



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 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 *Vaginatispora* was introduced from freshwater habitats in Queensland, Australia (Hyde 1995). It was immediately suggested that *Vaginatispora* 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>Arthoniomycetes</i>	<i>Arthoniales</i>	<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>Phaeococcomycetaceae</i> (3)
	<i>Candelariomycetes</i>	<i>Candelariales</i>	<i>Candelariaceae</i> (7)
			<i>Pycnoraceae</i> (1)
	<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> genera <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>Melaspilellaceae</i> (1)
			<i>Morenoiaceae</i> (1)
			<i>Neobueliellaceae</i> (1)
			<i>Oblongohyalosporaceae</i> (1) [#]
			<i>Stictographaceae</i> (5)
		<i>Arthoniales</i> genera <i>incertae sedis</i> (21)	
		<i>Aulographales</i> [#]	<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> [#]	<i>Aureoconidiellaceae</i> (1) [#]
		<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) [#]
			<i>Piedraiaceae</i> (1)
			<i>Readeriellipsoidaceae</i> (6) [#]
			<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> [#]	<i>Coniosporiaceae</i> (1) [#]
		<i>Dothideales</i>	<i>Dothideaceae</i> (14)
			<i>Neocelosporiaceae</i> (3)
			<i>Sacchettoeciaceae</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>Eremomyces</i> genus <i>incertae sedis</i> (1)	
		<i>Gloniales</i>	<i>Gloniaceae</i> (3)
		<i>Holmiellales</i>	<i>Holmiellaceae</i> (1)
		<i>Homortomyces</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>Muyocoprionales</i>	<i>Muyocoproneae</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> [#]	<i>Neophaeothecaceae</i> (1) [#]
		<i>Parmulariales</i>	<i>Parmulariaceae</i> (35)
		<i>Patellariales</i>	<i>Patellariaceae</i> (19)
		<i>Phaeothecales</i> [#]	<i>Phaeothecaceae</i> (1) [#]
		<i>Phaeotrichales</i>	<i>Phaeotrichaceae</i> (3)
		<i>Pleosporales</i>	<i>Acrocallymaceae</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>Neomassarinaceae</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>Sulcatisporaceae</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> [#]	<i>Racodiaceae</i> (1)
		<i>Stigmatodiscales</i>	<i>Stigmatodiscaceae</i> (1)
		<i>Strigulales</i>	<i>Strigulaceae</i> (14)
			<i>Tenuitholiascaceae</i> (1)
		<i>Superstratomyetales</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) [#]
			<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>Thelotremataceae</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> [#]	<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>Leotiomyces</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) [#]
			<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>Leotiomyces</i> genera <i>incertae sedis</i> (21)		
	<i>Lichinomycetes</i>	<i>Lichinales</i>	<i>Gloeoheppiaceae</i> (3)
			<i>Lichinaceae</i> (43)
			<i>Peltulaceae</i> (1)
	<i>Neolectomyces</i>	<i>Neolectales</i>	<i>Neolectaceae</i> (1)
	<i>Novakomyces</i>	<i>Novakomycetales</i>	<i>Novakomycetaceae</i> (1)
	<i>Orbiliomyces</i>	<i>Orbiliales</i>	<i>Orbiliaceae</i> (14)
		<i>Orbiliales</i> genus <i>incertae sedis</i> (2)	
	<i>Orbiliomyces</i> genus <i>incertae sedis</i> (1)		
	<i>Pezizomyces</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>Pseudoproboscisporaceae</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> [#]	<i>Cancellidiaceae</i> (2) [#]
		<i>Catabotryales</i> [#]	<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) [#]
			<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>Synnemasporellaceae</i> (1)
			<i>Tubakiaceae</i> (8)
		<i>Diaporthales</i> genera <i>incertae sedis</i> (36)	
		<i>Distoseptisporales</i>	<i>Distoseptisporaceae</i> (1)
		<i>Falcocladiales</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>Flammocladiellaceae</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>Jobellisiaceae</i> (1)
		<i>Koralionastetales</i>	<i>Koralionastetaceae</i> (2)
		<i>Lulworthiales</i>	<i>Lulworthiaceae</i> (16)
		<i>Magnaporthales</i>	<i>Ceratospaeriaceae</i> (1)
			<i>Magnaporthaceae</i> (24)
			<i>Ophioceraceae</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>Parasymptodiellales</i>	<i>Parasymptodiellaceae</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) [#]
			<i>Chaetomiaceae</i> (42)
			<i>Diplogelasinosporaceae</i> (1) [#]
			<i>Lasiosphaeriaceae</i> (7)
			<i>Lasiosphaeridaceae</i> (1) [#]
			<i>Naviculisporaceae</i> (4) [#]
			<i>Neoschizotheciaceae</i> (8) [#]
			<i>Podosporaceae</i> (3)
			<i>Schizotheciaceae</i> (3) [#]
			<i>Sordariaceae</i> (5)
			<i>Strattoniaceae</i> (1) [#]
			<i>Zygospermellaceae</i> (2) [#]
		<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>Conioceciaceae</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) [#]

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) [#]
			<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>Veizdaeales</i>	<i>Veizdaeaceae</i> (1)
	<i>Incertae sedis</i>	<i>Incertae sedis</i>	<i>Aphanopsidaceae</i> (2)
			<i>Diporotheceae</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) [#]
			<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) [#]
			<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) [#]
			<i>Sarcomyxaceae</i> (1) [#]
			<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) [#]
		<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>Gastrales</i>	<i>Geastraceae</i> (7)
			<i>Sclerogastraceae</i> (1)
		<i>Gastrales</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>Jaapiales</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>s</i>
	<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) [#]
			<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> [#]	<i>Heitmaniaceae</i> (1) [#]
		<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> [#]	<i>Rosettozymaceae</i> (1) [#]
		<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) [#]
			<i>Chaconiaceae</i> (8)
			<i>Coleosporiaceae</i> (7)
			<i>Cronartiaceae</i> (3)
			<i>Crossosporaceae</i> (6) [#]
			<i>Endoraeciaceae</i> (1) [#]
			<i>Gymnosporangiaceae</i> (1) [#]
			<i>Melampsoraceae</i> (1)
			<i>Mikronegeriaceae</i> (3)
			<i>Milesinaceae</i> (4) [#]
			<i>Neophysopellaceae</i> (1) [#]
			<i>Ochropsoraceae</i> (2) [#]
			<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) [#]
			<i>Skierkaceae</i> (1) [#]
			<i>Sphaerophragmiaceae</i> (2)
			<i>Tranzscheliaceae</i> (2) [#]
			<i>Uncolaceae</i> (2)
			<i>Uromycladiaceae</i> (1) [#]
			<i>Uropyxidaceae</i> (13)
		<i>Pucciniales</i> genera <i>incertae sedis</i> (25)	
		<i>Septobasidiales</i>	<i>Septobasidiaceae</i> (6)
	<i>Spiculogloeomycetes</i>	<i>Spiculogloales</i>	<i>Spiculogloeaceae</i> (2)
	<i>Spiculogloeomycetes</i> genus <i>incertae sedis</i> (1)		
	<i>Tremellomycetes</i>	<i>Chionasterales</i> [#]	<i>Chionasteraceae</i> (1) [#]
		<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>Cuniculitremaceae</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>Tetragoniomycetaceae</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>Fereydowniaceae</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>Blastocladiales</i>	<i>Blastocladiaceae</i> (3)
			<i>Catenariaceae</i> (2)
			<i>Paraphysodermataceae</i> (1)
			<i>Sorochytriaceae</i> (1)
		<i>Blastocladiales</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>Physodermatomycetes</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>Rhizophydiomycetes</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) [#]
			<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>Staurastromycetaceae</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>Borealophlyctidaceae</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) [#]
<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>Neozygitymycetes</i>	<i>Neozygiales</i>	<i>Neozygiteaceae</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) [#]
	<i>Glomeromycetes</i>	<i>Diversisporales</i>	<i>Acaulosporaceae</i> (1)
			<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>Dimargaritomyces</i>	<i>Dimargaritales</i>	<i>Dimargaritaceae</i> (3)
		<i>Dimargaritales</i> genus <i>incertae sedis</i> (1)	
	<i>Harpellomyces</i>	<i>Harpellales</i>	<i>Harpellaceae</i> (6)
			<i>Legeriomycetaceae</i> (38)
		<i>Harpellales</i> genus <i>incertae sedis</i> (1)	
	<i>Kickxellomyces</i>	<i>Kickxellales</i>	<i>Kickxellaceae</i> (11)
	<i>Ramicandelaberomyces</i>	<i>Ramicandelaberales</i>	<i>Ramicandelaberaceae</i> (1)
<i>Monoblepharomycota</i>	<i>Hyaloraphidiomycetes</i>	<i>Hyaloraphidiales</i>	<i>Hyaloraphidiaceae</i> (1)
	<i>Monoblepharidomyces</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>Mortierellomyces</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>Mucoromyces</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>Saksenaaceae</i> (2)
			<i>Syncephalastraceae</i> (2)

Table 2 Continued.

Phylum	Class	Order	Family
	<i>Umbelopsidomycetes</i>	<i>Umbelopsidales</i>	<i>Pygmaeomycetaceae</i> (1) [#]
			<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> [#]	<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*, *Rosettoziales*, *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

Andreiomycetes 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)

Crypthonia Frisch & G. Thor (16)

Cryptophaea Van den Broeck & Ertz (1)

Cryptothecia Stirt. (ca. 65)

Diarthonis Clem. (1)*

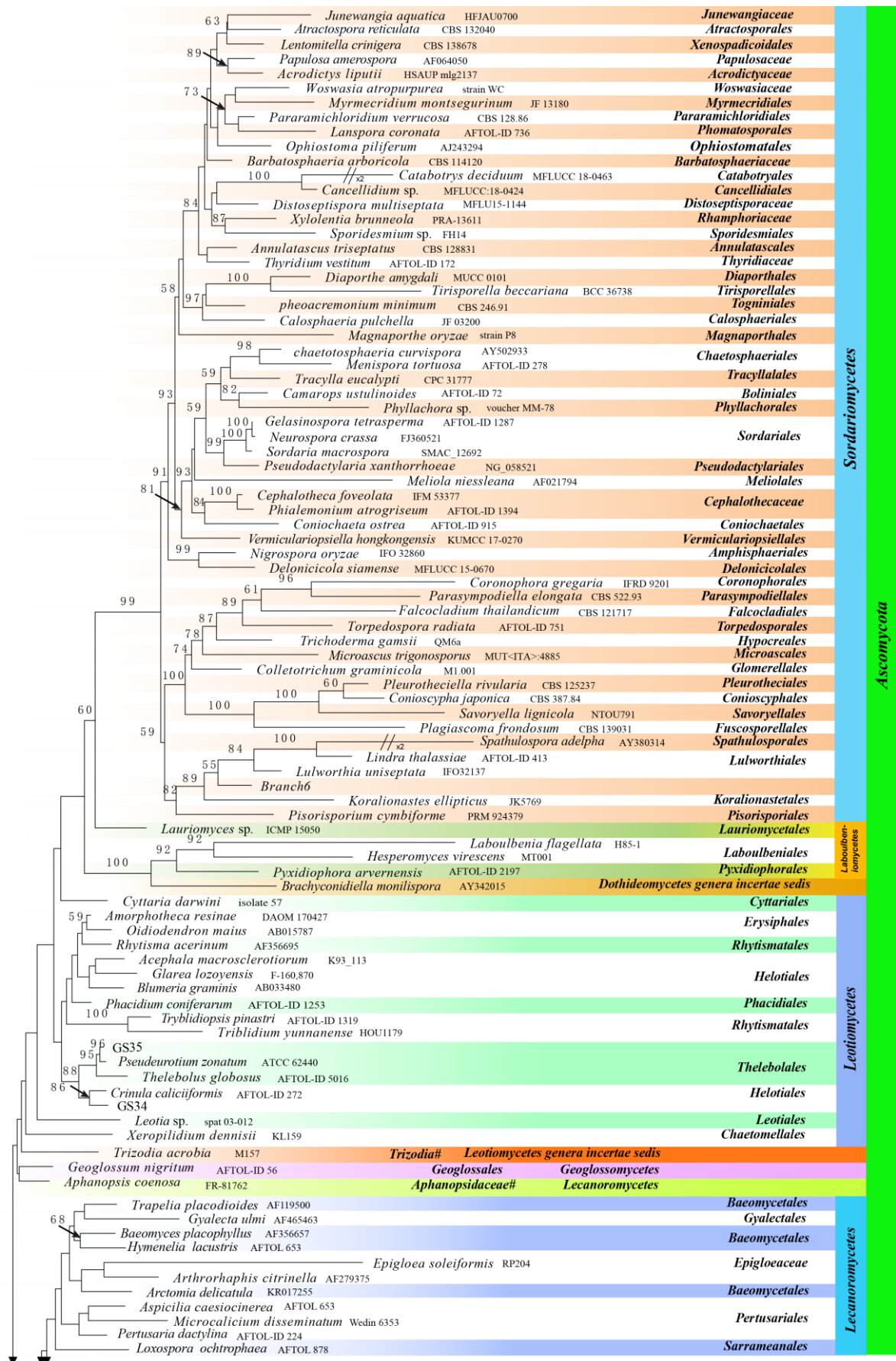


Figure 1 – Maximum likelihood phylogeny of the kingdom fungi based on nRNA LSU, nRNA SSU, RPB1 and RPB2 sequence data. Numbers above branches indicate bootstrap support, only values >50% are included.

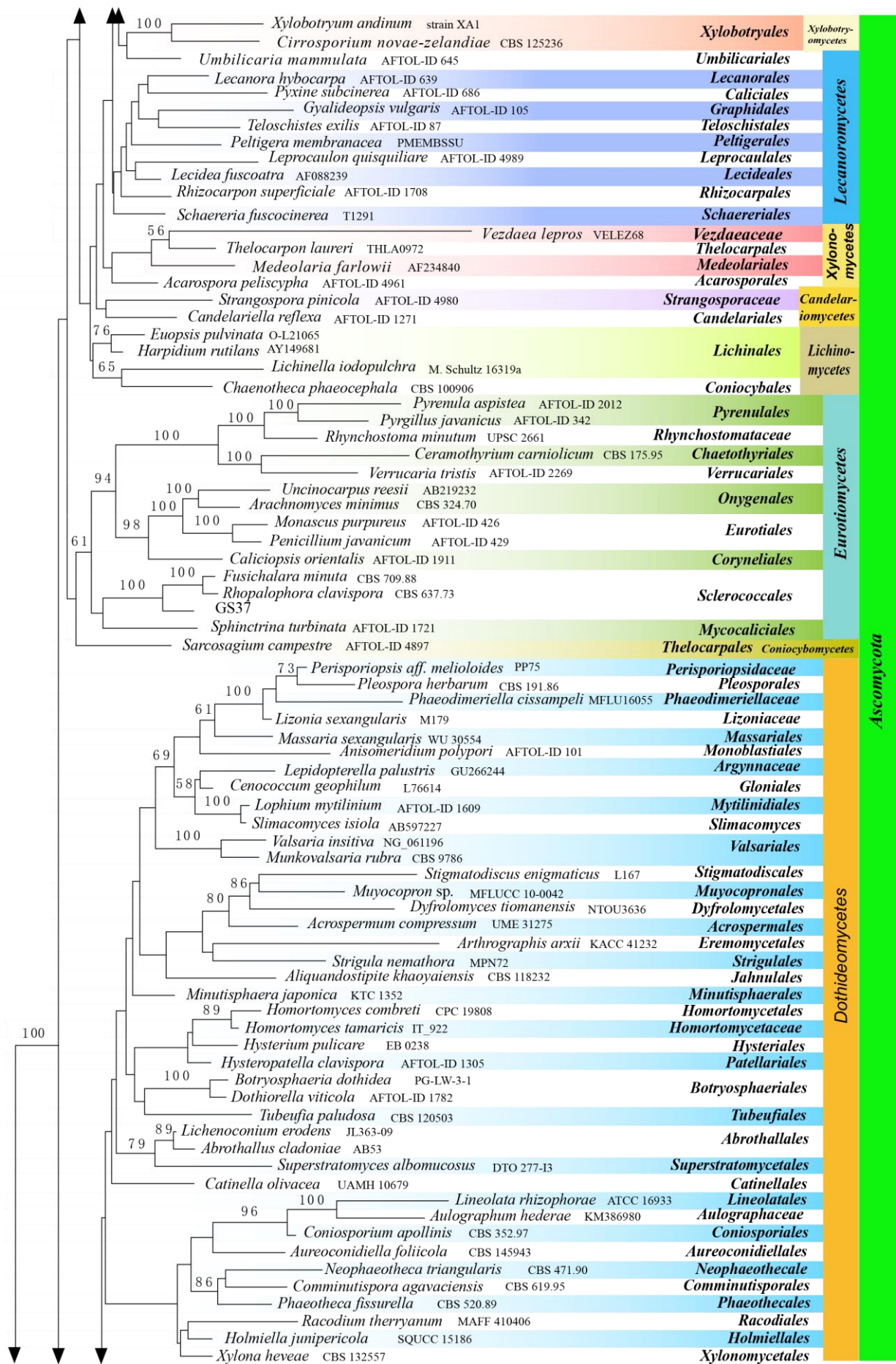


Figure 1 – Continued.

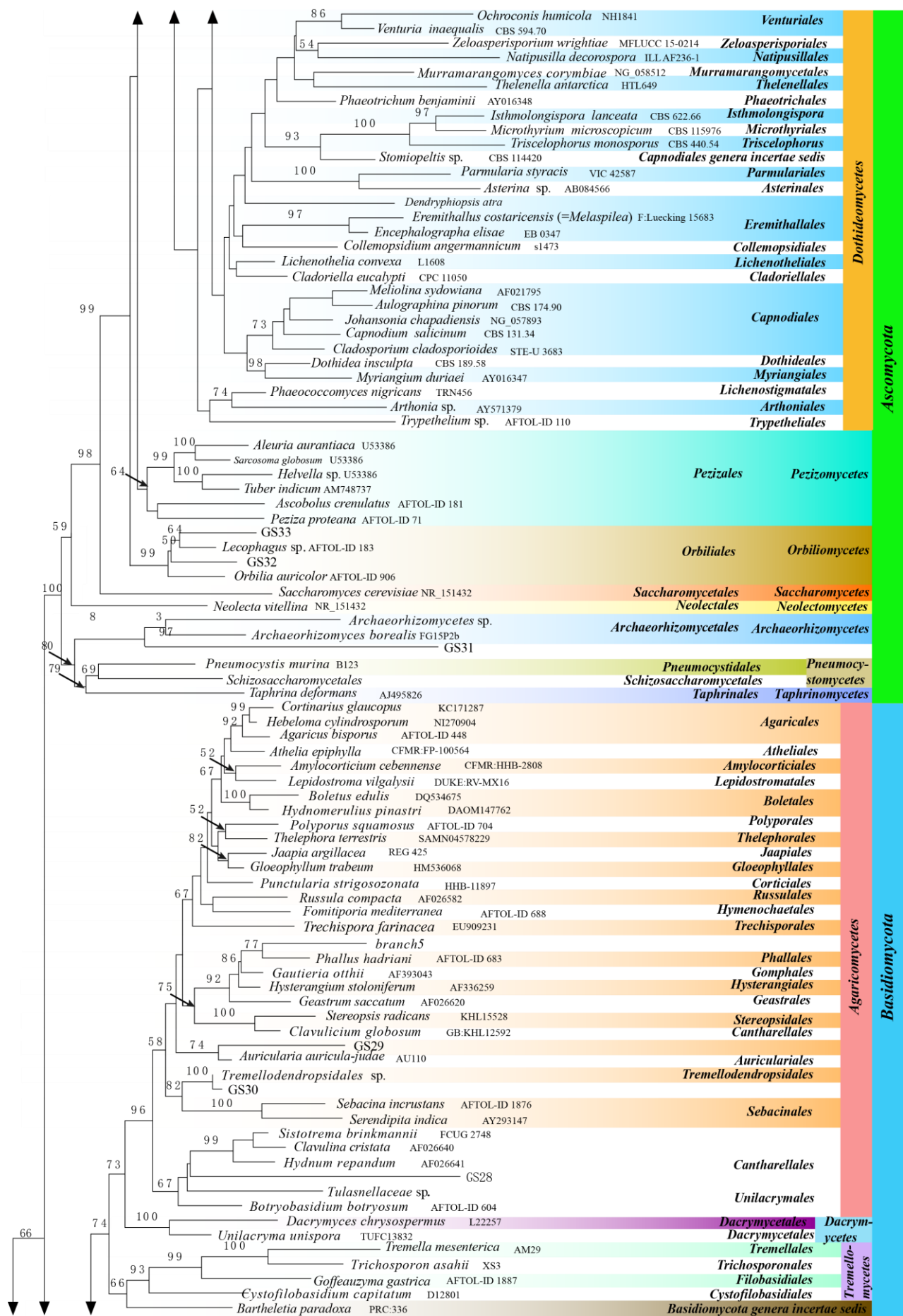


Figure 1 – Continued.

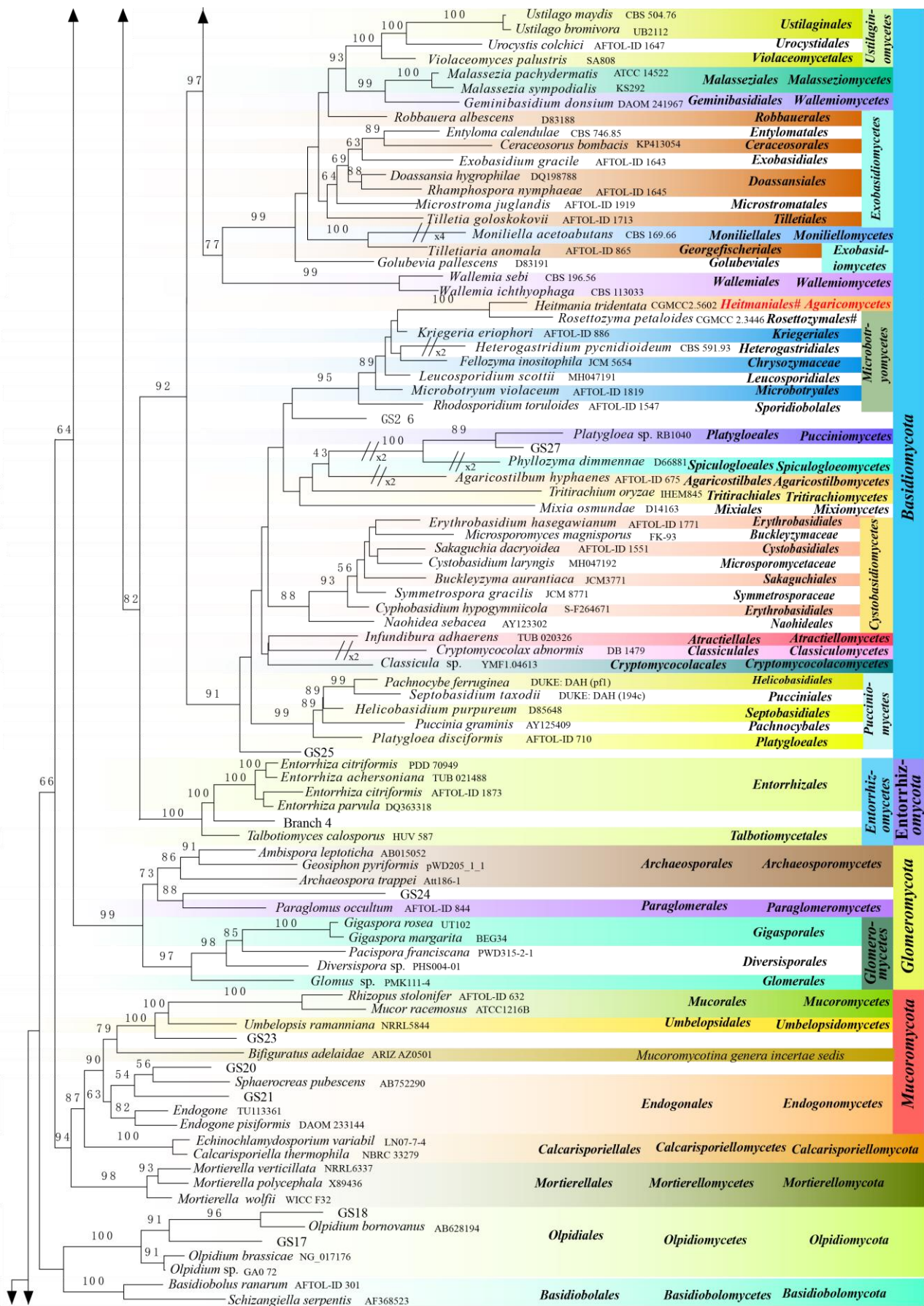


Figure 1 – Continued.

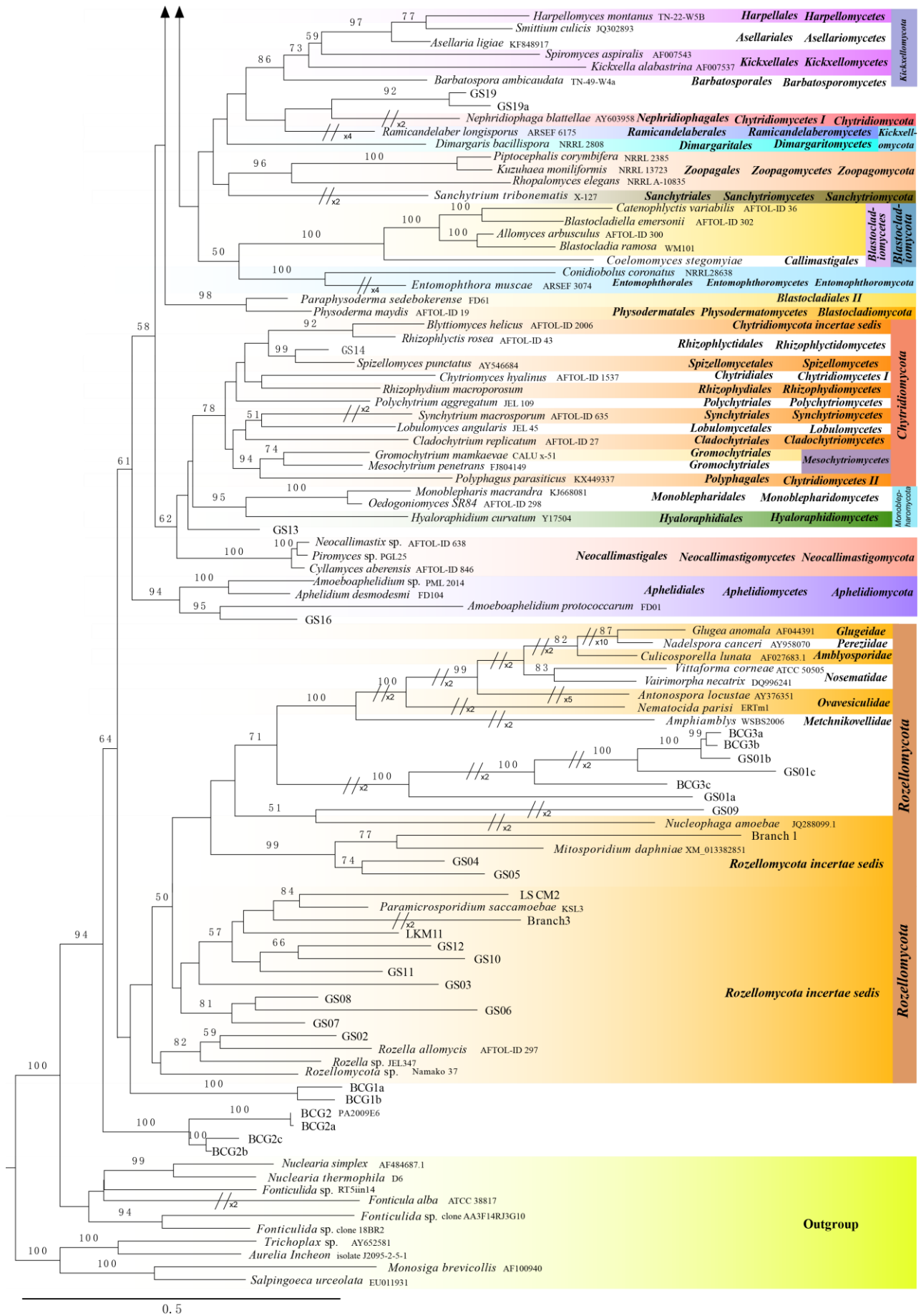


Figure 1 – Continued.

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)

Austroroccella 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)
Erythrodicton 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)
Protoroccella 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. Trovão, I. Tiago & A. Portugal

Aeminium J. Trovão, 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)

Limaciniaseta 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)

Readerielliopsisidaceae 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)

Xenodevriaceae 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)
Verruocladosporium K. Schub., Aptroot & Crous (2)

Comminutisporales Abdollahz. & Crous*
Comminutisporaceae Abdollahz. & Crous
Comminutispora A.W. Ramaley (1)

Dothideales Lindau (= *Neocelosporiales* Crous *vide* Hongsanan 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)

Saccoltheciaceae Bonord.

Aureobasidium Viala & G. Boyer (23)
Columnosphaeria Munk (4)
Kabatiella Bubák (19)
Moringomyces Crous (1)*
Pseudoseptoria Speg. (8)
Pseudosydowia Thambug. & K.D. Hyde (1)
Saccolthecium 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)
Amycosphaerella Quaedvl. & Crous (2)
Annellosympodiella 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)
Madagascaromyces 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)

Phaeothecoidiaceae K.D. Hyde & Hongsanan (= *Nowamycetaceae* Crous)
Chaetothyria Theiss. (6)
Exopassalora Videira & Crous (1)
Houjia G.Y. Sun & Crous (2)
Neochaetothyria Crous (1)
Nowamyces 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)
Plochmopeltis 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.**

Anhelia 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)
Hysterobrevium E.W.A. Boehm & C.L. Schoch (6)
Hysterocarina Zogg (1)
Hysterodifractum D.A.C. Almeida, Gusmão & A.N. Mill. (1)
Hysteroglonium 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)
Rhytidhysterion 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)
Neoastrophaeriella 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)

Astrosphaeriellopsis 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)
Aquaticherospora 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)
Chaetasbolsia 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)
Neosascochyta 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)
Pseudopeyronella 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)
Matsushimomyces 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)
Tingoldiogo 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 *vide* 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)
Hongkongmyces 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)

Longiostiolaceae 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)
Desertiserpentica 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)
Lophiomurispora 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)
Neovaginatisspora 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)
Sigarispora Thambug. & K.D. Hyde (18)
Vaginatisspora 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 *vide* 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)
Xenostigmia 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)
Neoaquastroma 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)

Paradictyoarthrinaceae Doilom, Ariyaw., Bhat & K.D. Hyde
Paradictyoarthrinium Matsush. (4)
Xenomassariosphaeria Jayasiri, Wanas. & K.D. Hyde (1)

Paralophiostomataceae V.V. Sarma & M. Niranjana.
Paralophiostoma V.V. Sarma & M. Niranjana (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)
Eudarlucia 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. & Volk.-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)
Sulcisporea Shoemaker & C.E. Babc. (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

Allonecte Syd. (3)
Alternaria Nees (ca. 360)
Bipolaris Shoemaker (69)
Clathrospora Rabenh. (20)
Comoclathris Clem. (30)
Curvularia Boedijn (119)
Decorospora Inderb., Kohlm. & Volkm.-Kohlm. (1)
Diademosia 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. (= *Marielliottia* Shoemaker) (ca. 95)
Stemphylium Wallr. (ca. 96)
Tamaricicola Thambug., Camporesi & K.D. Hyde (1)
Typhicola Crous (1)

Pseudoastrospheariellaceae Phook. & K.D. Hyde

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

Pseudoastrophaeriellopsis Devadatha, Wanas., Jeewon & V.V. Sarma (1)

Pseudoberkleasmiaceae Phukhams. & K.D. Hyde

Pseudoberkleasmium 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)

Pseudomassarinaceae 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)
Xenomodontyia Hern.-Restr., Karimi, Alizadeh & T. Ghanbary (1)*

Striatiguttulaceae S.N. Zhang, K.D. Hyde & J.K. Liu
Longicarpus 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)
Dendryphon 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)
Fuscospaeria 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
Wicklowsia 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)*
Inflatispora Y. Zhang ter, J. Fourn. & K.D. Hyde (2)
Isthosporella 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 Hongnanan, 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]
Lichenconiaceae 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)
Neohelleiosa Mortimer (1)*
Phellinocrescentia Crous & Decock (1)
Pseudopassalora Crous (1)
Trypetheliopsis Asahina (6)

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

Muyocopronales Mapook, Boonmee & K.D. Hyde
Muyocopronaceae 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)
Campoia Speg. (4)
Cirsosiosopsis 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)

Rhagadobium P. Henn. & Lindau (10)
Rhipidocarpon (Theiss.) Theiss. & Syd. (1)
Symphaeophyma Speg. (1)
Syropeltis 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. *vide* 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., Miądl., Houbraken, Adan, Lutzoni & Samson
Superstratomycetaceae van Nieuwenh., Miądl., Houbraken, Adan, Lutzoni & Samson
Superstratomyces van Nieuwenh., Miądl. & 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)
Nigrothelium 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)
Schummi 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)
Acanthostigmia 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)
Dematiohellicoma Y.Z. Lu, J.C. Kang & K.D. Hyde (2)
Dematiohellicomyces Y.Z. Lu, Boonmee & K.D. Hyde (1)
Dematiohellicosporium 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
Cylindrosymptodiaceae Crous, M. Shen & Y. Zhang ter
Cylindrosymptodium 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*
Cylindrosymptodioides 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)
Englerodonthis 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)*

Dysrhynchisceae 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)

Hyalomeliolaceae 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)

Parastigmatea Doidge (3)

Protoscyphaceae Kutorga & D. Hawksw.

Protoscypha Syd. (2)

Pseudoperisporiaceae Toro

Bryomyces Döbbeler (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)

Thyrinulaceae X.Y. Zeng, Hongsanan & K.D. Hyde

Blastacervulus H.J. Swart (4)

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

Thyrinula Petr. & Syd (5)

Toroaceae Boonmee & K.D. Hyde

Toroa 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)

Alysiidiella 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)
Dictyothyrina 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 *vide* 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 Doidgeb (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)
Rhopographus 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)
Nullicomyces Crous (1)
Phaeosaccardinula P. Henn. (27)
Stanhughesia Constant. (1)

Treubiomyces 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)*
Atrokyliodriopsis Y.R. Ma & X.G. Zhang (1)
Bacillicladium Hubka, Réblová & Thureborn (1)
Lichenodiplis Dyko & D. Hawksw. (= *Laeviomyces* D. Hawksw.) (13)
Lichenodiplisiella S.Y. Kondr. & Kudratov (1)
Melnikomyces Crous & U. Braun (1)
Minutoexcipula V. Atienza & D. Hawksw. (7)
Muellerella Hepp ex Müll. Arg. (14)
Pleostigma Kirschst. (9)
Sarcinomyces 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)
Serusiauxia 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)
Thelediopsis 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)

***Chaetothryiomycetidae* 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)*
Tripospora 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 Miede (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)
Calyptrozyma 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

Herpomycetales Haelew. & Pfister

Herpomycetaceae I.I. Tav.

Herpomycetes Thaxt. (27)*

Laboulbeniales Lindau

Ceratomycetaceae S. Colla

Autoicomycetes Thaxt. (28)

Ceratomyces Thaxt. (32)

Drepanomyces Thaxt. (1)

Eusynaptomyces Thaxt. (5)

Helodiomyces F. Picard (1)

Phurmomyces Thaxt. (1)

Plectomyces Thaxt. (1)

Rhynchophoromyces Thaxt. (8)

Synaptomyces Thaxt. (1)

Tettigomyces Thaxt. (16)

Thaumasomyces Thaxt. (3)

Thripomyces Speg. (2)

Euceratomycetaceae I.I. Tav.

Cochliomyces Speg. (2)

Colonomyces R.K. Benj. (2)

Euceratomyces Thaxt. (1)

Euzodiomyces 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)
Diplopodomycetes W. Rossi & Balazuc (6)
Dipodomycetes 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)
Kleidiomyces 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)
Peyritsiella 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)
Rhizopodomycetes 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)
Trenomycetes 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)

Laboulbeniomyces 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.

Biatoraceae M. Choisy ex Hafellner & Casares-Porcel
Biatorella 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 Bendiksbj & 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)
Austroparmelina 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 & Serus. (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)
Loflammiopsis 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)
Bilimbia De Not. (= *Myxobilimbia* 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)
Mycobilimbia 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. (= *Arthrosporium* A. Massal.) (85)
Toniniopsis Frey (7)
Tylocliostomum van den Boom & Magain (1)*
Tylothallia P. James & H. Kiliias (3)
Vermilacinia Spjut & Hale (34)
Waynea Moberg (7)

Ramboldiaceae S. Stenroos, Miądl. & 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)
Nimisiostella 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)

Cephalophysis (Hertel) H. Kiliyas (1)

Cerothallia Arup, Frödén & Søchting (4)

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

Cinnabaria Wilk, Pabijan & Lücking (1)*

Dijigiella S.Y. Kondr. & L. Lökös (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; = *Lazarenkoiopsis* 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)
Paratricharia 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)

Thelotremataceae 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)
Knightsiellastrum L. Ludw. & Kantvilas (1)*
Pseudobaeomyces M. Satî (2)
Siphula Fr. (26)
Siphulella Kantvilas, Elix & P. James (1)
Siphulopsis Kantvilas & A.R. Nilsen (1)*
Thamnoia 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

Amphorothecium 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

Elixiaceae 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)
Haploelthea 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 Masee (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)
Margaritispota Ingold (2)
Naevata 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)
Discorehmi 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)
Hegermilia 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
Loramycetes W. Weston (2)
Obtectodiscus E. Müll., Petrini & Samuels (2)

Mitrulaceae Rchb.
Mitruia 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)
Mollisina 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)
Scleromitruła 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 Hujšlova & M. Kolarik (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 Zúkal (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)
Rhizocladospodium Crous & U. Braun (1)
Rhizothyrium Naumov (1)
Rommelaarsia Baral & Haelew. (1)

Roseodiscus Baral (4)
Sageria A. Funk (1)
Sambucina Velen. (1)
Sarcomyces Masee (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)
Stammaria Fuckel (7)
Stilbopeziza Speg. (1)
Strossmayeria Schulzer (20)
Tetracladium De Wild. (10)
Thedgonia 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
Epithamnia 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)

Ceratopacidium 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)

Myriopacidium Sherwood (6)

Nematococcomyces C.L. Hou, M. Piepenbr. & Oberw. (2)

Neococcomyces Y.R. Lin, C.T. Xiang & Z.Z. Li (3)

Neopacidium Petr. (2)

Nothorhytisma Minter, P.F. Cannon, A.I. Romero & Peredo (1)

Parvacoccum R.S. Hunt & A. Funk (1)

Phaeopacidium 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)

Tribliidiaceae 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 Masee & 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)

Helicentralis 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)

Gymnohydnotrya B.C. Zhang & Minter (3)

Gyromitra Fr. (25)

Hydnotrya 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)
Mattiolomyces 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)
Paratricharina 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)
Pseudotricharina 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)
Tricharina Eckblad (= *Ascorhizoctonia* Chin S. Yang & Korf) (12)
Trichophaea Boud. (26)
Trichophaeopsis Korf & Erb (4)
Warcupia Paden & J.V. Cameron (1)
Wenyungia 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)
Kompsoscypha 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

Annulatasceae S.W. Wong, K.D. Hyde & E.B.G. Jones

Annulatasclus 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)*

Pseudoannulatasclus Z.L. Luo, Maharachch. & K.D. Hyde (1)

Submersisphaeria K.D. Hyde (5)

Verticicola 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)

Celoportha Nakab., Gryzenh., Jol. Roux & M.J. Wingf. (2)

Chromendothia Lar.N. Vassiljeva (2)

Chrysofolia Crous & M.J. Wingf. (1)

Chrysomorbus S.F. Chen (1)

Chrysoportha 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)

Immersiportha 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)
Chiangraiomyces 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)
Ophiodiaporthe 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)
Tenuignomonium 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)
Mebarria 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*

Mastigosporella 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)
Stegosporium 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)

Synnemasporiaceae X.L. Fan & J.D.P. Bezerra (1)
Synnemaspora 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)
Macrodiaporthe Petr. (1)
Melanamphora Lafl. (1)
Phragmodiaporthe Wehm. (3)
Phruensis Pinruan (1)
Plagiophiale Petr. (2)
Plagiostigme Syd. (1)
Prostratum 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)

Bifusisporella 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)

Clavatisporella K.D. Hyde (1)

Falciphora J. Luo & N. Zhang (1)

Falciphoriella M. Hern.-Restr. & Crous (1)

Gaeumannomycella 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)
Proxipyricularia 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)

Gaillardella 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)

Setiferotheca Matsush. (1)

Sypastospora 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)

Fracchiaea Sacc. (35)

Groenhiella Jørg. Koch, E.B.G. Jones & S.T. Moss (1)

Janannfeldtia Subram. & Sekar (1)

Lasiosphaeriosis 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)

Euacantho Theiss. (2)

Neocryptosphaerella S.K. Huang & K.D. Hyde (2)*

Neofracchiaea 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)*

Neotrorubiella 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)
Pseudoachroiostachys 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)*
Nitschkioopsis 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)

Alfariaclediella 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)

Illosporiopsis 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)
Tirispota 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)
Parascedosporium Gilgado, Gené, Cano & Guarro (2)
Petriella Curzi (8)
Pseudallescheria Negrone & I. Fisch. (8)
Pseudoscopulariopsis Sand.-Den., Gené & Guarro (2)
Rhinocladium Sacc. & Marchal (11)
Scedosporium Sacc. ex Castell. & Chalm. (12)
Scopulariopsis Bainier (87)
Wardomyces F.T. Brooks & Hansf. (11)
Wardomycopsis Udagawa & Furuya (5)
Yunnania H.Z. Kong (3)

Triadelpiaceae Y.Z. Lu, J.K. Liu, Z.L. Luo & K.D. Hyde

Triadelpia Shearer & J.L. Crane (18)
Synnematotriadelpia Chuasehar., 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)

Melanotrigonum 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)
Arcuatospora 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.
Echinospaeria A.N. Mill. & Huhndorf (14)
Helminthosphaeria Fuckel (ca. 20)
Hilberina Huhndorf & A.N. Mill. (ca. 20)
Ruzenia O. Hilber (1)

Leptosporellaceae 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)

Cocodiella Hara (27)

Cyclodomus Höhn. (5)

Deshpandiella Kamat & Ullasa (1)

Diachora Müll. Arg. (4)

Diatractium Syd. & P. Syd. (4)

Erikssonia 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)

Maculatifrones 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. Calduch, 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. Caldusch & 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. Marín & 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. Marín & Stchigel*

Lundqvistomyces Y. Marín & 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)
Periamphispora 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)

Arthrimum 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)

Arwidssonia 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)

Hymenopleella 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)

Arecophila K.D. Hyde (14)

Atrotorquata 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)

Vesiculozygosporium 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)

Eupepoxylon Füsting (2)

Halorosellinia Whalley, E.B.G. Jones, K.D. Hyde & Læssøe (3)

Helicogermis 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)
Stilbohypoxylon 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)
Tristatiperidium Daranag., Camporesi & K.D. Hyde (1)
Xenanthostomella 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 Hujslová & 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)
Ellisemia Subram. (ca. 60)
Esfandiariomyces 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)
Hassea Zahlbr. (1)
Heliastrum Petr. (1)
Hyaloderma Speg. (1)
Hyalotiopsis Punith. (1)
Hydronectria Kirschst. (1)
Immersisphaeria Jaklitsch (1)
Iraniella Petr. (1)
Koenia 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, Houbraken & D.O. Natvig (2)
Natantiella Réblová (1)
Naumovela 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)
Paradiplococcium 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 Zukal
Sarcosagium A. Massal. (1)
Thelocarpon Nyl (25)

Veizdaeales Lumbsch & Lücking
Veizdaeaceae Poelt & Vězda ex J.C. David & D. Hawksw.
Veizdaea 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)

Hemisphaericaspora 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)

Milleromyces 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)

Suhomyces 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)
Torulaspota Lindner (9)
Vanderwaltozyma Kurtzman (7)
Yueomyces Q.M. Wang, L. Wang, M. Groenewald & T. Boekhout (1)
Zygosaccharomyces B.T.P. Barker (11)
Zygotorulaspota 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)

Diporotheaceae R.K. Mibey & D. Hawksw.

Diporothea 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, Miądl. & 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 Nád. (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)
Amerosymphodula 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)
Annelodontomyces Matsush. (1)
Annellodochium Deighton (1)
Anellophorella Subram. (5)
Anellospermosporella 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)
Aposporella Thaxt. (1)
Apostrasseria Nag Raj (2)
Arachnophora Hennebert (11)
Arachnospora 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)
Arthrocristula 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)
Ascosubramania 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)
Beltramono 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)
Bhadradriella Nagaraju, Kunwar & Manohar. (1)
Bhadradriomyces 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)
Capitrostrum 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)
Cheiromycella Höhn. (3)
Cheiromyceopsis 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)
Civisubramaniana 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)
Colletoconis 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)
Cylindroxyphium 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 Agnihotr. (1)
Dendrographium Masee (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)
Digicatenosporium 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)
Elegantimyces 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)
Eriospora 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)
Glioannellochium 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. Calduch, 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)
Heimiadora 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)
Hyphodiscosioides 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)
Leightoniomyces 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)
Microperella 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)
Miricataena 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)
Pararthrocladium Matsush. (1)
Parablastocatenata Y.D. Zhang & X.G. Zhang (1)
Paraceratocladium R.F. Castañeda (6)
Parachionomyces Thaug (1)
Paracostantinella Subram. & Sudha (1)
Paracryptophiale Kuthub. & Nawawi (2)
Paracytospora 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 Thaug (1)
Parapyricularia M.B. Ellis (4)
Pararobillarda Matsush. (1)
Parasphaeropsis Petr. (1)
Parastigmatellina Bat. & C.A.A. Costa (1)
Paratraploa 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)
Perelegomyces 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 Agnihotr. (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)
Phragmospathula Subram. & N.G. Nair (3)
Phragmospathulella 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)
Pirisporea Faurel & Schotter (1)
Piromyces 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)
Porosubramaniana 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)
Pseudophloeosporella U. Braun (1)
Pseudophragmotrichum W.P. Wu, B. Sutton & Gange (1)
Pseudopolystigmina 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)
Pyripnomycetes 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)
Scolecodochium 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)
Sirosporonaemella 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)
Spermospora R. Sprague (9)
Spermosporella Deighton (4)
Sphaeridium Fresen. (5)
Sphaeristromella Bubák (1)
Sphaeriothyrium Bubák (2)
Sphaeromma H.B.P. Upadhyay (2)
Sphaeronaema Fr. (50)
Sphaerophoma Petr. (2)
Sphaerulomyces Marvanová (1)
Spinulospora Deighton (1)
Spiralum J.L. Mulder (2)
Spiropes Cif. (ca. 40)
Splanchospora Lar.N. Vassiljeva (1)
Spondylocladiella Linder (2)
Spondylocladiopsis 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)
Stenocradiella 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)
Strongylohallus 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)
Synnemaseimatooides 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)
Tetracoccusporium 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)
Verrucophragma 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)
Xenodorus 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)

BASIDIOBOLOMYCOTA 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 Masee (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 Masee (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)
Gloeocorticium Hjortstam & Ryvar den (1)
Gloeostereum S. Ito & S. Imai (1)
Granulobasidium Jülich (1)
Hyphoradulum Pouzar (1)
Incrustocalyptella Agerer (3)
Phaeoporotheleum (W.B. Cooke) W.B. Cooke (2)
Seticyphella Agerer (3)
Sphaerobasidioscypha Agerer (2)
Thujacorticium Ginns (1)

Cystostereaceae Jülich

- Cericium* Hjortstam (1)
Crustomyces Jülich (3)
Cystidiodontia Hjortstam (2)
Cystostereum Pouzar (7)
Parvobasidium Jülich (3)
Parvodontia Hjortstam & Ryvar den (2)
Rigidotubus J. Song, Y.C. Dai & B.K. Cui (1)

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)
Podohydangium 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 Cléménçon (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)*

Macrocystidiaceae Kühner

Macrocystidia 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)
Cyptotrampa Singer (16)
Dactylosporina (Cléménçon) Dörfelt (5)
Desarmillaria (Herink) R. A. Koch & Aime (2)
Epicnaphus Singer (2)

Flammulina P. Karst. (14)
Gloiocephala Masee (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)
Rhizomarasmius 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)
Chaetotyphula 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)

Sarcomyxa 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)
Pyrrhulomyces 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)
Pseudotracheloma (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)
Tygervalleyomyces 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)
Amylolepiota 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)
Calyptella 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)
Cocciobotrys 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)
Glabrocypbella W.B. Cooke (12)
Gloioxanthomyces Lodge, Vizzini, Ercole & Boertm. (2)
Gramincola Velen. (1)
Hemipholiota (Singer) Bon (2)
Henningsomyces Kuntze (ca. 21)
Hispidocalyptella 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 & Masee (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)
Phaeomyцена 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)
Pseudotyphula 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 & Ryvarde (3)
Amyloceraceomyces S.H. He (1)*
Amylocorticiellum Spirin & Zmitr. (4)
Amylocorticium Pouzar (11)
Amyloxenasma (Oberw.) Hjortstam & Ryvarde (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 & Ryvarde (1)
Athelopsis Oberw. ex Parmasto (14)
Butlerelfia Weresub & Illman (1)
Bysocorticium Bondartsev & Singer (11)
Elaphocephala Pouzar (1)
Fibulomyces Jülich (4)*
Hypochnella J. Schröt. (2)
Hypochniciellum Hjortstam & Ryvarde (1)
Leptosporomyces Jülich (15)
Lyoathelia Hjortstam & Ryvarde (1)
Melzericium 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)

Crystallogen 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)
Alessioporos 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)
Erythrophyllporus 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)
Octaviana 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)
Suillellus 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 Masee (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 & Ryvarde (8)
Melzerodontia Hjortstam & Ryvarde (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)
Pyrroderma 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 & Masee (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)
Vandasia 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
Cristataspora 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

Aurantiopileus 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)

Lilacephlebia (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 & Ryvarde (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 Ryvarde (8)
Amauroderma Murrill (40)
Amaurodermellus Costa-Rezende, Drechsler-Santos & Góes-Neto (2)*
Amylosporia B.K. Cui, C.L. Zhao & Y.C. Dai (1)
Atroporus Ryvarde (3)
Australoporus P.K. Buchanan & Ryvarde (1)
Bresadolia Speg. (4)
Cerarioporia F. Wu, L.W. Zhou & J. Si (1)
Cerioporus Qué. (15)
Cinereomycetella Zmitr. (1)
Colospora Miettinen & Spirin (2)
Coriolorpsis 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)
Szczepkamyces 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 Ryvar den & I. Johans. (50)

Atrapor iella Ryvar den (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 Ryvar den (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 Ryvar den (4)

Australicium Hjortstam & Ryvar den (2)

Australohydnum Jülich (2)

Austrolentinus Ryvar den (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)
Rhodonia 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)
Scutigera 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)
Stecchericium 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)
Hericium 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 Masee (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)

Terrestrisporiaceae Y.C. Dai, B.K. Cui, F. Wu, Y. Yuan & Jia J. Chen*

Terrestrisporia 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)

Dichopleuropus D.A. Reid (1)
Gloeoasterostroma Rick (1)
Gloeodontia Boidin (8)
Gloehypochnicium (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)
Xeroceps 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 Quéf. 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 & Ryvarde (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)

Amnocutis 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 & Ryvarde (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 & Bärl. (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. & Ryvarde (4)

Korupella Hjortstam & P. Roberts (1)

Loreleia Redhead, Moncalvo, Vilgalys & Lutzoni (3)

Minostrocyta Hjortstam & Ryvarde (1)

Myllitopsis Pat. (1)

Myriococcum Fr. (1)

Odonticium Parmasto (7)
Pagidospora Drechsler (1)
Phlyctibasidium Jülich (1)
Purpureocorticium 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)

Femsjonina 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, Roelijmans & 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)
Deroxomyces 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)*

Cuniculitremaceae 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)
Prillingera 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
Rhodosporeidiobolus 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)

Crossosporaceae Aime & McTaggart*

Angiopsora Mains (ca. 3)
Catenulopsora Mundk. (2)
Crossospora 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 Thaug (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)
Hamaspota 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)
Xenosteles 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 Masee (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)
Crossosorella 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)

Rogerpeteroniaceae Aime & McTaggart*

Rogerpeteronia 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)

Dasyscypha 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)
Coccidiodyon 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 & Sztejn. (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 & Sztejn. (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

Phragmotaenium 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 & Kajdacsí ex T. Kij. & Aime (4)

Parajaminaea T. Kij. & Aime (2)

Pseudomicrostroma T. Kij. & Aime (3)

Sympodiomyopsis 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

Moniellales Q.M. Wang, F.Y. Bai & Boekhout

Moniellaceae Q.M. Wang, F.Y. Bai & Boekhout

Moniella 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)
Fereydowniaceae S. Nasr, Soudi, H.D.T. Nguyen, M. Lutz & Piątek
Fereydownia 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)
Heterotolyposporium 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)
Tolyposporium 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 & Bärli. (1)

Arcispora Marvanová & Bärli. (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)

Physodermatomyces 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
Calcarisporiellomyces 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
Caulochytriomyces Doweld
Caulochytriales Doweld
Caulochytriaceae Subram.
Caulochytrium Voos & L.S. Olive (2)

CHYTRIDIOMYCOTA Doweld
Chytridiomyces 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)
Fayochoytriomyces 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)
Ichthyochytrium Plehn (1)
Loborhiza A.M. Hanson (1)
Macrochytrium Minden (1)
Megachytrium Sparrow (1)
Mitochytridium P.A. Dang. (2)
Mucophilus Plehn (1)
Nowakowskia Borzí (1)
Olpidiaster Pascher (4)
Perolpidium Doweld (2)
Physorhizophidium 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)

Lobulomyces 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)

Mesochytriomyces 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 & Pljusich (1)

Polychytriomyces 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)

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

Rhizophydiales Letcher

Alphamyetaceae 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)

Terramyces Letcher

Boothiomyces Letcher (1)

Terramyces Letcher (1)

Uebelmesseromyces M.J. Powell & Letcher

Uebelmesseromyces M.J. Powell & Letcher (1)

Rhizophydiales genus *incertae sedis*

Homolaphlyctis Longcore, Letcher & T.Y. James (1)

Rhizophlyctidomyces 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)

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

Spizellomycetales D.J.S. Barr

Powellomyces 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)

Synchytrium 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 Błaszcz., Niezgodna, B.T. Goto, Magurno*

Polonospora Błaszcz., Niezgodna, 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 Błaszcz. & Chwat (3)

Desertispora Błaszcz., 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 Błaszcz., Niezgodna & B.T. Goto (1)

Tricispora Oehl, Sieverd., G.A. Silva & Palenz. (1)

Pacisporaceae C. Walker, Błaszcz., 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 Błaszk., Chwat & Kovács (13)

Epigeocarpum Błaszk., 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 Błaszk., Niezgoda, B.T. Goto & Kozłowska (1)

Kamienskia Błaszk., 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 Błaszk., 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, Błaszk., Niezgoda, Kozłowska & Jobim (1)

Septoglomus Sieverd., G.A. Silva & Oehl (14)

Silvaspora Błaszk., 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 Błaszk., Kovács, Chwat & Kozłowska (1)

Pervetustaceae Błaszk., Chwat, Kozłowska, Symanczik & Al-Yahya'ei

Pervetustus Błaszk., Chwat, Kozłowska, Symanczik & Al-Yahya'ei (1)

KICKXELLOMYCOTA Tedersoo, Sanchez-Ramirez, Köljalg, 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)
Trichozygospora 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*

Trissocladomyces 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)

Dipsacomyces 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)

Pinnaticoemansia Kurihara & Degawa (1)

Spirodactylon R.K. Benj. (1)

Spiromyces 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. Caldusch (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)

Umbelopsidomyces 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)

Aestipascluomyces 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, Prospero-Porta & Kim

Facilispora Jones, Prospero-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)

Pereziiidae 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, Pieniasek & Jordana (1)
Ovipleistophora Pekkarinen, Lom & Nilsen (2)
Pleistophora Gurley (10)
Trachipleistophora Hollister, Canning, Weidner, Field, Kench & Marriott (4)
Vavraia Weiser (10)

Spragueiidae Weissenberg emend. Tokarev & Issi
Apotaspota Sokolova & Overstreet (1)
Inodosporus Overstreet & Weidner (2)
Microgemma Ralphs & Matthews (6)
Spraguea Weissenberg (2)
Potaspota 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, Ravisse & 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)
Vittaforma 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)
Kinorhynchospora 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 Ormières & Sprague
Hessea Ormières & 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
	<i>Amerosporae</i>	<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) <i>Lepiotasporites</i> T.C. Huang (1) <i>Magnosporites</i> Rouse (1) <i>Microsporonites</i> R.K. Jain (2) <i>Monoporisporites</i> Hammen (47) <i>Nailisporites</i> T.C. Huang (1) <i>Nigrosporites</i> Debi Mukh. (1) <i>Palaeoamphisphaerella</i> Ramanujam & Srisailam (3) <i>Parapotamomyces</i> O'Keefe (1) <i>Peziasporites</i> 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)
	<i>Didymosporae</i>	<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)*
	<i>Phragmosporae</i>	<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>Ceratohirudispora</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>Jansoniisporites</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)
	<i>Dictyosporae</i>	<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>Spataporthe</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>Paleophiocordyceps</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>Plochmopeltinities</i> Cookson (3) <i>Polyhyphaethyrites</i> R. Srivast. & R.K. Kar (1) <i>Ratnagiriathyrites</i> R.K. Saxena & N.K. Misra (1) <i>Spinosporonites</i> R.K. Saxena & S. Khare (1) <i>Stomiopeltites</i> Alvin & M.D. Muir (3) <i>Trichopeltinities</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>Paleoserenomyces</i> Currah, Stockey & B.A. LePage (1)
	<i>Pleosporales</i>	<i>Cryptodidymosphaerites</i> Currah, Stockey & B.A. LePage (1) <i>Dictyosporiuminities</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>Boletales</i>	<i>Palaeogaster</i> Poinar, Alfredo & Baseia (1)
	<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>Mensoideisporites</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>Rhizophyditis</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> Willh. Bock (1)
Mycelia Sterilia		<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>Tormentella</i> H.D. Pflug (2)
Fossil fungi <i>incertae sedis</i>		<i>Annella</i> Sat. K. Srivast. (2) <i>Caenomyces</i> E.W. Berry (<i>Pyrenomycetes</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>Hassiella</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>Paleopyrenomycites</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>Polystigmmites</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>Scepasmatoxycarpion</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>Botryosphaeriales</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>Chaetosphaeriales</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>Diporotheceae</i>	<i>Diporothea</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>Tetracoccosporium</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>Nidula</i> V.S. White	<i>N. baltica</i> Poinar
	<i>Agaricostilbales</i>	<i>Chionosphaeraceae</i>	<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. = Nucleomycea 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. & Kirchn.
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)
Lagena 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)

Clamydomygium 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)

Eurychasmatales 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.

AMOEBOTRICHIA 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 Lepşi
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* 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 aoudad 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. Erdoğan).

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. Erdoğan).

Annocutis K.H. Larss.

A new corticioid genus *Annocutis*, was introduced by Larsson & Oldervik (2020) to accommodate *A. rivularis*, belongs to the *Agaricomycetes* genera *incertae sedis* (M. Erdoğan).

Amphosoma Baral

Amphosoma was established by Baral et al. (2020) to accommodate four species. The type species *A. resinicola* is characterized by rather small, ± ellipsoid ascospores, and light-colored apothecia (Baral et al. 2020) (M. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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 *tef1-a* 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 soledia (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 analyzes 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 *Leotiomyces* and *Eurotiomyces* were detected by preliminary analyses of ITS sequences. Multilocus phylogenetic analyses (LSU, ITS, *tub*, *EF-1 α* , 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. Erdođdu).

Arniium Nitschke ex G. Winter

Huang et al. (2021b) excluded this genus from *Lasiosphaeriaceae* (*vide* 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. Erdođdu).

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. Erdođdu).

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 *Cladioriellales* 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 endopyte 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 & Volkman 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, seceding 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 *Oomyces*. 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. Wächt. & 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. Yamag. 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, gabbrous 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 *Pseudosplanchonema* 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 *Candelina*, 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 synnematos 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. Erdoğan).

Crossosporaceae Aime & McTaggart

Crossosporaceae was established by Aime & McTaggart (2021) to accommodate the genera *Angiopsora*, *Catenulopsora*, *Crossospora*, *Kweilingia*, *Neolivea*, *Neophysopella* and *Stomatisora* in the order *Pucciniales*. *Crossosporaceae* is similar to *Phakosporaceae*, 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. Erdoğan).

Cryolevonia A. Pontes et al.

Pontes et al. (2020) introduced the cryophilic yeast *Cryolevonia* in *Camptobasidiaceae* to accommodate *C. schafbergensis* (the type species) (M. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

Cylindrosympodiaceae Crous et al.

This family has been introduced by Shen et al. (2020) to accommodate *Cylindrosyposium*, 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-a*, *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 Teteravn.-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. Erdoğdu).

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-α* sequence data revealed *Elongaticollum* as a distinct genus within *Phaeosphaeriaceae* with high statistical support (Tennakoon et al. 2020) (M. Erdoğdu).

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 analyzes 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. Thiyagaraja).

***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).

***Fuscospaeria* 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 *Annulatascaeae* 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. Selcuk).

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. Thiyagaraja).

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 ascospores, 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).

Herpomycetes Thaxt.

The genus includes 27 species, after the description of *Herpomycetes sheldordellae* 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 α* and β -*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. lambearum* 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- α* , *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. Erdoğdu).

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. Erdoğdu).

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 3rd 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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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).

Knighiellastrum L. Ludw. & Kantvilas

Ludwig et al. (2020) introduced *Knighiellastrum* within *Icmadophilaceae* to accommodate the Tasmanian endemic *K. eucalypti*, which was provisionally ascribed to *Icmadophila* by Lumbsch et al. (2011) and then to *Knighiella* by Kantvilas (2018). *Knighiellastrum* 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.

Höhnel (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. sonora* (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).

Linosporopsis 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 *Annulatasceae* 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 *Botryosphaerales* 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 analyzes 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. Erdoğan).

Moringomyces Crous

Based on the phylogenetic results, combined with morphology and culture characteristics, Crous et al. (2020a) introduced *Moringomyces* as a monotypic genus in *Sacchettoeciaceae*. The genus is typified by *M. phantasmae* collected from the flower of *Moringa ovalifolia* in Namibia (Crous et al. 2020a) (M. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

Naviculispora Stchigel et al.

Marin-Felix et al. (2020) introduced this genus with *N. terrestris* as the type species (M. Erdoğan).

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. Erdoğan).

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 *Helleiosa* in the multigene phylogenetic analysis (V. Thiyagaraja).

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-a* 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 luetkemulleri 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).

Neoscirrhia Crous & R.K. Schumach.

Crous et al. (2021c) introduced *Neoscirrhia* 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. Thiagaraja).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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 *Annulatasceae* 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. Thiyagaraja).

Olotia D. Wächt. & 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 Maharachch. 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. Kondr.

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 Thiyagaraja et al.

Thiyagaraja 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. Thiyagaraja).

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 *RPBI* 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 *Archaespora ecuadoriana* as a basal species in *Archaesporaceae* but significant molecular divergence support *Palaeospora* and *Intraspora* as genus ranking. Additional analysis of *Archaespora ecuadoriana* and *A. trappei* from the type location is necessary to better understand the *Archaespora* clade and clarify the topology (B.T. Goto, F. Marguno, J. Błaszczowski & 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. Erdoğan).

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- μ m-long ascospores with an oblique or subapical germ pore (Mehrabi et al. 2020) (M. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

Parvaulbium K.S. Landry & A.N. Mill.

Miller (2021) introduced *Parvaulbium* in *Chaetomiaceae* to accommodate *P. thermostercus* (type species) which grew on the dung of *Equus caballus* (Miller 2021) (M. Erdoğan).

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 Søchting 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 *Readerielliopsidaceae*. 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. vermispota* 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 *Macrotrophula*, *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 *Polycephalomyces formosus*-like fungi (*Polycephalomyces 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 zwinianus* 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. Erdoğan).

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. Erdoğan).

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. Erdoğan).

Pseudoechria Y. Marín & Stchigel

Marin-Felix et al. (2020) introduced this genus with *P. curvicolla* as the type species (M. Erdoğan).

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 *Porotheleaceae*. 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).

Purpleofaciens 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).

Purpleomyces 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, monomitic 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 monomitic 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).

Readerielliopsisaceae Abdollahz. & Crous

Abdollahzadeh et al. (2020) introduced this family (type genus: *Readerielliopsis*) 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 monomitic 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 *Caecoma 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).

Sarcomyxa 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. Thiyagaraja).

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. niveocreameum*, 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).

Strelitzomyces Crous

Crous et al. (2019d) introduced this new genus with *S. knysnanus* as the type species. *Strelitzomyces* is closely related to *Anungitiomyces* (Crous et al. 2019d). The main differences between the two genera lie in the lack of pigmentation in *Strelitzomyces*, 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. Thiyagaraja).

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. diplocladielloidea* collected from decaying wood submerged in freshwater. The fungus is generically distinct in the brown, short-stalked, bulbous 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.

Höhnel (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-Otoni et al. 2021); *T. hondurensis* from Honduras (Haelewaters et al. 2020, 2021c); and *T. bambusicola*, *T. daweshanensis*, *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-Otoni et al. (2021), with five new combinations, 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 stiptipellis, 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).

Trochilispota VP Abreu et al.

Hyde et al. (2019) established *Trochilispota* 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 collarette and hyaline, aseptate, smooth conidia (Réblová et al. 2021b) (M. Erdoğdu).

Tulipispota 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).

Tylocliostrum van den Boom & Magain

The new genus *Tylocliostrum* 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).

Vandijckomycella 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 glomeromycetous 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 β -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 β -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).

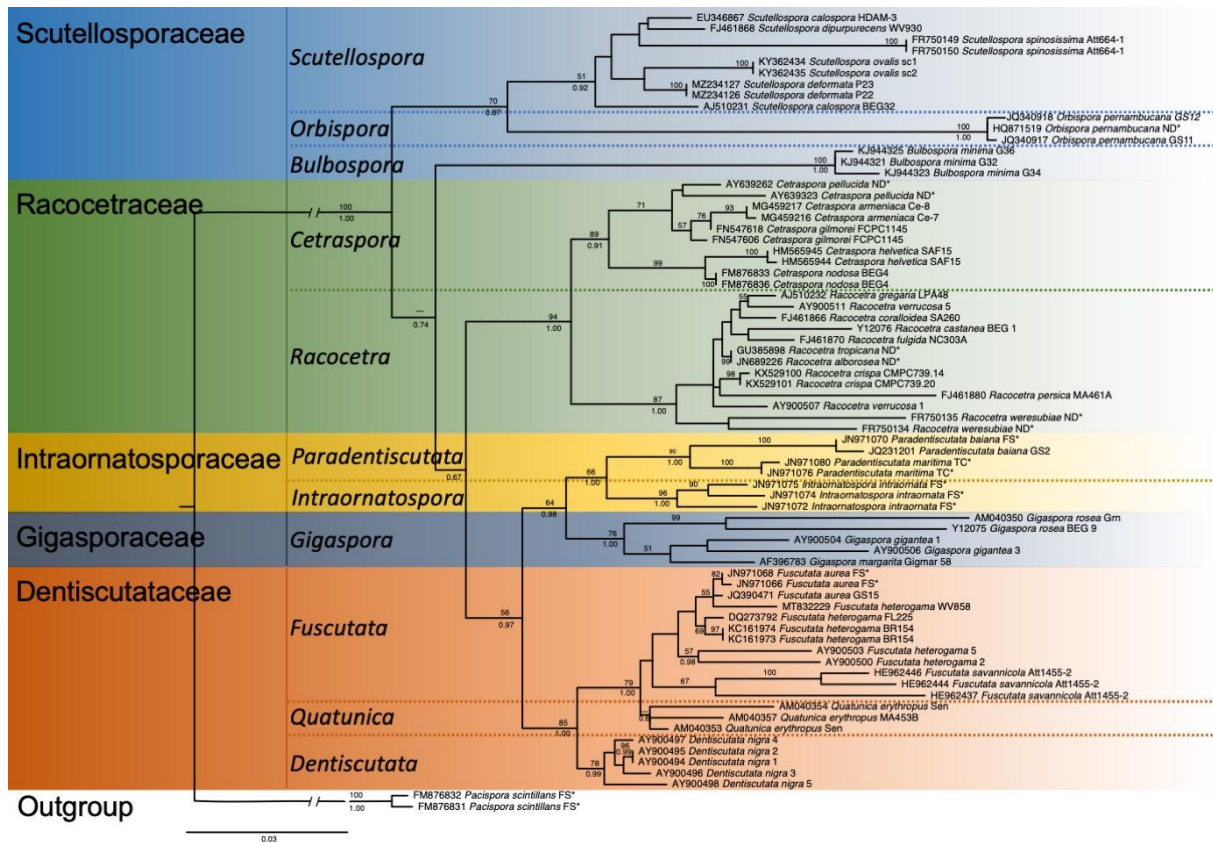


Figure 2 – *Gigasporales* with six families and eleven genera based on monophyletic clades. Phylogenetic tree reconstructed using partial nuclear LSU rDNA sequence. This marker was chosen as it is the only marker with sequences from type species for all eleven genera within this order. The tree was rooted 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 *Sarcomyxaceae* 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 *Macrotiophula* 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). *Sarcomyxaceae* 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 *Rosettozymales*. 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*, *Milesiaceae*, *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*, *Neolivea*, *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). *Milesiaceae* is typified by *Milesina* and includes *Milesia*, *Naohidemyces*, 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* (Hongsanan 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, *Eudarluca* 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* (Hongsanan 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- α* 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- α* 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* (Batzer 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. citharexyli* 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.

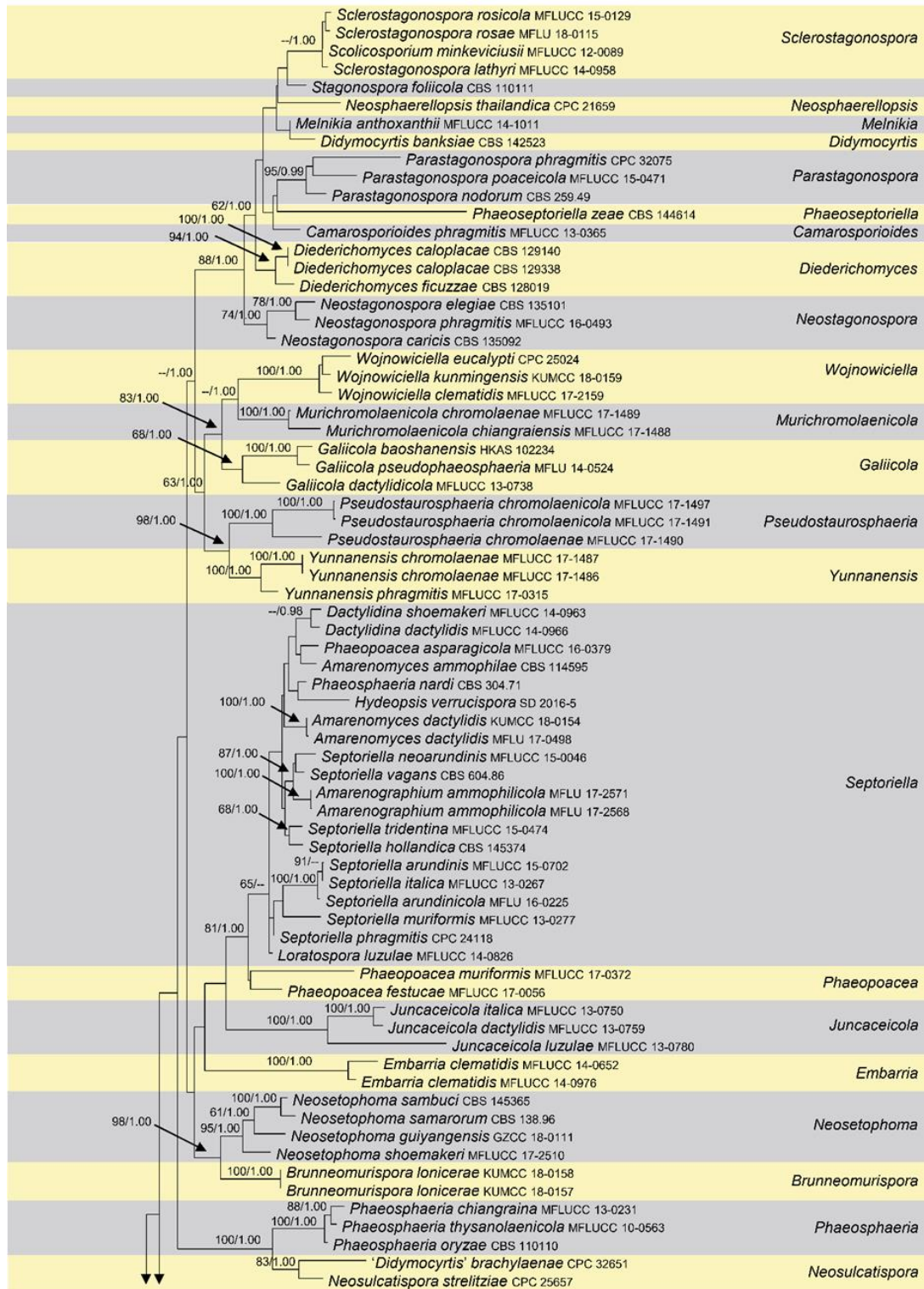


Figure 3 – Phylogram generated from maximum likelihood analysis (RAxML) of genera in *Phaeosphaeriaceae* based on SSU, LSU, ITS, *tef1- α* and *rpb2* sequence data. Maximum likelihood bootstrap values equal or above 60 %, Bayesian posterior probabilities equal or above 0.95

(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.

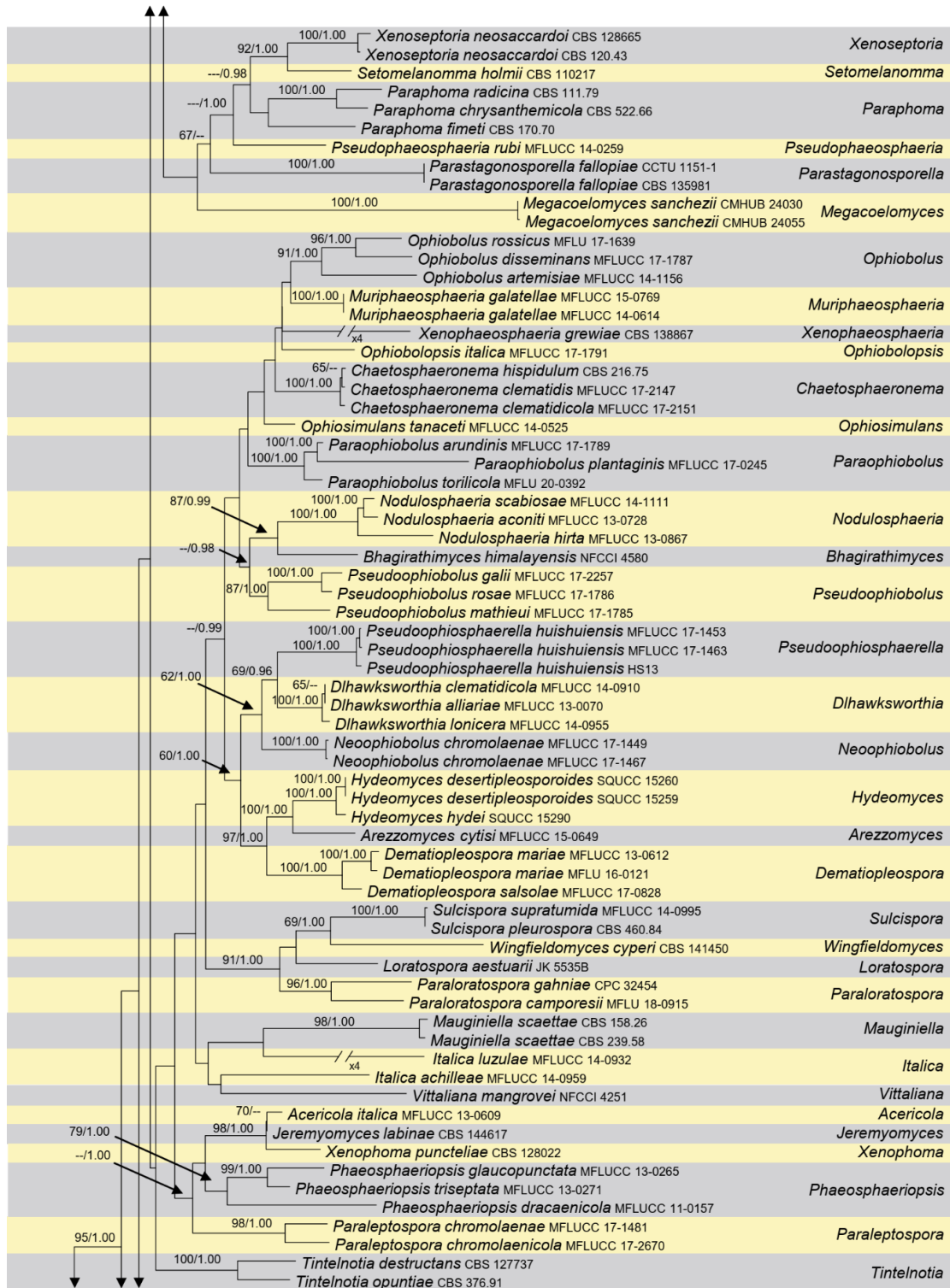


Figure 3 – Continued.

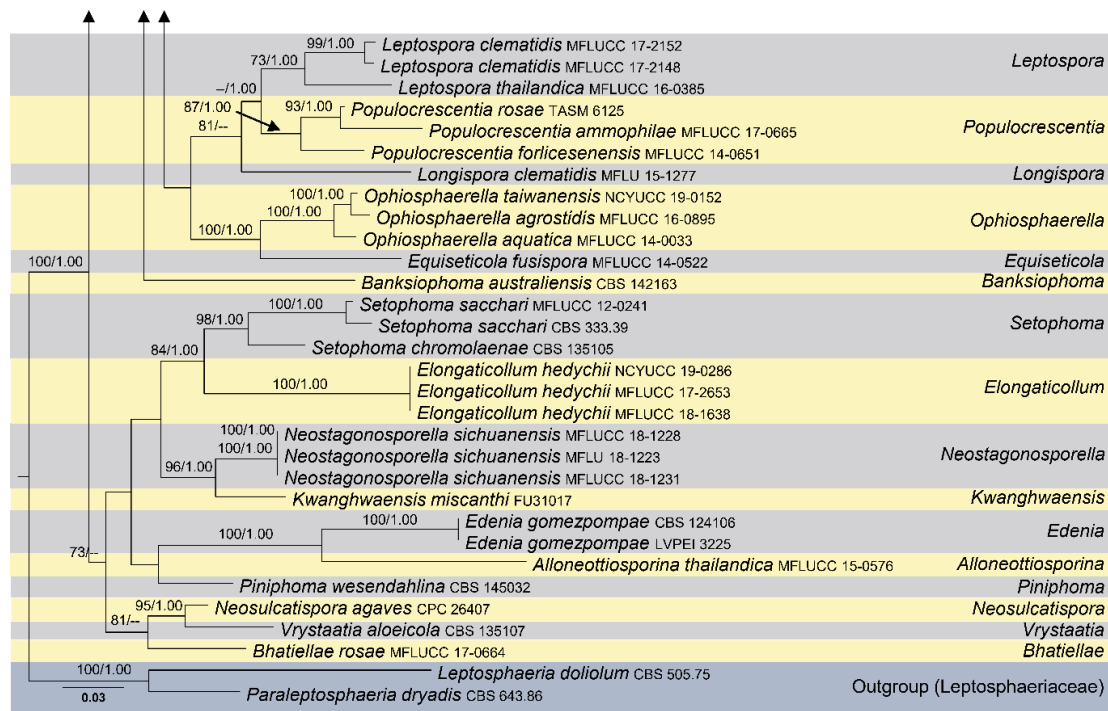


Figure 3 – Continued.

In this appraisal, we follow the treatment of Abdollahzadeh et al. (2020) and Hongsanan 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).

***Readerielliopsidaceae* Abdollahz. & Crous**

Abdollahzadeh et al. (2020) introduced *Readerielliopsidaceae* to accommodate four coelomycetous genera, namely *Phaeoxyphiella*, *Readerielliopsis*, *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 *Readeriellopsidaceae*. 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 fraseriae* Cif. & Bat. warranted an epitypification. Recently, a new genus *Alloscorias* Haituk & Chew 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, *tef1-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* Egidi & 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, *tef1-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 *Hippopotamyces* Crous, *Neokirramyces* 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 *Hippopotamyces* and *Neokirramyces* 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*.

Phaeothecoidiaceae 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 *Phaeothecoidiaceae* under *Mycosphaerellales*. Formerly, Hongsanan et al. (2020) synonymised *Nowamycetaceae* introduced by Crous et al. (2019c) to accommodate two species of *Nowamycetes* under *Phaeothecoidiaceae*. Recently, a new genus *Neochaetothyria* Crous was introduced in *Phaeothecoidiaceae*, *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.

Mucomyosphaerella Quaedv. & Crous

Mucomyosphaerella 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 *Mucomyosphaerella* 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(

Achorodothis 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
Cercostigmia U. Braun
Ciferriella Petr.
Cladosporiella Deighton
Clypeispora A.W. Ramaley
Colletogloeum Petr.
Cyclodothis 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
Gomphinaria 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 Thuang
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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