, Sachse, Prevost, Luallen, Troemel & Felix (2)  
*Parahepatospora* Bojko, Clark, Bass, Dunn, Stewart-Clark, Stebbing & Stentiford (1)  
*Percutemincola* Nishikori, Setiamarga, Tanji, Kuroda, Shiraishi & Okashi-Kobayashi (1)  
*Sporanauta* Ardila-Garcia & Fast (1)  
*Vittiforma* Silveira & Canning (1)

***Microsporidia* families *incertae sedis***

***Abelsporidae* Azevedo**

*Abelspora* Azevedo (1)

***Areosporiidae* Stentiford, Bateman, Feist, Oyarzún, Uribe, Palacios & Stone**

*Areospora* Stentiford, Bateman, Feist, Oyarzún, Uribe, Palacios & Stone (1)

***Burenellidae* Jouvenaz & Hazard**

*Burenella* Jouvenaz & Hazard (1)

*Pilosporella* Hazard & Oldacre (2)

*Tabanispora* Bykova, Sokolova & Issi (2)

***Cougourdellidae* Poisson**

*Cougourdella* Hesse (7)

***Cylindrosporidae* Issi & Voronin**

*Cylindrospora* Issi & Voronin (2)

***Duboscqiidae* R. Sprague**

*Duboscqia* Pérez (11)

*Mitoplastophora* Codreanu (1)

*Pulicispora* Vedmed, Krylova & Issi (1)

*Tardivesicula* Larsson & Bylén (1)

*Trichoduboscqia* Léger (1)

***Golbergiidae* Issi**

*Golbergia* Weiser (1)

*Krishtalia* Kilochitskii (1)

*Simuliospora* Khodzhaeva, Krylova & Issi (2)

***Microfilidae* Sprague, Becnel & Hazard**

*Microfilum* Faye, Toguebaye & Bouix (1)

***Neonosemoidiidae* Faye, Toguebaye & Bouix**

*Neonosemoides* Faye & Toguebaye (4)

***Pleistosporidiidae* Codreanu-Balcescu & Codreanu**

*Pleistosporidium* Codreanu-Balcescu & Codreanu (1)

***Pseudopleistophoridae* Sprague**

*Pseudopleistophora* Sprague (1)

*Steinhausia* Sprague, Ormières & Manier (4)

***Striatosporidae* Issi & Voronin**

*Striatospora* Issi & Voronin (1)



***Telomyxidae*** Léger & Hesse

*Telomyxa* Léger & Hesse (4)

***Toxoglugeidae*** Larsson

*Toxoglugea* Léger & Hesse (15)

*Toxospora* Voronin (2)

***Tuzetiidae*** Sprague, Tuzet & Maurand

*Nelliemelba* Larsson (1)

*Pankovaia* Simakova, Tokarev & Issi (1)

*Paratuzetia* Poddubnaya, Tokarev & Issi (1)

*Tuzetia* Maurand, Fize, Vernick & Michel (7)

***Microsporidia*** genera *incertae sedis*

*Auraspora* Weiser & Purrini (1)

*Baculea* Loubès & Akbarieh (1)

*Burkea* Sprague (2)

*Chytridioides* Tregouboff (1)

*Ciliatosporidium* Foissner & Foissner (1)

*Cryptosporina* Hazard & Oldacre (1)

*Evlachovaia* Voronin (1)

*Geusia* Rühl & Korn (1)

*Gurleyides* Voronin (1)

*Hamiltosporidium* Haag, Larsson, Refardt & Ebert (2)

*Hirsutosporos* Batson (1)

*Holobispora* Voronin (1)

*Issia* Weiser (3)

*Kinorhynchospira* Adrianov & Rybakov (1)

*Mariona* Stempell (1)

*Merocinta* Pell & Canning (1)

*Microsporidium* Balbiani (120)

*Myxocystis* Mrazek (1)

*Nematocenator* Sapir, Dillman, Connon, Grupe, Ingels, Mundo-Ocampo, Levin, Bladwin, Orphan & Sternberg (1)

*Nosemoides* Vinckier (5)

*Pyrotheca* Hesse (4)

*Sheriffia* Larsson (1)

*Spiroglugea* Léger & Hesse (1)

*Stempellia* Léger & Hesse (19)

*Wittmannia* Czaker (1)

***Rozellomycota*** orders *incertae sedis*

***Chytridiopsida*** Weiser

***Buxtehudiidae*** Larsson

*Jiroveciana* Larsson (1)

*Buxtehudea* Larsson (1)

***Chytridiopsidae*** Sprague, Ormières & Manier

*Acarispora* Radek and Alberti (1)

*Chytridiopsis* Schneider (11)

*Intexta* Larsson, Steiner & Bjørnson (1)

*Nolleria* Beard, Butler & Becnel (1)

**Hesseidae** Ormieres & Sprague  
*Hessea* Ormieres & Sprague (1)

**Rozellomycota** genera incertae sedis

*Nucleophaga* Dangeard (2)

*Mitosporidium* Haag, James, Pombert, Larsson, Schaer, Refardt & Ebert (2)

*Paramicrosporidium* Corsaro, Walochnik, Venditti, Steinmann, Müller & Michel (1)

*Rozella* Cornu (20)

#*Microsporidium* is a collective genus which incorporate species with uncertain genus allocation

**SANCHYTRIOMYCOTA** Galindo, López-García, Torruella, Karpov & Moreira

**Sanchytriomycetes** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

**Sanchytriales** Tedersoo, Sanchez-Ramirez, Kõljalg, Bahram, M. Döring, Schigel, T.W. May, M. Ryberg & Abarenkov

**Sanchytriaceae** Karpov & Aleoshin

*Amoeboradix* Karpov, López-García, Mamkaeva & Moreira (1)

*Sanchytrium* Karpov & Aleoshin (1)

**ZOOPAGOMYCOTA** Gryganskyi, M.E. Sm., Spatafora & Stajich

**Zoopagomycetes** Doweld

**Zoopagales** Bessey ex R.K. Benj.

**Cochlonemataceae** Dudd.

*Aenigmatomyces* R. F. Castañeda & W.B. Kendr. (1)

*Amoebophilus* P.A. Dang. (4)

*Aplectosoma* Drechsler (1)

*Bdellospora* Drechsler (1)

*Cochlonema* Drechsler (11)

*Endocochlus* Drechsler (4)

*Euryancale* Drechsler (4)

**Helicocephalidaceae** Boedijn

*Brachymyces* G.L. Barron (1)

*Helicocephalum* Thaxt. (6)

*Rhopalomyces* Corda (11)

*Verrucocephalum* Degawa (1)

**Piptocephalidaceae** J. Schröt.

*Kuzuhaea* R.K. Benj. (1)

*Piptocephalis* de Bary (ca. 25)

*Syncephalis* Tiegh. & G. Le Monn. (ca. 55)

**Sigmoideomycetaceae** Benny, R.K. Benj. & P.M. Kirk

*Reticulocephalis* Benny, R.K. Benj. & P.M. Kirk (2)

*Sigmoideomyces* Thaxt. (1)

*Sphondylocephalum* Stalpers (1)

*Thamnocephalis* Blakeslee (3)

**Zoopagaceae** Drechsler

*Acaulopage* Drechsler (27)

*Cystopage* Drechsler (9)

*Lecophagus* M.W. Dick (2)  
*Stylopage* Drechsler (17)  
*Tentaculophagus* Doweld (1)  
*Zoopage* Drechsler (11)  
*Zoophagus* Sommerst. (4)

***Zoopagales* genus *incertae sedis***  
*Massartia* De Wild. (1)

***Zoopagomycotina* genus *incertae sedis***  
*Basidiolum* Cienk. (1)

## Outline of Fossil fungi

The legitimate fossil fungal genera known so far are listed below (with the number of species in each genus in brackets). Here we list genera based on Saccardoan system (Table 4), fossil fungal sporophores, mycelia and other fungal remains (Table 5) and modern fungal genera to which fossil species have been assigned (Table 6).

**Table 4** Fossil fungal spores (according to Saccardoan system).

Fungi Imperfecti	Family	Genera
	<b><i>Amerosporae</i></b>	<i>Asyregraamspora</i> Locq. & Sal.-Cheb. (1) <i>Basidiosporites</i> Elsik (4) <i>Biporipsilonites</i> Kalgutkar & Janson. (11) <i>Biporisporites</i> Ke & Shi (2) <i>Cadyexinis</i> Stach (3) <i>Cervichlamydospora</i> R. Kar, Mand. & R.K. Kar (1) <i>Diporisporites</i> Hammen (17) <i>Dremuspora</i> Sal.-Cheb. & Locq. (1) <i>Exesisporites</i> Elsik (4) <i>Foliopollenites</i> Sierotin (3) <i>Foveodiporites</i> C.P. Varma & Rawat (11) <i>Fusidiporosporonites</i> Z.C. Song (1) <i>Geotrichites</i> Stubblef., C.E. Mill., T.N. Taylor & G.T. Cole (1) <i>Graphiolites</i> Fritel (1) <i>Haplographites</i> Félix(2) <i>Hypoxylonites</i> Elsik (53) <i>Inapertisporites</i> Hammen (60) <i>Incertisporites</i> Hammen (1) <i>Lacrimasporonites</i> R.T. Clarke (6) <b><i>Lepiotasporites</i></b> T.C. Huang (1) <i>Magnosporites</i> Rouse (1) <i>Microsporonites</i> R.K. Jain (2) <i>Monoporisporites</i> Hammen (47) <b><i>Nailisporites</i></b> T.C. Huang (1) <i>Nigrosporites</i> Debi Mukh. (1) <i>Palaeoamphisphaerella</i> Ramanujam & Srisailam (3) <i>Parapotamomyces</i> O'Keefe (1) <b><i>Pezizasporites</i></b> T.C. Huang (1) <i>Portalites</i> Hemer & Nygreen (1) <i>Psiamspora</i> Locq. & Sal.-Cheb. (1) <i>Retidiporites</i> C.P. Varma & Rawat (1) <i>Saccisporonites</i> Kalgutkar & Janson. (1) <i>Senegalosporites</i> Jardiné & Magloire (2) <i>Spirotremesporites</i> Dueñas (17) <i>Sporotrichites</i> Göpp. & Berendt (3) <i>Striadiporites</i> C.P. Varma & Rawat (14)

**Table 4** Continued.

Fungi Imperfecti	Family	Genera
		<i>Trichosporites</i> Félix (1) <i>Uncinulites</i> Pampal. (3) <i>Xylohyphites</i> Kalgutkar & Sigler (1)
	<b><i>Didymosporae</i></b>	<i>Ampulliferinites</i> Kalgutkar & Sigler (1) <i>Cladosporites</i> Félix (3) <i>Dicellaesporisporites</i> Kalgutkar (3) <i>Dicellaesporites</i> Elsik (58) <i>Didymoporisporonites</i> Sheffy & Dilcher (10) <i>Didymosporonites</i> Sal.-Cheb. & Locq. (1) <i>Diploneurospora</i> K.P. Jain & R.C. Gupta (1) <i>Disparidicellites</i> Kalgutkar & Janson. (1)* <i>Dyadosporites</i> Hammen ex R.T. Clarke (42) <i>Felixites</i> Elsik ex Janson. & Hills (2) <i>Fusiformisporites</i> Rouse (20) <i>Hilidicellites</i> Kalgutkar & Janson. (18) <i>Verrudisporonites</i> O'Keefe (1)*
	<b><i>Phragmosporae</i></b>	<i>Alleppeysporonites</i> Ramanujam & K.P. Rao (1) <i>Anatolinites</i> Elsik, V.S. Ediger & Bati (14) <i>Axisporonites</i> Kalgutkar & Janson. (1) <i>Brachysporisporites</i> R.T. Lange & P.H. Sm. (15) <i>Ceratothiridispora</i> R. Kar, Mand. & R.K. Kar (2) <i>Cercosporites</i> E.S. Salmon (3) <i>Chaetosphaerites</i> Félix (3) <i>Chordecystia</i> C.B. Foster (1) <i>Circinoconites</i> R. Kar, Mand. & R.K. Kar (1) <i>Cladosporiumsporinites</i> Debi Mukh. (1) <i>Diporicellaesporites</i> Elsik (50) <i>Diporipollis</i> S.K. Dutta & S.C.D. Sah emend. Kalgutkar & Janson. (2) <i>Dwayabeejaesporonites</i> Debi Mukh. (1) <i>Edmundmasonaesporites</i> Debi Mukh. (1) <i>Foveoletisporonites</i> Ramanujam & K.P. Rao (3) <i>Fractisporonites</i> R.T. Clarke (8) <i>Heterocystinella</i> Cookson & Eisenack (1) <i>Jansonisporites</i> Kalgutkar (1) <i>Kumarisporites</i> Kalgutkar & Janson. (1) <i>Mathurisporites</i> Kalgutkar & Janson. (2) <i>Monilites</i> Pampal. (1) <i>Multicellaesporites</i> Elsik emend. P. Kumar (13) <i>Multicellites</i> Kalgutkar & Janson. (46) <i>Ornasporonites</i> Ramanujam & K.P. Rao (1) <i>Palaeocurvularia</i> Dörfelt & A.R. Schmidt (1)* <i>Paragranatisporites</i> Zhong Y. Zhang (5) <i>Phialophoronites</i> Debi Mukh. (1) <i>Pluricellaesporites</i> Hammen (56) <i>Quilonia</i> K.P. Jain & R.C. Gupta emend. Kalgutkar & Janson. (11) <i>Ramasricellites</i> Kalgutkar & Janson. (2) <i>Reduviasporonites</i> L.R. Wilson (9) <i>Reticellites</i> D.L.E. Glass, D.D. Br. & Elsik (1) <i>Scolecospores</i> R.T. Lange & P.H. Sm. (4) <i>Tripithonites</i> Sat. K. Srivastava & Al-Tayyar (2) <i>Varmasporites</i> Kalgutkar & Janson. (1)
	<b><i>Dictyosporae</i></b>	<i>Centonites</i> Peppers (1) <i>Ctenosporites</i> Elsik & Janson. (3) <i>Dictyosporites</i> Félix emend. Kalgutkar & Janson. (15) <i>Kutchiathyrites</i> R.K. Kar emend. Kalgutkar & Janson. (5)

**Table 4** Continued.

Fungi Imperfecti	Family	Genera
		<i>Lirasporis</i> R. Potonié & S.C.D. Sah (2) <i>Octosporites</i> Sal.-Cheb. & Locq. (1) <i>Palambages</i> Wetzel (3) <i>Papulosporonites</i> Schmied. & G. Schwab (7) <i>Polyadosporites</i> Hammen (3) <i>Polycellaesporonites</i> Anil Chandra, R.K. Saxena & Setty (7) <i>Staphlosporonites</i> Sheffy & Dilcher (18)
	<i>Helicosporae</i>	<i>Colligerites</i> K.P. Jain & R.K. Kar (2) <i>Elsikisporonites</i> P. Kumar (1) <i>Helicominites</i> Barlinge & Paradkar (1) <i>Helicoönites</i> Kalgutkar & Sigler (1) <i>Helicosporiates</i> Kalgutkar & Sigler (1) <i>Involutisporonites</i> R.T. Clarke (4) <i>Palaeocirrenalia</i> Ramanujam & Srisailam (2) <i>Paleoslimacomycetes</i> Kalgutkar & Sigler (3) <i>Retihelicosporonites</i> Ramanujam & K.P. Rao (1)
	<i>Staurosporae</i>	<i>Eoglobella</i> W.H. Bradley (1) <i>Frasnacritetrus</i> Taug. (7) <i>Mossopisporites</i> Kalgutkar & Janson. (1) <i>Pesavis</i> Elsik & Janson. (2) <i>Spegazzinites</i> Félix (3) <i>Tribolites</i> W.H. Bradley (2) <i>Trihyphites</i> Kalgutkar & Janson. (1) <i>Triporicellaesporites</i> Ke & Shi (3)

**Table 5** Fossil fungal fructifications, mycelia and other fungal remains.

Phylum	Order	Genera
<i>Ascomycota</i>	<i>Asterinales</i>	<i>Palaeoasterina</i> S. Mitra, Bera & M. Banerjee (1)
	<i>Botryosphaeriales</i>	<i>Guignardiacarpites</i> Debi Mukh. (1)
	<i>Capnodiales</i>	<i>Mycosphaerellascoidetes</i> Debi Mukh. (1)
	<i>Diaporthales</i>	<i>Spataportha</i> Bronson, Klymiuk, Stockey & Tomescu (1)
	<i>Dothideales</i>	<i>Cucurbitariaceites</i> R.K. Kar, R.Y. Singh & S.C.D. Sah (2) <i>Leptosphaerites</i> Richon (2) <i>Palaeoleptosphaeria</i> Barlinge & Paradkar (1) <i>Perisporiacites</i> Félix (4)
	<i>Erysiphales</i>	<i>Erisiphites</i> Pampal. (1) <i>Palaeosclerotium</i> G.W. Rothwell (1) <i>Perisporites</i> Pampal. (2) <i>Protoerysiphe</i> N. Sharma, R.K. Kar, A. Agarwal & R. Kar (1)
	<i>Eurotiales</i>	<i>Coleocarpon</i> Stubblef., T.N. Taylor, C.E. Miller & G.T. Cole (1) <i>Cryptocolax</i> R.A. Scott (2) <i>Memmonillasporonites</i> Debi Mukh. (1) <i>Mycocarpon</i> S.A. Hutch. (7) <i>Roannaisia</i> T.N. Taylor, Galtier & Axsmith (1) <i>Sporocarpon</i> Will. (13) <i>Traquairia</i> Carruth. ex Scott (4)

**Table 5** Continued.

Phylum	Order	Genera
	<i>Helotiales</i>	<i>Lithouncinula</i> N. Sharma, R.K. Kar, A. Agarwal & R. Kar (1)
	<i>Hypocreales</i>	<i>Palaeoclaviseps</i> Poinar, S.C. Alderman & J. Wunderl. (1) <i>Paleoophiocordyceps</i> G.h. sung, Poinar & Spatafora (1)
	<i>Hysteriales</i>	<i>Hysterites</i> Unger (16)
	<i>Meliolales</i>	<i>Meliolinites</i> Selkirk (9) <i>Meliostroma</i> R. Kar, Mand. & R.K. Kar (1)
	<i>Microthyriales</i>	<i>Appendicisporonites</i> R.K. Saxena & S. Khare (1) <i>Asterinites</i> Doub. & D. Pons ex Kalgutkar & Janson. (2) <i>Asterothyrites</i> Cookson (16) <i>Brefeldiellites</i> Dilcher (2) <i>Caldesites</i> Puri (1)* <i>Callimothallus</i> Dilcher (11) <i>Cribrites</i> R.T. Lange (1) <i>Dictyotopileos</i> Dilcher (1) <i>Euthythyrites</i> Cookson (4) <i>Haplopeltis</i> Theiss. (5) <i>Kalviwadithyrites</i> M.R. Rao (1) <i>Koshalia</i> S. Sarkar & V. Prasad (1) <i>Mariusia</i> D. Pons & Boureau (1) <i>Melanosporites</i> Pampal. (1) <i>Microthyriacites</i> Cookson (19) <i>Microthyrites</i> Pampal. (1) <i>Molinaea</i> Doub. & D. Pons (1) <i>Palmellathyrites</i> Locq., D. Pons & Sal.-Cheb. (1)  <i>Parmathyrites</i> K.P. Jain & R.C. Gupta (5) <i>Pelicothallos</i> Dilcher (1) <i>Phragmothyrites</i> W.N. Edwards (24) <i>Plochmopeltinites</i> Cookson (3) <i>Polyhyphaethyrites</i> R. Srivast. & R.K. Kar (1) <i>Ratnagiriathyrites</i> R.K. Saxena & N.K. Misra (1) <i>Spinoporites</i> R.K. Saxena & S. Khare (1) <i>Stomiopeltites</i> Alvin & M.D. Muir (3) <i>Trichopeltinites</i> Cookson (5) <i>Trichothyrites</i> Rosend. (13) <i>Ussurithyrites</i> Krassilov (1)
	<i>Patellariales</i>	<i>Rhytidhysteriumites</i> Debi Mukh. (1)
	<i>Pezizales</i>	<i>Ascodesmisites</i> Trivedi, Chaturv. & C.L. Verma (1)\ <i>Paleomorchella</i> Poinar (1) <i>Pezizites</i> Göpp. & Berendt (4)
	<i>Phyllachorales</i>	<i>Paleoserenomycetes</i> Currah, Stockey & B.A. LePage (1)
	<i>Pleosporales</i>	<i>Cryptodidymosphaerites</i> Currah, Stockey & B.A. LePage (1) <i>Dictyosporiuminites</i> Debi Mukh. (1) <i>Pleosporites</i> Y. Suzuki (1)
	<i>Sphaeriales</i>	<i>Diploneurospora</i> K.P. Jain & R.C. Gupta (1) <i>Palaeosordaria</i> Sahni & H.S. Rao (1) <i>Petrosphaeria</i> Stopes & H. Fujii (1) <i>Valsarites</i> Puri (1)*

**Table 5** Continued.

Phylum	Order	Genera
	<i>Xylariales</i>	<i>Chaethomites</i> Pampal. (1) <i>Sphaerites</i> Unger (48)
<i>Ascomycota</i> genera Incertae sedis	<i>Incertae sedis</i>	<i>Adendorfia</i> G.Woroviec, F.H. Neumann & E. Woroviec (1) <i>Appianoporites</i> S.Y. SM., Currah & Stockey (1) <i>Archephoma</i> Kyoto Watan., H. Nishida & Tak. Kobay (1) <i>Asteromites</i> Poinar (1) <i>Aureofungus</i> Hibbett, Manfr. Binder & Zheng Wang (1) <i>Cashhickia</i> T.N. Taylor, M. Krings, Galtier & Dotzler (1) <i>Casparyotorula</i> Rikkinen, A.R. Schmidt & Kettunen (1) <i>Cephalothecoidomyces</i> G. Worobiec, Neumann & E. Worobiec (1) <i>Chlorolichenomycites</i> Honegger, D. Edwards & Axe (1) <i>Entropezites</i> Poinar & R. Buckley (1) <i>Eomelanomyces</i> Beimforde, Dörfelt & A.R. Schmidt (1) <i>Galloea</i> Alstrup & Söchting (1) <i>Honeggeriella</i> Matsunaga, Stockey & Tomescu (1) <i>Jimwhitea</i> M. Krings & T.N. Taylor (1) <i>Monodictyosporites</i> Klymiuk (1) <i>Palaeoanellus</i> A.R. Schmidt, Dörfelt & Perrichot (1) <i>Spheciophila</i> Poinar (1)
<i>Basidiomycota</i>	<i>Agaricales.</i>	<i>Archaeomarasmius</i> Hibbett, D. Grimaldi & Donoghue (1) <i>Coprinites</i> Poinar & Singer (1) <i>Gerontomyces</i> Poinar (1) <i>Gondwanagaricites</i> Heads, A.N. Mill & J.L. Crane (1) <i>Palaeoagaricites</i> Poinar & Buckley (1) <i>Palaeoclavaria</i> Poinar & A.E. Br. (1) <i>Protomycena</i> Hibbett, D. Grimaldi & Donoghue (1) <i>Palaeogaster</i> Poinar, Alfredo & Baseia (1)
	<i>Boletales</i>	
	<i>Polyporales.</i>	<i>Eopolyporoides</i> Rigby (1) <i>Ganodermites</i> A. Fleischm., M. Krings, H. Mayr & Agerer (1) <i>Phellinites</i> Singer & S. Archang. (1) <i>Pseudopolyporus</i> Hollick (1) <i>Trametites</i> A. Straus (3)
	<i>Pucciniales.</i>	<i>Aecidites</i> Debey & Ettingsh. (4) <i>Aeciosporonites</i> Debi Mukh. (1) <i>Hapalophragmites</i> Ramanujam & Ramachar (1)* <i>Milesites</i> Ramanujam & Ramachar (1) <i>Pucciniasporonites</i> Ramanujam & Ramachar (1)* <i>Shuklania</i> J.N. Dwivedi (1)
	<i>Sphaeropsidales</i>	<i>Archephoma</i> Kyoto Watanabe, H. Nishida & Tak. Kobay. (1) <i>Ascochyttites</i> Barlinge & Paradkar (2) <i>Deccanodia</i> Singhai (1) <i>Diplodites</i> D.N. Babajan & Tasl. ex Kalgutkar, Nambudiri & Tidwell (5)*  <i>Entopeltacites</i> Selkirk (6) <i>Meniscoideisporites</i> Kyoto Watanabe, H. Nishida & Tak. Kobay. (1) <i>Mohgaonidium</i> Singhai (1) <i>Palaeocytophaera</i> R.B. Singh & G.V. Patil (1) <i>Palaeophoma</i> Singhai (1) <i>Phomites</i> Fritel (2) <i>Rabenhorstinidium</i> R.B. Singh & G.V. Patil (1)

**Table 5** Continued.

Phylum	Order	Genera
	<i>Ustilaginales</i>	<i>Chlamydosporites</i> Paradkar (1) <i>Teliosporites</i> R. Kar, Mand. & R.K. Kar (2)
<i>Basidiomycota</i> genera <i>Incertae sedis</i>		<i>Lycoperdites</i> Poinar (1) <i>Mycetophagites</i> Poinar & Buckley (1) <i>Synaotomites</i> Poinar (1)
<i>Blastocladiomycota</i>	<i>Incertae sedis</i>	<i>Retesporangicus</i> Strullu-Derrien (1)
<i>Chytridiomycota</i>	<i>Chytridiales</i>	<i>Cultoraquaticus</i> Strullu-Derr. (1) <i>Grilletia</i> Renault & C.E. Bertrand (1) <i>Guizhounema</i> X. Mu (1) <i>Trewinomyces</i> M. Krings, T.N. Taylor & H. Martin (1) <i>Krispiromyces</i> T.N. Taylor, Hass & W. Remy (1) <i>Lyonomyces</i> T.N. Taylor, Hass & W. Remy (1) <i>Milleromyces</i> T.N. Taylor, Hass & W. Remy (1) <i>Oochytrium</i> Renault (1)
<i>Chytridiomycota</i> genera <i>incertae sedis</i>		<i>Brijax</i> M. Krings & C.J. Harper (1)* <i>Globicultrix</i> M. Krings, Dotzler & T.N. Taylor (1) <i>Illmanomyces</i> M. Krings & T.N. Taylor (1) <i>Nimbosphaera</i> C.J. Harper & M. Krings (1)* <i>Palaeozoosporites</i> Strullu-Der (1) <i>Perexiflasca</i> M. Krings, C.J. Harper & Ed.L. Taylor (2)* <i>Rhizophydites</i> M. Krings, S.M. Serbet & C.J. Harper (1)*
<i>Glomeromycota</i>	<i>Archaeosporales</i>	<i>Archaeosporites</i> C. Walker, C.J. Harper & M. Krings (1)*
<i>Glomeromycota</i> genera <i>incertae sedis</i>		<i>Glomites</i> T.N. Taylor, W. Remy, Hass & Kerp (3)* <i>Glomorphites</i> Garcia Mass. (1) <i>Gigasporites</i> Carlie J. Phipps & T.N. Taylor (1)* <i>Helmutella</i> M. Krings & T.N. Taylor (1) <i>Kryphiomyces</i> M. Krings, Dotzler, Longcore & T.N. Taylor (1) <i>Palaeoglomus</i> R. Redecker, Kodner & L.E. Graham (2) <i>Palaeogigaspora</i> R. Kar, Mand. & R.K. Kar (1)* <i>Palaeomyces</i> D. Ellis (9) <i>Zwergimyces</i> M. Krings & T.N. Taylor (1)*
<i>Mucoromycota</i>	<i>Endogonales</i>	<i>Chlamydospora</i> R. Kar, Mand. & R.K. Kar (1) <i>Endochaetophora</i> J.F. White & T.N. Taylor (1) <i>Palaeomycites</i> Mesch. (21) <i>Udaria</i> A. Gupta (2)
<i>Mucoromycota</i> genera <i>incertae sedis</i>		<i>Lithomucorites</i> R. Kar, Mand. & R.K. Kar (2) <i>Stolophorites</i> Wilh. Bock (1)
<b>Mycelia Sterilia</b>		<i>Animikiea</i> Bargh. (1) <i>Archaeorestis</i> Bargh. (1) <i>Celyphus</i> Batten (1) <i>Dendromyceliates</i> K.P. Jain & R.K. Kar (2)  <i>Entosphaeroides</i> Bargh. (1) <i>Eoastrion</i> Bargh. (2) <i>Eomycetopsis</i> J.W. Schopf (2) <i>Fungites</i> Hallier (7) <i>Gunflintia</i> Bargh. (2) <i>Laevitubulus</i> N.D. Burgess & D. Edwards (5)



**Table 5** Continued.

Phylum	Order	Genera
		<i>Ornatifilum</i> N.D. Burgess & D. Edwards (2) <i>Palaeancistrus</i> R.L. Dennis (1) <i>Palaeofibulus</i> J.M. Osborn, T.N. Taylor & J.F. White (1) <i>Sclerotites</i> A. Massal. (16) <i>Torrentella</i> H.D. Pflug (2)
<b>Fossil fungi incertae sedis</b>		<i>Annella</i> Sat. K. Srivast. (2) <i>Caenomyces</i> E.W. Berry ( <i>Pyrenomyces</i> Schwein?) (1) <i>Daohugouthallus</i> X. Wang, M. Krings & T.N. Taylor (1) <i>Dennisiellinites</i> Bannister, Conran & D.e. Lee (1) <i>Dictyomykus</i> R. Kar, Mand. & R.K. Kar (1) <i>Halifaxia</i> M. Krings, J.F. White, Dotzler & C.J. Harper (1) <i>Hassella</i> T.N. Taylor, M. Krings & Kerp (1) <i>Leptostromites</i> Poinar (1) <i>Leptothyrites</i> Poinar (1) <i>Lithosporocarpia</i> R. Kar, Mand. & R.K. Kar (1) <i>Mycokidstonia</i> D. Pons & Locq. (1) <i>Mycozygosporangia</i> R. Kar, Mand. & R.K. Kar (1) <i>Netothyrites</i> C.M. Misra, S.N. Swamy, B. Prasad, B.S. Pundeer, R.S. Rawat & K. Singh (2) <i>Ornatisporites</i> M.G. Parsons & G. Norris (1) <i>Palaeocercospora</i> S. Mitra and Manju Banerjee (1) <i>Palaeocolletotrichum</i> S. Mitra and Manju Banerjee (1) <i>Paleopyrenomyces</i> T.N. Taylor, Hass, Kerp, M. Krings & Hanlin (1)* <i>Paleoblastocladia</i> W. Remy, T.N. Taylor & Hass (1) <i>Palynomorphites</i> L.R. Moore (1) <i>Pestalozzites</i> E.W. Berry (1) <i>Pilula</i> Harker, Sarjeant & Caldwell ex Harker & Sarjeant (2) <i>Polycellaria</i> H.D. Pflug (1) <i>Polystigmites</i> A. Massal. (1) <i>Priscadvenaceae</i> Poinar & F.E. Vega (1) <i>Protoascon</i> L.R. Batra, Segal & R.W. Baxter (1) <i>Protocolletotrichum</i> R. Kar, Mand. & R.K. Kar (1) <i>Quatsinoporites</i> S.Y. Sm., Currah & Stockey (1) <i>Reymanella</i> Marcink. (1) <i>Scepasmatozocarpion</i> M. Krings & T.N. Taylor (1) <i>Scutellosporites</i> Dotzle, M. Krings, T.N. Taylor & Agerer (1) <i>Sorosporonites</i> X. Mu (1) <i>Stauromyca</i> R. Kar, Mand. & R.K. Kar (1) <i>Tetradigita</i> R. Kar, Mand. & R.K. Kar (1) <i>Tricellaesporonites</i> Sheffy & Dilcher (3) <i>Windipila</i> M. Krings & C.J. Harper (2)*

**Table 6** Modern fungal genera to which fossil species have been assigned.

Phylum	Order	Family	Modern genera	Fossil species
<i>Ascomycota</i>	<i>Asterinales</i>	<i>Asterinaceae</i>	<i>Asterina</i> Lév.	<i>A. eocenica</i> Dilcher, <i>A. kosciuskensis</i> Selkirk, <i>A. nodosaria</i> Dilcher, <i>A. indodeightonii</i> Vishnu, Khan & Bera, <i>A. mioconsobrina</i> Vishnu, Khan & Bera, <i>A. miosphaerelloides</i> Vishnu, Khan & Bera, <i>A. neocombreticola</i> Vishnu, Khan & Bera, <i>A. neolaeocarpi</i> Vishnu, Khan & Bera, <i>A. presaracae</i> Vishnu, Khan & Bera

Table 6 Continued.

Phylum	Order	Family	Modern genera	Fossil species
	<i>Botryosphaerales</i>	<i>Botryosphaeriaceae</i>	<i>Diplodia</i> Fr.	<i>D. rodei</i> Mahab. [Current name: <i>Diplodites rodei</i> (Mahab.) Kalgutkar, Nambudiri & Tidwell], <i>D. sahnii</i> Singhai [Current name: <i>Diplodites sahnii</i> (Singhai) Kalgutkar, Nambudiri & Tidwell]
	<i>Capnodiales</i>	<i>Mycosphaerellaceae</i>	<i>Ramularia</i> Sacc.	<i>R. oblongispora</i> Casp.
	<i>Chaetosphaerales</i>	<i>Chaetosphaeriaceae</i>	<i>Chaetosphaeria</i> Tul. & C. Tul.	<i>C. elsikii</i> M.J. Pound, J.M.K. O'Keefe, N.B. Nuñez Otaño, J.B. Riding
	<i>Diporthales</i>	<i>Incertae sedis</i>	<i>Botryodiplodia</i> Sacc.	<i>B. mohgaoensis</i> Barlinge & Paradkar
	<i>Eurotiales</i>	<i>Aspergillaceae</i>	<i>Penicillium</i> Link	<i>P. curtipes</i> Berk.
	<i>Helotiales</i>	<i>Mollisiaceae</i>	<i>Trimmatostroma</i> Corda.	<i>Trimmatostroma intertrappea</i> K.S. Patil & Datar
	<i>Hypocreales</i>	<i>Bionectriaceae</i>	<i>Acremonium</i> Link	<i>A. succineum</i> Casp.
	<i>Laboulbeniales</i>	<i>Laboulbeniaceae</i>	<i>Stigmatomyces</i> H. Karst.	<i>Stigmatomyces succini</i> W. Rossi, Kotrba & Triebel
	<i>Melanosporales</i>	<i>Ceratostomataceae</i>	<i>Gonatobotrys</i> Corda (Current name: <i>Melanospora</i> Corda)	<i>G. primigenius</i> Casp. [Current name: <i>Melanospora primigenia</i> (Casp.) R.K. Saxena, Wijayaw., D.Q. Dai, K.D. Hyde & P.M. Kirk]
			<i>Melanospora</i> Corda	<i>Melanospora primigenia</i> (Casp.) R.K. Saxena, Wijayaw., D.Q. Dai, K.D. Hyde & P.M. Kirk
	<i>Lecanorales</i>	<i>Sphaerophoraceae</i>	<i>Sphaerophorus</i> Pers.	<i>S. moniliformis</i> Menge
	<i>Magnaporthales</i>	<i>Magnaporthaceae</i>	<i>Clasterosporium</i> Schwein.	<i>C. eocenicum</i> Schwein.
	<i>Meliolales</i>	<i>Meliolaceae</i>	<i>Meliola</i> Fr.	<i>M. anfracta</i> Dilcher [Current name: <i>Meliolinites anfractus</i> (Dilcher) Kalgutkar & Janson.], <i>M. spinksii</i> Dilcher [Current name: <i>Meliolinites spinksii</i> (Dilcher) Selkirk]
	<i>Microthyriales</i>	<i>Microthyriaceae</i>	<i>Trichopeltina</i> Theiss.	<i>T. exporrecta</i> Dilcher
	<i>Mycocaliciales</i>	<i>Mycocaliciaceae</i>	<i>Chaenothecopsis</i> Vain.	<i>C. bitterfeldensis</i> Rikkinen & Poinar
	<i>Pleosporales</i>	<i>Didymellaceae</i>	<i>Epicoccum</i> Link	<i>E. deccanense</i> R. Srivast., Kapgate & S. Chatterjee
		<i>Pleosporaceae</i>	<i>Alternaria</i> Nees ex Fr.	<i>A. malayensis</i> Trivedi & C.L. Verma [Current name: <i>Pluricellaesporites malayensis</i> (Trivedi & C.L. Verma) Kalgutkar & Janson.]

Table 6 Continued.

Phylum	Order	Family	Modern genera	Fossil species
		<i>Torulaceae</i>	<i>Torula</i> Pers. ex Fr.	<i>T. globulifera</i> Casp., <i>T. heteromorpha</i> Casp., <i>T. mengeana</i> Casp. & R. Klebs in Casp.
	<i>Sordariales</i>	<i>Lasiosphaeriaceae</i>	<i>Zopfiella</i> G. Winter	<i>Z. neogenica</i> O'Keefe
	<i>Sporidesmiales</i>	<i>Sporidesmiaceae</i>	<i>Sporidesmium</i> Link ex Fr.	<i>S. henryense</i> Dilcher
	<i>Taphrinales</i>	<i>Protomycetaceae</i>	<i>Protomyces</i> Unger	<i>P. protogenes</i> W. Sm.
	<i>Trichosphaeriales</i>	<i>Trichosphaeriaceae</i>	<i>Brachysporium</i> Sacc.	<i>B. minutum</i> Trivedi & C.L. Verma [Current name: <i>Pluricellaesporites minutus</i> (Trivedi & C.L. Verma) ex Kalgutkar & Janson.]
	<i>Incertae sedis</i>	<i>Diporothecaceae</i>	<i>Diporotheca</i> C.C. Gordon & C.G. Shaw	<i>D. doniana</i> O'Keefe, <i>D. gorda</i> O'Keefe
	<i>Dothideomycetes</i> family <i>incertae sedis</i>	<i>Vizellaceae</i>	<i>Vizella</i> Sacc.	<i>V. discontinua</i> Selkirk, <i>V. memorabilis</i> (Dilcher) Selkirk
	<i>Incertae sedis</i>	<i>Incertae sedis</i>	<i>Desmidiospora</i> Thaxt.	<i>D. marginiconvoluta</i> Kalgutkar, <i>D. willoughbyi</i> (W.H. Bradley) D.L.E. Glass, D.D. Br. & Elsik
			<i>Manginula</i> G. Arnaud	<i>M. maegdefraui</i> Lange [Current name: <i>Entopeltacites maegdefraui</i> (Lange) Selkirk], <i>M. memorabilis</i> (Dilcher) Lange [Current name: <i>Vizella memorabilis</i> (Dilcher) Selkirk], <i>M. osbornii</i> Lange [Current name: <i>Entopeltacites osbornii</i> (Lange) Selkirk]
			<i>Potamomyces</i> K.D. Hyde*	<i>P. batii</i> (Sancay) ex Nuñez Otaño, M.M. de Pasquo & Bianchin., <i>P. elsikii</i> (Nandi & A. Sinha) Nuñez Otaño, M.M. de Pasquo & Bianchin., <i>P. fourmieri</i> (Elsik & Jarzen) Nuñez Otaño, M.M. de Pasquo & Bianchin., <i>P. invaginatus</i> (Elsik & Jarzen) Nuñez Otaño, M.M. de Pasquo & Bianchin., <i>P. magnus</i> (Elsik & Jarzen) Nuñez Otaño, M.M. de Pasquo & Bianchin., <i>P. mulleri</i> (Nandi & A. Sinha) Nuñez Otaño, M.M. de Pasquo & Bianchin., <i>P. pontidiensis</i> (Sancay) ex Nuñez Otaño, M.M. de Pasquo & Bianchin.
			<i>Sarcophoma</i> Höhn.	<i>S. deccani</i> R.B. Singh & G.V. Patil
			<i>Tetracoccusporium</i> Szabó	<i>T. eocenum</i> Biradar & Mahab.
			<i>Monotosporella</i> S. Hughes	<i>M. doerfeltii</i> Sadowski, Beimforde, Gube & A.R. Schmidt

Table 6 Continued.

Phylum	Order	Family	Modern genera	Fossil species
			<i>Rhexoampullifera</i> P.M. Kirk	<i>R. stogieana</i> M.J. Pound, J.M.K. O'Keefe, N.B. Nuñez Otaño, J.B. Riding, <i>R. sufflata</i> M.J. Pound, J.M.K. O'Keefe, N.B. Nuñez Otaño, J.B. Riding
<i>Basidiomycota</i>	<i>Agaricales genera incertae sedis</i> <i>Agaricostilbales</i>	<i>Chionosphaeraceae</i>	<i>Nidula</i> V.S. White	<i>N. baltica</i> Poinar
			<i>Stilbum</i> Tode ex Fr.	<i>S. succini</i> Casp.
	<i>Boletales</i>	<i>Sclerodermataceae</i>	<i>Scleroderma</i> Pers.	<i>S. echinosporites</i> Rouse
	<i>Cantharellales</i>	<i>Hydnaceae</i>	<i>Hydnum</i> L. ex Fr.	<i>H. argillae</i> R. Ludw.
	<i>Geastrales</i>	<i>Geastraceae</i>	<i>Geastrum</i> Pers.	<i>G. tepexense</i> Magallon-Puebla & Cevallos-Ferriz
			<i>Cyathus</i> Haller	<i>C. dominicanus</i> Poinar
	<i>Polyporales</i>	<i>Polyporaceae</i>	<i>Fomes</i> (Fr.) Fr.	<i>F. idahoensis</i> R.W. Br.
	<i>Urocystidales</i>	<i>Glomosporiaceae</i>	<i>Thecaphora</i> Fingerh	<i>T. mohgaoensis</i> (Chitaley & Yawale) R.K. Saxena, Wijayaw., D.Q. Dai, K.D. Hyde & P.M. Kirk]
			<i>Sorosporium</i> F. Rudolphi [Current name: <i>Thecaphora</i> Fingerh]	<i>S. mohgaoense</i> Chitaley & Yawale [Current name: <i>T. mohgaoensis</i> (Chitaley & Yawale) R.K. Saxena, Wijayaw., D.Q. Dai, K.D. Hyde & P.M. Kirk]
		<i>Urocystidaceae</i>	<i>Mundkurella</i> Thirum.	<i>M. mohgaoensis</i> Chitaley & Yawale
	<i>Ustilaginales</i>	<i>Ustilaginaceae</i>	<i>Ustilago</i> (Pers.) Roussel	<i>U. deccani</i> Chitaley & Yawale [Current name: <i>Inapertisporites deccani</i> (Chitaley & Yawale) Kalgutkar & Janson.]
<i>Chytridiomycota</i>	<i>Chytridiales</i>	<i>Chytriomycetaceae</i>	<i>Entophlyctis</i> A. Fisch.	<i>E. willoughbyi</i> W.H. Bradley [Current name: <i>Desmidiospora willoughbyi</i> (W.H. Bradley) D.L.E. Glass, D.D. Br. & Elsik]
<i>Fungi incertae sedis</i>			<i>Patoullardiella</i> Speg.	<i>P. imbricata</i> Dilcher

**Outline of fungus-like organisms****OBAZOA** Brown et al.**OPISTHOKONTA** Cavalier-Smith**HOLOMYCOTA** Liu et al. = Nucletmycea Brown et al.*Nucleariae* Tedersoo et al.*Fonticulida* Tedersoo et al.*Fonticulea* Tedersoo et al.*Fonticulida* Cavalier-Smith

**Fonticulidae** Worley, Raper & Hohl  
*Fonticula* Worley, Raper & M. Hohl

**RHIZARIA** Cavalier-Smith  
**ENDOMYXA** Cavalier-Smith  
**Phytomyxea** Engler & Prantl  
**Plasmodiophorida** Cook  
**Plasmodiophoridae** Loeblich & Tappan  
*Ligniera* Maire & A. Tison  
*Plasmodiophora* Worona  
*Polymyxa* Ledingham  
*Sorosphaerula* Neuh. & Kirchm.  
*Spongospora* Brunch.  
*Woronina* Cornu

**Phagomyxida** Cavalier-Smith  
**Phagomyxidae** Cavalier-Smith  
*Maullinia* I. Maier, E.R. Parodi, Westermeier & D.G. Müll  
*Phagomyxa* Karling

**CEROZOA** Cavalier-Smith  
**Sainouroidea** Schuler et al.  
**Guttulinopsidae** L.S. Olive  
*Guttulinopsis* E.W. Olive

**STRAMINIPILA** M.W. Dick  
**LABYRINTHULOMYCOTA** Whittaker  
**Labyrinthulomycetes** Dick  
**Labyrinthulales** E.A. Bessey  
**Aplanochytriaceae** Leander ex Cavalier-Smith  
*Aplanochytrium* Bahnweg & Sparrow

**Stellarchytriaceae** Bennett et al.  
*Stellarchytrium* FioRito & Leander

**Labyrinthulaceae** Haeckel  
*Labyrinthula* Cienk.  
*Phycophthorum* Hassett\*

**Oblongichytridiales** Bennett et al. ad int.  
**Oblongichytriaceae** Cavalier-Smith  
*Oblongichytrium* R. Yokoy. & D. Honda

**Thraustochytriales** Sparrow  
**Althornidiaceae** Jones and Alderman  
*Althornia* E.B.G. Jones & Alderman

**Thraustochytriaceae** Sparrow ex Cejp  
*Aurantiochytrium* R. Yokoy. & D. Honda  
*Botryochytrium* R. Yokoy., Salleh & D. Honda  
*Japanochytrium*  
*Monorhizochytrium* K. Doi & D. Honda

*Parietichytrium* R. Yokoy., Salleh & D. Honda  
*Schizochytrium* S. Goldst. & Belsky ex Raghuk.  
*Sicyoidochytrium* R. Yokoy., Salleh & D. Honda  
*Thraustochytrium* Sparrow  
*Ulkenia* A. Gaertn. ex M.W. Dick  
***Amphitremida*** Gomaa et al.  
***Amphitremidae*** Poch  
*Amphitrema* Archer  
*Archerella* Loeblich & Tappan  
*Paramphitrema* Valkanov

***Diplophrydae*** Cavalier-Smith  
*Diplophrys* J.S.F. Barker

***Amphifilida*** Cavalier-Smith  
***Amphifilidae*** Cavalier-Smith  
*Amphifila* Caval.-Sm.  
***Sorodiplophryidae*** Cavalier-Smith  
*Fibrophrys* Takahashi et al.  
*Sorodiplophrys* L.S. Olive & Dykstra

***HYPHOCHYTRIOMYCOTA*** Whittaker  
***Hyphochytriomycetes*** Sparrow  
***Hyphochytriales*** Bessey ex Sparrow  
***Hyphochytriaceae*** Fischer  
*Canteriomyces* Sparrow  
*Cystochytrium* Ivimey Cook  
*Hyphochytrium* Zopf

***Rhizidiomycetaceae*** Karling ex Kirk, Cannon & David  
*Latrostium* Zopf  
*Reessia* Fisch  
*Rhizidiomyces* Zopf

***OOMYCOTA*** Arx  
***Peronosporomycetes*** M.W. Dick  
***Albuginales*** Thines  
***Albuginaceae*** Schroet.  
*Albugo* (Pers.) Roussel (40)  
*Pustula* Thines (13)  
*Wilsoniana* Thines (5)

***Peronosporales*** A.N. Beketov  
***Peronosporaceae*** de Bary  
*Basidiophora* Roze & Cornu (3)  
*Baobabopsis* R.G. Shivas, Y.P. Tan, Telle & Thines (3)  
*Benua* Constant. (1)  
*Bremia* Regel (15)  
*Calycofera* R. Bennett & Thines (2)  
*Eraphthora* Telle & Thines (2)  
*Graminivora* Thines (1)  
*Halophytophthora* H.H. Ho & S.C. Jong (6)

*Hyaloperonospora* Constant. (35)  
*Kawakamia* Miyabe (4)  
*Nothophytophthora* T. Jung, Scanu, Bakonyi & M. Horta Jung (6)  
*Novotelnova* Voglmayr & Constant. (1)  
*Paraperonospora* Constant. (9)  
*Perofascia* Constant. (2)  
*Peronophythora* C.C. Chen ex W.H. Ko, H.S. Chang, H.J. Su, C.C. Chen & L.S. Leu (1)  
*Peronospora* Corda (353)  
*Peronosclerospora* (S. Ito) Hara (20)  
*Phytophthora* de Bary (150)  
*Phytophthium* Abad, de Cock, Bala, Robideau, A.M. Lodhi & Lévesque (25)  
*Plasmopara* J. Schröt. (150)  
*Plasmoverna* Constant., Voglmayr, Fatehi & Thines (7)  
*Poakatesthia* Thines (1)  
*Protobremia* Voglmayr, Riethm., Göker, Weiss & Oberw. (1)  
*Pseudoperonospora* Rostov. (9)  
*Sclerophthora* Thirum., C.G. Shaw & Naras. (7)  
*Sclerospora* J. Schröt. (2)  
*Viennotia* Göker, Voglmayr, Riethm., M. Weiss & Oberw. (1)

### ***Pythiaceae*** Schroet.

*Elongisporangium* Uzuhashi, Tojo & Kakish. (5)  
*Globisporangium* Uzuhashi, Tojo & Kakish. (70)  
*Lagen* Vanterp. & Ledingham (1)  
*Lagenidium* Schenk (40)  
*Myzocytiopsis* M.W. Dick (18)  
*Myzocytiium* Schenk (2)  
*Pilasporangium* (Uzuhashi & Tojo) Uzuhashi, Tojo & Kakish. (1)  
*Pythiogeton* Minden (16)  
*Pythium* Pringsh. (200)

Note – The monophyly of the *Pythiaceae* is not certain and the designation of the genera be considered as provisional at present.

### ***Salisapiliaceae***

*Salisapilia* Hulvey, Nigrelli, Telle, Lamour & Thines (9)

### ***Rhipidiales*** M.W. Dick

#### ***Rhipidiaceae*** Cejp

*Aqualinderella* Emerson & Weston (1)  
*Araiospora* Thaxt. (4)  
*Mindeniella* Kanouse (2)  
*Nellymyces* A. Batko (1)  
*Rhipidium* Cornu (6)  
*Sapromyces* Fritsch (4)

### ***Salispinaceae*** R. Bennett & Thines

*Salispina* Marano, A.L. Jesus & Pires-Zottar. (4)

### ***Peronosporomycetes*** genera *incertae sedis*

*Paralagenidium* Grooters, C.F.J. Spies, de Cock & Lévesque (2)  
*Trachysphaera* Tabor & Bunting (1)

***Saprolegniomycetes*** Thines & Beakes

***Leptomitales*** Kanouse

***Atkinsiellaceae*** Sparrow

*Atkinsiella* Vishniac (1)

*Bolbea* Buaya & Thines (1)\*

***Ectrogellaceae*** Cejp

*Crypticola* Humber, Frances & A.W. Sweeney (1)

*Ectrogella* Zopf (8)

*Lagenisma* Schnepf (1)

***Leptomitaceae*** Kütz

*Apodachlya* Pringsh. (5)

*Apodachlyella* Indoh (1)

*Blastulidium* Pérez (1)

*Leptomitus* C. Agardh (11)

***Saprolegniales*** K. Prantl

***Achlyaceae*** ined.

*Achlya* Nees (80)

*Brevilegnia* Coker & Couch (16)

*Dictyuchus* Leitg. (9)

*Thraustotheca* Humphrey (4)

***Saprolegniaceae*** Warm.

*Aplanopsis* Höhnk (1)

*Calyptralegnia* Coker (3)

*Couchia* W.W. Martin (3)

*Isoachlya* Kauffmann (9)

*Newbya* M.W. Dick & M.A. Spencer (13)

*Protoachlya* Coker (7)

*Pythiopsis* de Bary (7)

*Saprolegnia* Nees (80)

*Scoliolegnia* M.W. Dick (5)

***Verrucalvaceae*** M.W. Dick

*Aphanomyces* de Bary (40)

*Aphanomycopsis* Scherff. (6)

*Aquastella* Glockling & D.P. Molloy (2)

*Geolegnia* Coker (4)

*Leptolegnia* de Bary (9)

*Pachymetra* B.J. Croft & M.W. Dick (1)

*Plectospira* Drechsler (4)

*Verrucalvus* P. Wong & M.W. Dick (1)

***Saprolegniomycetes*** genera *incertae sedis*

*Brevilegniella* M.W. Dick (1)

*Cornumyces* M.W. Dick (8)

*Clamydomycium* M.W. Dick (7)

*Ducellieria* Teiling (1)

*Eurychasmopsis* Canter & M.W. Dick (1)

*Leptolegniella* Huneycutt (7)

*Nematophthora* Kerry & D.H. Crump (1)



*Pythiella* Couch (3)  
*Sommerstorffia* Arnaudov (1)  
*Synchaetophagus* Apstein (1)

***Oomycota*** orders *incertae sedis*

***Anisolpidiales*** M.W. Dick

***Anisolpidiaceae*** Karling

*Anisolpidium* Karling (7)

***Diatomophthoraceae*** Buaya & Thines

*Diatomophthora* Buaya & Thines (3)

***Eurychasmates*** Sparrow

***Eurychasmataceae*** Petersen

*Eurychasma* Magnus (3)

***Haliphthorales*** ined.

***Haliphthoraceae*** Vishniac

*Halioticida* Muraosa & Hatai (1)

*Halocrusticida* K. Nakam. & Hatai (7)

*Haliphthoros* Vishniac (3)

***Haptoglossales*** M.W. Dick

***Haptoglossaceae*** M.W. Dick

*Haptoglossa* Drechsler (12)

***Miraculales*** Buaya & Thines

***Miraculaceae*** Buaya, Hanic & Thines

*Miracula* Buaya, Hanic & Thines (5)

***Olpidiopsidales*** M.W. Dick

***Olpidiopsidaceae*** Sparrow

*Olpidiopsis* Cornu (12)

***Pontismatales*** Thines

***Postismataceae*** H.E. Petersen

*Petersenia* Sparrow (3)

*Pontisma* H.E. Petersen (17)

***Rozellopsidales*** M.W. Dick

***Rozellopsidaceae*** M.W. Dick

*Rozellopsis* Karling (5)

**AMORPHAEA** Adl et al.

**AMOEBOTOA** Lühe

***Evosea*** Kang et al.

***Eumycetozoa*** L.S. Olive

***Dictyosteliomycetes*** Doweld

***Acytosteliales*** S. Baldauf, S. Sheikh & Thulin

***Acytosteliaceae*** Raper ex Raper & Quinlan

*Acytostelium* Raper

*Heterostelium* S. Baldauf, S. Sheikh & Thulin

*Rostrostelium* S. Baldauf, S. Sheikh & Thulin

**Cavenderiaceae** S. Baldauf, S. Sheikh & Thulin

*Cavenderia* S. Baldauf, S. Sheikh & Thulin

**Dictyosteliales** L.S. Olive ex P.M. Kirk et al.

**Dictyosteliaceae** Rostaf. ex Cooke

*Dictyostelium* Bref.

*Polysphondylium* Bref.

**Raperosteliaceae** S. Baldauf, S. Sheikh & Thulin

*Hagiwaraea* S. Baldauf, S. Sheikh & Thulin

*Raperostelium* S. Baldauf, S. Sheikh & Thulin

*Speleostelium* S. Baldauf, S. Sheikh & Thulin

*Tieghemostelium* S. Baldauf, S. Sheikh & Thulin

**Dictyosteliales** genus *incertae sedis*

*Coremiostelium* S. Baldauf, S. Sheikh, Thulin & Spiegel

**Dictyosteliomycetes** genera *incertae sedis*

*Coenonia* Tiegh.

*Synstelium* S. Baldauf, S. Sheikh & Thulin

**Ceratiomyxomycetes** D. Hawksw., B. Sutton & Ainsw.

**Ceratiomyxales** G.W. Martin ex M.L. Farr & Alexop.

**Ceratiomyxaceae** J. Schröt.

*Ceratiomyxa* J. Schröt.

**Protosporangiaceae** Leontyev, Stephenson, Schnittler, Shchepin, Novozhilov

*Clastostelium* L.S. Olive & Stoian.

*Protosporangium* L.S. Olive & Stoian.

**Myxomycetes** G. Winter

**Lucisporomycetidae** Leontyev, Schnittler, S.L. Stephenson, Novozhilov & Shchepin

**Cribrariales** T. Macbr.

**Cribrariaceae** Corda

*Cribraria* Pers.

*Licaethalium* Rostaf.

*Lindbladia* Fr.

**Reticulariales** Leontyev, Schnittler, S.L. Stephenson, Novozhilov & Shchepin

**Reticulariaceae** Chevall. ex Corda

*Alwisia* Berk. & Broome (6)

*Lycogala* Adans.

*Reticularia* Bull.

*Tubifera* J.F. Gmel.

*Siphoptychium* Rostaf.

*Thecotubifera* Leontyev, Schnittler, S.L. Stephenson & Novozh.

**Liceales** E. Jahn

**Liceaceae** Chevall.

*Licea* Schrad.

*Listerella* E. Jahn

**Trichiales** T. Macbr.  
**Dianemataceae** T. Macbr.  
*Calomyxa* Nieuwl.  
*Dianema* Rex  
*Dictydiaethalium* Rostaf.  
*Prototrichia* Rostaf.

**Trichiaceae** Chevall.  
*Arcyodes* O.F. Cook  
*Arcyria* F.H. Wigg.  
*Cornuvia* Rostaf.  
*Hemitrichia* Rostaf.  
*Metatrichia* Ing  
*Oligonema* Rostaf.  
*Perichaena* Fr.  
*Trichia* Haller

**Lucisporomycetidae** genera incertae sedis  
*Arcyriatella* Hochg. & Gottsb.  
*Calonema* Morgan  
*Minakatella* G. Lister  
*Trichioides* Novozh., Hoof & Jagers

**Columellomycetidae** Leontyev, Schnittler, S.L. Stephenson, Novozhilov & Shchepin  
**Echinosteliopsidales** Shchepin, Leontyev, Schnittler, S.L. Stephenson, Novozhilov  
**Echinosteliopsidaceae** L.S. Olive  
*Echinosteliopsis* Reinhardt & L.S. Olive

**Echinosteliales** G.W. Martin  
**Echinosteliaceae** Rostaf. ex Cooke  
*Barbeyella* Meyl.  
*Echinostelium* de Bary  
*Semimorula* E.F. Haskins, McGuinn. & C.S. Berry

**Clastodermatales** Leontyev, Schnittler, S.L. Stephenson, Novozhilov & Shchepin  
**Clastodermataceae** Alexop. & T.E. Brooks  
*Clastoderma* A. Blytt.

**Meridermatales** Leontyev, Schnittler, S.L. Stephenson, Novozhilov & Shchepin  
**Meridermataceae** Leontyev, Schnittler, S.L. Stephenson, Novozhilov & Shchepin  
*Meriderma* Mar. Mey. & Poulain

**Stemonitidales** T. Macbr.  
**Amaurochaetaceae** Rostaf. ex Cooke  
*Amaurochaete* Rostaf.  
*Brefeldia* Rostaf.  
*Comatricha* Preuss  
*Enerthenema* Bowman  
*Paradiacheopsis* Hertel.  
*Stemonaria* Nann.-Bremek., R. Sharma & Y. Yamam.  
*Stemonitopsis* (Nann.-Bremek.) Nann.-Bremek.

***Stemonitidaceae*** Fr.

*Macbrideola* H.C. Gilbert

*Stemonitis* Gled.

*Symphytocarpus* Ing & Nann.-Bremek.

***Physarales*** T. Macbr.

***Lamprodermataceae*** T. Macbr.

*Collaria* Nann.-Bremek.

*Colloderma* G. Lister

*Diacheopsis* Meyl.

*Elaeomyxa* Hagelst.

*Lamproderma* Rostaf.

***Didymiaceae*** Rostaf. ex Cooke

*Diderma* Pers.

*Didymium* Schrad.

*Lepidoderma* de Bary

*Mucilago* Battarra

***Physaraceae*** Chevall.

*Badhamia* Berk.

*Craterium* Trentep.

*Fuligo* Haller

*Kelleromyxa* Eliasson

*Leocarpus* Link

*Physarella* Peck.

*Physarina* Höhn.

*Physarum* Pers.

*Willkommlangea* Kuntze

***Columellomycetidae*** genera incertae sedis

*Diachea* Fr.

*Leptoderma* G. Lister

*Paradiachea* Hertel

*Protophysarum* M. Blackw. & Alexop.

*Trabrooksia* H.W. Keller

***Variosea*** Cavalier-Smith et al.

***Protosteliida*** Olive & Stoian. sensu Shadwick & Spiegel

***Protosteliidae*** Olive & Stoian., emend Spiegel

*Protostelium* L.S. Olive & Stoian.

***Fractovitellida*** Lahr et al. sensu Kang et al. 2017

***Schizoplasmodiidae*** Shadwick & Spiegel

*Ceratiomyxella* L.S. Olive & Stoian.

*Nematostelium* L.S. Olive & Stoian.

*Schizoplasmodium* L.S. Olive & Stoian.

***Soliformoviidae*** Lahr & Katz

*Soliformovum* Spiegel

***Cavosteliida*** Shadwick & Spiegel  
***Cavosteliidae*** S.L. Olive  
*Cavostelium* S.L. Olive  
*Schizoplasmodiopsis* S.L. Olive  
*Tychosporium* Spiegel

***Tubulinea*** Smirnov et al.  
***Elardia*** Kang et al.  
***Euamoebida*** Lepši  
***Copromyxidae*** L.S. Olive & Stoian.  
*Copromyxa* Zopf

***Discosea*** Cavalier-Smith et al. sensu Smirnov et al. 2011  
***Flabellinea*** Smirnov et al.  
***Thecamoebida*** Schaeffer  
*Sappinia* P.A. Dang.

***Vannellida*** Smirnov et al.  
*Protosteliopsis* L.S. Olive & Stoian.

***Centramoebia*** Cavalier-Smith et al.  
***Acanthopodida*** Page  
*Acanthamoeba* Volkonsky  
*Luapelamoeba* Shadwick et al.

***Pellitida*** Smirnov & Cavalier-Smith sensu Kang et al. 2017  
*Endostelium* L.S. Olive, W.E. Benn. & Deasey

***DISCOBA*** Simpson in Hampl et al.  
***PERCOLOZOA*** Page & Blanton 1985  
***Heterolobosea*** Page & Blanton  
***Tetramitia*** Cavalier-Smith  
***Eutetramitia*** Hanousková et al.  
***Acrasidae*** Poche  
*Acrasis* Tiegh. (incl. *Pocheina* A.R. Loeb. & Tappan)

## Notes

In this section, we provide notes for newly introduced genera and changes to the classification since Wijayawardene et al. (2020)

### ***Acarella*** Syd.

Wijayawardene et al. (2012) listed *Acarella* in *Asterinaceae*. Pem et al. (2019b) transferred *Acarella* to *Vizellaceae* based on the ovoid to ellipsoidal or rarely subglobose, brown to dark brown ascospores, with a transverse hyaline band, formed on phialidic, hyaline cells lining the inner cavity of the upper wall (D. Pem).

### ***Achorodithis*** Syd.

Hongsanan et al. (2020) regarded this genus as doubtful which is in *Mycosphaerellaceae* (M. Erdoğan).

***Achrochaeta*** Réblová & Hern.-Restr.

Based on phylogenetic analyses and morphological characters, *Chaetosphaeria talbotii* was transferred to the new genus *Achrochaeta*. *Achrochaeta* can be distinguished by the absence of setae, cylindrical-clavate conidia which gradually tapering toward the basal end, and narrowly funnel-shaped collarettes that do not become apically incurved (Réblová et al. 2021b) (M. Erdoğdu).

***Acidotalaromyces*** Houbraken et al.

*Acidotalaromyces* (type: *A. lignorum* fide Houbraken et al. 2020) is a monotypic genus and forms a unique lineage in *Trichocomaceae*. It requires acidified agar media (pH 3.5) for growth, as no or very limited growth occurs on regular or slightly acidic or media with neutral pH. *Acidotalaromyces* is known from rotting wood in Europe and potentially produce biotechnologically interesting enzymes (F. Selcuk).

***Aestipascuomyces*** Stabel et al.

Based on morphological, physiological, microscopic, and phylogenetic characteristics, Stabel et al. (2020) introduced *Aestipascuomyces* within the family *Neocallimastigaceae* to accommodate *A. dupliciliberans* (type species) isolated from the frozen rumen content of a female adult sheep (M. Erdoğdu).

***Agriosomyces*** Hanafy et al.

Hanafy et al. (2020) isolated and characterized 65 anaerobic gut fungal strains from several herbivorous mammal species in the USA through morphological and molecular characterization. To assess phylogenetic relationships, they used ITS1 and 28S rDNA regions. As a result, they introduced seven novel genera, namely *Agriosomyces*, *Aklioshbomyces*, *Capellomyces*, *Ghazallomyces*, *Joblinomyces*, *Khoyollomyces*, and *Tahromyces* in *Neocallimastigaceae* (Hanafy et al. 2020) (M. Erdoğdu).

***Ahmadea*** Aman et al.

Based on combined evidence derived from the morphology and LSU sequence phylogeny, a monotypic truffle genus *Ahmadea* was introduced by Aman et al. (2020) to accommodate *A. dalanensis* found in arid and semi-arid regions of Punjab, Pakistan, often occurring in *Sorghum vulgare* Pers. fields where it has been known for its edibility for numerous decades (M. Erdoğdu).

***Aklioshbomyces*** Hanafy et al.

See under *Agriosomyces* Hanafy et al. (M. Erdoğdu).

***Albocoprinus*** Voto

Voto (2020) introduced *Albocoprinus* to accommodate *A. ealaensis* within the *Agaricales* genera *incertae sedis* (M. Erdoğdu).

***Allocanariomyces*** Mehrabi et al.

This genus was established by Mehrabi et al. (2020) based on morphological characteristics and multilocus phylogeny. *Allocanariomyces* is differentiated from *Canariomyces* Arx, its closest relative, by solitary and glabrous ascomata, cells of the perithecial wall forming a *textura epidermoidea*, stalked asci, densely granular ascospores with a distinct subapical germ pore, and only solitary conidia (Mehrabi et al. 2020) (M. Erdoğdu).

***Allodiatrype*** Konta & K.D. Hyde

Based on morphological characteristics as well as combined DNA sequence analyses (ITS and TUB2), *Allodiatrype* was introduced by Konta et al. (2020a) to accommodate *A. arengae* (the type species), *A. elaeidicola*, *A. elaeidis* and *A. thailandica*. *Allodiatrype* species are similar to that

of *Diatrype*. However, *Allodiatrype* differs in having 1–10 ascomata immersed in a single stroma, and with or lacking a black stromatic zone, while stromata of *Diatrype* mostly spread over a large area, sometimes covering the host surface (Konta et al. 2020a) (M. Erdoğdu).

#### ***Alloneottiosporina* Nag Raj**

Li et al. (2020a) introduced *A. thailandica* which was accommodated in *Phaeosphaeriaceae* based on sequence data analysis. However, the placement was based on specimens which were not the type of the genus. Therefore, the placement is tentative pending sequencing of the type species of the genus (K.D. Hyde & N. Wijayawardene).

#### ***Amaurodermellus* Costa-Rezende et al.**

Based on morphological and phylogenetic evidence, Costa-Rezende et al. (2020) introduced the monotypic genus *Amaurodermellus* to accommodate the neotropical *Amauroderma ovisporum*, a species recently introduced in *Amauroderma*. *Amaurodermellus* is characterized by a dark dull pilear surface, pale context, pileipellis as a short trichoderm, and ovoid, hyaline to pale yellow basidiospores, these with inconspicuous endosporic projections that are solid when observed under SEM (Costa-Rezende et al. 2020) (M. Erdoğdu).

#### ***Amnocyrtis* K.H. Larss.**

A new corticioid genus *Amnocyrtis*, was introduced by Larsson & Oldervik (2020) to accommodate *A. rivularis*, belongs to the *Agaricomycetes* genera *incertae sedis* (M. Erdoğdu).

#### ***Amphosoma* Baral**

*Amphosoma* was established by Baral et al. (2020) to accommodate four species. The type species *A. resinicola* is characterized by rather small,  $\pm$  ellipsoid ascospores, and light-colored apothecia (Baral et al. 2020) (M. Erdoğdu).

#### ***Amyloceraceomyces* S.H. He**

Yuan et al. (2020) introduced *Amyloceraceomyces* (in *Amylocorticiaceae*) to accommodate *A. angustisporus* (the type species). *Amyloceraceomyces* is mainly characterized by the pellicular to membranaceous, stratified basidiocarps, a monomitic hyphal system with nodose septate hyphae, absence of sterile organs, and cylindrical smooth thin-walled amyloid basidiospores. Phylogenetically, *Amyloceraceomyces* formed a distinct lineage in *Amylocorticiales* (Yuan et al. 2020) (M. Erdoğdu).

#### ***Anasporidesmiella* K. Zhang et al.**

*Anasporidesmiella* was introduced by Zhang et al. (2020) to accommodate *A. angustobasilaris*. *Anasporidesmiella* is characterized by macronematous, mononematous brown conidiophores frequently reduced to monoblastic determinate conidiogenous cells and solitary cylindrical distoseptate brown conidia with truncated or rounded bases (Zhang et al. 2020) (M. Erdoğdu).

#### ***Anastomitrabeculia* Bhunjun et al.**

Based on morphology, multi-loci phylogeny and divergence times estimates, *Anastomitrabeculia* was introduced by Bhunjun et al. (2021c) based on *A. didymospora*. *Anastomitrabeculia* is characterized by the presence of carbonaceous ascomata, with orange pigmentation near the ostioles and ascospores with longitudinally striate wall ornamentation. It is similar to members of *Pleosporales* in having perithecioid ascomata, bitunicate asci and hyaline ascospores (Bhunjun et al. 2021c) (M. Erdoğdu).

***Anastomitrabeculiaceae*** Bhunjun et al.

*Anastomitrabeculiaceae* was introduced by Bhunjun et al. (2021c) to accommodate *Anastomitrabeculia*. The family is characterized by semi-immersed, coriaceous or carbonaceous ascomata with septate, trabeculate pseudoparaphyses and hyaline ascospores with longitudinally striate wall ornamentation, surrounded by a mucilaginous sheath. *Anastomitrabeculiaceae* forms an independent lineage basal to *Halojulellaceae* in *Pleosporales* and it is closely related to *Neohendersoniaceae* based on phylogenetic analyses of a combined LSU, SSU and *tefl-α* dataset (Bhunjun et al. 2021c) (M. Erdoğdu).

***Andamanomyces*** Hosag.

Hongsanan et al. (2020) placed this genus in *Asterinales* (N. Wijayawardene).

***Andina*** Wilk et al.

*Andina* was introduced by Wilk et al. (2021) for *A. citrinoides*, a morphologically cryptic species similar to members of the *Flavoplaca citrina* group in the subfamily *Xanthorioideae*, plus a second species consisting of several samples from Chile (*Andina* sp.). *Andina citrinoides* produces yellow to yellow-orange, areolate, sterile thalli, much dissolving into concolorous soredia (Wilk et al. 2021) (M. Erdoğdu).

***Annellosympodia*** McTaggart et al.

*Annellosympodia*, with *A. orbiculata* as the type species, was introduced by McTaggart et al. (2007). *Annellosympodia orbiculata* is characterized by an unusual combination of features, viz., fasciculate conidiogenous cells (conidiophores reduced to conidiogenous cells), holoblastic conidiogenesis with sympodial, but rectilinear proliferation leaving annular structures and lateral conspicuous conidiogenous loci, and rhexolytic conidial secession (McTaggart et al. 2007) (M. Erdoğdu).

***Anthracina*** L. Su et al.

Sun et al. (2020a) introduced *Anthracina* within *Trichomeriaceae* to accommodate *A. ramosa* (the type species) and *A. saxicola* based on phylogenetic analyses and morphological characters (M. Erdoğdu).

***Anupama*** K.N.A. Raj et al.

Raj et al. (2019) introduced this genus and accommodated it in *Biannulariaceae* (N. Wijayawardene).

***Aphanodesmium*** Réblová & Hern.-Restr.

Réblová et al. (2020) introduced this genus to accommodate the type species (*Aphanodesmium gabretae*) based on phylogenetic analyses. The type species exhibits an endophytic life style and occurs in needles of *Picea abies*. The species is so far known in Europe in the Czech Republic (Koukol & Kolarova 2010) (F. Selcuk).

***Aquapteridospora*** Jiao Yang et al.

Yang et al. (2015) established this genus to accommodate a freshwater species *Aquapteridospora lignicola* and referred it to *Diaporthomycetidae* genera *incertae sedis*. It is now placed in *Aquapteridosporaceae*, *Distoseptisporales* (Hyde et al. 2021) (W. Dong).

***Aquatisphaeria*** W.L. Li et al.

Li et al. (2021) established this genus in *Tetraplosphaeriaceae* to accommodate a freshwater species *Aquatisphaeria thailandica* based on multi-locus phylogeny and distinct morphology (W. Dong).



***Aquatospora*** W. Dong et al.

Based on multigene analyses and morphology, *Aquatospora* was introduced to accommodate *A. cylindrica* collected from decaying wood submerged in freshwater. It is characterized by clavate to narrowly ellipsoidal asci and hyaline, cylindrical ascospores (Dong et al. 2020) (M. Erdoğan).

***Aquidictyomyces*** W. Dong et al.

This genus was established to accommodate a freshwater hyphomycetes *A. appendiculatus* and referred to *Diaporthomycetidae* genera *incertae sedis* (Dong et al. 2021a) (W. Dong).

***Aquihelicascus*** W. Dong et al.

Dong et al. (2020) established this genus in *Morosphaeriaceae* to accommodate *Aquihelicascus thalassioideus* segregated from *Helicascus* and another two new freshwater species *A. songkhlaensis* and *A. yunnanensis*. (W. Dong).

***Aquimassariosphaeria*** W. Dong & Doilom

Dong et al. (2020) established this genus in *Lindgomycetaceae* to accommodate *Massariosphaeria typhicola* and a new species *Aquimassariosphaeria kunmingensis* based on multi-locus phylogeny and distinct morphology (W. Dong).

***Araucariomyces*** Aime & McTaggart

Aime and McTaggart (2021) introduced *Araucariomyces* to accommodate *A. balansae* and *A. fragiformis*. *Araucariomyces* differs from all other rust genera in forming the gametothallus on species of *Agathis* (*Araucariaceae*) (Aime & McTaggart 2021) (M. Erdoğan).

***Araucariomycetaceae*** Aime & McTaggart

*Araucariomycetaceae* was established by Aime & McTaggart (2021) to accommodate *Araucariomyces* in *Pucciniales*. *Araucariomycetaceae* differs from all other *Pucciniales* in forming gametothalli on *Agathis* (Aime & McTaggart 2021) (M. Erdoğan).

***Arboricolonus*** S. Bien & Damm

During a survey of fungi associated with wood necrosis of *Prunus* sp. trees in Germany, strains belonging to *Leotiomycetes* and *Eurotiomycetes* were detected by preliminary analyses of ITS sequences. Multilocus phylogenetic analyses (LSU, ITS, *tub*, *EF-1α*, depending on the genus) of some strains from *Prunus* sp. and reference strains revealed several new taxa, including *Arboricolonus* (F. Selcuk).

***Archaeosporites*** C. Walker et al. (fossil)

In the idea of Harper et al. (fossil), this monotypic genus, belonging to endophytic fungi (*Glomeromycota*) was recorded from the Early Devonian sediments of Great Britain (R.K. Saxena).

***Areotheca*** Y. Marín & Stchigel

In order to produce a more natural classification of the polyphyletic family *Lasiosphaeriaceae*, Marin-Felix et al. (2020) conducted a phylogenetic analysis based on ITS, rDNA LSU, *rpb2* and *tub2* sequence data from soil samples and reference *Sordariales* strains. As a result, they introduced three new families (*Diplogelasinosporaceae*, *Naviculisporaceae*, and *Schizotheciaceae*), along with six new genera (*Areotheca*, *Lundqvistomyces*, *Naviculispora*, *Pseudoechria*, *Pseudoschizothecium*, and *Rhyphophila*). Additionally, they introduced new species combinations for *Cladorrhinum*, *Jugulospora*, *Podospora*, *Schizothecium*, and *Triangularia* (M. Erdoğan).

### ***Aridoplaca* Wilk et al.**

The monospecific genus *Aridoplaca* was described by Wilk et al. (2021) for the squamulose species *A. peltata*. *Aridoplaca peltata* is characterized by an orange, squamulose-peltate thallus and red, crowded apothecia  $\pm$  immersed in the thallus. The thalline cortex, parathecium, and hypothecium are paraplectenchymatous. The algal layer is discontinuous, consisting of distinct groups of algae. The ascospores are ellipsoid, medium-sized with medium-thick septa. Pycnidia are abundant and completely immersed (Wilk et al. 2021) (M. Erdoğan).

### ***Arnium* Nitschke ex G. Winter**

Huang et al. (2021b) excluded this genus from *Lasiosphaeriaceae* (fide Wijayawardene et al. 2020) and accommodated it in *Sordariales* genera *incertae sedis* (N. Wijayawardene).

### ***Artocarpomyces* Subram.**

Hongsanan et al. (2020) listed this genus under *Tubeufiaceae* however, this genus lacks DNA sequence data. Hence we tentatively transferred it to *Ascomycota* genera *incertae sedis* (N. Wijayawardene).

### ***Ascagilis* K.D. Hyde**

This genus was resurrected in *Aliquandostipitaceae* to accommodate four species segregated from *Aliquandostipite* and another two new species based on distinct morphology and multi-locus phylogeny (Dong et al. 2020) (W. Dong).

### ***Ascospirella* Houbraken et al.**

*Ascospirella* is a monotypic genus in *Trichocomaceae* and is phylogenetically most closely related to *Thermomyces*. *Thermomyces* contains thermophilic species (*T. lanuginosus* Tsikl., *T. dupontii* (Griffon & Maubl.) Houbraken & Samson), while the sole member in *Ascospirella* (i.e. *Ascospirella lutea* (Zukal) Houbraken, Frisvad & Samson) is a mesophile. *Ascospirella* can be further distinguished from *Thermomyces* by the production of penicillium-like conidiophores and yellow to orange ascomata. The production of ascospores with conspicuous transverse or spiral ridges or striations is a striking feature for *Ascospirella* (Houbraken et al. 2020) (F. Selcuk).

### ***Asteromidium* Speg.**

*Asteromidium* was introduced by Spegazzini (1888) to accommodate the species, *A. imperspicuum* Speg. collected from living leaves of an unidentified member of the *Sapindaceae* (M. Erdoğan).

### ***Asteronia* (Sacc.) Henn.**

Saccardo (1882) introduced *Asteronia* as a subgenus of *Asteronia* Sacc. Henning (1895) raised *Asteronia* to genus rank with *A. sweetiae* as the type species. Lumbsch & Hundorf (2010) treated *Asteronia* as a member of *Microthyriaceae*. Hyde et al. (2013) transferred *Asteronia* to *Dothideomycetes* genus *incertae sedis*. Pem et al. (2019b) re-examined the type specimen of *A. sweetiae* and transferred *Asteronia* to *Perisporiopsidaceae* based on the superficial ascomata with surrounding mycelia, and ellipsoidal oblong, 1-septate, hyaline ascospores (D. Pem).

### ***Atrophysma* T. Sprib.**

This genus has been introduced by Spribille et al. (2020) and its features are: A cyanolichen with minutely coralloid, finger-like lobes over a black hypothallus, similar to *Placynthium* but ascospores are simple, similar to *Leciophysma* but with dark blue-black pigments in the apothecium; asci lacking an amyloid apical tube (F. Selcuk).

### ***Atrozythia* J.K. Mitch. et al.**

*Atrozythia* was introduced by Mitchell et al. (2021) for the new species *A. klamathica* and the new combination *A. lignicola* (M. Erdoğan).

***Aulographales*** Crous et al.

This order, which was introduced in light of the data obtained as a result of the rearrangement of *Aulographum* and *Rhizodiscina*, includes two families as *Aulographaceae* and *Rhizodiscinaceae*. Members of this order are saprobic on leaves and wood (Haridas et al. 2020) (F. Selcuk).

***Aurantiolachnea*** Van Vooren

Three new genera were introduced by Van Vooren et al (2020) to accommodate several species previously assigned to *Trichophaea* or morphologically close genera: *Perilachnea* with *Lachnea hemisphaerioides* as type species, *Aurantiolachnea* with *Lachnea solsequia* as type species, and *Parawilcoxina* with *P. inexpectata* as the type species (M. Erdoğdu).

***Aureoconidiella*** Hern.-Restr. & Crous

Hernández-Restrepo et al. (2020) introduced this genus and accommodated it in *Aureoconidiellaceae* (F. Selcuk).

***Aureoconidiellaceae*** Hern.-Restr. & Crous

This new family was introduced by Hernández-Restrepo et al. (2020) with the type genus *Aureoconidiella*, which refers to as the golden-brown conidia (F. Selcuk).

***Aureoconidiellales*** Hern.-Restr. & Crous

*Aureoconidiellales* was introduced as a result of phylogenetic analysis of *Aureoconidiellaceae*. The order differs from the related lineages *Asterinales* and *Cladoriellales* based on the morphology of the asexual morphs (Hernández-Restrepo et al. 2020) (F. Selcuk).

***Babjevia*** Van der Walt & M.T. Sm.

This genus was recently reinstated and removed from synonymy with *Dipodascopsis* (Yamazaki et al. 2020) (W.P. Pfliegler).

***Babosia*** D.G. Knapp et al.

Knapp et al. (2020) introduced *Babosia* within *Pezizaceae* to accommodate *B. variospora* D.G. Knapp et al. (the type species). *Babosia variospora* is characterized by a dark sporogenous zone and dark brown spores at maturity, the clear peridermal layer at maturity, and the variability of the ornamentation of the ascospores (M. Erdoğdu).

***Baidera*** Ertz & Diederich

This genus was introduced for the new species *Baidera mauritiana*. Molecular analyses of *rpb2* sequence data placed *Baidera* in *Roccellaceae* (Diederich & Ertz 2020) (D. Ertz).

***Basidiodesertica*** Maharachch. et al.

Maharachchikumbura et al. (2021b) introduced this new hyphomycetes genus within *Corticaceae* to accommodate *Basidiodesertica hydei* based on phylogenetic analyses of nuclear ribosomal DNA (rDNA) (LSU, SSU and ITS) and protein-coding genes (*tef1-α*, *rpb2* and *tub*), plus morphological comparisons (M. Erdoğdu).

***Batnamyces*** Noumeur

The name is in reference to the town in Algeria where the ex-type strain was isolated as an endophyte of an endemic plant. It differs from the genera *Canariomyces*, *Stolonocarpus* and *Madurella* to which it appears phylogenetically most closely related, in the absence of sexual features and conidiogenous structures, except for producing terminal chains of hyphal chlamydospores, despite extensive culturing attempts. All related species, on the other, hand are known to sporulate readily. The ex-type strain of the genus was also characterized by extensive

studies on its secondary metabolites and several new compounds were reported (Noumeur et al. 2020) (F. Selcuk & M. Stadler).

***Begerowomyces*** Q.M. Wang & F.Y. Bai

The genus named in honour of Dr. Dominik Begerow is introduced for the branch represented by strain CGMCC 2.3164, which formed a separate clade from members of *Cystobasidiales*. The genus is mainly circumscribed by phylogenetic analysis of a seven loci dataset, where it is placed as a separate branch within *Cystobasidiales* (Li et al. 2020) (F. Selcuk).

***Belizeana*** Kohlm. & Volkm.-Kohlm.

Kohlmeyer & Kohlmeyer (1987) introduced *Belizeana* with *B. tuberculata* as the type species. Kohlmeyer & Volkmann Kohlmeyer (1987) placed *Belizeana* in *Pleosporaceae*. Lumbsch & Huhndorf (2010) transferred *Belizeana* to *Elsinoaceae*. Jones et al. (2015) transferred *Belizeana* to *Dothideales* genus *incertae sedis*. Pem et al. (2019b) re-examined a paratype specimen of *B. tuberculata* (IMS 4209) and transferred *Belizeana* to *Dothidotthiaceae* based on its subglobose, dark brown to black ascomata, clavate to cylindrical asci and 1-septate, ellipsoidal, pale brown ascospores (D. Pem).

***Bellamyces*** Crous et al.

The monotypic genus *Bellamyces* was introduced by Shen et al. (2020) with *B. quercus* as the type species. The conidia of *Bellamyces* are solitary, transversely multiseptate, and rarely oblique. Phylogenetically, it is not related to any other species known from sequence data (F. Selcuk).

***Benniella*** Vandepol & Bonito

This is a monotypic genus with *Benniella erionia*, described in 2020 from Australia (holotype FLAS-F-66497). The species is known from Africa, Australia and the United States. *Benniella* was isolated from dried soils (Vandepol et al. 2020) (J. Pawłowska).

***Bergerella*** Diederich & Lawrey

Lawrey et al. (2020) introduced this genus. *Bergerella atrofusca*, which is the type species of the genus, is mainly characterized by the extremely small, dark reddish-brown and shiny bulbils that develop superficially as a virulent pathogen on the thallus of *Physcia* sp. (F. Selcuk).

***Biconiosporella*** Schaumann

Huang et al. (2021b) excluded this genus from *Lasiosphaeriaceae* (*vide* Wijayawardene et al. 2020) and accommodated it in *Sordariales* genera *incertae sedis* (N. Wijayawardene).

***Blastophragmia*** Jian Ma et al.

*Blastophragmia* was introduced by Ma et al. (2021) based on *B. plurisetulosa* collected on dead branches of unidentified plants in Hainan Province, China. The fungus is distinguished by macronematous, unbranched, determinate or percurrently extending conidiophores, and solitary, acrogenous, fusiform to ellipsoidal, 3-euseptate, smooth, brown conidia with a single apical setula and 2–4 basal setulae, seciding rhexolytically from monoblastic, integrated, terminal conidiogenous cells (Ma et al. 2021) (M. Erdoğdu).

***Boekhoutia*** Q.M. Wang & F.Y. Bai

This genus was introduced for the branch represented by strain CGMCC 2.4539, which formed a separate clade from *Kurtzmanomyces*. The genus is mainly circumscribed by phylogenetic analysis of a seven genes dataset, in which it occurred as a separate branch within *Chionosphaeraceae* (Li et al. 2020) (F. Selcuk).

### ***Bolbea* Buaya & Thines**

The diagnostic features of this genus is based on *Bolbea parasitica* and are holocarpic parasitoid *Oomycetes*. The genus differs from *Atkinsiella* by the lack of sacculate hyphae in culture and from *Blastulidium* by its much more infrequent hyphal constrictions and more regular hyphae. It differs from other members of the *Leptomitales* by its crustacean host (Buaya & Thines 2020) (F. Selcuk).

### ***Bombardiaceae* S.K. Huang & K.D. Hyde**

Huang et al. (2021b) introduced this family to accommodate five genera viz., *Apodospora*, *Bombardia*, *Bombardioidea*, *Fimetariella*, and *Ramophialophora* (N. Wijayawardene).

### ***Bonaria* Bat**

Batista (1959) introduced *Bonaria* with *B. lithocarpi* as the type species. *Bonaria lithocarpi* was previously known as *Protopeltis lithocarpi* but was not congeneric with the type species of *Protopeltis*. Lumbsch & Huhndorf (2010) placed *Bonaria* in *Micropeltidaceae* while Hyde et al. (2013) and Wijayawardene et al. (2018) treated *Bonaria* in *Dothideomycetes*, genera *incertae sedis*. Pem et al. (2019b) tentatively transferred *Bonaria* to *Naetrocymbaceae* based on immersed, subglobose, black ascomata, 8-spored, bitunicate, thick-walled, obpyriform asci and multi-seriate, oblong to long ellipsoid, hyaline, 1- septate ascospores (D. Pem).

### ***Boothiella* Lodhi & Mirza**

Huang et al. (2021b) listed this genus under *Sordariaceae*. In the previous outline, Wijayawardene et al. (2020) regarded *Boothiella* as *Sordariomycetes* genera *incertae sedis* (N. Wijayawardene).

### ***Botryochora* Torrend.**

Torrend (1914) introduced *Botryochora* with *B. nigra* (Torrend) Torrend as the type species. Torrend (1914) placed *Botryochora* in *Nectriaceae*, *Sordariomycetes*. Hawksworth et al. (1995) and Lumbsch & Huhndorf (2010) treated *Botryochora* in *Dothioraceae*. Thambugala et al. (2014) observed a specimen of *B. nigra* from BPI and transferred *Botryochora* to *Dothideales*, genera *incertae sedis* based on asexual morph morphology. Pem et al. (2019b) re-studied a specimen of *B. nigra* (S-F49313) and treated *Botryochora* in *Dothideales*, genus *incertae sedis* following Thambugala et al. (2014) (D. Pem).

### ***Brachiampulla* Réblová & Hern.-Restr.**

Based on a detailed comparison of the material of *Zanclospora urewerae* and the description and illustration of *Selenosporella verticillata*. Réblová et al. (2021a) considered that both species identical and introduced *Brachiampulla* for *Selenosporella verticillata* and *Zanclospora urewerae*. *Brachiampulla verticillata* resembles *S. acicularis* and *S. aristata* in the morphology of conidiogenous cells with minute phialidic openings formed after sympodial elongation (Réblová et al. 2021a) (M. Erdoğdu).

### ***Brahmaculus* P.R. Johnst.**

Johnston et al. (2021) introduced *Brahmaculus* in *Chlorociboriaceae* to accommodate four new species. All species of the genus have bright yellow apothecia with several apothecial cups held on short branches at the tip of a long stipe. They differ from species referred to *Chlorociboria* the only other genus in *Chlorociboriaceae*, in their terrestrial habitat and ascomata that are noticeably more hairy than the known *Chlorociboria* species, most of which have apothecia with short, macroscopically indistinct hair-like elements (Johnston et al. 2021) (M. Erdoğdu).

***Brijax*** M. Krings & C.J. Harper (fossil)

Krings & Harper (2020) introduced *Brijax* to accommodate to *B. amictus*, a fossil with possible affinity to *Chytridiomycota*. It was recorded in inter-fungal relationship in the 410-million-yr-old Rhynie chert, colonizing the walls of glomeromycotan acaulospores (M. Erdoğan & R.K. Saxena).

***Britzelmayria*** D. Wächter & A. Melzer

*Britzelmayria*, with *B. supernula* as the type species, was introduced by Wächter & Melzer (2020). *Britzelmayria supernula* was described based on the stipe distinctly rooting, cystidia with greenish deposits, presence of pileocystidia or similar elements, and phylogenetic analyses (Wächter & Melzer 2020) (M. Erdoğan).

***Brocciosphaera*** K. Yamaguchi et al.

*Brocciosphaera* was introduced by Yamaguchi et al. (2020) based on *B. brocchiata* collected from a balsa-wood block immersed in water. Conidial characteristics of this genus are different from those of *Candelabrum sensu stricto*, synonymized in *Hyaloscypha*, because of its orange conidia and no basal plate in the conidium, which is composed of dichotomously or trichotomously branched cells (Yamaguchi et al. 2020) (M. Erdoğan).

***Brykendirckia*** Rajn.K. Verma et al.

A monotypic genus *Brykendirckia* was introduced by Verma et al. (2021) to accommodate *B. catenata* collected from decaying culms of bamboo species from Indian forests (M. Erdoğan).

***Bryoclavula*** H. Masumoto & Y. Degawa

A new clavarioid, lichenized basidiomycete was described from Japan based on morphological observations and molecular phylogenetic analyses. The new taxon occurs on unidentified senescent bryophytes on a moist large rock outcrop. Although this fungus forms basidiomata on bryophytes, no direct relationship between the mycelia and the bryophytes was observed. The mycelia are consistently associated with green algae present on the surface of the bryophytes, indicating the lichenization of this species. The basidiomata were collected in late autumn to early winter (Masumoto & Degawa 2020) (F. Selcuk).

***Bryopelta*** Döbbeler & Poelt

Döbbeler & Poelt (1978) introduced *Bryopelta* within *Pleosporaceae* to accommodate *B. variabilis*. *Bryopelta* is characterized by erumpent ascomata at maturity, with peridium cells of *textura angularis* to *textura porrecta*, and ascospores generally 1-septate and rarely 1–3-septate (Döbbeler et al. 1978). Subsequently, Lumbsch & Huhndorf (2010) referred this genus to *Dothideomycetes* genera *incertae sedis*. Li et al. (2014) then accommodated *Bryopelta* to *Mycosphaerellaceae* (M. Erdoğan).

***Bryopistillaria*** Olariaga et al.

A monotypic genus *Bryopistillaria* was introduced by Olariaga et al. (2020) to accommodate *B. sagittiformis* described based on its 2.5–6(–9) µm broad medulla hyphae and 4–10(–12) µm broad globose to subglobose subhymenial hyphae (M. Erdoğan).

***Bryorbilia*** Baral & E. Rubio

*Bryorbilia* was established by Baral et al. (2020) to accommodate *B. arenicola* which grew on burnt, sandy soil among *Ceratodon purpureus* (M. Erdoğan).

***Burrowsia*** Fryday & I. Medeiros

The new genus *Burrowsia* was introduced to accommodate the new species *B. cataractae*, which is known from only a single locality in Mpumalanga, South Africa. *Burrowsia* is

characterized by its pigmented, submuriform ascospores and ascus with an apical tube structure, and also by its DNA sequence data that place it outside related buellioid genera (Fryday et al. 2020) (F. Selcuk).

### ***Byssocallis* Syd.**

Sydow (1927) introduced *Byssocallis* with *B. phoebes* as the type species. Petrak (1931) and Pirozynski (1977) synonymized *Byssocallis* with *Puttemansia* based on the presence of apiculate ascospores. Lumbsch & Huhndorf (2010) placed *Byssocallis* to *Dothideomycetes*, genera *incertae sedis*. Pem et al. (2019b) re-examined the syntype of *Byssocallis phoebes* and transferred *Byssocallis* to *Perisporiopsidaceae* based on superficial ascomata with surrounding mycelia, and ellipsoidal oblong, 1 or more septate, hyaline ascospores (D. Pem).

### ***Byssolophis* Clem.**

Clements (1931) introduced *Byssolophis* with *B. byssiseda* as the type species. Wijayawardene et al. (2014) placed *Byssolophis* in *Dothideomycetes* genera *incertae sedis*. Zhang et al. (2012) re-examined the type specimen of *B. byssiseda* and suggested morphological similarities to species in *Lophiostoma*, but did not suggest a taxonomic placement. Pem et al. (2019b) re-examined the isotype of the second species, *B. sphaerioides* and reported similar morphology to taxa in *Tetraplosphaeriaceae* namely scattered to gregarious ascomata, immersed to superficial, gabbous or with brown hyphae, cylindrical to clavate asci with a short pedicel and 1–3-septate, hyaline to pale brown ascospores surrounded by a narrow appendage-like sheath. Pem et al. (2019b) transferred *Byssolophis* to *Tetraplosphaeriaceae* based on morphology and phylogenetic analyses using putative strains of *Byssolophis sphaerioides* (IFRDCC 2053). Fresh collections and sequence data of the type specimen, *B. byssiseda* is needed to confirm this taxonomic placement (D. Pem).

### ***Byssothecium* Fuckel**

Fuckel (1861) introduced *Byssothecium* with *B. circinans* as the type species. Boise (1983) considered *Byssothecium* to be closely related to *Teichospora*. Zhang et al. (2009) accepted *Byssothecium* as a genus in *Massarinaceae*. Lumbsch & Huhndorf (2010) and Wijayawardene et al. (2014) treated *Byssothecium* in *Dothideomycetes* genera *incertae sedis*. In the phylogenetic analysis of Chethana et al. (2015) and Thambugala et al. (2015), *Byssothecium* forms a distinct clade in *Massarinaceae*. Pem et al. (2019b) re-examined the isotype of *B. circinans* and transferred *Byssothecium* to *Massarinaceae* based on the morphological similarities to *Pseudosplanchnonema* namely pseudothecioid ascomata and cylindro-clavate asci and phylogenetic analyses of available strains of *B. circinans* (CBS 675.92) (D. Pem).

### ***Caatingomyces* T.G.L. Oliveira et al.**

A new monotypic genus *Caatingomyces* within *Teratosphaeriaceae* was introduced by Hyde et al. (2019) to accommodate *C. brasiliensis* T.G.L. Oliveira et al. based on phylogenetic analyses of ITS and LSU rDNA sequence data, morphology and ecology. *Caatingomyces* is related to *Readeriella* species, but was placed in a distinct clade with high support (M. Erdoğan).

### ***Caldesites* Puri (fossil)**

*Caldesites* resembles ascospores of *Caldesia sabina* recorded from the Senonian sediments of Nigeria (R.K. Saxena).

### ***Calliderma* (Romagn.) Largent**

Romagnesi (1974) introduced *Rhodophyllus* section *Calliderma* to contain species of *Entolomataceae* that have a hymeniform pileipellis most commonly with a single layer of pileocystidia. Largent (1994) raised *Calliderma* to generic rank. *Calliderma* is characterized by basidiomata with a tricholomatoid habit, a pruinose, tomentose, velutinous or rivulose pileus

surface, microscopically corresponding to a hymeniform pileipellis or a true hymeniderm, and septa on the hyphae are with or without clamp connections (Largent 1994) (M. Erdoğdu).

***Camptomeris* Syd.**

Sydow (1927) introduced *Camptomeris* to accommodate *C. calliandrae* (type species) collected from living leaflets of *Calliandra similis*. Currently, the genus is represented by eleven species (M. Erdoğdu).

***Camptosphaeria* Fuckel**

Huang et al. (2021b) excluded this genus from *Lasiosphaeriaceae* (fide Wijayawardene et al. 2020) and accommodated in *Sordariales* genera *incertae sedis* (N. Wijayawardene).

***Candelinella* S.Y. Kondr.**

Kondratyuk et al. (2020b) introduced *Candelinella* within *Cancellidiaceae* to accommodate *C. makarevichiae*. *Candelinella* is similar to *Candolina*, but differs in having indistinct areolate to squamulose thallus, not being firmly attached to the substrate, and in having simple to 1-septate, narrowly ellipsoid to oblong ascospores, as well as in the lack of lower cortex and medulla, and the lack of distinctly lobed thallus in the peripheral portion (Kondratyuk et al. 2020b) (M. Erdoğdu).

***Candolleomyces* D. Wächt. & A. Melzer**

Wächter & Melzer (2020) analyzed *Psathyrellaceae* using phylogenetic and morphological characters and introduced six new, monophyletic genera (*Candolleomyces*, *Britzelmayria*, *Narcissea*, *Olotia*, *Punjabia* and *Tulosesus*). The type species is of *Candolleomyces* is *C. candolleanus* (M. Erdoğdu).

***Canomyces* Rahul Sharma & Shouche**

Sharma & Shouche (2020) introduced *Canomyces* within *Onygenaceae* to accommodate *C. reticulatus* (the type species). *Canomyces reticulatus* is phylogenetically close to *Currahomyces indicus*, *Neogymnomyces demonbreunii* and *Renispora flavissima*. Although the gross morphology of the ascomata of *Canomyces reticulatus* is somewhat similar to *Neogymnomyces demonbreunii*, it differs in shape and size of the ascospore and the type of asexual morph which is arthroconidial in the former and *Chrysosporium* in the latter (Sharma & Shouche 2020) (M. Erdoğdu).

***Capellomyces* Hanafy et al.**

See under *Agriosomyces* (M. Erdoğdu).

***Capillidium* B. Huang & Y. Nie**

Nie et al. (2020) revised *Conidiobolus* and introduced three new genera *Capillidium*, *Microconidiobolus* and *Neoconidiobolus*. *Conidiobolus* sub gen. *Capillidium* was established to include species with capilliconidia (Ben-Ze'ev & Kenneth 1982). Based on phylogenetic analysis, Nie et al. (2020) raised the subgenus *Capillidium* to generic rank (M. Erdoğdu).

***Carneothele* Fryday et al.**

The genus was introduced by Spribille et al. (2020) based on morphology. It is similar to *Thelocarpon*, which shares minute ascomata on organic substrata with the occasional presence of a yellow pruina, plus the multi-spored asci that gradually taper to a narrow apex. However, it differs from that genus in the more robust red-brown ascomata with the wall pigment forming magenta crystals in 10% KOH (F. Selcuk).

***Catabotryales* K.D. Hyde & Senan.**

*Catabotryales* was formally introduced by Hyde et al. (2020b). This order is distinct from its



sister orders in having astromatic ascomata, broad cylindrical asci and ellipsoidal to cylindrical ascospores without a mucilaginous sheath (Hyde et al. 2020b) (F. Selcuk).

***Catenuliconidia*** N.G. Liu & K.D. Hyde

Based on morphology and phylogeny, *Catenuliconidia* was introduced by Yuan et al. (2020) to accommodate *C. uniseptata* and belongs in *Xylariales* genus *incertae sedis* (M. Erdoğdu).

***Ceratosphaerella*** Huhndorf et al.

Jiang et al. (2021a) regarded *Ceratosphaerella castillensis*, the type species of *Ceratosphaerella* as congeneric with *Ophioceras* and thus introduced a new combination, *Ophioceras castillensis*. However, the authors did not consider morphology carefully thus we believe that it is not wise to conclude the synonymy based only on phylogeny which is based on a few strains in the family. Hence, we reinstate *Ceratosphaerella*, pending future studies (K.D. Hyde).

***Cercosperma*** G. Arnaud ex B. Sutton & Hodges

*Cercosperma* was introduced by Arnaud (1954) with *C. subsessilis* G. Arnaud, which remained a nomen nudum. Sutton & Hodges (1981) subsequently validated the generic name *Cercosperma* and typified by *C. arnaudii* B. Sutton & Hodges collected on *Eucalyptus* litter from Brazil (M. Erdoğdu).

***Chromelosporiopsis*** Hennebert

A new name *Chromelosporiopsis* was introduced by Hennebert (2020) for *Chromelosporium carneum* and *C. coerulescens*. *Chromelosporiopsis* differs from *Chromelosporium* by its synnematus conidiophores and irregular successive bifurcate branching (Hennebert 2020) (M. Erdoğdu).

***Cinnabaria*** Wilk et al.

The monospecific genus *Cinnabaria* was introduced by Wilk et al. (2021) to accommodate *C. Boliviana*. *Cinnabaria boliviana* is similar to members of the “*Caloplaca*” *cinnabarina* group, recently separated as *Brownliella*, but differs in ascospore size, among other features. The species is characterized by a yellowish, areolate thallus, sublobate at the margin, and immersed, red apothecia, contrasting with the thallus color (Wilk et al. 2021) (M. Erdoğdu).

***Cirrenalia*** Meyers & R.T. Moore

This is a recognised genus in the *Halosphaeriaceae* and *C. macrocephala* is the type species. *Cirrenalia* is polyphyletic but the correct *Cirrenalia* is based on a marine fungus (E.B.G. Jones).

***Cladocillium*** Chun-Hao Chen & R. Kirschner

Molecular phylogenetic analyses made by Chen et al. (2020) in several loci (LSU, ITS, *tef1-α*, *rpb2*) indicated a relationship with cercosporoid fungi. Since there is no other known lineages with similar morphology or DNA sequences, the new genus and species *C. musae* Chun-Hao Chen & R. Kirschner was introduced (F. Selcuk).

***Cladosporiales*** Abdollahz. & Crous

This order, which includes saprobic, endophytic, fungicolous, lichenicolous, human and plant pathogens, was introduced based on the phylogenetic analyses by Abdollahzadeh et al. (2020), to accommodate *Cladosporiaceae* Chalm. & R.G. Archibald, which was previously placed in *Capnodiales* (F. Selcuk).

***Columnomyces*** R.K. Benj.

The genus comprises four species. Perreau et al. (2021) described new three species, including a fossil representative, *C. electri*, from a cholevine beetle (*Proptomaphagus alleni*)

embedded in Dominican amber. Thus far, only two fossil species of *Laboulbeniales* are known, *Columnomyces electri* and *Stigmatomyces succini* from a diopsid fly in Bitterfeld amber (Rossi et al. 2005) (D. Haelewaters).

#### ***Commelinaceomyces* E. Tanaka**

A novel genus, *Commelinaceomyces* has been reported based on morphological and molecular studies, which infects flowers of *Murdannia keisak* (*Commelinaceae*) in Japan. The asexual morph forms dusty spore masses composed of thick-walled conidia in the flowers of *Commelinaceae*. The conidia germinate to form filamentous hyphae. Secondary conidia are globose, hyaline. The generic type is *C. aneilematis* (Tanaka et al. 2020) (F. Selcuk).

#### ***Comminutisporales* Abdollahz. & Crous**

Members of this order are saprobic. The name refers to *Comminutispora* A.W. Ramaley. Based on the phylogenetic results, combined with morphology and ecology, Abdollahzadeh et al. (2020) introduced this order to accommodate *Comminutisporaceae* (F. Selcuk).

#### ***Conidiotheca* Réblová & L. Moster**

Huang et al. (2021b) excluded this genus from *Togniniaceae* and accommodated it in *Sordariomyces* genus *incertae sedis* (N. Wijayawardene).

#### ***Coniosporiaceae* Crous et al.**

*Coniosporiaceae* Nann. 1934 (Nannizzi 1934) is invalid. Hence, *Coniosporiaceae* Crous et al. 2020 was introduced by Haridas et al. (2020) in detailed phylogenetic analysis (F. Selcuk).

#### ***Coniosporiales* Crous et al.**

*Coniosporium* Link was revisited by Haridas et al. (2020). However, there are no DNA sequence data available from the type, and the species needs to be recollected and epitypified (F. Selcuk).

#### ***Copromyces* N. Lundq.**

Huang et al. (2021b) excluded this genus from *Sordariaceae* and accommodated it in *Ascomycota* genus *incertae sedis* (N. Wijayawardene).

#### ***Corylicola* Wijesinghe et al.**

Wijesinghe et al. (2020) introduced this genus to accommodate *C. italica* isolated from *Coryllus avellana* L. in Italy. It has similar characters compared to other genera of *Bambusicolaceae* D.Q. Dai & K.D. Hyde. These are solitary, scattered, globose to subglobose and ostiolate ascomata; anastomosing and branching pseudoparaphyses; cylindrical asci with a well-developed ocular chamber and short furcate pedicel; and single-septate ascospores. The coelomycetous asexual morph of *Corylicola* has holoblastic, phialidic conidiogenous cells and light brown conidia analogous to other members of the family. *Corylicola* differs from the other genera of *Bambusicolaceae* in having yellowish-brown ascospore masses at the apex of the ascomatal neck (F. Selcuk).

#### ***Cristataspora* Robledo & Costa-Rezende**

Based on morphological and phylogenetic evidence, *Cristataspora* was introduced by Costa-Rezende et al. (2020) to accommodate two species of *Ganoderma* (*G. coffeatum* and *G. flaviporum*) with pale context and truncate basidiospores with endosporic ornamentation as ridges (M. Erdoğdu).

#### ***Crittendenia* Diederich et al.**

*Crittendenia* was introduced by Millanes et al. (2021) to accommodate *C. coppinsii* and

*C. lichenicola*. *Crittendenia* is characterized by minute synnemata-like basidiomata, clamp connections and aseptate tubular basidia from which 4–7 spores discharge passively, often in groups (Millanes et al. 2021) (M. Erdoğdu).

#### ***Crossopsoraceae* Aime & McTaggart**

*Crossopsoraceae* was established by Aime & McTaggart (2021) to accommodate the genera *Angiopsora*, *Catenulopsora*, *Crossopsora*, *Kweilingia*, *Neolivea*, *Neophysopella* and *Stomatisora* in the order *Pucciniales*. *Crossopsoraceae* is similar to *Phakopsoraceae*, differing in that the majority of sporothalli infect *Lamiaceae*, *Poaceae*, *Rhamnaceae* and *Vitaceae* with none known on *Annonaceae* and *Euphorbiaceae* and that some species are known to be heteroecious (Aime & McTaggart 2021) (M. Erdoğdu).

#### ***Cryolevonia* A. Pontes et al.**

Pontes et al. (2020) introduced the cryophilic yeast *Cryolevonia* in *Camptobasidiaceae* to accommodate *C. schaffbergensis* (the type species) (M. Erdoğdu).

#### ***Cryphognomonina* C.M. Tian & N. Jiang**

This genus was introduced by Yang et al. (2020) with *C. pini* as the type species. Moreover, the genus was accommodated in *Gnomoniaceae* (F. Selcuk).

#### ***Cryptosphaerella* Sacc.**

In the previous outline of fungi, this genus was listed in *Scortechiniaceae* (Wijayawardene et al. 2020). However, Huang et al. (2021a) regarded that this genus belongs in *Niessliaceae*, *Hypocreales* (N. Wijayawardene).

#### ***Crystallicutis* El-Gharabawy et al.**

El-Gharabawy et al. (2021) introduced *Crystallicutis* to accommodate three new species and a new combination based on morphological and molecular data. The distinctive feature of *Crystallicutis* is the presence of crystal-encrusted hyphae in the hymenium and subiculum. Basidiomes are usually honey-yellow with white margins, but there is variability in the presence of clamp connections and cystidia, as noted for other genera within *Irpicaceae* (El-Gharabawy et al. 2021) (M. Erdoğdu).

#### ***Currahomyces* Rahul Sharma & Shouche**

*Currahomyces* was introduced by Sharma & Shouche (2020) based on *C. indicus* collected from a hen resting area in India. Morphologically, *C. indicus* resembles *Amauroascus* due to its fragile ascoma and broadly punctate-reticulate ascospores (Sharma & Shouche 2020) (M. Erdoğdu).

#### ***Cyberloma* Minter**

Minter (2020) introduced *Cyberloma* to accommodate *C. acerinae* (the type species), which infects fish of the families *Atherinidae*, *Gobiidae* and *Percidae* in Europe (M. Erdoğdu).

#### ***Cylindromonium* Crous**

Crous et al. (2019a) introduced *Cylindromonium* within the *Nectriaceae* to accommodate *C. eugeniicola* (the type species) collected from leaf litter of *Eugenia capensis* (M. Erdoğdu).

#### ***Cylindrosyndromiaceae* Crous et al.**

This family has been introduced by Shen et al. (2020) to accommodate *Cylindrosyndromium*, based on the multigene phylogenetic analysis, morphological and ecological characteristics (F. Selcuk).

***Dactylodendron*** Stchigel et al.

Rodríguez-Andrade et al. (2020) introduced *Dactylodendron* to accommodate *D. pinicola* (formerly *Arthrographis pinicola*) and two new species. *Dactylodendron*, is phylogenetically closely related to *Onygenales* and is characterized by its branched conidiophores and the production of chains of arthroconidia (Rodríguez-Andrade et al. 2020) (M. Erdoğan).

***Desertiserpentica*** Maharachch. et al.

Maharachchikumbura et al. (2021b) introduced this genus within *Lophiostomataceae* to accommodate *Desertiserpentica hydei* based on phylogenetic analyses of nuclear ribosomal DNA (rDNA) (LSU, SSU and ITS) and protein-coding genes (*tefl-α*, *rpb2* and *tub*), plus morphological comparisons (M. Erdoğan).

***Diabolocovidia*** Crous

Crous et al. (2020a) introduced this genus which is accommodated in *Xylariaceae* (F. Selcuk).

***Diarthonis*** Clem.

Cannon et al. (2020) resurrected this genus in *Arthoniaceae* which was regarded as a synonym of *Arthonia*. *Diarthonis* is currently monotypic, (type species: *Diarthonis spadicea* (Bas. *Arthonia spadicea*) based on molecular analyses by Frisch et al. (2014) (D. Ertz).

***Didymocyrtidium*** Vain.

Vainio (1921) introduced *Didymocyrtidium* without designating a type species. *Didymocyrtidium* accommodated three species *Didymocyrtidium mozambicum*, *Didymocyrtidium nudum* and *Didymocyrtidium populnellum*. Pem et al. (2019b) re-examined the holotype specimen *Didymocyrtidium populnellum* and *Didymocyrtidium nudum* and selected *Didymocyrtidium nudum* as the lectotype based on morphology. Pem et al. (2019b) did not typify the genus with *Didymocyrtidium populnellum* because the specimen was doubtful with the occurrence of two types of fungi (D. Pem).

***Diffractella*** Guarro et al.

Huang et al. (2021b) excluded this genus from *Lasiosphaeriaceae* (fide Wijayawardene et al. 2020) and accommodated it in *Sordariales* genera *incertae sedis* (N. Wijayawardene).

***Dimorphoma*** L.W. Hou et al.

Hou et al. (2020) introduced this genus within *Didymellaceae* to accommodate *Dimorphoma saxea*. *Dimorphoma saxea* was described from stone and is characterized by pycnidia with an extremely thin pycnidial wall, being almost hyaline when the conidia have exuded (Aveskamp et al. 2010) (M. Erdoğan).

***Diplodites*** Teterev.-Babajan & Tasl. ex Kalgutkar et al. (fossil)

*Diplodites* was introduced for spores similar to extant *Diplodia* (current name: *Botryosphaeria*) from Tertiary strata of Armenia. *Palaeodiplodites* is a later synonym of *Diplodites* (R.K. Saxena).

***Diplogelasinosporaceae*** Y. Marin & Stchigel

Based on morphological and sequence data, Marin-Felix et al. (2020) introduced three new families *Diplogelasinosporaceae*, *Naviculisporaceae*, and *Schizotheciaceae* to accommodate taxa, which were formerly included in *Lasiosphaeriaceae* (M. Erdoğan).

***Disparidicellites*** Kalgutkar & Janson. (fossil)

This monotypic genus is characterized by inaperturate spores having two cells of unequal

size, the proximal cell being much smaller and thinner-walled than the distal cell (R.K. Saxena).

***Dissingia*** K. Hansen et al.

Hansen et al. (2019) introduced *Dissingia* within the *Helvellaceae* to accommodate four new combinations (*viz.*, *D. confusa*, *D. crassitunicata*, *D. leucomelaena* and *D. oblongispora*). *Dissingia* is characterized by asci with simple septa at the bases (Hansen et al. 2019) (M. Erdoğdu).

***Distobactrodesmium*** Z. Niu et al.

*Distobactrodesmium* was introduced by Niu et al. (2021) to accommodate *Bactrodesmium rahmii*, characterized by sporodochial conidiomata that produce distoseptate, brown to dark brown phragmoconidia through monoblastic conidiogenous cells (M. Erdoğdu).

***Distothelia*** Aptroot

Hongsanan et al. (2020) synonymized the type species of this genus with *Bogoriella* and confirmed its placement in *Trypetheliaceae*. The only other species known in this genus was given its own new genus *Schummia* (A. Aptroot).

***Dothidasteromella*** Höhn.

Höhn (1910) introduced *Dothidasteromella* with *D. sepulta* as the type species. Von & Müller (1975) placed *Dothidasteromella* in *Asterinaceae* based on morphology such as the presence of subcuticular hypostromata and superficial hyphae lacking appressoria. Hongsanan et al. (2014) re-examined the holotype and isotype specimen of *D. sepulta* and placed *Dothidasteromella* in *Dothideomycetes* genera *incertae sedis* as the morphological characters were not clear. Pem et al. (2019b) re-observed the holotype specimen of *D. sepulta* (F56756) and transferred *Dothidasteromella* to *Asterinaceae* based on morphology namely Y-shaped thyriothecia, 8-spored oblong to subglobose asci, lacking a pedicel and 1-septate brown ascospores which are typical of *Asterina* (D. Pem).

***Dubujiana*** D.R. Reynolds & G.S. Gilbert

Reynolds & Gilbert (2005) introduced *Dubujiana* with *D. glandulifera* as type species. Pem et al. (2019b) studied the holotype of *D. glandulifera* and placed *Dubujiana* in a new family *Dubujianaceae* based on its unique morphology; *viz.*, namely hyphopodiate pycnidia, conidiomatal walls composed of dark-brown walled cells of *textura globulosa* and 1-septate, punctate hyaline to pale brown conidia (D. Pem).

***Ectodidymella*** L.W. Hou et al.

*Ectodidymella* was established by Hou et al. (2020) to accommodate *Phoma nigrificans*. The sexual morph of *Phoma nigrificans* (= *Didymella macropodii*) is morphologically similar with species of *Didymella* Sacc. However, phylogenetically it forms a distinct clade that is distant from *Didymella* and separated from all genera previously described in *Didymellaceae*. Morphologically, *Ectodidymella* differs from *Didymella* by occasionally producing four ascospores in a single ascus, which is rare in *Didymellaceae* (Hou et al. 2020) (M. Erdoğdu).

***Effetia*** Bartoli et al.

Huang et al. (2021b) excluded this genus from *Sordariaceae* and accommodated in *Ascomycota* genus *incertae sedis* (N. Wijayawardene).

***Elaiopezia*** Van Vooren

Based on both molecular data obtained from databases and new studies of type collections of species of *Peziza* described by *Donadini* and morphological characters, six new genera were introduced by Van Vooren (2020); *Ionopezia*, with *Peziza gerardii* as the type species, *Malvipezia*, with *Peziza howsei* as the type species, *Elaiopezia* with *Galactinia polaripapulata* as the type

species, *Paragalactinia* with *Peziza succosa* as the type species, *Phylloscypha*, with *Peziza phyllogena* as the type species, and *Legaliana* with *Peziza badia* as the type species (M. Erdoğan).

***Elongaticollum*** D.S. Tennakoon et al.

Tennakoon et al. (2020) introduced this genus within *Phaeosphaeriaceae* to accommodate *Elongaticollum hedychii*. *Elongaticollum* is characterized by dark brown to black, superficial, obpyriform, pycnidial conidiomata with a distinct elongate neck, and oval to oblong, hyaline, aseptate conidia. Phylogenetic analyses (maximum likelihood, maximum parsimony and Bayesian) of combined ITS, LSU, SSU and *tefl*- $\alpha$  sequence data revealed *Elongaticollum* as a distinct genus within *Phaeosphaeriaceae* with high statistical support (Tennakoon et al. 2020) (M. Erdoğan).

***Elongaticonidia*** W.J. Li et al.

Li et al. (2020a) described *Elongaticonidia* with *Elongaticonidia rosae* as the type, from *Rosa canina* (V. Thiagaraja).

***Emblemospora*** Jeng & J.C. Krug

Wijayawardene et al. (2020) listed this genus under *Lasiosphaeriaceae*. Huang et al. (2021b) excluded this genus from *Lasiosphaeriaceae* and accommodated in *Sordariales* genera *incertae sedis* (N. Wijayawardene).

***Endophragmiella*** B. Sutton

Wijayawardene et al. (2020) listed this genus under *Helminthosphaeriaceae*. Huang et al. (2021b) excluded this genus from *Helminthosphaeriaceae* and accommodated it in *Ascomycota* genus *incertae sedis* (N. Wijayawardene).

***Endosporium*** Tsuneda

Tsuneda (2008) introduced *Endosporium* with *E. populi-tremuloides* as the type species. Pem et al. (2019b) studied the holotype specimen of *E. populi-tremuloides* and placed *Endosporium* to a new family based on its unique morphological characters such as cylindrical hyphae, ellipsoidal, subglobose to globose endoconidia and cellular clumps, globose, obovoid, fusiform blastic conidia and based on phylogenetic analysis of the putative strains of *Endosporium populi-tremuloides* and *E. aviarium* (D. Pem).

***Englerodothis*** Theiss. & Syd.

Theissen & Sydow (1915) introduced *Englerodothis* with *E. kilimandscharica* as type species. Hofmann (2009) and Lumbsch & Huhndorf (2010) placed *Englerodothis* in *Parmulariaceae*. Hyde et al. (2013) excluded *Englerodothis* from *Parmulariaceae* based on morphology; viz., enclosed ascomata and a single ascomatal wall layer composed of cells of *textura angularis*. Pem et al. (2019b) re-examined the type specimen of *E. kilimandscharica* and placed *Englerodothis* in *Coccoideaceae* based on morphology; viz., circular or discoid ascostroma, multi-loculate, dark pigmented, bitunicate asci and 1-septate, light pigmented ascospores (D. Pem).

***Engleromyces*** Henn.

Zhou et al. (2021) have recently been the first to generate DNA sequence data of a species of *Engleromyces* and finally confirmed the placement of this genus, whose species form massive stromatal on bamboo that are used in folk medicine, in the *Xylariaceae*. Previously, it had been only retained in the family based on chemotaxonomy and ascospore morphology (cf. Wendt et al. 2018) (M. Stadler).

***Entrophospora*** Ames & Schneider

*Entrophospora* was treated as *insertae sedis* in different classifications (Redecker et al. 2013, Wijayawardene et al. 2018). Nevertheless, all partial rDNA sequences published within the last

years, suggest that *Entrophospora infrequens* belongs to the *Claroideoglomus* clade (Oehl et al. 2011c,d), justifying the use of *Entrophosporaceae* instead of *Claroideoglomeraceae*. Additional phylogenetic analysis of distinct isolates suggest that *Entrophospora infrequens* is a cryptic species. Moreover, it is necessary to assess the type location isolate to confirm the phylogenetic position and clarify the status of genus and family (B.T. Goto, F. Marguno, J. Błaszczowski & F. Oehl).

### ***Eosphaeria* Höhn.**

Wijayawardene et al. (2020) listed this genus under *Lasiosphaeriaceae*. Huang et al. (2021b) excluded this genus from *Lasiosphaeriaceae* and accommodated it in *Sordariales* genera *incertae sedis* (N. Wijayawardene).

### ***Epigeocarpum* Błaszcz. et al.**

Błaszczowski et al. (2021a) introduced the monospecific genus *Epigeocarpum* based on phylogenetic divergence of *E. crypticum* from *Kamienskia bistrata* clade, the type species of *Kamienskia* (B.T. Goto, F. Marguno & J. Błaszczowski).

### ***Erichansenia* S. Y. Kondr. et al.**

This genus was introduced by Kondratyuk et al. (2020a) with *E. epithallina* as the type species (F. Selcuk).

### ***Ericiomyces* Karpov & Reñé**

*Ericiomyces*, typified by *E. syringoforeus*, was established by Karpov et al. (2021) based on phylogenetic analyses and morphological characters. *Ericiomyces syringoforeus* is a parasitoid with a life cycle composed of zoospores, which attach to the host, encyst, and produce a rhizoidal system (Karpov et al. 2021). This genus showed a distinct phylogenetic lineage in *Rhizophydiales* thus, *Ericiomycetaceae* was introduced (M. Erdoğdu & N. Wijayawardene).

### ***Eumela* Syd.**

Sydow (1925) introduced *Eumela* with *E. chiococcae* as the type species. Several authors placed *Eumela* in *Pseudoperisporiaceae* (Lumbsch & Hundorf 2010, Hyde et al. 2013). Boonmee et al. (2017) observed the holotype of *Eumela chiococcae* (S-F11418) and treated *Eumela* in *Dothideomycetes* genus *incertae sedis*. Pem et al. (2019b) re-examined the syntype of *Eumela chiococcae* and transferred *Eumela* to *Antennulariellaceae* based on morphology namely aerial mycelium colonies and ascospores features (D. Pem).

### ***Evansstolkia* Houbraken et al.**

*Evansstolkia* forms a single lineage and is a monotypic phylogenetically distinct genus. Conidiophores are paecilomyces-like; conidia brown; chlamydospores present, thick-walled; ascospores decorated with some what jagged, irregular, mostly longitudinal ridges of different length. Thermotolerant to thermophilic (Houbraken et al. 2020) (F. Selcuk).

### ***Fagicola* Crous et al.**

*Fagicola* has been introduced with *F. fagi* as the type species. This genus is saprobic on leaves of *Fagus sylvatica* collected in the Netherlands (Shen et al. 2020) (F. Selcuk).

### ***Fasciodontia* Yurchenko & Riebesehl**

Based on the analyses of ITS and 28S sequences data, *Fasciodontia* was introduced by Yurchenko et al. (2020) to represent *Xylodon bugellensis* and related taxa. The genus is characterized by fascicles of skeletal-like hyphae in aculeal trama and thick-walled basidiospores (Yurchenko et al. 2020) (M. Erdoğdu).

### ***Fibulomyces* Jülich**

Jülich (1972) introduced *Fibulomyces* within *Atheliaceae* to accommodate the type species *F. mutabilis* (M. Erdoğdu).

### ***Flagellostrigula* Lücking et al.**

*Flagellostrigula* was introduced to accommodate *Flagellostrigula laureriformis* based on pycnidial morphology (Hongsanan et al. 2020). This species shows large pycnidia covered by a thick thalline layer and produces macroconidia with a single, very long, flagelliform appendage at the proximal end (Hongsanan et al. 2020) (V. Thiagaraja).

### ***Flavocillium* H. Yu et al.**

*Flavocillium* was introduced by Wang et al. (2020a) to accommodate one new species *F. bifurcatum* and the three new combinations previously treated as members of *Lecanicillium*. The type species *F. bifurcatum* is characterized by the fleshy stromata with a bifurcate terminal branch, solitary, yellowish, contorted fertile parts, long conidiophores, lanceolate phialides and two types of cymbiform macroconidia and ellipsoidal to reniform microconidia (Wang et al. 2020a) (M. Erdoğdu).

### ***Foliocryphiaceae* C.M. Tian et al.**

*Foliocryphiaceae* has been introduced by Jiang et al (2020a) based on phylogenetic analyses of combined gene set of ITS, nrDNA (28S), and *tef1-α* and *rpb2* genes (F. Selcuk).

### ***Francisrosea* Ertz & Sanderson**

Ertz et al. (2021) introduced *Francisrosea* in *Gyalectaceae* to accommodate *F. bicolor* (the type species). *Francisrosea* is distinguished by having an isolated phylogenetic position as sister to a clade including *Gyalidea praetermissa* and *Neopetractis* and *Ramonia*, and is characterized by an inconspicuous thallus with small discrete erumpent soralia lacking acetone-soluble secondary metabolites detectable by TLC (Ertz et al. 2021) (M. Erdoğdu).

### ***Fraxinicola* Crous et al.**

The type species of this genus, *F. fraxini* is parasitic on leaves of *Fraxinus excelsior*. Based on multigene phylogenetic analysis, morphological and ecological characteristics, *Fraxinicola* has been described (Shen et al. 2020) (F. Selcuk).

### ***Fumagospora* G. Arnaud**

*Fumagospora* was introduced by Arnaud (1911) based on *F. capnodioides*. Species of this genus are related to or associated with species of *Capnodium* (Arnaud 1911) (M. Erdoğdu).

### ***Fusarium* Link**

There have been several important publications concerning *Fusarium* but there are conflicting ideas with regards to the taxonomy of the *Fusarium* group(s). Even though it seems likely that a narrower concept for the genus is preferable (Crous et al. 2021), it is likely to be further argued on the subject in coming publications. In the outline, we provide both options for the classification of fusarium-like species until a broad consensus is reached (K.D. Hyde and M. Thines).

### ***Fuscohilum* Crous et al.**

Shen et al. (2020) introduced this genus with *F. rhodensis* as the type species (F. Selcuk).

### ***Fuscosphaeria* D.G. Knapp & Pintye**

Based on phylogenetic analyses and morphological characters, root-colonizing



*Fuscosphaeria* within *Trematosphaeriaceae* was introduced by Pintye & Knapp (2021) to accommodate *F. hungarica* isolated from the root of *Festuca vaginata* (M. Erdoğdu).

***Fuscutata*** Oehl et al.

See *Gigasporales* in the discussion (F.A. de Souza & B.T. Goto).

***Fusichalara*** S. Hughes & Nag Raj

*Fusichalara minuta* clustered in the family *Sclerococcaceae* (Réblová et al. 2016, Yu et al. 2018). However, this species is not the type species of the genus (N. Wijayawardene).

***Fusiformiseptata*** W. Dong et al.

Dong et al. (2020) established this genus to accommodate a freshwater species *F. crocea* and referred it to *Pleosporales* genera *incertae sedis* (W. Dong).

***Fusoidigranularius*** W. Dong et al.

Dong et al. (2021a) established this genus in *Annulatascaceae* to accommodate *Fusoidigranularius nilensis* segregated from *Annulatascus* based on distinct morphology and multi-locus phylogeny. (W. Dong).

***Gamsomyces*** Hern.-Restr. & Réblová

Réblová et al. (2020) have introduced this genus to accommodate the type species, *G. longisporus* based on phylogenetic analysis (F. Sencuk).

***Gamszarea*** Z.F. Zhang & L. Cai

Zhang et al. (2020) introduced *Gamszarea* to accommodate three new species and five new combinations based on morphology and phylogeny. Currently, the genus comprises eight species (Zhang et al. 2020c) (M. Erdoğdu).

***Geohypha*** (Fr.) Hennebert

*Hyphelikia terrestris*, long misapplied to *Chromelosporium*, was reevaluated by Hennebert (2020) as *Geohypha terrestris*. *Geohypha terrestris* has narrow, sinuous conidiogenous hyphae and verrucose conidia mixed with young smooth conidia, with relative abundance depending on the maturity of the fungus (Hennebert 2020) (M. Erdoğdu).

***Ghazallomyces*** Hanafy et al.

See under *Agriosomyces* (M. Erdoğdu).

***Gibbago*** E.G. Simmons

Simmons (1986) introduced *Gibbago* with *G. trianthemae* as the type species. Simmons (1986) placed *Gibbago* in *Pleosporaceae* based on morphological similarities with *Alternaria*, *Embellisia*, *Ulocladium* and *Stemphylium* and this was followed by Wijayawardene et al. (2014). Ariyawansa et al. (2015) placed *Gibbago* in *Pleosporaceae* based on phylogenetic analysis of putative strains of *G. trianthemae* (strain numbers: GT-VM and NFCCI 1886). Pem et al. (2019b) re-examined the isotype specimen of *G. trianthemae* and placed *Gibbago* in *Pleosporaceae* based on morphology and phylogeny (D. Pem).

***Gibberidea*** Fuckel.

Fuckel (1870) introduced *Gibberidea* with *G. visci* as the type species. Wijayawardene et al. (2017) treated *Gibberidea* in *Dothideomycetes*, genera *incertae sedis*. Pem et al. (2019b) suggested that the type species of *Gibberidea*, *G. visci* is a synonym of *Sphaeropsis visci*. Pem et al. (2019b) transferred *Gibberidea* to *Botryosphaeriaceae* based on morphology and phylogenetic analysis (D. Pem).

***Gigasporites*** Carlie J. Phipps & T.N. Taylor (fossil)

This monotypic genus of endophytic fungi was recorded from the Early Middle Triassic sediments of Fremouw Peak, near the Beardmore Glacier, Antarctica. The hyphae and arbuscules occupy inter- and intracellular cortical regions (R.K. Saxena).

***Glomites*** T.N. Taylor et al. (fossil)

*Glomites* is a genus of endophytic fungi. It is represented by four species, viz., *G. cycestris* recorded from the Early-Middle Triassic sediments of Fremouw Peak, near Beardmore Glacier, Antarctica, *G. rhyniensis* from the Early Devonian Rhynie Chert, Aberdeenshire, Scotland, *G. sporocarpoides* from the Early Devonian Lower Old Red Sandstone, Rhynie, Aberdeenshire, Scotland and *G. vertebrariae* from the Late Permian sediments associated with rootlets of *Vertebraria*, in permineralized peat, Antarctica (R.K. Saxena).

***Gobabebomyces*** Crous

*Gobabebomyces* was introduced by Crous et al. (2020a) to accommodate *G. vachelliae* based on phylogenetic analyses, combined with morphology and culture characteristics. It is an asexual, coniothyrium-like coelomycetous morph related to *Lembosiniella*, a genus of ascomycetes forming dark brown to black, superficial, irregular leaf spots with linear to Y-shaped hysterothecia on *Eucalyptus* spp. in Australia (Crous et al. 2020a) (M. Erdoğdu).

***Gonatobotrys*** Corda

Wijayawardene et al. (2020) listed this genus as a synonym of *Melanospora* but Huang et al. (2021a) regarded this genus as a distinct genus in *Ceratostomataceae* (N. Wijayawardene).

***Grigorovia*** Gouliamova & Dimitrov

This genus was introduced by Gouliamova & Dimitrov (2020) to accommodate *Kazachstania transvaalensis* (W.P. Pfliegler).

***Gryganskiella*** Vandepol & Bonito

This genus comprises two species previously classified within the *Mortierella* clade 1 (Wagner et al 2013). Based on previous phylogenetic studies (Wagner et al. 2013), it is likely that more species can be transferred to this genus. The type species is *Gryganskiella* (type specimen CBS 456.71). The representatives of this genus were reported from agricultural soil and moss in Europe and South America. Vandepol et al. (2020) used low coverage and high-throughput sequencing in order to resolve the phylogeny of *Mortierellaceae*, which consisted of several polyphyletic taxa. As a result, they found seven new genera (*Benniella*, *Entomortierella*, *Gryganskiella*, *Linnemannia*, *Lunasporangiospora*, *Necromortierella* and *Podila*) among 13 monophyletic genera (J. Pawłowska & M. Erdoğdu).

***Guayaquilina*** R.F. Castañeda et al.

*Guayaquilina* was established by Magdama et al. (2020) to accommodate *Idriella cubensis* based on morphology and phylogenetic analysis. It is characterized by macronematous, tree-like, fasciculate, profuse dichotomously, alternately, or irregularly branched, brown conidiophores with polyblastic, denticulate, sympodial extended, intercalary and terminal conidiogenous cells that produce solitary, sublunate, subnavicular, lunate, inequilateral, (0–)1-septate, hyaline conidia (Magdama et al. 2020) (M. Erdoğdu).

***Halobyssothecium*** Dayar. et al.

*Halobyssothecium* was established to accommodate a marine fungus *Byssothecium obiones* (Dayarathne et al. 2018), and later some freshwater species was transferred to this genus (Calabon et al. 2021a) (W. Dong).

***Halocryptosphaeria*** Dayar. et al.

This genus is saprobic on decaying wood of *Avicennia marina*. It is characterized by poorly developed entostroma, dorsally limited by a black zone binding the stromatic area, submerged or occasionally deeply buried long-necked ascomata and olive-brown, aseptate ascospores (Dayarathne et al. 2020) (F. Selcuk).

***Halotestudina*** Dayar. & K.D. Hyde

This monotypic genus is saprobic on mangrove wood and is typified by *H. muriformis*. The genus can be easily distinguished from other *Testudinaceae* genera by its brown muriform ascospores that are constricted at each septum. It is based on morphological examination of a fresh specimen supported by multigene phylogeny to better integrate taxon into higher taxonomic framework and infer its phylogenetic relationships as well as establish a new genus (Dayarathne et al. 2020) (F. Selcuk).

***Haniomyces*** J.C. Xu

Note: Wanasinghe et al. (2021) introduced this new genus to accommodate *Haniomyces dodonaeae* collected from dead twigs of *Dodonaea viscosa* in China. *Haniomyces dodonaeae* fits morphologically well into *Teratosphaeriaceae* by its periphysate ostiole and hyaline ascospores with a single septum in each. However, the dimensions of the asci and ascospores are significantly larger than the existing sexual reports of this family (Wanasinghe et al. 2021) (M. Erdoğdu).

***Hansenopezia*** Matočec et al.

Based on a multiple gene phylogeny and phenetic evidence, Yuan et al. (2020) described two new genera for species classified earlier as “*Peziza*” for which no name is available: *Ionopezia* for *Peziza gerardii* and *Hansenopezia* for *Peziza retrocurvata* (M. Erdoğdu).

***Hantamomyces*** Crous

Based on the phylogenetic analyses, combined with morphology and culture characteristics, Crous et al. (2020a) introduced *Hantamomyces* as a monotypic genus in *Ophiocordycipitaceae*. The genus is typified by *H. aloidendri* collected from leaves of *Aloidendron dichotomum* in South Africa (Crous et al. 2020a) (M. Erdoğdu).

***Hapalophragmites*** Ramanujam & Ramachar (fossil)

This monotypic genus is a common element in the *Neyveli lignite* (Miocene), Tamil Nadu, India. The fossil spores show close similarity to spores of modern *Hapalophragmium* (R.K. Saxena).

***Haploanthostomella*** Konta & K.D. Hyde

Based on phylogenetic analyses of a combined dataset of ITS, LSU, *rpb2*, and *tub2* nucleotide sequence data as well as unique morphological characteristics, Konta et al. (2021a) introduced *Haploanthostomella* to accommodate *H. elaeidis* (the type species) collected from dead leaves and rachis of *Elaeis guineensis* (M. Erdoğdu).

***Haplohelminthosporium*** Konta & K.D. Hyde

Based on morphological characteristics and phylogenetic analyses of combined ITS, LSU, SSU, and *tef1-α* sequence data, the monotypic genus *Haplohelminthosporium* was established by Konta et al. (2021b) with *H. calami* as the type species. *Haplohelminthosporium* is distinguished by its unbranched conidiophores arising solitarily or fasciculate from the stroma-like bulbous basal cells that are hyaline in the middle, brown to red-brown at 1–2-cells above the base, pale brown to red-brown and curved at the apical cell with well-defined non-cicatrized small pores and with a single olive-brown conidium arising from each conidiophore (Konta et al. 2021b) (M. Erdoğdu).

***Haudseptoria*** Crous & R.K. Schumach.

Crous et al. (2021c) introduced *Haudseptoria* to accommodate a single species *Haudseptoria typhae* which was isolated from a leaf sheath of *Typha* species. The genus was established based on morpho-molecular approaches (V. Thiagaraja).

***Hausknechtia*** D. Wächter & A. Melzer

*Hausknechtia* was erected by Wächter & Melzer (2020) to accommodate *Galerella floriformis*. The type species *H. floriformis* was described based on its deliquescent lamellae, the absence of cheilocystidia, and phylogenetic analyses (Wächter & Melzer 2020) (M. Erdoğan).

***Heitmaniaceae*** Q.M. Wang & F.Y. Bai

Li et al. (2020) introduced this family based on *Heitmania* (F. Selcuk).

***Heitmaniales*** Q.M. Wang & F.Y. Bai

This order was introduced (based on *Heitmania*) by Li et al. (2020b) (F. Selcuk).

***Helgardiomycetes*** Crous

Based on phylogenetic analyses and morphological characters, a monotypic genus *Helgardiomycetes* was introduced by Crous et al. (2021a) to accommodate *H. anguioides*. *Helgardiomycetes anguioides* is characterized by having fast-growing cultures with long, flexuous, subcylindrical, pluriseptate conidia. Colonies of *H. anguioides* differ from those of *Oculimacula* in that they are fast growing, and dull pinkish on PDA, velvety, with an entire margin (Crous et al. 2021a) (M. Erdoğan).

***Helminthosporiella*** Konta & K.D. Hyde

*Helminthosporiella* was introduced by Crous et al. (2016a) to accommodate a new combination of *H. stilbacea*, in *Massarinaceae*, the basionym of the type species was not provided with a Latin diagnosis. Konta et al. (2021b) accepted *Helminthosporiella* as a distinct genus, with type species *H. stilbacea*. *Helminthosporiella* has brown to red-brown conidiophores with terminal, polytretic conidiogenous cells, with catenate and easily disarticulating chains of conidia that are medium brown, striated at surface and distoseptate (Crous et al. 2016a) (M. Erdoğan).

***Helotiales*** Nannf. ex Korf & Lizoň

Haelewaters et al. (2021a) proposed *Cyttariales* and *Erysiphales* as synonym of *Helotiales* and accommodated *Cyttariaceae* and *Erysiphaceae* in *Helotiales* based on the phylogenetic reconstruction of a 15-locus dataset (D. Haelewaters).

***Hermetothecium*** T.F. Nóbrega et al.

Crous et al. (2019d) introduced *Hermetothecium* as belonging to *Chaetothyriaceae* based on phylogenetic analysis. The closest genera to *Hermetothecium* in the phylogenetic analysis are *Phaeosaccardinula* and *Vonarxia* (Crous et al. 2019d). *Phaeosaccardinula* has ascomata, with a dark, non-setose pellicle, saccate, bitunicate asci and muriform, hyaline to brownish ascospores (Yang et al. 2014). *Vonarxia* is based on an asexual morph which is sporodochial, with septate setae (Batista et al. 1960) (M. Erdoğan).

***Herpomyces*** Thaxt.

The genus includes 27 species, after the description of *Herpomyces shelfordellae* from Europe and North America (Haelewaters et al. 2019) and *H. spegazzinii* from Argentina (Gutierrez et al. 2020). Based on phylogenetic studies, the genus was transferred out of *Laboulbeniales* to its own order, *Herpomycetales* (Haelewaters et al. 2019) (D. Haelewaters).

### ***Heteropsathyrella*** T. Bau & J.Q. Yan

Based on morphological and phylogenetic analyses (ITS, LSU, *tef-1 $\alpha$*  and  $\beta$ -*tub*), Bau & Yan (2021) introduced the monotypic genus *Heteropsathyrella* to accommodate *H. macrocystidia* in *Psathyrellaceae*. *Heteropsathyrella* is macromorphologically similar to *Psathyrella*, but phylogenetically and micromorphologically can be distinguished from it, differing in the special pileipellis which is composed of utriform to subglobose cells covered by a 1 cell deep layer of periclinal hyphae and abundant pseudoparaphyses (Bau & Yan 2021) (M. Erdoğdu).

### ***Hippopotamyces*** Crous

*Hippopotamyces* was introduced by Crous et al. (2019d) to accommodate *H. phragmitis* collected from leaves of *Phragmites australis*. It has a septoria-like morphology (Quaedvlieg et al. 2013, Verkley et al. 2013), but is phylogenetically distinct, and represents a new genus in the *Mycosphaerellaceae* (Videira et al. 2017) (M. Erdoğdu).

### ***Hirticrusta*** Matozaki et al.

*Hirticrusta*, typified by *H. subradiata* was introduced by Matozaki et al. (2020) based on morphological and molecular evidence. *Hirticrusta* is characterized by annual to biennial and sessile basidiocarps, a semicircular to dimidiate pileus, velutinous to tomentose hairs on the pileus surface, buff to brown context with a crustose layer indicated by a dark brown line forming a longitudinal section below the superficial hairs, a trimitic hyphal system, crustose layer composed of parallel and densely arranged brown hyphae and cylindrical basidiospores (Matozaki et al. 2020) (M. Erdoğdu).

### ***Hispidopannaria*** Elvebakk et al.

Based on phylogenetic analyses of the ITS, nuclear large subunit rRNA, mitochondrial small subunit rRNA, and MCM7 genes, species previously treated as *Pannaria hispidula* and *P. isabellina* were shown to represent two new *Pannariaceae* genera, *Hispidopannaria* and *Phormospsora*. *Hispidopannaria* differs from *Pannaria* in having large, geotropically arranged, hispid squamules, IKI+ internal ascus structures, and perispores with irregular pulvinate verrucae and apical extensions (Elvebakk et al. 2020) (M. Erdoğdu).

### ***Hogelandia*** Hern.-Restr.

Crous et al. (2021c) introduced this new genus to accommodate *H. lambeareum* which as isolated from soil in the Netherlands. *Hogelandia* is represented only by the asexual morph, characterized by micronematous conidiophores, monoblastic conidiogenous cells and subglobose conidia (Crous et al. 2021c) (M. Erdoğdu).

### ***Holmiella*** Petrini et al.

Petrini et al. (1979) introduced *Holmiella* with *H. sabina*, as the type species. Kutorga & Hawksworth (1997) added the second species *H. macrospora* but without molecular data. Pem et al. (2019b) added two other species *H. junipericola* and *H. juniperi-semiglobosae* based on morphology and phylogenetic analyses (D. Pem).

### ***Holmiellaceae*** Maharachch. & Wanas.

Based on phylogenetic analyses of nuclear ribosomal DNA (rDNA) (LSU, SSU and ITS) and protein-coding genes (*tef1- $\alpha$* , *rpb2* and *tub*), plus morphological comparisons, Maharachchikumbura et al. (2021b) introduced *Holmiellaceae* to accommodate *Holmiella* in *Holmiellales* (M. Erdoğdu).

### ***Holmiellales*** Maharachch. & Wanas.

*Holmiellales* was introduced by Maharachchikumbura et al. (2021b) for a lineage of saprobic fungi that were previously placed in the monotypic order *Patellariales* (M. Erdoğdu).

***Homortomycetales*** Maharachch. & Wanas.

Maharachchikumbura et al. (2021b) introduced this new order to accommodate *Homortomyces*, which was previously placed in *incertae sedis* family in *Dothideomycetes* (M. Erdoğan).

***Homostegia*** Fuckel

Fuckel (1870) introduced *Homostegia* with *H. adusta* as the type species. Doilom et al. (2018) studied the lectotype specimen of *Homostegia piggotii* and confirmed that it is a synonym of *Homostegia adusta*. Moreover, Doilom et al. (2018) treated *Homostegia* in *Pleosporales*, genera *incertae sedis*. Pem et al. (2019b) re-examined the holotype of *Homostegia adusta* and treated *Homostegia* in *Pleosporales*, genus *incertae sedis* following Doilom et al. (2018) (D. Pem).

***Hyaloterminalis*** Rathnayaka et al.

Rathnayaka et al. (2020) introduced the dematiaceous coelomycetes, *Hyaloterminalis* with *H. alishanensis* as the type species. *Hyaloterminalis* is characterized with pycnidial conidiomata, persistent paraphyses, dark brown, fusiform, 3–4-septate conidia with hyaline pointed apical cells and a hyaline basal cell with truncated ends (Rathnayaka et al. 2020). It is similar to species in *Coryneaceae* in having fusiform, brown conidia (Hyde et al. 2020b), and differs in having pycnidial conidiomata with paraphyses and hyaline basal cell in the conidia (Rathnayaka et al. 2020) (M. Erdoğan).

***Hypomontagnella*** Sir, L. Wendt & C. Lamb.

The genus *Hypomontagnella* (*Hypoxylaceae*) had recently been segregated from *Hypoxylon* based on a multi-locus phylogeny (Lambert et al. 2019), and three strains of *Hypomontagnella* were recently included in the first phylogenomic study that was based on 3<sup>rd</sup> generation DNA sequencing techniques. On the one hand, analysis of these data revealed a substantial degree of intragenomic polymorphisms in the rDNA cistron (Stadler et al. 2020), revealing multiple paralogs of the ITS located in one and the same genome that only showed 90% homology to each other for *Hypomontagnella monticulosum*. On the other hand, analysis of the complete genomes resulted in the recognition of a new species derived from a marine sponge based on a phylogenomic analysis in comparison to its next related, terrestrial plant-associated counterpart (Wibberg et al. 2021). In-depth genomic comparison (revealing differences in over 700 strain-specific proteins) and morphological differences of the cultures were observed. Thus, *Hypomontagnella spongiphila* is the first fungal species that was recognized based on state of the art genomics technology, such as PACBIO and Oxford nanopore (M. Stadler).

***Incumbomyces*** Y. Quan et al.

The genus was introduced by Quan et al. (2021) to accommodate black yeast-like fungi. The two novel species were associated with tropical ants (A. Yurkov).

***Inopinatum*** Haelew. & Aime.

This genus was introduced by Haelewaters et al. (2021b) to accommodate a pink yeast, *I. lactosum*, which was previously classified in *Sporobolomyces* (*Microbotryomycetes*, *Sporidiobolales*). Molecular phylogenetic analysis placed *Inopinatum* within the order *Thelebolales* (*Leotiomyces*). Additional yeast-like morphologies within the class were discussed by Tanney & Quijada (2021) (D. Haelewaters).

***Intraspora*** (Sieverd. & S. Toro) Oehl & Sieverd.

See remarks on *Palaeospora* (B. Goto).

***Ionopezia*** Matočec et al.

Based on a multiple locus phylogeny and phenetic evidence, Yuan et al. (2020) described two

new genera for species classified earlier as “*Peziza*” for which no name is available: *Ionopezia* for *Peziza gerardii* and *Hansenopezia* for *Peziza retrocurvata* (M. Erdoğdu).

***Italiofungus* Crous**

Crous et al. (2020c) introduced this genus to accommodate *Italiofungus phillyreae* which was isolated from *Phillyrea latifolia* in Italy (F. Selcuk).

***Jennwenomyces* Goh & C.H. Kuo**

This new hyphomycetous genus was introduced by Goh & Kuo (2020) to accommodate *J. navicularis*, based on morphological and molecular data. *Jennwenomyces* produces dematiaceous, versicolored, straight, navicular to cylindrical euseptate phragmospores borne on multiple percurrently extending, annellate conidiophores (F. Selcuk).

***Jianyuniaceae* Q.M. Wang & F.Y. Bai**

Li et al. (2020b) introduced this family (type genus: *Jianyunia*) in *Agaricostilbales* (F. Selcuk).

***Joblinomyces* Hanafy et al.**

See under *Agriosomyces* (M. Erdoğdu).

***Jocatoa* R. Miranda**

A novel genus was described by Miranda-González et al. (2020) from tropical dry forests of Mexico, based on morphological and molecular data of mtSSU, nuLSU and ITS markers. Thallus ecorticate; ascocarps solitary to pseudostromatic; excipulum not carbonized; spores muriform, J+ strongly violet; chemistry of the stictic acid complex (F. Selcuk).

***Juncomyces* Crous**

The genus introduced by Crous et al (2020a) was isolated from leaves of *Juncus effuses*. Solitary conidiophores, and multiseptate, obclavate conidia are features that differentiates it from similar genus (Crous et al 2020a) (F. Selcuk).

***Kaarikia* C. Mayers & T.C. Harr.**

The monotypic genus, *Kaarikia* was introduced by Mayers et al. (2020) to accommodate *K. abrahamsonii*. *Kaarikia* resembles *Distoseptispora* in general culture morphology and in having thick, darkly pigmented hyphae and multiseptate conidia, but *Kaarikia* does not produce sporidesmium-like conidiophores; its conidiophores are significantly less-developed, its conidia much less pigmented, and its formation of spherical chlamydospores unique (Mayers et al. 2020) (M. Erdoğdu).

***Kalmanago* T. Denchev et al.**

Based on phylogenetic analyses (ITS, LSU, and SSU rDNA sequences), Denchev et al. (2020) placed this new genus in *Microbotryaceae* with four new combinations: *K. commelinae*, *K. combensis*, *K. boliviana* and *K. tinantiae* (M. Erdoğdu).

***Kaseifertia* Réblová et al.**

Réblová et al. (2020) introduced this genus with *K. cubense* as the type species which was isolated from fallen leaves of *Coccoloba uviferae* and leaf litter and decaying wood of *Quercus ilex* (F. Selcuk).

***Keithomyces* Samson et al.**

This genus (type species is *K. carneus*) comprises species isolated mainly from soil and

produce conidiophores with divergent whorls of 2–4 phialides; conidia echinulate to aciculate, in chains (Mongkolsamrit et al. 2020) (F. Selcuk).

***Khoyollomyces*** Hanafy et al.

See under *Agriosomyces* (M. Erdoğdu).

***Knighitiellastrum*** L. Ludw. & Kantvilas

Ludwig et al. (2020) introduced *Knighitiellastrum* within *Icmadophilaceae* to accommodate the Tasmanian endemic *K. eucalypti*, which was provisionally ascribed to *Icmadophila* by Lumbsch et al. (2011) and then to *Knighitiella* by Kantvilas (2018). *Knighitiellastrum* is characterized by squamulose, erhizinate, whitish to pale grey thallus with a green, coccoid photobiont and by containing thamnolic acid (Ludwig et al. 2020) (M. Erdoğdu).

***Koordersiella*** Höhn.

Höhnelt (1909) introduced *Koordersiella* with *K. javanica* as the type species. Hawksworth (2016) considered *K. javanica*, and the type species of *Hansfordiellopsis*, *H. aburiensis* (now regarded as a synonym of *K. insectivora*), to be congeneric. Several authors placed *Koordersiella* in *Dothideomycetes* genus *incertae sedis* (Lumbsch & Huhndorf 2010, Rossman et al. 2016). Pem et al. (2019b) re-examined the holotype specimen of *K. javanica* and transferred *Koordersiella* to *Lophiotremataceae* based on small ascomata, clavate asci, and several septate hyaline ascospores (D. Pem).

***Kosmimatomyces*** Bianchin. et al.

This novel genus was described by Crous et al. (2020b) with *K. alatophylus* as the type species in *Capnodiaceae*. Conidia are holoblastic, 0–1-septate, brown to dark brown, thick walled, globose, ovoid or ellipsoid, ornamented with spines and crater-like warts, with dark scars at one or both ends, arranged in branching acropetal chains (F. Selcuk).

***Kukwaea*** Suija et al.

This new genus was introduced from coniferous forests in the Asian region of Russia and Europe. The new taxon is characterized by its cupulate, brown ascomata with grey to blackish disc surrounded by brownish-grey hairs. The DNA sequence data confirmed its placement in *Helotiales* (Suija et al. 2020) (F. Selcuk).

***Lacrima*** Bungartz et al.

Bungartz et al. (2020) introduced this genus to accommodate a new species and three new combinations based on morphological, anatomical, chemical, and molecular data. Currently, the genus comprises four species viz., *L. aphanotripta*, *L. epiphora* (the type species), *L. galapagoensis* and *L. sonoriae* (Bungartz et al. 2020) (M. Erdoğdu).

***Lasiosphaeridaceae*** S.K. Huang & K.D. Hyde

Huang et al. (2021b) introduced this family to accommodate *Lasiosphaeris* (N. Wijayawardene).

***Legaliana*** Van Vooren

This new genus was introduced by Van Vooren (2020) with *Peziza badia* as type species (M. Erdoğdu).

***Lembosiniella*** Crous

Crous et al. (2019c) introduced *Lembosiniella* to accommodate two new species based on the phylogenetic analyses and morphological characters. The genus is typified by *L. eucalyptorum* collected from *Eucalyptus dunnii* in Australia (M. Erdoğdu).



### ***Lendemeriella* S.Y. Kondr.**

This genus has been introduced by Kondratyuk et al. (2020a) with *L. reptans* as the type species. Its features are described based on results of the three gene phylogeny of the *Teloschistaceae* based on nrITS, nrLSU and mtSSU gene sequence data (Kondratyuk et al. 2020a) (F. Selcuk).

### ***Leotiales* Korf & Lizoň**

Haelewaters et al. (2021a) introduced *Lichinodiales* as a synonym of *Leotiales* and accommodated *Lichinodiaceae* *Leotiales* based on the phylogenetic reconstruction of a 15-locus dataset (D. Haelewaters).

### ***Leptosphaeria* Ces. & De Not.**

Cesati & De Notaris (1863) introduced *Leptosphaeria* without designating the type species. Shearer et al. (1990) treated *L. doliolum* as the lectotype. *Leptosphaeria* is characterized by superficial ascomata, flattened at the base, papillate, thick, scleroplectenchyma tissue types of peridium and cylindrical asci with ellipsoid to fusoid ascospores with a coelomycetous asexual morph (Crane & Shearer 1991, Hyde et al. 2011, 2013). Since then, several authors added new species to *Leptosphaeria* (Ariyawansa et al. 2015, Dayarathne et al. 2015, Liu et al. 2015, Phookamsak et al. 2019b). Pem et al. (2020) added *L. regiae* based on morphology and phylogeny (D. Pem).

### ***Liangia* H. Yu et al.**

*Liangia* was introduced by Wang et al. (2020a) to accommodate *L. sinensis* isolated from an entomopathogenic fungus *Beauveria yunnanensis*. *Liangia sinensis* possesses a lecanicillium-like asexual morph and is characterized by white colonies forming a sunken zone at the centrum of dome-shaped mycelial density and verrucose around the margin, solitary and lanceolate phialides occurring directly from the prostrate hyphae, oblong-oval to fusiform macroconidia, and oval to ellipsoidal microconidia existing singly or in pairs at the apex of phialides (Wang et al. 2020a) (M. Erdoğan).

### ***Liladisca* Baral**

*Liladisca* was established by Baral et al. (2020) to accommodate *Tympanis acicola*. The type species, *L. acicola* is easily recognized by its deep purple-lilac pigment of the intercellular gel like exudate in the entire excipulum when viewing under transmitted light in a water mount (Baral et al. 2020) (M. Erdoğan).

### ***Lilapila* Baral & G. Marson**

*Lilapila* was established by Baral et al. (2020) to accommodate three new species. *Lilapila* is characterized by purplish-black apothecia covered with large, deep purple, septate, thick-walled, finely warted hairs and (sub)globose ascospores with a single, broad and thin, lens-shaped spore body (Baral et al. 2020) (M. Erdoğan).

### ***Limtongozyma* Boontham et al.**

Boontham et al. (2020) described the genus to accommodate newly isolated strains phylogenetically placed close to *Candida cylindracea*. The description follows the reclassification of asexual Saccharomycetes, which were previously classified in the polyphyletic genus *Candida*. The original description of the genus was invalid and was corrected by Boontham et al. (2021) (A. Yurkov).

### ***Lineolataceae* Crous et al.**

This family was introduced by Haridas et al. (2020) to accommodate *Lineolata* (type genus) based on phylogenetic analysis (F. Selcuk).

### ***Lineolatales* Crous et al.**

This order was introduced to accommodate *Lineolataceae* Crous et al. by Haridas et al. (2020) based on phylogenetic analysis (F. Selcuk).

### ***Linnemannia* Vandepol & Bonito**

The genus comprises eleven species, previously classified within the *Mortierella* clade 7 (Wagner et al. 2013), called also “gamsii clade”. Based on previous phylogenetic studies (Wagner et al. 2013) probably more species can be transferred to this genus. The type species is *Linnemannia hyalina*. This genus contains widely distributed *Mortierellaceae*, and common in neutral or calcareous soils. Most of the species in this genus are isolated from soils and are usually associated with plant rhizospheres or decaying plant matter (Vandepol et al. 2020) (J. Pawłowska).

### ***Linoporopsis* Voglmayr & Beenken**

This genus has been introduced by Voglmayr & Beenken (2020) to accommodate four species that had previously been classified within *Linospora* (*Diaporthales*). Based on fresh isolates, which were studied morphologically and using a multi-locus genealogy, it was established that these species, which are associated with overwintered dead leaves of various angiosperm trees, show close affinities to the *Xylariaceae*. Accordingly, the new genus is now placed in the *Xylariales* (M. Stadler).

### ***Linteromyces* Crous**

Based on the phylogenetic analyses, combined with morphology and culture characteristics, Crous et al. (2020a) introduced this monotypic genus to accommodate *L. quintinae* collected from leaves of *Quintinia sieberi* in Australia. *Linteromyces* resembles *Subramaniomyces* which has aseptate, polyblastic conidia occurring in branched, acropetal chains on mononematous, branched conidiophores occurring along the length of brown setae. It is morphologically distinct, however, in having solitary conidia, and being phylogenetically unrelated to *Subramaniomyces* (Crous et al. 2020a) (M. Erdoğdu).

### ***Loculosulcatispora* G.C. Ren & K.D. Hyde**

A new monotypic coelomycetous genus, *Loculosulcatispora* (the type species *L. thailandica*) was introduced by Ren et al. (2020) in *Pleosporales* from woody litter in Thailand. Phylogenetic analysis of combined loci (SSU, LSU, ITS) and protein-coding regions (*tef1-α*, *rpb2*) shows the genus is a distinct lineage in *Sulcatisporaceae*. *Loculosulcatispora* is distinguished from other genera in the family, by 1-celled, oblong, hyaline, smooth-walled conidia with guttules (Ren et al. 2020) (M. Erdoğdu).

### ***Lonavalomyces* Rashmi Dubey (nom. inval.)**

*Lonavalomyces* was introduced by Dubey (2020) based on *L. indicus* collected on dead branches of an unidentified broadleaf tree in Hainan Province, China. Its salient morphological feature includes the presence of simple to branched conidiophores bearing holoblastic, simple to branched conidial chains, possessing large, spherical, brown, verrucose apical conidia and small, brown, spherical to subspherical successive conidia (Dubey 2020) (M. Erdoğdu).

### ***Longiappendispora* Mapook & K.D. Hyde**

Based on morphological comparison with phylogenetic analyses, Mapook et al. (2020) introduced *Longiappendispora* to accommodate *L. chromolaenae* within *Cainiaceae* (M. Erdoğdu).

### ***Longididymella* L.W. Hou et al.**

Based on morphological and phylogenetic analyses, *Longididymella* was introduced in *Didymellaceae* by Hou et al. (2020) to accommodate two species collected from leaves of *Clematis* spp. (M. Erdoğdu).

***Longiseptatispora*** L.W. Hou & Crous

Crous et al. (2020c) introduced *Longiseptatispora* with *L. curvata* (F. Selcuk).

***Longistriata*** Sulzbacher et al.

*Longistriata* was introduced by Sulzbacher et al. (2020) to accommodate *L. flava*. *Longistriata flava* is characterized by a hypogeous habit, a smooth and bright yellow peridium, the presence of cystidia, and the absence of clamp connections in all tissues. In phylogenetic analyses based on LSU and *tef-1α*, *L. flava* is phylogenetically sister to the monotypic sequestrate African genus *Mackintoshia* in *Boletaceae* (Sulzbacher et al. 2020) (M. Erdoğdu).

***Longivarius*** W. Dong et al.

Dong et al. (2021a) established this genus in *Annulatascaceae* to accommodate *Longivarius aquatorba* segregated from *Annulatascus* based on distinct morphology and multi-locus phylogeny (W. Dong).

***Lophiomurispota*** Wanas. & Mortimer

Wanasinghe et al. (2021) introduced this genus to accommodate *L. hongheensis* collected from dead twigs of *Dodonaea viscosa* in China. *Lophiomurispota* morphologically resembles *Coelodictyosporium*, *Platystomum* and *Sigarispota* with its crest-like ostiole and brown, multi-septate ascospores (Wanasinghe et al. 2021) (M. Erdoğdu).

***Lunasporangiospora*** Vandepol & Bonito

Vandepol et al. (2020) introduced this genus with *L. chienii* as the type species (M. Erdoğdu).

***Lundqvistomyces*** Y. Marin & Stchigel

Marin-Felix et al. (2020) introduced this genus with *L. karachiensis* as the type species (M. Erdoğdu).

***Macroascochyta*** L.W. Hou et al.

Based on morphological and phylogenetic analyses, *Macroascochyta* was introduced in *Didymellaceae* by Hou et al. (2020) to accommodate *M. grandis* which was collected from *Tradescantia* sp. in New Zealand (M. Erdoğdu).

***Macroconstrictolumina*** Lücking et al.

Hongsanan et al. (2020) introduced *Macroconstrictolumina* to encompass four lichenized species. Among these, three species were previously assigned within *Constrictolumina* and transferred to a newly established genus *Macroconstrictolumina* based on ascospore morphology. The genus formed a sister clade to *Bogoriella* in the phylogenetic analysis (Thiyagaraja et al. 2021a) (V. Thiyagaraja & A. Aptroot).

***Macrovalsaria*** Petr.

Petrak (1962) introduced *Macrovalsaria* with *M. leonensis* as the type species. *Macrovalsaria leonensis* was previously known as *Valsaria leonensis* but was not congeneric with the type species of *Valsaria*. Sivanesan (1975) examined the type specimen of *M. leonensis* and synonymised it under *Macrovalsaria megalospora*. Li & Zhuang (2009) considered *Macrovalsaria* to be related to *Botryosphaeriales* based on phylogenetic analysis of two strains of *M. megalospora*, which clustered close to *Lasiodiplodia*. Doilom et al. (2017) described *M. megalospora* from *Tectona grandis* in northern Thailand and placed *Macrovalsaria* in *Dothideomycetes* genera *incertae sedis* based on morphology and phylogenetic analysis. Pem et al. (2019b) re-studied the specimen of *Macrovalsaria leonensis* collected by Deighton and carried out phylogenetic analyses with available strains of *M. megalospora* from Li & Zhuang (2009) and Doilom et al. (2017). Pem et al.

(2019b) placed *Macrovalsaria* in a new family *Macrovalsariaceae* based on morphology and phylogeny (D. Pem).

***Magnopulchromyces*** L.B. Conc. et al.

Yuan et al. (2020) described the monotypic genus *Magnopulchromyces* to accommodate *M. scorpiophorus* in *Lophiostomataceae*. *Magnopulchromyces* resembles superficially the monotypic genera *Turturconchata* and *Venustisporium* by the multicellular, lenticular, complex conidia, with holoblastic production and schizolytic secession (Castañeda-Ruiz & Iturriaga 1999, Chen et al. 1999) but differs by having a developed scorpioid growth of conidiophores and the complex conidia (M. Erdoğan).

***Malvipezia*** Van Vooren

Van Vooren (2020) introduced this genus with *Peziza howsei* as the type species (M. Erdoğan).

***Marantokordyana*** M. Piepenbr. et al.

Based on the distinct host family and molecular sequence data of the ITS and LSU rDNA regions, Piepenbring et al. (2020) introduced this genus to accommodate two new species viz., *M. boliviana* and *M. oberwinkleriana*. *Marantokordyana* is similar to *Kordyana* spp. in its basidia in suprastomatal balls, basidia forming two basidiospores each, and basidiospores germinating after septation with hyphae forming elongate conidia. However, species of *Kordyana* mostly infect species of *Commelinaceae* while species of *Marantokordyana* infect species of *Marantaceae* (Piepenbring et al. 2020) (M. Erdoğan).

***Marquandomyces*** Samson et al.

The known distribution of this genus is Brazil, Netherlands, Russia, the UK and the USA. *Marquandomyces* has been isolated in mushrooms and soil. Molecular analyses have been performed as well as macro and micro morphologies (Mongkolsamrit et al. 2020). Moreover, this was introduced after resolution of *Metarrhizium s. lato* based on a 5 DNA loci genealogy (F. Selcuk & M. Stadler).

***Mastigosporellaceae*** C.M. Tian et al.

Jiang et al (2020a) introduced this family in *Diaporthales* which is typified by *Mastigosporella*. Currently, family comprises only one genus (F. Selcuk).

***Mediaverrunites*** Nandi & A. Sinha (fossil) (Current name: *Potamomyces* K. D. Hyde)

*Mediaverrunites* was introduced for aseptate, oval to elliptical spores having equatorial region ornamented with verrucae that remain arranged either freely around the equator or merge to form a shallow, shadow-like rim or band. Nuñez Otaño et al. (2017) considered *Mediaverrunites* to be a later synonym of *Potamomyces* K.D. Hyde and transferred all species *Mediaverrunites*, viz., *M. batii*, *M. elsikii*, *M. fournieri*, *M. invaginatus*, *M. magnus*, *M. mulleri* and *M. pontidiensis* to *Potamomyces* K.D. Hyde (R.K. Saxena).

***Megacoelomyces*** Dianese et al.

*Megacoelomyces*, an ascomycete asexual morph infecting *Myrcia feniziana*, was introduced by Santos et al. (2021) to accommodate *M. sanchezii* based on multilocus phylogeny (three nuclear ribosomal DNA and two protein-coding genes) in addition to morphological and ecological data (M. Erdoğan).

***Melanocamarosporioides*** D. Pem et al.

Pem et al. (2019d) introduced *Melanocamarosporioides* with *M. ugamica* as the type species. *Melanocamarosporioides* is characterized by superficial to erumpent, uniloculate conidiomata, and

globose ellipsoidal or ovoid, dark brown, multi-septate conidia. *Melanocamarosporioides* is closely related to *Melanodiplodia* and forms a lineage in *Melanommataceae* with strong statistical support (D. Pem).

***Meniscomyces*** Q.M. Wang & F.Y. Bai

Li et al. (2020b) introduced this genus with *M. layueensis* as the type species (F. Selcuk).

***Mesocorynespora*** Jian Ma et al.

*Mesocorynespora* was introduced by Xu et al. (2020a) based on *M. sinensis* which was collected on decaying culms of bamboo in China. The fungus is distinguished by short, unbranched, clavate conidiophores with monotretic, conidiogenous cells that produce solitary, acrogenous, obclavate, euseptate conidia (Xu et al. 2020a) (M. Erdoğdu).

***Microconidiobolus*** B. Huang & Y. Nie

Nie et al. (2020) revised *Conidiobolus* and introduced *Microconidiobolus* which includes three species producing smaller primary conidia without microspores or capilliconidia compared to other *Conidiobolus* spp. (Nie et al. 2020) (M. Erdoğdu).

***Micromelanconis*** C.M. Tian & N. Jiang

Jiang et al. (2021b) introduced this genus in *Pseudomelanconidaceae*. *Micromelanconis* resembles melanconis-like conidiomata, and pale brown conidia with conspicuous hyaline sheath. *Micromelanconis* produces two types of conidia from natural branches and manual media respectively, which differs from *Neopseudomelanconis* and *Pseudomelanconis* (M. Erdoğdu).

***Milesinaceae*** Aime & McTaggart

*Milesinaceae* was established by Aime & McTaggart (2021) to accommodate the genera *Milesia*, *Milesina*, *Naohidemycus* and *Uredinopsis* in *Pucciniales*. *Milesinaceae* is similar to other *Melampsorineae*, differing in either production of colourless urediniospores in species that infect ferns, or in production of milesia-type aecia in species that infect *Ericaceae* (Aime & McTaggart 2021) (M. Erdoğdu).

***Millesimomyces*** Crous & M.J. Wingf.

Crous et al. (2019d) established *Millesimomyces* to accommodate *M. rhoicissi* collected from leaves of *Rhoicissus digitata*. *Millesimomyces* resembles *Discosia* in morphology, having stromatic acervuli, and long, hyaline, subcylindrical or lageniform phialides that give rise to subcylindrical, pale brown, 3-septate conidia with eccentric apical and basal appendages (Liu et al. 2019). However, based on phylogenetic inference, the fungus clusters apart from species of *Discosia* (Crous et al. 2019d) (M. Erdoğdu).

***Mimicoscypha*** T. Kosonen et al.

The name of the genus refers to its mimicking two other genera, *Eupezizella* and *Resinoscypha*. Although *Mimicoscypha* earns its name by sharing morphological features with both *Eupezizella* and *Resinoscypha*, it is clearly distinct from these genera based on the multi-gene analysis of Kosonen et al. (2021). *Mimicoscypha* is closely related to *Olla* and *Hyalopeziza nectrioidea*, but it is distinct in morphologically from these taxa (Kosonen et al. 2021) (M. Erdoğdu).

***Mirohelminthosporium*** K. Zhang et al.

*Mirohelminthosporium* was introduced by Zhang et al. (2020a) as a new genus for *Helminthosporium bigenum* which characterized by polytretic and blastic conidial ontogeny on the apical conidiogenous cells (M. Erdoğdu).

***Montanitestudina*** Maharachch. et al.

Maharachchikumbura et al. (2021b) introduced this genus within *Testudinaceae* to accommodate *Montanitestudina hydei* (M. Erdoğdu).

***Moringomyces*** Crous

Based on the phylogenetic results, combined with morphology and culture characteristics, Crous et al. (2020a) introduced *Moringomyces* as a monotypic genus in *Saccotheciaceae*. The genus is typified by *M. phantasmae* collected from the flower of *Moringa ovalifolia* in Namibia (Crous et al. 2020a) (M. Erdoğdu).

***Muriphila*** Jurjevic et al.

This new genus was introduced by Crous et al. (2020b) with *M. oklahomaensis* as the type species (F. Selcuk).

***Muyocopromyces*** G. Worobiec

The fossil-genus *Muyocopromyces* (typified by *M. quilonensis*), was introduced by Worobiec et al. (2020) (M. Erdoğdu).

***Myrmecopterula*** Leal-Dutra et al.

The new genus *Myrmecopterula* was introduced by Leal-Dutra et al. (2020) to accommodate ant associated species previously classified in *Pterula*. *Myrmecopterula* differs from *Pterula* in the presence of the cottony subiculum. Currently, the genus includes three species viz., *M. moniliformis* (the type species), *M. nudihortorum* and *M. velohortorum* (Leal-Dutra et al. 2020) (M. Erdoğdu).

***Naevia*** Fr.

Thiyagaraja et al. (2020) resurrected this genus of *Arthoniaceae* from the synonymy with *Arthonia* for a lineage of non-lichenized, saprotrophic arthonioid fungi using molecular analyses of a combined data set of nuLSU, mtSSU and *rpb2* sequence data (D. Ertz & V. Thiyagaraja).

***Namibialina*** Spjut & Sérus.

The new genus *Namibialina* was introduced by Spjut et al. (2020) with *N. melanothrix* as the type species and belongs in *Ramalinaceae* (M. Erdoğdu).

***Nannfeldtia*** Petr.

Hongsanan et al. (2020) excluded this genus from *Leptopeltidaceae* and tentatively placed in *Leotiomyces* genera *incertae sedis* (N. Wijayawardene).

***Narcissea*** D. Wächt. & A. Melzer

*Narcissea* was introduced by Wächter & Melzer (2020) to accommodate *Coprinus cordisporus* and *C. patouillardii*. The type species, *N. patouillardii*, was described based on the strongly flattened spores with a tri- to polygonal outline, and phylogenetic analyses (Wächter & Melzer 2020) (M. Erdoğdu).

***Naviculispora*** Stchigel et al.

Marin-Felix et al. (2020) introduced this genus with *N. terrestris* as the type species (M. Erdoğdu).

***Naviculisporaceae*** Y. Marin & Stchigel

Based on morphological and sequence data, Marin-Felix et al. (2020) introduced *Naviculisporaceae* (type genus: *Naviculispora*) based on phylogenetic analyses to accommodate taxa, which were formerly included in *Lasiosphaeriaceae* (M. Erdoğdu).

### ***Necromortierella*** Vandepol & Bonito

The genus comprises a single species, previously known as *Mortierella dichotoma*. However, there may be additional species in this genus that were not yet been studied. Syntype (MBT#8056) was isolated from mouse dung in Germany. The species is known to be necrotrophic mycophile (Vandepol et al. 2020) (J. Pawłowska).

### ***Neoaccladium*** P.N. Singh & S.K. Singh

Hyde et al. (2019) established *Neoaccladium* to accommodate *N. indicum* as the type species. Phylogenetic analysis of ITS and LSU sequence data indicated that *Neoaccladium* is a distinct genus in *Botryobasidiaceae*, which forms a clade sister to *Botryobasidium*. *Neoaccladium* is close to *Acladium*, but differs from all other allied genera in having subhyaline to light olivaceous variously shaped conidia, viz., globose to sub-globose, clavate, obclavate, lenticular, ampulliform and pyriform, catenate conidia, dentate and phialidic conidiogenous cells and presence of abundant trident like pigmented chlamydospores (Hyde et al. 2019) (M. Erdoğdu).

### ***Neoacrodontiella*** Crous & M.J. Wingf.

The monotypic genus *Neoacrodontiella* was introduced by Crous et al. (2019a) with *N. eucalypti* as the type species. *Neoacrodontiella* is somewhat reminiscent of *Acrodontiella* (Seifert et al. 2011), though distinct in that it forms sporodochia, and the conidiogenous loci are flattened and more prominent than in *Acrodontiella*, with conidia also having prominently truncate hila (Crous et al. 2019a) (M. Erdoğdu).

### ***Neoantennariella*** Abdollahz. & Crous

This genus was introduced with *N. phylicae* as the type species (Abdollahzadeh et al. 2020) (F. Selcuk).

### ***Neoantennariellaceae*** Abdollahz. & Crous

Abdollahzadeh et al. (2020) introduced *Neoantennariellaceae* and accommodated three genera (*Fumiglobus*, *Neoantennariella* and *Neoasbolisia*) (N. Wijayawardene).

### ***Neoasbolisia*** Abdollahz. & Crous

*Neoasbolisia* was introduced by Abdollahzadeh et al. (2020) with *N. phylicae* as the type species is (F. Selcuk).

### ***Neobuelliella*** Hongsanan & K.D. Hyde

This new genus was introduced by Hongsanan et al. (2020) to accommodate *Neobuelliella poetschii*, which was known as *Buelliella poetschii*. Phylogenetically, *Buelliella poetschii* formed a distinct lineage within *Asterinales*, and did not cluster with *B. minimula* (the type species of *Buelliella*). Thus, *B. poetschii* was synonymized under *Neobuelliella* (Hongsanan et al. 2020) (M. Erdoğdu).

### ***Neobuelliellaceae*** Hongsanan & K.D. Hyde

*Neobuelliellaceae* is similar to species of *Buelliella* which are placed in *Dothideomycetes* genera *incertae sedis*. *Buelliella minimula* (the type species) together with *B. physciicola* cluster within *Stictographaceae* (*Asterinales*) in the phylogenetic analyses of Dai et al. (2018) and Hongsanan et al. (2020). Two strains of *Neobuelliella poetschii* ( $\equiv$  *Buelliella poetschii*) form a distinct clade separately from *Stictographaceae*, and are sister to *Hemigraphaceae* (Ertz et al. 2015, Dai et al. 2018, Hongsanan et al. 2020). Therefore, Hongsanan et al. (2020) introduced this new family to accommodate the type genus *Neobuelliella* Hongsanan & K.D. Hyde (M. Erdoğdu).

### ***Neocalonectria*** Crous

Based on the phylogenetic results, combined with morphology and culture characteristics, Crous et al. (2019a) introduced *Neocalonectria* as a monotypic genus in *Nectriaceae*. The genus is

typified by *N. tristaniopsisidis* collected from leaves of *Tristaniopsis collina* in Australia (Crous et al. 2019a) (M. Erdoğdu).

***Neoconidiobolus*** B. Huang & Y. Nie

Nie et al. (2020) revised *Conidiobolus* Bref. and introduced *Neoconidiobolus* which has nine new combinations based on morphological and molecular data (Nie et al. 2020) (M. Erdoğdu).

***Neocryphonectria*** C.M. Tian et al.

*Neocryphonectria* (in *Foliocryphiaceae*) was introduced by Jiang et al. (2020a) with *N. carpini* as the type species (F. Selcuk).

***Neocryptosphaerella*** S.K. Huang & K.D. Hyde

Huang et al. (2021a) showed that *Cryptosphaerella globosa* is not congeneric with *Cryptosphaerella sensu stricto*, thus they introduced *Neocryptosphaerella* (N. Wijayawardene).

***Neodiluvicola*** W. Dong & H. Zhang

*Diluvicola capensis* the type species of *Diluvicola*, is phylogenetically distant from *D. aquatica*. Therefore, *D. aquatica* was transferred to a new genus, *Neodiluvicola* based on morphology and phylogeny (Dong et al. 2021) (M. Erdoğdu & W. Dong).

***Neodothiora*** Crous et al.

The new genus was introduced by Crous et al. (2020a) to accommodate *Neodothiora populina*, which was determined to be a new pathogen of trembling aspen (*Populus tremuloides*) growing in Alaska. *Neodothiora* resembles *Dothiora*, which has *Dothichiza* and *hormonema*-like morphs in culture (Crous & Groenewald 2016, 2017), but clusters apart from the type species, *D. pyrenophora* (Crous et al. 2020a) (M. Erdoğdu).

***Neognomoniopsis*** Crous

Crous et al. (2019a) introduced this new genus within the *Gnomoniaceae* (*Diaporthales*) to accommodate *N. quercina* collected from leaves of *Quercus ilex* in Italy (M. Erdoğdu).

***Neohelleiosa*** Mortimer

Mortimer et al. (2021) introduced *Neohelleiosa* for a species isolated from dead twigs of *Pittosporum* from China. *Neohelleiosa lincangensis* formed a sister clade to a saprotrophic genus *Heleiosa* in the multigene phylogenetic analysis (V. Thiagaraja).

***Neohelicascus*** W. Dong et al.

Dong et al. (2020) established this genus in *Morosphaeriaceae* to accommodate seven species segregated from *Helicascus* and another species based on multi-locus phylogeny and distinct morphology (W. Dong).

***Neojahnula*** W. Dong et al.

Dong et al. (2020) established this genus to accommodate *Neojahnula australiensis* segregated from *Jahnula* based on multi-locus phylogeny and distinct morphology (W. Dong).

***Neokirramyces*** Crous

Crous et al. (2019d) introduced this monotypic genus within *Mycosphaerellaceae* to accommodate *Neokirramyces syzygii* collected from a leaf of *Syzygium* sp. *Neokirramyces* resembles the *Kirramyces* asexual morph of *Teratosphaeria* (*Teratosphaeriaceae*) (Quaedvlieg et al. 2014, Andjic et al. 2019), but is phylogenetically related to *Sonderhenia* (*Mycosphaerellaceae*) (Videira et al. 2017, Crous et al. 2019d). *Neokirramyces* is distinct from *Sonderhenia* in that it has euseptate conidia that are kirramyces-like (Crous et al. 2019d) (M. Erdoğdu).



### ***Neolamproconium*** Crous & Akulov

Crous et al. (2020c) have introduced this genus to accommodate *N. silvestre* isolated from *Tilia* sp. in Ukraine (F. Selcuk).

### ***Neolophiotrema*** G.C. Ren & K.D. Hyde

The monotypic *Neolophiotrema* (typified by *N. xiaokongense*) was introduced by Ren et al. (2021) for a wood-inhabiting taxon classified in *Dothideomycetes*. The genus is characterized by coriaceous, immersed to semi-immersed ascomata, a hamathecium with cellular pseudoparaphyses and overlapping 1–2-seriate, hyaline ascospores. Phylogenetic analysis of combined SSU, LSU, ITS, *tef1-α* and *rpb2* sequence data supports the placement of *Neolophiotrema* in *Anteagloniaceae* (Ren et al. 2021) (M. Erdoğdu).

### ***Neomicrosphaeropsis*** Thambug. et al.

Thambugala et al. (2017) introduced *Neomicrosphaeropsis* with *N. italica* Thambug. et al. as type species. *Neomicrosphaeropsis* is characterized by hyaline to light brown, aseptate, obovoid to ellipsoidal conidia (Wanasinghe et al. 2018). Ten species of *Neomicrosphaeropsis* have molecular data. Pem et al. (2020) added *N. juglandis* to *Neomicrosphaeropsis* (D. Pem).

### ***Neolivea*** Aime & McTaggart

Aime & McTaggart (2021) introduced *Neolivea*, to accommodate *Olivea tectonae*. *Neolivea* is similar to *Olivea* and *Tegillum* but differs in having subglobose to ellipsoid, non-angular urediniospores with inconspicuous germ pores, and waxy telia (Aime & McTaggart 2021) (M. Erdoğdu).

### ***Neopetractis*** Ertz

*Petractis luetkemuellerei* and *P. nodispora* were accommodated in the new genus *Neopetractis*, differing from the generic type of *Petractis*, *P. clausa* in having a different phylogenetic position and a different photobiont. *Neopetractis* differs from *Petractis* in having a trentepohlioid photobiont and from *Gyalecta s. lat.* in having ascospores with a thick gelatinous sheath (Ertz et al. 2021) (M. Erdoğdu).

### ***Neophaeotheca*** Abdollahz. & Crous

This genus was introduced by Abdollahzadeh et al. (2020) with *N. salicorniae* as the type species (F. Selcuk).

### ***Neophaeothecaceae*** Abdollahz. & Crous

*Neophaeothecales* and *Neophaeothecaceae* were introduced by Abdollahzadeh et al. (2020) to accommodate *Neophaeotheca* which has a distinct lineage in *Dothideomycetes* (F. Selcuk).

### ***Neophaeothecales*** Abdollahz. & Crous

See remarks under *Neophaeothecaceae* (F. Selcuk).

### ***Neoschizotheciaceae*** S.K. Huang & K.D. Hyde

Huang et al. (2021b) introduced *Neoschizothecium* and showed that it has a distinct lineage in *Sordariales*. At the same time, seven other genera grouped in the same clade (viz., *Apodus*, *Cercophora*, *Echria*, *Immersiella*, *Jugulospora*, *Rinaldiella* and *Zygopleurage* (N. Wijayawardene).

### ***Neoscirrha*** Crous & R.K. Schumach.

Crous et al. (2021c) introduced *Neoscirrha* within *Didymellaceae* to accommodate two new species based on the phylogenetic analyses and morphological characters. The genus is typified by *N. osmundae* collected from culms of *Sasa veitchii* (Crous et al. 2021c) (M. Erdoğdu).

***Neoshiraia*** H.A. Ariyaw.

Ariyawansa et al. (2020) introduced this novel genus to accommodate *N. camelliae* isolated from the leaves of *Camellia sinensis* (F. Selcuk).

***Neosonderhenia*** Crous

Crous et al. (2019c) introduced *Neosonderhenia* to accommodate two new species based on the phylogenetic analyses and morphological characters. The genus is typified by *N. eucalypti* collected from *Eucalyptus costata* in Australia. *Neosonderhenia* has pycnidial conidiomata, distoseptate conidia with a central pore, brown, percurrently proliferating conidiogenous cells, and a teratosphaeria-like sexual morph (Crous et al. 2019c) (M. Erdoğdu).

***Neosorocybe*** Crous & Akulov

Crous et al. (2020c) have introduced this genus to accommodate *N. pini* isolated from *Pinus sylvestris* in Ukraine. *Neosorocybe pini* is phylogenetically allied to *Sorocybe*, but appears to represent a distinct genus, for which the name *Neosorocybe* was introduced. *Neosorocybe* has synnemata with chains of pigmented, cylindrical conidia, with typical culture characteristics of *Chaetothyriales*, with slimy, iron-grey colonies on MEA and PDA (F. Selcuk).

***Neospermospora*** Crous & U. Braun

Based on phylogenetic analyses and morphological characters, Crous et al. (2021a) introduced *Neospermospora* within the *Ploettnerulaceae* to accommodate *N. avenae*, which caused red leather leaf disease of oats, reducing grain yield and hay quality (M. Erdoğdu).

***Neostictis*** Ekanayaka & K.D. Hyde

Phukhamsakda et al. (2020) introduced *Neostictis* to accommodate a single species *Neostictis nigricans*. The fungus was collected from a dead stem of *Clematis vitalba* from Italy (Phukhamsakda et al. 2020) (V. Thiyagaraja).

***Neothyriopsis*** Crous

Crous et al. (2019c) introduced this monotypic genus to accommodate *N. sphaerospora* collected from a leaf of *Eucalyptus* sp. *Neothyriopsis sphaerospora* is distinct from *Thyriopsis* which occurs on needles of *Pinus* spp. (Crous et al. 2019c). *Thyriopsis* has thyrothecia that open by linear fissures, sometimes Y-shaped, asci are bitunicate, 8-spored, and contain ascospores that are ellipsoidal, 1-septate, with cells of roughly equal size, rounded at the ends, highly constricted at the septa, hyaline to yellowish brown (von Arx & Müller 1975), which clearly distinguish it from *N. sphaerospora* (M. Erdoğdu).

***Neothyrostroma*** Crous

Crous et al. (2019d) introduced *Neothyrostroma* to accommodate *N. encephalarti* (the type species) collected from leaves of *Encephalartos* sp. *Neothyrostroma* is reminiscent of *Thyrostroma*. The two genera are distinct phylogenetically, and *Neothyrostroma* can be distinguished in having distoseptate conidia (Crous et al. 2019d) (M. Erdoğdu).

***Neotorrubiella*** Tasan. et al.

Based on the phylogenetic results, combined with morphology and ecology, Thanakitpipattana et al. (2020) introduced this novel genus (the species: *N. chinghradicola*) (F. Selcuk).

***Neotracylla*** Crous

Crous et al. (2019d) established *Neotracylla* to accommodate *N. pini* collected from needles of *Pinus tecunumanii* in Malaysia (M. Erdoğdu).

***Neotrichosphaeria*** Crous & Carnegie

Crous et al. (2019c) introduced this monotypic genus to accommodate *N. eucalypticola* collected from a leaf of *Eucalyptus microcorys*. *Neotrichosphaeria* is distinguished from *Trichosphaeria* in that it lacks a periphysate ostiole, and has numerous, very long and flexuous setae, paraphyses that dissolve during maturation, asci with a visible discharge mechanism, and ascospores that are hyaline and aseptate (Crous et al. 2019c) (M. Erdoğdu).

***Neotrotteria*** Sacc.

Wijayawardene et al. (2020) listed this genus in *Nitschkiaceae* but Huang et al. (2021a) transferred it to *Ceratostomataceae* (N. Wijayawardene).

***Neoxylaria*** Konta & K.D. Hyde

Konta et al. (2020b) introduced *Neoxylaria* to accommodate a new species and two new combinations based on the morpho-molecular differences. *Neoxylaria* is characterized by relatively small stromata with conspicuously exposed perithecial contours under a narrowly striped outer layer (Konta et al. 2020b) (M. Erdoğdu).

***Neoxylomyces*** M.S. Calabon et al.

Based on morphology and multi-loci phylogenetic analyses, *Neoxylomyces* was introduced by Calabon et al. (2021b) to accommodate *N. multiseptatus* collected from decaying wood submerged in freshwater habitats. It is similar to *Xylomyces giganteus*, but differs in the number of septa, chlamydospore measurements, and absence of a mucilaginous coating around the chlamydospores (Calabon et al. 2021b) (M. Erdoğdu).

***Niesslia*** Auersw.

Gams et al. (2019) and Huang et al. (2021a) synonymized *Hyaloseta* under *Niesslia* (N. Wijayawardene).

***Nimbosphaera*** C.J. Harper & M. Krings (fossil)

This monotypic genus (Type: *N. rothwellii*) of phylum *Chytridiomycota* was found enveloped in a prominent sheath from the Early Devonian Windyfield Chert, Scotland (R.K. Saxena).

***Nitschkiopsis*** Nannf. & R. Sant.

Wijayawardene et al. (2020) listed this genus under *Sordariales* genera *incertae sedis*. However, Huang et al. (2021a) regarded *Nitschkiopsis* as *Sordariomycetes* genera *incertae sedis* (N. Wijayawardene).

***Nothoanungitopsis*** Crous

Crous et al. (2021c) described the monotypic genus *Nothoanungitopsis* to accommodate *N. urophyllae* based on the phylogenetic analyses and morphological characters. Although *Nothoanungitopsis* has unthickened conidiophore scars and conidial hila as in *Anungitopsis*, it is distinguished by lacking globose, brown swellings in its conidiophores, and having conidia that are unevenly pigmented, with two brown central cells (Crous et al. 2021c) (M. Erdoğdu).

***Nothomicrosphaeropsis*** Crous

Based on the phylogenetic analyses and morphological characters, Crous et al. (2021c) introduced the monotypic genus *Nothomicrosphaeropsis* to accommodate *N. welwitschiae* which was isolated from dead leaves of *Welwitschia mirabilis* (Crous et al. 2021c) (M. Erdoğdu).

***Nothoramichloridium*** Crous

Crous et al. (2019d) introduced *Nothoramichloridium* within the *Anungitiomycetaceae* to

accommodate *N. perseae* (the type species) collected from leaves of *Persea americana* (M. Erdoğdu).

***Nothoseiridium*** Crous

This genus has been introduced by Crous et al. (2020b) from South Africa, on leaf spots of *Podocarpus latifolius*. Currently, the genus is monotypic (F. Selcuk).

***Nothoseptoria*** Crous & Bulgakov

Crous et al. (2020c) introduced this genus to accommodate *Nothoseptoria caraganae* isolated on leaves of *Caragana arborescens* from Russia (F. Selcuk).

***Nothotrimmatostroma*** Crous

Based on phylogenetic analysis, Crous et al. (2019c) introduced *Nothotrimmatostroma* with two new combinations in *Mycosphaerellaceae*. Currently, the genus comprises two species viz., *N. bifarium* (the type species) and *N. eucalyptorum* (Crous et al. 2019c) (M. Erdoğdu).

***Novakomycetes*** Dlačhy et al.

The class was proposed for the order *Novakomycetales* in the subphylum *Taphrinomycotina*, *Ascomycota* (Čadež et al. 2021). Phylogenomic analysis performed by Čadež et al. (2021) placed the novel class next to *Schizosaccharomycetes* (A. Yurkov).

***Novakomycetales*** Dlačhy et al.

The order was proposed for the family *Novakomycetaceae* (Čadež et al. 2021) (A. Yurkov).

***Novakomycetaceae*** Dlačhy et al.

The family was introduced to accommodate the monotypic genus *Novakomyces* (Čadež et al. 2021) (A. Yurkov).

***Novakomyces*** Dlačhy et al.

The genus was described to place a novel yeast species isolated from olive oil (Čadež et al. 2021). Phylogenetic and phylogenomic analyses showed that the novel yeast is distantly related to any hitherto recognized lineage in *Taphrinomycotina*, *Ascomycota*, and next to the class *Schizosaccharomycetes*. To accommodate the novel species, *Novakomyces olei*, a novel genus *Novakomyces*, a novel family *Novakomycetaceae*, a novel order *Novakomycetales*, and a novel class *Novakomycetes* were proposed (A. Yurkov).

***Novomicrothelia*** Aptroot et al.

Hongsanan et al. (2020) synonymized species of this genus with *Bogoriella* and confirmed its placement in *Trypetheliaceae* (A. Aptroot).

***Obliquiminima*** W. Dong et al.

Dong et al. (2021a) introduced *Obliquiminima* in *Cancellidiaceae*, which is the first sexual morph linked by molecular data and morphologically similar to *Annulatascaceae* species. *Obliquiminima* is morphologically similar to *Ayria*. However, it differs in having superficial ascomata, with a lateral neck that oblique to the host substrate, narrowly obclavate asci with a refractive apical ring (Dong et al. 2021a) (M. Erdoğdu & W. Dong).

***Oceanoplaca*** Arup et al.

Bungartz et al. (2020) introduced *Oceanoplaca* to accommodate two new species and four new combinations based on morphological, anatomical, chemical, and molecular data. Currently, the genus comprises six species (Bungartz et al. 2020) (M. Erdoğdu).

### ***Ochraceocephala* Voglmayr & Aiello**

Phylogenetic analyses based on a matrix of the ITS, LSU and SSU regions revealed that the isolates represent a new genus within the *Leptosphaeriaceae*, which is described as *Ochraceocephala* (type species: *O. foeniculi*) (Aiello et al. 2020). It is pathogenic in the crown, roots and stems of living *Foeniculum vulgare* (F. Selcuk).

### ***Ochropsoraceae* (Arthur) Aime & McTaggart**

Based on phylogenetic analysis, morphology, host range and life cycle, Aime & McTaggart (2021) introduced this new family to accommodate the type genus *Ochropsora* in *Pucciniales* (M. Erdoğan).

### ***Odontotrematales* Lücking**

*Odontotrematales* was introduced to accommodate *Odontotremataceae* (Lücking 2019). The order comprised non-lichenized taxa which showed a close phylogenetic relationship to *Graphidales* and *Gyalectales* and clustered outside of *Ostropales sensu stricto* (Kraichak et al. 2018, Lücking 2019) (V. Thiagaraja).

### ***Olotia* D. Wächter & A. Melzer**

*Olotia* was introduced by Wächter & Melzer (2020) to accommodate *Psathyrella codinae*. The type species of *Olotia*, *O. codinae* was described based on the pleurocystidia predominantly spatula-shaped and strongly pediculate, often slightly thick-walled, and phylogenetic analyses (Wächter & Melzer 2020) (M. Erdoğan).

### ***Omania* Maharachchikumbura et al.**

Maharachchikumbura et al. (2021b) introduced this genus within *Halojulellaceae* to accommodate *Omania hydei* which was isolated from dead roots of *Avicennia marina* (Maharachchikumbura et al. 2021b) (M. Erdoğan).

### ***Opeltiella* S.Y. Kondratyuk**

Kondratyuk et al. (2020b) introduced *Opeltiella* within *Cancellidiaceae* to accommodate *O. fruticans*. *Opeltiella* is similar to *Candelaria*, but differs in having 8-spored asci as well as in the lack of lower cortical layer and true rhizines (Kondratyuk et al. 2020b) (M. Erdoğan).

### ***Ostropomyces* Thiagaraja et al.**

Thiagaraja et al. (2021b) introduced *Ostropomyces* for two new saprotrophic species. These species were recorded in their sexual and asexual morphs and formed a close clade to *Ostropa* in the phylogenetic analysis (V. Thiagaraja).

### ***Otospora* Oehl et al.**

The new monospecific genus was introduced by Palenzuela et al (2008) based on morphological evidence of acaulosporoid/otosporoid spore development of spore wall in *Diversisporaceae* clade. The sister species of *Otospora bareae* is *Diversispora varaderana* with short molecular divergence. At this time there is no phylogenetic support to validate *Otospora* as a genus ranking taxa. Additional analysis with new genes as such *RPB1* could be useful to check the closest relative using a more powerful tools to clarify the ranking status of the genus in *Diversisporales* (B.T. Goto, F. Marguno, J. Błaszowski, F. Oehl, G.A. da Silva & F.A. de Souza).

### ***Palaeocurvularia* Dörfelt & A.R. Schmidt**

In the idea of Schmidt, Dörfelt, Struwe & Perrichot (fossil), this monotypic genus of conidiogenous fungus (*Pleosporaceae*, *Pleosporales*) was recorded from the faecal pellets of insect embedded in amber, collected from the Cretaceous sediments of Ethiopia. It resembles spores of

extant genera *Helminthosporium* Link, *Drechslera* S. Ito, *Curvularia* Boedijn, *Bipolaris* Shoemaker and *Exserohilum* K.J. Leonard & Suggs (R.K. Saxena).

***Palaeogigaspora*** R. Kar et al. (fossil)

*Palaeogigaspora* is a monotypic genus of glomeromycetous fungi. Its spores resemble those of extant genus *Gigaspora* (*Gigasporaceae*, *Diversisporales*) (R.K. Saxena).

***Palaeospora*** Oehl et al.

Schuessler & Walker (2019) introduced a new species *Archaeospora ecuadoriana* as a basal species in *Archaeosporaceae* but significant molecular divergence support *Palaeospora* and *Intraspora* as genus ranking. Additional analysis of *Archaeospora ecuadoriana* and *A. trappei* from the type location is necessary to better understand the *Archaeospora* clade and clarify the topology (B.T. Goto, F. Marguno, J. Błaszowski & F. Oehl).

***Paleopyrenomycites*** T.N. Taylor et al.

This monotypic genus, belonging to pyrenomycetous taxa, was recorded from the cortex of aerial stems and rhizomes of *Asteroxylon mackiei* found in Early Devonian sediments of Great Britain (R.K. Saxena).

***Palmeiomyces*** D.R.S. Pereira & A.J.L. Phillips

*Palmeiomyces* was introduced by Pereira & Phillips (2020) based on *P. chamaeropicola*. Phylogenetically, *P. chamaeropicola* is closely related to genera in *Teratosphaeriaceae*. The ascospores have a peculiar mode of germination, lack of an asexual morph and have very slow growth in culture which corresponds to genera in *Teratosphaeriaceae* (Crous et al. 2007). However, ascospores of *P. chamaeropicola* lack mucous sheaths, which is a characteristic of *Teratosphaeriaceae* (Crous et al. 2007, Quaedvlieg et al. 2014) (M. Erdoğdu).

***Papiliomyces*** Luangsa-ard et al.

This genus was introduced with *P. liangshanensis* as the type species (Mongkolsamrit et al. 2020) (F. Selcuk).

***Parachaetomium*** Mehrabi et al.

Based on morphological characteristics and multilocus phylogeny, Mehrabi et al. (2020) introduced this genus to accommodate *Chaetomium carinthiacum*, *C. iranianum*, and *C. truncatulum*. *Parachaetomium* is characterized by distinctly ostiolate ascomata and equi- or inequilaterally fusiform, typically less than 13-µm-long ascospores with an oblique or subapical germ pore (Mehrabi et al. 2020) (M. Erdoğdu).

***Paraeutypella*** L.S. Dissan. et al.

Dissanayake et al. (2021) introduced *Paraeutypella* to accommodate *P. guizhouensis* (the type species), *P. citricola* and *P. vitis*. *Paraeutypella* is characterized by having 4-25 perithecia in a stroma each with 3-6 sulcate, long ostiolar necks (Dissanayake et al. 2021) (M. Erdoğdu).

***Parafusicladium*** Crous et al.

Shen et al. (2020) introduced this genus, typified by *P. amoenum* (F. Selcuk).

***Paragalactinia*** Van Vooren

Based on both molecular data and from new studies of type collections of species of *Peziza*, Van Vooren (2020) introduced *Paragalactinia* Van Vooren, with *Peziza succosa* Berk as the type species (M. Erdoğdu).

***Parahelicomyces*** Goh

*Pseudohelicomyces talbotii* was renamed by Hsieh et al. (2021) as *Parahelicomyces talbotii*

as the former genus was a homonym thus illegitimate. The other six illegitimate *Pseudohelicomyces* species were transferred to *Parahelicomyces* as new combinations (Hsieh et al. 2021) (M. Erdoğdu).

***Paralulworthia*** A. Poli et al.

Poli et al. (2020a) introduced *Paralulworthia* represented by two new species *P. gigaspora* and *P. posidoniae*. *Paralulworthia gigaspora* and *P. posidoniae* were isolated from rhizomes that are characterized by a high content of lignin (Kaal et al. 2016, Poli et al. 2020a) (M. Erdoğdu).

***Paramicrosphaeropsis*** L.W. Hou et al.

Hou et al. (2020) introduced *Paramicrosphaeropsis* (in *Didymellaceae*) based on the multi-locus phylogenetic analysis and morphological characters. This genus is phylogenetically close to *Neomicrosphaeropsis* and *Microsphaeropsis* and distinct from all other known genera in *Didymellaceae*. *Paramicrosphaeropsis* could be distinguished from other genera in this family by producing pycnidia with an extremely thin and hyaline pycnidial wall (Hou et al. 2020) (M. Erdoğdu).

***Paramycetinis*** R.H. Petersen

The genus comprises two antipodal taxa related to *Mycetinis*. Both *Paramycetinis* species are characterized by luxuriant rhizomorphs, with basidiomata arising occasionally as side branches but also separately from rhizomorphs (Petersen & Hughes 2020) (M. Erdoğdu).

***Parapotamomyces*** O'Keefe (fossil)

The monotypic genus *Parapotamomyces* resembles *Potamomyces* but has many more verrucae than any recorded species of *Potamomyces* (R.K. Saxena).

***Parathyridariella*** Prigione et al.

Poli et al. (2020b) introduced this genus, typified by *P. dematiacea* Prigione et al. Hyphae 2.8–4.8 µm wide, septate, hyaline to lightly pigmented (F. Selcuk).

***Parawilcoxina*** Van Vooren

Three new genera were introduced by Van Vooren et al (2020) to accommodate several species previously assigned to *Trichophaea* or morphologically close genera viz., *Perilachnea* (with *Lachnea hemisphaerioides* as the type species), *Aurantiolachnea* (with *Lachnea solsequia* as type species) and *Parawilcoxina* (with *P. inexpectata* as type species) (M. Erdoğdu).

***Parvabulbium*** K.S. Landry & A.N. Mill.

Miller (2021) introduced *Parvabulbium* in *Chaetomiaceae* to accommodate *P. thermostercus* (type species) which grew on the dung of *Equus caballus* (Miller 2021) (M. Erdoğdu).

***Parvomorbus*** Wen Wang & S.F. Chen

Wang et al. (2020b) introduced this genus in *Cryphonectriaceae* from China. The genus is typified by *P. eucalypti* (F. Selcuk).

***Patellariopsidaceae*** Karun. et al.

Karunarathna et al. (2020) introduced this new family based on morphology and phylogeny. The type genus is *Patellariopsis* and it was saprobic on dead branches of *Corylus avellana* (F. Selcuk).

***Pedrocrousiella*** Rajeshkumar et al.

Rajeshkumar et al. (2021) introduced *Pedrocrousiella*, *P. pongamiae* for *Asperisporium*

*pongamiae* under *Mycosphaerellaceae*, *Mycosphaerellales* based epitypification and ITS, LSU and *rpb2* sequence data and phylogeny (K.C. Rajeshkumar).

***Penicillaginaceae*** Houbraken et al.

This family is phylogenetically distinct from other families of *Eurotiales*. Conidiophores are penicillium-like and the phialides have a long, narrow neck (Houbraken et al. 2020) (F. Selcuk).

***Perexiflasca*** M. Krings et al. (fossil)

*Perexiflasca* is represented by two species, viz., *P. tayloriana* and *P. ventricosa*. It belongs to the phylum *Chytridiomycota* (R.K. Saxena).

***Periamphispora*** J.C. Krug

Wijayawardene et al. (2020) listed this genus under *Lasiosphaeriaceae*. Huang et al. (2021b) excluded this genus from *Lasiosphaeriaceae* and accommodated it in *Sordariales* genera *incertae sedis* (N. Wijayawardene).

***Perilachnea*** Van Vooren

Van Vooren et al (2020) introduced this genus with *Perilachnea hemisphaerioides* as the type species (M. Erdoğdu).

***Periplasma*** W.W. Martin & A. Warren

Martin & Warren (2020) introduced *Periplasma* to accommodate *P. isogametum* (the type species) isolated in pure culture from a moribund simuliid adult (M. Erdoğdu).

***Petchia*** Thanakitp. et al.

Based on the phylogenetic analyses, combined with morphology and ecology, Thanakitpipattana et al. (2020) introduced this novel genus to accommodate the species *P. siamensis* (F. Selcuk).

***Pewenomyces*** F. Balocchi et al.

Balocchi et al. (2021) introduced this new genus to accommodate *Pewenomyces kutranfy* isolated from lesion margins of cankers on branches of *Araucaria araucana* in Chile. Phylogenetic analyses of the ITS, nucSSU, and nucLSU gene regions showed that the fungus resides in *Coryneliaceae* but is distinct from other genera in that family (Balocchi et al. 2021) (M. Erdoğdu).

***Phaeoplaca*** Söchting et al.

Bungartz et al. (2020) introduced the genus *Phaeoplaca* to accommodate a new species and two new combinations based on morphological, anatomical, chemical, and molecular data. Currently, the genus comprises three species viz., *P. tortuca*, *P. camptidia* (the type species) and *P. ochrolechioides* (Bungartz et al. 2020) (M. Erdoğdu).

***Phaeoxyphiella*** Bat. & Cif.

Abdollahzadeh et al. (2020) introduced *Phaeoxyphiella australiana* and confirmed its placement in *Readeriellipsidaceae*. However, the type species lacks DNA sequence data (N. Wijayawardene).

***Phaneromycetaceae*** Gamundí & Spinedi

*Phaneromycetaceae* comprised *Phaneromyces* and the phylogenetic placement of this family remains uncertain due to the lack of molecular data (Gamundí & Spinedi 1985, Baloch et al. 2010) (V. Thiyagaraja).



***Phialolunulospora*** Z.F. Yu & R.F. Castañeda

The monotypic genus *Phialolunulospora* (in *Chaetosphaeriaceae*) was introduced by Zheng et al. (2020) to accommodate *P. vermisporea* collected from submerged dicotyledonous leaves in China. *Phialolunulospora* is characterized by macronematous, semimacronematous, septate and pigmented conidiophores and acrogenous, long lunate, vermiform to sigmoid, hyaline conidia with an eccentric basal appendage (Zheng et al. 2020) (M. Erdoğdu).

***Phialoseptomonium*** Crous & Carnegie

Crous et al. (2019a) introduced the monotypic genus *Phialoseptomonium* within *Nectriaceae* to accommodate *P. eucalypti* collected from leaves of *Eucalyptus grandis* and *E. camaldulensis* (M. Erdoğdu).

***Phoebus*** R.C. Harris & Ladd

The monotypic genus *Phoebus* was considered as an *Arthoniales* of uncertain family affiliation. Ertz et al. (2021) placed the genus in *Lecanographaceae* using molecular analyses of a combined data set of nuLSU, mtSSU and *rpb2* sequences (D. Ertz).

***Phormopsora*** Elvebakk et al.

Based on phylogenetic analyses of the ITS, nuclear large subunit rRNA, mitochondrial small subunit rRNA, and MCM7 genes, species previously treated as *Pannaria hispidula* and *P. isabellina* were shown to represent two new *Pannariaceae* genera, *Hispidopannaria* and *Phormopsora*. *Phormopsora* is monospecific and is the only member of *Pannariaceae* which contains norstictic and connorstictic acids. Its thallus of large, branched squamules with large, foliose cephalodia and its bullate perispores with long-apiculate apical extensions also separate it from *Pannaria* Delise ex Bory (Elvebakk et al. 2020) (M. Erdoğdu).

***Phycophthorum*** Hassett

Hassett (2020) introduced this genus to accommodate *P. isakeiti* (the type species) isolated from the Arctic (M. Erdoğdu).

***Phyllocraterina*** Sérus. & Aptroot

*Phyllocraterina* was introduced as a replacement synonym of *Phyllocratera* in Hongsanan et al. (2020). This genus comprised two species namely *Phyllocraterina nuda* and *P. papuana* and was identified by unbranched paraphyses, *Phycopeltis* photobiont and the substrate (Hongsanan et al. 2020) (V. Thiyagaraja).

***Phylloscypha*** Van Vooren

Van Vooren (2020) introduced this genus with *P. phyllogena* as the type species (M. Erdoğdu).

***Phyllotopsidaceae*** Locquin ex Olariaga et al.

The family comprises of *Macrotyphula*, *Phyllotopsis* (type genus) and *Pleurocybella*. Olariaga et al. (2020) described the family as such: “Basidiomata pleurotoid or clavarioid and sometimes arising from a sclerotium. Spore deposit white to salmon pink. Hyphal system monomitic. Basidiospores hyaline, cylindrical, allantoid or subglobose, smooth, without iodine reactions. Cheilocystidia sometimes present in pleurotoid genera. Clamp connections present, rarely absent. Saprotrophic.” (M. Erdoğdu).

***Pinaceicola*** Crous et al.

Shen et al. (2020) introduced this genus which is typified by *P. pini* (F. Selcuk).

***Piricauda*** Bubák

Hongsanan et al. (2020) listed this genus in *Mycosphaerellaceae* (N. Wijayawardene).

***Pisutiella*** S.Y. Kondr. et al.

This genus was introduced by Kondratyuk et al. (2020a) with *P. conversa* as type species (F. Selcuk).

***Pleurocordyceps*** Y.J. Yao et al.

Wang et al. (2021) introduced *Pleurocordyceps* to accommodate ten new combinations based on the phylogenetic analyses and morphological characteristics. Species in this new genus differ from *Perennicordyceps* and *Polycephalomycetes* formosus-like fungi (*Polycephalomycetes sensu stricto*) in producing lateral fertile pulvinate stromata close to the tip in the sexual morph and two types of conidia in petri dish culture in the asexual morph (Wang et al. 2021) (M. Erdoğdu).

***Podila*** Stajich et al.

This genus comprises seven species previously classified within *Mortierella* clade 2 (Wagner et al. 2013), including among others *P. verticillata* and *P. humilis*. Based on previous phylogenetic studies (Wagner et al. 2013) probably more species can be transferred to this genus. The type species is *Podila minutissima*, but the type specimen is not known. The representatives of this genus are often isolated from forest and agricultural soil, compost, dung, and municipal waste (Vandepol et al. 2020) (J. Pawłowska).

***Podospora*** Ces.

Huang et al. (2021b) synonymized *Apiosordaria* under this genus (N. Wijayawardene).

***Polonospora*** Błaszcz. et al.

Błaszczkowski et al. (2021b) introduced the monospecific genus *Polonospora* based on a large phylogenetic divergence of *A. polonica* from *Archaeospora ecuadoriana* clade. Additional analysis of environmental sequences suggests that the new genus presents other species to be described and worldwide distribution (B.T. Goto, F. Marguno & J. Błaszczkowski).

***Polonosporaceae*** Błaszcz. et al.

*Polonosporaceae* was introduced by Błaszczkowski et al. (2021b) based on new phylogenetic data set of 18S-ITS-28S + *RPB1* sequences of a fungus described originally as *Acaulospora polonica* in Poland. Such analysis put *A. polonica* as a sister (divergent) clade of *Archaeosporaceae* and *Ambisporaceae* in *Archaeosporales*. Environmental sequences suggest that the new family includes other genera yet to be described and a worldwide distribution (Kolarikova et al. 2021) (B.T. Goto, F. Marguno & J. Błaszczkowski).

***Populomyces*** Hern.-Restr.

Crous et al. (2021c) introduced this new genus to accommodate *Populomyces zwonianus* isolated from soil in the Netherlands. *Populomyces* is phylogenetically close to *Calloria* and *Tricellula*. The cylindrical, aseptate conidia of *Populomyces* are easily distinguished from the stauroconidia of *Tricellula* (Seifert et al. 2011, Crous et al. 2021c). Furthermore, *Calloria* is a polyphyletic genus with apothecial ascomata including species that are related to *Cylindrocolla*. Asexual morphs are characterized by polyblastic conidiogenous cells producing conidia in chains, thus distinct from the solitary conidia of *Populomyces* (Muntañola-Cvetkovic et al. 1997, Seifert et al. 2011, Crous et al. 2021c) (M. Erdoğdu).

***Poroisariopsis*** M. Morelet

Morelet (1971) introduced this genus within the *Pezizomycotina incertae sedis* to accommodate *Phaeoisariopsis armillata* (M. Erdoğdu).

***Praeclarispora*** Doilom et al.

Doilom et al. (2021) established this genus in *Leptosphaeriaceae* to accommodate a single species *P. artemisiae* based on multi-locus phylogeny and distinct morphology (W. Dong).

***Protocandelariella*** Poelt et al.

Kondratyuk et al. (2020b) introduced *Protocandelariella* within *Cancellidiaceae* to accommodate *P. subdeflexa*. *Protocandelariella* is similar to *Candelariella*, but differs in having squamulose thallus and in having conidia from conidiogenous cells on the lower surface (Kondratyuk et al. 2020b) (M. Erdoğdu).

***Protographum*** Le Renard et al.

This new genus, which reproduce via thyriothecia that consist of sporogenous tissue appressed to cuticle surfaces of plant leaves and covered by a shield-like scutellum, was introduced by Le Renard et al. (2020) (F. Selcuk).

***Pruniphilomyces*** Crous & Bulgakov

Crous et al. (2020c) introduced this genus to accommodate *Pruniphilomyces circumscissus* isolated on living leaves of *Prunus cerasus* from Russia (F. Selcuk).

***Pseudoacrosporum*** Crous

Based on the phylogenetic analyses and morphological characters, Crous et al. (2021c) introduced the monotypic genus *Pseudoacrosporum* to accommodate *P. goniomae* Crous collected from leaves of *Gonioma kamassi* (M. Erdoğdu).

***Pseudobactrodesmium*** H. Zhang et al.

Dong et al. (2020) introduced this genus with *P. aquaticum* as the type species (F. Selcuk).

***Pseudobogoriella*** Lücking et al.

Hongsanan et al. (2020) introduced this genus and confirmed its placement in *Trypetheliaceae*. Its acceptance makes the number of accepted species in *Bogoriella* Zahlbr. considerably smaller (A. Aptroot).

***Pseudocryptosphaerella*** S.K. Huang & K.D. Hyde

Huang et al. (2021a) regarded that *Cryptosphaerella elliptica* is not congeneric with *Cryptosphaerella sensu stricto*. Hence, Huang et al. (2021) introduced *Pseudocryptosphaerella* (N. Wijayawardene).

***Pseudocyclothyriella*** Phukhams. & Phookamsak

Based on morphological distinctiveness and multigene phylogenetic analyses, *Pseudocyclothyriella* was introduced by Jiang et al. (2021c) to accommodate a single coelomycetous species, *P. clematidis* which was previously described as *Pseudocoleophoma clematidis* by Phukhamsakda et al. (2020). *Pseudocyclothyriella* is characterized by solitary to gregarious, immersed to erumpent, black, shiny, subglobose to subconical conidiomata, with oval, papilla, an ostiolar canal and pycnidial wall composed of thick-walled, scleroplectenchymatous cells (Jiang et al. 2021c) (M. Erdoğdu).

***Pseudoechria*** Y. Marín & Stchigel

Marin-Felix et al. (2020) introduced this genus with *P. curvicolla* as the type species (M. Erdoğdu).

***Pseudohamigera*** Houbraken et al.

The mesophilic genus *Pseudohamigera* was introduced by Houbraken et al. (2020) to

accommodate *P. striata* (F. Selcuk).

***Pseudojahnula*** W. Dong et al.

Dong et al. (2020) established this genus to accommodate *Pseudojahnula potamophila* segregated from *Jahnula* based on multi-locus phylogeny and its distinct morphology (W. Dong).

***Pseudomarasmius*** R.H. Petersen & K.W. Hughes

Petersen & Hughes (2020) introduced *Pseudomarasmius* to accommodate four species and four others previously placed in *Marasmius*. The genus differs from *Marasmius* by the presence of diverticulate hyphae in the pileipellis and the absence of clamp connections (Petersen & Hughes 2020) (M. Erdoğdu).

***Pseudopeyronellaea*** L.W. Hou et al.

Hou et al. (2020) introduced *Pseudopeyronellaea* as a new genus belonging to *Didymellaceae* based on multi-locus phylogenetic analyses and morphological characters. *Pseudopeyronellaea* differs from *Didymella* in producing bi- to triseriate, ovate to fusoid and prominently guttulate ascospores with mucoid sheaths, while ascospores of *Didymella* species are biseriate, ellipsoidal to cymbiform (Chen et al. 2015) (M. Erdoğdu).

***Pseudorhizophila*** Y. Marín & Stchigel

Based on the combined dataset sequences of ITS, LSU, *rpb2* and *tub2* loci, *Pseudorhizophila* was introduced by Harms et al. (2021) to accommodate *Triangularia mangelotii*, which was located far from the monophyletic clade *Triangularia*, together with other three species of *Zopfiella* clustering in the same well-supported clade in *Naviculisporaceae* (M. Erdoğdu).

***Pseudoschizothecium*** Y. Marín et al.

Marin-Felix et al. (2020) introduced this genus with *P. atropurpureum* as the type species (M. Erdoğdu).

***Pseudosterigmatospora*** Q.M. Wang & F.Y. Bai

This genus was introduced by Li et al. (2020b) to accommodate *P. motuoensis* (F. Selcuk).

***Pseudozeugandromyces*** De Kesel & Haelew.

*Pseudozeugandromyces* was introduced as a new genus of *Laboulbeniales* by Haelewaters et al. (2020) with *P. tachypori* as the type species. The new genus is morphologically supported; no sequences could be generated due to the age of the material. Even though *P. tachypori* is morphologically very similar to *Zeugandromyces*, it is different in the following characteristics: cell II is higher than broad, the appendage is composed of two antheridial branches, and antheridia are not borne in pairs as is typical for *Zeugandromyces* (Haelewaters et al. 2020). *Pseudozeugandromyces tachypori* has thus far only been found in Belgium in association with *Tachyporus pusillus* (Coleoptera, Staphylinidae) (D. Haelewaters).

***Psychromyces*** L. Perini & Zalar

*Psychromyces* was introduced for the dimorphic/filamentous isolates found in Svalbard and Greenland glacial environments. Based on ribosomal genes, *Psychromyces glacialis* is related to *Glaciozyma* and *Cryolevonia*. Seven gene phylogeny restricted to taxa with available sequences, supported the placement of *Psychromyces* in *Camptobasidiaceae* (Perini et al. 2021) (M. Erdoğdu).

***Pucciniasporonites*** Ramanujam & Ramachar (fossil)

This monotypic genus was recorded from the Neyveli lignite (Miocene), Tamil Nadu, India. The fossil spores are quite similar to spores of modern *Puccinia* Pers. (*Pucciniaceae*, *Pucciniales*) which parasitize members of *Poaceae* (R.K. Saxena).

***Pulverulina*** Matheny & K.W. Hughes

Matheny et al. (2020) introduced *Pulverulina* to accommodate the monotypic lineage *Clitocybe ulmicola* in *Porothelaceae*. Type species *P. ulmicola* is characterized by small, clitocyboid, pileate-stipitate basidiomata with a tough, pruinose stipe; distant decurrent lamellae; smooth inamyloid basidiospores; long, abundant caulocystidia; interwoven lamellar trama, and lignicolous habit on the bark of living trees (Matheny et al. 2020) (M. Erdoğdu).

***Punjabia*** D. Wächt. & A. Melzer

*Punjabia* was erected by Wächter & Melzer (2020) to accommodate *Coprinellus pakistanicus*. The type species *P. pakistanica* was described based on the pileus with greenish tones and phylogenetic analyses (Wächter & Melzer 2020) (M. Erdoğdu).

***Purpureofaciens*** W. Dong et al.

This genus was established in *Anteagloniaceae* to accommodate a freshwater species *P. aquatica* collected from Thailand (Dong et al. 2020) (W. Dong).

***Purpureomyces*** Luangsa-ard et al.

This genus was introduced by Mongkolsamrit et al. (2020) with *P. khaoyaiensis* as the type species (F. Selcuk).

***Pygmaeomyces*** E. Walsh & N. Zhang

Walsh et al. (2021) introduced *Pygmaeomyces thomasi* (holotype RUTPP-PP16K26, ex-type culture CBS146528) as the type species. The genus refers to the former Clade GS23, as it was identified based on a sequence-only soil fungal survey. Both species of *Pygmaeomyces* were isolated from plants' roots from acidic and oligotrophic soils in the USA. At the same time, Walsh et al. (2021) introduced the new family *Pygmaeomycetaceae* in *Mucoromycotina* (J. Pawłowska & N. Wijayawardene).

***Pygmaeomycetaceae*** E. Walsh & N. Zhang

Based on the phylogeny and phenotypic characters, *Pygmaeomycetaceae* was introduced by Walsh et al. (2021) to accommodate *Pygmaeomyces* in *Umbelopsidales*. *Pygmaeomycetaceae* is distinguished from other families in the *Mucoromycotina* by producing hyaline microchlamydospores (Walsh et al. 2021) (M. Erdoğdu).

***Pyrispora*** C.M. Tian & N. Jiang

Based on morphological and molecular approaches, the monotypic genus *Pyrispora* was introduced by Jiang et al. (2021d) to accommodate *P. castaneae*, which was reported as a pathogenic or saprobic on *Castanea mollissima* (M. Erdoğdu).

***Pyrisporaceae*** C.M. Tian & N. Jiang

*Pyrisporaceae* was introduced by Jiang et al. (2021d) to accommodate *Pyrispora*, which was reported as a pathogenic or saprobic on *Castanea mollissima*. The sexual morph shows typical characters of *Diaporthales*, as asci have a distinct apical ring. The asexual morph is distinctive based on the conidiogenous cells with pyriform base and a long neck (Jiang et al. 2021d) (M. Erdoğdu).

***Pyrrhulomyces*** E.J. Tian & Matheny

The new genus *Pyrrhulomyces* was introduced by Tian & Matheny (2021) to accommodate *P. astragalina* and *P. amariceps*. *Pyrrhulomyces* is distinguished from other genera of *Strophariaceae* by the blackening basidiomata with a bitter taste, smooth basidiospores without a germ pore under light microscopy, presence of pleurochrysocystidia, an ixocutis, rugulose spore ornamentation under the scanning electron microscope (SEM), and association with late stages of conifer wood decay (Tian & Matheny 2021) (M. Erdoğdu).

***Quaeritorhiza*** Longcore et al.

*Quaeritorhiza*, parasitic on *Haematococcus pluvialis*, was introduced by Longcore et al. (2020) to accommodate *Q. haematococci* based on phylogenetic analyses and morphological characters (M. Erdoğdu).

***Quaeritorhizaceae*** Longcore et al.

Longcore et al. (2020) introduced this new family to accommodate the type genus *Quaeritorhiza* based on phylogenetic analyses and morphological characters (M. Erdoğdu).

***Quatunica*** F.A. Souza et al.

See *Gigasporales* in the discussion (F.A. de Souza & B.T. Goto).

***Racodiales*** Abdollahz. & Crous

*Racodiales*, which accommodates *Racodiaceae*, was introduced by Abdollahzadeh et al. (2020) as a result of studies about an attempt to explain the high levels of diversity in the *Capnodiales*, the resulting phylogenetic tree (LSU, *tef1-α* and *rpb2*) revealed *Racodiales* as polyphyletic (F. Selcuk).

***Radulomycetaceae*** Leal-Dutra et al.

Based on phylogenetic analyses and morphological characters, Leal-Dutra et al. (2020) introduced *Radulomycetaceae* to accommodate *Aphanobasidium*, *Radulotubus* and *Radulomyces* within *Agaricales*. *Radulomycetaceae* is morphologically characterized by a combination of resupinate basidiomes, monomitric hyphal system and lack of cystidia (Leal-Dutra et al. 2020) (M. Erdoğdu).

***Rajchenbergia*** Salvador-Montoya et al.

Based on morphology, phylogenetic relationships and host distribution, Salvador-Montoya et al. (2020) segregated this new genus from *Fomitiporella sensu lato*. *Rajchenbergia* is characterized by effuse basidiomata with homogenous to duplex context, a predominately monomitric hyphal system, the absence of setae, and ellipsoid to ovoid, coloured, thick-walled basidiospores, with distribution mainly in the tropical climatic zones (Salvador-Montoya et al. 2020) (M. Erdoğdu).

***Ramiphialis*** F.R. Barbosa et al.

*Ramiphialis* was introduced by Barbosa et al. (2020) to accommodate *R. ronuroensis* collected on decaying leaves from the Amazon rainforest in Brazil. The taxon is distinguished by macronematous, monophialidic and multibranched, discrete, and terminal and intercalary conidiogenous cells that produce filiform to falcate, unicellular, hyaline conidia (Barbosa et al. 2020) (M. Erdoğdu).

***Readeriellipsoidaceae*** Abdollahz. & Crous

Abdollahzadeh et al. (2020) introduced this family (type genus: *Readeriellipsoidis*) in *Capnodiales* based on multi gene phylogenetic analyses (LSU, ITS, *tef1-α* and *rpb2*) (F. Selcuk).

***Resinoscypha*** T. Kosonen et al.

Kosonen et al. (2021) found that *Arachnopeziza variepilos* is molecularly distant from other species of the *Arachnopeziza*, and erected *Resinoscypha* for *A. variepilos*. *Resinoscypha* includes two species: *R. monoseptata* and *R. variepilosa* (Kosonen et al. 2021) (M. Erdoğdu).

***Rhagadodidymellopsis*** Fdez.-Brime et al.

*Rhagadodidymellopsis* was introduced as a new genus in *Xanthopyreniaceae* (Fernández-Brime et al. 2020) (F. Selcuk).

***Rhexodenticula*** W.A. Baker & Morgan-Jones

This genus was referred to *Sordariomycetidae* genera *incertae sedis* based on multi-locus phylogeny and distinct morphology (Dong et al. 2021b) (W. Dong).

***Rhizodiscinaceae*** Crous et al.

This family was introduced by Haridas et al. (2020) to accommodate *Rhizodiscina* which has characteristic apothecial ascomata (F. Selcuk).

***Rhizophydites*** M. Krings et al. (fossil)

This monotypic genus (Type: *R. matryoshkae*) of the phylum *Chytridiomycota* was found on spores of the early land plant *Horneophyton lignieri* from the Early Devonian Rhynie Chert (R.K. Saxena).

***Rhomboidia*** C.L. Zhao

*Rhomboidia*, typified by *R. wuliangshanensis*, was introduced by Xu et al. (2020c) based on morphological and molecular evidence. *Rhomboidia* is characterized by annual, stipitate basidiomes with rhomboid pileus, a monomitric hyphal system with thick-walled generative hyphae bearing clamp connections, and broadly ellipsoid basidiospores with thin, hyaline, smooth walls (Xu et al. 2020c) (M. Erdoğdu).

***Rhynchobrunnera*** B.A. McDonald et al.

*Rhynchobrunnera* was introduced by Crous et al. (2021a) to accommodate species that have 1–3-septate, straight conidia lacking apical beaks. It is similar to members of *Rhynchosporium*, but with different conidial morphology. Conidia solitary, subcylindrical, straight, (0-)1-3-septate, hyaline, hilum neither thickened nor darkened; conidial secession schizolytic (Crous et al. 2021a) (M. Erdoğdu).

***Rhypophila*** Y. Marín et al.

Marin-Felix et al. (2020) introduced this genus with *R. myriospora* as the type species (M. Erdoğdu).

***Robertozyma*** Q.M. Wang & F.Y. Bai

This genus was introduced with *R. ningxiaensis* as the type species (Li et al. 2020) (F. Selcuk).

***Rogerpetersonia*** Aime & McTaggart

Aime & McTaggart (2021) introduced the monotypic genus *Rogerpetersonia* to accommodate *Caeoma torreyae*. *Rogerpetersonia* differs from all other rust fungi in forming gametothalli on *Taxaceae* (Aime & McTaggart 2021) (M. Erdoğdu).

***Rogerpetersoniaceae*** Aime & McTaggart

*Rogerpetersoniaceae* was established by Aime & McTaggart (2021) to accommodate *Rogerpetersonia* Aime & McTaggart in *Pucciniales*. *Rogerpetersoniaceae* differs from all other *Pucciniales* in that gametothalli are formed on *Taxaceae* (Aime & McTaggart 2021) (M. Erdoğdu).

***Rosettozyma*** Q.M. Wang & F.Y. Bai

Li et al. (2020b) introduced this genus with *R. petaloides* as the type species. At the same time, new family and order (i.e. *Rosettozymaceae* and *Rosettozymales* respectively) were also introduced (F. Selcuk).

***Rosettozymaceae*** Q.M. Wang & F.Y. Bai

See remarks under *Rosettozyma* (F. Selcuk).

**Rosettozymales** Q.M. Wang & F.Y. Bai

See remarks under *Rosettozyma* (F. Selcuk).

**Rossmatomyces** Aime & McTaggart

*Rossmatomyces* was introduced by Aime & McTaggart (2021) to accommodate *Chrysomyxa monesis*, *C. pyrolae*, and *C. ramischiae*. *Rossmatomyces* is similar to *Chrysomyxa* but differs in forming a systemic sporothallus; differs from all other rust fungi in forming sporothalli on *Moneses* and *Orthilia* (*Ericaceae*) (Aime & McTaggart 2021) (M. Erdoğdu).

**Sajamaea** Flakus et al.

Piątek et al. (2020) introduced this genus with *S. mycophila* (F. Selcuk).

**Sanguinoderma** Y.F. Sun et al.

Sun et al. (2020b) introduced this genus to accommodate five new species and five new combinations based on morphological and molecular data. *Sanguinoderma* is characterized by corky to woody hard basidiomata; pileus dark, pore surface colour changing to blood-red when bruised, basidiospores double-walled in which exospore wall semi-reticulate or vermiculate to verrucose, endospore wall with solid and columnar to coniform spinules under SEM (Sun et al. 2020b) (M. Erdoğdu).

**Sarcomyxaceae** Olariag et al.

The family encompasses only *Sarcomyxa*. It has unique pleurotoid basidiomata, gelatinised pileipellis, fusiform to clavate cheilo- and pleurocystidia and amyloid spores (Knudsen & Vesterholt 2012). It was isolated within the *Pleurotineae* (Olariaga et al. 2020) (M. Erdoğdu).

**Savitreea** Sakpuntoon et al.

Sakpuntoon et al. (2020) introduced this genus and confirmed its placement in *Saccharomycetaceae* (W.P. Pfliegler).

**Saxiloba** Lücking et al.

Lücking et al. (2020) described *Saxiloba* with *S. firmula* from the Caribbean and *S. hawaiiensis* from Hawaii. *Saxiloba* is characterized by a unique, placodioid thallus forming distinct lobes, growing on rocks in shaded to exposed situations with a trentepohlioid photobiont and a fenestrate thallus anatomy with distinct surface lines (Lücking et al. 2020) (M. Erdoğdu).

**Schizotheciaceae** Y. Marin & Stchigel

Marin-Felix et al. (2020) introduced *Schizotheciaceae* to accommodate taxa, which were formerly included in *Lasiosphaeriaceae* (M. Erdoğdu).

**Schummia** Lücking et al.

*Schummia* was introduced for a single facultatively lichenized species *Schummia angulata*. The species was previously assigned within *Distothelia* but transferred to *Schummia* based on ascospore morphology (Schumm & Aptroot 2013, Hongsanan et al. 2020) (A. Aptroot & V. Thiagaraja).

**Sclerotiophoma** L.W. Hou et al.

*Sclerotiophoma* was introduced by Hou et al. (2020) to accommodate *Phoma versabilis* based on the multi-locus phylogenetic analysis and morphological characters. *Sclerotiophoma versabilis*, the type species of this genus, is characterized by pycnosclerotia, which gradually develop into poroid pycnidia (Hou et al. 2020) (M. Erdoğdu).

**Sertulicium** Spirin et al.

Spirin et al. (2021) introduced *Sertulicium* to accommodate a new species and five new



combinations based on morphological and phylogenetic distinctions. Currently, the genus comprises six species including *S. niveocreum*, the type species (M. Erdoğdu).

***Serusiauxia* Ertz & Diederich**

Diederich & Ertz (2020) introduced this genus with *S. inexpectata* as the type species (F. Selcuk).

***Serusiauxiella* S.H. Jiang et al.**

Jiang et al. (2020b) introduced *Serusiauxiella* with *S. filifera* as the type species (F. Selcuk).

***Silvaspora* Błaszcz. et al.**

Błaszczkowski et al. (2021a) introduced the monospecific genus *Silvaspora* based on phylogenetic divergence of new data set of concatenated analysis of 18S-ITS-28S + *RPB1* sequences that show *S. caledonica* as a sister clade of *Rhizoglosum* and *Sclerocystis* (B.T. Goto, F. Marguno & J. Błaszczkowski).

***Similitrichoconis* R.F. Castañeda et al.**

*Similitrichoconis*, with *S. wongii* as the type species, was introduced by Vera et al. (2020). *Similitrichoconis wongii* is characterized by blastic production of obclavate to long fusiform, hyaline phragmoconidia that are rostrate above, uncinata below, and produced by schizolytic conidial secession of clear to translucent conidiogenous cells (Vera et al. 2020) (M. Erdoğdu).

***Sinuicella* D.F. Stone et al.**

Based on the phylogenetic, morphological and ecological data, a new monospecific genus *Sinuicella* (in *Peltigeraceae*) was introduced by Stone et al. (2021) to accommodate *S. denisonii* found on bare soil in Oregon, USA (M. Erdoğdu).

***Siphulopsis* Kantvilas & A.R. Nilsen**

This genus was introduced by Ludwig et al. (2020). It is characterized by an erhizinate, whitish to pale grey thallus, with a green, coccoid photobiont and containing thamnolic acid, but is instead fruticose (F. Selcuk).

***Skierkaceae* (Arthur) Aime & McTaggart**

Based on phylogenetic analysis, morphology, host range and life cycle, Aime & McTaggart (2021) introduced this new family to accommodate the type genus *Skierka* in *Pucciniales*. *Skierkaceae* differs from all other rust fungi in that sporothalli sori are deep-seated and subepidermal with mature uredinio and teliospores single-celled and non-catenulate, these forced through a narrow sorus opening by the production of new spores from sporogenous cells from which they are detached before extrusion (Aime & McTaggart 2021) (M. Erdoğdu).

***Solomyces* Zhi Y. Zhang et al.**

*Solomyces* was introduced by Zhang et al. (2020d) to accommodate *S. sinensis* isolated from soil in China. The morphology of *Solomyces* species is similar to that of *Geomyces* Traaen and the asexual morphs of *Pseudogymnoascus* (Zhang et al. 2020d). However, *Geomyces* differs in having terminal and lateral conidia borne on hyphae, short protrusions or side branches; intercalary conidia barrel-shaped, and conidiophores abundant, always forming verticillate and opposite branches with an acute angle to the axis near the apex (Van Oorschot 1980, Chen et al. 2017) (M. Erdoğdu).

***Spirographaceae* Flakus et al.**

*Spirographaceae* was established to accommodate *Spirographa* which comprises lichenicolous and fungicolous taxa (Flakus et al. 2019). The family formed a clade close to *Graphidaceae* in the multigene phylogenetic analysis. However, the family was not studied by

Lücking (2019) who revised and provided the latest classification for *Ostropales*. Therefore, the ordinal level classification of this family needs further revision (V. Thiagaraja).

***Spodocybe* Z.M. He & Zhu L. Yang**

Based on multigenic phylogenetic inference datasets and morphological evidence, a new clitocyboid genus *Spodocybe* was introduced by He & Yang (2021) to accommodate two species (*S. rugosiceps* and *S. bispora*) belonging to *Hygrophoraceae* (M. Erdoğdu).

***Sporidesmiella* P.M. Kirk**

Kirk (1982) introduced *Sporidesmiella* with *S. claviformis* as type species; the genus is characterized by conidia that are solitary, acrogenous, mostly distoseptate, pale olivaceous brown or subhyaline and produced by a monoblastic, terminal, integrated, indeterminate, enteroblastic percurrent elongated conidiogenous cell. This genus was accepted in *Junewangiaceae* by Luo et al. (2019) and Dong et al. (2020) based on multi-locus phylogeny and distinct morphology (W. Dong & M. Erdoğdu).

***Srinivasanomyces* S. Rana & S.K. Singh 2020**

*Srinivasanomyces* was introduced by Hyde et al. (2020c) based on its morphological distinctiveness supported by strong phylogenetic support. *Srinivasanomyces* morphologically resembles some features in *Phialocephala* W.B. Kendr. However, it differs in having variably-shaped conidia that are pyriform to obpyriform, globose to subglobose, fusoid, or clavate. It produces dense globose clusters of conidial heads and the conidiophores are formed in an indeterminate, intercalary, simple to dense globose to subglobose clustered mass (Hyde et al. 2020c) (M. Erdoğdu).

***Staurospora* Grube**

This genus was introduced to accommodate (in *Arthoniaceae*) *S. purpurissata* (Basionym: *Arthonia purpurissata* Nyl.) based on morphological and chemical data (Grube 2018) (D. Ertz).

***Stellatospora* T. Ito & A. Nakagiri**

Wijayawardene et al. (2020) listed this genus under *Sordariaceae*, however, Huang et al. (2021b) transferred this genus to *Chaetomiaceae* (N. Wijayawardene).

***Stephanophorella* Réblová & Hern.-Restr.**

*Stephanophorella* was introduced by Réblová et al. (2021a) to accommodate *Zanclospora stellata*. *Stephanophorella* resembles *Zanclospora* in setiform conidiophores and the arrangement of sessile, lateral phialides, but differs mainly in well-defined collarettes and the dark, opaque, setiform part of the conidiophore with branches inserted in a stellate fashion at the apex (Réblová et al. 2021a) (M. Erdoğdu).

***Sterigmatospora* Q.M. Wang & F.Y. Bai**

This is a novel genus was introduced by Li et al. (2020b) with *S. layueensis* as the type species (F. Selcuk).

***Sterila* Crous et al.**

Shen et al. (2020) introduced this genus based on multigene phylogenetic and morphological analysis. Type species is *S. eucalypti* (F. Selcuk).

***Strattonia* Cif.**

Wijayawardene et al. (2020) listed this genus under *Lasiosphaeriaceae*, but Huang et al. (2021b) introduced a new family, *Strattoniaceae* to accommodate this genus (N. Wijayawardene).

### ***Strelitziomycetes* Crous**

Crous et al. (2019d) introduced this new genus with *S. knysnanus* as the type species. *Strelitziomycetes* is closely related to *Anungitomyces* (Crous et al. 2019d). The main differences between the two genera lie in the lack of pigmentation in *Strelitziomycetes*, and the prominently formed sclerotium-like bodies (Crous et al. 2019d) (M. Erdoğan).

### ***Strigulaceae* Zahlbr.**

Jiang et al. (2020b) reinstated some genera that were previously synonymized with *Strigula* subsequently Hongsanan et al. (2020) introduced some new genera in this family and provided a generic placement for all accepted species in this genus in the wide sense (A. Aptroot).

### ***Stromatoneurospora* S.C. Jong & E.E. Davis**

The genus *Stromatoneurospora* had until recently been included in *Xylariales* genera *incertae sedis*, since no molecular data had been reported and the conidial state was also not known (Wendt et al. 2018). However, recently, fresh material from Thailand was found and cultured. The cultures were subjected to morphological studies and included in a multi-locus genealogy. In addition, a chemotaxonomic study was carried out. The results clearly demonstrated the affinities of *Stromatoneurospora phoenix* to the coprophilous *Xylariaceae* like *Poronia*, *Podosordaria* and allies. Where this is known, species of these genera also produce lindquistia-like synnematal conidiophores in culture and on the natural substrates. *Stromatoneurospora* is therefore now included in the *Xylariaceae* (Becker et al. 2020) (M. Stadler).

### ***Submersispora* W. Dong et al.**

Dong et al. (2020) established this genus in *Longipedicellataceae* to accommodate the freshwater hyphomycete species *Submersispora variabilis* based on multi-locus phylogeny and distinct morphology (W. Dong).

### ***Subplenodomus* de Gruyter et al.**

de Gruyter et al. (2013) introduced *Subplenodomus* with *S. violicola* as type species. *Subplenodomus* comprises six species with molecular data. Pem et al. (2020) added *S. urticae* based on morphology and phylogeny. *Subplenodomus* is paraphyletic and more taxa are needed to clarify the status of the genus (D. Pem).

### ***Sucioplaca* Bungartz et al.**

Based on morphological, anatomical, chemical, and molecular data, the monospecific genus *Sucioplaca* was introduced by Bungartz et al. (2020) to accommodate *S. diplacia* common in Central America, particularly around the Caribbean Sea (M. Erdoğan).

### ***Sulcatistroma* A.W. Ramaley**

Wijayawardene et al. (2020) listed this genus under *Calosphaeriales* genera *incertae sedis*. However, Huang et al. (2021b) transferred this genus to *Hypocreales* genera *incertae sedis* (N. Wijayawardene).

### ***Sungia* Luangsa-ard et al.**

Mongkolsamrit et al. (2020) introduced this genus with *S. yongmunensis* as the type species (F. Selcuk).

### ***Swinscowia* S.H. Jiang et al.**

*Swinscowia* was introduced in Hongsanan et al. (2020) for non-foliicolous species which were isolated from bark and rocks. This genus comprised 34 species with *Swinscowia jamesii* as the type and the molecular data are available only for one species (V. Thiagaraja).

### ***Synaptospora* Cain**

Wijayawardene et al. (2020) listed this genus in *Lasiosphaeriaceae*. However, Huang et al. (2021b) excluded this genus from *Lasiosphaeriaceae* and accommodated in *Sordariales* genera *incertae sedis* (N. Wijayawardene).

### ***Synarthonia* Müll. Arg.**

*Synarthonia* was considered as an *Arthoniales* of uncertain family affiliation. Van den Broeck et al. (2018) placed the genus in *Arthoniaceae* using molecular analyses of a combined data set of mtSSU and *rpb2* sequences that included the type species. The genus was shown to be closely related to the genera *Coniocarpon* and *Reichlingia*. Six *Synarthonia* species were described as new to science and ten new combinations were made into this genus. A total of 22 species are now accepted in the genus (D. Ertz).

### ***Synnematotriadelphia* Chuaseehar. et al.**

This genus was introduced with *S. stilboidea* as the type species (Chuaseeharonnachai et al. 2020) (F. Selcuk).

### ***Tahromyces* Hanafy et al.**

See under *Agriosomyces* (M. Erdoğan).

### ***Tanmaurkiella* Santam.**

This genus was proposed by Santamaria & Pedersen (2021) to accommodate *T. huggertii* and *T. pselaphi* (type), two species associated with *Pselaphus heisei* (Coleoptera, Staphylinidae). The genus was distinguished from related genera *Bordea*, *Cryptandromyces*, and *Siemaszkoa* based on morphology and ecology (host information) (D. Haelewaters).

### ***Tengiomyces* Réblová**

Huang et al. (2021b) transferred this genus to *Coronophorales* genera *incertae sedis* (N. Wijayawardene).

### ***Teratospermopsis* Jian Ma et al.**

Xu et al. (2021) introduced *Teratospermopsis*, typified by *Chaetendophragmia*, with *Teratosperma microsporum* as a heterotypic synonym. *Teratospermopsis protuberata*, the type species is different from *Chaetendophragmia* and *Teratosperma* by its schizolytic conidial secession, and further from *Chaetendophragmia* which produces conidia with lateral appendages arising from the middle cells (Xu et al. 2021) (M. Erdoğan).

### ***Terrestriporia* Y.C. Dai et al.**

Wu et al. (2020) introduced *Terrestriporia* within the *Terrestriporiaceae* to accommodate *T. alba* as the type species. *Terrestriporia* resembles *Anomoporia* and *Anomoloma* in sharing annual and resupinate basidioma, a monomitic hyphal structure, and hyaline, thin-walled, smooth and amyloid basidiospores (Ryvarden & Melo 2014), but the latter two genera have clamp connections only, lack gloeoplerous hyphae and cystidioles, and belong to *Amylocorticiales* (M. Erdoğan).

### ***Terrestriporiaceae* Y.C. Dai et al.**

*Terrestriporiaceae* in *Russulales*, was introduced by Wu et al. (2020) based on the combination of molecular and morphological data, and it was typified by *Terrestriporia*. *Terrestriporiaceae* is characterized by annual and resupinate basidioma, poroid hymenophore, a monomitic hyphal structure, and generative hyphae mostly simple septate, but occasionally having clamp connections, the presence of gloeoplerous hyphae and cystidioles, thin-walled, hyaline, smooth, amyloid and acyanophilous basidiospores (Wu et al. 2020) (M. Erdoğan).

**Teunia** Q.M. Wang & F.Y. Bai

Li et al. (2020b) introduced this genus with *T. korlaensis* as the type species (F. Selcuk).

**Phaeonawawia** Goh

The monotypic genus *Phaeonawawia* within *Chaetosphaeriaceae* was introduced by Goh et al. (2021) to accommodate *P. diplocradielloidea* collected from decaying wood submerged in freshwater. The fungus is generically distinct in the brown, short-stalked, bulbose or urceolate conidiogenous cells with a terminal pore rimmed with a flared collarete, producing large, dematiaceous, versicolored, multi-euseptate, tetrahedral, or obpyramidal stauroconidia, which bear hyaline filiform appendages at the end of the arms and enclosed by a thick, hyaline sheath (Goh et al. 2021) (M. Erdoğdu).

**Thyrostroma** Höhn.

Höhnelt (1911) introduced *Thyrostroma* with *T. compactum* as the type species. *Thyrostroma* comprises 24 morphological species but only 12 species have molecular data. Phillips et al. (2008) regarded *Thyrostroma* as the asexual morph of *Dothidotthia*. Crous et al. (2016a), Marin-Felix et al. (2017) and Senwanna et al. (2019b) showed that *Thyrostroma* and *Dothidotthia* are not congeneric. Senwanna et al. (2019b) added eight other species based on morphological and phylogenetic evidence and Pem et al. (2019c) added one new species *T. ephedricola* and provided a new combination *T. jaczewskii*. Jayawardena et al. (2020) discuss the phytopathogenic species of this genus (D. Pem).

**Tranzscheliaceae** (Arthur) Aime & McTaggart

Based on phylogenetic analysis, morphology, host range and life cycle, Aime & McTaggart (2021) introduced this new family to accommodate the type genus *Tranzschelia* in the order *Pucciniales* (M. Erdoğdu).

**Triangularia** Boedijn

Huang et al. (2021b) synonymized *Schizothecium* under this genus (N. Wijayawardene).

**Trechispora** P. Karst.

In the past two years, eleven new species were described in this genus: *Trechispora copiosa*, *T. gelatinosa*, *T. mollis*, *T. termitophila*, and *T. torrendii* from Brazil (Chikowski et al. 2020, de Meiras-Ottoni et al. 2021); *T. hondurensis* from Honduras (Haelewaters et al. 2020, 2021c); and *T. bambusicola*, *T. daweishanensis*, *T. fimbriata*, *T. fissurata*, and *T. xantha* from China (Zhao & Zhao et al. 2021, Zong et al. 2021). *Scytinopogon* was synonymized with *Trechispora* by de Meiras-Ottoni et al. (2021), with five new combination, and two additional combinations were introduced by Chikowski et al. (2020). Index Fungorum (2021) currently lists 67 valid species in *Trechispora* (D. Haelewaters).

**Trochila** Fr.

Gómez-Zapata et al. (2021) introduced two new species (*T. bostonensis*, *T. urediniophila*) and two new combinations, based on multi-locus phylogenetic analyses – bringing the number of species in the genus to 37 (D. Haelewaters).

**Tricholyophyllum** Qing Cai et al.

Based on both morphological and phylogenetic evidence, *Tricholyophyllum* was introduced by Cai et al. (2020) to accommodate *T. brunneum*. Besides the independent phylogenetic position, *Tricholyophyllum* is morphologically distinct from the other genera within *Lyophyllaceae sensu lato* in the trichodermal pileipellis and stipitipellis, presence of cheilocystidia, and elongate to cylindrical basidiospores (Cai et al. 2020) (M. Erdoğdu).

***Trichophoma*** Magaña-Dueñas et al.

Crous et al. (2020b) introduced this genus with *T. cylindrospora* as the type species (F. Selcuk).

***Tricispora*** Oehl et al.

The monospecific genus was introduced by Oehl et al. (2011b) based on morphological evidence of entrophosporoid/tricisporoid spore development of spore wall in the *Diversisporaceae* clade. The sister species of *Tricispora nevadensis* is *Diversispora arenaria* without significant molecular divergence. Additional analysis using independent genes as such *RPB1* could be useful to check the closest relative using another powerful tools to solve the ranking status of the genus in *Diversisporales* (B. Goto & F. Marguno).

***Tricladiaceae*** P.R. Johnst. & Baschien

Johnston & Baschien (2020) established this family to accommodate *Tricladium* Ingold (F. Selcuk).

***Tripterosporella*** Subram. & Lodha

Huang et al. (2021b) excluded this genus from *Lasiosphaeriaceae* (fide Wijayawardene et al. 2020) and accommodated it in *Sordariales* genera *incertae sedis* (N. Wijayawardene).

***Triseptata*** Boonmee & Phookamsak

Boonmee et al. (2020) introduced this genus with *T. sexualis* as the type species and accommodated it in *Latoruaceae* (F. Selcuk).

***Trochilispora*** VP Abreu et al.

Hyde et al. (2019) established *Trochilispora* to accommodate *T. schefflerae* collected from leaves of *Schefflera morototoni* based on morphology and phylogenetic support (LSU and ITS sequence data) (M. Erdoğdu).

***Trypetheliaceae*** Zenker (= *Arthopyreniaceae* Walt. Watson)

Thiyagaraja et al. (2021a) accepted *Arthopyreniaceae* as a synonym of *Trypetheliaceae* based on the sequence of type species, *Arthopyrenia cerasi*. *Julella* was included within *Trypetheliaceae* however, the sequenced *Julella fallaciosa* clustered together with *Arthopyrenia cerasi* in the phylogenetic analysis. Both *Arthopyrenia cerasi* and *Julella fallaciosa* differs only in ascospore characteristics (transverse vs. septate muriform), thus transferred to *Arthopyrenia* based on morpho-molecular evidence (V. Thiyagaraja).

***Tubulicolla*** Réblová & Hern.-Restr.

Based on the multigene analysis, Réblová et al. (2021b) revealed that *Tubulicolla* is a member of the *Vermiculariopsiellales*, distantly related to *Dictyochaeta*, and introduced *Tubulicolla* to accommodate *D. cylindrospora*. *Tubulicolla* is characterized by upright, fertile setae formed on stromatic cells and encircled by shorter, unbranched conidiophores terminating in monophialides with a tubular neck below the funnel-shaped collarete and hyaline, aseptate, smooth conidia (Réblová et al. 2021b) (M. Erdoğdu).

***Tulipispora*** Révay & Gönczöl

Wijayawardene et al. (2020) listed this genus under *Helminthosphaeriaceae*. Huang et al. (2021b) excluded this genus from *Helminthosphaeriaceae* and accommodated it in *Ascomycota* genera *incertae sedis* (N. Wijayawardene).

***Tulosesus*** D. Wächt. & A. Melzer

Wächter & Melzer (2020) recommended the separation of *Coprinellus* based on phylogenetic

and morphological reasons and introduced *Tulosesus* with 39 new combinations. The genus was described based on the rounded-angular spores, presence of pileocystidia, and phylogenetic analyses (Wächter & Melzer 2020) (M. Erdoğan).

***Tyloclostomum*** van den Boom & Magain

The new genus *Tyloclostomum* was typified by *T. viridifarinosum* (van den Boom & Magain 2020) (F. Selcuk).

***Ustilaginaceae*** Tul. & C. Tul.

The generic boundaries in the *Ustilaginaceae* have to be considered unresolved based on current molecular and morphological evidence. Whether several of the recently-described segregate genera should be maintained, such as *Langdonia*, *Stollia*, and *Triodiomyces*, or the genus *Mycosarcoma* be re-instated, is a much-debated topic, which cannot be decided based on the data available at present (M. Thines).

***Valsaria*** Ces. & De Not.

Cesati & De Notaris (1863) introduced *Valsaria* with *V. insitiva* as the type species. Ju et al. (1996) placed *Valsaria* in *Dothideomycetes*. Kirk et al. (2008) transferred *Valsaria* to *Diaporthales* (*Sordariomycetes*) based on morphology mainly hamathecium comprising true apically free paraphyses, a true ascomatal wall distinct from the surrounding pseudostroma and unitunicate asci. Jaklitsch et al. (2015) placed *Valsaria* in a new family *Valsariaceae* based on phylogenetic analyses. Only six species namely, *V. insitiva*, *V. lopadostomoides*, *V. neotropica*, *V. robiniae*, *V. saprtii* and, *V. rudis* have molecular data. Pem et al. (2019a) added another species *V. ostrya* based on phylogenetic analysis of LSU, ITS and *rpb2* DNA sequence data (D. Pem).

***Valsarites*** Puri (fossil)

This monotypic genus, recorded from the Senonian sediments of Nigeria, is characterized by an ascospore showing resemblance with ascospores of *Endothia*, *Didymosphaeria* and *Valsaria*. In size, it is closest to the spores of *Valsaria insitiva* (R.K. Saxena).

***Vanderaaea*** Crous

*Vanderaaea*, with *V. ammophilae* as the type species, was introduced by Crous et al. (2021a) as a new coelomycetous taxon occurring on dead leaves of *Ammophila arenaria*. *Vanderaaea ammophilae* is distinct from all species treated as belonging to *Acarosporales* by forming sporodochia with curved, 0-1-septate conidia (Crous et al. 2021a) (M. Erdoğan).

***Vandijkomycella*** Hern.-Restr. et al.

Hou et al. (2020) introduced this genus with *V. joseae* as the type species (F. Selcuk).

***Varioseptispora*** L. Qiu et al.

*Varioseptispora* was introduced by Xu et al. (2020b) based on *V. chinensis* collected on decaying twigs of unidentified plants in Hainan, China. The genus is characterized by macronematous, unbranched, conidiophores with polytretic, integrated, terminal or intercalary conidiogenous cells that produce solitary, acropleurogenous distoseptate and euseptate, brown conidia (Xu et al. 2020b) (M. Erdoğan).

***Veloboletus*** Fechner & Halling

Crous et al. (2020a) introduced this monotypic genus and confirmed its placement in *Boletaceae* based on the phylogenetic results, combined with morphology and culture characteristics (M. Erdoğan).

***Verrudisporonites* O’Keefe (fossil)**

This monotypic genus, recorded from the Heath Formation of Peru, is characterized by dicellate spores with two large pores and differs from *Dyadosporites*, *Dicellaeporisporites*, *Didymosporonites*, *Ornasporonites* and *Teleutospora* in having large verrucae on the surface (R.K. Saxena).

***Vesiculozygosporium* Crous**

Crous et al. (2020c) introduced this genus to accommodate *V. echinosporum* (F. Selcuk).

***Vinositunica* Koh. Yamam. et al.**

*Vinositunica* was introduced by Yamamoto et al. (2020) to accommodate *V. radiata* and *V. ingens* within *Endogonaceae*. *Vinositunica* is characterized by purplish sporocarps and red-wine-coloured chlamydospores up to 700 µm in diameter. *Vinositunica* is the only genus in *Endogonaceae* that forms chlamydospores but lacks an observation of sexual reproduction (Yamamoto et al. 2020) (M. Erdoğdu).

***Vredendaliella* C.F.J. Spies et al.**

Spies et al. (2020) introduced *Vredendaliella* within *Chaetothyriomycetidae* genera *incertae sedis* to accommodate *V. oleae* (the type species) isolated from necrotic wood of European olive (*Olea europaea* subsp. *europaea*) (M. Erdoğdu).

***Walkaminomyces* Crous & Carnegie**

Crous et al. (2019c) introduced this genus within the *Mycosphaerellaceae* to accommodate *Mycosphaerella medusa* based on DNA phylogenetic data. *Walkaminomyces* is characterized by a distinct germination pattern, germinating with 4–6 snake-like germ tubes per ascospore (Carnegie et al. 2011) (M. Erdoğdu).

***Windipila* M. Krings & C.J. Harper (fossil)**

*Windipila* is represented by two species, viz., *W. pumila* recorded from the Windyfield chert and *W. spinifera* from the Rhynie Chert (Early Devonian) of Scotland. The affinity of this fungal genus is unknown (R.K. Saxena).

***Xenomonodictys* Hern.-Restr. et al.**

Based on the phylogenetic results, combined with morphology and culture characteristics, Crous et al. (2020a) introduced *Xenomonodictys* as a monotypic genus in *Sporormiaceae*. The genus is typified by *X. iranica* collected from the wood of *Fagus orientalis* in Iran (Crous et al. 2020a) (M. Erdoğdu).

***Xenoplectosphaerella* Jayaward. et al.**

*Xenoplectosphaerella* was introduced by Phukhamsakda et al. (2020) as a monotypic genus in *Plectosphaerellaceae*. The genus was associated with a herbaceous plant in Thailand and formed obpyriform, coriaceous ascomata with papilla, with paraphyses, and uniquely spathulate asci (Carlucci et al. 2012, Grum-Grzhimaylo et al. 2016, Giraldo et al. 2019, Phukhamsakda et al. 2020) (M. Erdoğdu).

***Yosiokobayasia* Samson et al.**

Mongkolsamrit et al. (2020) introduced this genus with *Y. kusanaginensis* as the type species (F. Selcuk).

***Zwergimyces* M. Krings & T.N. Taylor (fossil)**

*Zwergimyces* is a monotypic genus of glomeromycetus fungi. It was recovered from the Early Devonian sediments of Muir of Rhynie, Aberdeenshire, Scotland (R.K. Saxena).



### ***Zygospermellaceae* S.K. Huang & K.D. Hyde**

Wijayawardene et al. (2020) listed these genera in *Lasiosphaeriaceae*. Huang et al. (2021b) introduced *Zygospermellaceae* to accommodate *Episternus* Górz & Boroń and *Zygospermella* Cain. (N. Wijayawardene).

### **Discussion for controversial taxa**

***Gigasporales*** S.P. Gautam & U.S. Patel (= *Gigasporales* Sieverd., G.A. Silva, B.T. Goto & Oehl) (Authors: B.T. Goto, F. Marguno, J. Błaszowski, F. Oehl, G.A. da Silva & F.A. de Souza)

*Gigasporales* has been supported by molecular phylogeny analysis based on LSU, SSU nuclear rDNA, *rpb1* and *rpb2* combined sequence data (Wijayawardene et al. 2020), with the families and genera introduced by (da Silva et al. 2012, Goto et al. 2010, 2011, 2012, Pontes et al. 2013, de Souza et al. 2018, Oehl et al. 2008, 2011c).

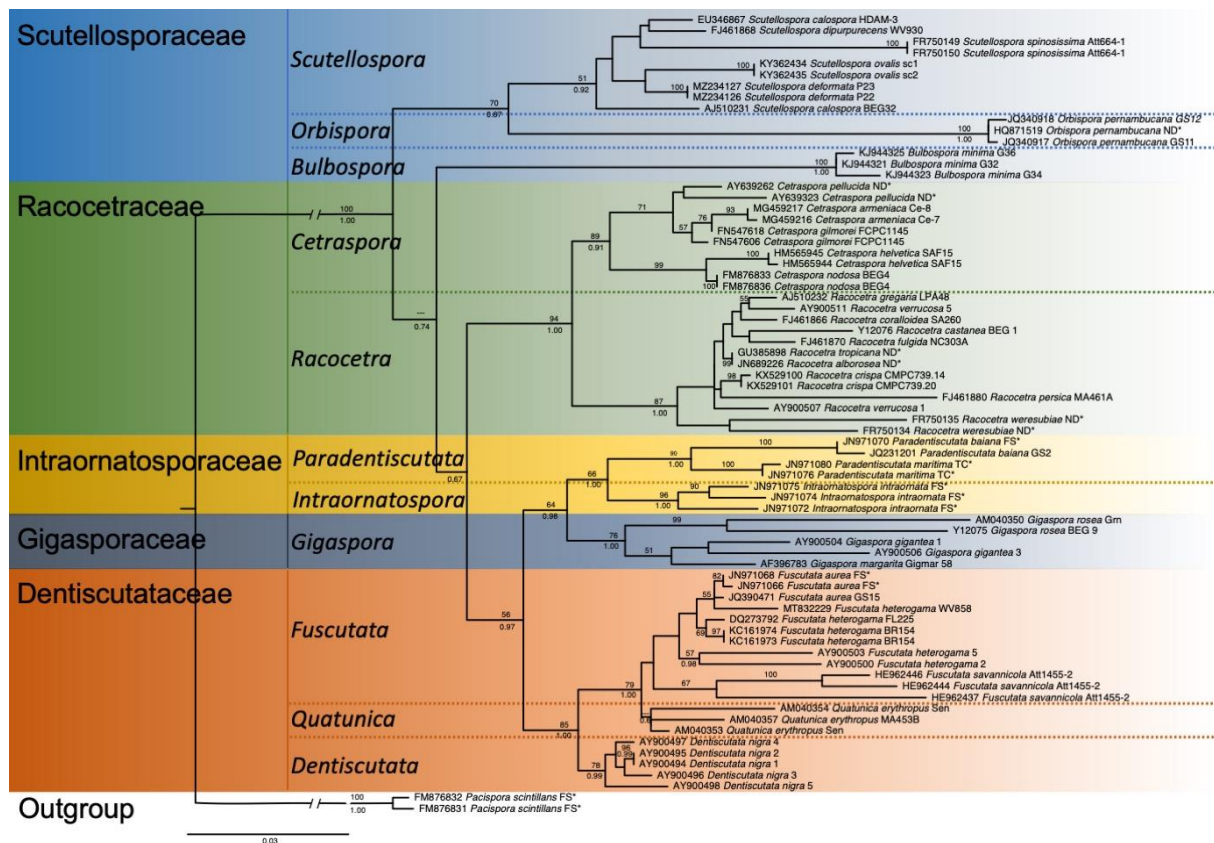
Here, we will shed light on criticism previously made regarding taxa in *Gigasporales*. A first revision of *Glomeromycota* species forming gigasporoid and scutellosporoid spores according to concomitant morphological and phylogenetic features introduced five new genera and three families based on monophyletic lineages (*Scutellosporaceae* – *Scutellospora*; *Dentiscutataceae* – *Dentiscutata*, *Fuscutata* and *Quatunica*; and *Racocetraceae* – *Racocetra* and *Cetraspora*) (Oehl et al. 2008). That proposal received some criticism (Morton & Msiska 2010, Redecker et al. 2013). It is important to point out that Morton & Msiska (2010) disagree mainly on the morphological approach used by Oehl et al. (2008), rather than on the monophyly of the groups based on molecular phylogenetic reconstructions. For instance, the phylogenetic tree (concatenated  $\beta$ -tubulin and nuclear LSU rDNA sequences) published by Morton & Msiska (2010) show the same topology for the clades introduced by Oehl et al. (2008) but with higher support. Besides, molecular phylogenies obtained with other gene markers also recovered the same topologies of the trees introduced by Oehl et al. (2008), supporting the families (*Scutellosporaceae*, *Dentiscutataceae* and *Racocetraceae*) as distinct monophyletic lineages from *Gigasporaceae* [see phylogenetic trees obtained using  $\beta$ -tubulin genes in Msiska and Morton 2010); mitochondrial COI gene (Borriello et al. 2014), LSU of RNA Polymerase II (Stockinger et al. 2014), and genomic assemblies (Montoliu-Nerin et al. 2021)]. Now, taxonomists consensually agree with all genera introduced by Oehl et al. (2008) except *Fuscutata* and *Quatunica* (Redecker et al. 2013, Wijayawardene et al. 2018).

Concern about *Gigasporaceae* lies on the fact that some taxonomists have different opinions regarding the families within *Gigasporales*. Most of them consider *Gigasporales* with five families (*Gigasporaceae*, *Dentiscutataceae*, *Intraornatosporaceae*, *Racocetraceae* and *Scutellosporaceae*) (Wijayawardene et al. 2020), while others consider only a single-family (*Gigasporaceae*) with eleven genera (Wijayawardene et al. 2018). However, the classification accepts the families *Dentiscutataceae*, *Gigasporaceae*, *Intraornatosporaceae*, *Racocetraceae*, *Scutellosporaceae* as representing distinct lineages (da Silva et al. 2012, Goto et al. 2010, 2011, 2012, Pontes et al. 2013, de Souza et al. 2018) is based on monophyletic groups. The advantage of a detailed classification of *Gigasporales* on a monophyletic basis at the level of family and genera is that it provides comprehensive information for ecological and evolutionary studies. For instance, microbiome of maize roots at the central region of Minas Gerais State, in Brazil, is dominated by *Gigasporales* (*Gigasporaceae*, *Racocetraceae* and *Scutellosporaceae*) over all the other families and genera in *Glomeromycota* (Gomes et al. 2015, 2018). In such a case, without a detailed classification, the interpretation of this type of study is jeopardized as different evolutionary lineages will be seen as single taxa.

Other discrepancies refer to genera *Fuscutata* and *Quatunica* (*Dentiscutataceae*). Both possess morphological and molecular evidence to support them (Fig. 2), and new species were proposed for *Fuscutata* (de Mello et al. 2012). However, the biggest issue concerning the problem to recognize *Dentiscutata heterogama* and *Fuscutata heterogama*. Oehl et al. (2008), examined the vouchers of the type specimens for *Scutellospora heterogama* (Nilcolson and Gerdemann 1968), and compared them with spores of the strains deposited in living culture collections as *S.*

*heterogama*. They conclude that vouchers deposited as type for *S. heterogama* were not related with the living cultures identified as such. Based on that, they transfer *Scutellospora heterogama* (type) to *Dentiscutata*, and described a new species *Fuscutata heterogama* using material from live culture collections. For instance, *Fuscutata savannicola* was erroneously transferred to *Dentiscutata* by Krüger et al. (2014). Their study lacks proper representative sequences from type species of the genus *Dentiscutata* (*D. nigra*). Besides, they named *F. heterogama* sequences as *D. heterogama* a species that based on our knowledge has no living culture available on germplasm collections. In addition, as pointed by de Souza et al. (2018), sequences of *D. reticulata* used by Krüger et al. (2014) were chimeric as they contain a LSU fragment while the original sequences covers only the SSU and ITS regions of the rRNA gene (de Souza et al. 2005). The chimeric fragment added to the original sequences blast results are from *Cetraspora gilmorei* and this can be verified analyzing the alignment available in TreeBASE ID:15080 (M24197) deposited by Krüger et al. (2014).

The *Gigasporales* tree (Fig. 2) was reconstructed using nuclear LSU rDNA sequences, because it is the only marker with sequences from type species for all eleven genera within this order. We considered the inclusion of sequences from type specimens (and new species) as the fundamental ground for phylogenetic proposals in *Glomeromycota* (Chimal-Sánchez et al. 2021, Guillén et al. 2021, Crossay et al. 2018, de Souza et al. 2018, de Pontes et al. 2013, de Melo et al. 2012, Goto et al. 2010, 2011, Oehl et al. 2010).



**Figure 2** – *Gigasporales* with six families and eleven genera based on monophyletic clades. Phylogenetic tree reconstructed using partial nuclear LSU rDNA sequence. This marker was chosen as it is the only marker with sequences from type species for all eleven genera within this order. The tree was rooted using *Pacispora scintillans*. Sequences are labelled with database accession numbers, followed by isolate/strains code. Support values (from top) are from Maximum Likelihood (ML) 1000 bootstrap replicates and (from bottom) Bayesian posterior probabilities. Only bootstrap values of at least 50 % are shown. Posterior probabilities are shown only for the branch at family and generic levels. FS – Field Spore; ND – No data; TC – Trap Culture.

## **Updates in *Basidiomycota* (Authors: M.Q. He & J.X. Li)**

The main changes of the system of *Basidiomycota* are new rankings proposed to accommodate new taxa discovered worldwide. Most of them are under ordinal level as family and or genus. Since the latest outline of *Basidiomycota* published (He et al. 2019), there are 76 new genera, 22 new families and four new orders published. The new genera are mainly from *Agaricomycetes* (47), *Pucciniomycetes* (8), and *Microbotryomycetes* (6). The new families are mainly from *Pucciniales* (11) and *Agaricales* (4). Four new orders are *Chionasterales* (*Tremellomycetes*), *Cintractiellales* (*incertae sedis* in *Ustilaginomycotina*), *Heitmaniales* (*Microbotryomycetes*) and *Rosettozymales* (*Microbotryomycetes*). The main updates are introduced as follows:

### ***Agaricomycotina***

#### ***Agaricomycetes***

There are 47 new genera and six families introduced in *Agaricomycetes*. The six families are *Callistosporiaceae*, *Phyllotopsidaceae*, *Radulomycetaceae* and *Sarcomyxnaceae* in *Agaricales*; *Lobuliciaceae* in *Atheliales*; *Terrestriporiaceae* in *Russulales*. *Callistosporiaceae* is proposed based on multigene phylogenetic analyses of Tricholomatoid clade. It is typified by *Callistosporium* and include *Anupama*, *Guyanagarika*, *Macrocybe*, *Pseudolaccaria*, and *Xerophorus* (Vizzini et al. 2020). The basidiomes of the species in *Callistosporiaceae* can be tricholomatoid, collybioid or pleurotoid and veils are absent. *Phyllotopsidaceae* is a new family of clavarioid and pleurotoid fungi which was typified by *Phyllotopsis* and also accommodate genera *Macrotyphula* and *Pleurocybella*. Species from this family form a pleurotoid or clavarioid basidiome and sometimes arise from a sclerotium. Spore deposit white to salmon pink (Olariaga et al. 2020). *Sarcomyxnaceae* is introduced to encompass *Sarcomyxa* which is the only genus at present (Olariaga et al. 2020). *Radulomycetaceae* is introduced to include taxa that differ from resupinate forms of *Pterulaceae* in the monomitic hyphal system and the absence of cystidia. It is typified by *Radulomyces* and composes *Aphanobasidium* and *Radulotubus* (Leal-Dutra et al. 2020). *Lobuliciaceae* is a new family proposed which sister to the rest of *Atheliales*. This family include only the type genus *Lobulicium*, a monotypic genus with a distinct morphology of seven-lobed basidiospores (Sulistyo et al. 2021). *Terrestriporiaceae* typified by *Terrestriporia* is found in Malaysia. The species of which forms annual, resupinate basidioma and poroid hymenophore. Currently, the family is monotypic (Wu et al. 2020).

#### ***Dacrymycetes***

*Dacryonaemataceae* is proposed to accommodate *Dacryonaema* which previously is placed in *Dacrymycetaceae* (He et al. 2019). *Dacryonaemataceae* is classified as *incertae sedis* in *Dacrymycetes*.

#### ***Tremellomycetes***

*Chionasterales* is a new order proposed to accommodate *Chionaster* which was previously recognized as algae. In multigene phylogenetic analyses, species of *Chionaster* form a clade in *Tremellomycetes*. *Chionasterales* include a single-family *Chionasteraceae* and a single genus *Chionaster*. Species from this order are psychrophilic and globally distributed (Irwin et al. 2021).

### ***Pucciniomycotina***

#### ***Agaricostilbomycetes***

*Jianyuniaceae* is proposed to accommodate three genera as *Jianyunia*, *Sterigmatospora*, and *Pseudosterigmatospora*. It is classified in *Agaricostilbales*. The type genus of this family is *Jianyunia* which previously is classified as *incertae sedis* in *Agaricostilbomycetes*. This family is mainly circumscribed by the phylogenetic analysis of the seven genes dataset.

#### ***Microbotryomycetes***

Two new orders, *Heitmaniales* and *Rosettozymales*, were introduced in *Microbotryomycetes*

with two new families *Heitmaniaceae* and *Rosettozymaceae*, respectively. *Heitmania* is the type and only genus of *Heitmaniaceae* which is previously ranked as *incertae sedis* in Microbotryomycetes (He et al. 2019). *Rosettozyma* is the type and only genus of *Rosettozymaceae* in *Rosettozyma*les. This genus is mainly circumscribed by the phylogenetic analysis of the seven genes dataset (Li et al. 2020b).

### ***Pucciniomycetes***

There are 11 new families proposed in *Pucciniomycetes* and all in *Pucciniales*. The 11 new families are *Araucariomycetaceae*, *Crossopsoraceae*, *Endoraeciaceae*, *Gymnosporangiaceae*, *Milesinaceae*, *Neophysopellaceae*, *Ochropsoraceae*, *Rogerpetersoniaceae*, *Skierkaceae*, *Tranzscheliaceae*, and *Uromycladiaceae*. *Araucariomycetaceae* is typified by *Araucariomyces* which differs from all other *Pucciniales* in forming gametothalli on *Agathis*. *Crossopsoraceae* is typified by *Crossopsora* and includes *Angiopsora*, *Catenulopsora*, *Kweilingia*, *Neoolivea*, *Neophysopella*, and *Stomatisora* (Aime & McTaggart 2021). *Endoraeciaceae* is typified by *Endoraecium* which is the only genus in this family at present (Zhao et al. 2021). *Gymnosporangiaceae* was proposed to accommodate *Gymnosporangium* (Zhao et al. 2020). *Milesinaceae* is typified by *Milesina* and includes *Milesia*, *Naohidemycetes*, and *Uredinopsis*. Further study is needed to verify if *Milesina* and *Milesia* are congeneric or not. *Neophysopellaceae* is typified by *Neophysopella* which is the only genus in this family at present (Zhao et al. 2021). *Ochropsoraceae* is typified by *Ochropsora* and includes *Aplopsora*. Previously these two genera were placed in *Chaoniaceae* and *Uropyxidaceae* (He et al. 2019). *Rogerpetersoniaceae* was proposed with the type genus *Rogerpetersonia*. Species of this family differs from all other *Pucciniales* in that gametothalli are formed on *Taxaceae*. *Skierkaceae* was proposed with the type genus *Skierka*. *Tranzscheliaceae* was proposed with the type genus *Tranzschelia* and also includes *Leucotelium*. *Uromycladiaceae* is typified by *Uromycladium* which is the only genus in this family at present (Zhao et al. 2021). Seven suborders in *Pucciniales* were proposed as *Araucariomycetinae*, *Melampsorineae*, *Mikronegeriineae*, *Raveneliineae*, *Rogerpetersoniineae*, *Skierkineae*, and *Urediniineae* (Aime & McTaggart 2021). This classification system of rust fungi was accepted in a study of Indian rust fungi (Gautam et al. 2021) but not in a study of rust fungi in China (Zhao et al. 2021).

### ***Ustilaginomycotina* Order *incertae sedis***

*Cintractiellales* is proposed to accommodate *Cintractiellaceae* which typified by *Cintractiella*. *Cintractiellaceae* is previously classified in *Ustilaginales* in *Ustilaginomycetes*, but now in *Cintractiellales* as *incertae sedis* in *Ustilaginomycotina*.

### **Genera in *Phaeosphaeriaceae* (Author: D.N. Wanasinghe)**

Given that *Phaeosphaeriaceae* composed of 82 genera (Wijayawardene et al. 2020), it is regarded as one of the largest families in *Dothideomycetes* (Hongsan et al. 2020). In this study, we have included representative sequence data of all available genera listed in Wijayawardene et al. (2020) for the phylogenetic analyses (except *Aphanostigme* Syd., *Bricookea* M.E. Barr, *Eudarluc*a Speg., *Phaeostagonospora* A.W. Ramaley and *Tiarospora* Sacc. & Marchal, which lack DNA-based sequence data). In addition, published data for *Alloneottiosporina* Nag Raj (Li et al. 2020), *Diederichomyces* Crous & Trakun. (Trakuningcharoen et al. 2014), *Elongaticollum* Tennakoon, C.H. Kuo & K.D. Hyde (Tennakoon et al. 2020) and *Megacoelomyces* Dianese et al. (Santos et al. 2021) were also included in the final dataset. The phylogeny generated herein (Fig. 3) is congruent with those of other recently published studies to resolve intergeneric relationships in *Phaeosphaeriaceae* (Hongsan et al. 2020, Tennakoon et al. 2020).

Marin-Felix et al. (2019) showed that, in their combined multi-gene phylogenetic analysis, the ex-type strains of the sexual genera *Allophaeosphaeria* Ariyaw. et al., *Poaceicola* W.J. Li et al. and *Vagicola* Chethana & K.D. Hyde were nested in the clade representing *Septoriella* Oudem. Therefore, these genera were synonymized with *Septoriella* in the Marin-Felix et al. (2019).

However, this was not accepted by Hongsanan et al. (2020) and Wijayawardene et al. (2020). The combined SSU, LSU, ITS, *tef1*- $\alpha$  and *rpb2* data analysis in this study (Fig. 3), also reflects an adjacent relationship between the *Allophaeosphaeria*, *Poaceicola*, *Septoriella* and *Vagicola*, which is a similar phylogenetic scenario as reported by Marin-Felix et al. (2019).

Our molecular based phylogeny also highlights a monophyletic affinity of the ex-type strains of *Amarenographium ammophilicola* Dayar. et al., *Amarenomyces dactylidis* Mapook et al., *Dactylidina dactylidis* (Wanas. et al.) Wanas. & K.D. Hyde, *D. shoemakeri* Wanas. et al., *Hydeopsis verrucispora* J.F. Zhang et al., *Loratospora luzulae* Jayasiri et al., *Phaeopoacea asparagicola* Phukhams. et al., *Phaeosphaeria nardi* (Fr.) L. Holm and the representative strain of *Amarenomyces ammophilae* (Lasch) O.E. Erikss. with the remaining taxa in *Septoriella*. Given that analyses of our single and concatenated datasets consistently support a monophyletic lineage of above-mentioned species along with the basal two ex-type strains of *Phaeopoacea muriformis* Karun. et al. and *P. festucae* Dissan. & K.D. Hyde (Fig. 3), we believe that these all could be considered as *Septoriella* species. We also noted peculiar taxonomic disparities with the placements of *Didymocyrtis brachylaenae* Crous, *Muriphaeosphaeria angustifoliae* D. Pem et al., *M. viburni* Crous et al., *Scolicosporium minkeviciusii* Treigienė and ‘*Stagonospora*’ *foliicola* (Bres.) Bubák (strain CBS 110111). Our phylogenetic results herein postulated that further taxonomic sampling is warranted to clarify taxonomic relationships of these ambiguous species to shed more light into the generic relationships in *Phaeosphaeriaceae*. Nevertheless, in here we follow the classification as in Hongsanan et al. (2020) pending further collections of each genus.

#### **Taxonomic conundrums of *Capnodiales* and *Mycosphaerellales* (*Dothideomycetes*) (Author: K.C. Rajeshkumar)**

Members of *Capnodiales* and *Mycosphaerellales* belonging to *Dothideomycetes* are ecologically diverse and have a cosmopolitan distribution. They thrive in aquatic and terrestrial habitats and have diverse lifestyles such as epiphytes, endophytes, saprobes, plant and animal pathogens, mycoparasites, mycorrhizal, lichenized and rock-inhabiting fungi (Schoch et al. 2009, Schoch & Grube 2015, Ametrano et al. 2019). Understanding and resolving the taxonomy of genera and species of *Dothideomycetes* have utmost importance given their impact on agriculture, horticulture and forestry. Members of *Dothideomycetes* are mainly characterized by bitunicate asci with fissitunicate dehiscence. *Dothideomycetes* currently encompass more than 25 orders, 110 families and over 19,000 species, thereby representing the largest class of *Ascomycota* (Schoch et al. 2009, Hyde et al. 2013, Jaklitsch et al. 2015, Schoch & Grube 2015, Van Nieuwenhuijzen et al. 2016, Bezerra et al. 2017, Videira et al. 2017, Wijayawardene et al. 2017, 2020, Abdollahzadeh et al. 2020).

*Capnodiales* was originally established for three families of sooty moulds, namely *Antennulariaceae*, *Capnodiaceae* and *Coccodiniaceae* (Woronichin 1925). Schoch et al. (2006) transferred *Mycosphaerellaceae* and *Piedraiaceae* to the *Capnodiales* and recognized the *Cladosporiaceae* (= *Davidiellaceae*), thereby expanding the concept of the order. Subsequent phylogenetic studies further expanded the concept of *Capnodiales*, making it the second-largest order of *Dothideomycetes*. Hawksworth et al. (1995) treated *Mycosphaerellaceae* as a family in the *Dothideales*, while Kirk et al. (2001) introduced a separate order *Mycosphaerellales* Cannon for this family and later revised it under the *Capnodiales* (Kirk et al. 2008). Lately, Abdollahzadeh et al. (2020) revalidated *Mycosphaerellales* as a separate order based on LSU, *tef1*- $\alpha$  and *rpb2* sequence data and analyses accommodating eight families *Cystocoleaceae*, *Dissoconiaceae*, *Extremaceae*, *Mycosphaerellaceae*, *Neodevriesiaceae*, *Phaeothecoidiellaceae*, *Schizothyriaceae* and *Teratosphaeriaceae* formerly treated in *Capnodiales*.

*Mycosphaerellaceae* Lindau was introduced in Engler & Prantl (1897) with *Mycosphaerella* as the generic type, initially including 14 genera based on morphological characteristics viz. *Achorodopsis*, *Brunneosphaerella*, *Cymadothea*, *Euryachora*, *Gillotia*, *Melanodopsis*, *Mycosphaerella*, *Placocrea*, *Polysporella*, *Pseudostigmidium*, *Sphaerellothecium*, *Sphaerulina*, *Stigmidium*, and *Wernerella* (Lumbsch & Huhndorf 2010). The flagship family



*Mycosphaerellaceae* is recognized by having characteristic pseudothecial ascomata that can be immersed or superficial, embedded in host tissue or erumpent, having ostiolar periphyses, but lacking interascal tissue at maturity. Ascospores are hyaline, but in some cases slightly pigmented (Barr 1987), and predominantly 1-septate, although some taxa with 3-septate ascospores have been recorded (Crous et al. 2003). With the advent of molecular tools, initially, *Mycosphaerellaceae* was circumscribed as polyphyletic (Crous et al. 2007, 2009a, c) but later split into several families, namely *Schizothyriaceae* (Batzler et al. 2008), *Cladosporiaceae* (Schubert et al. 2007, Dugan et al. 2008, Bensch et al. 2012, 2015), *Dissoconiaceae* and *Teratosphaeriaceae* (Crous et al. 2009b, Li et al. 2012, Quaedvlieg et al. 2014). Based on morphological studies of the generic types as well as the representative species coupled with phylogenetic analysis, Hyde et al. (2013) re-circumscribed the genera in *Mycosphaerellaceae* and accepted 46 genera in this family. Subsequent authors have included many genera in *Mycosphaerellaceae* based on molecular data along with morphological characteristics of their asexual morphs (Quaedvlieg et al. 2014, Bakhshi et al. 2015, Crous et al. 2016b, 2017, 2019b, Guatimosim et al. 2016, Videira et al. 2016, 2017, Hyde et al. 2017, Thambugala et al. 2017, Hassan & Chang 2019). While addressing the chaos and clarity of *Mycosphaerellaceae*, Videira et al. (2017) stated that many well-known genera are shown to be paraphyletic, with several synapomorphic characters that have evolved more than once within the family. As a consequence, several old generic names including *Cercosporidium*, *Fulvia*, *Mycovellosiella*, *Phaeoramularia* and *Ragnildiana* are resurrected, and 32 additional new genera are described. Videira et al. (2017) accepted 120 genera based on phylogenetic data in the family, but many accepted cercosporoid genera remain unresolved due to pending fresh collections and DNA sequence data. They also presumed that even though type species of several genera have been reliably identified and typified, many genera remain unresolved or need an in-depth study and new patterns of coevolution with different fungal genera and their associated host families will emerge, that will eventually lead to more clarity. Recently, while revisiting the circumscription of *Dothideomycetes*, Hongsanan et al. (2020) also challenged the generic status of several *Mycosphaerellaceae* members due to the lack of molecular data of the generic type to confirm their phylogenetic affinities. They treated 112 genera in *Mycosphaerellaceae* based on molecular data and the other 107 genera are treated as doubtful genera in *Mycosphaerellaceae* pending further studies.

### **Major changes in the treatment of genera under *Capnodiales***

***Capnodiaceae* (Sacc.) Höhn. ex Theiss.**

***Heteroconium* Petr.**

Hernandez-Restrepo et al. (2017) treated *Heteroconium* as polyphyletic. However, the type species, *H. citharexylis* was placed under *Heteroconium sensu stricto* (*Capnodiaceae*) based on LSU sequence data and analysis but other species in this genus are of uncertain affinities. Recently, Abdollahzadeh et al. (2020) revalidated *Heteroconium* based on LSU data and treated the genus under *Capnodiaceae*.

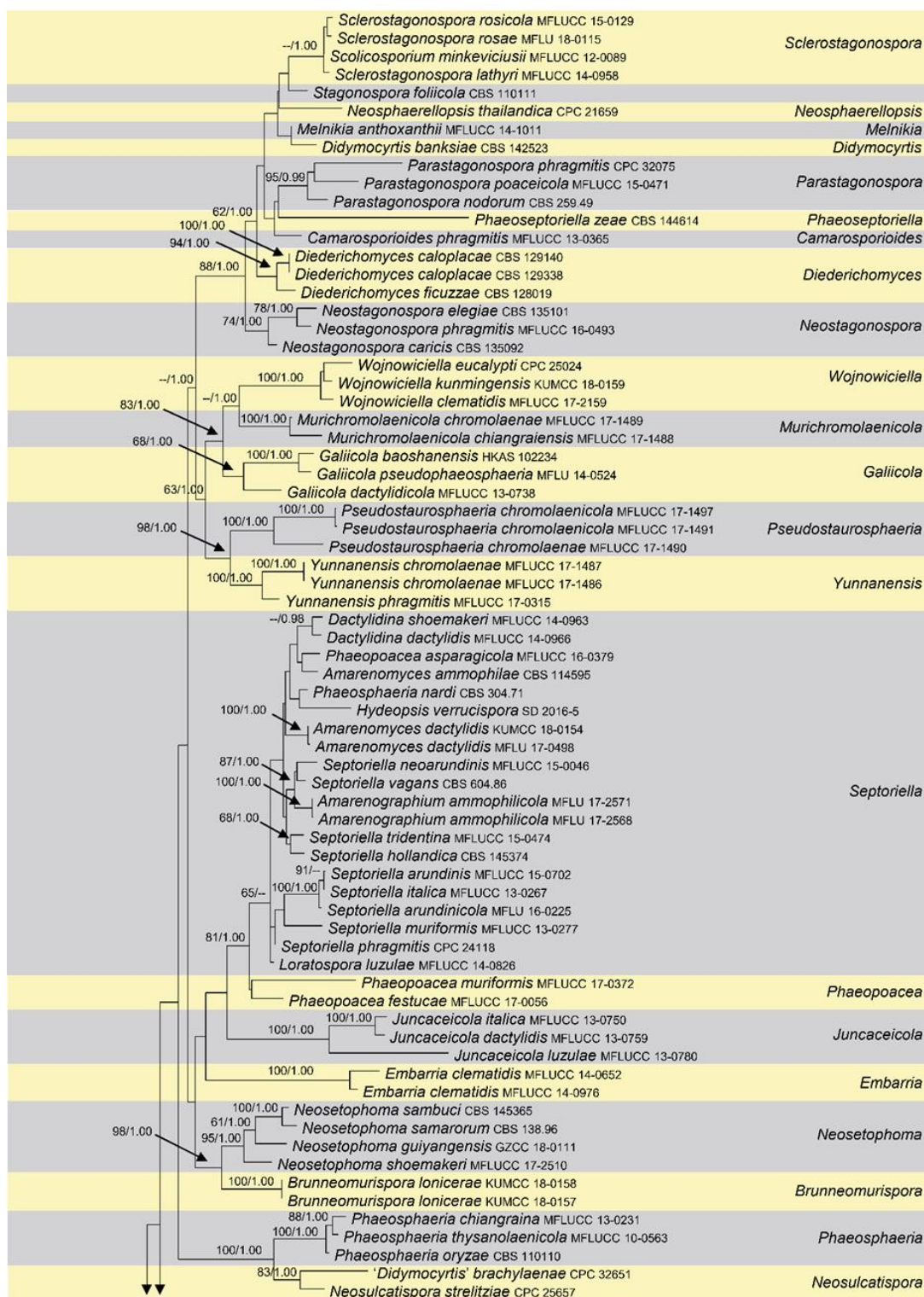
***Phragmocapnias* Theiss. & Syd.**

Phylogenetic analyses based on four loci (LSU, ITS, *tef1-α* and *rpb2*) differentiated two species of *Conidiocarpus*, *Co. betle* and *Co. plumeriae* as a distinct lineage adjacent to *Conidiocarpus* clade. Hence a new genus *Phragmocapnias* typified by *P. betle* was resurrected and a new combination introduced for *Conidiocarpus plumeriae* as *P. plumeriae* (Abdollahzadeh et al. 2020). Of the ten-known species of *Conidiocarpus* only six have DNA sequence data hence the phylogenetic placement of the remaining four species are unresolved.

***Polychaeton* (Pers.) Lév.**

*Polychaeton* was considered as an asexual morph of *Capnodium*, the type genus of *Capnodiaceae* established by Montagne (1849) based on *Fumago citri* (Friend 1965). Considering *One fungus One name* concept, Chomnunti et al. (2011) synonymised *Polychaeton* under

*Capnodiaceae*. Abdollahzadeh et al. (2020) examined isolate CBS 116435 deposited as *Po. citri* (Pers.) Lév. from Iran on *Citrus aurantium*, isolated by Walter Gams. In their phylogenetic analyses, this isolate clustered in a distinct clade close to *Conidiocarpus* and *Phragmocapnias*. Hence, we treated *Polychaeton* under *Capnodiaceae*. Further studies are required to resolve the taxonomy of the various species described in the genus.



**Figure 3** – Phylogram generated from maximum likelihood analysis (RAxML) of genera in *Phaeosphaeriaceae* based on SSU, LSU, ITS, *tef1-α* and *rpb2* sequence data. Maximum likelihood bootstrap values equal or above 60 %, Bayesian posterior probabilities equal or above 0.95

(MLBS/PP) are given at the nodes. The tree is rooted to *Leptosphaeria doliolum* (CBS 505.75) and *Paraleptosphaeria dryadis* (CBS 643.86). Hyphen (-) represents support values below 60 % MLBS and 0.95 PP. The original isolate number is noted after each species name. The scale bar represents the expected number of nucleotide substitutions per site.

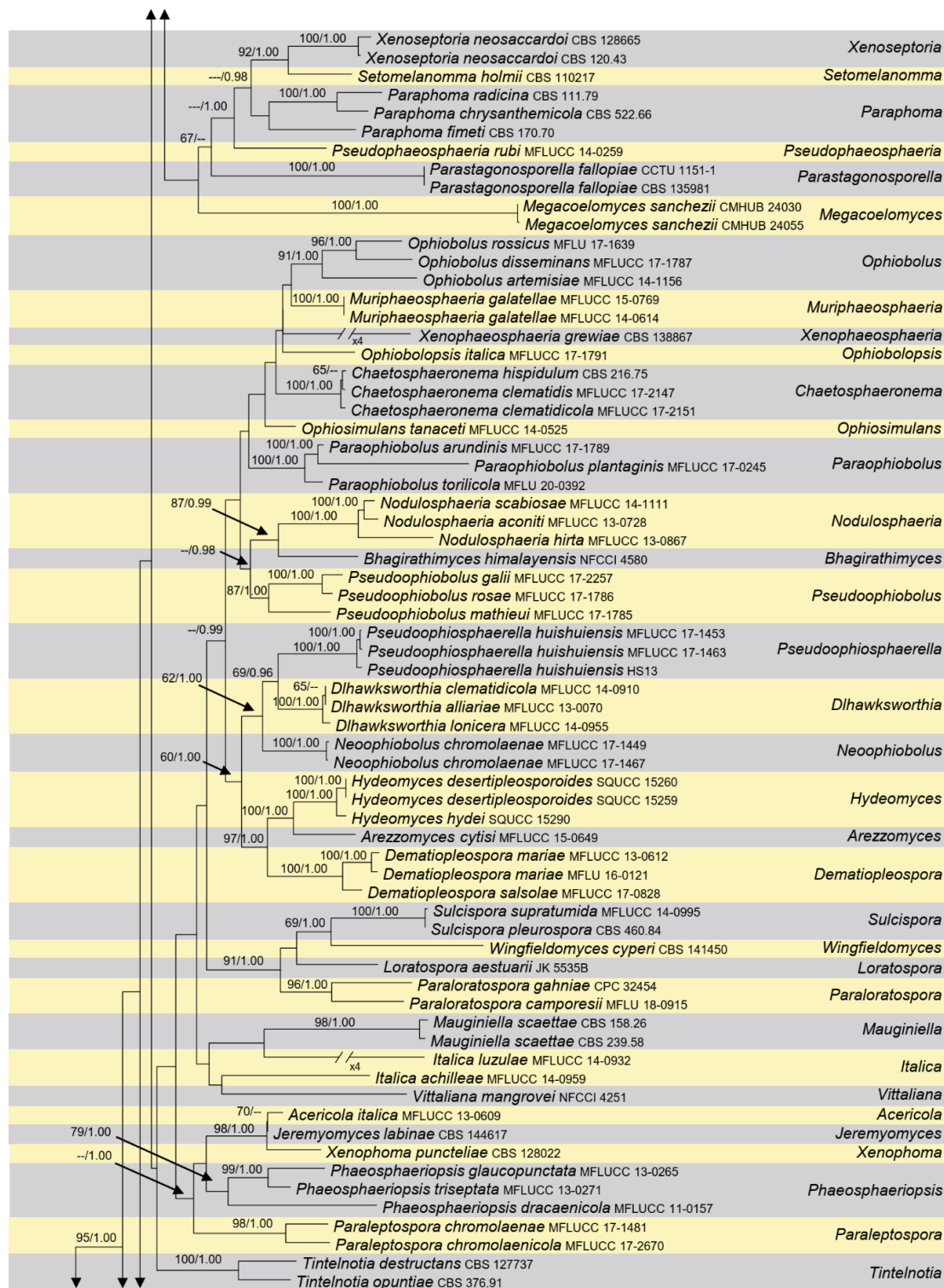
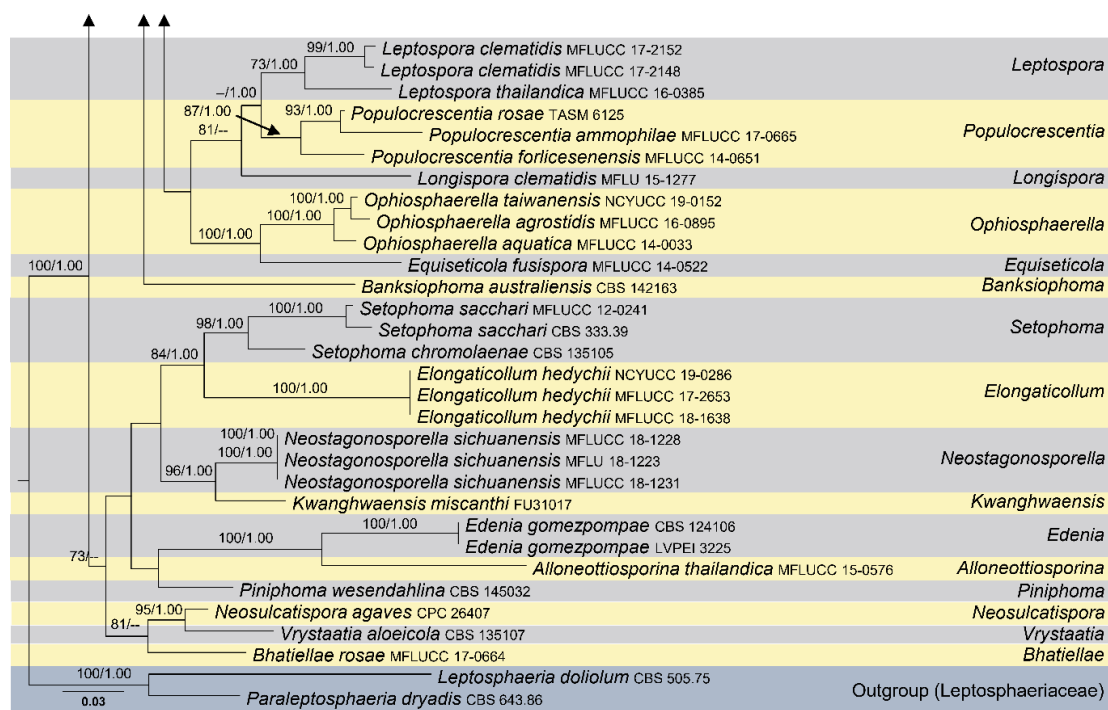


Figure 3 – Continued.





**Figure 3 – Continued.**

In this appraisal, we follow the treatment of Abdollahzadeh et al. (2020) and Hongsan et al. (2020) as a baseline along with the recent treatments and additions under *Capnodiales* and *Mycosphaerellales* from across the world. This study follows Abdollahzadeh et al. (2020) and treated *Mycosphaerellaceae* under *Mycosphaerellales*. We accept a total of 119 genera having molecular data under *Mycosphaerellaceae*.

#### ***Neoantennariellaceae* Abdollahz. & Crous**

The *Neoantennariellaceae* is introduced to accommodate *Fumiglobus* D.R. Reynolds & G.S. Gilbert and two new monotypic genera, *Neoantennariella* Abdollahz. & Crous and *Neoasbolisia* Abdollahz. & Crous (Abdollahzadeh et al. 2020). All three genera produce pycnidial conidiomata. According to Index Fungorum and MycoBank, *Fumiglobus* presently contains 10 names, of which LSU and ITS sequences data are only available for *F. pieridicola* (Abdollahzadeh et al. 2020).

#### ***Readeriellipsidaceae* Abdollahz. & Crous**

Abdollahzadeh et al. (2020) introduced *Readeriellipsidaceae* to accommodate four coelomycetous genera, namely *Phaeoxyphiella*, *Readeriellipsis*, *Scolecocyphium* and *Scorias* and eight new species have been recognised. Abdollahzadeh et al. (2020) recognized *Scolecocyphium* Cif. & Bat with the introduction of four new species based on ITS, LSU, *tef1-α*, *rpb2* sequence data and analyses under *Readeriellipsidaceae*. However, four previously established species in *Scolecocyphium* including type species established by Ciferri et al. (1956) and additional three species by Batista & Ciferri (1963) were not having cultures or sequence data. The type species of *Scolecocyphium*, *Scolecocyphium fraseri* Cif. & Bat. warranted an epitypification. Recently, a new genus *Alloscorias* Haituk & Cheew was introduced by Haituk et al. (2021) based on ITS, LSU, *tef1-α* and *rpb2* sequence data and analyses.

#### **Major changes in the treatment of genera under *Mycosphaerellales***

##### ***Mycosphaerellales* Nannf. (P.F. Cannon)**

Abdollahzadeh et al. (2020) revalidated *Mycosphaerellales* as a separate order based on LSU, *tef1-α* and *rpb2* sequence data and analyses accommodating eight families *Cystocoleaceae*,

*Dissoconiaceae*, *Extremaceae*, *Mycosphaerellaceae*, *Neodevriesiaceae*, *Phaeothecoidiellaceae*, *Schizothyriaceae* and *Teratosphaeriaceae* formerly treated in *Capnodiales*.

### ***Extremaceae* Quaedvl. & Crous**

*Extremaceae* was introduced by Quaedvlieg et al. (2014) and validated by Crous et al. (2019b) under *Capnodiales*. Currently, Abdollahzadeh et al. (2020) treated it under *Mycosphaerellales* based on LSU, *tefl-α* and *rpb2* sequence data and analyses. Crous et al. (2019b) introduced *Paradevriesiaceae* as a separate family including three species of *Paradevriesia*. But, Hongasanan et al. (2020) synonymized *Paradevriesiaceae* under *Extremaceae* and also stated that Crous et al. (2019b) treated it as a separate family because they did not include sequence data of *Extremaceae* in their phylogenetic tree. Meantime, Hongasanan et al. 2020, wrongly cited *Vermiconidia* as *Vermiconia* Egidio & Onofri in their checklist but elaborated correctly in their description. Recently, a new genus *Extremopsis* G. Delgado & Maciá-Vicente was introduced in *Extremaceae* based on ITS and LSU sequence data and analyses (Crous et al. 2021b).

Dai et al. (2014) treated *Eriosporella* Höhn. under *Capnodiales incertae sedis* as it forms a cluster with *Pseudoramichloridium*, a genus currently placed under *Extremaceae* based on SSU & LSU sequence data. Considering this fact, we treat *Eriosporella* under *Extremaceae*. A BLASTn in NCBI based on LSU sequence data and a tree was made using BLAST pairwise alignments (fast minimum evolution, max sequence difference 0.1) also supported the placement of *Eriosporella* allied to *Pseudoramichloridium*. Hence, we treated *Eriosporella* under *Extremaceae*.

### ***Mycosphaerellaceae* Lindau**

*Mycosphaerellaceae* was treated as a family in the *Dothideales* by Hawksworth et al. (1995), while Kirk et al. (2001) introduced a separate order, the *Mycosphaerellales* Cannon for this family, and Kirk et al. (2008) again placed it in the *Capnodiales*. Abdollahzadeh et al. (2020) revalidated *Mycosphaerellaceae* under *Mycosphaerellales* based on LSU, *tefl-α* and *rpb2* sequence data and analyses. Videira et al. (2017) made a significant revision of this family with the addition of 32 genera and accepted 120 valid genera in *Mycosphaerellaceae* based on molecular data. The generic status of the many morphologically established genera was considered questionable due to the lack of molecular data. Hongasanan et al. (2020), accepted 112 genera based on molecular data and additional 107 genera are listed as doubtful genera that need further authentication.

Crous et al. (2019d) introduced *Hippopotamycus* Crous, *Neokirramycus* Crous under *Mycosphaerellaceae*, *Capnodiales* based on ITS, LSU and *rpb2* sequence data and analyses. However, Abdollahzadeh et al. (2020) segregated *Mycosphaerellaceae* under *Mycosphaerellales*. Hence, we included *Hippopotamycus* and *Neokirramycus* under *Mycosphaerellaceae*, *Mycosphaerellales*. *Neosonderhenia* Crous was introduced by Crous et al. (2019c) in *Mycosphaerellaceae*, *Capnodiales*. Recently, Rajeshkumar et al. (2021) treated *Neosonderhenia* under *Mycosphaerellaceae*, *Mycosphaerellales*. So, we placed *Neosonderhenia* in *Mycosphaerellaceae*, *Mycosphaerellales*.

Crous et al. (2020c) also introduced *Nothoseptoria* Crous & Bulgakov and *Pruniphilomyces* Crous & Bulgakov under *Mycosphaerellaceae*, *Mycosphaerellales* based on ITS, LSU, *rpb2* and *tub2* sequence data and analyses. In an interesting study on revalidation and epitypification of *Asperisporium pongamiae*, Rajeshkumar et al. (2021) introduced *Pedrocrousiella*, *P. pongamiae* under *Mycosphaerellaceae*, *Mycosphaerellales* based on ITS, LSU and *rpb2* sequence data and phylogeny. Their study established Videira et al. (2017) observation on the presence of paraphyletic placement of synanamorphic genera and their multiple origins within *Mycosphaerellaceae*. *Walkaminomyces* Crous & Carnegie was listed under *Teratosphaeriaceae* in Mycobank and Index Fungorum. But while studying foliar pathogens of *Eucalyptus*, Crous et al. (2019c) treated this genus under *Mycosphaerellaceae* based on DNA sequence data (ITS, LSU & *rpb2*) and BLAST analyses in NCBI (Crous et al. 2019c). So, we treated this genus under *Mycosphaerellaceae*.

### ***Phaeothecoidiellaceae* K.D. Hyde & Hongsanan**

This family was established within *Capnodiales* to accommodate *Chaetothyria*, *Houjia* and *Phaeothecoidiella* by Hongsanan et al. (2017). However, Abdollahzadeh et al. (2020) revised the placement of *Phaeothecoidiellaceae* under *Mycosphaerellales*. Formerly, Hongsanan et al. (2020) synonymised *Nowamycetaceae* introduced by Crous et al. (2019c) to accommodate two species of *Nowamycetes* under *Phaeothecoidiellaceae*. Recently, a new genus *Neochaetothyria* Crous was introduced in *Phaeothecoidiellaceae*, *Mycosphaerellales* based on ITS, LSU and *rpb2* sequence data and analyses (Crous et al. 2021b).

### ***Teratosphaeriaceae* Crous & U. Braun**

#### ***Nothotrimmatostroma* Crous**

*Nothotrimmatostroma* Crous was included in *Mycosphaerellaceae* in MycoBank and Index Fungorum (IF), but while studying foliar pathogens of *Eucalyptus*, Crous et al. (2019c) placed *Nothotrimmatostroma* Crous, under *Teratosphaeriaceae* based on LSU sequence analysis (Crous et al. 2019c). So, we treated *Nothotrimmatostroma* under *Teratosphaeriaceae*.

### ***Mycosphaerellales* genera incertae sedis**

#### ***Arthrocatena* Egidi & Selbmann and *Hyphoconis* Egidi & Quaedv.**

Egidi et al. (2014) placed *Arthrocatena* Egidi & Selbmann and *Hyphoconis* Egidi & Quaedv., as separate highly-supported basal clades to *Teratosphaeriaceae*. *Teratosphaeriaceae* is currently treated under *Mycosphaerellales*, so in this work, we treated *Arthrocatena* Egidi & Selbmann and *Hyphoconis* Egidi & Quaedv. under *Mycosphaerellales* genera incertae sedis.

### ***Brunneomycosphaerella* Dissanayake et al.**

*Brunneomycosphaerella* was introduced by Liu et al. (2015) under *Capnodiales* along with (sister clade) *Cystocoleus* based on LSU and SSU sequence data and phylogeny. Formerly, Lücking et al. (2017) established the monotypic family *Cystocoleaceae* under *Capnodiales*, which include a single genus *Cystocoleus*. But Abdollahzadeh et al. (2020) segregated *Cystocoleaceae* under *Mycosphaerellales*. So, we place *Brunneomycosphaerella* under *Mycosphaerellales*, incertae sedis as the familial placement of this genus has not been validated.

### ***Mucomycosphaerella* Quaedv. & Crous**

*Mucomycosphaerella* Quaedv. & Crous was placed as incertae sedis allied to *Schizothyriaceae* based on ITS and LSU sequence data (Quaedvlieg et al. 2014). Currently, *Schizothyriaceae* is placed under *Mycosphaerellales* (Abdollahzadeh et al. 2020) therefore, we treat *Mucomycosphaerella* in *Mycosphaerellales* incertae sedis.

### ***Mycophycias* Kohlm. & Volkm.-Kohlm**

*Mycophycias* Kohlm. & Volkm.-Kohlm was treated under *Capnodiales* incertae sedis by Toxopeus et al. (2011). But in their phylogenetic tree, *Mycophycias* was clustered together with members of *Mycosphaerellales*. Hence we treated *Mycophycias* under *Mycosphaerellales* genera incertae sedis.

### ***Neohortaea* Quaedvlieg & Crous**

*Neohortaea* Quaedvlieg & Crous was introduced in *Teratosphaeriaceae* (Quaedvlieg et al. 2014). However, Hongsanan et al. (2020) treated *Neohortaea* under *Capnodiales* incertae sedis. Recently, Abdollahzadeh et al. (2020) placed *Teratosphaeriaceae* under *Mycosphaerellales*, therefore we treated *Neohortaea* in *Mycosphaerellales* incertae sedis.

### ***Ramopenidiella* Crous & R.G. Shivas**

Wijayawardene et al. (2018) treated *Ramopenidiella* in *Teratosphaeriaceae*. However, Hongsanan et al. (2020) treated it under *Capnodiales* incertae sedis, because it was clustered as a

sister clade to *Extremaceae*. Currently *Extremaceae* is placed under *Mycosphaerellales* therefore, we treat *Ramopenidiella* in *Mycosphaerellales incertae sedis*.

**Dubious genera in *Mycosphaerellaceae*** )authenticated based on morphological characters; phylogenetic placement has not been confirmed based on DNA data: 107 Genera(

*Achorodopsis* Syd.  
*Acrodesmis* Syd.  
*Acrotheca* Fuckel  
*Allantophomoides* S.L. Wei & T.Y. Zhang  
*Anematidium* Gronchi  
*Anguillosporella* U. Braun  
*Annellophora* S. Hughes  
*Annellophragmia* Subram.  
*Annellosympodia* McTaggart, R.G. Shivas & U. Braun  
*Asteromidium* Speg.  
*Berteromyces* Cif.  
*Biharia* Thirum. & Mishra  
*Bryopelta* Döbbeler & Poelt  
*Camptomeris* Syd.  
*Cercodeuterospora* Curzi  
*Cercoseptoria* Petr.  
*Cercosperma* G. Arnaud ex B. Sutton & Hodges  
*Cercosphaerella* Kleb.  
*Cercosporina* Speg.  
*Cercosporiopsis* Miura  
*Cercostigma* U. Braun  
*Ciferriella* Petr.  
*Cladosporiella* Deighton  
*Clypeispora* A.W. Ramaley  
*Colletogloeum* Petr.  
*Cyclodopsis* Syd. & P. Syd.  
*Denticularia* Deighton  
*Dictyocephala* A.G. Medeiros  
*Dictyodesmium* S. Hughes  
*Didymaria* Corda  
*Didymellina* Höhn.  
*Didymochora* Höhn.  
*Elletevera* Deighton  
*Episphaerella* Petr.  
*Eriocercospora* Deighton  
*Eriocercospora* Rak. Kumar, A.N. Rai & Kamal ex U. Braun  
*Euryachora* Fuckel  
*Fusicladiella* Höhn.  
*Gillotia* Sacc. & Trotter  
*Gloeocercospora* D.C. Bain & Edgerton ex Deighton  
*Gomphinarina* Preuss  
*Haplodothis* Höhn.  
*Hawksworthiana* U. Braun  
*Helicomina* L.S. Olive  
*Hyalodictys* Subram.  
*Hyalodothis* Pat. & Har.  
*Isariella* Henn.

*Isariopsella* Höhn.  
*Isariopsis* Fresen.  
*Jaczewskiella* Murashk.  
*Jahniella* Petr.  
*Laocoon* J.C. David  
*Lecanostictopsis* B. Sutton & Crous  
*Lembosiopsis* Theiss.  
*Lophiosphaerella* Hara  
*Marcosia* Syd. & P. Syd.  
*Megaloseptoria* Naumov  
*Melanodothis* R.H. Arnold  
*Microcyclus* Sacc., Syd. & P. Syd.  
*Micronectriella* Höhn.  
*Mycoporis* Clem.  
*Neoovularia* U. Braun  
*Neoramularia* U. Braun  
*Oedothea* Syd.  
*Ophiocarpella* Theiss. & Syd.  
*Oreophylla* Cif.  
*Ormathodium* Syd.  
*Ovosphaerella* Laib.  
*Parastenella* J.C. David  
*Phacellium* Bonord.  
*Phaeophloeospora* Crous & B. Sutton  
*Phlyctaeniella* Petr.  
*Pleurovularia* R. Kirschner & U. Braun  
*Polysporella* Woron.  
*Pseudocercosporidium* Deighton  
*Pseudodidymaria* U. Braun  
*Pseudophaeoramularia* U. Braun  
*Pseudopuccinia* Höhn.  
*Pseudostigmidium* Etayo  
*Pseudovularia* Speg.  
*Quasiphloeospora* B. Sutton, Crous & Shamoun  
*Ramularisphaerella* Kleb.  
*Rhabdospora* (Durieu & Mont.) Sacc.  
*Rhopaloconidium* Petr.  
*Rosenscheldiella* Theiss. & Syd.  
*Scirrhia* Nitschke ex Fuckel  
*Semipseudocercospora* J.M. Yen  
*Septocylindrium* Bonord. ex Sacc.  
*Septocyta* Petr.  
*Septopatella* Petr.  
*Septoriopsis* Gonz. Frag. & M.J. Paúl  
*Septorisphaerella* Kleb.  
*Sirosporium* Bubak & Serebrian.  
*Sphaerellothecium* Zopf  
*Spilosphaeria* Rabenh.  
*Stenellopsis* B. Huguenin, Bull.  
*Stenospora* Deighton  
*Stictosepta* Petr.  
*Stigmidium* Trevis.

*Tandonella* S.S. Prasad & R.A.B. Verma  
*Tapeinosporium* Bonord.  
*Utrechtiana* Crous & Quaedvlieg  
*Verrucisporota* D.E. Shaw & Alcorn  
*Virgasporium* Cooke  
*Walkeromyces* Thaug  
*Wernerella* Nav.-Ros., Cl. Roux & Giralt

### **Finding a new species – but you only have a single collection! (Author: K.D. Hyde)**

Several recent publications have urged researchers to introduce new species based on two or more collections (Aimes et al. 2020, Senanayake et al. 2020, Lücking et al. 2021). Of course, this is an ideal scenario, but it is also often not possible. Lack of funding, trained specialists, time, and multiple other reasons may mean that only a single collection is available to the researcher. What does the researcher do in such a case? The options are to 1) put the collections aside and wait for more collections that may never occur, or 2) go ahead and publish the new species based on a single collection. Option 1 may mean the species will never be known to science and the collection and associated study will have also wasted valuable research funds and time. Option 2 might result in a less-well resolved species and even the possible introduction of a species that later turns out not to be novel. Option 2 could also represent the only lineage and the introduction of the taxon, thus reducing the risk of extinction due to associated/indirect conservation (Bhunjun et al. 2021a). The worst-case scenarios are 1) the species will never be known to science or 2) it will later be synonymised under an existing species when better evidence becomes available. With the challenges in most cases to obtain resources and the lack of trained mycologists, we would recommend describing the new species based on a single collection. Therefore, if the researcher believes they have discovered a new taxon and can justify the new species based on established procedures, they are encouraged to publish it. The publication channels, such as the Asian Journal of Mycology notes (Hyde et al. 2020c, Chethana et al. 2021b), which publishes collections of taxa, will help to clarify the justification for publishing names of taxa if new collections are later made. Describing a new species is not straightforward and must pass reviewers and journal standards, whereas synonymizing a species, on the other hand, is relatively straight forward. Index Fungorum already contains invalid names and Species Fungorum likely contains numerous subjectively synonymised names, many of which have never properly been verified. Therefore, any synonymies should be carried out with clear evidence, mainly multigene phylogeny based on the best genes to resolve a genus. It should not be based on subjective arguments.

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