

Overlooked competing asexual and sexually typified generic names of *Ascomycota* with recommendations for their use or protection

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Abstract: With the change to one scientific name for fungal species, numerous papers have been published with recommendations for use or protection of competing generic names in major groups of ascomycetes. Although genera in each group of fungi were carefully considered, some competing generic names were overlooked. This paper makes recommendations for additional competing genera not considered in previous papers. Chairs of relevant Working Groups of the ICTF were consulted in the development of these recommendations. A number of generic names need protection, specifically *Amarenographium* over *Amarenomyces*, *Amniculicola* over *Anguillospora*, *Balansia* over *Ephelis*, *Claviceps* over *Sphacelia*, *Drepanopeziza* over *Gloeosporidiella* and *Gloeosporium*, *Golovinomyces* over *Euoidium*, *Holwaya* over *Crinium*, *Hypocrella* over *Aschersonia*, *Labridella* over *Griphosphaerioma*, *Metacapnodium* over *Antennularia*, and *Neonectria* over *Cylindrocarpon* and *Heliscus*. The following new combinations are made: *Amniculicola longissima*, *Atichia maunauluana*, *Diaporthe columnaris*, *D. liquidambaris*, *D. longiparaphysata*, *D. palmicola*, *D. tersa*, *Elsinoë bucidae*, *E. caricae*, *E. choisyae*, *E. paeoniae*, *E. psidii*, *E. zorniae*, *Eupelte shoemakeri*, *Godronia myrtilli*, *G. raduloides*, *Sarcinella mirabilis*, *S. pulchra*, *Schizothyrium jamaicense*, and *Trichothallus niger*. Finally, one new species name, *Diaporthe azadirachte*, is introduced to validate an earlier name, and the conservation of *Discula* with a new type, *D. destructiva*, is recommended.

Key words:

Diaporthales
Dothideomycetes
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Eurotiales
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INTRODUCTION

With the change to one scientific name for fungi (McNeill *et al.* 2012), a number of papers have been published

with recommendations for use or protection of competing generic names of ascomycetes. These papers address genera in the major groups of *Sordariomycetes* such as *Diaporthales* (Rossman *et al.* 2015a), *Hypocreales*

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(Rossman *et al.* 2013, Quandt *et al.* 2014), *Magnaporthales* (Zhang *et al.* 2016), *Microascales* and *Ophiostomatales* (de Beer *et al.* 2013), *Xylariaceae* (Stadler *et al.* 2013) and remaining *Sordariomycetes* (Réblová *et al.* 2016) as well as *Dothideomycetes* (Rossman *et al.* 2015b), *Eurotiales* (Samson *et al.* 2014, Visagie *et al.* 2014), *Leotiomycetes* including *Erysiphales* (Braun 2013, Johnston *et al.* 2014), and yeast fungi (Daniel *et al.* 2014). A paper on competing genera of *Pezizomycetes* is concluded in this issue (Healy *et al.* 2016) and one on competing genera of *Basidiomycetes* is in preparation (J A Stalpers, pers. comm.). Thus competing generic names in most groups of pleomorphic fungi will then have been considered with recommendations made for use or protection of one generic name. Each of these papers was developed and recommendations approved by a Working Group of the International Committee on the Taxonomy of Fungi (ICTF). Although genera in each group of fungi were carefully considered, some competing generic names were overlooked. This paper makes recommendations for additional competing generic names not considered in previous papers. Table 1 is synopsis of the competing genera discussed in this paper with need for action noted, if necessary. If priority of sexually typified generic names is eliminated as has been proposed (Hawksworth 2015), asexually typified generic names that have priority need not be approved by the Nomenclature Committee on Fungi (NCF) as required now by the ICN. This is noted in Table 1 as required action similar to that required for generic names that do not have priority. Chairs of relevant Working Groups of the ICTF were consulted in the development of these recommendations as reflected in the authorship. Within each previously published paper necessary new combinations were made to place species in the recommended genera, however, additional required new combinations and nomenclatural issues have been discovered and are completed here.

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

EUROTIALES

The most commonly encountered members of *Eurotiales*, namely *Aspergillus* and *Penicillium*, have been reviewed with one scientific name recommended for each pleomorphic genus and species (Samson *et al.* 2014, Visagie *et al.* 2014). However, three additional sets of competing generic names within *Eurotiales* are considered here.

Use *Monascus* Tiegh. 1884 (S) rather than *Basipetospora* G.T. Cole & W.B. Kendr. 1968 (A) and *Backusia* Thirum. *et al.* 1964 (S)

The asexual morph of the type species of *Monascus*, *M. ruber*, was described as *Basipetospora rubra*, type species of *Basipetospora*, by Cole & Kendrick (1968), and later regarded as *B. vesicarium* (Stalpers 1984), thus these generic names are synonyms. These authors also considered the monotypic genus *Backusia* based on *B. terricola* to be a synonym of *Monascus*. Stchigel *et al.* (2004) provided an account of

Monascus recognizing *Basipetospora* for the asexual morph and placed it in *Aspergillaceae*. *Monascus* includes a number of species that are important in food science for which the name *Monascus* is used exclusively. *Monascus* includes 30 species, with four names currently accepted in *Basipetospora* of which the two species described by Matsushima (1975) belong to different orders (Seifert & Gams, unpubl.). Given its priority, the greater number of species, a recent monograph, and its economic importance, the use of *Monascus* is recommended.

Use *Paecilomyces* Bainier 1907 (A) rather than *Byssochlamys* Westling 1909 (S)

The type species of *Paecilomyces*, *P. variotii*, and the type species of *Byssochlamys*, *B. nivea*, were shown to be congeneric through molecular sequence analyses (Luangsa-ard *et al.* 2004, Samson *et al.* 2009), although the relationship between these genera had been known for some time (Stolk & Samson 1971). These fungi are thermotolerant and thus are important in the food and beverage industry as spoilage organisms (Samson *et al.* 2000). The concept of *Paecilomyces* had been confused due to the reduced morphology of the asexual reproductive structures, however, many species that are not monophyletic with the type species have now been placed in other genera. These include fungi used in biological control, *Purpureocillium lilicinum* (syn. *Paecilomyces lilicinum*) and insect pathogens such as *Isaria farinosa* (syn. *Paecilomyces farinosus*) and *I. fumosoroseus* (syn. *Paecilomyces fumosoroseus*; Luangsa-ard *et al.* 2004, 2005). The use of *Paecilomyces* in the strict sense of those involved in food spoilage is widespread; in a recent Food Mycology workshop held in Freising, Germany, the group discussed these competing generic names and decided to recommend use of the generic name that has priority, namely *Paecilomyces* (Samson pers. comm.). Although several valid and accepted species of *Paecilomyces* sensu Stolk & Samson (1971) remain to be renamed, we support the community opinion to maintain the use of *Paecilomyces* over *Byssochlamys*.

Use *Xeromyces* L.R. Fraser 1954 (S) rather than *Fraseriella* Cif. & A.M. Corte 1957 (A)

The type of the monotypic genus *Xeromyces*, *X. bisporus*, is an extreme xerophilic fungus that can grow in sugary substances and is thus important in food mycology (Dallyn & Everton 1969). The asexual morph of *X. bisporus* was described as *Fraseriella bispora*, type of the monotypic genus *Fraseriella*, thus these generic names are synonyms and compete for use. Although an early study suggested that *Xeromyces bisporus* belonged in *Monascus* (Stchigel *et al.* 2004), a more extensive account has shown that *Xeromyces* is a distinct genus within *Eurotiales* (Pettersson *et al.* 2011). *Xeromyces* has priority and is used more extensively than *Fraseriella*, thus we recommend the use of *Xeromyces*.

SORDARIOMYCETES

AMPHISPHAERIALES

Protect *Labridella* Brenckle 1929 (S) over *Griphosphaerioma* Höhn. 1918 (A)

The sexual morph of the type species of *Labridella*, *L. cornu-cervae*, was determined to be *Griphosphaerioma kansensis* based on *Cryptospora kansensis*, an earlier name for *G. symphoricarpi*, by Shoemaker (1963). At present *Griphosphaerioma* includes one other species, *G. zelvovicola*, which has an asexual morph referred to as *Sarcostroma zelvovicola* (Ono & Kobayashi 2003). The generic name *Sarcostroma* is now regarded as *Seimatosporium*, thus it seems unlikely that *G. zelvovicola* is congeneric with the type of *Griphosphaerioma*. No molecular data exist for any of these species. The name *Labridella cornu-cervae* has been used in two major references (Nag Raj 1993, Sutton 1980) and *Labridella* is cited more frequently than *Griphosphaerioma*, thus we recommend *Labridella* for protection and use.

DIAPORTHALES

Five new combinations and one name validated in *Diaporthe*

The name *Diaporthe* has priority over *Phomopsis* and was recommended for use based on discussions within the *Diaporthales* Working Group (Rossmann *et al.* 2015a). New combinations in *Diaporthe* of commonly encountered species were made in that paper. Some names of *Phomopsis* have been synonymized under older *Diaporthe* species names redefined using molecular data (Rossmann *et al.* 2014, Udayanga *et al.* 2014a,b). A number of economically important species of *Phomopsis* have been sequenced and appear to be unique species within *Diaporthe*. Based on these sequences and the use of the generic name *Diaporthe*, we propose a new species to validate a name previously described in *Phomopsis* and the following five new combinations.

***Diaporthe azadirachtae* Udayanga & Castl., sp. nov.**
Mycobank MB819047

Description: Original description as "*Phomopsis azadirachtae*" in Sateesh *et al.*, *Mycotaxon* **65**: 517 (1997).

Type: **India:** Karnataka, on dry twigs of *Azadirachta indica*; 1996, M.K Sateesh (HClO 42119-holotype; University of Mysore, Manasagangotri, MUBH 983-isotype).

Diaporthe azadirachtae (as "*Phomopsis azadirachtae*") causes a serious twig blight disease on *Azadirachta indica* (*Meliaceae*), neem, and has widely been reported in phytopathological literature (Sateesh *et al.* 1997, Fathima *et al.* 2004, Girish & Shankara Bhat 2008, Prasad *et al.* 2009, 2010). This new name replaces "*Phomopsis azadirachtae*", which was described with two specimens designated as type and so was not validly published (Art. 40.3). In addition this

taxon is now placed in the correct genus, *Diaporthe*.

***Diaporthe columnaris* (Farr & Castl.) Udayanga & Castl., comb. nov.**

Mycobank MB819020.

Basionym: *Phomopsis columnaris* D.F. Farr & Castl., *Mycol. Res.* **106**: 747 (2002).

***Diaporthe liquidambaris* (C.Q. Chang *et al.*) Udayanga & Castl., comb. nov.**

Mycobank MB819021.

Basionym: *Phomopsis liquidambaris* C.Q. Chang *et al.*, *Mycosystema* **24**: 9 (2005).

***Diaporthe longiparaphysata* (Uecker & K.C. Kuo) Udayanga & Castl., comb. nov.**

Mycobank MB819022

Basionym: *Phomopsis longiparaphysata* Uecker & K.C. Kuo, *Mycotaxon* **44**: 426 (1992).

***Diaporthe palmicola* (G. Winter) Udayanga & Castl., comb. nov.**

Mycobank MB819023

Basionym: *Phoma palmicola* G. Winter, *Grevillea* **15**: 92 (1887).

Synonym: *Phomopsis palmicola* (G. Winter) Sacc., *Syll. Fung.* **25**: 132 (1915).

***Diaporthe tersa* (Sacc.) Udayanga & Castl., comb. nov.**

Mycobank MB819024

Basionym: *Phoma tersa* Sacc., *Bolm Soc. broteriana, Coimbra*, sér. 1, **11**: 16 (1893).

Synonym: *Phomopsis tersa* (Sacc.) B. Sutton, *The Coelomycetes*: 573 (1980).

Use *Discula* Sacc. 1884 based on *D. destructiva* Redlin 1991

In reviewing the generic names competing for use in *Diaporthales*, Rossmann *et al.* (2015a) suggested that the generic name *Discula* based on *D. platani*, which is now regarded as *D. nervisequa* but erroneously stated as *D. quercina*, should be considered a synonym of *Apiognomonina*. *Discula nervisequa* is, however, now regarded as *Apiognomonina veneta* while the sexual morph of *D. quercina* could not be determined (Sogonov *et al.* 2007). Most species of *Discula* are now recognized in *Apiognomonina*. One widely used species of *Discula* is not congeneric with the type species and is not synonymous with *Apiognomonina*, namely *Discula destructiva*, cause of dogwood anthracnose (Redlin 1991). This species has been shown to fall outside of *Apiognomonina* but still within *Gnomoniaceae*, and is not allied with any known genus (Castlebury *et al.* 2002, Mejia *et al.* 2012). In order to continue the use of *Discula destructiva* for the cause of dogwood anthracnose and to eliminate the need for a new generic name and name change, a conservation proposal has been published to conserve *Discula* with a new type species, *D. destructiva* (Allen *et al.* 2016).

Table 1. Recommended generic names that compete for use not considered in previous papers. The recommended accepted generic name is in bold; see text for rationale for these decisions. For each generic name this list provides the authors, its date and place of publication, the type species of the genus, its basionym, their dates of publication, and the currently accepted name, if different. The action required is indicated in the last column such as protection of name that is recommended for use but does not have priority. NCF = Nomenclature Committee for Fungi.

Recommended generic name	Synonymous alternate morph generic name	Action required
EUROTIALES		
Monascus Tiegh. in Bull. Soc. Bot. France 31 : 226. 1884. Type: <i>M. ruber</i> Tiegh. 1884.	<i>Basipetospora</i> G.T. Cole & W.B. Kendr. in Canad. J. Bot. 46 : 991. 1968. Type: <i>B. rubra</i> G.T. Cole & W.B. Kendr. 1968, now regarded as <i>Monascus ruber</i> Tiegh 1884. <i>Backusia</i> Thirum. <i>et al.</i> in Mycologia 56 : 813. 1965. Type: <i>B. terricola</i> Thirum. <i>et al.</i> 1965, now regarded as <i>Monascus ruber</i> Tiegh 1884.	None.
Paecilomyces Bainier in Bull. Soc. Mycol. France 23 : 26. 1907. Type: <i>P. variotii</i> Bainier 1907.	<i>Byssochlamys</i> Westling in Svensk Bot. Tidskr. 3 : 134. 1909. Type: <i>B. nivea</i> Westling 1909, now regarded as <i>Paecilomyces niveus</i> Stolk & Samson 1971.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
Xeromyces L.R. Fraser in Proc. Linn. Soc. New South Wales 78 : 245. 1954. [1953]. Type: <i>X. bisporus</i> L.R. Fraser 1954.	<i>Fraseriella</i> Cif. & A.M. Corte in Atti Ist. Bot. Lab. Crittog. Univ. Pavia, ser. 4 14 : 109. 1957. Type: <i>F. bispora</i> Cif. & A.M. Corte 1957, now regarded as <i>Xeromyces bisporus</i> L.R. Fraser 1954.	None.
AMPHISPHAERIALES		
Labridella Brenckle in <i>Fungi Dakotenses</i> : no. 663. 1929. Type: <i>L. cornu-cervae</i> Brenckle 1929.	<i>Griphosphaerioma</i> Höhn. in Ber. Deutsch. Bot. Ges. 36 : 312. 1918. Type: <i>G. symphoricarpi</i> Höhn. 1918, now regarded as <i>Labridella cornu-cervae</i> Brenckle 1929.	Protection needed by NCF.
HYPOCREALES		
Balansia Speg. in Anales Soc. Ci. Argent. 19 : 45. 1885. Type: <i>B. claviceps</i> Speg. 1885.	<i>Ephelis</i> Fr., Summa Veg. Scand. 2 : 370. 1849. Type: <i>E. mexicana</i> Fr. 1849, now regarded as <i>Balansia claviceps</i> Speg. 1885.	Protection needed by NCF if proposal to remove sexual type priority is accepted.
Calonectria De Not. in Comment. Soc. Crittog. Ital. 2 : 477. 1867. Type: <i>C. daldiniana</i> De Not. 1867, now regarded as <i>C. pyrochroa</i> (Desm.) Sacc. 1878.	<i>Cylindrocladium</i> Morgan in Bot. Gaz. 17 : 191. 1892. Type: <i>C. scoparium</i> Morgan 1892, now regarded as <i>Calonectria cylindrospora</i> (Ellis & Everh.) Rossmann <i>et al.</i> 2015. <i>Candelospora</i> Rea & Hawley in Proc. Roy Irish Acad., sect. B, Biol. Sci. 13 : 11. 1912. Type: <i>C. illicicola</i> Hawley 1912, now regarded as <i>Calonectria pyrochroa</i> (Desm.) Sacc. 1878.	None.
Calostilbe Sacc. & P. Syd., Syll. Fung. 16 : 591. 1902. Type: <i>Calostilbe longiasca</i> (Möller) Sacc. & P. Syd. 1902, basionym: <i>Sphaerostilbe longiasca</i> Möller 1901, now regarded as <i>Calostilbe striispora</i> (Ellis & Everh.) Seaver 1928.	<i>Calostibella</i> Höhn. in Ber. Deutsch. Bot. Ges. 37 : 160. 1919. Type: <i>C. calostilbe</i> Höhn. 1919, now regarded as <i>Calostilbe striispora</i> (Ellis & Everh.) Seaver 1928. <i>Xenostilbum</i> Petr. in Sydowia 13 : 105. 1959. Type: <i>X. sydowii</i> Petr. 1959, now regarded as <i>Calostilbe striispora</i> (Ellis & Everh.) Seaver 1928.	None.
Chaetopsina Rambelli in Atti Accad. Sci. Ist. Bologna, Cl. Sci. Fis. Rendiconti 3 : 5. 1956. Type: <i>C. fulva</i> Rambelli 1956.	<i>Chaetopsinectria</i> J. Luo & W.Y. Zhuang in Mycologia 102 : 979. 2010. Type: <i>C. chaetopsinae</i> (Samuels) J. Luo & W.Y. Zhuang 2010, basionym: <i>Nectria chaetopsinae</i> Samuels 1985, now regarded as <i>Chaetopsina fulva</i> Rambelli 1956.	Asexual type. Protection needed by NCF if proposal to change this not accepted.

Table 1. (Continued).

Recommended generic name	Synonymous alternate morph generic name	Action required
Claviceps Tul. in Ann. Sci. Nat., Bot., sér. 3 20 : 43. 1853. Type: <i>C. purpurea</i> (Fr.) Tul. 1853, basionym: <i>Sphaeria purpurea</i> Fr. 1823.	<i>Sphacelia</i> Lév. in Mém. Soc. Linn. Paris 5 : 578. 1827. Type: <i>Sphacelia segetum</i> Lév. 1827, now regarded as <i>Claviceps purpurea</i> (Fr.) Tul. 1853. <i>Ustilagopsis</i> Speg. in Anales Soc. Ci. Argent. 10 : 5. 1880. Type: <i>U. deliquescens</i> Speg. 1880, now regarded as <i>Claviceps paspali</i> F. Stevens & J.G. Hall 1910, nom. cons. prop.	Protection needed by NCF if proposal to remove sexual type priority is accepted.
Corallomycetella Henn. in Hedwigia 43 : 245. 1904. Type: <i>C. heinsenii</i> Henn. 1904, now regarded as <i>Corallomycetella repens</i> (Berk. & M.A. Curtis) Rossman & Samuels 1999.	<i>Rhizostilbella</i> Wolk in Mycol. Centralbl. 4 : 237. 1914. Type: <i>R. rubra</i> Wolk 1914, now regarded as <i>Corallomycetella repens</i> (Berk. & M.A. Curtis) Rossman & Samuels 1999.	None.
Epichloë (Fr.) Tul. & C. Tul., Select. Fung. Carpol. 3 : 24. 1865, basionym: <i>Cordyceps</i> subgen. <i>Epichloë</i> Fr. 1849. Type: <i>Epichloë typhina</i> (Pers.) Tul. & C. Tul. 1865.	<i>Neotyphodium</i> Glenn <i>et al.</i> in Mycologia 88 : 377. 1996. Type: <i>N. coenophialum</i> (Morgan-Jones & W. Gams) Glenn <i>et al.</i> 1996, basionym: <i>Acremonium coenophialum</i> Morgan-Jones & W. Gams 1982, now regarded as <i>Epichloë coenophiala</i> (Morgan-Jones & W. Gams) C.W. Bacon & Schardl 2014.	None.
Hypocrella Sacc. in Michelia 1 : 322. 1878. Type: <i>H. discoidea</i> (Berk. & Broome) Sacc. 1878.	<i>Aschersonia</i> Mont. in Ann. Sci. Nat., Bot., sér. 3 10 : 121. 1848. Type: <i>A. tahitensis</i> Mont. 1848, now regarded as closely related to <i>H. discoidea</i> (Berk. & Broome) Sacc. 1878.	Protection needed by NCF if proposal to remove sexual type priority is accepted.
Neonectria Wollenw. in Ann. Mycol. 15 : 52. 1917. Type: <i>N. ramulariae</i> Wollenw. 1917, now regarded as <i>Neonectria candidum</i> (Ehrenb.) Rossman <i>et al.</i> 2015.	<i>Heliscus</i> Sacc., in Michelia 2 : 35. 1880. Type: <i>H. lugdunensis</i> Sacc. & Therry 1880, now regarded as <i>Neonectria lugdunensis</i> (Sacc. & Therry) L. Lombard & Crous 2014. <i>Cylindrocarpon</i> Wollenw. in Phytopathology 3 : 225. 1913. Type: <i>C. cylindroides</i> Wollenw. 1913, now regarded as <i>Neonectria neomacrospora</i> (C. Booth & Samuels) Mantiri & Samuels 2001.	Protection needed by NCF if proposal to remove sexual type priority is accepted.
Ophionectria Sacc. in Michelia 1 : 323. 1878. Type: <i>O. trichospora</i> (Berk. & Broome) Sacc. 1878, basionym <i>Nectria trichospora</i> Berk. & Broome 1873.	<i>Antipodium</i> Piroz. in Canad. J. Bot. 52 : 1143. 1974. Type: <i>A. spectabile</i> Piroz. 1974, now regarded as <i>Ophionectria trichospora</i> (Berk. & Broome) Sacc. 1878.	None.
Penicillifer Emden in Acta Bot. Neerl. 17 : 54. 1968. Type: <i>P. pulcher</i> Emden 1968.	<i>Viridispora</i> Samuels & Rossman in Stud. Mycol. 42 : 166. 1999. Type: <i>V. penicilliferi</i> (Samuels) Samuels & Rossman 1999, basionym: <i>Nectria penicilliferi</i> Samuels 1989, now regarded as <i>Penicillifer macrosporus</i> Samuels 1989.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
Sarcopodium Ehrenb., Sylv. Mycol. Berol.: 12, 23. 1818. Type: <i>S. circinatum</i> Ehrenb. 1818.	<i>Lanatonectria</i> Samuels & Rossman in Stud. Mycol. 42 : 137. 1999. Type: <i>L. flocculenta</i> (Henn. & E. Nyman) Samuels & Rossman 1999, basionym: <i>Nectriella flocculenta</i> Henn. & E. Nyman 1900, now regarded as <i>Sarcopodium macalpinei</i> (Agnihotr. & G.C.S. Barua) B. Sutton 1981. <i>Actinostilbe</i> Petch in Ann. Roy. Bot. Gard. (Peradeniya) 9 : 327. 1925. Type: <i>A. vanillae</i> Petch 1925, now regarded as <i>Sarcopodium vanillae</i> (Petch) B. Sutton 1981.	Asexual type. Protection needed by NCF if proposal to change this not accepted.

Table 1. (Continued).

Recommended generic name	Synonymous alternate morph generic name	Action required
<i>Ustilaginoidea</i> Bref., Unters. Gesamtgeb. Mykol. 12 : 194. 1895. Type: <i>U. oryzae</i> (Pat.) Bref. 1895, basionym: <i>Tilletia oryzae</i> Pat. 1887, now regarded as <i>Ustilaginoidea virens</i> (Cooke) Takah. 1896.	<i>Villosiclava</i> E. Tanaka & C. Tanaka in Mycotaxon 106 : 498. 2009. Type: <i>V. virens</i> (M. Sakurai ex Nakata) E. Tanaka & C. Tanaka 2008, basionym: <i>Claviceps virens</i> M. Sakurai ex Nakata 1934, now regarded as <i>Ustilaginoidea virens</i> (Cooke) Takah. 1896.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
<i>Volutella</i> Fr., <i>Syst. Mycol.</i> 3 : 458. 1832, nom. cons. Type: <i>V. ciliata</i> (Alb. & Schwein.) Fr. 1832, basionym: <i>Tubercularia ciliata</i> Alb. & Schwein. 1805, typ. cons.	<i>Voluellaonectria</i> J. Luo & W.Y. Zhuang in Phytotaxa 44 : 3. 2012. Type: <i>V. consors</i> (Ellis & Everh.) J. Luo <i>et al.</i> 2012, basionym: <i>Dialonectria consors</i> Ellis & Everh. 1888, now regarded as <i>Volutella consors</i> (Ellis & Everh.) Seifert <i>et al.</i> 2011.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
<i>Xenocylindrocladium</i> Decock <i>et al.</i> in Mycol. Res. 101 : 788. 1997. Type: <i>X. serpens</i> Decock <i>et al.</i> 1997.	<i>Xenocalonectria</i> Crous & C.L. Schoch in Stud. Mycol. 45 : 50. 2000. Type: <i>X. serpens</i> (Decock <i>et al.</i>) Crous & C.L. Schoch 2000, basionym: <i>Nectria serpens</i> Decock <i>et al.</i> 1997, now regarded as <i>Xenocylindrocladium serpens</i> Decock <i>et al.</i> 1997.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
SORDARIOMYCETES INSERTAE SEDIS		
<i>Batistia</i> Cif. in Ist. Bot. Reale Univ. Reale Lab. Crittog. Pavia Atti, ser. 4 15 : 166. 1958. Type: <i>B. annulipes</i> (Mont.) Cif. 1958, basionym: <i>Thamnomycetes annulipes</i> Mont. 1834.	<i>Acrostroma</i> Seifert, in Canad. J. Bot. 65 : 2197. 1987. Type: <i>A. annellosynnema</i> Seifert 1987, now regarded as <i>Batistia annulipes</i> (Mont.) Cif. 1958.	None.
LEOTIOMYCETES		
<i>Drepanopeziza</i> (Kleb.) Höhn. in Ann. Mycol. 15 : 332. 1917, basionym: <i>Pseudopeziza</i> sect. <i>Drepanopeziza</i> Kleb. in Z. Pflanzenkrankh. 16 : 82. 1906. Type: <i>D. ribis</i> (Kleb.) Höhn. 1917, basionym: <i>Pseudopeziza ribis</i> Kleb. 1906.	<i>Gloeosporium</i> Desm. & Mont., in Ann. Sci. Nat., Bot., sér. 3, 12 : 295. 1849. Type: <i>G. castagnei</i> Desm. & Mont. 1849, now regarded as <i>Drepanopeziza populi-albae</i> (Kleb.) Nannf. 1932, nom. cons. prop. <i>Gloeosporidiella</i> Petr. in Hedwigia 62 : 318. 1921. Type: <i>G. ribis</i> (Lib.) Petr., (1921), basionym: <i>Leptothyrium ribis</i> Lib. 1834, now regarded as <i>Drepanopeziza ribis</i> (Kleb.) Höhn. 1917.	Protection needed by NCF if proposal to remove sexual type priority is accepted.
<i>Golovinomyces</i> (U. Braun) Heluta in Biol. Žum. Armen. 41 : 357. 1988, basionym: <i>Erysiphe</i> sect. <i>Golovinomyces</i> U. Braun in Feddes Repert. 88 : 659. 1978. Type: <i>G. cichoracearum</i> (DC.) Heluta, 1988, basionym: <i>Erysiphe cichoracearum</i> DC. 1805.	<i>Euoidium</i> Y.L. Paul & J.N. Kapoor in Indian Phytopathol. 38 : 761. 1985. Type: <i>E. erysiphoides</i> (Fr.) Y.L. Paul & J.N. Kapoor 1985, basionym: <i>Oidium erysiphoides</i> Fr. 1832, now regarded as <i>Golovinomyces biocellatus</i> (Ehrenb.) Heluta 1988.	Protection needed by NCF if proposal to remove sexual type priority is accepted.
<i>Holwaya</i> Sacc., Syll. Fung. 8 : 646. 1889. Type: <i>H. ophiobolus</i> (Ellis) Sacc. 1889, basionym: <i>Bulgaria ophiobolus</i> Ellis 1883, now regarded as <i>Holwaya mucida</i> (Schulzer) Korf & Abawi 1971.	<i>Crinium</i> Fr., Novit. Fl. Suec. 5 : 79. 1819. Type: <i>Acrospermum caliciiforme</i> Fr. 1818, now regarded as <i>Holwaya mucida</i> (Schulzer) Korf & Abawi 1971.	Protection needed by NCF.
DOTHIDEOMYCETES		
<i>Abrothallus</i> De Not., Abrothallus: 1. 1845. Type: <i>A. bertianus</i> De Not. 1849	<i>Vouauxiomyces</i> Dyko & D. Hawksw. in Lichenologist 11 : 57. 1979. Type: <i>V. truncatus</i> (B. de Lesd.) Dyko & D. Hawksw. 1979, basionym: <i>Phoma truncata</i> B. de Lesd. 1914, now regarded as <i>Abrothallus microspermus</i> Tul. 1852.	None.

Table 1. (Continued).

Recommended generic name	Synonymous alternate morph generic name	Action required
Acroconidiellina M.B. Ellis in Mycol. Pap. 125 : 22. 1971. Type: <i>A. loudetiae</i> M.B. Ellis 1971.	<i>Zeuctomorpha</i> Sivan. <i>et al.</i> , Bitunicate Ascomyc. & Anam.: 572. 1984. Type: <i>Z. arecae</i> Sivan., P.M. Kirk & Govindu 1984, now regarded as <i>Acroconidiellina arecae</i> (Berk. & Broome) M.B. Ellis 1976.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
Amarenographium O.E. Erikss. in Mycotaxon 15 : 199. 1982. Type: <i>A. metableticum</i> (Trail) O.E. Erikss. 1982, basionym: <i>Camarosporium metableticum</i> Trail 1886.	<i>Amarenomyces</i> O.E. Erikss. in Opera Bot. 60 : 124. 1981. Type: <i>A. ammophilae</i> (Lasch) O.E. Erikss. 1981, basionym: <i>Sphaeria ammophilae</i> Lasch 1850, now regarded as <i>Amarenographium metableticum</i> (Trail) O.E. Erikss. 1982.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
Amniculicola Y. Zhang <i>ter</i> & K.D. Hyde in Mycol. Res. 112 : 1189. 2008. Type: <i>A. lignicola</i> Y. Zhang <i>ter</i> & K.D. Hyde 2008.	<i>Anguillospora</i> Ingold in Trans. Brit. Mycol. Soc. 25 : 401. 1942 ["1941"]. Type: <i>A. longissima</i> (Sacc. & P. Syd.) Ingold 1942, basionym: <i>Fusarium longissimum</i> Sacc. & P. Syd. 1899, now recognized as <i>Amniculicola longissima</i> (Sacc. & P. Syd.) Nadeeshan & K.D. Hyde 2016.	Asexual type. Protection needed by NCF unless proposal to conserve <i>Anguillospora</i> with new type is accepted.
Atichia Flot. in Linnaea 23 : 149. 1850. Type: <i>A. mosigii</i> Flot. 1850, now regarded as <i>Atichia glomerulosa</i> (Ach.) Stein 1850, basionym: <i>Collema glomerulosum</i> Ach. 1810.	<i>Seuratia</i> Pat. in Bull. Soc. Mycol. France 20 : 136. 1904. Type: <i>S. coffeicola</i> Pat. 1904, now regarded as <i>Atichia glomerulosa</i> (Ach.) Stein 1850.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
Blasdalea Sacc. & P. Syd., Syll. Fung. 16 : 634. 1902. Type: <i>B. disciformis</i> (Rehm) Sacc. & P. Syd. (1902), basionym: <i>Vizella disciformis</i> Rehm 1900.	<i>Chrysogloeum</i> Petr. in Sydowia 12 : 254. 1959. Type: <i>C. peruvianum</i> Petr. 1959, now regarded as <i>Blasdalea disciformis</i> (Rehm) Sacc. & P. Syd. 1902. <i>Singeriella</i> Petr. in Sydowia 12 : 252. 1959. Type: <i>S. peruviana</i> Petr. 1959, now regarded as <i>Blasdalea disciformis</i> (Rehm) Sacc. & P. Syd. 1902.	None.
Capnodium Mont. in Ann. Sci. Nat., Bot., sér. 3 11 : 233. 1849. Type: <i>C. salicinum</i> Mont. 1849.	<i>Fumagospora</i> G. Arnaud in Ann. École Natl. Agric. Montpellier, sér.2 10 : 326. 1911. Type: <i>F. capnodioides</i> G. Arnaud 1911, now regarded as <i>C. salicinum</i> Mont. 1849.	None.
Dilophospora Desm. in Ann. Sci. Nat., Bot., sér. 2 14 : 6. 1840. Type: <i>D. graminis</i> Desm. 1840, now regarded as <i>Dilophospora alopecuri</i> (Fr.) Fr. 1849.	<i>Lidophia</i> J. Walker & B. Sutton in Trans. Brit Mycol. Soc. 62 : 232. 1974. Type: <i>L. graminis</i> (Sacc.) J. Walker & B. Sutton 1974, basionym <i>Dilophia graminis</i> Sacc. 1883, now regarded as <i>Dilophospora alopecuri</i> (Fr.) Fr. 1849.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
Eupelte Syd. in Ann. Mycol. 22 : 426. 1924. Type: <i>E. amicta</i> Syd. 1924.	<i>Maurodothina</i> G. Arnaud <i>ex</i> Piroz. & Shoemaker in Canad. J. Bot. 48 : 1326. 1970. Type: <i>M. dothideoides</i> (Ellis & Everh.) Piroz. & Shoemaker 1970, basionym: <i>Asteridium dothideoides</i> Ellis & Everh. 1895, now regarded as <i>Eupelte dothideoides</i> (Ellis & Everh.) Arx & E. Müll. 1975. <i>Pirozynskia</i> Subram., <i>Curr. Sci.</i> 41 : 711. 1972. Type: <i>P. farriae</i> Subram. 1972, now regarded as <i>Eupelte farriae</i> (Piroz. & Shoemaker) Arx & E. Müll. 1975.	None.

Table 1. (Continued).

Recommended generic name	Synonymous alternate morph generic name	Action required
Koordersiella Höhn. in Sitzungsber. Kaiserl. Akad. Wiss., Math.-naturw. Cl., Abt. 1 118 : 833. 1909. Type: <i>K. javanica</i> Höhn. 1909.	<i>Hansfordiellopsis</i> Deighton in Mycol. Pap. 78 : 33. 1960. Type: <i>H. aburiensis</i> Deighton 1960, now regarded as <i>Koordersiella insectivora</i> (Hansf.) D. Hawksw. & O.E. Erikss. 1987. <i>Ascohansfordiellopsis</i> D. Hawksw. in Bull. Brit. Mus. (Nat. Hist.), Bot. 6 : 221. 1979. Type: <i>A. deightonii</i> D. Hawksw. 1979 now regarded as <i>Koordersiella deightonii</i> (D. Hawksw.) D. Hawksw. & O.E. Erikss. 1987.	None.
Metacapnodium Speg. in Physis (Buenos Aires 4 : 288. 1918. Type: <i>M. juniperi</i> (W. Phillips & Plowr.) Speg. 1918, basionym: <i>Capnodium juniperi</i> W. Phillips & Plowr. 1885.	<i>Antennularia</i> Rchb., Consp. Regni Veget.: 5. 1828. Type: <i>A. ericophila</i> (Link) Höhn. 1909, basionym: <i>Sphaeria ericophila</i> Link 1809, now regarded as <i>Metacapnodium ericophilum</i> (Link) D. Hawksw. & S. Hughes 2013. <i>Capnocybe</i> S. Hughes in New Zealand J. Bot. 4 : 335. 1966. Type: <i>C. fraseriae</i> S. Hughes 1966, now regarded as <i>Metacapnodium fraseriae</i> (S. Hughes) S. Hughes 1976. <i>Capnophialophora</i> S. Hughes in New Zealand J. Bot. 4 : 352. 1966. Type: <i>C. fraseriae</i> S. Hughes 1966, now regarded as <i>Metacapnodium fraseriae</i> (S. Hughes) S. Hughes 1976. <i>Capnobotrys</i> S. Hughes in New Zealand J. Bot. 8 : 205. 1970. Type: <i>C. neesii</i> S. Hughes 1970, said to be a <i>Metacapnodium</i> close to <i>M. quinquesepatum</i> (Hughes 1981). <i>Capnosporium</i> S. Hughes in Mycologia 68 : 752. 1976. Type: <i>C. moniliforme</i> S. Hughes 1976, now regarded as <i>Metacapnodium moniliforme</i> (L.R. Fraser) S. Hughes 1976. <i>Torulopsiella</i> Bender in Mycologia 24 : 411. 1932. Type: <i>T. fumaginea</i> (Speg.) Bender 1932, basionym: <i>Torula fumaginea</i> Speg. 1911.	Protection needed by NCF if proposal to remove sexual type priority is accepted.
Microxiphium (Harv. ex Berk. & Desm.) Thüm., Mycoth. Univ. 14 : no. 1352. 1879, basionym: <i>Capnodium</i> subgen. <i>Microxiphium</i> Harv. ex Berk. & Desm. in J. Hort. Soc. 4 : 253. 1849. Type: <i>M. footii</i> (Harv. ex Berk. & Desm.) Thüm. 1879, basionym: <i>Capnodium footii</i> Harv. ex Berk. & Desm. 1849, now regarded as <i>Microxiphium fagi</i> (Pers.) S. Hughes 1976.	<i>Dennisiella</i> Bat. & Cif. in Beih. Sydowia 3 : 37. 1962. Type: <i>D. babingtonii</i> (Berk.) Bat. & Cif. 1962, basionym: <i>Strigula babingtonii</i> Berk. (1849), now regarded as <i>Microxiphium fagi</i> (Pers.) S. Hughes 1976.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
Mirandina G. Arnaud ex Matsush., Icon. microfung. Matsush.: 96. 1975. Type: <i>M. corticola</i> G. Arnaud ex Matsush. 1975.	<i>Chaetonectrioides</i> Matsush., Matsush. Mycol. Mem. 9 : 5. 1996. Type: <i>C. malaysiana</i> Matsush. 1996, now regarded as <i>Mirandina flagelliformis</i> Matsush. 1987.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
Protoventuria Berl. & Sacc. in Atti Soc. Veneto-Trentino Sci. Nat. Padova 10 : 174. 1887. Type: <i>P. rosae</i> (De Not.) Berl. & Sacc. 1887, basionym: <i>Venturia rosae</i> De Not. 1855.	<i>Ramalia</i> Bat. in Revista Biol.(Lisboa) 1 : 110. 1957. Type: <i>R. veronica</i> Bat. 1957, now regarded as <i>Protoventuria parahebecola</i> B. Sutton & Pascoe 1988.	None.

Table 1. (Continued).

Recommended generic name	Synonymous alternate morph generic name	Action required
Sarcinella Sacc. in <i>Michelia</i> 2 : 31. 1880. Type: <i>S. heterospora</i> Sacc. 1877, now regarded as <i>S. pulchra</i> (Sacc.) Seifert 2016.	<i>Schiffnerula</i> Höhn. in <i>Sitzungsber. Kaiserl. Akad. Wiss., Math.-naturw. Cl., Abt. 1</i> 118 : 867. 1909. Type: <i>S. mirabilis</i> Höhn. 1909, now regarded as <i>Sarcinella mirabilis</i> (Höhn.) Seifert 2016. <i>Questieriella</i> G. Arnaud ex S. Hughes in <i>Can. J. Bot.</i> 61 : 1729. 1983. Type: <i>Questieriella pulchra</i> S. Hughes 1983, now regarded as <i>Sarcinella pulchra</i> (Sacc.) Seifert 2016.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
Trichothallus F. Stevens in <i>Bernice P. Bishop Mus. Bull.</i> 19 : 85. 1925. Type: <i>T. hawaiiensis</i> F. Stevens 1925.	<i>Plokamidomyces</i> Bat. <i>et al.</i> in <i>Ist. Bot. Reale Univ. Reale Lab. Crittog. Pavia, ser. 5</i> 15 : 47. 1958. Type: <i>P. colensoi</i> Bat. <i>et al.</i> 1958, now regarded as <i>Trichothallus niger</i> (Jennings) Seifert 2016. <i>Trichopelthea</i> Bat. <i>et al.</i> in <i>Ist. Bot. Reale Univ. Reale Lab. Crittog. Pavia, ser. 5</i> 15 : 44. 1958. Type: <i>T. asiatica</i> Bat. <i>et al.</i> 1958, now regarded as <i>Trichothallus niger</i> (Jennings) Seifert 2016.	Asexual type. Protection needed by NCF if proposal to change this not accepted.
Xenodium Syd. in <i>Ann. Mycol.</i> 33 : 95. 1935. Type: <i>X. petrakii</i> Syd. 1935.	<i>Xenodiella</i> Syd. in <i>Ann. Mycol.</i> 33 : 98. 1935. Type: <i>X. petrakii</i> Syd. 1935, now regarded as <i>Xenodium petrakii</i> Syd. 1935.	None.
Yoshinagaia Henn. in <i>Hedwigia</i> 43 : 143. 1904. Type: <i>Y. quercus</i> Henn. 1904.	<i>Japonia</i> Höhn. in <i>Sitzungsber. Kaiserl. Akad. Wiss., Math.-naturw. Cl., Abt. 1</i> 118 : 879. 1909. Type: <i>J. quercus</i> Höhn. 1909, now regarded as <i>Yoshinagaia quercus</i> Henn. 1904. <i>Yoshinagamycetes</i> Hara in <i>Bot. Mag. (Tokyo)</i> 26 : 143. 1912. Type: <i>Y. quercus</i> Hara 1912, now regarded as <i>Yoshinagaia quercus</i> Henn. 1904. <i>Monoloculia</i> Hara, <i>Diseases Trees</i> : 171. 1927. Type: <i>M. quercus</i> (Henn.) Hara. 1927, now regarded as <i>Yoshinagaia quercus</i> Henn. 1904.	Asexual type. Protection needed by NCF if proposal to change this not accepted.

HYPOCREALES

When the paper on recommendations for competing generic names in the non-clavicipitaceous *Hypocreales* was published based on deliberations of the *Hypocreales* Working Group (Rossman *et al.* 2013), only those generic names needing protection due to lack of priority or having asexual types were included. Since then the philosophy has changed with the Working Group reports including all competing generic names in their papers, for completeness, thus additional competing generic names in the non-clavicipitaceous *Hypocreales* are presented here. The generic names recommended for use in *Nectriaceae* are in agreement with the comprehensive overview of this family presented by Lombard *et al.* (2015). Among the clavicipitaceous *Hypocreales*, Quandt *et al.* (2014) published a paper on *Ophiocordycipitaceae* and a second major paper on *Cordycipitaceae* is planned to be published soon (R Kepler, pers. comm.). Several important generic pairs in *Clavicipitaceae* are considered here.

Protect *Balansia* Speg. 1885 (S) over *Ephelis* Fr. 1849 (A)

The genus *Balansia* is typified by *B. claviceps* and was monographed by Diehl (1950) with 13 species. A phylogeny of *Balansia* within *Clavicipitaceae* was provided by Reddy *et al.* (1998), who determined that six species of *Balansia* including the type form a monophyletic group. *Balansia claviceps* causes a disease referred to as false smut or flower blight that infects living inflorescences in tropical regions (Reddy *et al.* 1998). This and other species of *Balansia* produce alkaloids that provide protection to grasses that harbour this fungus as an endophyte (White 1997). The generic name *Ephelis*, based on *E. mexicana*, has been used for the asexual morphs of species of *Balansia* but includes many fewer names. *Ephelis mexicana* is considered the asexual morph of *B. claviceps* as confirmed by Diehl (1950) and later authors (Bacon & White 1994, White 1997), thus these generic names are synonyms. *Balansia* is here proposed for protection over *Ephelis* and only *Balansia* is included in Kirk *et al.* (2013).

Use *Calonectria* De Not. 1867 (S) rather than *Cylindrocladium* Morgan 1892 (A) and *Candelospora* Rea & Hawley 1912 (A)

The relationship and restricted definition of *Calonectria* based on *C. pyrochroa* and its asexual morph in *Cylindrocladium* typified by *C. scoparium* was first recognized by Rossman (1979) and confirmed by Lombard *et al.* (2010, 2015). The type of *Candelospora*, *C. ilicicola*, has most recently been recognized as a synonym of *Calonectria pyrochroa* (Lombard *et al.* 2015). Both *Calonectria* and *Cylindrocladium* are used about equally, thus we recommend following the principle of priority and using the name *Calonectria*. A number of important plant pathogenic fungi are placed in this genus including *Calonectria pseudonaviculata*, cause of boxwood blight, and *C. ilicicola*, cause of black rot of peanut.

Use *Calostilbe* Sacc. & P. Syd. 1902 (S) rather than *Calostibella* Höhn. 1919 (A) or *Xenostilbum* Petr. 1959 (A)

The relationships of the type species of *Calostilbe*, *C. striispora*, to the asexual morph *Calostibella calostilbe*, type of the monotypic *Calostibella*, was first recognized by Samuels (1973, as “*Nectria striispora*”) and later confirmed as a genus distinct from *Nectria* in Rossman *et al.* (1999) and Lombard *et al.* (2015). The synonymy of *Xenostilbum sydowii*, type of the monotypic *Xenostilbum*, with *Calostibella calostilbe* was first recognized by von Arx (1981) and accepted by later authors. Given that the generic name *Calostilbe* has priority and is most widely used, *Calostilbe* is recommended for use.

Use *Chaetopsina* Rambelli 1956 (A) rather than *Chaetopsinectria* J. Luo & W.Y. Zhuang 2010 (S)

Four species of *Nectria s. lat.* having *Chaetopsina* asexual morphs were described by Samuels (1985). These species were later placed in a separate genus *Chaetopsinectria* typified by *N. chaetopsinae* by Luo & Zhuang (2010). The asexual morph of *N. chaetopsinae* is *Chaetopsina fulva*, type of the generic name *Chaetopsina* (Samuels 1985), thus these generic names are synonyms. One of the four nectria-like species described by Samuels (1985) and placed in *Chaetopsinectria* has since been placed in *Mariannaea*, *M. catenulatae*, thus only three names remain in *Chaetopsinectria* all of which have names in *Chaetopsina*. *Chaetopsina* includes 18 names. Given its priority, widespread use, and greater number of names, the generic name *Chaetopsina* is recommended for use.

Protect *Claviceps* Tul. 1853 (S) over *Sphacelia* Lév. 1827 (A) and rather than *Ustilagopsis* Speg. 1880 (A)

The genus *Claviceps*, typified by *C. purpurea*, is well known as the cause of ergot and human diseases associated with infected cereals (Bove 1970) while the asexual morph producing a honey dew has been placed in *Sphacelia*. The type of *Sphacelia*, *S. segetum*, has long been regarded as the asexual morph of *C. purpurea* (Tulasne 1853). This species was recently determined to consist of three species with *S. segetum* recognized as a synonym of *C. purpurea* sensu stricto (Pažoutová *et al.* 2015), thus there

is no question that *Claviceps* and *Sphacelia* are synonyms. Another younger generic name, *Ustilagopsis* based on *U. deliquescens*, competes with *Claviceps*. This type is a synonym of *Claviceps paspali* as suggested by Wolf & Wolf (1947) and Langdon (1954), thus *Ustilagopsis* is a further synonym of *Claviceps*. In addition to ergot caused by *C. purpurea*, there are a number of important diseases caused by *Claviceps* such as sorghum ergot, *C. africana* (Tooley *et al.* 2006), and horse's tooth of corn, *C. giganteum* (Fuentes *et al.* 1964). These fungi produce a number of industrially important alkaloids (Hulvová *et al.* 2013). Although *Sphacelia* includes 33 species names, the generic name *Claviceps* includes 88 names, many of which have been thoroughly studied (White *et al.* 2003), is much more widely used, and should be protected for use.

Use *Corallomycetella* Henn. 1904 (S) rather than *Rhizostilbella* Wolk 1914 (A)

The type species of *Corallomycetella*, *C. heinsenii*, was confirmed as a synonym of *C. repens* by Rossman *et al.* (1999), a common tropical fungus that is known to cause diseases such as violet root rot of cacao, *Theobroma cacao*, and other root rot diseases on woody plants (Booth & Holliday 1973, as “*Sphaerostilbe repens*”). Seifert (1985) recognized the synonymy of the type species of *Rhizostilbella*, *R. rubra*, with *Stilbum hibisci*, then considered the asexual morph of *Nectria mauritiicola*, now *C. repens* (Rossman *et al.* 1999). *Corallomycetella* was recently monographed by Herrera *et al.* (2013) in which *Corallomycetella* was accepted over *Rhizostilbella* as was also the case in Lombard *et al.* (2015). Given its priority and widespread use, we recommend the use of *Corallomycetella*.

Use *Epichloë* (Fr.) Tul. & C. Tul. 1865 (S) rather than *Neotyphodium* Glenn *et al.* 1996 (A)

The relationship of *Epichloë* and *Neotyphodium* has already been addressed with all names resolved by Leuchtman *et al.* (2014). They clearly demonstrated that these generic names are synonyms and agreed with priority thus recommending the use of *Epichloë*.

Protect *Hypocrella* Sacc. 1878 (S) over *Aschersonia* Mont. 1848 (A)

The genus *Hypocrella* based on *H. discoidea* has been defined to include the type and four additional species while most species previously regarded as *Hypocrella* are now placed in the genera *Moelleriella* and *Samuelsia* (Chaverri *et al.* 2008). The type species of *Aschersonia*, *A. tahitensis*, was said to be closely related to the type of *Hypocrella* (Chaverri *et al.* 2008), although *H. discoidea* was considered to have an asexual morph referred to as *A. samoensis* by Hywel-Jones *et al.* (1993). Nevertheless the generic names *Hypocrella* and *Aschersonia* are synonyms. Both names have been used extensively in the literature and include many names but with the narrow concept of *Hypocrella*, relatively few species remain in that genus but even fewer remain in *Aschersonia*. Given its widespread use and the greater number of names, we recommend the generic name *Hypocrella* for protection and use.

Protect *Neonectria* Wollenw. 1917 (S) over the additional synonym *Heliscus* Sacc. 1880 (A) as well as *Cylindrocarpon* Wollenw. 1913 (A)

As part of discussions by the *Hypocreales* Working Group, it was decided to protect *Neonectria* over *Cylindrocarpon* (Rossman *et al.* 2013). Since then Lombard *et al.* (2014) demonstrated that the type species of *Heliscus*, *H. lugdunensis*, belongs in *Neonectria*. This species is an aquatic hyphomycete with unusual helicoid conidia. *Heliscus* includes only a few species while over 50 species have been described in *Neonectria* including a number of important plant pathogens such as *N. coccinea*, cause of beech bark disease in Europe, and *N. galligena*, cause of canker disease of apple, birch and other hardwood trees in temperate regions. Given that *Neonectria* is already proposed for protection over *Cylindrocarpon* and that *Heliscus* is a relatively unknown genus with few species, it is recommended that *Neonectria* also be protected over *Heliscus*.

Use *Ophionectria* Sacc. 1878 (S) rather than *Antipodium* Piroz. 1974 (A)

The type of the generic name *Ophionectria*, *O. trichospora*, is a relatively common and distinctive species occurring on rotting wood in tropical regions (Rossman 1977). The asexual morph of *O. trichospora* was described as the equally distinctive *Antipodium spectabile* in the monotypic genus *Antipodium* (Pirozynski 1974), thus these generic names are synonyms. Given its priority and widespread use, the name *Ophionectria* is recommended for use.

Use *Penicillifer* Emden 1968 (A) rather than *Viridispora* Samuels & Rossman 1999 (S)

Two species of *Nectria s. lat.* were determined to have asexual morphs belonging to the genus *Penicillifer* by Samuels (1989). Rossman *et al.* (1999) recognized these species with two others as the distinct genus *Viridispora*, typified by *V. penicilliferi*. Lombard *et al.* (2015) demonstrated that the type species of *Viridispora* and the type species of *Penicillifer*, *P. pulcher*, were congeneric thus these generic names are synonyms. About eight names are included in *Penicillifer* with only four names in *Viridispora*, all of which also have names in *Penicillifer*. Given its priority, widespread use and greater number of names, we recommend the use of *Penicillifer*.

Use *Sarcopodium* Ehrenb. 1818 (A) rather than *Actinostilbe* Petch 1925 (A) and *Lanatonectria* Samuels & Rossman 1999 (S)

A clade with the type species of *Sarcopodium*, *S. circinatum*, was shown to include the type species of *Lanatonectria*, *L. flocculenta* (as *S. macalpinei*), and the type species of *Actinostilbe*, *A. vanillae* (as *S. vanilla*) by Lombard *et al.* (2015), thus these three generic names are synonyms. *Actinostilbe* had previously been shown to be a synonym of *Sarcopodium* by Sutton (1981). About thirty names are included in *Sarcopodium*, a generic name that is widely used. Only five names have been placed in *Lanatonectria*. Given its priority, widespread use and greater number of names, we recommend the use of *Sarcopodium*.

Use *Ustilaginoidea* Bref. 1895 (A) rather than *Villosiclava* E. Tanaka & C. Tanaka 2009 (S)

The type species of *Ustilaginoidea*, *U. oryzae*, now recognized as *U. virens*, causes a disease called false smut of rice that occurs throughout the rice-growing regions of the world (Mulder & Holliday 1971). A monotypic generic name for the sexual morph of this fungus, *Villosiclava* based on *V. virens*, was published by Tanaka *et al.* (2009) in which the relationship between these two names as the same species was confirmed. Thus there is no question that these generic names are synonyms. *Ustilaginoidea* has been used widely for this disease while the sexual morph name is relatively recent and has not been used to any extent. Given its widespread use and priority, *Ustilaginoidea* is recommended for use.

Use *Volutella* Fr. 1832 (A) nom. cons. rather than *Volutellonectria* J. Luo & W.Y. Zhuang 2012 (S)

Volutella based on *V. ciliata* is a well known genus of ubiquitous, sporodochial, saprobic fungi. This generic name has been conserved over the plant name *Volutella* Forsk. 1775 (*Lauraceae*) (Hawksworth & Tulloch 1972). The link with the nectria-like sexual morph *Nectria consors* was determined by Samuels (1977). This species, as *Volutellonectria consors*, served as the type of the generic name *Volutellonectria* with three species. Gräfenhan *et al.* (2011) and Lombard *et al.* (2015) demonstrated that *Volutella ciliata* and *V. consors* are congeneric and should be regarded as a distinct genus in *Nectriaceae*. Given the numerous species, its priority, and widespread use, it is recommended that *Volutella* be used for this genus.

Use *Xenocylincladium* Decock *et al.* 1997 (A) rather than *Xenocalonectria* Crous & C.L. Schoch (2000)

The type species of *Xenocylincladium*, *X. serpens*, was described as the asexual morph of *Nectria serpens* (Decock *et al.* 1997), a name that was later transferred to the monotypic *Xenocalonectria* (Schoch *et al.* 2000), thus these generic names are synonyms. Given the three names in that genus and its priority, we recommend the use of *Xenocylincladium*.

SORDARIOMYCETES INCERTAE SEDIS

Use *Batistia* Cif. 1958 (S) rather than *Acrostroma* Seifert 1987 (A)

The monotypic genus *Batistia* is based on *B. annulipes* with which an asexual morph, *Acrostroma annellosynnema*, was linked using cultural methods by Samuels & Rodriguez (1989). No sequence data have been published for this species and the only known cultures are lost (S Huhndorf, in litt. to K A Seifert). The generic name *Acrostroma*, typified by *A. annulipes*, was described by Seifert (1987) with two species added since then (Verma *et al.* 2008) that are probably misclassified (Seifert *et al.* 2011). *Batistia annulipes* is a relatively common and distinctive tropical fungus, thus this genus is more widely known than *Acrostroma*. Based on its greater use in the literature and priority, we recommend the use of *Batistia*.

LEOTIOMYCETES

In reviewing generic names in *Leotiomyces*, Johnston *et al.* (2014) listed competing generic names and proposed a single generic name for protection or use. However, the following three sets of generic names were not included in that paper. In addition two new combinations are made in genera reviewed previously and the protection of a generic name of a powdery mildew (*Leotiomyces*, *Erysiphales*) omitted in Braun (2013) is proposed.

Protect *Drepanopeziza* (Kleb.) Jaap 1914 (S) over *Gloeosporium* Desm. & Mont. 1848 (A) and rather than *Gloeosporidiella* Petr. 1921 (A)

Drepanopeziza ribis, type species of *Drepanopeziza*, is commonly encountered causing a leaf spot disease of current or gooseberry anthracnose (Booth & Walker 1979). The name *Drepanopeziza* was recognized at the generic rank for the first time by Jaap (1914) based on *Pseudopeziza* subgenus *Drepanopeziza* described by Klebahn (1906) who based this subgenus on *P. ribis*, the only species mentioned in this description; *Index Fungorum* erroneously gives *P. campestris* as the type of *Drepanopeziza*. Although Jaap (1914) recognized *D. campestris* based on *P. campestris*, he attributed the generic name to Klebahn's name *Pseudopeziza* subgenus *Drepanopeziza*, which was described with only one species, *P. ribis* (Klebahn 1906). This name automatically becomes the type. *Drepanopeziza* was not included in Johnston *et al.* (2014) because this name was considered to represent a good genus with no competing synonyms. Since then, it has been discovered that the type species of *Gloeosporium*, *G. castagnei*, is the asexual morph of *D. populi-albae* and the type species of *Gloeosporidiella*, *G. ribis*, is the asexual morph of *D. ribis*. Similarly *G. variabile* is the asexual morph of *D. variabilis* (Rimpau 1961). Thus *Gloeosporium* and *Gloeosporidiella* are congeneric with *Drepanopeziza*. Von Arx (1957) provided an account of the over 800 names described in a very broadly circumscribed *Gloeosporium*, which are used for asexual morphs of species in genera throughout the ascomycetes. *Gloeosporidiella* is a smaller genus with only 18 species some of which were included in von Arx (1957) and Sutton (1980). Based on its widespread use, the ill-defined, historical concept of *Gloeosporium*, and the relative obscurity of *Gloeosporidiella*, *Drepanopeziza* is recommended for protection and use over these two competing generic names.

Protect *Golovinomyces* (U. Braun) Heluta 1988 (S) over *Euoidium* Y.L. Paul & J.N. Kapoor 1985 (A)

Braun (2012) discussed the relevance of asexual and sexual morph-typified names in powdery mildews (*Erysiphales*) and proposed to give general preference to names based on sexual morphs. This approach to solve corresponding nomenclatural problems in powdery mildews was implemented by Braun (2013) who proposed to conserve the sexual morph-typified name *Blumeria* against the asexual morph-typified name *Oidium* and twenty-two sexual morph-typified species names against competing asexual morph-typified names. One case at the generic level was omitted. Braun (1978) introduced *Erysiphe*

sect. *Golovinomyces* for powdery mildews characterized by having ascomata with mycelioid appendages, 2-spored asci, and a characteristic asexual morph: i.e. appressoria indistinct to nipple-shaped, conidia catenulent, without fibrosin bodies. Heluta (1988) raised this section to generic rank by introducing the new combination *Golovinomyces*. The asexual morph-typified name *Euoidium* was proposed by Paul & Kapoor (1985) with *Oidium erysiphoides* as type species. This generic name was previously used in the broad sense for all kinds of asexual powdery mildews with conidia formed in chains. *Oidium erysiphoides* is also a dubious name, i.e. used in a very wide sense for all kinds of asexual powdery mildews. Type material of *O. erysiphoides* is not preserved. In order to clarify the application of *Oidium erysiphoides* and thereby *Euoidium*, Braun & Cook (2012) neotypified this species name with asexual morph material of *Golovinomyces biocellatus* making *Euoidium* a heterotypic synonym of *Golovinomyces*. The name *Euoidium* dates from 1985 while *Golovinomyces* was introduced at the generic rank in 1988. Following the proposal to give general preference to sexual morph-typified names in powdery mildews, its wide recognition, and phylogenetically proven distinction, *Golovinomyces* is proposed for protection over *Euoidium*.

Protect *Holwaya* Sacc. 1889 over the additional synonym *Crinium* Fr. 1819 (A)

Although the generic name *Holwaya* has been proposed for protection over *Crinula* in Johnston *et al.* (2014), since then it has been determined that *Holwaya* must also be protected against *Crinium* based on the type, *Acrospermum caliciiforme*. In the protologue for *Crinium* Fries (1819) mentioned only this species with reference to its place of publication. Later Fries (1821) placed *A. caliciiforme* in the genus *Crinula*. The name *Crinium* has not been used since then, thus *Holwaya* is proposed for protection over *Crinium*.

Use *Pseudeurotium* J.F.H. Beyma 1937 (S) rather than *Teberdinia* Sogonov *et al.* 2005 (A)

The genus *Pseudeurotium* based on *P. zonatum* includes 19 names and belongs in *Pseudeurotiaceae*. Sogonov *et al.* (2005) described the monotypic genus *Teberdinia*, based on *T. hygrophila*, including three unnamed asexual morphs of species of *Pseudeurotium*. In determining the phylogenetic position of the fungus causing white-nose syndrome of bats now known as *Pseudogymnoascus destructans*, Minnis & Lindner (2013) demonstrated that *Pseudeurotium* and *Teberdinia* were synonyms and placed *T. hygrophila* in *Pseudeurotium*. While *Teberdinia* is monotypic and relatively obscure, *Pseudeurotium* has priority, includes a number species, and is well known, thus we recommend the use of *Pseudeurotium*.

NEW COMBINATIONS IN LEOTIOMYCETES

In reviewing generic names in *Leotiomyces*, Johnston *et al.* (2014) recommended the use of *Godronia* rather than *Topospora*. Since then it has been determined that two names in *Topospora* should be placed in *Godronia* so these new combinations are proposed here:

Godronia myrtilli (Feltgen) J.K. Stone, **comb. nov.**

MycoBank MB819026

Basionym: Dothiopsis myrtilli Feltgen, *Vorstud. Pilzfl. Luxemb.*, Nachtr. III: 286 (1903).*Synonym: Topospora myrtilli* (Feltgen) Boerema, *Gewasbescherming* 1(4): 66 (1970).

In studying *Sirococcus*, Konrad *et al.* (2007) used *Godronia* (syn. *Topospora*) as an outgroup and showed that two isolates of *T. myrtilli* grouped with *G. cassandrae*, thus confirming that *T. myrtilli* belongs in *Godronia*.

Godronia raduloides (Sacc. & Scalia) J.K. Stone, **comb. nov.**

MycoBank MB819027

Basionym: Rhynchophoma raduloides Sacc. & Scalia, *Harriman Alaska Expedition* 5: 20 (1904).*Synonym: Topospora raduloides* (Sacc. & Scalia) Verkley, *Nova Hedwigia* 75: 444 (2002).

In placing this species in *Topospora*, Verkley (2002) noted that on the type material there was a note "...accompanied by apothecia of a species of *Godronia*", and he suggested that *Godronia* was the sexual morph of *T. raduloides*.

DOTHIDEOMYCETES

Although a list has been published of recommendations for competing genera in the *Dothideomycetes* (Rossman *et al.* 2015b) based on Wijayawardene *et al.* (2014), a number of additional competing generic names have been noted since then and are listed here with recommendations for the generic name to use.

Use *Abrothallus* De Not 1845 (S) rather than *Vouauxiomyces* Dyko & D. Hawksw. 1979 (A)

The generic name *Abrothallus*, typified by *A. bertianus*, represents a relatively well-known group of lichenicolous fungi including about 60 names, while *Vouauxiomyces* based on *V. truncatus* (Hawksworth & Dyko 1979), the asexual morph of *A. microspermus*. The connection between these generic names was confirmed using electrophoretic methods by Pérez-Ortega *et al.* (2011), who cited numerous papers in which this relationship was noted. In addition two recent accounts of *Abrothallus* have been published in which the phylogeny and species of this genus are elaborated (Pérez-Ortega *et al.* 2014, Suija *et al.* 2015). Given the greater number of species, widespread use, and priority, use of *Abrothallus* is recommended.

Use *Acroconidiellina* M.B. Ellis 1971 (A) rather than *Zeuctomorpha* Sivan. *et al.* 1984 (S)

The monotypic genus *Zeuctomorpha*, based on *Z. arecae*, was described as the sexual morph of *Acroconidiellina arecae*. No molecular work exists to confirm that *A. arecae* is congeneric with the type species of *Acroconidiellina*, *A. loudetiae*, but this seems likely. Assuming that these type species belong in the same genus, it follows that *Acroconidiellina* and *Zeuctomorpha* are congeneric. *Acroconidiellina* includes

four species, is more commonly used, has priority, and was accepted by Hernández-Restrepo *et al.* (2016), thus we recommend the use of *Acroconidiellina*.

Protect *Amarenographium* O.E. Erikss. 1982 (A) over *Amarenomyces* O.E. Erikss. 1981 (S)

The type species of *Amarenomyces*, *A. ammophilae*, was determined to be the sexual morph of *Amarenographium metableticum*, type of *Amarenographium* (Eriksson 1982, Phooksamsak *et al.* 2014), thus these generic names are synonyms. Although *Amarenomyces ammophilae* is widely reported as an aquatic fungus, it remains the only name placed in this genus while four species have been included in *Amarenographium* (Nag Raj 1989). Both generic names have been cited about equally. Rather than make three name changes, we recommend protecting the name *Amarenographium* for which no name changes are required.

Protect *Amniculicola* Y. Zhang *ter* & K.D. Hyde 2008 (S) over *Anguillospora* Ingold 1942 (A)

Both Zhang *et al.* (2009) and Shearer *et al.* (2009) showed that the type species of *Anguillospora*, *A. longissima*, groups with three species of *Amniculicola* including the type, *A. lignicola*, within *Pleosporales*, thus *Anguillospora* and *Amniculicola* are synonyms. Although more species of *Anguillospora* have been described, these aquatic hyphomycetous fungi tend to be morphologically convergent with most sequenced species belonging in the *Leotiomyces* (Belliveau & Barlocher 2005, Baschien *et al.* 2006, Duarte *et al.* 2013). Although 18 species have been described in *Anguillospora*, five are known to belong in the *Leotiomyces*, another in the *Orbiliomyces*, and one in the *Dothideales* but not related to *Amniculicola*. Only the type species of *Anguillospora*, *A. longissima*, is monophyletic with the three species of *Amniculicola*. Thus, if *Amniculicola* is protected over *Anguillospora*, only one new combination is required. The use of *Anguillospora* with a new type species belonging to the *Leotiomyces* will be proposed. This will conserve *Anguillospora* in the sense in which it has been most commonly used.

One new combination is necessary:

Amniculicola longissima* (Sacc. & P. Syd.) Nadeeshan & K.D. Hyde, **comb. nov.*

MycoBank MB819029

Basionym: Fusarium longissimum Sacc. & P. Syd., *Syll. Fung.* 14: 1128 (1899).**Use *Atichia* Flot. 1850 (A) rather than *Seuratia* Pat. 1904 (S)**

Atichia glomerulosa, the older name for *A. mosigii*, type species of *Atichia*, is commonly reported as a lichen-like, superficial, gelatinous, black fungus on evergreen leaves in warm temperate and tropical regions (Meeker 1975, Gillis & Glawe 2008). Its sexual morph was described as *Seuratia coffeicola*, later referred to as *S. millardetii*, type species of *Seuratia* (Meeker 1975). Three names have been placed in *Seuratia*, two of which have names in *Atichia*. Although *Atichia* includes 20 names, many of these appear to be synonyms. These fungi are most commonly reported as *Atichia* and that

generic name has priority, thus *Atichia* is recommended for use.

The following new combination is required:

Atichia maunauluana* (Meeker) Rossman, *comb. nov.

MycoBank MB819030

Basionym: *Seuratia maunauluana* Meeker, *Can. J. Bot.* **53**: 2490 (1975).

Use *Blasdalea* Sacc. & P. Syd. 1902 (S) rather than *Chrysogloeum* Petr. 1959 (A) or *Singerella* Petr. 1959 (S)

Petrak (1959) established the monotypic genus *Chrysogloeum* based on *C. peruvianum* to accommodate the asexual morph of *Singerella peruvianum*, monotype of *Singerella*. According to Kirk *et al.* (2008), *Singerella* is a synonym of the monotypic *Blasdalea* based on *B. disciformis*. Hence, these three monotypic generic names are all based on the same species. Swart (1971) established the family *Vizellaceae* for the genera *Blasdalea* and *Vizella*. Neither *Chrysogloeum* nor *Singerella* have been considered by any but the original author. *Blasdalea* has priority, thus this generic name is recommended for use.

Use *Capnodium* Mont. 1849 (S) rather than the additional synonym *Fumagospora* G. Arnaud 1911 (A)

Following Hughes (1976), Crous *et al.* (2007) demonstrated that the sexual morph of *Fumagospora*, *F. capnodioides*, is *Capnodium salicinum*, type of *Capnodium*, thus *Fumagospora* is an additional synonym of *Capnodium*, which was recommended for protection over *Polychaeton* 1846 by the *Dothideomycetes* Working Group (Rossman *et al.* 2015b).

Use *Dilophospora* Desm. 1840 (A) rather than *Lidophia* J. Walker & B. Sutton 1974 (S)

Twist disease caused by *Dilophospora alopecuri* occurs on the leaves, stems and glumes of cereals and grasses in temperate regions throughout the world (Gibson & Sutton 1976, Riley 1996). The generic name *Dilophospora* is based on the type species, *D. graminis*, a synonym of *D. alopecuri* (Walker & Sutton 1974). The generic name *Lidophia* was established by Walker & Sutton (1974) for the later homonym *Dilophia* Sacc. 1883 non *Dilophia* Thomson 1853 (*Brassicaceae*). The type species of *Lidophia* is *L. graminis* based on *Dilophia graminis*, the sexual morph of *Dilophospora alopecuri* (Walker & Sutton 1974), thus *Dilophospora* and *Lidophia* are synonyms. *Lidophia* is a monotypic genus while *Dilophospora* now includes two species, is widely used, and has priority, thus we recommend the use of *Dilophospora*.

Six new combinations in *Elsinoë*:

Based on deliberations of the *Dothideomycetes* Working Group (Rossman *et al.* 2015b), it was recommended that the generic name *Elsinoë* should be protected over *Sphaceloma*. Six names in *Sphaceloma* of importance to plant quarantine officials in the United States are herein transferred to *Elsinoë*.

Elsinoë bucidiae* (A.M.J. Watson & Jenkins) Romberg & W.C. Allen, *comb. nov.

MycoBank MB819031

Basionym: *Sphaceloma bucidiae* A.M.J. Watson & Jenkins, *Mycologia* **61**: 276 (1969).

Elsinoë caricae* (Ikata & Katsuki) Romberg & W.C. Allen, *comb. nov.

MycoBank MB819032

Basionym: *Sphaceloma caricae* Ikata & Katsuki, *Ann. phytopath. Soc. Japan* **21**: 14 (1956).

Elsinoë choisyae* (A.M.J. Watson & Jenkins) Romberg & W.C. Allen, *comb. nov.

MycoBank MB819033

Basionym: *Sphaceloma choisyae* A.M.J. Watson & Jenkins, *Mycologia* **61**: 276 (1969).

Elsinoë paeoniae* (Kuros.) Romberg & W.C. Allen, *comb. nov.

MycoBank MB819034

Basionym: *Sphaceloma paeoniae* Kuros., *Ann. phytopath. Soc. Japan* **9**: 131 (1939).

Elsinoë psidii* (Bitanc. & Jenkins) Romberg & W.C. Allen, *comb. nov.

MycoBank MB819035

Basionym: *Sphaceloma psidii* Bitanc. & Jenkins, *Archos Inst. biol., S. Paulo* **19**: 105 (1949) ["1949-50"].

Elsinoë zorniae* (Bitanc. & Jenkins) Romberg & W.C. Allen, *comb. nov.

MycoBank MB819036

Basionym: *Sphaceloma zorniae* Bitanc. & Jenkins, *Aq. Inst. Biol. São Paulo* **11**: 47 (1940).

In addition, *Sphaceloma fawcettii* var. *scabiosa*, differentiated from *Elsinoë fawcettii* on the basis of morphological and cultural characteristics, should be considered synonymous with *E. fawcettii* based on molecular analyses (Tan *et al.* 1996, Hyun *et al.* 2009).

Use *Eupelte* Syd. 1924 (S) rather than *Maurodothina* G. Arnaud ex Piroz. & Shoemaker 1970 (S) or *Pirozynskia* Subram. 1972 (A)

The genus *Eupelte*, based on *E. amicta*, was considered by von Arx & Müller (1975) to include the type species of two other genera, namely *E. dothideoides*, type of *Maurodothina*, and *E. farriarum*, the sexual morph of the type of *Pirozynskia*, *P. farriarum*, thus these three generic names are synonyms. *Eupelte farriarum* causes a black mildew on *Abies* in north temperate regions (Pirozynski & Shoemaker 1970). Among the four names included in these three genera, all but one have been included in *Eupelte*, thus use of the oldest generic name is recommended.

Eupelte shoemakeri* (Subram.) Rossman, *comb. nov.

MycoBank MB819037

Basionym: *Pirozynskia shoemakeri* Subram., *Curr. Sci.* **41**: 711 (1972).

Use *Koordersiella* Höhn. 1909 (S) rather than *Hansfordiellopsis* Deighton 1960 (A) and *Ascohansfordiellopsis* D. Hawksw. 1979 (S)

The synonymy of these three lichenicolous generic names was presented by Hawksworth (2016). Based on morphology, he considered the type species of *Koordersiella*, *K. javanica*, and the type species of *Hansfordiellopsis*, *H. aburiensis* (now regarded as a synonym of *K. insectivora*), to be congeneric. Although *Hansfordiellopsis* includes eight species names while *Koordersiella* has only five, he accepted priority because all of these fungi are relatively obscure and thus used *Koordersiella*, and we concur.

Protect *Metacapnodium* Speg. 1918 (S) over *Antennularia* Rchb. 1838 (S) and rather than *Torulopsiella* Bender 1932 (A), *Capnocybe* S. Hughes 1966 (A), *Capnophialophora* S. Hughes 1966 (A), *Capnobotrys* S. Hughes 1970 (A), and *Capnosporium* S. Hughes 1976 (A)

The genus *Metacapnodium* is typified by *M. juniperi* (Hughes 1972). This genus was recently considered to be congeneric with *Antennularia* based on *A. ericophila*, which was placed in *Metacapnodium* as *M. ericophilum* (Hyde *et al.* 2013). In addition they considered *Capnocybe* typified by *C. fraseriae* to be an asexual morph of *Metacapnodium fraseriae* (Hughes 1976). Hughes (1972, 1981) also listed *Capnobotrys*, *Capnophialophora* and *Torulopsiella* as names for the synanamorphs of *Metacapnodium*. Thus these six generic names compete for use. Four of these names, *Capnocybe* with three species, *Capnophialophora* with three species, monotypic *Capnosporium*, and *Torulopsiella* with two species, are rarely used. Although *Antennularia* includes 17 names and *Capnobotrys* includes ten, *Metacapnodium* with 14 names is widely used and should be protected as suggested in Hyde *et al.* (2013).

Use *Microxiphium* (Harv. ex Berk. & Desm.) Thüm. 1879 (A) rather than *Dennisiella* Bat. & Cif. 1962 (S)

The generic name *Microxiphium* (previously often spelled “*Microxyphium*”) is typified by *M. footii* while the type of *Dennisiella* is *D. babingtonii*. The types of these generic names are considered the same species (Dennis & Ellis 1952, Hughes 1976, Sivanesan 1984). Little molecular study has been conducted on these fungi, nevertheless, *Microxiphium fagi*, the earliest name for this species (Hughes 1976), is reported commonly in the literature. At present *Microxiphium* includes 33 names while Rocha *et al.* (2010) provided a key to the nine species of *Dennisiella*. Based on priority, the greater number of names, and widespread use, *Microxiphium* is recommended for use.

Use *Mirandina* G. Arnaud ex Matsush. 1975 (A) rather than *Chaetonectrioides* Matsush. 1996 (S)

The type of *Mirandina*, *M. corticola*, is a relatively common fresh-water hyphomycete that is known from Europe and Asia (Czeczuga *et al.* 2007, Kobayashi 2007). The sexual morph of the congeneric species, *M. flagelliformis*, was described as *Chaetonectrioides malaysiana*, in the monotypic genus

Chaetonectrioides, thus these generic names are synonyms. About 10 species have been included in *Mirandina* with two species described recently (Ma *et al.* 2015, Fiuza *et al.* 2016). No DNA sequences exist for any of these species. Given the greater number of species and priority, use of *Mirandina* is recommended.

Use *Protoventuria* Berl. & Sacc. 1887 (S) rather than *Ramalia* Bat. 1957 (A)

The genus *Protoventuria* is typified by *P. rosae* based on *Venturia rosae* and includes 46 names. Zhang *et al.* (2012) demonstrated that this species groups with *Protoventuria alpina* to form a distinct lineage of *Dothideomycetes* that should be regarded as *Protoventuria*. The type species of *Ramalia*, *R. veronicae*, was placed in the genus *Fusicladium* as *F. veronicae* by Sutton & Pascoe (1988). They also described *Protoventuria parahebecola* for the sexual morph of this species, which causes leaf spots on *Parahebe* (*Scrophulariaceae*), thus *Protoventuria* and *Ramalia* are synonyms. Although one additional name, *R. byrsonimatis* was described in *Ramalia* (Braun & Mouchacca 2000), that name has remained obscure. *Protoventuria* includes over 40 names, is widely used, and has priority over *Ramalia*, thus *Protoventuria* is recommended for use.

Use *Sarcinella* Sacc. 1880 (A) rather than *Schiffnerula* Höhn. 1909 (S) and *Questieriella* S. Hughes 1983 (A)

When Hughes (1983) described the genus *Questieriella* based on *Q. pulchra*, he stated that the sexual morph was *Schiffnerula pulchra* and that *Sarcinella heterospora*, type of *Sarcinella*, represented a second asexual morph of the same species. Thus the generic names *Sarcinella* and *Questieriella* are synonyms. Earlier Hughes (1952) had distinguished the asexual morph of *Schiffnerula mirabilis*, type of the genus *Schiffnerula*, from *S. pulchra*. Hughes (1952) and Hosagoudar (2003) considered *S. mirabilis* and *S. pulchra* to be congeneric, thus *Schiffnerula* is also congeneric with *Questieriella* and *Sarcinella*. A second species of *Schiffnerula*, *S. corni*, was described from Quebec having *Questieriella* and *Sarcinella* synasexual morphs (Hughes 1990), again suggesting this generic synonymy. None of these species have been sequenced. *Sarcinella* provides the oldest generic name for these fungi, is used about equally with *Schiffnerula*, and has about the same number of names, thus the principle of priority is followed and *Sarcinella* is recommended for use.

The following new combinations are required:

***Sarcinella mirabilis* (Höhn.) Seifert, comb. nov.**

MycoBank MB819038

Basionym: *Schiffnerula mirabilis* Höhn., *Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1* 118: 868 (1909).

***Sarcinella pulchra* (Sacc.) Seifert, comb. nov.**

MycoBank MB819044

Basionym: *Apiosporium pulchrum* Sacc., *Mycoth. Univ.*, cent. 1: no. 52 (1875).

Synonyms: *Dimerosporium pulchrum* (Sacc.) Sacc., *Syll. Fung.* 1: 52 (1882).

Schiffnerula pulchra (Sacc.) Petr., *Ann. mycol.* **26**: 397 (1928).
Sarcinella heterospora Sacc., *Fungi italica autogr. del.* **1–4**:
 tab. 126 (1877).

Questieriella pulchra S. Hughes, *Can. J. Bot.* **61**: 1730. 1983.

An additional new combination in *Schizothyrium*

Previously the generic name *Schizothyrium* was recommended for use rather than *Zygophiala* and most names have been placed in *Schizothyrium*, however, one name was overlooked.

Schizothyrium jamaicense (E.W. Mason) Rossman, **comb. nov.**

Mycobank MB819039

Basionym: *Zygophiala jamaicense* E.W. Mason, *Mycol. Pap.* **13**: 5 (1945).

Use *Trichothallus* D. Stevens 1925 (A) rather than *Plokamidomyces* Bat. *et al.* 1957 (A) or *Trichopeltheca* Bat. *et al.* 1958 (S)

Hughes (1965) monographed *Trichopeltheca* and accepted two species including the type species *T. asiatica* and listing the type species of *Plokamidomyces*, *P. colensoi*, as a synonym. He also accepted a second species, *T. stevensii*, with the type species of *Trichothallus*, *T. hawaiiensis*, as a synonym, thus these three generic names are synonyms. These sooty moulds develop from a distinctive one-cell thick stroma growing over living plant tissue, with setae, conidia and perithecia developing from the same stromata. Although there are no cultures or DNA sequence data, there is little doubt that these two species are congeneric and that the constitutive morphs are part of the same fungus. None of the three generic names is frequently cited in the literature. Adopting either the older asexual morph name *Trichothallus* or the sexual morph name *Trichopeltheca* would require making a new combination. We opt to respect priority in this case and recommend the adoption of the oldest generic name *Trichothallus*.

Trichothallus niger (Jennings) Seifert, **comb. nov.**

Mycobank MB819047

Basionym: *Phycopeltis nigra* Jennings, *Proc.R. Irish Acad.* **3**: 758 (1896).

Type: New Zealand: Rotorua, on *Nesodaphne towa* (sic, = *Beilschmiedia tawa*), A.V. Jennings (DBN-**lectotype designated here**, MBT-isotype).

Synonyms: *Plokamidomyces colensoi* Bat. *et al.*, *Atti Ist. bot. Univ. Lab. crittog. Pavia*, ser. 5, **15**: 47 (1957).

Trichopeltheca asiatica Bat. *et al.*, *Publicações Inst. Micol. Recife* **90**: 13 (1958) ["1957"].

Notes: On the basis of the protologue of *Phycopeltis nigra*, Santesson (1944) concluded that the type material was mixed and that the name should be considered a *nomen confusum*, as was common practice at the time and permitted under the Code then in force. Hughes (1965) examined co-type (i.e. syntypes) specimens in DBN and MBT and recognized that *P. nigra* was identical with *T. asiatica*, arguing that the 'type form' described in the protologue corresponded with

the *Trichopeltheca* component. He did not make the new combination, presumably because the species had originally been described as an alga. The lectotype proposed above is selected based on Hughes' observations.

Use *Xenodium* Syd. 1935 (S) rather than *Xenodiella* Syd. 1935 (A)

The generic names *Xenodium* typified by *X. petrakii* and *Xenodiella* typified by *X. petrakii* were published in the same article as sexual and asexual morphs of the same species (Sydow 1935), thus these generic names are synonyms. Both generic names are monotypic, however, *Xenodium* has been used in the literature more than *Xenodiella*, thus *Xenodium* is recommended for use.

Use *Yoshinagaia* Henn. 1904 (A) rather than *Japonia* Höhn. 1909 (S), *Yoshinagamyces* Hara 1912 (A) or *Monoloculia* Hara 1927 (A)

The type species of each of these four monotypic generic names, *Yoshinagaia*, *Japonia*, *Yoshinagamyces* and *Monoloculia*, are the same species as explained by Sivanesan & Hsieh (1995). All of the names are relatively obscure but *Yoshinagaia* is used more frequently than the others. In addition, *Japonia* is also used as the name for an insect, thus we recommend use of the name that has priority, namely *Yoshinagaia*.

The nomenclator for the type species of these four generic names is:

Yoshinagaia quercus Henn., *Hedwigia* **43**: 143 (1904).

Synonyms: *Monoloculia quercus* (Henn.) Hara, *Diseases of Trees*: 171 (1927).

Japonia quercus Höhn., *Sber. Akad. Wiss. Wien, Math.-naturw. Kl.*, Abt. 1, **118**: 879. (1909).

Yoshinagamyces quercus Hara, *Bot. Mag.*, (Tokyo) **26**: 143 (1912).

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