## Recommendations for competing sexual-asexually typified generic names in *Sordariomycetes* (except *Diaporthales, Hypocreales,* and *Magnaporthales*)

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Abstract: With the advance to one scientific name for each fungal species, the generic names in the class *Sordariomycetes* typified by sexual and asexual morphs are evaluated based on their type species to determine if they compete with each other for use or protection. Recommendations are made for which of the competing generic names should be used based on criteria such as priority, number of potential names changes, and frequency of use. Some recommendations for well-known genera include *Arthrinium* over *Apiospora*, *Colletotrichum* over *Glomerella*, *Menispora* over *Zignoëlla*, *Microdochium* over *Monographella*, *Nigrospora* over *Khuskia*, and *Plectosphaerella* over *Plectosporium*. All competing generic names are listed in a table of recommended names along with the required action. If priority is not accorded to sexually typified generic names after 2017, only four names would require formal protection: *Chaetosphaerella* over *Oedemium*, *Diatrype* over *Libertella*, *Microdochium* over *Monographella*, and *Phaeoacremonium* over *Romellia* and *Togninia*. Concerning species in the recommended genera, one replacement name (*Xylaria benjaminii* nom. nov.) is introduced, and the following new combinations are made: *Arthrinium sinense*, *Chloridium caesium*, *C. chloroconium*, *C. gonytrichii*, *Corollospora marina*, *C. parvula*, *C. ramulosa*, *Juncigena fruticosae*, *Melanospora simplex*, *Seimatosporium massarina*, *Sporoschisma daemonoropis*, *S. taitense*, *Torpedospora mangrovei*, *Xylaria penicilliopsis*, and *X. termiticola* combs. nov.

#### Key words:

Ascomycota nomenclature pleomorphic fungi protected lists taxonomy

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# *<b>RTICLE*

#### **INTRODUCTION:**

The class *Sordariomycetes* is composed of three subclasses and about 21 orders including many genera with species that express themselves in both their sexual and asexual morphs. Based on the obsolete version of Article 59 of the outdated *International Code of Botanical Nomenclature* (McNeill *et al.* 2006), these morphs had previously been described in different genera resulting in more than one scientific name for a single fungal species. With the change to the *International Code of Nomenclature for algae, fungi, and plants* (ICN; McNeill *et al.* 2012), two or more names for different morphs of the same species are no longer allowed. Although determining which name to use generally follows the principle of priority of publication at the family, generic and species level, exceptions to this principle are allowed, especially in the case of economically important and widely used taxa.

In this paper generic names that appear to compete for use are reviewed to determine if their respective type species are congeneric using various resources including the USDA SMML Fungal Databases (http://nt.ars-grin.gov/ fungaldatabases/) and Wijayawardene et al. (2012). If so, then a number of factors are considered in deciding which generic name to recommend for use. These factors include the number of species in each competing genus, which correlates with the number of name changes that would be required, and how widely used are species in each genus as determined by reports and peer-reviewed publications. If these factors are about equal, then the generic name that has priority by date is recommended for use. For each set of competing generic names, these factors are discussed based on the literature. Finally, a draft of these recommendations was circulated widely amongst the community of mycologists interested in each major group of fungi to arrive at the proposals made here.

A synopsis of data concerning each genus is provided in Table 1 listing the generic names recommended for use and competing names, the type species for each genus and the current name for the type, and action required especially if the principle of priority will not be followed, i.e. the generic name must be protected. At present the ICN requires that names typified by sexual morphs should have priority unless protected, although it is proposed that this requirement be deleted in 2017 (Hawksworth 2015). Eventually all generic names proposed for protection will be evaluated by the Nomenclature Committee for Fungi (NCF), and formally accepted or not at the Nomenclature Section meeting of the next International Botanical Congress in 2017.

For several groups of fungi having pleomorphic genera, this process has been completed, i.e. *Dothideomycetes* (Rossman *et al.* 2015b), *Erysiphales* (Braun 2013), *Eurotiales* (Samson *et al.* 2014, Visagie *et al.* 2014), *Leotiomycetes* (Johnston *et al.* 2014), yeast fungi (Daniel *et al.* 2014), and some orders of *Sordariomycetes* including *Diaporthales* (Rossman *et al.* 2015a), *Hypocreales* (Rossman *et al.* 2013, Quandt *et al.* 2014), *Magnaporthales* (Zhang *et al.* 2016), and *Microascales* and *Ophiostomatales* (de Beer *et al.* 2013). This paper addresses the remaining orders of the class *Sordariomycetes* listed alphabetically by order as outlined in Maharachchikumbura *et al.* (2015): *Amphisphaeriales*, Calosphaeriales, Chaetosphaeriales, Coniochaetales, Conioscyphales, Cordanales, Coronophorales, Glomerellales, Halosphaeriales, Melanosporales, Microascales, Phyllachorales, Pleurotheciales, Savoryellales, Sordariales, Togniniales, Torpedosporales, and Xylariales.

#### **RECOMMENDATIONS FOR GENERIC NAMES**

(A) = a name typified by an asexual morph, and (S) = a name typified by a sexual morph.

#### Amphisphaeriales

### Use Dyrithiopsis L. Cai et al. 2003 (S) rather than Monochaetiopsis L. Cai et al. 2003 (A)

The monotypic genera *Dyrithiopsis*, typified by *D. lakefuxianensis*, and *Monochaetiopsis*, typified by *M. lakefuxiansis*, were described as the sexual and asexual morph of the same species at the same time (Jeewon *et al.* 2003), thus they are synonyms and have equal priority. Because *Dyrithiopsis* has been cited more widely in the literature, we recommend *Dyrithiopsis* for use.

### Use *Hyalotiopsis* Punith. 1970 (A) rather than *Ellurema* Nag Raj & W.B. Kendr. 1985 (S)

When Punithalingam (1970) described the genus *Hyalotiopsis*, typified by *H. subramanianii*, he noted that the sexual morph was *Massaria indica*, the basionym of *Ellurema indica*, type of the monotypic *Ellurema*, thus *Hyalotiopsis* and *Ellurema* are synonyms. This history was recounted by Nag Raj & Kendrick (1986) when they described *Ellurema*. A second species of *Hyalotiopsis* has been redisposed in *Parahyalotiopsis* as *P. borassi* (syn. *Hyalotiopsis borassi*) (Nag Raj 1976), thus both genera include only one species. Given their equal use, we follow priority and recommend *Hyalotiopsis* for use.

### Use *Pestalotiopsis* Steyaert 1949 (A) rather than *Pestalosphaeria* M.E. Barr 1975 (S)

The well-known genus *Pestalotiopsis*, typified by *P. guepinii*, was established for many species of *Pestalotia* determined to be distinct from the type of *Pestalotia*, *P. pezizoides*. Barr (1975) described the genus *Pestalosphaeria*, typified by *P. concentrica*, for the sexual morph of *Pestalotiopsis guepinii* var. *macrotricha*, both species on *Rhododendron* in southeastern North America. Thus, it appears that *Pestalosphaeria* is a synonym of *Pestalotiopsis*. *Pestalotiopsis* has been widely used and currently includes more than 200 names with two recent accounts of the genus (Maharachchikumbura *et al.* 2012, 2014). On the other hand, *Pestalosphaeria* includes 14 names, none of which are commonly used. Given the ubiquitous and widely reported species of *Pestalotiopsis* as well as the number of names in that genus and its priority, we recommend use of *Pestalotiopsis*.

### Use Seimatosporium Corda 1833 (A) rather than Discostroma Clem. 1909 (S)

The generic names *Discostroma* and *Seimatosporium* have been applied to sexual and asexual morphs of the same species based on morphological studies (Brockmann

1976, Nag Raj 1993). The type species of Discostroma, D. rehmii, is a younger synonym of *D. massarina*, and has an asexual morph referred to as Seimatosporium ribis-alpini while the type of Seimatosporium, S. rosae, has a sexual morph described as Discostroma rosae (Shoemaker 1964, Brockmann 1976, Nag Raj 1993). Although neither of the type species of Discostroma or Seimatosporium were included, Tanaka et al. (2011) used three species of Discostroma and sixteen species of Seimatosporium in their LSU tree to show that representatives of these genera form a monophyletic genus that should be regarded as Seimatosporium. Norphanphoun et al. (2015) added four more isolates of Seimatosporium including one for the type species, S. rosae, and also concluded that the genus was monophyletic. Host-specificity should be considered in studying the taxonomy of this genus. Given that Seimatosporium is the oldest name, has the greater number of species, and is more commonly used, this generic name is recommended for use.

New combination:

Seimatosporium massarina (Sacc.) Jaklitsch & Voglmayr, comb. nov.

MycoBank MB817259

- Basionym: Metasphaeria massarina Sacc., Atti Soc. Veneto-Trent. Sci. Nat., Padova, Sér. 6 **2**: 22 (1884).
- Synonyms: Discostroma massarina (Sacc.) Arx, Gen. Fungi Sporul. Cult., 2<sup>nd</sup> edn. (Vaduz): 131 (1974).
- *Hendersonia ribis-alpini* Fautrey, *Revue Mycol.*, Toulouse **14**: 171 (1892).
- Seimatosporium ribis-alpini (Fautrey) Shoemaker & E. Müll., Canad. J. Bot. **42**: 403 (1964).
- Curreya rehmii Schnabl, Ber. Bayer. Bot. Ges., Beih. 2: 66 (1892)

Discostroma rehmii (Schnabl) Clem., Gen. Fungi: 173 (1909).

### Use *Seiridium* Nees 1816 (A) rather than *Blogiascospora* Shoemaker *et al.* 1966 (S)

According to Shoemaker *et al.* (1966) *Seiridium marginatum*, the type species of *Seiridium*, is the asexual morph of *Blogiascospora marginata*, type of the monotypic genus *Blogiascospora*, thus *Seiridium* and *Blogioascopsora* are synonyms as confirmed by Jaklitsch *et al.* (2016). *Seiridium* is the older generic name, has the greater number of species, and is the more widely used, therefore *Seiridium* is recommended for use.

One species of *Seiridium, S. cupressi*, cause of the widespread disease known as cypress canker, has previously been referred to as *Lepteutypa cupressi*. The type of *Lepteutypa, L. fuckelii*, is now placed in a distinct genus in the *Amphisphaeriaceae* (Jaklitsch *et al.* 2016), while the species previously regarded as *L. cupressi* belongs in *Seiridium* as *S. cupressi* in *Sporocadaceae*.

#### Calosphaeriales

Use Calosphaeria Tul. & C. Tul. 1863 (S) rather than Calosphaeriophora Réblová et al. 2004 (A) The genus *Calosphaeria*, typified by *C. princeps*, includes 114 names while an asexual morph of *C. pulchella* was described in the monotypic genus *Calosphaeriophora* as *Ca. pulchella* (Réblová *et al.* 2004). *Calosphaeria pulchella* is a saprobic fungus occurring on various woody plants and has been recently isolated from wood of sweet cherry trees showing canker symptoms (Trouillas *et al.* 2010a, Berbegal *et al.* 2014). If *Calosphaeria princeps* and *C. pulchella* are congeneric, then these generic names are synonyms as suggested by Réblová *et al.* (2015). Based on priority, the number of species in the genus, and its widespread use, the generic name *Calosphaeria* is recommended for use.

### Use *Pleurostoma* Tul. & C. Tul. 1863 (S) rather than *Pleurostomophora* Vijaykr. *et al.* 2004 (A)

The genus Pleurostoma, typified by P. candollei, includes six names, two of which have been placed elsewhere. One species, P. ootheca, has an asexual morph described as Pleurostomophora ootheca, the type species of Pleurostomophora (Vijaykrishna et al. 2004). Réblová et al. (2015) explored the phylogeny of this group including one species of Pleurostoma and four species of Pleurostomophora, although the type species of Pleurostoma was not available. While both sexual species are lignicolous, the asexual species were isolated from woody plants, soil or sewage (Schol-Schwarz 1970). They were also identified as etiological agents of subcutaneous phaeohyphomycosis (Meyer et al. 1975, Hironaga et al. 1989), and one asexual species of Pleurostoma, P. ochraceum, is known to cause human eumycetoma (Mhmoud et al. 2012). Assuming that Pleurostoma candollei and P. ootheca are congeneric, these generic names are synonyms. Given that the name Pleurostoma has priority, has the greater number of species, and has been widely used, we recommend the use of Pleurostoma. Based on these conclusions and recent molecular data, the three exclusively asexual Pleurostomophora species were transferred to Pleurostoma by Réblová et al. (2015).

### Use *Togniniella* Réblová *et al.* 2004 (S) rather than *Phaeocrella* Réblová *et al.* 2004 (A)

The monotypic genera *Togniniella*, typified by *T. acerosa*, and *Phaeocrella*, typified by *P. acerosa*, were described in the same article for the sexual and asexual morphs of the same species and thus are synonyms having equal priority (Réblová *et al.* 2004). Although an older epithet was discovered for *T. acerosa* (Réblová 2011), this was later rescinded (Réblová *et al.* 2015). We recommend the use of the generic name *Togniniella*.

#### Chaetosphaeriales

#### Use Chloridium Link 1809 (A) rather than Gonytrichum Nees & T. Nees 1818 (A) or Melanopsammella Höhn.1920 (S)

The type species of *Chloridium*, *C. viride* as *C. virescens*, has long been known to be a synonym of *Chaetosphaeria vermicularioides* (syn. *Melanopsammella vermicularioides*), a species that is congeneric with *M. inaequalis*, the type of *Melanopsammella* (Réblová & Winka 2000, Fernández *et al.* 

2006, Crous *et al.* 2012). The type species of *Gonytrichum, G. caesium*, is the asexual morph of *M. inaequalis* (Hughes 1951), thus *Chloridium*, *Gonytrichum* and *Melanopsammella* are synonyms. Over 60 names have been placed in *Chloridium*, the most well-known of these three generic names. *Chloridium* was monographed by Gams & Holubová-Jechová (1976), however, many of these names have been removed to other genera. *Gonytrichum* includes over 20 species while *Melanopsammella* consists of five species, two of which already have names in *Chloridium* (Réblová *et al.* 1999, Réblová 2000). *Melanopsammella* has been distinguished from *Chaetosphaeria* by several authors (Réblová & Winka 2000, Fernández & Huhndorf 2005, Fernández *et al.* 2006, Crous *et al.* 2012). Given the widespread use of *Chloridium* and its priority, the generic name *Chloridium* is recommended for use.

New combinations:

### Chloridium caesium (Nees) Réblová & Seifert, comb. nov.

#### MycoBank MB816825

- Basionym: Gonytrichum caesium Nees, Nova Acta Phys.-Med. Acad. Caes. Leop.-Carol. Nat. Cur. **9**: 244 (1818).
- Synonyms: Eriosphaeria inaequalis Grove, J. Bot., Lond. 24: 132 (1886).
- Melanopsammella inaequalis (Grove) Höhn., Ann. Mycol. 17: 121 (1920).

Chloridium chloroconium (W. Gams & Hol.-Jech.) Réblová & Seifert, comb. nov.

MycoBank MB816826

- Basionym: Chaetosphaeria chloroconia W. Gams & Hol.-Jech., Stud. Mycol. 13: 86 (1976).
- Synonyms: Melanopsammella chloroconia (W. Gams & Hol.-Jech.) Réblová et al., Sydowia **51**: 65 (1999).
- Gonytrichum chlamydosporium G.L. Barron & G.C. Bhatt, Mycopath. Mycol. appl. **32**: 126 (1967).

Because the name *Chloridium chlamydosporium* (J.F.H. Beyma) S. Hughes 1958 already exists, and refers to a different taxon, the next older epithet for this species is taken up and placed in *Chloridium*.

#### Chloridium gonytrichii (F.A. Fernández & Huhndorf) Réblová & Seifert, comb. nov.

#### MycoBank MB816827

Basionym: Melanopsammella gonytrichii F.A. Fernández & Huhndorf, Fungal Diversity **18**: 42 (2005).

Crous *et al.* (2012) showed that this species is closely related to *Chloridium virescens* as *Melanopsammella vermicularioides*.

### Use *Menispora* Pers. (A) 1822 rather than *Zignoëlla* Sacc. 1878 (S)

The genus *Menispora* is typified by *M. glauca*, which has a sexual morph referred to as *Chaetosphaeria glauca* (Holubová-Jechová 1973a), which is a synonym of the earlier name *Zignoëlla ovoidea*. The type of *Zignoëlla* is *Z. pulviscula*, which has an asexual morph known as *Menispora* 

*caesia* (Booth 1957, Constantinescu *et al.* 1995). Fernández *et al.* (2006) demonstrated that *Zignoëlla* is distinct from *Chaetosphaeria* based on *C. innumera* and that *Z. pulviscula* and *Z. ovoidea* are congeneric, thus *Menispora* and *Zignoëlla* are synonyms. Like *Chaetosphaeria*, *Zignoëlla* has been used as a repository for species that have a similar morphology, namely black non-stromatic ascomata with a papilla and hyaline, septate ascospores, but are phylogenetically diverse. Given the lack of characterization of *Zignoëlla*, the greater use of *Menispora*, and following the principle of priority, *Menispora* is recommended for use.

### Use *Menisporopsis* S. Hughes 1952 (A) rather than *Menisporopascus* Matsush. 2003 (S)

The monotype species of *Menisporopascus*, *M. kobensis*, was described for the asexual morph *Menisporopsis kobensis*. Because *M. kobensis* is congeneric with the type species of *Menisporopsis*, *M. theobromae*, as indicated by Rodrigues de Cruz *et al.* (2014), *Menisporopsis* and *Menisporopascus* are synonyms. *Menisporopsis* includes 10 names, is widely known, and has priority, therefore, the use of *Menisporopsis* is recommended.

## Use Sporoschisma Berk. & Broome 1847 (A) rather than *Melanochaeta* E. Müll. *et al.* 1969 (S)

The genus *Sporoschisma*, typified by *S. mirabile*, is considered the asexual morph of *Melanochaeta aotearoae*, while the type of *Melanochaeta*, *M. hemipsila*, is the sexual morph of *S. saccardoi*, now considered a synonym of *S. hemipsila* (Sivichai *et al.* 2000, Zelski *et al.* 2014a). *Sporoschisma mirabile* and *S. hemipsila* were shown to be congeneric (Fernández *et al.* 2006), thus *Sporoschisma* and *Melanochaeta* are synonyms. Of the five species in *Melanochaeta*, four have *Sporoschisma* asexual morphs (Sivichai *et al.* 2000, Mugambi & Huhndorf 2008). *Sporoschisma* includes 23 names, some of which have been placed elsewhere. If *Melanochaeta* were used, many name changes would be required. Based on priority and fewer number of name changes, we follow Zelski *et al.* (2014a) and recommend the use of *Sporoschisma* for this genus.

New combinations:

#### Sporoschisma daemonoropis (J. Fröhl. & K.D. Hyde) A.N. Mill., comb. nov.

MycoBank MB816828

Basionym: Melanochaeta daemonoropis J. Fröhl. & K.D. Hyde, Palm Microfungi: 235 (2000).

Sporoschisma taitense (Mugambi & Huhndorf) A.N. Mill., comb. nov.

MycoBank MB816829

Basionym: Melanochaeta taitensis Mugambi & Huhndorf, Sydowia 60: 263 (2008).

A *Sporoschisma* asexual morph was noted to occur with this type specimen.

### Use *Stanjehughesia Subram*. 1992 (A) rather than *Umbinosphaeria* Réblová 1999 (S)

Stanjehughesia hormiscioides, type of Stanjehughesia, was established with cultivation techniques as an asexual morph of Umbrinosphaeria caesariata, the monotype species of Umbrinosphaeria (Réblová 1999), therefore Stanjehughesia and Umbrinosphaeria are synonyms. In exploring species of Sporidesmium, Shenoy et al. (2006) demonstrated the polyphyletic nature of Stanjehughesia; however, 15 species have been described in that genus and the name is well-known. Given its priority, we recommend the use of Stanjehughesia.

#### Coniochaetales

### Use *Coniochaeta* (Sacc.) Cooke 1887 (S) rather than *Lecythophora* Nannf. 1934 (A)

The genus *Coniochaeta*, typified by *C. ligniaria*, was shown to be congeneric with *Lecythophora*, typified by *L. lignicola* (Weber *et al.* 2002, Damm *et al.* 2010, Khan *et al.* 2013, Perdomo *et al.* 2013). *Coniochaeta* is a well-known genus with almost 100 names while *Lecythophora* includes nine names, two of which are linked to species of *Coniochaeta*. These fungi are known as endophytes, pathogens of woody trees, saprobes in terrestrial and freshwater habitats (Raja *et al.* 2012) and, to a lesser degree, human pathogens (Damm *et al.* 2010). Both Khan *et al.* (2013) and Perdomo *et al.* (2013) include species of *Lecythophora* in a clade with the type species of *Coniochaeta*. Given the number of species, its widespread use, following the principle of priority, and in agreement with Khan *et al.* (2013), *Coniochaeta* is recommended for use.

#### Conioscyphales

### Use *Conioscypha* Höhn. 1904 (A) rather than *Conioscyphascus* Réblová & Seifert 2004 (S)

The genus Conioscypha, with C. lignicola as type species, includes 13 species from freshwater and terrestrial habitats. The genus Conioscyphascus, typified by Ca. varius, was originally established for fungi with Conioscypha asexual morphs (Réblová & Seifert 2004a). The two sexual species, Ca. gracilis with C. gracilis as its asexual morph and Ca. varius with C. varia, were recently placed in Conioscypha (Zelski et al. 2014b, Réblová et al. 2016). Although C. lignicola and 10 other species of Conioscypha are known only in their asexual morph, using DNA sequence data and cultivation studies, the link between sexual and asexual morphs has been experimentally proven for C. peruviana (Zelski et al. 2014b) and C. varia (Réblová & Seifert 2004a). Such a link has not yet been confirmed for the third species known to have a sexual morph, C. gracilis, however, conidia were observed on the substratum near ascomata (Réblová & Seifert 2004a, Zelski et al. 2014b). The molecular data clearly show that Conioscypha and Conioscyphascus are congeneric (Réblová & Seifert 2004a). Based on priority and the greater number of species, the name Conioscypha is recommended for use.

#### Cordanales

Use Cordana Preuss 1851 (A) rather than Pseudobotrytis Krzemien. & Badura 1954 (A) or Porosphaerella E. Müll. & Samuels 1982 (S) The type species of Cordana, C. pauciseptata, was linked to a sexual morph described as Porosphaerella cordanophora, type of Porosphaerella (Müller & Samuels 1982), thus these generic names are synonyms. Cordana is a well-known asexual genus that includes 22 names while three species have been placed in Porosphaerella. Réblová and Seifert (2007) showed that P. boringuinensis and P. cordanophora are closely related despite the fact that P. borinquinensis has an asexual morph regarded as Pseudobotrytis terrestris which Hernández-Restrepo et al. (2014) recognized as Cordana terrestris including Porosphaerella borinquinensis as a synonym. They also considered the type species of Pseudobotrytis, P. fusca, to be a synonym of C. terrestris, thus this generic name with four species is also a synonym of Cordana. Given its priority, fewer number of name changes required, and widespread use, we recommend the use of Cordana rather than Pseudobotrytis or Porosphaerella.

#### Coronophorales

#### Protect *Chaetosphaerella* E. Müll. & C. Booth 1972 (S) over *Oedemium* Link 1824 (A) and rather than *Veramycina* Subram. 1995 (A)

The genus Chaetosphaerella, typified by C. phaeostroma, has an asexual morph regarded as Oedemium minus (Booth 1958, Réblová 1999). The type species of Oedemium, O. atrum as O. didymium, is the asexual morph of Chaetosphaerella fusca (Ellis 1971). These two species of Chaetosphaerella were shown to be congeneric (Mugambi & Huhndorf 2010), thus Chaetosphaerella and Oedemium are synonyms. Veramycina elegans, the monotype species of Veramycina, was regarded as a later name for the asexual morph of C. phaeostroma (Réblová 1999), thus this generic name is also a synonym of Chaetosphaerella. Because Veramycina has been rarely used, that name is not a contender for use, however, the decision of whether to use Oedemium or Chaetospharella is more difficult. The genus Oedemium was clarified and monographed including two species by Hughes & Hennebert (1963) both of which have been linked with Chaetosphaerella. Although more species have been described in Oedemium, some have been placed elsewhere and others remain obscure. Chaetosphaerella has been placed phylogenetically in Chaetosphaerellaceae, Coronophorales (Mugambi & Huhndorf 2010). In the past decade Chaetosphaerella appears in the literature much more frequently than Oedemium, thus we recommend Chaetosphaerella for protection.

#### Glomerellales

#### Use Colletotrichum Corda 1837 (A) rather than Glomerella Spauld. & Schrenk 1903 (S)

The genus *Colletotrichum*, typified by *C. lineola*, is a large genus with 817 epithets (*Index Fungorum* 2016), many of which are considered plant pathogens. The number of

accepted species has varied over the decades with most species previously considered to be host-specific. Based on von Arx (1957) in which several hundred names were placed in synonymy with C. gloeosporioides, the number of species in Colletotrichum decreased to 11. Sutton (1980) included about 22 species in Colletotrichum for which he provided a key. With the use of molecular sequence data, the number of recognized species has increased with some species determined to be host-specific while others have a broad host range (Rojas et al. 2010, Damm et al. 2009, 2012, Weir et al. 2012). The type species, Colletotrichum lineola, had long been considered to be a synonym of C. dematium but was recently recognized as a distinct species in the C. dematium species complex (Damm et al. 2009, Cannon et al. 2012). Meanwhile, the sexual morphs of Colletotrichum were placed in the genus Glomerella, typified by G. cingulata, which has been considered the sexual morph of C. gloeosporioides. Recently this relationship has been questioned with C. gloeosporioides and G. cingulata regarded as distinct species in the C. gloeosporioides species complex (Weir et al. 2012). Over 100 names have been described in Glomerella, many of which have names in Colletotrichum. Although considered different species, there is no question that Colletotrichum and Glomerella represent the same genus.

Use of *Colletotrichum* over *Glomerella* is recommended for use for several reasons. Species of *Colletotrichum* are mainly associated with plants as endophytes and pathogens and have been thoroughly studied. In contrast, their sexual morphs regarded as *Glomerella* tend to occur on dead plant material and are less frequently encountered (Cannon *et al.* 2012, Maharachchikumbura *et al.* 2015). *Colletotrichum* is the older generic name and is well established in the plant pathological and plant breeder literature (Cannon *et al.* 2012). Preference has been given to *Colletotrichum* by several groups working on this genus (Cannon *et al.* 2012, Maharachchikumbura *et al.* 2015) based on its widespread use, greater number of names, and priority.

### Use Cylindrotrichum Bonord. 1851 (A) rather than Reticulascus Réblová & W. Gams 2011 (S)

The type species of *Cylindrotrichum*, *C. oligospermum*, was shown to represent the asexual morph of *Chaetosphaeria tulasneorum*, the type species of *Reticulascus* (Réblová & Gams 1999, Réblová *et al.* 2011a), thus the generic names *Cylindrotrichum* and *Reticulascus* are synonyms. *Cylindrotrichum* includes 23 names (Rambelli & Onofri 1987) while *Reticulascus* includes only two names. Between these two generic names, *Cylindrotrichum* is the most widely known. Given its widespread use, priority, and greater number of names, we recommend the use of *Cylindrotrichum* rather than *Reticulascus*.

## Use *Monilochaetes* Halst. ex Harter 1916 (A) rather than *Australiasca* Sivan. & Alcorn 2002 (S)

The type species of *Monilochaetes*, *M. infuscans*, was shown to be congeneric with *Australiasca queenslandica*, the type species of *Australiasca* (Réblová *et al.* 2011a). The two species described in *Australiasca* have names in *Monilochaetes*, thus, if the older name *Monilochaetes* is used, no name changes are required. This generic name

includes six species and has priority, thus *Monilochaetes* is recommended for use.

### Use *Plectosphaerella* Kleb. 1929 (S) rather than *Plectosporium* M.E. Palm *et al.* 1995 (A)

The genus Plectosporium, typified by P. tabacinum, was established for the asexual morph of species of Plectosphaerella of which the type species, P. cucumeris, is the name applied to the sexual morph of *Plectosporium* tabacinum (Palm et al. 1995), thus Plectosphaerella and Plectosporium are synonyms. Plectosphaerella cucumerinum is known as the cause of fruit and collar rot, and collapse of several crops including melons (Carlucci et al. 2012). Plectosphaerella includes 14 names while four species have been placed in Plectosporium. Carlucci et al. (2012) provided a molecular account of Plectosphaerella in the Plectosphaerellaceae and transferred species of Plectosporium to Plectosphaerella. Given its priority, greater number of names, economic importance, and recent account of the genus, the use of Plectosphaerella is recommended.

#### Use Sporoschismopsis Hol.-Jech. & Hennebert 1972 (A) rather than *Porosphaerellopsis* Samuels & E. Müll. 1982 (S)

The generic name Sporoschismopsis was introduced by Holubová-Jechová & Hennebert (1972) with S. moravica as type species and it now includes eight names (Holubová-Jechová 1973b). The generic name Porosphaerellopsis, typified by P. sporoschismophora (Samuels & Müller 1978, Müller & Samuels 1982), was established for the sexual morphs of Sporoschismopsis. Porosphaerellopsis sporoschismophora was transferred to Sporoschismopsis (Réblová 2014) while a second species, P. bipolaris described by Ranghoo et al. (2001), was excluded from the genus. Another sexual morph was experimentally proven for S. angustata (Réblová 2014). Based on DNA sequence data, the two asexual morphs, S. angustata and S. sporoschismophora, form a strongly supported monophyletic clade in the Reticulascaceae, Glomerellales. Given that S. angustata, S. moravica, and S. sporoschismophora are congeneric, the generic names Sporoschismopsis and Porosphaerellopsis are synonyms. Based on priority and the greater number of species, Sporoschismopsis is recommended for use.

#### Halosphaeriales

#### Use Corollospora Werderm. 1922 (S) rather than Varicosporina Meyers & Kohlm. 1965 (A) and Halosigmoidea Nakagiri *et al.* 2009 (A)

Although the type species of *Corollospora*, *C. maritima*, does not appear to have an asexual morph in *Varicosporina*, a number of species of *Corollospora* are linked to varicosporinalike asexual morphs. Abdel-Wahab *et al.* (2009) showed that the type of *Varicosporina*, *V. ramulosa*, groups within *Corollospora*, thus *Corollospora* and *Varicosporina* are synonyms. The type species of *Halosigmoidea*, *H. luteola* as *Sigmoidea luteola*, was shown by culture techniques to be the asexual morph of *Corollospora luteola* (Nakagiri & Tokura, 1982). Jones *et al.* (2009) demonstrated that the three marine species recognized in *Halosigmoidea* grouped with *Corollospora*, thus *Halosigmoidea* is also a synonym of *Corollospora*. Over 20 species are included in *Corollospora* while only three names have been described in *Varicosporina*, two of which have names in *Corollospora*, and only three names were included in *Halosigmoidea*. Given the number of names, widespread use, and priority, we recommend the use of *Corollospora*.

New combinations:

Corollospora marina (Haythorn & E.B.G. Jones) E.B.G. Jones, K.L. Pang & Abdel-Wahab, comb. nov.

#### MycoBank MB816830

- Basionym: Sigmoidea marina Haythorn & E.B.G. Jones, Trans. Brit. Mycol. Soc. **74**: 620 (1980).
- Synonym: *Halosigmoidea marina* (Haythorn & E.B.G. Jones) Nakagiri *et al.*, *Bot. Mar.* **52**: 355 (2009).
- **Corollospora parvula** (Zuccaro *et al.*) E.B.G. Jones, K.L. Pang & Abdel-Wahab, **comb. nov.**

MycoBank MB816831

Basionym: Halosigmoidea parvula Zuccaro et al., Bot. Mar. **52**: 355 (2009).

Corollospora ramulosa (Meyers & Kohlm.) E.B.G. Jones & Abdel-Wahab, comb. nov.

MycoBank MB816832

Basionym: Varicosporina ramulosa Meyers & Kohlm., Canad. J. Bot. 43: 916 (1965).

#### Melanosporales

### Use *Melanospora* Corda 1836 (S) rather than *Gonatobotrys* Corda 1839 (A)

The type species of *Melanospora*, *M. zamiae*, has been shown to be congeneric with *M. damnosa* (Cannon & Hawksworth 1982), of which the type species of *Gonatobotrys*, *G. simplex*, is considered a synonym (Vakili 1989). Given the widespread use of *Melanospora*, its priority, and the 120 names in *Melanospora* while *Gonatobotrys* includes only 32 names, *Melanospora* is recommended for use.

New combination:

Melanospora simplex (Corda) D. Hawksw., comb. nov.

MycoBank MB816833

- Basionym: Gonatobotrys simplex Corda, Prachtflora: 9 (1839).
- Synonyms: Sphaeroderma damnosum Sacc. & Berl., *Riv. Patol. Veg.* **4**: 56 (1896) ["1895"].
- Melanospora damnosa (Sacc.) Lindau, Nat. Pflanzenfam. 1 (1\*): 353 (1897).

#### **Microascales**

Use *Knoxdaviesia* M.J. Wingf. *et al.* 1988 (A) rather than *Gondwanamyces* G.J. Marais & M.J. Wingf. 1998 (S)

*Knoxdaviesia proteae*, type of the genus *Knoxdaviesia*, was described as the asexual morph of *Ceratocystiopsis proteae*, a species that was later placed in the genus *Gondwanamyces* as the type species, thus *Knoxdaviesia* and *Gondwanamyces* are synonyms. Both generic names have been used about equally. In agreement with de Beer *et al.* (2013), the use of the oldest name, *Knoxdaviesia*, is recommended.

Use Sphaeronaemella P. Karst. 1884 (S) rather than Gabarnaudia Samson & W. Gams 1974 (A) The type species of Sphaeronaemella, S. helvellae, is congeneric with the type species of Gabarnaudia, G. betae, described as the asexual morph of S. fimicola (Samson 1974). Confirmed by molecular data (Hausner & Reid 2004), these generic names are synonyms. Five species of Gabarnaudia have been placed in Sphaeronaemella (De Beer et al. 2013), a genus with 30 species. Sphaeronaemella is most commonly used and has priority, thus we recommend the use of Sphaeronaemella.

#### **Phyllachorales**

### Use *Diachora* Müll. Arg. 1893 (S) rather than *Diachorella* Höhn. 1918 (A)

The generic names *Diachora*, typified by *D. onobrychidis*, and *Diachorella*, typified by *D. onobrychidis*, are apparently based on the same type specimen, thus these names are synonyms. *Diachora* is considered a name for the sexual morph while *Diachorella* represents the asexual morph. Both generic names include less than ten species. Müller (1986) and Cannon (1991) reviewed species in these genera including the type species. Because *Diachora* is more widely known and has priority, we recommend that name for use.

### Use *Ophiodothella* (Henn.) Höhn. 1904 (S) rather than *Acerviclypeata* Hanlin 1990 (A)

The genus *Ophiodothella*, typified by *O. atromaculans*, now includes 26 species, which are obligate parasites of subtropical and tropical plants (Hanlin *et al.* 1992). An asexual morph of *O. vaccinii*, now *O. angustissima*, cause of flyspeck leafspot of *Vaccinium arboretum* in the southeastern United States, was described as the monotype species of *Acerviclypeatus*, *A. poriformans* (Hanlin 1990), thus *Ophiodothella* and *Acerviclypeatus* are synonyms. Not much is known about *O. atromaculans* but this species appears to be congeneric with *O. angustissima* (Hanlin & Gonzáles 2013). Given the number of species and priority, we recommend the use of *Ophiodothella*.

## Use *Polystigma* DC 1815 (S) rather than *Polystigmina* Sacc. 1884 (A) and *Rhodoseptoria* Naumov 1913 (A)

The generic names *Polystigma*, typified by *P. rubrum*, and *Polystigmina*, typified by *P. rubrum*, are based on the same basionym of their respective type species and, therefore, are synonyms for the sexual and asexual morphs. Cannon (1996) monographed *Polystigma* including five species on *Prunus* among others. He also noted that the type species of the monotypic *Rhodoseptoria* was a synonym of *Polystigma* 

*rubra*, thus that generic name is also a synonym of *Polystigma*. Several species of *Polystigma* cause diseases such as red blotch of almonds caused by *P. amygdalinum* and red leaf spot of plum caused by *P. rubrum* (Habibi *et al.* 2015). All but two of the seven taxa placed in *Polystigmina* are synonyms of *Polystigma rubra* while *Polystigma* includes over 50 species. Given the greater number of species, its widespread use, economic importance, and priority, we recommend the use of *Polystigma*.

### Use *Pseudothiella* Petr. 1928 (S) rather than *Pseudothiopsella* Petr. 1928 (A)

The monotypic generic names *Pseudothiella*, typified by *P. hirtellae*, and *Pseudothiopsella*, typified by *P. hirtellae*, were described at the same time for sexual and asexual morphs of the same species, thus they are synonyms with equal priority. *Pseudothiella* has been used slightly more often than *Pseudothiopsella* (Furlanetto & Dianese 1998), therefore we recommend use of *Pseudothiella*.

#### Pleurotheciales

## Use *Pleurothecium* Höhn. 1919 (A) rather than *Carpoligna* F.A. Fernández & Huhndorf 1999 (S)

The genus *Pleurothecium* is typified by *P. recurvatum*. A sexual morph is known for *P. recurvatum* for which the monotypic generic name *Carpoligna*, typified by *C. pleurothecii*, was introduced (Fernández *et al.* 1999). Of the eight species assigned to the genus *Pleurothecium*, only three have DNA sequence data. *Pleurothecium recurvatum* and *P. semifecundum* form a strongly supported monophyletic clade in the *Pleurotheciales* and represent the core of the genus (Réblová *et al.* 2016), while *P. obovoideum* (Arzanlou *et al.* 2007) is nested in the same order but within another clade. Given its priority and greater number of species, *Pleurothecium* is recommended for use.

#### Savoryellales

## Use *Canalisporium* Nawawi & Kuthub. 1989 (A) rather than *Ascothailandia* Sri-indr. *et al.* 2010 (S)

The genus *Canalisporium*, typified by *C. caribense*, includes 12 species (Nawawi & Kuthubutheen 1989). A sexual morph was described for *C. grenadoideum* and linked to the monotypic genus *Ascothailandia*, typified by *A. grenadoidea* (Sri-indrasutdhi *et al.* 2010). The link between sexual and asexual morphs of this species was confirmed experimentally in axenic culture. Six species of *Canalisporium*, including the type species, were the subject of phylogenetic analysis based on DNA sequence data of three nuclear loci by Sri-indrasutdhi *et al.* (2010) who confirmed that *Ascothailandia* and *Canalisporium* are congeneric. Based on priority and the greater number of species, the generic name *Canalisporium* is recommended for use.

#### Sordariales

# Use Chaetomium Kunze 1817 (S) rather than *Trichocladium* Harz 1871 (A), *Botryotrichum* Sacc. & Marchal 1885 (A), or *Humicola* Traaen 1914 (A)

Chaetomium, typified by C. globosum, is a well-known genus of cellulose-decomposing fungi some of which cause diseases of humans. The sexual morph of Botryotrichum piluliferum, type of the asexual genus Botryotrichum, was described as Chaetomium piluliferum (Daniels 1961). Later this species was confirmed to be congeneric with C. globosum (Untereiner et al. 2001, Nonaka et al. 2012), thus Chaetomium and Botryotrichum are synonyms. Although sexual states have not been discovered for the type of Humicola, H. fuscoatra or related species such as the common H. grisea, nuc28S rDNA sequences place these species within the present concept of Chaetomium. The type of Trichocladium, T. asperum, also lacks a sexual morph and occurs in the same clade (Hambleton et al. 2005). Over 500 names have been described in Chaetomium. Botryotrichum currently includes eight species. Humicola and Trichocladium each include about 20 species, but both are phylogenetically heterogeneous and most species belong to different clades. Given its extensive use and economic importance, its priority, and the greater number of species, we recommend the use of Chaetomium.

### Use *Lasiosphaeris* Clem. 1909 (S) rather than *Lasiadelphia* Réblová & W. Gams 2011 (A)

The genus Lasiosphaeris was described by Clements (1909) with *L. hispida* as its type species. The name was reestablished by Miller & Huhndorf (2004) for species segregated from Lasiosphaeria based on nuc28S rDNA sequences. Two species were accepted in the genus, L. hispida and L. hirsuta. Gams & Holubová-Jechová (1976) introduced Phialophora sect. Catenulatae, typified by the dematiaceous species Phialophora lasiosphaeriae, the asexual morph experimentally proven for L. hispida (as L. hirsuta, Gams & Holubová-Jechová 1976, Gams 2000). Réblová et al. (2011b) desribed the generic name Lasiadelphia with L. lasiosphaeriae as the type species for the asexual morph of Lasiosphaeris hispida. Therefore, the type species of Lasiosphaeris and Lasiadelphia are morphs of the same species and the generic names are synonyms. Based on priority and the greater number of species, the generic name Lasiosphaeris should be used.

## Use *Mammaria* Rabenh. 1854 (A) rather than *Pseudocercophora* Subram. & Sekar 1986 (S)

The genus *Mammaria*, typified by *M. echinobotryoides*, includes two names while the monotypic genus *Pseudocercophora*, typified by *P. ingoldii*, was described for the sexual morph of *M. echinobotryoides*, thus these generic names are synonyms. If the principle of priority is followed, no names changes are required, thus, the use of *Mammaria* is recommended.

### Use *Neurospora* Shear & B.O. Dodge 1927 (S) rather than *Chrysonilia* Arx 1981 (A)

The genus *Neurospora,* typified by *N. sitophila,* includes the well-known model organism, *N. crassa.* The asexual

morph of the type species was described in *Chrysonilia* with *C. sitophila* as the type species. There is no question that *Neurospora* and *Chrysonilia* are generic synonyms (von Arx 1981). At present *Neurospora* includes 57 names while only three names have been placed in *Chrysonilia*, all of which also have names in *Neurospora*. Given its priority, the number of species, and its widespread use, it is recommended that *Neurospora* be used rather than *Chrysonilia*.

### Use Stromatographium Henn. 1907 (A) rather than Fluviostroma Samuels & E. Müll. 1980 (S)

The genus *Stromatographium*, typified by *S. stromaticum*, is the asexual state of *Fluviostroma wrightii*, monotype species of *Fluviostroma* (Samuels & Müller 1980). Seifert (1987) clarified the confusion between *Stromatographium* and *Stromatostilbella* and showed that the asexual morph of *F. wrightii* belongs in *Stromatographium*. Given its greater use and priority, we recommend the use of *Stromatographium*.

#### Togniniales

## Protect *Phaeoacremonium* W. Gams 1996 (A) over *Togninia* Berl. 1900 (S) and *Romellia* Berl. 1900 (S)

The genus Phaeoacremonium was established for P. parasiticum, first described causing phaeohyphomycosis in humans, but also causing wilts in tropical trees and an economically important disease of grapevine known as esca disease (Hawksworth et al. 1976, Crous et al. 1996). Once this genus was described, a number of species were discovered and placed in Phaeoacremonium. Based on phylogenetic analysis and mating studies, sexual morphs were found for these species in Togninia, formerly attributed to Calosphaeriales (Mostert et al. 2003). Species of Phaeoacremonium are known as vascular plant pathogens such as esca and Petri disease of grapevine as well as human pathogens. Two monographic accounts of Phaeoacremonium have been published (Mostert et al. 2006, Réblová et al. 2015). Gramaje et al. (2015) formally proposed to protect the name Phaeoacremonium against Togninia because although Togninia has 26 epithets, half have not been reported since their description, and only nine species have been experimentally linked with Phaeoacremonium. Phaeoacremonium includes 46 species of which all are known from culture and their DNA data are available. Also Phaeoacremonium is favoured by plant pathologists and medical mycologists and is well established in the literature. All required new combinations were made in Gramaje et al. (2015). The type species of Romellia, R. vibratilis, was sequenced and placed in Togninia by Réblová & Mostert (2007) and recently moved to Phaeoacremonium by Gramaje et al. (2015). Three of the four species of Romellia have since been placed elsewhere. Thus, because it is widely used and has the greatest number of species, we recommend the protection of Phaeoacremonium over Togninia and Romellia.

#### Torpedosporales

Use Juncigena Kohlm. et al. 1997 (S) rather than Moheitospora Abdel-Wahab et al. 2010 (A) The monotypic genus Juncigena is typified by J. adarca for which an asexual morph was described as Cirrenalia adarca (Kohlmeyer et al. 1997). Later the asexual species was placed in the genus Moheitospora as M. adarca along with the type species, M. fruticosae (Abdel-Wahab et al. 2010), thus Juncigena and Moheitospora are synonyms. Although one name change would be required, Juncigena has priority and has greater use in the literature, thus it is recommended that Juncigena be used. Schoch et al. (2007) showed that this genus belongs in Hypocreomycetidae and later Jones et al. (2015) placed it in Juncigenaceae, Torpedosporales.

New combination:

### Juncigena fruticosae (Abdel-Wahab *et al.*) A.N. Mill. & Shearer, comb. nov.

MycoBank MB816834

Basionym: Moheitospora fruticosae Abdel-Wahab et al., Mycol. Progr. **9:** 551 (2010).

#### Use *Torpedospora* Meyers 1957 (S) rather than *Glomerulispora* Abdel-Wahab & Nagah. 2010 (A)

The monotype species of *Glomerulispora*, *G. mangrovei*, groups with the two species of *Torpedospora* such that these generic names are considered synonyms (Abdel-Wahab *et al.* 2010, Jones *et al.* 2015). These species are marine fungi found on driftwood throughout the world. Given the widespread use of *Torpedospora* and its priority, use of *Torpedospora* is recommended.

New combination:

Torpedospora mangrovei (Abdel-Wahab & Nagah.) E.B.G. Jones & Abdel-Wahab, comb. nov.

MycoBank MB816835

Basionym: Glomerulispora mangrovei Abdel-Wahab & Nagah., Mycol. Progr. 9: 553 (2010).

#### **Xylariales**

# Use Arthrinium Kunze 1817 (A) rather than Apiospora Sacc. 1875 (S), *Pteroconium* Sacc. ex Grove 1914 (A), and *Scyphospora* L.A. Kantsch 1928 (A)

Species in the genus *Arthrinium* are widespread and commonly encountered as saprobes and secondary invaders especially on monocotyledonous plants. The common species, *A. arundinis*, is the name typified by the sexual morph of the type species of *Apiospora, A. montagnei* (Müller & Arx 1962). Less is known about the type species of *Arthrinium, A. caricicola*, but this species is assumed to be congeneric with *A. arundinis* (Crous & Groenewald 2013), although they were unable to find material to include in their molecular phylogeny. Crous & Groenewald (2013) also showed that *Pteroconium asteroides*, type of *Pteroconium*,

is a synonym of *Arthrinium*. Samuels *et al.* (1981) suggested that *Scyphospora phyllostachydis* was the asexual morph of *Apiospora tintinnabula*, now *Arthrinium hysterinum*, thus *Scyphospora* is a synonym of *Arthrinium*. In agreement with both Crous & Groenewald (2013) and Senanayake *et al.* (2015), *Arthrinium* has priority and is the most widely used of these generic names, thus use of *Arthrinium* is recommended.

Although Hughes (1958) followed by Ellis (1965), Samuels *et al.* (1981) and Crous & Groenewald (2013) suggested that *Cordella* is a synonym of *Arthrinium*, this is based on the assumption that *C. coniosporioides* is the type species. *Cordella* was described with two species without indicating a type. Clements & Shear (1931) were the first to select a type species for *Cordella* and they list *C. spinulosa*, a species that Hughes (1958) placed in *Melanographium*, thus *Cordella* is not a synonym of *Arthrinium*.

Based on the molecular sequence data provided by Crous & Groenewald (2013), *Apiospora sinensis* is placed in *Arthrinium*.

New combination:

Arthrinium sinense (K.D. Hyde *et al.*) Crous & J.Z. Groenew., comb. nov.

MycoBank MB816836

Basionym: Apiospora sinensis K.D. Hyde et al., Sydowia **50**: 27 (1998).

In addition a nomenclator is provided for *Arthrinium hysterinum* because of confusion about the correct name for this species and its numerous synonyms. Previously recognized in *Apiospora* by Tang *et al.* (2007), Kirk (1986) and Sivanesan (1983), Crous & Groenewald (2013) and Senanayake *et al.* (2015) included *Apiospora bambusae, A. setosa* and *A. tintinnabula* as synonyms within the genus *Arthrinium.* The correct name for this species is *Arthrinium hysterinum* with the synonyms listed below:

- Arthrinium hysterinum (Sacc.) P.M. Kirk, *Trans. Brit. Mycol. Soc.* 86: 409 (1986).
- Basionym: Melanconium hysterinum Sacc., Bolm Soc. broteriana, Coimbra, sér. 1 **11**: 21 (1893).
- Synonyms: Scyphospora hysterina (Sacc.) Sivan., Trans. Brit. Mycol. Soc. 81: 331 (1983).
- Melanconium bambusae Turconi, Atti Ist. bot. R. Univ. Pavia, sér.2 16: 251 (1916).
- Scirrhia bambusae Turconi, Atti Ist. bot. R. Univ. Pavia, sér. 2 16: 531 (1916).
- *Scirrhodothis bambusae* (Turconi) Trotter, in Saccardo, *Syll. Fung.* **24**: 611 (1926).
- Placostroma bambusae (Turconi) R. Sprague, Diseases Cereals Grasses N. Amer.: 121 (1950).
- Apiospora bambusae (Turconi) Sivan., Trans. Brit. Mycol. Soc. 81: 331 (1983).
- Scyphospora phyllostachydis L.A. Kantsch., Bolêz. Rast. 17: 88 (1928).

Cordella johnstonii M.B. Ellis, Mycol. Pap. 103: 31 (1965).

Apiospora setosa Samuels et al., New Zealand J. Bot. **19**: 142 (1981).

Apiospora tintinnabula Samuels et al., New Zealand J. Bot. 19: 142 (1981).

## Use *Collodiscula* I. Hino & Katum. 1955 (S) rather than *Acanthodochium* Samuels *et al.* 1987 (A)

The genus *Collodiscula*, typified by *C. japonica*, was linked to *Acanthodochium collodisculae*, type of *Acanthodochium*, by Samuels *et al.* (1987), who considered these names morphs of the same species, thus these generic names are synonyms. Three species have been added to *Collodiscula* (Li *et al.* 2015a, b). Given that this generic name has priority and includes four species, the use of *Collodiscula* is recommended.

#### Use Daldinia Ces. & De Not. 1863 (S) rather than Annellosporium M.L. Davey 2010 (A) or Versiomyces Whalley & Watling 1989 (S)

The genus *Daldinia*, typified by *D. concentrica*, has recently been monographed by Stadler *et al.* (2014). They showed that the monotype species of *Annellosporium*, *A. nemorosa*, belongs in *Daldinia* as *D. nemorosa*, thus *Daldinia* and *Annellosporium* are synonyms. They also showed that the monotype species of *Versiomyces*, *V. cahuchucosus*, belongs in *Daldinia* as *D. cahuchucosa*, thus *Versiomyces* is a synonym of *Daldinia*. *Daldinia* is a well-known genus with many species and has priority, thus it is recommended for use.

### Protect *Diatrype* Fr. 1849 (S) over *Libertella* Desm. 1830 (A)

The genus *Diatrype*, typified by *D. disciformis*, includes over 500 names (*Index Fungorum* 2016), some of which cause canker diseases of hardwoods such as *D. stigma* associated with diseased grapevines (Rolshausen *et al.* 2006). *Libertella betulina*, type of the genus *Libertella*, is known to be the asexual morph of *Diatrype stigma* (Grove 1937, Kutorga *et al.* 2006) and *D. disciformis* has an asexual morph described as *L. disciformis*. Trouillas *et al.* (2010b) showed that *D. disciformis* and *D. stigma* are congeneric, thus *Diatrype* and *Libertella* are synonyms. Because *Diatrype* is widely known, has a greater number of species, and includes important plant pathogenic fungi, *Diatrype* is recommended for protection over *Libertella*.

## Use *Hypocreodendron* Henn. 1897 (A) rather than *Discoxylaria* J.C. Lindq. & J.E. Wright 1964 (S)

Hypocreodendron is a monotypic genus based upon *H.* sanguineum for which Lindqvist & Wright (1964) introduced the monotypic genus *Discoxylaria*, typified by *D. myrmecophila*, as the sexual morph. Rogers *et al.* (1995) observed a specimen of *D. myrmecophila* that bore both conidial and mature perithecial morphs. They compared their collection with the holotype specimen and obtained the conidial morph in culture initiated from ascospores to demonstrate that these were alternate morphs of the same species. Thus, *Hypocreodendron* and *Discoxylaria* are synonyms. In agreement with Stadler *et al.* (2013), Maharachchikumbura *et al.* (2015), and priority, we recommend the use of *Hypocreodendron*.

### Use *Hypoxylon* Bull. 1791 (S) rather than *Nodulisporium* Preuss 1849 (A)

The genus *Hypoxylon*, typified by *H. fragiforme*, is a well-known group of stromatic ascomycetes on rotting wood. Although a number of segregated genera are now recognized such as *Annulohypoxylon*, *Biscogniauxia*, and *Nemania*, many species still remain within *Hypoxylon sensu stricto* (Hsieh *et al.* 2005). Von Arx (1982), *fide* Deighton (1985), demonstrated the relationship of the asexual morph *Nodulisporium ochraceum*, type of *Nodulisporium*, to *Hypoxylon fragiforme*, thus these generic names are synonyms. Other species of *Nodulisporium* have been placed in various genera suggesting the artificial circumscription of this genus. Given the widespread use of *Hypoxylon* is recommended.

## Use *Microdochium* Syd. & P. Syd. 1924 (A) rather than *Monographella* Petr. later in 1924 (S)

The genus Microdochium, typified by M. phragmitis, was published a few months later than Monographella, typified by *M. divergens*, now regarded as a synonym of Microdochium nivale. Hernández-Restrepo et al. (2016) recognized the synonym of Microdochium and Monographella and considered Microdochium to be the best generic name to use for these fungi because Microdochium included more species and was more widely known than Monographella. They added six species to the 31 names in the genus Microdochium while Monographella includes only 15 names. In addition they epitypified the type of Microdochium, M. phragmitis, a species that had been shown to represent two sympatric species (Ernst et al. 2011). Thus, in agreement with Hernández-Restrepo et al. (2016), we recommend the protection of Microdochium over Monographella.

Use Nemania Gray 1821 (S) rather than Geniculosporium Chesters & Greenh. 1964 (A) An asexual morph of Nemania serpens, type species of Nemania, was described as Geniculosporium serpens, type of Geniculosporium (Chesters & Greenhalgh 1964), thus the generic names Nemania and Geniculosporium are synonyms. Nemania includes over 30 names while only four names have been placed in Geniculosporium. In addition, Nemania is well-known and has priority, thus we recommend the use of Nemania.

### Use *Rosellinia* De Not. 1844 (S) rather than *Dematophora* R. Hartig 1883 (A)

The genus *Rosellinia*, typified by *R. aquila*, is a wellknown genus that has recently been monographed (Petrini 2013). A number of plant pathogenic species are included in *Rosellinia* such as *R. bunodes* causing black root rot of tropical woody plants and *R. thelena* causing root collar of hardwoods. *Dematophora necatrix*, type of *Dematophora*, is considered the asexual morph of *R. necatrix*, cause of white root rot (Petrini 2013), thus *Rosellinia* and *Dematophora* are synonyms. The only other species of *Dematophora*, *D. glomerata*, is considered the asexual morph of *R. glomerata*. Given the widespread use of *Rosellinia*, the recent monographic account, its importance as a plant pathogen, and priority, we recommend the use of *Rosellinia*.

## Use Virgaria Nees 1816 (A) rather than Ascovirgaria J.D. Rogers & Y.-M. Ju 2002 (S) The monotypic genus Ascovirgaria, typified by A. occulta,

The monotypic genus *Ascovirgaria*, typified by *A. occulta*, was described for the sexual morph of the type species of *Virgaria*, *V. nigra*, by Rogers & Ju (2002), thus these generic names are synonyms. Nonaka *et al.* (2013) demonstrated that *A. occulta* was a synonym of *V. nigra* and that *Virgaria* was distinct from other genera in the *Xylariaceae*. Although some names have been transferred to other genera, *Virgaria* still includes 10 names and is more commonly used than *Ascovirgaria*. Given its priority and widespread use, *Virgaria* is recommended for use over *Ascovirgaria*.

#### Use *Xylaria* Hill ex Schrank 1789 (S) rather than *Moelleroclavus* Henn. 1902 (A), *Xylocoremium* J.D. Rogers 1984 (A), *Arthroxylaria* Seifert & W. Gams 2002 (A) or *Geniculisynnema* Okane & Nakagiri 2007 (A)

Xylaria is a well-known genus with many species such as Xylaria polymorpha, commonly known as dead man's fingers, also said to cause root rot of urban trees (Proffer 1988). The asexual morphs of species of Xylaria have been described in four genera. The monotype species of Moelleroclavus, M. penicillioides, has a sexual morph described as Xylaria moelleroclavus (Rogers et al. 1997) and Xylocoremium flabelliforme, monotype species of Xylocoremium, is the asexual morph of Xylaria cubensis (Rogers 1984), now known to be X. flabelliformis (Ju et al. 2016). Both Arthroxylaria and Geniculisynnema are monotypic genera proposed for asexual morphs not yet connected to a sexual morph but clearly within Xylaria based on rDNA sequences (Seifert et al. 2002, Okane & Nakagiri 2007). The type species of Arthroxylaria, A. elegans, is herein placed in Xylaria. Although Stadler et al. (2013) connected Geniculisynnema with Nemania, a BLAST search with the ITS sequence of G. termiticola (AB274813), type species of Geniculisynnema, showed top matches with Xylaria species associated with termite nests.. These four generic names are now considered synonyms of Xylaria. Given its widespread use, the number of species, and priority, Xylaria is recommended for use.

New combinations:

#### **Xylaria benjaminii** Seifert & W. Gams, **nom. nov.** MycoBank MB816839

Replaced name: Arthroxylaria elegans Seifert & W. Gams, Czech Mycol. 53: 209 (2002).

Non Xylaria elegans Syd. & P. Syd., Annls mycol. 5: 357 (1907).

#### **Xylaria penicilliopsis** (Henn.) Y.-M. Ju, **comb. nov.** MycoBank MB816837

- Basionym: Moelleroclavus penicilliopsis Henn., Hedwigia **41**: 15 (1902).
- Synonym: Xylaria moelleroclavus J.D. Rogers et al., Mycol. Res. **101**: 345 (1997).

Xylaria termiticola (Okane & Nakagiri) Y.-M. Ju, comb. nov.

MycoBank MB816838

Basionym: Geniculisynnema termiticola Okane & Nakagiri, Mycoscience **48**: 245 (2007).

#### Sordariomycetidae incertae sedis

#### Use *Brachysporium* Sacc. 1886 (A) rather than *Cryptadelphia* Réblová & Seifert 2004 (S)

*Brachysporium*, typified by *B. obovatum*, is a widespread and well-established asexual genus that includes 113 species and varieties. The genus *Cryptadelphia*, typified by *C. groenendalensis*, was introduced for the sexual morphs of six species of *Brachysporium* (Réblová & Seifert 2004b). The link between the sexual and asexual morphs was experimentally proven only for *B. nigrum*, which is the asexual morph of *C. groenendalensis*. The axenic cultures of *B. obovatum* and *B. polyseptatum* derived from ascospores yielded only sterile mycelium. Recently, *C. fusiformis* was described with its asexual morph regarded as *B. fusiformis*  (Markovskaja & Treigiené 2007). Based on molecular sequence data, *B. nigrum* and *B. polyseptatum* form a strongly supported monophyletic clade (Réblová & Seifert 2004b). If *B. obovatum* is congeneric with *B. nigrum*, then the generic names *Brachysporium* and *Cryptadelphia* should be treated as synonyms. Based on priority and the greater number of species, *Brachysporium* is recommended for use.

### Use *Nigrospora* Zimm. 1902 (A) rather than *Khuskia* H.J. Huds. 1963 (S)

The monotype species of *Khuskia*, *K. oryzae*, was described as the sexual morph of *Nigrospora oryzae*, a well-known species of *Nigrospora*, by Hudson (1963). He also considered *N. oryzae* and *N. panici*, the type species of *Nigrospora*, to be congeneric, thus *Nigrospora* and *Khuskia* are synonyms. *Nigrospora oryzae* is reported from a variety of hosts including marine sponges (Ding *et al.* 2011) and as endophytes of plants (Peršoh *et al.* 2010) as well as causing plant diseases (Moshrefi-Zarandi *et al.* 2014). Given that *Nigrospora* has priority, includes fifteen names, and is more widely known than *Khuskia*, the use of *Nigrospora* is recommended.

**Table 1.** Names of pleomorphic genera in *Sordariomycetes* excluding *Diaporthales, Hypocreales* and *Magnaporthales* indicating those that are proposed for protection (including those which are asexually typified and recommended for use over sexually typified genera). For each genus the citation, type species and accepted name is given. NCF = Nomenclature Committee for Fungi.

Generic name recommended for use, citation and type species	Suppressed generic name(s), citation, type species and currently accepted name	Action Required
<i>Arthrinium</i> Kunze, in Kunze & Schmidt, Mykol. Hefte <b>1</b> : 9. 1817.	Apiospora Sacc. in Atti Soc. Veneto-Trent. Sci. Nat., Padova, sér. 4 <b>4</b> : 85. 1875.	Asexual type. Protection needed by NCF.
Typus: <i>A. caricicola</i> Kunze & J.C. Schmidt 1817.	Typus: <i>A. montagnei</i> Sacc. 1875, now regarded as <i>Arthrinium arundinis</i> (Corda) Dyko & B. Sutton 1979.	
	<i>Pteroconium</i> Sacc. ex Grove in Hedwigia <b>55</b> : 146. 1914.	
	Typus: <i>P. asteroides</i> Grove 1914, now regarded as <i>Arthrinium pterospermum</i> (Cooke & Massee) Arx 1981.	
	Scyphospora L.A. Kantsch. in Bolêzni Rast. <b>17</b> : 87 (1928).	
	Typus: <i>S. phyllostachydis</i> L.A. Kantsch. 1928, now regarded as <i>Arthrinium hysterinum</i> (Sacc.) P.M. Kirk 1986.	
Brachysporium Sacc., Syll. Fung. 4: 423. 1886.	<i>Cryptadelphia</i> Réblová & Seifert in Mycologia <b>96</b> : 348. 2004.	Asexual type. Protection needed by NCF.
Typus: <i>B. obovatum</i> (Berk.) Sacc. 1886, basionym: <i>Helminthosporium obovatum</i> Berk. 1841.	Typus: <i>C. groenendalensis</i> (Sacc. <i>et al.</i> ) Réblová & Seifert 2004, basionym: <i>Zignoëlla groenendalensis</i> Sacc. <i>et al.</i> 1884, now regarded as <i>Brachysporium</i> <i>nigrum</i> (Link) S. Hughes 1958.	
Calosphaeria Tul. & C. Tul., Select. fung. carpol. 2: 108. 1863.	Calosphaeriophora Réblová et al. in Stud. Mycol. 50: 542. 2004.	None.
Typus: C. princeps Tul. & C. Tul. 1863.	Typus: <i>C. pulchella</i> Réblová <i>et al.</i> 2004, now regarded as <i>Calosphaeria pulchella</i> (Pers.) J. Schröt. 1897.	
Canalisporium Nawawi & Kuthub. in Mycotaxon 34: 477. 1989.	Ascothailandia Sri-indr. et al. in Mycoscience 51: 414. 2010.	Asexual type. Protection needed by NCF.
Typus: <i>C. caribense</i> (HolJech. & Mercado) Nawawi & Kuthub. 1989, basionym: <i>Berkleasmium caribense</i> HolJech. & Mercado 1984.	Typus: <i>A. grenadoidea</i> Sri-indr. <i>et al.</i> 2010, now regarded as <i>Canalisporium grenadoideum</i> Sri-indr. <i>et al.</i> 2010.	

Table 1. (Continued).

Generic name recommended for use, citation and type species	Suppressed generic name(s), citation, type species and currently accepted name	Action Required
<i>Chaetomium</i> Kunze, in Kunze & Schmidt, Mykol. Hefte <b>1</b> : 15. 1817.	<i>Botryotrichum</i> Sacc. & Marchal in Bull. Soc. Roy. Bot. Belgique <b>24</b> : 66. 1885.	None.
Typus: C. globosum Kunze 1817.	Typus: <i>B. piluliferum</i> Sacc. & Marchal 1885, now regarded as <i>Chaetomium piluliferum</i> J. Daniels 1961. Although the synonym <i>Sepedonium albogriseum</i> BalfBrowne 1952 provides an older name, <i>C. piluliferum</i> will be proposed for conservation.	
	<i>Trichocladium</i> Harz in Bull. Soc. Imp. nat. Moscou <b>44</b> : 125. 1871.	
	Typus: <i>T. asperum</i> Harz 1871.	
	Humicola Traaen in Nytt Mag. Natur. 52: 31. 1914.	
	Typus: <i>H. fuscoatra</i> Traaen 1914.	
Chaetosphaerella E. Müll. & C. Booth in Trans. Brit. Mycol. Soc. 58: 76. 1972.	<i>Oedemium</i> Link, Sp. Pl., edn 4 6(1): 42. 1824.	Protection needed by NCF for Chaeto- sphaerella 1972 over Oedemium 1824.
Typus: <i>C. phaeostroma</i> (Durieu & Mont.) E. Müll. & C. Booth 1972, basionym: <i>Sphaeria</i> <i>phaeostroma</i> Durieu & Mont. 1846	Typus: O. atrum Link 1824, now regarded as <i>Chaetosphaerella fusca</i> (Fuckel) E. Müll. & C. Booth 1972.	
	Veramycina Subram. in Kavaka 20/21: 58. 1995.	
	Typus: <i>V. elegans</i> Subram. 1995, now regarded as <i>Chaetosphaerella phaeostroma</i> (Durieu & Mont.) E. Müll. & C. Booth 1972.	
<i>Chloridium</i> Link in Mag. Gesell. Naturf. Freunde, Berlin <b>3</b> : 13. 1809.	Gonytrichum Nees & T. Nees in Nova Acta Phys Med. Acad. Caes. LeopCarol. Nat. Cur. <b>9</b> : 244. 1818.	Asexual type. Protection needed by NCF.
Typus: <i>C. viride</i> Link 1805, now regarded as <i>Chloridium virescens</i> (Pers.) W. Gams & HolJech. 1976, basionym <i>Dematium</i> <i>virescens</i> Pers. 1794.	Typus: <i>G. caesium</i> Nees 1818, now regarded as <i>Chloridium caesium</i> (Nees) Réblová & Seifert 2016	
	<i>Melanopsammella</i> Höhn. in Ann. Mycol. <b>17</b> : 121. 1920.	
	Typus: <i>M. inaequalis</i> (Grove) Höhn. 1920, basionym: <i>Eriosphaeria inaequalis</i> Grove, in Berlese & Voglino 1886, now regarded as <i>Chloridium caesium</i> (Nees) Réblová & Seifert 2016.	
<b>Colletotrichum</b> Corda, Deutschl. Fl., <b>3</b> (12): 41. 1837.	<i>Glomerella</i> Spauld. & H. Schrenk in Science <b>17</b> : 751. 1903.	Asexual type. Protection needed by NCF.
Typus: <i>C. lineola</i> Corda 1832.	Typus: <i>G. cingulata</i> (Stoneman) Spauld. & H. Schrenk 1903, now regarded as <i>Colletotrichum gloeosporioides</i> (Penz.) Penz. & Sacc. 1884.	
<i>Collodiscula</i> I. Hino & Katum. in Bull. Fac. Agric. Yamaguchi Univ. <b>6</b> : 55. 1955.	Acanthodochium Samuels et al. in Mycotaxon 28: 457. 1987.	None.
Typus: C. japonica I. Hino & Katum. 1955.	Typus: <i>A. collodisculae</i> Samuels <i>et al.</i> 1987, now regarded as <i>Collodiscula japonica</i> I. Hino & Katum. 1955.	
Coniochaeta (Sacc.) Cooke in Grevillea 16: 16. 1887, basionym: <i>Rosellinia</i> subgen. <i>Coniochaeta</i> Sacc., Syll. Fung. 1: 269. 1882.	<i>Lecythophora</i> Nannf. in Svensk Skogsvårdsförening Tidskr. <b>3–4</b> : 435. 1934.	None.
Typus: <i>C. ligniaria</i> (Grev.) Cooke 1887, basionym: <i>Sphaeria ligniaria</i> Grev. 1824.	Typus: <i>L. lignicola</i> Nannf. 1934, now regarded as <i>Coniochaeta lignicola</i> (Nannf.) Z.U. Khan <i>et al.</i> 2013.	
Conioscypha Höhn. in Ann. Mycol. 2: 58. 1904.	Conioscyphascus Réblová & Seifert in Stud. Mycol. 50: 100. 2004.	Asexual type. Protection needed by NCF.
Typus: C. lignicola Höhn. 1904.	Typus: <i>C. varius</i> Réblová & Seifert 2004, now regarded as <i>Conioscypha varia</i> Shearer 1973.	

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Generic name recommended for use, citation and type species	Suppressed generic name(s), citation, type species and currently accepted name	Action Required
Cordana Preuss in Linnaea 24: 129. 1851.	Porosphaerella E. Müll. & Samuels in Sydowia <b>35</b> : 151. 1982.	Asexual type. Protection needed by NCF.
Typus: <i>C. pauciseptata</i> Preuss 1851.	Typus: <i>P. cordanophora</i> E. Müll. & Samuels 1982, now regarded as <i>Cordana pauciseptata</i> Preuss 1851.	
	<i>Pseudobotrytis</i> Krzemien. & Badura in Acta Soc. Bot. Pol. <b>23</b> : 761. 1954.	
	Typus: <i>P. fusca</i> Krzemien. & Badura 1954, now regarded as <i>Cordana terrestris</i> (Timonin) HernRest. <i>et al.</i> 2014.	
<b>Corollospora</b> Werderm. in Notizbl. Bot. Gart. Berlin-Dahlem 8: 248. 1922.	Varicosporina Meyers & Kohlm. in Canad. J. Bot. 43: 916. 1965.	None.
Typus: <i>Corollospora maritima</i> Werderm. 1922.	Typus: <i>V. ramulosa</i> Meyers & Kohlm. 1965, now regarded as <i>Corollospora ramulosa</i> (Meyers & Kohlm.) Abdel-Wahab 2016.	
	Halosigmoidea Nakagiri et al. in Bot. Mar. <b>52</b> : 355. 2009.	
	Typus: <i>H. luteola</i> (Nakagiri & Tubaki) Nakagiri <i>et al.</i> 2009, basionym: <i>Sigmoidea luteola</i> Nakagiri & Tubaki 1982, now regarded as <i>Corollospora luteola</i> Nakagiri & Tubaki 1982.	
Cylindrotrichum Bonord., Handb. Allgem. mykol.: 88 (1851).	Reticulascus Réblová & W. Gams in Stud. Mycol. 68: 180. 2011.	Asexual type. Protection needed by NCF.
Typus: <i>C. oligospermum</i> (Corda) Bonord. 1851, basionym: <i>Menispora oligosperma</i> Corda 1838.	Typus: <i>R. tulasneorum</i> (Réblová & W. Gams) Réblová & W. Gams 2010, basionym: <i>Chaetosphaeria tulasneorum</i> Réblová & W. Gams 1999, now regarded as <i>Cylindrotrichum oligospermum</i> (Corda) Bonord. 1851.	
Daldinia Ces. & De Not. in Comment. Soc. Crittog. Ital. 1(4): 197. 1863.	Annellosporium M.L. Davey in Karstenia 50: 3. 2010.	None.
Typus: <i>D. concentrica</i> (Bolton) Ces. & De Not. 1863, basionym: <i>Sphaeria concentrica</i> Bolton 1792.	Typus: <i>A. nemorosum</i> M.L. Davey 2010, now <i>Daldinia nemorosa</i> (M.L. Davey) M. Stadler <i>et al.</i> 2014.	
	<i>Versiomyces</i> Whalley & Watling in Notes R. bot. Gdn Edinb. <b>45</b> : 401. 1989.	
	Typus: <i>V. cahuchucosus</i> Whalley & Watling 1989, now regarded as <i>Daldinia cahuchucosus</i> (Whalley & Watling) M. Stadler & Læssøe 2014.	
<i>Diachora</i> Jul. Müll. in Jahrb. Wiss. Bot. <b>25</b> : 623. 1893.	Diachorella Höhn. in Hedwigia 60: 192. 1918.	None.
Typus: <i>D. onobrychidis</i> (DC.) Jul. Müll. 1893, basionym: <i>Xyloma onobrychidis</i> DC. 1815.	Typus: <i>D. onobrychidis</i> (DC.) Höhn. 1918, basionym: <i>Xyloma onobrychidis</i> DC. 1815, now regarded as <i>Diachora onobrychidis</i> (DC) Jul. Müll. 1893.	
<i>Diatrype</i> Fr., Summa veg. Scand. <b>2</b> : 384. 1849.	<i>Libertella</i> Desm. in Ann. Sci. Nat. (Paris) sér. 1 <b>19</b> : 275. 1830.	Protection needed by NCF for <i>Diatrype</i> 1849 over <i>Libertella</i> 1830.
Typus: <i>D. disciformis</i> (Hoffm.) Fr. 1849, basionym: <i>Sphaeria disciformis</i> Hoffm. 1787.	Typus: <i>L. betulina</i> Desm. 1830, now regarded as <i>Diatrype stigma</i> (Hoffm.) Fr. 1849.	
<i>Dyrithiopsis</i> L. Cai <i>et al.</i> in Mycologia <b>95</b> : 912. 2003.	<i>Monochaetiopsis</i> L. Cai <i>et al.</i> in Mycologia <b>95</b> : 913. 2003.	None.
Typus: <i>D. lakefuxianensis</i> L. Cai <i>et al.</i> 2003.	Typus: <i>M. lakefuxianensis</i> L. Cai <i>et al.</i> 2003, now regarded as <i>Dyrithiopsis lakefuxianensis</i> L. Cai <i>et al.</i> 2003.	

Generic name recommended for use, citation and type species	Suppressed generic name(s), citation, type species and currently accepted name	Action Required
<i>Hyalotiopsis</i> Punith. in Mycol. Pap. <b>119</b> : 12. 1970.	<i>Ellurema</i> Nag Raj & W.B. Kendr. in Sydowia <b>38</b> : 178. 1986.	Asexual type. Protection needed by NCF.
Typus: <i>H. subramanianii</i> (Agnihothr. & Luke) Punith. 1970, basionym: <i>Hyalotiella subramanianii</i> Agnihothr. & Luke 1970.	Typus: <i>E. indica</i> (Punith.) Nag Raj & W.B. Kendr. 1986, basionym: <i>Massaria indica</i> Punith. 1970, now regarded as <i>Hyalotiopsis subramanianii</i> (Agnihothr. & Luke) Punith. 1970.	
Hypocreodendron Henn. in Hedwigia 36: 223. 1897.	<i>Discoxylaria</i> J.C. Lindq. & J.E. Wright in Darwiniana <b>13</b> : 139. 1964.	Asexual type. Protection needed by NCF.
Typus: H. sanguineum Henn. 1897.	Typus: <i>Discoxylaria myrmecophila</i> J.C. Lindq. & J.E. Wright 1964, now regarded as <i>Hypocreodendron sanguineum</i> Henn. 1897.	
<i>Hypoxylon</i> Bull., Hist. Champ. Fr. 1: 168. 1791.	<i>Nodulisporium</i> Preuss in Klotzschii Herb. Viv. Mycol.: no. 1272. 1849.	None.
Typus: <i>H. coccineum</i> Bull. 1791, now regarded as <i>Hypoxylon fragiforme</i> (Pers.) J. Kickx f. 1835, basionym <i>Sphaeria fragiformis</i> Pers. 1794.	Typus: <i>N. ochraceum</i> Preuss 1849, now regarded as <i>Hypoxylon fragiforme</i> (Pers.) J. Kickx f. 1835.	
<i>Juncigena</i> Kohlm. <i>et al.</i> in Bot. Mar. <b>40</b> : 291. 1997.	<i>Moheitospora</i> Abdel-Wahab <i>et al.</i> in Mycol. Progr. <b>9</b> : 551. 2010.	None.
Typus: <i>J. adarca</i> Kohlm. <i>et al</i> . 1997.	Typus: <i>M. fruticosae</i> Abdel-Wahab <i>et al.</i> 2010, now regarded as <i>Juncigena fruticosae</i> (Abdel-Wahab <i>et al.</i> ) A.N. Mill. & Shearer 2016.	
<i>Knoxdaviesia</i> M.J. Wingf. <i>et al.</i> in Mycologia <b>80</b> : 26. 1988.	Gondwanamyces G.J. Marais & M.J. Wingf. in Mycologia <b>90</b> : 139. 1998.	Asexual type. Protection needed by NCF.
Typus: <i>K. proteae</i> M.J. Wingf. <i>et al</i> . 1988.	Typus: <i>G. proteae</i> (M.J. Wingf. <i>et al.</i> ) G.J. Marais & M.J. Wingf. 1998, basionym: <i>Ceratocystiopsis</i> <i>proteae</i> M.J. Wingf. <i>et al.</i> 1988, now regarded as <i>Knoxdaviesia proteae</i> M.J. Wingf. <i>et al.</i> 1988.	
Lasiosphaeris Clem., Gen. Fungi: 173. 1909.	Lasiadelphia Réblová & W. Gams in Fungal Divers. 46: 82. 2011.	None.
Typus: <i>L. hispida</i> (Tode) Clem. 1909.	Typus: <i>L. lasiosphaeriae</i> (W. Gams) Réblová & W. Gams 2011, now regarded as <i>Lasiosphaeris hispida</i> (Tode) Clem. 1909.	
<i>Mammaria</i> Ces. ex Rabenh. in Bot. Zeit. <b>12</b> : 190. 1854.	Pseudocercophora Subram. & Sekar in J. Singapore Natl. Acad. Sci. <b>15</b> : 58. 1986.	Asexual type. Protection needed by NCF.
Typus: <i>M. echinobotryoides</i> Ces. 1854.	Typus: <i>P. ingoldii</i> Subram. & Sekar 1986, now regarded as <i>Mammaria echinobotryoides</i> Ces. 1854.	
<i>Melanospora</i> Corda, Icon. Fung. 1: 24. 1837.	<i>Gonatobotrys</i> Corda, Pracht-Fl. Eur. Schimmelbild.: 9. 1839.	None.
Typus: <i>M. zamiae</i> Corda 1837.	Typus: <i>G. simplex</i> Corda 1839, now regarded as <i>Melanospora simplex</i> (Corda) D. Hawks. 2016.	
<i>Menispora</i> Pers., Mycol. Eur. 1: 32. 1822.	Zignoëlla Sacc. in Michelia 1: 346. 1878.	Asexual type. Protection needed by
Typus: <i>M. glauca</i> (Link) Pers. 1822, basionym: <i>Camptosporium glaucum</i> Link in Ehrenberg 1827.	Typus: <i>Z. pulviscula</i> (Curr.) Sacc. 1878, now regarded as <i>Menispora caesia</i> Preuss 1851.	NCF.
<i>Menisporopsis</i> S. Hughes in Mycol. Pap. <b>48</b> : 59. 1952.	<i>Menisporopascus</i> Matsush. in Matsush. Mycol. Mem. <b>10</b> : 141. 2003.	Asexual type. Protection needed by NCF.
Typus: <i>M. theobromae</i> S. Hughes 1952.	Typus: <i>M. kobensis</i> Matsush. 2003, now regarded as <i>Menisporopsis kobensis</i> Matsush. 2003.	
<i>Microdochium</i> Syd. & P. Syd. in Ann. Mycol. <b>22</b> (3/6): 267. Published on 15 Nov 1924.	<i>Monographella</i> Petr. in Ann. Mycol. <b>22</b> (1/2): 144. Published 20 Jun 1924.	Protection needed by NCF for Microdochium (Jun 1924) over
Typus: <i>M. phragmitis</i> Syd. & P. Syd. 1924.	Typus: <i>M. divergens</i> (Rehm) Petr. 1924, basionym: <i>Sphaerulina divergens</i> Rehm 1913, now regarded as <i>Microdochium nivale</i> (Fr.) Samuels & I.C. Hallett 1983.	Monographella (Nov 1924).

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<i>Monilochaetes</i> Halst. ex Harter in J. Agric. Res. <b>5</b> : 791. 1916.	Australiasca Sivan. & Alcorn in Aust. Syst. Bot. 15: 741. 2002.	Asexual type. Protection needed by NCF.
Typus: <i>M. infuscans</i> Harter 1916.	Typus: <i>A. queenslandica</i> Sivan. & Alcorn 2002, now regarded as <i>Monilochaetes camelliae</i> (Alcorn & Sivan.) Réblová <i>et al.</i> 2011.	
Nemania Gray, Nat. Arr. Brit. Pl. 1: 516. 1821.	<i>Geniculosporium</i> Chesters & Greenh. in Trans. Brit. Mycol. Soc. <b>47</b> : 400. 1964.	None.
Type: <i>N. serpens</i> (Pers.) Gray 1821.	Type: <i>G. serpens</i> Chesters & Greenh. 1964, now regarded as <i>Nemania serpens</i> (Pers.) Gray 1821.	
<i>Neurospora</i> Shear & B.O. Dodge in J. Agric. Res. <b>34</b> : 1025. 1927.	Chrysonilia Arx in Sydowia <b>34</b> : 16. 1981.	None.
Typus: <i>N. sitophila</i> Shear & B.O. Dodge 1927.	Typus: <i>Chrysonilia sitophila</i> (Mont.) Arx 1981, basionym: <i>Penicillium sitophilum</i> Mont. 1843, now regarded as <i>Neurospora sitophila</i> Shear & B.O. Dodge 1927.	
<i>Nigrospora</i> Zimm. in Centralbl. Bakteriol. Parasitenk., 1. Abt. <b>8</b> : 220. 1902.	Khuskia H.J. Huds. in Trans. Brit. Mycol. Soc. 46: 358. 1963.	Asexual type. Protection needed by NCF.
Typus: N. panici Zimm. 1902.	Typus: <i>K.oryzae</i> H.J. Huds. 1963, now regarded as <i>Nigrospora oryzae</i> (Berk. & Broome) Petch 1924.	
<b>Ophiodothella</b> (Henn.) Höhn. in Sitzungsber. Kaiserl. Akad. Wiss., MathNaturwiss. Cl., Abt. 1 <b>119</b> : 940. 1910, basionym: <i>Ophiodothis</i> subgen. <i>Ophiodothella</i> Henn. 1904.	<i>Acerviclypeatus</i> Hanlin in Mycotaxon <b>37</b> : 380. 1990.	None.
Typus: <i>O. atromaculans</i> (Henn.) Höhn. 1910, basionym: <i>Ophiodothis atromaculans</i> Henn. 1904.	Typus: <i>A. poriformans</i> Hanlin 1990, now regarded as <i>Ophiodothella angustissima</i> (Peck) Hanlin & M.C. González 2013.	
<b>Pestalotiopsis</b> Steyaert in Bull. Jard. Bot. État. Bruxelles <b>19</b> : 300. 1949.	<i>Pestalosphaeria</i> M.E. Barr in Mycologia <b>67</b> : 188. 1975.	Asexual type. Protection needed by NCF.
Typus: <i>P. guepinii</i> (Desm.) Steyaert 1949, basionym: <i>Pestalotia guepinii</i> Desm. 1840.	Typus: <i>P. concentrica</i> M.E. Barr 1975, now regarded as <i>Pestalotiopsis guepinii</i> var. <i>macrotricha</i> (Kleb.) B. Sutton 1961.	
<b>Phaeoacremonium</b> W. Gams <i>et al.</i> in Mycologia <b>88</b> : 789. 1996.	Romellia Berl., Icon. Fung. 3: 5. 1900.	Protection needed by NCF for Phaeoacremonium 1996 over Romellia
Typus: <i>P. parasiticum</i> (Ajello <i>et al.</i> ) W. Gams, <i>et al.</i> 1996.	Typus: <i>R. vibratilis</i> (Fr.) Berl. 1900, basionym: <i>Sphaeria vibratilis</i> Fr. 1823, now <i>Phaeoacremonium</i> <i>vibratilis</i> (Fr.) Gramaje <i>et al.</i> 2015.	1900 and <i>Togninia</i> 1900.
	<i>Togninia</i> Berl., Icon. Fung. <b>3</b> : 9. 1900.	
	Typus: <i>T. minima</i> (Tul. & C. Tul.) Berl. 1900, now regarded as <i>Phaeoacremonium minimum</i> (Tul. & C. Tul.) D. Gramaje, <i>et al.</i> 2015.	
<b>Plectosphaerella</b> Kleb. in Phytopathol. Z. 1: 43. 1929.	Plectosporium M.E. Palm et al. in Mycologia 87: 398. 1995.	None.
Typus: <i>P. cucumeris</i> Kleb. 1929.	Typus: <i>P. tabacinum</i> (J.F.H. Beyma) M.E. Palm <i>et al.</i> 1995, now regarded as <i>Plectosphaerella</i> <i>cucumeris</i> Kleb. 1929.	
<i>Pleurostoma</i> Tul. & C. Tul., Select. fung. Carpol. <b>2</b> : 247. 1863.	Pleurostomophora Vijaykr. et al. in Stud. Mycol. 50: 390. 2004.	None.
Typus: <i>P. candollei</i> Tul. & C. Tul. 1863.	Typus: <i>P. ootheca</i> Vijaykr. <i>et al.</i> 2004, now regarded as <i>Pleurostoma ootheca</i> (Berk. & M.A. Curtis) M.E. Barr 1985.	
Pleurothecium Höhn. in Ber. Deutsch. Bot. Ges. 37: 154. 1919.	Carpoligna F.A. Fernández & Huhndorf in Mycologia 91: 253. 1999.	Asexual type. Protection needed by NCF.
Typus: <i>P. recurvatum</i> (Morgan) Höhn. 1924, basionym: <i>Acrothecium recurvatum</i> Morgan 1895.	Typus: <i>C. pleurothecii</i> F.A. Fernández & Huhndorf 1999, now regarded as <i>Pleurothecium recurvatum</i> (Morgan) Höhn. 1924.	

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<b>Polystigma</b> DC., in de Candolle & Lamarck, Fl. Franç., edn 3 <b>6</b> : 164. 1815.	Polystigmina Sacc., Syll. Fung. 3: 622. 1884.	None.
Typus: <i>P. rubrum</i> (Pers.) DC. 1815, basionym: <i>Xyloma rubrum</i> Pers. 1800.	Typus: <i>P. rubra</i> (Pers.) Sacc. 1884, basionym: <i>Xyloma rubrum</i> Pers. 1800, now regarded as <i>Polystigma rubrum</i> (Pers.) DC. 1815.	
	<i>Rhodoseptoria</i> Naumov in Bull. Soc. Mycol. Fr. <b>29</b> : 278. 1913.	
	Typus: <i>R. ussuriensis</i> Naumov 1913, now regarded as <i>Polystigma rubrum</i> (Pers.) DC. 1815	
<i>Pseudothiella</i> Petr. in Hedwigia <b>68</b> : 257. 1928.	Pseudothiopsella Petr. in Hedwigia 68: 259. 1928.	None.
Typus: <i>P. hirtellae</i> (Henn.) Petr. 1928.	Typus: <i>P. hirtellae</i> Petr. 1928, now regarded as <i>Pseudothiella hirtellae</i> (Henn.) Petr. 1928.	
<b>Rosellinia</b> De Not. in Giorn. Bot. ital. <b>1</b> : 334. 1844.	Dematophora R. Hartig in Untersuch. Forstbot. Inst. München 3: 95. 1883.	None.
Typus: <i>R. aquila</i> (Fr.) Ces. & De Not. 1844.	Typus: <i>D. necatrix</i> R. Hartig 1883, now regarded as <i>Rosellinia necatrix</i> Berl. ex Prill. 1904	
Seimatosporium Corda, in Sturm, Deutschl. Fl., 3 Abt. 3(13): 79. 1833.	Discostroma Clem., Gen. Fung.: 50. 1909.	Asexual type. Protection needed by NCF.
Typus: <i>S. rosae</i> Corda 1833.	Typus: <i>Discostroma rehmii</i> (Schnabl) Clem. 1909, basionym: <i>Curreya rehmii</i> Schnabl 1892, a synonym of <i>D. massarina</i> (Sacc.) Arx 1974, basionym: <i>Metasphaeria massarina</i> Sacc. 1884, now regarded as <i>Seimatosporium massarina</i> (Sacc.) Jaklitsch & Voglmayr 2016.	
Seiridium Nees, Syst. Pilze: 22. 1816.	<i>Blogiascospora</i> Shoemaker <i>et al.</i> in Canad. J. Bot. <b>44</b> : 248. 1966.	Asexual type. Protection needed by NCF.
Typus: S. marginatum Nees 1816.	Typus: <i>B. marginata</i> (Fuckel) Shoemaker <i>et al.</i> 1966, basionym: <i>Massaria marginata</i> Fuckel 1873, now regarded as <i>Seiridium marginatum</i> Nees 1816.	
<b>Sphaeronaemella</b> P. Karst. in Hedwigia <b>23</b> : 17. 1884.	Gabarnaudia Samson & W. Gams in Stud. Mycol. 6: 88. 1974.	None.
Typus: <i>S. helvellae</i> (P. Karst.) P. Karst. 1884, basionym: <i>Sphaeria helvellae</i> P. Karst. 1867.	Typus: <i>G. betae</i> (Delacr.) Samson & W. Gams, in Samson 1974, basionym: <i>Oospora betae</i> Delacr. 1897, now regarded as <i>Sphaeronaemella betae</i> (Delacr.) Z.W. De Beer & M.J. Wingf. 2013.	
<b>Sporoschisma</b> Berk. & Broome, in Berkeley, Gard. Chron. <b>1847</b> : 540. 1847.	<i>Melanochaeta</i> E. Müll. <i>et al.</i> in Revue Mycol. <b>33</b> : 377. 1969.	Asexual type. Protection needed by NCF.
Typus: <i>S. mirabile</i> Berk. & Broome 1847.	Typus: <i>M. hemipsila</i> (Berk. & Broome) E. Müll., <i>et al.</i> 1969, basionym: <i>Sphaeria hemipsila</i> Berk. & Broome 1873, now regarded as <i>Sporoschisma</i> <i>hemipsila</i> (Berk. & Broome) Zelski <i>et al.</i> 2014.	
<i>Sporoschismopsis</i> HolJech. & Hennebert in Bull. Jard. Bot. Nat. Belgique. Bruxelles <b>42</b> : 385. 1972.	Porosphaerellopsis Samuels & E. Müll. in Sydowia <b>35</b> : 143. 1982.	Asexual type. Protection needed by NCF.
Typus: S. moravica HolJech. & Hennebert 1972.	Typus: <i>P. sporoschismophora</i> (Samuels & E. Müll.) E. Müll. & Samuels 1982, basionym: <i>Porosphaeria</i> <i>sporoschismophora</i> Samuels & E. Müll. 1978, now regarded as <i>Sporoschismopsis sporoschismophora</i> (Samuels & E. Müll.) Réblová 2014.	
Stanjehughesia Subram. in Proc. Indian Acad. Sci., B, Biol. Sci. 58(4): 184. 1992.	<i>Umbrinosphaeria</i> Réblová in Mycotaxon <b>71</b> : 17. 1999.	Asexual type. Protection needed by NCF.
Type: S. <i>hormiscioides</i> (Corda) Subram. 1992, basionym: <i>Sporidesmium</i> <i>hormiscioides</i> Corda 1838.	Type: <i>U. caesariata</i> (Clinton & Peck) Réblová 1999, basionym: <i>Sphaeria caesariata</i> Clinton & Peck, in Peck 1878, now regarded as <i>Stanjehughesia</i> <i>hormiscioides</i> (Corda) Subram. 1992.	

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Stromatographium Höhn. in Denkschr. Kaiserl. Akad. Wiss., MathNaturwiss. Kl. 83: 37. 1907.	Fluviostroma Samuels & E. Müll. in Sydowia 33: 283. 1980.	None.
Typus: <i>S. stromaticum</i> (Berk.) Höhn. 1907, basionym: <i>Stilbum stromaticum</i> Berk. 1843.	Typus: <i>F. wrightii</i> Samuels & E. Müll. 1980, now regarded as <i>Stromatographium stromaticum</i> (Berk.) Höhn. 1907.	
<b>Togniniella</b> Réblová <i>et al.</i> in Stud. Mycol. <b>50</b> : 543. 2004.	Phaeocrella Réblová et al. in Stud. Mycol. <b>50</b> : 545. 2004.	None.
Typus: <i>T. acerosa</i> Réblová <i>et al.</i> 2004.	Typus: <i>P. acerosa</i> Réblová <i>et al.</i> 2004, now regarded as <i>Togniniella acerosa</i> Réblová <i>et al.</i> 2004.	
<b>Torpedospora</b> Meyers in Mycologia <b>49</b> : 496. 1957.	Glomerulispora Abdel-Wahab & Nagah. in Mycol. Progr. 9: 552. 2010.	None.
Typus: <i>T. radiata</i> Meyers 1957.	Typus: <i>G. mangrovei</i> Abdel-Wahab & Nagah. 2010, now regarded as <i>Torpedospora mangrovei</i> (Abdel- Wahab & Nagah.) E.B.G. Jones & Abdel-Wahab 2016.	
Virgaria Nees, Syst. Pilze: 54. 1816.	Ascovirgaria J.D. Rogers & Y.M. Ju in Canad. J. Bot. 80: 478. 2002.	Asexual type. Protection needed by NCF.
Typus: <i>V. nigra</i> (Link) Nees 1817, basionym: <i>Botrytis nigra</i> Link 1809.	Typus: A. occulta J.D. Rogers & Y.M. Ju 2002, now regarded as Virgaria nigra (Link) Nees 1817.	
Xylaria Hill ex Schrank, Baier. Fl. 1: 200. 1789.	<i>Moelleroclavus</i> Henn. in Hedwigia <b>41</b> : 15. 1902.	None.
Typus: <i>X. hypoxylon</i> (L.) Grev. 1824, basionym: <i>Clavaria hypoxylon</i> L. 1753.	Typus: <i>M. penicilliopsis</i> Henn. 1902, now regarded as <i>Xylaria penicilliopsis</i> (Henn.) Y.M. Ju 2016.	
	<i>Xylocoremium</i> J.D. Rogers in Mycologia <b>76</b> : 913. 1984.	
	Typus: <i>X. flabelliforme</i> (Schwein.) J.D. Rogers 1984, basionym: <i>Sphaeria flabelliformis</i> Schwein., in Fries 1828, now regarded as <i>Xylaria flabelliformis</i> (Schwein.) Berk. & M.A. Curtis 1868.	
	Geniculisynnema Okane & Nakagiri in Mycoscience <b>48</b> : 245. 2007.	
	Typus: <i>G. termiticola</i> Okane & Nakagiri 2007, now regared as <i>Xylaria termiticola</i> (Okane & Nakagiri) YM. Ju 2016.	
	Arthroxylaria Seifert & W. Gams in Czech Mycol. 53: 299. 2002.	
	Typus: <i>A. elegans</i> Seifert & W. Gams 2002, now regarded as <i>Xylaria benjaminii</i> Seifert & W. Gams 2016.	

#### REFERENCES

- Abdel-Wahab MA, Nagahama T, Abdel-Aziz FA (2009) Two new *Corollospora* species and one new anamorph based on morphological and molecular data. *Mycoscience* **50**: 147–155.
- Abdel-Wahab MA, Pang KL, Nagahama T, Abdel-Aziz FA, Jones EBG (2010) Phylogenetic evaluation of anamorphic species of *Cirrenalia* and *Cumulospora* with the description of eight new genera and four new species. *Mycological Progress* **9**: 537–558.
- Arx JA von (1957) Die Arten der Gattung *Colletotrichum* Cda. *Phytopathologische Zeitschrift* **29**: 413–468.

- Arx JA von (1981) On *Monilia sitophila* and some families of *Ascomycetes*. *Sydowia* **34**: 13–29.
- Arx JA von (1982) The genus Dicyma, its synonyms and related fungi. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen C 85: 21–28.
- Arzanlou M, Groenewald JZ, Gams W, Braun U, Shin HD *et al.* (2007) Phylogenetic and morphotaxonomic revision of *Ramichloridium* and allied genera. *Studies of Mycology* **58**: 57–93.
- Barr ME (1975) *Pestalosphaeria*, a new genus in the *Amphisphaeriaceae*. *Mycologia* **67**: 187–194.
- Berbegal M, Garcia-Jimenez J, Armengol J (2014) First report of

Calosphaeria pulchella causing canker and branch dieback of sweet cherry trees in Spain. *Plant Disease* **98**: 1008.

- Booth C (1957) Studies of pyrenomycetes: I. Four species of Chaetosphaeria, two with Catenularia conidia. II. Melanopsamma pomiformis and its Stachybotrys conidia. Mycological Papers 68: 1–27.
- Booth C (1958) The genera *Chaetosphaeria* and *Thaxteria* in Britain. *Naturalist* **1958**: 83–90.
- Braun U (2013) (2210 2232) Proposals to conserve the teleomorphtypified name *Blumeria* against the anamorph-typified name *Oidium* and twenty-two teleomorph-typified powdery mildew species names against competing anamorph-typified names (*Ascomycota : Erysiphaceae*).Taxon **62**: 1328–1331.
- Brockmann I (1976) Untersuchungen ueber die Gattung *Discostroma* Clements (*Ascomycetes*). *Sydowia* **28**: 275–338.
- Cannon PF (1991) A revision of *Phyllachora* and some similar genera on the host family *Leguminosae*. *Mycological Papers* **163**: 1–302.
- Cannon PF (1996) Systematics and diversity of the *Phyllachoraceae* associated with *Rosaceae*, with a monograph of *Polystigma*. *Mycological Research* **100**: 1409–1427.
- Cannon PF, Damm U, Johnston PR, Weir BS (2012) *Colletotrichum* current status and future directions. *Studies in Mycology* **73**: 181–213.
- Cannon PF, Hawksworth DL (1982) A re-evaluation of *Melanospora* Corda and similar *Pyrenomycetes*, with a revision of the British species. *Botanical Journal of the Linnean Society* **84**: 115–160.
- Carlucci A, Raimondo ML, Santos J, Phillips AJL (2012) *Plectosphaerella* species associated with root and collar rots of horticultural crops in southern Italy. *Persoonia* **28**: 34–48.
- Chesters CGC, Greenhalgh GN (1964) *Geniculosporium serpens* gen. et sp. nov., the imperfect state of *Hypoxylon serpens*. *Transactions of the British Mycological Society* **47**: 393–401.
- Clements FE (1909) The Genera of Fungi. Minneapolis: H.W. Wilson.
- Clements FE, Shear C (1931) *The Genera of Fungi*. New York: H. W. Wilson.
- Constantinescu O, Holm K, Holm L (1995) Teleomorph-anamorph connections in ascomycetes: the anamorphs of three species of *Chaetosphaeria*. *Mycological Research* **99**: 585–592.
- Crous PW, Gams W, Wingfield MJ, van Wyk PS (1996) *Phaeoacremonium* gen. nov. associated with wilt and decline diseases of woody hosts and human infections. *Mycologia* 88: 786–796.
- Crous PW, Groenewald JZ (2013) A phylogenetic re-evaluation of *Arthrinium. IMA Fungus* **4**: 133–154.
- Crous PW, Verkley GJM, Christensen M, Castaneda-Ruiz RF, Groenewald JZ (2012) How important are conidial appendages? *Persoonia* **28**: 126–137.
- Damm U, Cannon PF, Woudenberg JHC, Crous PW (2012) The Colletotrichum acutatum species complex. Studies in Mycology 73: 37–113.
- Damm U, Fourie PH, Crous PW (2010) *Coniochaeta (Lecythophora)*, *Collophora* gen. nov. and *Phaeomoniella* species associated with wood necroses of *Prunus* trees. *Persoonia* **24**: 60–80.
- Damm U, Woudenberg JHC, Cannon PF, Crous PW (2009) *Colletotrichum* species with curved conidia from herbaceous hosts. *Fungal Diversity* **39**: 45–87.
- Daniel H-M, Lachance M-A, CPKurtzman (2014) On the reclassification of species assigned to *Candida* and other ascomycetous yeast genera based on phylogenetic circumscription. *Antonie van Leeuwenhoek* **10**: 67–84.

- Daniels J (1961) Chaetomium piluliferum sp. nov., the perfect state of Botryotrichum piluliferum. Transactions of the British Mycological Society **44**: 79–86.
- de Beer ZW, Seifert KA, Wingfield MJ (2013) A nomenclator for ophiostomatoid genera and species in the Ophiostomatales and Microascales. CBS Biodiversity Series 12: 245–322.
- Deighton FC (1985) Some species of *Nodulisporium*. *Transactions of the British Mycological Society* **85**: 391–395.
- Ding B, YinY, Zhang F, Li Z (2011) Recovery and phylogenetic diversity of culturable fungi associated with marine sponges *Clathrina luteoculcitella* and *Holoxea* sp. in the South China Sea. *Marine Biotechnology* **13**: 713–721.
- Ellis MB (1965) Dematiaceous Hyphomycetes. VI. *Mycological Papers* **103**: 1–46.
- Ellis MB (1971) *Dematiaceous Hyphomycetes*. Kew: Commonwealth Mycological Institute.
- Ernst M, Neubert K, Mendgen K, Wiersel SGR (2011) Niche differentiation of two sympatric species of *Microdochium* colonizing the roots of common reed, *M. phragmitis* vs. *M. bolleyi BMC Microbiology* **11**: 242–255.
- Fernández FA, Huhndorf SM (2005) New species of Chaetosphaeria, Melanopsammella and Tainosphaeria gen. nov. from the Americas. Fungal Diversity 18: 15–57.
- Fernández FA, Lutzoni FM, Huhndorf SM (1999) Teleomorphanamorph connections: the new pyrenomycetous genus *Carpoligna* and its *Pleurothecium* anamorph. *Mycologia* **91**: 251–262.
- Fernández FA, Miller AN, Huhndorf SM, Lutzoni FM, Zoller S (2006) Systematics of the genus *Chaetosphaeria* and its allied genera: morphological and phylogenetic diversity in north temperate and neotropical taxa. *Mycologia* **98**: 121–130.
- Furlanetto C, Dianese JC (1998) Some coelomycetes from Central Brazil. *Mycological Research* **102**: 19–29.
- Gams W (2000). *Phialophora* and some similar morphologically littledifferentiated anamorphs of divergent ascomycetes. *Studies in Mycology* **45**: 187–199.
- Gams W, Holubová-Jechová V (1976) *Chloridium* and some other dematiaceous hyphomycetes growing on decaying wood. *Studies in Mycology* **13**: 1–99.
- Gramaje D, Mostert L, Groenewald JZ, Crous PW (2015) *Phaeoacremonium*: from esca disease to phaeohyphomycosis. *Fungal Biology* **119**: 759–783.
- Grove WB (1937) *British Stem and Leaf-Fungi (Coelomycetes).* Vol. 2. Cambridge: Cambridge University Press.
- Habibi A, Banihashemi Z, Mostowfizadeh-Ghalamfarsa R (2015) Phylogenetic analysis of *Polystigma* and its relationship to *Phyllachorales. Phytopathologia Mediterranea* 54: 45–54.
- Hambleton S, Nickerson NL, Seifert KA (2005) *Leohumicola*, a new genus of heat-resistant hyphomycetes. *Studies in Mycology* **53**: 29–52.
- Hanlin RT (1990) *Acerviclypeatus*, a new genus for the anamorph of *Ophiodothella vaccinii*. *Mycotaxon* **37**: 379–384.
- Hanlin RT, Goh T-K, Skarshaug AJ (1992) A key to and descriptions of species assigned to *Ophiodothella* based on the literature. *Mycotaxon* **44**: 103–126.
- Hanlin RT, Gonzáles M (2013) Ophiodothella angustissima comb. nov., a new name for Acerviclypeatus poriformans and O. vaccinii. Mycotaxon 123: 327–334.
- Hausner G, Reid J (2004) The nuclear small subunit ribosomal genes of Sphaeronaemella helvellae, Sphaeronaemella fimicola,

Gabarnaudia betae, and Cornuvesica falcata: phylogenetic implications. Canadian Journal of Botany **82**: 752–762.

- Hawksworth DL (2015) Proposals to clarify and enhance the naming of fungi under the *International Code of Nomenclature for algae, fungi, and plants. IMA Fungus* **6**: 199–205; *Taxon* **64**: 858–862.
- Hawksworth DL, Gibson IAS, Gams W (1976) *Phialophora parasitica* associated with disease conditions in various trees. *Transactions* of the British Mycological Society **66**: 427–431.
- Hernández-Restrepo M, Gene J, Mena-Portales J, Cano J, Hadrid H, *et al.* (2014) New species of *Cordana* and epitypification of the genus. *Mycologia* **106**: 723–734.
- Hernández-Restrepo M, Groenewald JZ, Crous PW (2016) Taxonomy and phylogenetic reevaluation of *Microdochium*, *Monographella* and *Idriella*. *Persoonia* **36**: 57–82.
- Hironaga M, Nakano K, Yokoyama I, Kitajima J (1989) *Phialophora repens*, an emerging agent of subcutaneous phaeohyphomycosis in humans. *Journal of Clinical Microbiology* **27**: 394–399.
- Holubová-Jechová V (1973a) Lignicolous hyphomycetes from Czechoslovakia 4. Menispora. Folia Geobotanica et Phytotaxonomic 8: 317–336.
- Holubová-Jechová V (1973b) Lignicolous hyphomycetes from
   Czechoslovakia 3. Sporoschisma, Sporoschismopsis and
   Catenularia. Folia Geobotanica et Phytotaxonomic 8: 209–218.
- Holubová-Jechová V, Hennebert GL (1972) *Sporoschismopsis*, a new genus of lignicolous hyphomycetes. *Bulletin du Jardin Botanique National de Belgique* **42**: 385–391.
- Hsieh H-M, Ju Y-M, Rogers JD (2005) Molecular phylogeny of *Hypoxylon* and closely related genera. *Mycologia* **97**: 844–865.
- Hudson HJ (1963) The perfect state of *Nigrospora oryzae*. *Transactions of the British Mycological Society* **46**: 355–360.
- Hughes SJ (1951) Studies on micro-fungi. XI. Some hyphomycetes which produce phialides. *Mycological Papers* **45**: 1–36.
- Hughes SJ (1958) Revisiones hyphomycetum aliquot cum appendice de nominibus rejiciendis. *Canadian Journal of Botany* **36**: 727–836.
- Hughes SL, Hennebert GL (1963) Microfungi: X. Oedemium, Dimera, Diplosporium, Gongylocladium, and Cladotrichum. Canadian Journal of Botany 41: 773–809.
- Jaklitsch WJ, Gardiennet, A, Voglmayr H (2016) Resolution of morphology-based taxonomic delusions: Acrocordiella, Basiseptospora, Blogiascospora, Clypeosphaeria, Hymenopleella, Lepteutypa, Pseudapiospora, Requienella, Seiridium and Strickeria. Persoonia 37: 82–105.
- Jeewon R, Cai L, Liew ECY, Zhang K-Q, Hyde KD (2003) *Dyrithiopsis lakefuxianensis* gen. et sp. nov. from Fuxian Lake, Yunnan, China, and notes on the taxonomic confusion surrounding *Dyrithium. Mycologia* **95**: 911–920.
- Johnston PR, Seifert KA, Stone JK, Rossman AY, Maranova L (2014) Recommendations on generic names competing for use in *Leotiomycetes* (*Ascomycota*). *IMA Fungus* **5**: 91–120.
- Jones EBG, Suetrong S, Sakayaroj J, Bahkali AH, Abdel-Wahab MA, et al. (2015) Classification of marine Ascomycota, Basidiomycota, Blastocladiomycota and Chytridiomycota. Fungal Diversity **73**: 1–72.
- Jones EBG, Zuccaro A, Mitchell J, Nakagira A, Chatmala I, et al. (2009) Phylogenetic position of freshwater and marine Sigmoidea species: introducing a marine hyphomycete Halosigmoidea gen. nov. (Halosphaeriales). Botanica Marina 52: 349–359.
- Ju Y-M, Hsieh H-M, Dominick S (2016) The *Xylaria* names proposed by C.G. Lloyd. *North American Fungi* **11**: 1–31.

- Khan Z, Gene J, Ahmad S, Cano J, Al-Swieh, N *et al.* (2013) *Coniochaeta polymorpha*, a new species from endotracheal aspirate of a preterm neonate, and transfer of *Lecythophora* species to *Coniochaeta. Antonie van Leeuwenhoek* **104**: 243– 252.
- Kirk PM (1986) New or interesting microfungi XV. Miscellaneous hyphomycetes from the British Isles. *Transactions of the British Mycological Society* 86: 409–428.
- Kohlmeyer J, Volkmann-Kohlmeyer B, Eriksson OE (1997) Fungi on *Juncus roemerianus*. 9. New obligate and facultative marine *Ascomycotina*. *Botanica Marina* **40**: 291–300.
- Kutorga E, Rukšėnienė J, Treigienė A (2006) Microscopic fungi on Carpinus betulus in Lithuania 1. Teleomorphs and associated anamorphs. Botanica Lithuanica 12: 233–241.
- Li Q, Wen T-C, Kang J-C, Hyde KD (2015a) A new species of *Collodiscula* (*Xylariaceae*) from China. *Phytotaxa* **205**: 187–196.
- Li Q, Kang J-C, Hyde KD (2015b) Two new species of the genus *Collodiscula* (*Xylariaceae*) from China. *Mycological Progress* **14**: article 52.
- Lindqvist JC, Wright JE (1964) *Discoxylaria* genero nuevo la forma perfecta de *Hypocreodendron*. *Darwiniana* **13**: 138–143.
- Maharachchikumbura SSN, Guo L-D, Cai L, Chukeatirote E, Wu WP, *et al.* (2012) A multi-locus backbone tree for *Pestalotiopsis*, with a polyphasic characterization of 14 new species. *Fungal Diversity* **56**: 95–129.
- Maharachchikumbura SSN, Hyde KD, Groenewald JZ, Xu J, Crous PW (2014) *Pestalotiopsis* revisited. *Studies in Mycology* **79**: 121–186.
- Maharachchikumbura SSN, Hyde KD, Jones EBG, McKenzie EHC, Huang S-K, *et al.* (2015) Towards a natural classification and backbone tree for *Sordariomycetes*. *Fungal Diversity* **72**: 199– 301.
- Markovskaja S, Treigiené A (2007) A new and a rare species of *Cryptadelphia* and their *Brachysporium* anamorphs. *Nova Hedwigia* 84: 495–501.
- McNeill J, Barrie FR, Burdet HM, Demoulin V, Hawksworth DL, et al. (2006) International Code of Botanical Nomenclature (Vienna Code). [Regnum Vegetabile no. 146.] Ruggell: A. R. G. Gantner Verlag.
- McNeill J, Barrie FF, Buck WR, Demoulin V, Greuter W, et al. (eds) (2012) International Code of Nomenclature for algae, fungi, and plants (Melbourne Code). [Regnum vegetabile no. 154.] Königstein: Koeltz Scientific Books.
- Meyer WM, Dooley JR, Kwon-Chung KJ (1975) Mycotic granuloma caused by *Phialophora repens. American Journal of Clinical Pathology* **64**: 549–555.
- Mhmoud NA, Abdalla AS, Fahal AH, de Hoog GS, Gerrits van den Ende AH et al. (2012) Pleurostomophora ochracea, a novel agent of human eumycetoma with yellow grains. Journal of Clinical Microbiology 50: 2987–2994.
- Miller AN, Huhndorf SM (2004). A natural classification of *Lasiosphaeria* based on nuclear LSU rDNA sequences. *Mycological Research* **108**: 26–34.
- Moshrefi-Zarandi D, Aminaee MM, Sharzei A, Rezaee S (2014) First report of rosemary leaf spot caused by *Nigrospora oryzae* in Iran. *New Disease Reports* **30**: 27.
- Mostert L, Crous PW, Groenewald JZ, Gams W, Summerbell RC (2003) *Togninia* (*Calosphaeriales*) is confirmed as teleomorph of *Phaeoacremonium* by means of morphology, sexual compatibility and DNA phylogeny. *Mycologia* **95**: 646–659.

- Mostert L, Groenewald JZ, Summerbell RC, Gams W, Crous PW (2006) Taxonomy and pathology of *Togninia* (*Diaporthales*) and its *Phaeoacremonium* anamorphs. *Studies in Mycology* **54**: 1–115.
- Mugambi G, Huhndorf SM (2008) A new species of *Melanochaeta* from Kenya. *Sydowia* **60**: 261–266.
- Mugambi GK, Huhndorf SM (2010) Multigene phylogeny of the *Coronophorales*: morphology and new species in the order. *Mycologia* **102**: 185–210.
- Müller E (1986) On the genus *Diachora* J. Müller. *Transactions of the Botanical Society of Edinburgh* **45** (Supplement 1): 69–75.
- Müller E, von Arx JA (1962) Die Gattungen der didymosporen Pyrenomyceten. *Beiträge zur Kryptogamenflora der Schweiz* **11**(2): 1–922.
- Müller E, Samuels GJ (1982) Anamorphs of pyrenomycetous ascomycetes I. *Rhamphoria* Niessl and *Trichosphaerella* Bommer et al. Sydowia 35: 143–149
- Müller E, Samuels G (1982) Anamorphs of pyrenomycetous ascomycetes. II. Porosphaerella gen. nov. and its Cordana anamorph. Sydowia 35: 150–154.
- Nag Raj TR (1975) Genera coelomycetum. XI. Hyalotia, Hyalotiella, and Hyalotiopsis. Canadian Journal of Botany **53**: 1615–1624.
- Nag Raj TR (1993) Coelomycetous Anamorphs with Appendagebearing Conidia. Waterloo: Mycologue Publications.
- Nag Raj TR, Kendrick B (1986) *Ellurema* gen. nov., with notes on *Lepteutypa cisticola* and *Seiridium canariense*. *Sydowia* **38**: 178–193.
- Nakagiri A, Tokura R (1982) A new marine ascomycete and its anamorph from Japan. *Transactions of the Mycological Society of Japan* **23**: 101–110.
- Nawawi A, Kuthubutheen AJ (1989) *Canalisporium*, a new genus of lignicolous hyphomycetes from Malaysia. *Mycotaxon* **34**: 475–487.
- Nonaka K, Ishit T, Shiomi K, Omura S, Masume R (2013) *Virgaria boninensis*, a new hyphomycete (*Xylariaceae*) from soils in the Bonin Islands, Japan. *Mycoscience* **54**: 394–399.
- Nonaka K, Miyazaki H, Iwatsuki M, Shiomi K, Tomoda H *et al.* (2012) *Staphylotrichum boninense*, a new hyphomycete (*Chaetomiaceae*) from soils in the Bonin Islands, Japan. *Mycoscience* **53**: 312–318.
- Norphanphoun C, Maharachchikumbura SSN, Daranagama A, Bulgakov TS, Bhat DJ, *et al.* (2015) Towards a backbone tree for *Seimatosporium*, with S. *physocarpi* sp. nov. *Mycosphere* **6**: 385–400.
- Okane I, Nakagiri A (2007) Taxonomy of an anamorphic xylariaceous fungus from a termite nest found together with *Xylaria angulosa*. *Mycoscience* **48**: 240–249.
- Palm ME, Gams W, Nirenberg HI (1995) *Plectosporium*, a new genus for *Fusarium tabacinum*, the anamorph of *Plectosphaerella cucumerina*. *Mycologia* 87: 397–406.
- Perdomo H, Garcia D, Gene J, Sutton DA, Summerbell R et al. (2013) Phialemoniopsis, a new genus of Sordariomycetes, and new species of Phialemonium and Lecythophora. Mycologia 105: 398–421.
- Peršoh D, Melcher M, Flessa F, Rambold G (2010) First fungal community analyses of endophytic ascomycetes associated with Viscum album ssp. austriacum and its host Pinus sylvestris. Fungal Biology 114: 585–596.
- Petrini L (2013) Rosellinia a world monograph. Bibliotheca Mycologica 205: 1–410.
- Proffer TJ (1988) Xylaria root rot of urban trees caused by *Xylaria* polymorpha. Plant Disease **72**: 79.

- Punithalingam E (1970) Studies on *Sphaeropsidales* in culture. *Mycological Papers* **119**: 1–24.
- Quandt CA, Kepler RM, Gams W, Araújo JPM, Ban S, *et al.* (2014) Phylogenetic-based nomenclatural proposals for *Ophiocordycipitaceae* (*Hypocreales*) with new combinations in *Tolypocladium. IMA Fungus* 5: 121–134.
- Raja HA, Fournier J, Shearer CA, Miller AN (2012) Freshwater ascomycetes: Coniochaeta gigantospora sp. nov. based on morphological and molecular data. Mycoscience 53: 373–380.
- Rambelli A, Onofri S (1987) New species of *Kylindria* and *Xenokylindria* and notes on *Cylindrotrichum* (*Hyphomycetes*). *Transactions of the British Mycological Society* **88**: 393–397.
- Ranghoo VM, Tsui CKM, Hyde KD (2001) Brunneosporella aquatica gen. et sp. nov., Aqualignicola hyalina gen. et sp. nov., Jobellisia viridifusca sp. nov. and Porosphaerellopsis bipolaris sp. nov. (Ascomycetes) from submerged wood in freshwater habitats. Mycological Research 105: 625–633.
- Réblová M (1999) Studies in *Chaetosphaeria sensu lato* I. The genera *Chaetosphaerella* and *Tengiomyces* gen. nov. of the *Helminthosphaeriaceae*. *Mycotaxon* **70**: 387–420.
- Réblová M (2000) The genus *Chaetosphaeria* and its anamorphs. *Studies in Mycology* **45**: 149–168.
- Réblová M (2011) New insights into the systematics and phylogeny of the genus *Jattaea* and similar fungi of the *Calosphaeriales*. *Fungal Diversity* **49**: 167–198.
- Réblová M (2014) Sporoschismopsis angustata sp. nov., a new holomorph species in the Reticulascaceae (Glomerellales), and a reappraisal of Sporoschismopsis. Mycological Progress 13: 671–681.
- Réblová M, Barr ME, Samuels GJ (1999) *Chaetosphaeriaceae*, a new family for *Chaetosphaeria* and its relatives. *Sydowia* **51**: 49–70.
- Réblová M, Gams W (1999) Teleomorph-anamorph connections in ascomycetes. 1. *Cylindrotrichum* and *Cacumisporium* anamorphs of *Chaetosphaeria. Czech Mycology* **51**: 1–40.
- Réblová M, Gams W, Seifert KA (2011a) *Monilochaetes* and allied genera of the *Glomerellales*, and a reconsideration of families in the *Microascales*. *Studies in Mycology* **68**: 163–191.
- Réblová M, Gams W, Štěpánek V (2011b) The new hyphomycete genera Brachyalara and Infundichalara, the similar Exochalara and species of Phialophora' sect. Catenulatae' (Leotiomycetes). Fungal Diversity 46: 67–86.
- Réblová M, Jaklitsch WM, Réblová K, Štěpánek V (2015) Phylogenetic reconstruction of the *Calosphaeriales* and *Togniniales* using five genes and predicted RNA secondary structures of ITS, and *Flabellascus tenuirostris* gen. et sp. nov. *PLos One* 10(12): e0144616.
- Réblová M, Mostert L, Gams W, Crous PW (2004) New genera in the Calosphaeriales: Togniniella and its anamorph Phaeocrella, and Calosphaeriophora as anamorph of Calosphaeria. Studies in Mycology 50: 533–550.
- Réblová M, Mostert L (2007) *Romellia* is congeneric with *Togninia* and description of *Conidiotheca* gen. nov. for one species of this genus with polysporous asci. *Mycological Research* **111**: 299–307.
- Réblová M, Seifert KA (2004a) Conioscyphascus, a new ascomycetous genus for holomorphs with Conioscypha anamorphs. Studies in Mycology 50: 95–108.
- Réblová M, Seifert KA (2004b) *Cryptadelphia (Trichosphaeriales)*, a new genus for holomorphs with *Brachysporium* anamorphs, and clarification of the taxonomic status of *Wallrothiella*. *Mycologia* **96**: 343–367.

- Réblová M, Seifert KA (2007) A new fungal genus, *Teracosphaeria*, with a phialophora-like anamorph (*Sordariomycetes, Ascomycota*). *Mycological Research* **111**: 287–298.
- Réblová M, Seifert KA, Fournier J, Štěpánek V (2016) Newly recognised lineages of perithecial ascomycetes: the new orders *Conioscyphales* and *Pleurotheciales*. *Persoonia* 37: 57–81.
- Réblová M, Winka K (2000) Phylogeny of *Chaetosphaeria* and its anamorphs based on morphological and molecular data. *Mycologia* **92**: 939–954.
- Rodrigues de Cruz MC, Marques MFO, Guzmão LFP (2014) Conidial fungi from the semi-arid catinga biome of Brazil. The genus *Menisporopsis. Acta Botanica Brasilica* **28**: 339–345.
- Rogers JD (1984) *Xylaria cubensis* and its anamorph *Xylocoremium flabelliforme, Xylaria allantoidea*, and *Xylaria poitei* in continental United States. *Mycologia* **76**: 912–923.
- Rogers JD, Ju Y-M (2002) Ascovirgaria occulta gen. et sp. nov., Jumillera hawaiiensis sp. nov, and Lopadostoma hawaiianum sp. nov. from Hawaii. Canadian Journal of Botany **80**: 478–481.
- Rogers JD, Ju Y-M, Hemmes DE (1997) *Xylaria moelleroclavus* sp. nov. and its *Moelleroclavus* anamorphic state. *Mycological Research* **101**: 345–348.
- Rogers JD, Ju Y-M, San Martin Gonzalez F (1995) Discoxylaria myrmecophila and its Hypocreodendron anamorph. Mycologia 87: 41–45.
- Rojas EI, Rehner SA, Samuels GJ, Van Bael SA, Herre EA *et al.* (2010) *Colletotrichum gloeosporioides* s.l. associated with *Theobroma cacao* and other plants in Panama: multilocus phylogenies distinguish host-associated pathogens from asymptomatic endophytes. *Mycologia* **102**: 1318–1338.
- Rolshausen PE, Mahoney NE, Molyneux RJ, Gubler WD (2006) A reassessment of the species concept in *Eutypa lata*, the causal agent of Eutypa dieback of grapevine. *Phytopathology* **96**: 367–377.
- Rossman AY, Seifert KA, Samuels GJ, Minnis AM, Schroers H-J, et al. (2013) Genera in *Bionectriaceae*, *Hypocreaceae*, and *Nectriaceae* (*Hypocreales*) proposed for acceptance or rejection. *IMA Fungus* 4: 41–51.
- Rossman AY, Adams GC, Cannon PF, Castlebury LA, Crous PW *et al.* (2015a) Recommendations of generic names in *Diaporthales* competing for protection or use. *IMA Fungus* **6**: 145–154.
- Rossman AY, Crous PW, Hyde KD, Hawksworth DL, Aptroot A, et al. (2015b) Recommended names of pleomorphic genera in Dothideomycetes. IMA Fungus 6: 507–523.
- Samson RA (1974) Paecilomyces and some allied hyphomycetes. Studies in Mycology 6: 1–119.
- Samson RA, Visagie CM, Houbraken J, Hong S-B, Hubka V, *et al.* (2014) Phylogeny, identification and nomenclature of the genus *Aspergillus. Studies in Mycology* **78**: 141–173.
- Samuels GJ, Müller E (1978) Life-history studies of Brazilian ascomycetes. 1. Two new genera of the Sphaeriaceae having, respectively, Sporoschisma-like and Codinaea anamorphs. Sydowia 31: 126–136.
- Samuels GJ, Müller E (1980) Life history studies of Brazilian ascomycetes 8. *Thamnomyces chordalis* (anam.: *Nodulisporium*) and *Camillea bacillum* (anam.: *Geniculosporium*) with notes on taxonomy of the *Xylariaceae*. *Sydowia* **33**: 274–281.
- Samuels GJ, McKenzie EHC, Buchanan DE (1981) Ascomycetes of New Zealand 3. Two new species of *Apiospora* and their *Arthrinium* anamorphs on bamboo. *New Zealand Journal of Botany* **19**: 137–149.

Samuels GJ, Rogers JD, Nagasawa E (1987) Studies in the

*Amphisphaeriaceae* (sensu lato) 11. Collodiscula japonica and its anamorph, *Acanthodochium collodisculae*. *Mycotaxon* **28**: 453–459.

- Schoch CL, Sung GH, Volkmann-Kohlmeyer B, Kohlmeyer J, Spatafora JW (2007) Marine fungal lineages in the *Hypocreomycetidae*. *Mycological Research* **111**: 154–162.
- Schol-Schwarz MB(1970). Revision of the genus *Phialophora*. *Persoonia* **6**: 59–94.
- Seifert KA (1987) *Stromatographium* and *Acrostroma* gen. nov.: two tropical hyphomycete genera with distinctive synnema anatomies. *Canadian Journal of Botany* **65**: 2196–2201.
- Seifert KA, Gams W, Louis-Seize GW (2002) Arthroxylaria elegans, a new coprophilous anamorphic fungus allied with the Xylariaceae, with notes on the genus Bisporostilbella. Czech Mycology 53: 297–307.
- Senanayake IC, Maharachchikumbura SSN, Hyde KD, Bhat JD, Jones EBG, et al. (2015) Towards unraveling relationships in Xylariomycetidae (Sordariomycetes). Fungal Diversity 73: 73–144.
- Shenoy BD, Jeewon R, Wu WP, Bhat DJ, Hyde KD (2006) Ribosomal and RPB2 DNA sequence analyses suggest that *Sporidesmium* and morphologically similar genera are polyphyletic. *Mycological Research* **110**: 916–928.
- Shoemaker RA, Müller E, Morgan-Jones G (1966) Fuckel's Massaria marginata and Seiridium marginatum Nees ex Steudel. Canadian Journal of Botany 44: 247–254.
- Shoemaker RA (1964) Seimatosporium (= Cryptostictis) parasites of Rosa, Vitis, and Cornus. Canadian Journal of Botany **42**: 411–421.
- Sivanesan A (1983) Studies on ascomycetes. *Transactions of the British Mycological Society* **81**: 313–332.

Sivichai S, Hywel-Jones NL, Somrithipol S (2000) Lignicolous freshwater *Ascomycota* from Thailand: *Melanochaeta* and *Sporoschisma* anamorphs. *Mycological Research* **104**: 478–485.

- Sri-indrasutdhi V, Boonyuen N, Suetrong S, Chuaseeharonnachai C, Sivichai S, et al. (2010) Wood-inhabiting freshwater fungi from Thailand: Ascothailandia grenadoidia gen. et sp. nov., Canalisporium grenadoidia sp. nov. with a key to Canalisporium species (Sordariomycetes, Ascomycota). Mycoscience 51: 411– 420.
- Stadler M, Kuhnert E, Peršoh D, Fournier J (2013) The Xylariaceae as model example for a unified nomenclature following the "One fungus-one name" (1F1N) concept. Mycology 4: 5–21.
- Stadler M, Læssøe T, Fournier J, Decock C, Schmieschek B, et al. (2014). A polyphasic taxonomy of *Daldinia* (*Xylariaceae*). Studies in Mycology **77**: 1–143.
- Subramanian CV, Sekar G (1986) *Pseudocercophora ingoldii* gen. et sp. nov. and its *Mammaria* anamorph. *Journal of the Singapore National Academy of Sciences* **15**: 58–60.
- Sutton BC (1980) *The Coelomycetes; Fungi Imperfecti with pycnidia, acervuli and stromata.* Kew: Commonwealth Mycological Institute.
- Tanaka K, Endo M, Hirayama K, Okane I, Hosoya T, et al. (2011) Phylogeny of *Discosia* and *Seimatosporium* and introduction of *Adisciso* and *Immersidiscosia* genera nova. *Persoonia* 26: 85–98.
- Tang AM, Jeewon R, Hyde KD (2007) Phylogenetic utility of protein (RPB2, beta-tubulin) and ribosomal (LSU, SSU) gene sequences in the systematics of *Sordariomycetes, Ascomycota, Fungi. Antonie van Leeuwenhoek* **91**: 327–349.

Trouillas FP, Lorber JD, Peduto F, Grant J, Coates WW, et al. (2010a)

First report of *Calosphaeria pulchella* associated with branch dieback of sweet cherry trees in California. *Plant Disease* **94**: 1167.

- Trouillas FP, Urbez-Torres JR, Gubler WD (2010b). Diversity of diatrypaceous fungi associated with grapevine canker diseases in California. *Mycologia* **102**: 319–336.
- Untereiner WA, Debois V, Naveau FA (2001) Molecular systematics of the ascomycete genus *Farrowia* (*Chaetomiaceae*). *Canadian Journal of Botany* **79**: 321–333.
- Vakili NG (1989) Gonatobotrys simplex and its teleomorph, Melanospora damnosa. Mycological Research **93**: 67–74.
- Vijaykrishna D, Mostert L, Jeewon R, Gams W, Hyde KD, et al. (2004) Pleurostomophora, an anamorph of Pleurostoma (Calosphaeriales), a new anamorph genus morphologically similar to Phialophora. Studies in Mycology 50: 387–395.
- Visagie CM, Houbraken J, Frisvad JC, Hong S-B, Klaassen CHW, et al. (2014) Identification and nomenclature of the genus Penicillium. Studies in Mycology **78**: 343–371.
- Weber E, Gorke C, Begerow D (2002) The Lecythophora-Coniochaeta complex II. Molecular studies based on sequences of the large subunit of ribosomal DNA. Nova Hedwigia 74: 187–200.

- Weir BS, Johnston PR, Damm U (2012) The Collectotrichum gloeosporioides species complex. Studies in Mycology 73: 115– 180.
- Wijayawardene DNN, McKenzie EHC, Hyde KD (2012) Towards incorporating anamorphic fungi in a natural classification– checklist and notes for 2011. *Mycosphere* **3**: 157–228.
- Zelski S, Do C, Balto JA, Raja HA, Miller AN, *et al.* (2014a) Some dematiaceous freshwater microfungi from Perú and their previously unknown phylogenetic relationships based on 28S nrDNA. *IMA Fungus* **5**: 425–438.
- Zelski SE, Raja HA, Miller AN, Shearer CA (2014b) *Conioscypha peruviana* sp. nov., its phylogenetic placement based on 28S rRNA gene, and a report of *Conioscypha gracilis* comb. nov. from Peru. *Mycoscience* **56**: 319–325.
- Zhang N, Luo J, Rossman A, Aoki T, Chuma I, *et al.* (2016) Generic names in *Magnaporthales. IMA Fungus* **7**: 155–159.