

Fungi and fungus-like organisms of Homilsha Forests National Park, Ukraine

OLEH V. PRYLUTSKYI^{1*}, OLEXANDER YU. AKULOV¹, DMITRY V. LEONTYEV^{2,3}, ALEXANDER V. ORDYNETS⁴, IRYNA I. YATSIUK¹, ANDRIY S. USICHENKO¹ & ANTON O. SAVCHENKO⁵

¹V.N. Karazin Kharkiv National University, Svobody sq., 4, Kharkiv 61022 Ukraine

²H.S. Skovoroda Kharkiv National Pedagogical University, Valentynivs'ka str. 2, Kharkiv 61168 Ukraine

³Kharkiv State Veterinary Academy, Akademichna str. 1, p/o Mala Danylivka, Kharkiv oblast 62341 Ukraine

⁴University of Kassel, Heinrich-Plett-Str. 40, Kassel D-34132 Germany

⁵University of Tartu, Vanemuise 46, 51014, Tartu, Estonia

CORRESPONDENCE TO: prylutskyi@karazin.ua

ABSTRACT – The annotated checklist of fungi and fungus-like organisms, recorded in the Homilsha Forests National Park, Eastern Ukraine, is given. The list includes 1469 species and infraspecific taxa belonging to 10 phyla of *Fungi*, *Amoebozoa*, *Stramenopila*, *Rhizaria* and *Discoba*. For species studied by the authors of this checklist, names are accompanied by species abundance status (Rare, Occasional and Common). Names are also annotated by literature references (if available); however, the majority of taxa are reported for the first time. Thirty names from the literature could not be interpreted and these literature records are treated separately from the main list.

KEY WORDS – mycota, myxomycetes, *Basidiomycota*, *Ascomycota*, Ukraine, biodiversity, oak forests, Eastern Europe, natural reserve

Introduction

Documenting biodiversity at the local level is a first step to understand ecological processes, especially those happening at broader spatial and temporal scales. In Europe, the species diversity of fungi is generally well explored in the northern, western and central parts of the continent, thanks to a more than two centuries old mycological research tradition (Kotiranta et al 2009, Langer et al. 2015, Venturella et al 2011). Such local surveys provide a basis for advanced ecological research and conclusions for conservation of fungi and their habitats (Heilmann-Clausen et al 2014, Nordén et al 2013).

While a large effort has been made to explore fungal diversity in boreal coniferous and central European beech forests, this was not the case for eastern European forests. Here, because of the continental climate, pedunculate oak (*Quercus robur* L.) creates the main aspect of the natural forests. Long-living strategy of this large tree results in habitats supporting a great portion of threatened and nationally protected forest biota, including species rare at the European level (Ordynets & Akulov 2012, Saidakhmedova et al. 2012). These forests, however, suffered for centuries from removal of large oak trees, because of their high wood quality. This management impact, together with current biotic and abiotic factors, resulted in the massive oak decline observed not only in Eastern Europe but worldwide (Haavik et al 2015). Therefore, documenting oak-associated biota is of urgent necessity. The Oak-associated species *Daedalea quercina*, *Fomitiporia robusta*, *Fistulina hepatica*, *Hymenochaete fuliginosa*, and *Piptoporus quercinus* are rare in Western and Central Europe, but more frequent in Eastern Europe where large oak forests are available.

This work deals with fungal species diversity of one protected area called Homilsha Forests National Park, and its neighbouring steppe areas, in the eastern part of Ukraine. This area is one of the largest and most intact remnants of East European oak forests (Saidakhmedova et al. 2012). Different fungal and fungus-like groups were inventoried in the area for the last two decades by the authors of this paper, but over more than a century by other mycologists. We summarise all these data according to the latest insights in eukaryotic and specifically fungal taxonomy, and provide a comprehensive checklist that totals 1432 names (species and infraspecific taxa) and covers 11 phyla of fungi and fungus-like protists.

Description of the study area

Homilsha Forests (hereafter HF), also known as Homilshansky lisy, Gomilshansky lisy or Gomolsha Forests, is a large forest area (14,315 ha) located in the east of Ukraine (49° 35' N, 36° 19' E), in Eastern Europe (Fig. 1). The HF territory is a part of the East European Plain, and is characterized by an elevation range of 80–200 m a.s.l. The HF area lies on the southern border of the temperate deciduous forest biome,

and neighbours a steppe biome. The HF territory is characterized by a temperate continental climate: the mean annual temperature is +10 °C, and mean annual precipitation is 538 mm (Saidakhmedova et al. 2012).



PLATE 1. The territory and location of the Homilsha Forests National Park.

The topography and vegetation of HF are greatly shaped by the Siversky Donets, one of the largest Eastern European rivers that runs from North to South and divides the national park in two parts, both lying in the river valley. The western, higher part of this valley is covered by highland deciduous forests, mainly oak-dominated. Most common tree species include pedunculate oak (*Quercus robur* L.), common ash (*Fraxinus excelsior* L.), maples (*Acer platanoides* L., *A. campestre* L., *A. tataricum* L. and *A. negundo* L.), lime (*Tilia cordata* Mill.), and aspen and poplars (*Populus tremula* L., *P. alba* L.). Within deciduous forests, there are also single small plantations of *Picea abies* (L.) H. Karst. and *Larix decidua* Mill., which are results of the previous forestry activity. Meadows and oak-maple-poplar forests are situated in the river's flood plain. The eastern part of the valley is covered by coniferous forests formed by Scots pine (*Pinus sylvestris* L.) with patches of birches (*Betula pendula* Roth and *B. pubescens* Ehrh.), black alder (*Alnus glutinosa* (L.) Gaertn.) and oak. The latter can also co-dominate with the Scots pine over larger areas, thus forming a mixed forest recognised as a separate forest type.

The area of HF received formal status of National Nature Park from the Ukrainian Government in 2004, although it was highly valued and more or less strictly protected starting from around 1770 (Saidakhmedova et al. 2012).

Short summary of mycological research in Homilsha Forests

The first mycological research in HF dates from the middle of the 19th century and was initiated by V. Czerniaev (1845), a mycologist from Kharkiv University. The next generation of Kharkiv mycologists investigated the mycota of this territory, with a focus on plant pathogens (Sorokin 1871, Treboux 1913, Spagorov 1915, Strakhov 1916). In the middle of the 20th century, occasional mycological studies focused on aquatic and plant-pathogenic fungi (Shkorbatov 1927, Milovtsova 1935 and 1937, Lohvinenko 1972, Chuzhykova 1976, Lohvinenko 1987, Lohvinenko et al. 1983, Mescheryakova et al. 1972, Mescheryakova 1981, Nedilko (Manko) 1999). However, by the end of the century, the research was expanded to cover a wide range of fungi and fungus-like organisms.

Based on specimens from HF, at least four species were described as new for science (Leontyev & Moreno 2011, Leontyev & Fefelov 2012, Leontyev et al. 2015, Leontyev 2016). Specimens and observations of fungi from HF were reported in at least 32 papers in peer-reviewed journals, five books, and three doctoral theses (see bibliography below). However, all these studies considered particular taxonomical and morphological groups, according to the authors' specialization. Moreover, a portion of records was mentioned exclusively in conference abstracts or Ukrainian- or Russian-language papers that are not easily accessible. Therefore, a comprehensive summary that integrates data on all records of fungi and fungus-like organisms from HF is needed. This checklist is aimed to complete this gap and includes both published and unpublished data. Upon creating this checklist we have concluded that HF is the most explored protected area in Ukraine in terms of fungal species richness.

Materials & Methods

The main part of the list represents our collections and observations made during 2000–2015. Furthermore, we included published data of other mycologists relevant to HF. For all species, references to the original studies were provided (in square brackets), unless this is the first record of the species for the area.

We listed species according to the taxonomic hierarchy and within the same taxonomic rank alphabetically. First, we segregated principal eucaryotic groups after Adl et al. (2012). We classified the slime moulds according to Poulain et al. (2011). We followed Hibbett et al. (2007) and the tenth edition of The Dictionary of Fungi (Kirk et al. 2008) for higher fungal taxa. For naming species and infraspecific taxa, we used currently accepted names as provided by Index Fungorum database (Kirk et al., 2016), unless the relevant coauthor was aware of a more optimal solution (Vellinga 2001, Hansen et al. 2002, Robich 2003, Vellinga et al. 2003, Hausknecht 2009, Hjortstam & Ryvarden 2009, Justo & Hibbett 2011, Justo et al. 2011, Nguyen et al. 2013, Spirin et al. 2013, Tedersoo et al. 2014, Volobuev et al. 2015, Pärtel et al. 2016).

We annotated each species/infraspecific taxon (where possible) with abundance category according to the three-level scheme: common (C), occasional (O) and rare (R) species. The species was considered common if found every year on appropriate substrates in appropriate habitats; rare species are those encountered only one or two times during the overall period of investigation; and the species of intermediate frequency were classified as occasional. We made also special note for species found only or mostly in cultural landscapes lying within the borders of the national park.

While compiling the checklist, we re-identified some of our collections, which brought a need to eliminate some species names from the checklist. Furthermore, we encountered in some earlier published works names which could not be linked to currently accepted names, or names which are now considered illegitimate. Such records were listed in the section "Unconfirmed records" after the main checklist and were counted separately.

Results

The list of fungi and fungi-like organisms of Homilsha Forests is given below. Table 1 shows the systematic structure of studied mycota.

TABLE 1. Systematic structure of the mycota of Homilsha Forests.

PHYLUM	NUMBER OF TAXA (SPECIES AND SUBSPECIFIC TAXA)
Discicristata	1
Hypochytriomycota	1
Peronosporomycota	80
Cercozoa	2
Eumycetozoa	168
Blastocladiomycota	1
Chytridiomycota	3
Zygomycota	8
Basidiomycota	679
Ascomycota	526
TOTAL:	1469

SUBDOMAIN EXCAVATA Caval.-Sm. sensu Adl. et al.

KINGDOM DISCOBA Simpson in Hampl et al.

PHYLUM DISCICRISTATA Caval.-Sm.

CLASS HETEROLOBOSEA Page & Blanton

ORDER TETRAMITIA Caval.-Sm. emend Caval.-Sm. & Nikolaev

Family Acrasiaceae Poche (=Acrasidae Tiegh.)

Acrasis rosea L.S. Olive & Stoian (=*Pochenia rosea* Loeblich & Tappan) – C [6]

SUBDOMAIN DIAPHORETIKES Adl et al.

SUPERKINGDOM SAR Burki et al.

KINGDOM STRAMENOPILES Patterson emend. Adl et al. (=Chromista Caval.-Sm. pro parte)

PHYLUM HYPHOCYTRIOMYCOTA Whittaker

CLASS HYPHOCYTRIOMYCETES Sparrow & M.W. Dick

ORDER HYPHOCYTRIALES E.A. Bessey ex P.M. Kirk, P.F. Cannon & J.C. David

Family Rhizidiomycetaceae Karling ex P.M. Kirk, P.F. Cannon & J.C. David

Rhizidiomyces apophysatus Zopf – [56]

PHYLUM PERONOSPOROMYCOTA M.W. Dick

CLASS PERONOSPOROMYCETES Locq.

(=Oomycetes Winter, emend. M.W. Dick)

ORDER OLPIDIOPSIDALES M.W. Dick

Family Olpidiopsidaceae Sparrow ex Cejp

Olpidiopsis incrassata Cormu – [59, 60, 61]

Olpidiopsis saprolegniae var. *saprolegniae* – [56, 57]

Olpidiopsis saprolegniae var. *levis* Coker – [59]

ORDER LEPTOMITALES Kanouse

Family Leptomitaceae Kütz.

Apodachlya pirifera Zopf (=*Apodachlya pirifera* f. *macrosporangia* (Tiesenh.) Sparrow) [54]

Leptomitus lacteus (Roth) C. Agardh [51, 54, 59]

ORDER PERONOSPORALES E. Fisch.

Family Albuginaceae J. Schröt.

Albugo candida (Pers. ex J.F. Gmel.) Kuntze

Wilsoniana bliti (Biv.) Thines (=*Albugo bliti* (Biv.) Kuntze) [80]

Family Peronosporaceae Warm.

Hyaloperonospora brassicae (Gäum.) Göker, Voglmayr, Riethm., M. Weiss & Oberw. (=*Peronospora brassicae* Gäum.)

Hyaloperonospora parasitica (Pers.) Constant. (=*Peronospora dentariae* Rabenh.; *Peronospora parasitica* (Pers.) Fr.; *Peronospora thlaspeos-arvensis* Gäum.)

Peronospora destructor (Berk.) Casp. ex Berk. (=*Peronospora schleideni* Unger)

Peronospora farinosa (Fr.) Fr. (=*Peronospora effusa* (Grev.) Rabenh.) [91]

Peronospora ficariae Tul. [91]

Phytophthora infestans (Mont.) de Bary [91]

Plasmopara viticola (Berk. & M.A. Curtis) Berl. & De Toni

ORDER PYTHIALES M.W. Dick

Family Pythiaceae J. Schröt.

Elongisporangium undulatum (H.E. Petersen) Uzuhashi, Tojo & Kakish. (=*Pythium undulatum* H.E. Petersen) [20, 52]

Globisporangium carolinianum (V.D. Matthews) Uzuhashi, Tojo & Kakish. (=*Pythium carolinianum* V.D. Matthews, =*Pythium catenulatum* V.D. Matthews) [20, 56]

Globisporangium pulchrum (Minden) Uzuhashi, Tojo & Kakish. (=*Pythium pulchrum* Minden) [51]

Globisporangium rostratum (E.J. Butler) Uzuhashi, Tojo & Kakish. (=*Pythium rostratum* E.J. Butler) [20, 51]

Myzocytium rabenhorstii (Zopf) M.W. Dick (=*Lagenidium rabenhorstii* Zopf) [56]

Pythium debaryanum R. Hesse [51, 59]

Pythium diclinum Tokun. (=*Pythium gracile* Schenk) [51]

Pythium dissotocum Drechsler [51]

Pythium inflatum V.D. Matthews [56]

Pythium monospermum Pringsh. (=*Pythium complens* A. Fisch.) [20, 57]

Pythium tenue Gobi [56, 59]

Pythium vexans de Bary [59]

ORDER SAPROLEGNIALES E. Fisch.

Family Leptolegniaceae M.W. Dick

Aphanomyces laevis de Bary [20, 56]

Aphanomyces ovidestruens Gickelh. [56]

Aphanomyces scaber de Bary [56]

Aphanomyces volgensis Domashova [60]

Leptolegnia caudata de Bary [67]

Family Saprolegniaceae Kütz. ex Warm.

Achlya americana Humphrey [51, 59]

Achlya androgyna (W. Archer) T.W. Johnson & R.L. Seym. (=*Aplanes androgynus* (W. Archer) Humphrey) [59, 67]

Achlya caroliniana Coker [51, 59]

Achlya colorata Pringsh. [20, 59]

Achlya debaryana Humphrey [51, 59, 89]

Achlya diffusa J.V. Harv. ex T.W. Johnson [59, 60, 61]

Achlya dubia Coker [51]

Achlya flagellata Coker [51, 59]

Achlya glomerata Coker [59]

Achlya hypogyna Coker & Pemberton [20, 54, 56]

Achlya orion Coker & Couch [59]

Achlya prolifera Nees [59]

Achlya proliferoides Coker [56]

Achlya racemosa Hildebr. [20, 51, 54, 57]

Achlya rodrigueziana F.T. Wolf [20]

Calyptalegnia ripariensis Höhnk [59]

Cladolegnia spiralis (Cornu) Johannes (=*Saprolegnia spiralis* Cornu) [51]

Dictyuchus monosporus Leitg. [51, 54, 56, 59]

Isoachlya toruloides Kauffman & Coker [51]

Isoachlya torulosa (de Bary) Cejp (=*Saprolegnia torulosa* de Bary) [56, 59]

Newbya apiculata (de Bary) M.W. Dick & Mark A. Spencer (=*Achlya apiculata* de Bary) [51]
Newbya megasperma (Humphrey) Mark A. Spencer (=*Achlya megasperma* Humphrey) [56]
Newbya oblongata (de Bary) Mark A. Spencer (=*Achlya oblongata* de Bary [51])
Newbya oligocantha (de Bary) Mark A. Spencer (=*Achlya oligocantha* de Bary) [51, 59]
Newbya polyandra (Hildebr.) Mark A. Spencer [59]
Protoachlya polyspora (Lindst.) Apinis [67]
Saprolegnia anisospora de Bary [59]
Saprolegnia crustosa Maurizio [51, 56]
Saprolegnia diclina Humphrey [20, 51, 56, 59]
Saprolegnia eccentrica (Coker) R.L. Seym. [59]
Saprolegnia ferax (Gruith.) Kütz. [20, 51, 56, 57, 67, 89]
Saprolegnia glomerata (Tiesenh.) A. Lund (=*Saprolegnia monoica* var. *glomerata* Tiesenh.) [51]
Saprolegnia furcata Maurizio [20, 51, 56, 59, 67]
Saprolegnia hypogyna (Pringsh.) de Bary [51, 59]
Saprolegnia lapponica Gäum. (=*Saprolegnia ferax* var. *lapponica* (Gäum.) Cejp) [51]
Saprolegnia latvica Apinis [51]
Saprolegnia litoralis Coker [51]
Saprolegnia mixta de Bary [20, 51]
Saprolegnia monilifera de Bary [57]
Saprolegnia monoica Pringsh.
 var. *monoica* [20, 51, 56, 57]
 var. *montana* de Bary [51]
Saprolegnia paradoxa Maurizio [56]
Saprolegnia parasitica Coker [20, 51, 56, 59, 67]
Saprolegnia rhaetica Maurizio [59]
Saprolegnia turfosa (Minden) Gäum. (=*Aplanes turfosus* (Minden) Coker) [59, 67]
Saprolegnia unispora (Coker & Couch) R.L. Seym. (=*Isoachlya unispora* Coker & Couch) [51]
Thraustotheca clavata (de Bary) Humphrey [51]

Family Leptolegniaceae M.W. Dick

Aphanomyces volgensis Domashova [59]
Leptolegnia caudata de Bary [59, 89]

KINGDOM RHIZARIA Caval.-Sm.

PHYLUM CERCOZOA Caval.-Sm.

CLASS PLASMODIOPHOROMYCETES Engl.

ORDER PLASMODIOPHORALES F. Stevens (=PHYTOMYXEA Engl. & Prantl)

Family Plasmodiophoraceae Zopf ex Berl.

Woronina glomerata (Cornu) A. Fisch. [59]
Woronina polycystis Cornu [20, 56, 59, 67]

SUBDOMAIN AMORPHEA Adl et al.

SUPERKINGDOM AMOEBOZOA Lühe emend. Caval.-Sm.

KINGDOM CONOSA Caval.-Sm.

PHYLUM EUMYCETOZOA Zopf emend. Olive

CLASS CERATIOMYXOMYCETES D. Hawksw., B. Sutton & Ainsw.

ORDER CERATIOMYXALES G.W. Martin ex M.L. Farr et alexop.

Family Ceratiomyxaceae J. Schröt.

Ceratiomyxa fruticulosa (O. F. Müll.) T. Macbr. – C [48]

var. *fruticulosa* – C [48]

var. *porioides* (Alb. & Schwein.) G. Lister – O [46, 48]

CLASS MYXOMYCETES Link (=Myxogastria T. Macbr.)

ORDER ECHINOSTELIALES G.W. Martin

Family Clastodermataceae Rostaf.

Clastoderma debaryanum A. Blitt. – R [48]

Family Echinosteliaceae Rostaf.

Echinostelium arboreum H.W. Keller & T.E. Broox – R [46, 48]

Echinostelium apitectum K.D. Whitney – R [46, 48]

Echinostelium coelocephalum T.E. Broox & H.W. Keller – R [46, 48]

Echinostelium elachiston Alexop. – R [46, 48]

Echinostelium minutum de Bary – C [46, 48]

ORDER LICEALES E. Jahn

Family Cibrariaceae Rostaf.

Cibraria argillacea (Pers. ex J.F. Gmel.) Pers. – C [46, 48]

Cibraria aurantiaca Schrad. – O [46, 48]

Cibraria cancellata (Batsch) Nann.-Bremek. – C [46, 48]

var. *cancellata* – C [48]

var. *fusca* (Lister) Nann.-Bremek. – C [48]

Cibraria intricata Schrad. – R [46–48]

Cibraria microcarpa (Schrad.) Pers. – O [46, 48]

Cibraria rufa (Roth) Rostaf. – R [46, 48]

Cibraria tenella Schrad. – R [46, 48]

Cibraria violacea Rex – O [46, 48]

Cibraria vulgaris Schrad. – C [46, 48]

Lindbladia tubulina Fr. – C [41]

Family Liceaaceae Rostaf.

Licea biforis Morgan – R [46, 48]

Licea castanea G. Lister – R [46, 48]

Licea kleistobolus G.W. Martin – C [46, 48]

Licea minima Fr. – C [46, 48]

Licea operculata (Wign.) G.W. Martin – O [48]

Licea parasitica (Zucal) G.W. Martin – O [48]

Family Dictydiaethaliaceae Nann.-Bremek.

Dictydiaethalium plumbeum (Schumach.) Rostaf. – O [46, 48]

Family Reticulariaceae Rostaf.

- Lycogala conicum* Pers. – O [46–48, 51]
Lycogala epidendrum (L.) Fr. – C [46, 48, 51]
Lycogala exiguum Morgan – C [46, 48, 51]
Lycogala flavofuscum (Ehrenb.) Rostaf. – O [46, 48, 51]
Reticularia intermedia Nann.-Bremek. – R [46–48, 51]
Reticularia lycoperdon Bull. – O [46, 48, 51]
Reticularia olivacea (Ehrenb.) Fr. – R [51, 63, 64]
Reticularia splendens Morgan – R [46–48, 51]
Tubifera applanata Leontyev & Fefelov – C [42, 43, 45, 51]
Tubifera dudkae (Leontyev & G. Moreno) Leontyev, G. Moreno & Schnittler – R [44, 45, 51]
Tubifera ferruginosa (Batsch) J.F. Gmel. – C [45, 46, 48, 51]
 subsp. *ferruginosa* – O [45, 51]
 subsp. *acutissima* Leontyev, Schnittler & S.L. Stephenson – C [45, 51]
Tubifera montana Leontyev, Schnittler & S.L. Stephenson – R [45, 51]
Tubifera pseudomicrosperma Leontyev, Schnittler & S.L. Stephenson – R [45, 51]

ORDER PHYSARALES T. Macbr.

Family Didymiaceae Rostaf.

- Diachea leucopodia* (Bull.) Rostaf. – O [46, 48]
Diachea subsessilis Peck – R [46, 48]
Diderma cingulatum Nann.-Bremek. – R [48]
Diderma deplanatum Fr. – R [46–48]
Diderma floriforme (Bull.) Pers. – R [41]
Diderma globosum Pers. – R [48]
Diderma effusum (Schwein.) Morgan – O [46–48]
Diderma montanum (Meyl.) Meyl. – R [46–48]
Diderma spumariooides (Fr.) Fr. – R [48]
Didymium applanatum Nann.-Bremek. – R [41]
Didymium bahiense Gottsb. – R [41]
Didymium clavus (Alb. & Schwein.) Rabenh. – O [46, 48]
Didymium difforme (Pers.) Gray – R [46, 48]
Didymium flexuosum Yamash. – R [41]
Didymium melanospermum (Pers.) T. Macbr. – O [46, 48]
Didymium minus (Lister) Morgan – C [46–48]
Didymium serpula Fr. – R [46, 48]
Didymium squamulosum (Alb. & Schwein.) Fr. – C [46, 48]
Mucilago crustacea F.H. Wigg. – C [46, 48]

Family Physaraceae Rostaf.

- Badhamia capsulifera* (Bull.) Berk. – O [46, 48]
Badhamia foliicola Lister – R [48]
Badhamia macrocarpa (Ces.) Rostaf. – O [46, 48]
Badhamia melanospora Speg. – O [46–48]
Badhamia panicea (Fr.) Rostaf. – R [46, 48]
Badhamia utricularis (Bull.) Berk. – O [46, 48]
Craterium aureum (Schumach.) Rostaf. – R [48]
Craterium minutum (Leers) Fr. – R [46, 48]

- Craterium leucocephalum* (Pers. ex J.F. Gmel.) Ditmar – O [46, 48]
 var. *leucocephalum* – O [48]
 var. *scyphoides* (Cooke & Balf.) G. Lister – R [48]
 var. *cylindricum* (Massee) G. Lister – R [48]
- Fuligo cinerea* (Schwein.) Morg. – R [46, 48]
- Fuligo leviderma* H. Neubert, Nowotny, K. Baumann – O [46–48]
- Fuligo luteonitens* L.G. Krieglst. & Nowotny – O [46–48]
- Fuligo muscorum* Alb. & Schwein. – R [48]
- Fuligo rufa* Pers. – C [41]
- Fuligo septica* (L.) F. H. Wigg. – C [46, 48]
 var. *septica* – C [46, 48]
 var. *candida* (Pers.) R.E. Fr. – C [46, 48]
 var. *flava* (Pers.) Morgan – C [46, 48]
- Leocarpus fragilis* (Dicks.) Rostaf. – R [46, 48]
- Physarum album* (Bull.) Chevall. – C [46, 48]
- Physarum bitectum* G. Lister – R [48]
- Physarum bivalve* Pers. – C [46, 48]
- Physarum cinereum* (Batsch) Pers. – R [46, 48]
- Physarum compressum* Alb. & Schwein. – R [46, 48]
- Physarum conglomeratum* (Fr.) Rostaf.
- Physarum confertum* T. Macbr. – R [46–48]
- Physarum diderma* Rostaf. – R [46, 48]
- Physarum decipiens* M.A. Curtis – O [46, 48]
- Physarum didermoides* (Pers.) Rostaf. – C [46, 48]
- Physarum flavicomum* Berk. – O [46, 48]
- Physarum gyrosum* Rostaf. – R [46, 48]
- Physarum globuliferum* (Bull.) Pers. – O [46, 48]
- Physarum leucophaeum* Fr. – R [46, 48]
- Physarum leucopus* Link – R [46, 48]
- Physarum notabile* T. Macbr. – R [46, 48]
- Physarum psittacinum* Ditmar – R [48]
- Physarum vernum* Sommerf. – R [46–48]
- Physarum viride* (Bull.) Pers. – C [46, 48]
 f. *viride* – C [48]
 f. *aurantium* (Bull.) Y. Yamam. – C [48]

ORDER STEMONITALES T. Macbr.

Family Stemonitidaceae Rostaf.

- Amaurochaete atra* (Alb. & Schwein.) Rostaf. – R [46, 48]
- Collaria arcyronema* (Rostaf.) Nann.-Bremek. ex Lado – O [46, 48]
- Comatricha alta* Preuss – R [46–48]
- Comatricha elegans* (Racib.) G. Lister – R [41, 50]
- Comatricha ellae* Härk. – R [41, 50]
- Comatricha filamentosa* Meyl. – R [50, 63, 64]
- Comatricha laxa* Rostaf. – O [46–48]
- Comatricha longipila* Nann.-Bremek. – R [48, 50]
- Comatricha nigra* (Pers. ex J.F. Gmel.) J. Schröt. – C [46, 48, 50]

- Comatricha pulchella* (C. Bab.) Rostaf. – R [46, 48, 50]
 var. *pulchella* – R [50]
 var. *fusca* (Lister) G. Lister – R [50]
- Enerthenema papillatum* (Pers.) Rostaf. – C [46, 48]
- Lamproderma scintillans* (Berk. & Broome) Morgan – R [46–48]
- Macbrideola cornea* (G. Lister & Cran) Alexop. – C [46, 48, 50]
- Paradiacheopsis acanthodes* (Alexop.) Nann.-Bremek. – R [41, 50]
- Paradiacheopsis fimbriata* (G. Lister & Cran) Hertel ex Nann.-Bremek. – C [46, 48, 50]
- Paradiacheopsis rigida* (Brândză) Nann.-Bremek. – R [44–46, 48]
- Paradiacheopsis solitaria* (Nann.-Bremek.) Nann.-Bremek. – O [46, 48, 50]
- Stemonaria longa* (Peck) Nann.-Bremek., R. Sharma & Y. Yamam. – O [46, 48, 49]
- Stemonitis axifera* (Bull.) T. Macbr. – C [46, 48, 49]
- Stemonitis flavogenita* E. Jahn – O [48, 49]
- Stemonitis fusca* Roth – C [48, 49]
 var. *fusca* – C [48]
 var. *rufescens* Lister – R [47]
 var. *nigrescens* (Rex) Torrend – C [46, 48, 49]
- Stemonitis pallida* Wingate – R [46, 48, 49]
- Stemonitis smithii* T. Macbr. – R [46, 48, 49]
- Stemonitis splendens* Rostaf. – O [46, 48, 49]
 var. *splendens* – O [46, 48, 49]
 var. *webberi* (Rex) Lister – R [47]
- Stemonitis virginiensis* Rex – R [46, 48, 49]
- Stemonitopsis amoena* (Nann.-Bremek.) Nann.-Bremek. – O [46, 48, 49]
- Stemonitopsis hyperopta* (Meyl.) Nann.-Bremek. – R [46, 48, 49]
- Stemonitopsis peritricha* (Nann.-Bremek.) Nann.-Bremek. – R [48, 49]
- Stemonitopsis typhina* (F.H. Wigg.) Nann.-Bremek. – C [46, 48, 49]
 var. *typhina* – C [48]
 var. *similis* (G. Lister) Nann.-Bremek. & Y. Yamam. – R [48]
- Sympylocarpus amaurochaetoides* Ing & Nann.-Bremek. – R [46, 48]
Sympylocarpus flaccidus (Lister) Ing & Nann.-Bremek. – R [46, 48]

ORDER TRICHLIALES T. Macbr.

Family Trichiaceae Rostaf.

- Arcyria affinis* Rostaf. – O [46–48]
- Arcyria cinerea* (Bull.) Pers. – C [46, 48]
- Arcyria denudata* (L.) Wetst. – C [46, 48]
- Arcyria ferruginea* Saut. – R [46, 48]
- Arcyria helvetica* (Meyl.) H. Neubert, Nowotny, K. Baumann – R [46–48]
- Arcyria incarnata* (Pers. ex J.F. Gmel.) Pers. – O [46, 48]
- Arcyria insignis* Kalchbr. – O [46, 48]
- Arcyria minuta* Buchet – R [46, 48]
- Arcyria obvelata* (Oeder) Onsberg – C [46, 48]
- Arcyria oerstedii* Rostaf. – R [46, 48]
- Arcyria pomiformis* (Leers) Rostaf. – C [46, 48]
- Arcyria stipata* (Schwein.) Lister – R [46–48]
- Hemitrichia abietina* (Wigand) G. Lister – R [46, 48]
- Hemitrichia calyculata* (Speg.) M.L. Farr – O [46, 48]

- Hemitrichia clavata* (Pers.) Rostaf. – O [46, 48]
Hemitrichia serpula (Scop.) Rostaf. ex Lister – O [46, 48]
Metatrichia floriformis (Schwein.) Nann.-Bremek. – R [64]
Metatrichia vesparia (Batsch) Nann.-Bremek. – C [46, 48]
Perichaena chrysosperma (Curr.) Lister – O [46, 48]
Perichaena corticalis (Batsch) Rostaf. – C [46, 48]
Perichaena depressa Lib. – R [46, 48]
Trichia affinis de Bary sensu Ing – O [46, 48]
Trichia botrytis (J.F. Gmel.) Pers. – P [46, 48]
Trichia contorta (Ditmar) Rostaf. – C [48]
 var. *contorta* – C [48]
 var. *attenuata* Meyl. – R [46, 48]
Trichia decipiens (Pers.) T. Macbr. – C [46, 48]
 var. *decipiens* – C [48]
 var. *hemitrichoides* Brândză – R [48]
 var. *olivacea* Meyl. – C [48]
Trichia favaginea (Batsch) Pers. sensu Ing – C [46, 48]
Trichia lutescens (Lister) Lister – R [46, 48]
Trichia persimilis P. Karst. sensu Ing – O [46, 48]
Trichia scabra Rostaf. – C [46, 48]
Trichia varia (Pers. ex J.F. Gmel.) Pers. – C [46, 48]

SUPERKINGDOM OPISTHOKONTA Caval.-Sm., emend. Caval.-Sm. and Chao, emend. Adl et al.
KINGDOM FUNGI T. L. Jahn & F. F. Jahn ex R. T. Moore
PHYLUM BLASTOCLADIOMYCOTA T.Y. James
CLASS BLASTOCLADIOMYCETES Doweld
ORDER BLASTOCLADIALES Fitzp.
Family Blastocladiaceae H.E. Petersen
Clavochytridium stuebenii Doweld (=*Blastocladiella stuebenii* Couch & Whiffen) [55, 67]

PHYLUM CHYTRIDIOMYCOTA Doweld
CLASS CHYTRIDIOMYCETES de Bary
ORDER CLADOCHYTRIALES Mozley-Standridge
Family Cladochytriaceae J. Schröt.
Nowakowskia elegans (Nowak.) J. Schröt. [55]
ORDER CHYTRIDIALES Cohn
Family Chytridiaceae Nowak.
Polyphagus euglenae (Bail) Nowak. [57]
ORDER RHIZOPHYDIALES Letcher
Family Globomycetaceae Letcher
Urceomyces sphaerocarpus (Zopf) Letcher (=*Chytridium sphaerocarpum* (Zopf) A. Fisch.) [67]

PHYLUM ZYGOMYCOTA Moreau
SUBPHYLUM MUCOROMYCOTINA Benny
ORDER MUCORALES Fr.
Family Mucoraceae Dumort.
Mucor circinelloides Tiegh. – R

Mucor mucedo Fresen. – C [58]

Spinellus fusiger (Link) Tiegh. – R

Syzygites megalocarpus Ehrenb. – R

Family Pilobolaceae Corda

Pilobolus crystallinus (F. H. Wigg.) Tode – O

Family Rhizopodaceae K. Schum.

Rhizopus stolonifer (Ehrenb.) Vuill. (=*Rhizopus nigricans* Ehrenb.) – C [51, 58]

Family Syncephalastraceae Naumov ex R.K. Benj.

Circinella muscae (Sorokīn) Berl. & De Toni (=*Circinella spinosa* Tiegh. & G. Le Monn.) – R [58]

Circinella umbellata Tiegh. & G. Le Monn. – R [58]

PHYLUM BASIDIOMYCOTA Bold ex R. T. Moore

SUBPHYLUM PUCCINIOGYCOTINA R. BAUER ET AL.

CLASS PUCCINIOGYCETES R. Bauer et al.

(=Urediniomycetes Swann and Taylor)

ORDER PUCCINIALES Clem. & Shear

(=Uredinales G. Winter, emend. Arthur)

Family Coleosporiaceae Racib.

Coleosporium tussilaginis (Pers.) Kleb. (=*Coleosporium campanulae* (Pers.) Tul., =*Coleosporium melampyri* (Rebent.) Kleb., =*Coleosporium petasitis* (DC.) de Bary) [91]

Family Melampsoraceae Dietel

Melampsora allii-populina Kleb.

Melampsora amygdalinae Kleb.

Melampsora euphorbiae (Ficinus & C. Schub.) Castagne

Melampsora magnusiana G.H. Wagner

Melampsora populnea (Pers.) P. Karst. (=*Melampsora pinitorqua* Rostr., =*Melampsora rostrupii* G.H. Wagner, =*Melampsora tremulae* Tul.)

Melampsora salicina (Moug. & Nestl. ex DC.) Desm.

Miyagia pseudosphaeria (Mont.) Jørst. (=*Puccinia sonchi* Roberge ex Desm.)

Phragmidium fragariae G. Winter (=*Phragmidium fragariastri* (DC.) J. Schröt.)

Phragmidium mucronatum (Pers.) Schltdl.

Phragmidium potentillae (Pers.) P. Karst. [91]

Phragmidium rubi-idaei (DC.) P. Karst.

Phragmidium tuberculatum Jul. Müll. [91]

Phragmidium violaceum (Schultz) G. Winter

Family Pucciniaceae Chevall.

Gymnosporangium sabinae (Dicks.) G. Winter

Puccinia aegopodii (Schumach.) Link

Puccinia angelicae (Schumach.) Fuckel

Puccinia arenariae (Schumach.) J. Schröt.

Puccinia argentata (Schultz) G. Winter

Puccinia asarina Kunze

Puccinia calcitratae DC. (=*Puccinia bardanae* (Wallr.) Corda)

Puccinia chrysanthemi Roze (=*Puccinia absinthii* DC.) [91]

Puccinia conii (F. Strauss) Fuckel [91]

- Puccinia coronata* Corda (=*Puccinia coronifera* Kleb.) [91]
Puccinia dioicae Magnus (=*Puccinia carisis* (Schumach.) Rebent., =*Puccinia sylvatica* J.Schröt.)
Puccinia falcariæ (Pers.) Fuckel
Puccinia glechomatis DC. [91]
Puccinia graminis Pers. [91]
Puccinia helianthi Schwein. [91]
Puccinia hieracii (Röhl.) H. Mart. var. *hieracii* (=*Puccinia cichorii* (DC.) Bellynck, =*Puccinia leontodontis* Jacky, =*Puccinia taraxaci* Plowr.)
Puccinia hordei G.H. Otth (=*Puccinia simplex* (Körn.) Erikss. & Henning) [91]
Puccinia iridis Wallr.
Puccinia lactucarum P. Syd. [91]
Puccinia lapsanae Fuckel [as '*lampsanae*'] [91]
Puccinia magnusiana Körn. [91]
Puccinia menthae Pers. [91]
Puccinia opizii Bubák
Puccinia phragmitis (Schumach.) Körn.
Puccinia poarum E. Nielsen
Puccinia polygoni-amphibii Pers. (=*Puccinia polygoni-amphibii* var. *convolvuli* Arthur)
Puccinia punctata Link [91]
Puccinia punctiformis (F. Strauss) Röhl. (=*Puccinia suaveolens* (Pers.) Rostr.)
Puccinia recondita Dietel & Holw. (=*Puccinia agropyri* Ellis & Everh., =*Puccinia bromina* Erikss., =*Puccinia dispersa* Erikss. & Henning) [91]
Puccinia ribesii-caricis Kleb.
Puccinia scillae Linh.
Puccinia sessilis J. Schröt.
Puccinia striiformis Westend. (=*Puccinia glumarum* Erikss. & Henning)
Puccinia vincae (DC.) Berk
Puccinia violae (Schumach.) DC.
Puccinia xanthii Schwein.
Pucciniastrum areolatum (Fr.) G.H. Otth (=*Pucciniastrum padi* (Kunze & J.C. Schmidt) Dietel) [91]
Uromyces appendiculatus F. Strauss
Uromyces beticola (Bellynck) Boerema, Loer. & Hamers (=*Uromyces betaee* (Pers.) J.G. Kühn ; =*Uromyces betaee* Lév. =*Uromyces betaee* J. Kickx fil.)
Uromyces cytisi J. Schröt.
Uromyces dactylidis G.H. Otth (=*Uromyces lycoctoni* (Kalchbr.) Trotter, =*Uromyces poae* Rabenh.)
Uromyces geranii (DC.) G.H. Otth & Wartm. (=*Uromyces kabatianus* Bubák)
Uromyces lineolatus (Desm.) J. Schröt.
Uromyces occultus J.C. Lindq. (as *Uromyces occulta* Rabenh.)
Uromyces pisi-sativi (Pers.) Liro (=*Uromyces genistae-tinctoriae* (Pers.) Fuckel ex G. Winter, =*Uromyces laburni* Fuckel, =*Uromyces laburni* (DC.) G. H. Otth, =*Uromyces onobrychidis* (Desm.) Lév., =*Uromyces pisi* (Pers.) de Bary) [91]
Uromyces polygoni-avicularis (Pers.) P. Karst. (=*Uromyces polygoni* (Pers.) Fuckel) [91]
Uromyces scrophulariae (DC.) Berk. & Broome ex J. Schröt. [91]
Uromyces striatus J. Schröt.
Uromyces trifolii (R. Hedw.) Lév. [91]
Uromyces trifolii-repentis Liro [91]
Uromyces verruculosus Berk. & Broome [91]
Uromyces viciae-fabae (F. Strauss) J. Schröt. [91]

Family Uropyxidaceae (Arthur) Cummins & Y. Hirats.

Tranzschelia pruni-spinosae (Pers.) Dietel [91]

SUBPHYLUM USTILAGINOMYCOTINA

R. Bauer, Begerow, J. P. Samp., M. Weiss & Oberw.

CLASS USTILAGINOMYCETES R. Bauer, Oberw. & Vánky

ORDER USTILAGINALES G.P. Clinton

Family Ustilaginaceae Tul. & C. Tul.

Schizonella melanogramma (DC.) J. Schröt. (=*Schizonella melanogramma* DC.)

Sphacelotheca reiliana (J. G. Kühn) G. P. Clinton (=*Sorosporium reilianum* (J.G. Kühn) McAlpine; as

Sorosporium reiliana Kühn.)

Sporisorium destruens (Schltdl.) Vánky (=*Sphacelotheca panici-miliacei* (Pers.) Bubák, =*Ustilago panici-miliacei* (Pers.) G. Winter) [91]

Tilletia caries (DC.) Tul. & C. Tul. (=*Tilletia tritici* (Bjerk.) G. Winter)

Ustilago avenae (Pers.) Rostr. (=*Ustilago levis* (Kellerm. & Swingle) Magnus) [91]

Ustilago filiformis (Schrank) Rostr. (=*Ustilago longissima* (Sowerby) Meyen)

Ustilago hordei (Pers.) Lagerh. [91]

Ustilago maydis (DC.) Corda [91]

Ustilago nuda (C.N. Jensen) Rostr. [91]

Ustilago tritici (Pers.) Rostr. [91]

SUBPHYLUM AGARICOMYCOTINA R. Bauer et al.

(=Hymenomycetes Swann & Taylor)

CLASS AGARICOMYCETES Matheny, Hibbett & Binder

SUBCLASS AGARICOMYCETIDAE (Fr.) Parm.

ORDER AGARICALES Clem.

Family Agaricaceae Chevall.

Agaricus arvensis Schaeff. – C [97]

Agaricus augustus Fr. – O [97]

Agaricus bisporus (J. E. Lange) Imbach – R [97]

Agaricus campestris L. var. *campestris* – C [97]

Agaricus comtulus Fr. – O [97]

Agaricus sylvaticus Schaeff. – C [97]

Agaricus sylvicola (Vittad.) Peck – O [97]

Agaricus xanthodermus Genev. – O [97]

Agaricus xantholepis (F.H. Møller) F.H. Møller – C [97]

Battarrea phalloides (Dicks.) Pers. – R

Bovista aestivalis (Bonord.) Demoulin [19]

Bovista cunninghamii Kreisel [19]

Bovista dermoxantha (Vittad.) De Toni [19]

Bovista dryina (Morgan) Demoulin [19]

Bovista graveolens Schwalb [19]

Bovista plumbea Pers. [19]

Bovista promontorii Kreisel [19]

Calvatia candida (Rostk.) Hollós [19]

Calvatia cyathiformis (Bosc) Morgan [19]

- Calvatia gigantea* (Batsch) Lloyd [19]
Chlorophyllum agaricoides (Czern.) Vellinga (=*Endoptychum agaricoides* Czern.) – R [21, 97]
Chlorophyllum rachodes (Vittad.) Vellinga – C [97]
Coprinus comatus (O.F. Mull.) Pers. – C
Cystoderma amianthinum (Scop.) Fayod – C [97]
Cystoderma carcharias (Pers.) Fayod – C [90, 97]
Cystoderma cinnabarinum (Alb. & Schwein.) Harmaja – O [90, 94, 97]
Cystolepiota seminuda (Lasch) Bon – O [22, 97]
Disciseda bovista (Klotzsch) Henn. [19]
Echinoderma asperum (Pers.) Bon – R [97]
Lepiota angustispora (Migl. & Bizzi) Hauskn. & Pidlisch-Aigner – R
Lepiota castanea Quél. – O
Lepiota clypeolaria (Bull.) P. Kumm. – O [97]
Lepiota cristata (Bolton) P. Kumm. – C [97]
Lepiota oreadiciformis Velen. – O
Lepiota subincarnata J.E. Lange – O [97]
Leucoagaricus badhamii (Berk. & Broome) Singer – R [89]
Leucoagaricus crystallifer Vellinga – R [89]
Leucoagaricus leucothites (Vittad.) Wasser – O [89, 97]
Leucoagaricus menieri (Sacc.) Singer – R [89, 97]
Leucoagaricus sericifer (Locq.) Vellinga – R [89, 97]
Leucoagaricus sublitoralis (Kühner ex Hora) Singer – R [89]
Lycoperdon excipuliforme (Scop.) Pers. [19]
Lycoperdon atropurpureum Vittad. [19]
Lycoperdon lividum Pers. [19]
Lycoperdon marginatum Vittad. [19]
Lycoperdon nigrescens Wahlenb. [19]
Lycoperdon norvegicum Demoulin [19]
Lycoperdon perlatum Pers. [19]
Lycoperdon pratense Pers. [19]
Lycoperdon pyriforme Schaeff. [19]
Lycoperdon umbrinum Pers. [19]
Lycoperdon utriforme Bull. (as *Calvatia caelata* (Bull.) Morgan) [19, 89]
Macrolepiota excoriata (Schaeff.) Wasser – C [97]
Macrolepiota mastoidea (Fr.) Singer (=*Macrolepiota konradii* (Huijsman ex Orton) Moser) – O
Macrolepiota procera var. *procera* (Scop.) Singer – C [97]
Mycenastrum corium (Guér. ex DC.) Desv. [19, 21]
- Family Amanitaceae R. Heim ex Pouzar**
- Amanita citrina* Pers. – O
Amanita crocea (Quél.) Singer – R [22]
Amanita muscaria (L.) Lam. – O [92]
 var. *muscaria* – R [92]
 var. *formosa* f. *europaea* Neville & Poumarat – C [90, 92]
Amanita pantherina (DC.) Krombh. – C
Amanita phalloides (Vaill. ex Fr.) Link – O
Amanita rubescens Pers. – C
Amanita solitaria (Bull.) Fr. – R
Amanita vaginata (Bull.) Lam. – C

Family Bolbitiaceae Singer

Bolbitius titubans (Bull.) Fr. – O
Pholiotina dasypus (Romagn.) P.-A. Moreau – O
Pholiotina arrhenii (Fr.) Singer – O

Family Clavariaceae Chevall.

Clavulinopsis fusiformis (Sowerby) Corner [22]

Family Cortinariaceae (Fayod) R. Heim ex Pouzar

Cortinarius decipiens (Pers.) Fr. – R
Cortinarius fulmineus Fr. – R
Cortinarius glaucopus (Schaeff.) Fr. – R
Cortinarius hemitrichus (Pers.) Fr. – R
Cortinarius malicorius Fr. – R
Cortinarius olivaceofuscus Kühner – R
Cortinarius triumphans Fr. – R
Cortinarius turgidus Fr. – R
Meottomyces dissimulans (Berk. & Broome) Vizzini – O

Family Cyphellaceae Lotsy

Granulobasidium vellereum (Ellis & Cragin) Jülich – R
Radulomyces confluens (Fr.) M.P. Christ. – O [22, 103]
Radulomyces molaris (Chaillet ex Fr.) M.P. Christ. – C [22, 103]
Radulomyces rickii (Bres.) M.P. Christ. – R [22, 103, 113]

Family Entolomataceae Kotl. & Pouzar

Clitopilus caelatus (Fr.) Vila & Contu – O
Clitopilus prunulus (Scop.) P. Kumm. – O
Entoloma araneosum f. *fulvostrigosum* (Berk. & Broome) Noordel. – R
Entoloma clypeatum (L.) P. Kumm. – O
Entoloma neglectum (Lasch) M.fM. Moser – R
Entoloma sinuatum (Bull. ex Pers.) P. Kumm. – R
Entoloma sordidulum (Kühner & Romagn.) P.D. Orton – R [22]
Entoloma tjallingiorum Noordel. – R
Entoloma turbidum (Fr.) Quél. – O
Entoloma vernum S. Lundell – R

Family Fistulinaceae Lotsy

Fistulina hepatica (Schaeff.) With. – C [10, 22, 110]

Family Hydnangiaceae Gäum. & C.W. Dodge

Laccaria amethystina Cooke – R
Laccaria laccata (Scop.) Cooke – O [94]
Laccaria proxima (Boud.) Pat. – C

Family Hygrophoraceae Lotsy

Ampulloclitocybe clavipes (Pers.) Redhead, Lutzoni, Moncalvo & Vilgalys – R
Gliophorus psittacinus (Schaeff.) Herink – R
Hygrophorus arbustivus Fr. – O
Hygrophorus eburneus (Bull.) Fr. – O
Hygrophorus hypothejus (Fr.) Fr. – C [94]

Family Hymenogastraceae Vittad.

- Deconica montana* (Pers.) P.D. Orton – C [90, 94]
Galerina sideroides (Bull.) Kühner – O [86, 90]
Galerina marginata (Batsch) Kühner – O [94]
Galerina vittiformis (Fr.) Earle – C [94]
Gymnopilus penetrans (Fr.) Murrill – O [90, 94]
Hebeloma crustuliniforme (Bull.) Quél. – O
Hebeloma mesophaeum (Pers.) Quél. – O
Psilocybe semilanceata (Fr.) P. Kumm. – R

Family Inocybaceae Jülich

- Crepidotus calolepis* (Fr.) P. Karst. – O [98]
Crepidotus caspari Velen. – O [98]
Crepidotus crocophyllus (Berk.) Sacc. – O [22, 98]
Crepidotus epibryus (Fr.) Quél. – C [98]
Crepidotus luteolus Sacc. – R [98]
Crepidotus mollis (Schaeff.) Staude – C [22, 98]
Crepidotus subverrucisporus Pilát – O [98]
Crepidotus variabilis (Pers.) P. Kumm. – R
Flammulaster muricatus (Fr.) Watling – O [22]
Inocybe adaequata (Britzelm.) Sacc. – R [22, 99]
Inocybe asterospora Quél. – R [99]
Inocybe bresadolae Massee – R [22, 99]
Inocybe curvipes P. Karst. – O [99]
Inocybe geophylla (Bull.) P. Kumm. – O
 var. *geophylla* – O
 var. *lilacina* (Peck) Gillet – O [99]
Inocybe lacera (Fr.) P. Kumm. – O [99]
Inocybe maculata Boud. – O [99]
Inocybe mixtilis (Britzelm.) Sacc. – R [99]
Inocybe muricellata Bres. – R [99]
Inocybe napipes J.E. Lange – R [99]
Inocybe oblectabilis (Britzelm.) Sacc. – R [99]
Inocybe rennyi (Berk. & Broome) Sacc. – R [99]
Inocybe rimososa (Bull.) P. Kumm. – O [99]
Simocybe sumptuosa (P.D. Orton) Singer – R [22]

Family Lyophyllaceae Jülich

- Calocybe gambosa* (Fr.) Donk – C
Lyophyllum fumosum (Pers.) P.D. Orton – R
Rugosomyces ionides (Bull.) Bon – O

Family Marasmiaceae Roze ex Kühner

- Atheniella flavoalba* (Fr.) Redhead, Moncalvo, Vilgalys, Desjardin & B.A. Perry – R [91]
Baeospora myosura (Fr.) Singer – C [94]
Hydropus floccipes (Fr.) Singer – O
Marasmius bulliardii Quél. – R
Marasmius cohaerens (Alb. & Schwein.) Cooke & Quél. – R
Marasmius epiphillus Fr. – O

Marasmius oreades (Bolton) Fr. – C
Marasmius rotula (Scop.) Fr. – C
Marasmius wynneae Berk. & Broome – O
Megacollybia platyphylla (Pers.) Kotl. & Pouzar – C

Family Mycenaceae Roze

Hemimycena candida (Bres.) Singer – R
Hemimycena mairei (E.-J. Gilbert) Singer – R
Mycena abramsii (Murrill.) Murrill. – R [96]
Mycena acicula (Schaeff.) P. Kumm. [96]
Mycena aetites (Fr.) Quél. – O [96]
Mycena cinerella (P. Karst.) P. Karst. – R [96]
Mycena citrinomarginata Gillet – O [96, 94]
Mycena epipterygia var. *viscosa* (Maire) Ricken (= *Mycena viscosa* Maire) – O [96, 94]
Mycena galericulata (Scop.) Gray – C [96, 94]
Mycena hiemalis (Osbeck) Quél. – C [96]
Mycena inclinata (Fr.) Quél. – C [22, 96, 94]
 f. *inclinata* – C [96]
 f. *albopilea* Derbsch & J. Aug. Schmitt ex Robich & Cons. – R [96]
Mycena meliigena (Berk. & Cooke) Sacc. – C [96]
Mycena metata (Fr.) P. Kumm. – C [96, 94]
Mycena olivaceomarginata (Massee) Massee – O [96]
Mycena pelianthina (Fr.) Quél. – R [22, 96]
Mycena polyadelpha (Lasch) Kühner – O [96]
Mycena polygramma (Bull.) Gray – C [96]
Mycena pseudocorticola Kühner – C [96]
Mycena pura (Pers.) P. Kumm. – O [96]
Mycena purpureofusca (Peck) Sacc. – C [90, 94, 96]
Mycena renati Quél. – O [96]
Mycena rosea (Schumach.) Gramberg – O [96]
Mycena rubromarginata (Fr.) P. Kumm. – R [96]
Mycena sanguinolenta (Alb. & Schwein.) P. Kumm. – R [96]
Mycena vitilis (Fr.) Quél. – C [22, 96]
Mycena viridimarginata P. Karst. [94]
Panellus stipticus (Bull.) P. Karst. – O [98]
Xeromphalina cauicinalis var. *subfellea* Bon – R [94]

Family Nidulariaceae Dumort.

Crucibulum laeve (Huds.) Kamble [19]
Cyathus olla (Batsch) Pers. [19]
Cyathus stercoreus (Schwein.) De Toni [19]
Cyathus striatus (Huds.) Willd. [19]
Nidularia deformis (Willd.) Sw. [19]

Family Omphalotaceae Bresinsky

Gymnopus androsaceus (L.) Della Maggiora & Trassinelli (as *Marasmius androsaceus* (L.) Fr.) – C
 [94]
Gymnopus confluens (Pers.) Antonín, Halling & Noordel. – O
Gymnopus dryophilus (Bull.) Murrill – C [22]

- Gymnopus erythropus* (Pers.) Antonín, Halling & Noordel. – O
Gymnopus foetidus (Sowerby) J.L. Mata & R.H. Petersen – O
Gymnopus fusipes (Bull.) Gray – R
Gymnopus ocior (Pers.) Antonín & Noordel. – R
Gymnopus peronatus (Bolton) Antonín, Halling & Noordel. – C [94]
Gymnopus putillus (Fr.) Antonín, Halling & Noordel. – R [94]
Marasmiellus ramealis (Bull.) Singer – C
Mycetinis alliaceus (Jacq.) Earle ex A.W. Wilson & Desjardin – R
Mycetinis scorodonius (Fr.) A.W. Wilson & Desjardin – C (as *Marasmius scorodonius* (Fr.) Fr.) [94]
Rhodocollybia butyracea (Bull.) Lennox – C
 f. *asema* (Fr.) Antonín, Halling & Noordel. – C [94]
 f. *butyracea* – C [90]
Rhodocollybia maculata (Alb. & Schwein.) Singer – R

Family Physalaciaceae Corner

- Armillaria cepistipes* Velen. – R
Armillaria lutea Gillet – O
Armillaria mellea (Vahl) P. Kumm. – C
Flammulina velutipes (Curtis) Singer – C
Hymenopellis radicata (Relhan) R.H. Petersen – C
Rhodotus palmatus (Bull.) Maire – R [98]
Strobilurus esculentus (Wulfen) Singer – O [93]
Strobilurus stephanocystis (Hora) Singer – C [93]
Xerula pudens (Pers.) Singer – R
Xerula radicata (Relhan) Dörfelt – C

Family Pleurotaceae Kühner

- Hohenbuehelia atrocoerulea* (Fr.) Singer – R [22]
Hohenbuehelia reniformis Singer – R
Pleurotus calyptatus (Lindblad) Sacc. – O [22, 95, 98]
Pleurotus cornucopiae (Poulet) Rolland – O [98]
Pleurotus ostreatus (Jacq.) P. Kumm. – C [98]
Pleurotus pulmonarius (Fr.) Quél. – C [22, 98]

Family Pluteaceae Kotl. & Pouzar

- Pluteus atromarginatus* (Konrad) Kühner – O [90]
Pluteus cervinus P. Kumm. – C
Pluteus cinereofuscus J.E. Lange
Pluteus ephebeus (Fr.) Gillet – O
Pluteus hiatulus Romagn. – R [22]
Pluteus hispidulus (Fr.) Gillet – R
Pluteus leoninus (Schaeff.) P. Kumm. – R
Pluteus luctuosus Boud. – R [22]
Pluteus nanus (Pers.) P. Kumm. – O
Pluteus petasatus (Fr.) Gillet – O
Pluteus phlebophorus Cooke – O
Pluteus plautus (Weinm.) Gillet – O
Pluteus podospileus Sacc. & Cub. – O
Pluteus pouzarianus Singer – R

Pluteus romellii (Britz.) Sacc. – R

Pluteus salicinus (Pers.) P. Kumm. – C [22]

Family Porotheleaceae Murrill

Phloeomana speirea (Fr.) Redhead – O [96]

Family Psathyrellaceae Vilgalys, Moncalvo & Redhead

Coprinellus disseminatus (Pers.) J. E. Lange – C

Coprinellus domesticus (Bolton) Vilgalys, Hopple & Jacq. Johnson in Redhead, Vilgalys, Moncalvo, Johnson & Hopple – C

Coprinellus micaceus (Bull.) Vilgalys, Hopple & Jacq. Johnson in Redhead, Vilgalys, Moncalvo, Johnson & Hopple – C

Coprinellus radians (Desm.) Vilgalys, Hopple & Jacq. Johnson in Redhead, Vilgalys, Moncalvo, Johnson & Hopple – R [22, 85]

Coprinellus xanthothrix (Romagn.) Vilgalys, Hopple & Jacq. Johnson in Redhead, Vilgalys, Moncalvo, Johnson & Hopple – R [22, 85]

Coprinopsis atramentaria (Bull.) Redhead, Vilgalys & Moncalvo in Redhead, Vilgalys, Moncalvo, Johnson & Hopple – C

Coprinopsis echinospora (Buller) Redhead, Vilgalys & Moncalvo in Redhead, Vilgalys, Moncalvo, Johnson & Hopple – R [22, 83, 85]

Coprinopsis insignis (Peck) Redhead, Vilgalys et Moncalvo in Redhead, Vilgalys, Moncalvo, Johnson & Hopple [83, 85]

Coprinopsis stercorea (Fr.) Redhead, Vilgalys & Moncalvo in Redhead, Vilgalys, Moncalvo, Johnson & Hopple (=*Coprinus stercorarius* Fr.) [58]

Coprinopsis nivea (Pers.) Redhead, Vilgalys & Moncalvo in Redhead, Vilgalys, Moncalvo, Johnson & Hopple – O

Coprinopsis picacea (Bull.) Redhead, Vilgalys & Moncalvo in Redhead, Vilgalys, Moncalvo, Johnson & Hopple – C

Coprinopsis poliomalla (Romagn.) Doveri, Granito & Lunghini – O

Coprinopsis romagnesiana (Singer) Redhead, Vilgalys & Moncalvo in Redhead, Vilgalys, Moncalvo, Johnson & Hopple – R [84, 85]

Lacrymaria lacrymabunda (Bull.) Pat. – O

Psathyrella candolleana (Fr.) Maire – C

Psathyrella canoceph (Kauffman) A.H. Sm. – R

Psathyrella corrugis (Pers.) Konrad & Maubl. – R

Psathyrella effibulata Örstadius & E. Ludw. – R

Psathyrella pennata (Fr.) A. Pearson & Dennis – R

Psathyrella piluliformis (Bull.) P.D. Orton – R

Psathyrella spadiceogrisea (Schaeff.) Maire – C

Family Schizophyllaceae Quél.

Schizophyllum amplum (Lév.) Nakasone – R [22, 75]

Schizophyllum commune Fr. – C [22, 110]

Family Strophariaceae Singer & A. H. Sm.

Agrocybe pediades (Fr.) Fayod – O [22]

Agrocybe praecox (Pers.) Fayod – C

Hypholoma capnoides (Fr.) P. Kumm. – O

Hypholoma fasciculare (Fr.) P. Kumm. – C

Hypholoma lateritium (Schaeff.) Quél. – O [94]

- Kuehneromyces mutabilis* (Schaeff.) Singer & A.H. Sm. – O [22]
Pholiota alnicola var. *salicicola* (Fr.) Holec (= *Pholiota salicicola* (Fr.) Arnolds) – R
Pholiota aurivella (Batsch) P. Kumm. – R
Pholiota gummosa (Lasch) Singer – R
Pholiota highlandensis (Peck) A.H. Sm. & Hesler – O [90]
Pholiota tuberculosa (Schaeff.) P. Kumm. – R [22]
Stropharia aeruginosa (Curtis) Quél. – C
Stropharia coronilla (Bull.) Quél. – R

Family Tapinellaceae C. Hahn

- Pseudomerulius aureus* (Fr.) Jülich – O [13, 22]
Tapinella atrotomentosa (Batsch) Šutara – R [13]
Tapinella panuoides (Fr.) E.-J. Gilbert – R [13, 98]

Family Tricholomataceae (Fayod) R. Heim ex Pouzar

- Clitocybe dealbata* (Sowerby) P. Kumm. – C
Clitocybe diatreta (Fr.) P. Kumm. – O [94]
Clitocybe marginella Harmaja – O
Clitocybe metachroa (Fr.) P. Kumm. – C [94]
Clitocybe nebularis (Batsch) P. Kumm. – C
Clitocybe odora (Bull.) P. Kumm. – O
Clitocybe phyllophila (Pers.) P. Kumm. – O [94]
Delicatula integrella (Pers.) Pat. – O
Infundibulicybe geotropa (Bull.) Harmaja – O
Infundibulicybe gibba (Pers.) Harmaja
Lepista flaccida (Sowerby) Pat. – C [94]
Lepista nuda (Bull.) Cooke – O
Lepista personata (Fr.) Cooke – O
Lepista sordida (Schumach.) Singer – O
Melanoleuca brevipes (Bull.) Pat. – R
Melanoleuca melaleuca (Pers.) Murrill – R
Myxomphalia maura (Fr.) Hora – O [90, 94]
Pseudoclitocybe cyathiformis (Bull.) Singer – C
Resupinatus applicatus (Batsch) Gray – R
Tricholoma equestre (L.) P. Kumm. – C [94]
Tricholoma portentosum (Fr.) Quél. – O
Tricholoma sculpturatum (Fr.) Quél. – R
Tricholoma terreum (Schaeff.) P. Kumm. – R
Tricholoma tigrinum (Schaeff.) P. Kumm. – R
Tricholomopsis decora (Fr.) Singer – R
Tricholomopsis rutilans (Schaeff.) Singer – O

Family Tubariaceae Vizzini

- Tubaria conspersa* (Pers.) Fayod – R
Tubaria furfuracea (Pers.) Gillet – C

AGARICALES INCERTAE SEDIS

- Volvariella bombycinia* (Schaeff.) Singer – O

ORDER ATHELIALES Jülich

Family Atheliaceae Jülich

- Athelia arachnoidea* (Berk.) Jülich – O [103]
Amphinema byssoides (Pers.) J. Erikss. – R [22, 103]
Athelia epiphylla Pers. – R [22, 103, 113]
Athelia fibulata M.P. Christ. – R [22, 103]
Leptosporomyces galzinii (Bourd.) Jülich – R [22, 103]

ORDER AURICULARIALES J. Schröt.

Family Auriculariaceae Fr.

- Auricularia auricula-judae* (Bull.) Quél. – C [22]
Auricularia mesenterica (Dicks.) Pers. – C [22]

Family Exidiaceae R. T. Moore

- Exidia glandulosa* (Bull.) Fr. – O [22]
Exidia nigricans (With.) P. Roberts – C
Exidia recisa (Ditmar) Fr. – O
Exidia repanda Fr. – O
Exidia saccharina Fr. – O

ORDER BOLETALES E.-J. Gilbert

Family Boletaceae Chevall

- Boletus aereus* Bull. – R [7, 13]
Boletus edulis Bull. – C [13]
Boletus pinophilus Pilát & Dermek – C [13]
Boletus reticulatus Schaeff. ex Fr. – O [13]
Butyriboletus appendiculatus (Schaeff.) D. Arora & J.L. Frank – R [13]
Caloboletus radicans (Pers.) Vizzini – R [13]
Chalciporus piperatus (Bull.) Bataille – R [13]
Hemileccinum impolitum (Fr.) Šutara – O [13]
Hortiboletus rubellus (Krombh.) Simonini, Vizzini & Gelardi – O [13]
Imleria badia (Fr.) Vizzini – C [13]
Leccinum aurantiacum (Bull.) Gray – R [13]
Leccinum crocipodium (Letell.) Watling – R [13]
Leccinum duriusculum (Schulzer ex Kalchbr.) Singer – R [13, 27]
Leccinum pseudoscabrum (Kallenb.) Šutara – R [13]
Leccinum scabrum (Bull.) Gray – O [13]
Rheubarbariboletus armeniacus (Quél.) Vizzini, Simonini & Gelardi – O [13]
Rubroboletus lupinus (Fr.) Costanzo, Gelardi, Simonini & Vizzini – R [13]
Strobilomyces strobilaceus (Scop.) Berk. – R [13]
Suillellus luridus (Schaeff.) Murrill – R [13]
Suillellus queletii (Schulzer) Vizzini, Simonini & Gelardi – R [13]
Tylopilus felleus (Bull.) P. Karst. – R [13]
Xerocomellus chrysenteron (Bull.) Šutara – C [13, 22]
Xerocomellus porosporus (Imler ex Bon) Šutara – R [13]
Xerocomellus pruinatus (Fr. & Hök) Šutara – O [13]
Xerocomus subtomentosus (L.) Quél. – C [13]

Family Coniophoraceae Ulbr.

- Coniophora arida* (Fr.) P. Karst. – R [13, 22, 103, 110]
Coniophora olivacea (Fr.) P. Karst. – R [13, 103]
Coniophora puteana (Schumach.) P. Karst. – C [13, 22, 103, 110]

Family Gomphidiaceae Maire ex Jülich

- Chroogomphus rutilus* (Schaeff.) O.K. Mill. – O [13]
Gomphidius glutinosus (Schaeff.) Fr. – R [13]
Gomphidius roseus (Scop.) Fr. – R [13]

Family Gyroporaceae (Singer) Binder & Bresinsky

- Gyroporus castaneus* (Bull.) Quél. – R [13]
Gyroporus cyanescens (Bull.) Quél. – R [13]

Family Hygrophoropsidaceae Kühner

- Hygrophoropsis aurantiaca* (Wulff) Maire – C [13]
Leucogyphana mollusca (Fr.) Pouzar – O [13, 76]

Family Melanogastraceae E. Fisch.

- Melanogaster variegatus* (Vittad.) Tul. & C. Tul. [19]

Family Paxillaceae Lotsy

- Paxillus involutus* (Batsch) Fr. – C [13]

Family Rhizopogonaceae Gäum. & C.W. Dodge

- Rhizopogon roseolus* (Corda) Th. Fr. (=*Rhizopogon vulgaris* (Vittad.) M. Lange) [13, 19]

Family Sclerodermataceae Corda

- Scleroderma areolatum* Ehrenb. [19]
Scleroderma bovista Fr. [13, 19]
Scleroderma citrinum Pers. [13, 19]
Scleroderma verrucosum (Bull.) Pers. [13, 19]

Family Suillaceae (Singer) Locq.

- Suillus bovinus* (L.) Kuntze – O [13]
Suillus granulatus (L.) Roussel – C [13]
Suillus grevillei (Klotzsch) Imazeki – R [13]
Suillus luteus (L.) Roussel – C [13]

Family Serpulaceae Jarosch & Bresinsky

- Serpula himantoides* (Fr.) P. Karst. – O [13]

ORDER CORTICIALES K.H. Larss.

Family Corticiaceae Herter

- Corticium roseum* Pers. (=*Laeticorticium roseum* (Pers.) Donk) – R [22, 103]
Dendrothele acerina (Pers.) P.A. Lemke – C [22, 103]
Dendrothele alliacea (Quél.) P.A. Lemke – C [103, 113]
Vuilleminia comedens (Nees) Maire – C [22, 103]
Vuilleminia cystidiata Parmasto – R [22, 103]
Vuilleminia coryli Boidin – R [103, 113]

ORDER GLOEOPHYLLALES Thorn.

Family Gloeophyllaceae Jülich

Gloeophyllum trabeum (Pers.) Murrill (=*Coriolopsis trabea* f. *communis* Bourdot & Galzin;
= *Trametes trabea* G.H. Otth) – O [22, 103, 110]

ORDER SEBACINALES M. Weiß, Selosse, Rexer, A. Urb. & Oberw.

Family Sebacinaceae Oberw. & K. Wells, emend. Oberw., Garnica, R. Bauer & K. Riess
Sebacina incrassans (Pers.) Tul. & C. Tul. – R [22]

ORDER TRECHISPORALES K.H. Larss.

Family Hydnodontaceae Jülich

Brevicellicium olivascens (Bres.) K.H. Larss. & Hjortstam – R [103]
Sistotremastrum niveocremeum (Höhn. & Litsch.) J. Erikss. – R [22, 103]
Subulicystidium longisporum (Pat.) Parmasto – R [103]
Trechispora stevensonii (Berk. & Broome) K.H. Larss. as anamorph *Osteomorpha fragilis* G. Arnaud
ex Watling & W.B. Kendr. – R

SUBCLASS CANTHARELLOMYCETIDAE Hibbett

ORDER CANTHARELLALES Gäum.

Family Botryobasidiaceae (Parmasto) Jülich

Botryobasidium aureum Parmasto – R [22, 103]
Botryobasidium laeve (J. Erikss.) Parmasto – R
Botryobasidium pruinatum (Bres.) J. Erikss. – R [22, 103]
Botryobasidium subcoronatum (Höhn. & Litsch.) Donk – C [22, 103, 111]

Family Cantharellaceae J. Schröt.

Cantharellus cibarius Fr. – O [22]
Cantharellus cinereus (Pers.) Fr. – R [22]
Craterellus cornucopoides (L.) Pers. – R [22]

Family Clavulinaceae Donk

Clavulina cinerea (Bull.) J. Schröt. – R [22]
Clavulina coralloides (L.) J. Schröt. – R [22]
Clavulina cristata (Holmsk.) J. Schröt. – R [22]

Family Hydnaceae Chevall.

Hydnum repandum L. – R [22]
Sistotrema brinkmannii (Bres.) J. Erikss. – R [22, 103]

Family Tulasnellaceae Chevall.

Tulasnella pallida Bres. – R

SUBCLASS HYMENOCHAETOMYCETIDAE Vizzini

ORDER HYMENOCHAETALES Oberw.

Family Hymenochaetaceae Imazeki & Toki

Coltricia perennis (L.) Murrill – O [22, 110]
Hymenochaete cinnamomea (Pers.) Bres. – O [22, 75]
Hymenochaete fuliginosa (Pers.) Lév. – R [75]
Hymenochaete rubiginosa (Dicks.) Lév. – C [22, 103, 110]

- Inocutis dryophila* (Berk.) Fiasson & Niemelä – R [22]
Inocutis rheades (Pers.) Fiasson & Niemelä – R [22, 75]
Inonotus hispidus (Bull.) P. Karst. – R [22, 75]
Inonotus obliquus (Ach. ex Pers.) Pilát – R [22, 110]
Inonotus radiatus (Sowerby) P. Karst. – R [22]
Phellinus contiguus (Pers.) Pat. (=*Fuscoporia contigua* (Pers.) G. Cunn.) – O [22, 103]
Phellinus ferruginosus (Schrad.) Pat. (=*Fuscoporia ferruginosa* (Schrad.) Murrill) – O [22, 103]
Phellinus ignarius (L.) Quél. – O [22, 103, 110]
Phellinus lundellii Niemelä – R [22]
Phellinus nigricans (Fr.) P. Karst. – R [22, 110]
Phellinus punctatus (P. Karst.) Pilát (=*Fomitiporia punctata* (P. Karst.) Teixeira) – R [22, 111]
Phellinus robustus (P. Karst.) Bourd. & Galzin (=*Fomitiporia robusta* (P. Karst.) Fiasson & Niemelä) – C [22, 96, 112]
Phellinus tremulae (Bondartsev) Bondartsev & P.N. Borisov – R [22, 110]
Phellinus tuberculosus (Baumg.) Niemelä – O [22, 110]
Phylloporia ribis (Schumach.) Ryvarden (=*Phellinus ribis* (Schumach.) Quél.) – O [22, 75]
Porodaedalea pini (Brot.: Fr.) Murrill (=*Phellinus pini* (Brot.) A. Ames) – O [22, 103, 110]

Family Schizophoraceae Jülich

- Basidioradulum radula* (Fr.) Nobles – R [22]
Hyphodontia arguta (Fr.) J. Erikss. – R [22, 103]
Hyphodontia pallidula (Bres.) J. Erikss. – R
Kneiffiella abieticola (Bourdot & Galzin) Jülich & Stalpers – R [22, 103]
Kneiffiella barba-jovis (Bull.) P. Karst. – R [22, 103]
Lyomyces sambuci (Pers.) P. Karst. – O [22, 103]
Oxyporus corticola (Fr.) Parmasto – O [22, 103]
Oxyporus latemarginatus (Fr.) Pouzar – R [22, 103]
Oxyporus obducens (Pers.) Donk – R
Oxyporus populinus (Schumach.) Donk – O [22, 103, 110]
Schizopora flavipora (Cooke) Ryvarden – C [22, 103]
Schizopora paradoxa (Schrad.) Donk – C [22, 103]
Schizopora radula (Pers.) Hallenb. (=*Hyphodontia radula* (Pers.) Langer & Vesterh.) – R [22]
Xylodon asperus (Fr.) Hjortstam & Ryvarden [111]
Xylodon brevisetus (P. Karst.) Hjortstam & Ryvarden – O [22, 103]
Xylodon crustosus (Pers.) Chevall. – O [22, 103, 111]
Xylodon nespori (Bres.) Hjortstam & Ryvarden – O [22, 103]

SUBCLASS PHALLOMYCETIDAE K. Hosaka, Castellano & Spatafora

ORDER GEASTRALES K. Hosaka & Castellano

Family Geastraceae Corda

- Geastrum melanocephalum* (Czern.) V.J. Staněk [19, 21]
Geastrum saccatum Fr. [19]
Geastrum striatum DC. [19]
Geastrum rufescens Pers. [19]
Myriostoma coliforme (Dicks.) Corda – R [7, 19]

Family Sphaerobolaceae J. Schröt.

- Sphaerobolus stellatus* Tode – C [19]

ORDER GOMPHALES Jülich

Family Clavariadelphaceae Corner

- Clavariadelphus ligula* (Schaeff.) Donk – O
Clavariadelphus pistillaris (L.) Donk – R [7]

ORDER PHALLALES E. Fisch.

Family Phallaceae Corda

- Mutinus caninus* (Huds.) Fr. – R [7]
Phallus hadriani Vent. – R [19]
Phallus impudicus L. – C [19]

SUBCLASS PORIOMYCETIDAE Vizzini

ORDER POLYPORALES Gäum.

Family Albatrellaceae (Pouzar) Nuss

- Albatrellus cristatus* (Fr.) Kotl. & Pouzar – R [22, 70]

Family Cyphellaceae Lotsy

- Granulobasidium velleereum* (Ellis & Cragin) Jülich – R [113]
Radulomyces confluens (Fr.) M.P. Christ. – O [22, 103]
Radulomyces molaris (Chaillet ex Fr.) Christ. – C [22, 103]
Radulomyces rickii (Bres.) M.P. Christ. – R [22, 103]
Sarcodontia crocea (Schwein.) Kotl. (=*Hydnus schiedermayeri* Heufl.) – R [22, 91, 104]

Family Fomitopsidaceae Jülich

- Antrodia gossypium* (Speg.) Ryvarden – R [22]
Antrodia heteromorpha (Fries) Donk – O [22, 75]
Antrodia hyalina Spirin, Miettinen & Kotir. (formerly misnamed as *Antrodia pulvinascens* (Pilát) Niemelä)
– O [103]
Antrodia macra (Sommerf.) Niemelä – R [22]
Antrodia ramentacea (Berk. & Broome) Donk – R [22, 75]
Antrodia serialis (Fr.) Donk – R [22]
Daedalea quercina (L.) Fr. – O [22, 103, 110]
Fomitopsis pinicola (Sw.) P. Karst. – O [22, 85, 103, 110]
Piptoporus betulinus (Bull.) P. Karst. – C [22, 110]
Piptoporus quercinus (Schrad.) Pilát – O [22, 72, 73, 111]
Postia alni Niemelä & Vampola – O
Postia caesia (Schrad.) P. Karst. – O [22, 103]
Postia leucomallella (Murrill) Jülich – R [22, 75]
Postia stiptica (Pers.) Jülich – O [22]
Postia subcaesia (A. David) Jülich – R

Family Ganodermataceae (Donk) Donk

- Ganoderma applanatum* (Pers.) Pat. (=*Ganoderma lipsiense* (Batsch) G.F. Atk.) – C [22, 103, 110]
Ganoderma lucidum (Curtis) P. Karst. – O [22, 103, 110]

Family Hapalopilaceae Jülich

- Aurantiporus fissilis* (Berk. & M.A. Curtis) H. Jahn ex Ryvarden – O [22]
Bjerkandera adusta (Willd.) P. Karst. – O [22, 103, 110]
Bjerkandera fumosa (Pers.) P. Karst – R [22, 103]
Ceriporia purpurea (Fr.) Donk – R [22, 75]

Hapalopilus nidulans (Fr.) P. Karst. – O [22, 103, 110]
Spongipellis spumeus (Sowerby) Pat. – R [22, 104]

Family Hypodermataceae Jülich

Hypoderma medioburiense (Burt) Donk – R [22, 113]
Hypoderma mutatum (Peck) Donk – O [22]
Hypoderma setigerum (Fr.) Donk – C [22]
Hypoderma transiens (Bres.) Parmasto – R [22]

Family Phanerochaetaceae Jülich

Byssomerulius corium (Pers.) Parmasto – R [22, 103]
Ceraceomyces microsporus K.H. Larss. in K.H. Larss. & E. Larss. – R [22]
Ceraceomyces serpens (Tode) Ginns – R [22]
Ceraceomyces sulphurinus (P. Karst.) J. Erikss. & Ryvarden – R
Chondrostereum purpureum (Pers.) Pouzar – O [22, 110]
Cylindrobasidium evolvens (Fr.) Jülich – O [22]
Gloeoporus dichrous (Fr.) Bres. – O [22]
Gloeoporus taxicola (Pers.) Gilb. & Ryvarden – R [22]
Hypochnicium bombycinum (Sommerf.) J. Erikss. – R [22]
Hypochnicium wakefieldiae (Bres.) J. Erikss. (=*Hypochnicium caucasicum* Parmasto) – R [22, 113]
Hypochnicium lundellii (Bourdot) J. Erikss. – R [22]
Junghuhnia nitida (Fr.) Ryvarden – R
Merulius tremellosus Schrad. (=*Phlebia tremellosa* (Schrad.) Nakasone & Burdsall) – C
Phanerochaete calotricha (P. Karst.) J. Erikss. & Ryvarden – R [22, 113]
Phanerochaete jose-ferreira (D.A. Reid) D.A. Reid – R [22]
Phanerochaete laevis (Pers.) J. Erikss. & Ryvarden – R [22]
Phanerochaete sanguinea (Fr.) Pouzar – R [22, 111]
Phanerochaete livescens (P. Karst.) Volobuev & Spirin (formerly named as *Phanerochaete sordida* (P. Karst.) J. Erikss. & Ryvarden from this area) – O [22, 103]
Phanerochaete subquercina (Henn.) Hjortstam – R [22, 103, 113]
Phanerochaete tuberculata (P. Karst.) Parmasto – O [22, 103, 111]
Phanerochaete velutina (DC.) P. Karst. – O [22, 103]
Phlebia acerina Peck – C [22, 71]
Phlebia radiata Fr. – O [22]
Phlebia rufa (Pers.) M.P. Christ. – R [22, 71]
Phlebiopsis gigantea (Fr.) Jülich – R
Porostereum spadiceum (Pers.) Hjortstam & Ryvarden – O [22]
Sarcodontia crocea (Schwein.) Kotl. (=*Hydnus schiedermayeri* Heufl.) – R [22, 91, 115]

Family Polyporaceae Fr. ex Corda

Cerrena unicolor (Bull.) Murrill – O [22]
Daedaleopsis confragosa (Bolton) Schröt. – O [22, 110]
Datronia mollis (Sommerf.) Donk – O [22]
Dichomitus squalens (P. Karst.) D. A. Reid – O [22, 85]
Fomes fomentarius (L.) J. Kickx – C [22, 110]
Funalia trogii (Berk.) Bond. & Singer (=*Coriolopsis trogii* (Berk. in Trog) Domacski) – O
Laetiporus sulphureus (Bull.) Murrill – C [22, 110]
Lentinus tigrinus (Bull.) Fr. – O [98]
Neolentinus lepideus (Fr.) Redhead & Ginns – O [98]

- Perenniporia medulla-panis* (Jacq.) Donk – R
Perenniporia tenuis var. *pulchella* (Schwein.) Gilb. & Ryvarden – R [22, 75]
Phaeolus schweinitzii (Fr.) Pat. – R [22]
Polyporus alveolaris (DC.) Bondartsev & Singer – C [22, 103]
Polyporus arcularius (Batsch) Fr. – R [22, 103, 110]
Polyporus badius (Pers.) Schwein. – R [22, 103]
Polyporus squamosus (Huds.) Fr. – O [22, 103, 110]
Polyporus umbellatus (Pers.) Fr. – R [7, 22]
Polyporus varius (Pers.) Fr. – R [22, 110]
Pycnoporus cinnabarinus (Jacq.) P. Karst. – R [22, 110]
Skeletocutis amorphula (Fr.) Kotl. & Pouzar – R [22, 111]
Skeletocutis nivea (Jungh.) Jean Keller – O [22]
Skeletocutis odora (Peck ex Saccardo) Ginns – O [103, 115]
Skeletocutis subincarnata (Peck) Jean Keller – R [22]
Trametes betulina (L.) Pilát (= *Lenzites betulina* (L.) Fr., = *Daedalea betulina* (L.) Fr.) – R [22, 110]
Trametes gibbosa Pers. – R [22, 110]
Trametes hirsuta (Wulfen) Lloyd – C [22, 103, 110]
Trametes ljubarskii Pilát – R [77]
Trametes ochracea (Pers.) Gilb. & Ryvarden – R [22, 103, 110]
Trametes pubescens (Schumach.) Pilát – R [22]
Trametes suaveolens (L.) Fr. – R [22]
Trametes versicolor (L.) Lloyd – C [22, 103, 110]
Trametes warnieri (Durieu & Mont.) Zmitr., Wasser & Ezhov (= *Lenzites warnieri* Durieu & Mont. in Mont.) – R [22, 73]
Trichaptum fuscoviolaceum (Ehrenb.) Ryvarden – C [22, 103, 110]
Trichaptum biforme (Fr.) Ryvarden (= *Trichaptum pargamenum* (Fr.) G. Cunn.) – R [22]
Tyromyces chioneus (Fr.) P. Karst. – R

Family Steccherinaceae Parmasto

- Antrodiella romellii* (Donk) Niemelä – R [22]
Antrodiella fragrans (A. David & Tortić) A. David & Tortić – O [9, 22, 103]
Diplomitoporus flavescens (Bres.) Domacski – R [22, 75]
Irpea lactea (Fr.) Fr. – C [22, 110]
Steccherinum fimbriatum (Pers.: Fr.) J. Erikss. – O [22, 103]
Steccherinum ochraceum (Pers. in J.F. Gmel.) Gray – O [22, 103, 110]

Family Xenasmataceae Oberw.

- Xenasmatella vaga* (Fr.) Stalpers – O

SUBCLASS RUSSULOMYCETIDAE Hibbett

ORDER RUSSULALES Kreisel ex P. M. Kirk, P. F. Cannon & J.C. David

Family Auriscalpiaceae Maas Geest.

- Artomyces pyxidatus* (Pers.) Jülich – C
Auriscalpium vulgare Gray – R [22, 110]
Lentinellus ursinus (Fr.) Kühner – O [98]

Family Bondarzewiaceae Kotl. & Pouzar

- Heterobasidion annosum* (Fr.) Bref. – O [22, 110]

Family Gloeocystidiellaceae Jülich

Gloeocystidiellum porosum (Berk. & M.A. Curtis) Donk – R

Family Hericiaceae Donk

Hericium cirrhatum (Pers.) Nikol. (= *Creolophus cirrhatus* (Pers.) P. Karst.) – R [22, 115]

Hericium coralloides (Scop.) Pers. – R [7, 22]

Family Lachnocladiaceae D. A. Reid

Scytinostroma aluta Lanq. – R [103]

Scytinostroma galactinum (Fr.) Donk – O [22]

Family Peniophoraceae Lotsy

Peniophora cinerea (Pers.) – O [22, 103, 110]

Peniophora incarnata (Pers.) P. Karst. – O [22, 103]

Peniophora limitata (Chaillet ex Fr.) Cooke – R [22, 103]

Peniophora nuda (Fr.) Bres. – R

Peniophora pini (Schleich. & DC.) Boidin – R [22, 103, 111]

Peniophora quercina (Pers.) Cooke – C [22, 103]

Peniophora rufa (Pers.) Boidin – R [22, 103]

Peniophora violaceolivida (Sommerf.) Massee – R [22, 103]

Family Russulaceae Lotsy

Lactarius camphoratus (Bull.) Fr. – R [94]

Lactarius deliciosus (L.) Gray – O

Lactarius mairei Malençon – R

Lactarius piperatus (L.) Pers. – R

Lactarius quietus (Fr.) Fr. – C

Lactarius rufus (Scop.) Fr. – R

Russula adusta (Pers.) Fr. – R

Russula aeruginea Fr. – O

Russula cyanoxantha var. *cyanoxantha* (Schaeff.) Fr. – O

Russula delica Fr. – R

Russula emetica (Schaeff.) Pers. – R

Russula exalbicans (Krapf) Melzer [22]

Russula foetens (Pers.) Pers. – R

Russula heterophylla (Fr.) Fr. – O [22]

Russula lilacea Quél. – R

Russula nigricans Fr. – R

Russula pectinatoides Peck – C [22, 34]

Russula roseipes Secr. ex Bres. – O

Russula risigallina (Batsch) Sacc. – C

Russula subfoetens W.G. Sm. – O

Russula vesca Fr. – O

Russula virescens (Schaeff.) Fr. – C

Family Stereaceae Pilát

Gloiothele citrina (Pers.) Ginns & G.W. Freeman – R [22]

Laxitextum bicolor (Pers.) Lentz – R [22]

Megalocystidium leucoxanthum (Bres.) Jülich – R [22]

Stereum gausapatum (Fr.) Fr. – R [22, 103, 110]

- Stereum hirsutum* (Willd.) Pers. – C [22, 103, 110]
Stereum sanguinolentum (Alb. & Schwein.) Fr. – R [22, 103]
Stereum subtomentosum Pouzar – O [22, 110]
Xylobolus frustulatus (Pers.) Boidin – R [22, 115]

SUBCLASS THELEPHOROMYCETIDAE Locq.

ORDER THELEPHORALES Corner ex Oberw.

Family Bankeraceae Donk

- Bankera fuligineoalba* (J.C. Schmidt) Coker & Beers ex Pouzar – R [22]
Sarcodon imbricatus (L.) P. Karst. – R [22]

Family Thelephoraceae Chevall.

- Odontia ferruginea* Pers. (= *Tomentella crinalis* (Fries) M.J. Larsen) – R [75, 103]
Thelephora anthocephala (Bull.) Fr. – R [22]
Thelephora penicillata (Pers.) Fr. – R
Thelephora terrestris Ehrh. – O [22]
Thelephora palmata (Scop.) Fr. – R [22]
Tomentella cinereoumbrina (Bres.) Stalpers – R [113]
Tomentella ferruginea (Pers.) Pat. – R
Tomentella radiosua (P. Karst.) Rick – O [22, 111]

AGARICOMYCETES INCERTAE SEDIS

- Peniophorella praetermissa* (P. Karst.) K.H. Larss. – O
Peniophorella pubera (Fr.) P. Karst. – O
Rickenella fibula (Bull.) Raithelh. – C [90, 94]
Resinicium bicolor (Alb. & Schwein.) Parmasto – R

CLASS DACRYMYCETES Doweld

ORDER DACRYMYCETALES Henn.

Family Dacrymycetaceae Bref.

- Calocera cornea* (Batsch) Fr. – C
Calocera viscosa (Pers.) Fr. – C
Dacrymyces capitatus Schwein. – R
Dacrymyces lacrymalis (Pers.) Nees – O [102]
Dacrymyces minor Peck – O
Dacrymyces tortus (Willd.) Fr. – R [102]
Dacrymyces stillatus Nees – C [102]

CLASS TREMELLOMYCETES Doweld

ORDER TREMELLALES Fr., emend. Rea

Family Syzygosporaceae Jülich

- Syzygospora tumefaciens* (Ginns & Sunhede) Ginns – R [22, 76]

Family Tremellaceae Fr.

- Tremella aurantia* Schwein. – R
Tremella foliacea Pers. – R [22]
Tremella mesenterica Retz. – O [22]
Tremella penetrans (Hauerslev) Jülich – R

PHYLUM ASCOMYCOTA Bold ex Caval.-Sm.

SUBPHYLUM SACCHAROMYCOTINA O. E. Erikss. & Winka

CLASS SACCHAROMYCETES O. E. Erikss. & Winka

SUBCLASS SACCHAROMYCETIDAE Tehler

ORDER SACCHAROMYCETALES Kudrjanzev

Family Dipodascaceae Engl. & E. Gilg

Dipodascus armillariae W. Gams as anamorph *Geotrichum decipiens* (Tul. & C. Tul.) W. Gams – R

SUBPHYLUM TAPHRINOMYCOTINA O. E. Erikss. & Winka

CLASS TAPHRINOMYCETES Eriksson & Winka

ORDER TAPHRINALES Gäum. & C. W. Dodge

Family Taphrinaceae Gäum. & C. W. Dodge

Protomyces macrosporus Unger – C [22]

Taphrina betulae (Fuckel) Johanson – R [22]

Taphrina bullata (Berk. & Broome) Tul. – O [22]

Taphrina padi (Jacz.) Mix – R [22]

Taphrina polyspora (Sorokin) Johanson – R [22]

Taphrina populina (Fr.) Fr. – R [22]

Taphrina pruni Tul. – O [22]

Taphrina sadebeckii Johanson (reidentified from *Taphrina tosquinetii* (Westend.) Tul.) – O [22]

SUBPHYLUM PEZIZOMYCOTINA O. E. Erikss. & Winka

CLASS EUROTIOMYCETES O. E. Erikss. & Winka

SUBCLASS EUROTIOMYCETIDAE Geiser & Lutzoni

ORDER ELAPHOMYCETALES Trappe

Family Elaphomycetaceae Tul. ex Paol.

Elaphomyces granulatus Fr. – R [22]

Family Trichocomataceae E.Fisch.

Isaria farinosa (Holmsk.) Fr. (=*Paecilomyces farinosus* (Holmsk.) A.H.S. Brown & G. Sm.) – R [22]

CLASS LECANOROMYCETES O. E. Erikss. & Winka

SUBCLASS LECANOROMYCETIDAE P. M. Kirk, P. F. Cannon, J.C. David & Stalpers ex Miądl.,
Lutzoni & Lumbsch

ORDER LECANORALES Nannf.

Family Dactylosporaceae Bellem. & Hafellner

Dactylospora stygia (Berk. & M.A. Curtis) Hafellner – R [62]

SUBCLASS OSTROPOMYCETIDAE Reeb, Lutzoni & Cl. Roux

ORDER OSTROPALES Nannf.

Family Stictidaceae Fr.

Stictis radiata (L.) Pers. (=*Schmitzomia radiata* (L.) W. Phillips) – R [38]

CLASS LEOTIOMYCETES Eriksson & Winka

SUBCLASS LEOTIOMYCETIDAE P. M. Kirk, P. F. Cannon, J.C. David & Stalpers ex Miądl.,
Lutzoni & Lumbsch

ORDER ERYSPHALES H. Gwynne-Vaughan

Family Erysiphaceae Tul. & C. Tul.

Blumeria graminis (DC.) Speer – C [91]

Erysiphe adunca (Wallr.) Fr.

Erysiphe alphitoides (Griffon & Maubl.) U. Braun & S. Takam. (=*Microsphaera alphitoides* Griffon & Maubl.)
– C [91]

Erysiphe aquilegiae DC.

Erysiphe astragali DC., in de Candolle & Lamarck (=*Microsphaera astragali* (DC.) Trevis.) [91]

Erysiphe baeumleri (Magnus) U. Braun & S. Takam. (=*Microsphaera baeumleri* Magnus)

Erysiphe buhrii U. Braun

Erysiphe convolvuli DC. – C

Erysiphe cruciferarum Opiz ex L. Junell

Erysiphe euonymi DC. (=*Microsphaera euonymi* (DC.) Sacc.) [105]

Erysiphe euonymi-japonici (Vienn.-Bourg.) U. Braun & S. Takam. (=*Oidium euonymi-japonici* (Arcang.)
Sacc.) [105]

Erysiphe heraclei DC. – R

Erysiphe lonicerae DC. (as *Microsphaera lonicerae* (DC.) Wint.)

Erysiphe necator Schwein. (=*Uncinula necator* (Schwein.) Burrill)

Erysiphe palczewskii (Jacz.) U. Braun & S. Takam. (=*Microsphaera palczewskii* Jacz.) – C

Erysiphe pseudacaciae (P.D. Marchenko) U. Braun & S. Takam. (=*Microsphaera pseudacaciae* (P.D.
Marchenko) U. Braun)

Erysiphe polygoni DC. – C

Erysiphe trifolii Grev. – O

Erysiphe urticae (Wallr.) S. Blumer

Golovinomyces artemisiae (Grev.) V.P. Heluta (=*Erysiphe artemisiae* Grev.)

Golovinomyces biocellatus (Ehrenb.) V.P. Heluta (=*Erysiphe biocellata* Ehrenb.)

Golovinomyces cichoracearum (DC.) V.P. Heluta (=*Erysiphe cichoracearum* DC.) – C

Golovinomyces cynoglossi (Wallr.) V.P. Heluta (=*Erysiphe cynoglossi* (Wallr.) U. Braun)

Golovinomyces depressus (Wallr.) V.P. Heluta (=*Erysiphe depressa* (Wallr.) Schltld.)

Golovinomyces orontii (Castagne) V.P. Heluta (=*Erysiphe orontii* Castagne)

Golovinomyces verbasci (Jacz.) V.P. Heluta (=*Erysiphe verbasci* (Jacz.) S. Blumer) [105]

Neoerysiphe galeopsidis (DC.) U. Braun (=*Golovinomyces galeopsidis* (DC.) Heluta) [105]

Phyllactinia alnicola U. Braun (=*Microsphaera alni* (DC.) G. Winter) [105]

Phyllactinia fraxini (DC.) Fuss

Phyllactinia guttata (Wallr.) Lév. (=*Phyllactinia suffulta* (Rebent.) Sacc., =*Phyllactinia corylea* (Pers.) P.
Karst.) – R [105]

Phyllactinia mali (Duby) U. Braun

Podosphaera aphanis (Wallr.) U. Braun & S. Takam. (=*Sphaerotheca aphanis* (Wallr.) U. Braun)

Podosphaera clandestina var. *aucupariae* (Erikss.) U. Braun

Podosphaera dipsacacearum (Tul. & C. Tul.) U. Braun & S. Takam.

Podosphaera euphorbiae (Castagne) U. Braun & S. Takam. (=*Sphaerotheca euphorbiae* (Castagne)
E.S. Salmon)

Podosphaera fugax (Penz. & Sacc.) U. Braun & S. Takam. (=*Sphaerotheca fugax* Penz. & Sacc.)

- Podosphaera fuliginea* (Schltdl.) U. Braun & S. Takam. (=*Sphaerotheca fuliginea* (Schltdl.) Pollacci [105])
Podosphaera fusca (Fr.) U. Braun & Shishkoff, in Braun & Takamatsu (=*Sphaerotheca fusca* (Fr.) S. Blumer)
Podosphaera leucotricha (Ellis & Everh.) E. S. Salmon
Podosphaera macularis (Wallr.) U. Braun & S. Takam. (=*Sphaerotheca humuli* (DC.) Burrill [105])
Podosphaera mors-uvae (Schwein.) U. Braun & S. Takam. (=*Sphaerotheca mors-uvae* (Schwein.) Berk. & M.A. Curtis) – C (in agrocenoses only)
Podosphaera pannosa (Wallr.) de Bary (=*Sphaerotheca pannosa* (Wallr.) Lév.) – R
Podosphaera plantaginis (Castagne) U. Braun & S. Takam. (=*Sphaerotheca plantaginis* (Castagne) L. Junell) – C
Podosphaera tridactyla (Wallr.) de Bary
Sawadaia bicornis (Wallr.) Miyabe – C [105]
Sawadaia tulasnei (Fuckel) Homma – O
Sphaerotheca epilobii (Wallr.) de Bary

ORDER HELOTIALES Nannf.

Family Arachnopezizaceae Hosoya, J.G. Han & Baral

- Arachnopeziza araneosa* (Sacc.) Korf – R [62]
Arachnopeziza aurata Fuckel – R
Eriopezia caesia (Pers.) Rehm – R [22]

Family Cenangiaceae Rehm. emend. Baral & Pärtel

- Cenangium ferruginosum* Fr. – R
Encoelia furfuracea (Roth) P. Karst. – O [22, 38]

Family Dermateaceae Fr.

- Blumeriella hiemalis* (B.B. Higgins) Pöldmaa (=*Blumeriella jaapii* (Rehm) Arx) – C [22]
Calloria neglecta (Lib.) B. Heas + anamorph *Cylindrocolla urticae* (Pers.) Bonord. – C [22, 62]
Catinella olivacea (Batsch) Boud. – R [22]
Dermea acerina (Peck) Rehm – R
Dermea padi (Alb. & Schwein.) Fr. + anamorph *Micropora padina* (Pers.) Sacc. – R
Diplocarpon rosae F.A. Wolf – C
Drepanopeziza ribis (Kleb.) Höhn. – O [22]
Drepanopeziza salicis (Tul. & C. Tul.) Höhn. – C [22]
Leptotrichila ranunculi (Fr.) Schüepp (=*Dothidea ranunculi* Fr.) – R [22]
Mollisia cinerea-complex – C [22, 62]
Mollisia discolor (Mont. & Fr.) W. Phillips – O [62]
Mollisia ligni (Desm.) P. Karst. – R [22]
Mollisia melaleuca (Fr.) Sacc. – O [22]
Mollisia perparvula P. Karst. – O
Mollisia spectabilis Kirschst. – R [62]
Pezicula acerina (Fr.) P. Karst. & Har. – R [22]
Pezicula acericola (Peck) Peck ex Sacc. & Berl. [39, 62]
Pezicula aesculea Kirschst. [39]
Pezicula cinnamomea (DC.) Sacc.
Pezicula eucrita (P. Karst.) P. Karst. [62]
Pseudopeziza medicaginis (Lib.) Sacc. – R [22]
Pseudopeziza trifolii (Biv.) Fuckel – R [22]

- Pyrenopeziza benesuada* (Tul.) Gremmen – O [62]
Pyrenopeziza petiolaris (Alb. & Schwein.) Nannf. – R
Tapesia lividofusca (Fr.) Rehm – R
Tapesia fusca (Pers.) Fuckel – R
Tapesia strobilicola (Rehm) Sacc. – R

Family Helotiaceae Rehm

- Articulospora moniliformis* Ranzoni – R [67]
Ascocoryne cylindrium (Tul.) Korf – R [22, 62]
Ascocoryne sarcooides (Jacq.) J.W. Groves & D.E. Wilson – C [22, 38, 62]
Bisporella citrina (Batsch) Korf & S.E. Carp. – C [22, 62]
Chlorociboria aeruginosa (Oeder) Seaver ex C.S. Ramamurthi, Korf & L.R. Batra – O [22]
Cyathicula coronata (Bull.) Rehm – O [62]
Cyathicula culmicola (Desm.) De Not. – O
Crocicreas pallidum (Velen.) S.E. Carp. – R [62]
Cyathicula cyathoidea (Bull.) Thüm. – C [62]
Crocicreas cyathoideum var. *cacaliae* (Pers.) S.E. Carp. – O
Hymenoscyphus fructigenus (Bull.) Gray – O
Hymenoscyphus imberbis (Bull.) Dennis – O
Strossmayeria basitricha (Sacc.) Dennis as anamorph *Pseudospiropes simplex* (Kunze ex Nees) M.B. Ellis – O

Family Hyaloscyphaceae Nannf.

- Albotricha acutipila* (P. Karst.) Raitv. – R [62]
Belonidium mollissimum (Fuckel) Raitv. (=*Trichopeziza mollissima* (Lasch) Fuckel) – R
Brunnipila fuscescens (Pers.) Baral (=*Lachnum fuscescens* (Pers.) P. Karst.) – R [22]
Calycellina populina (Fuckel) Höhn. – R [62]
Cistella grevillei (Berkeley) Raitv. (=*Discocistella grevillei* (Berk.) Svrček) – R
Dasyscyphella nivea (R. Hedw.) Raitv. – O [62]
Dasyscyphus crystallinus (Fuckel) Sacc. (=*Lachnum crystallinum* (Fuckel) Rehm) – R [22]
Dasyscyphus pudibundus (Quél.) Sacc. (=*Lachnum pudibundum* (Quél.) J. Schröt.) – R [62]
Dasyscyphus virgineus (Batsch) Gray (=*Lachnum virgineum* (Batsch) P. Karst.) – C [22]
Dematiocypha dematiicola (Berk. & Broome) Svrček – R
Hyaloscypha spiralis (Velen.) J.G. Han, Hosoya & H.D. Shin – R [62]
Hyaloscypha aureliella (Nyl.) Huhtinen – C [22]
Hyaloscypha daedaleae Velen. – O [62]
Hyaloscypha hyalina (Pers.) Boud. – R [22]
Hyaloscypha quercicola (Velen.) Huhtinen – O [62]
Lasiobelonium lonicerae (Alb. & Schwein.) Raitv. – R [62]
Lachnellula pulverulenta (Lib.) Sasagawa & Hosoya – R
Lachnum brevipilosum Baral – R
Perrotia flammea (Alb. & Schwein.) Boud. – O [22]
Polydesmia pruinosa (Berk. & Broome) Boud. – R
Rodwayella citrinula (P. Karst.) Spooner – R

Family Rutstroemiaceae Holst-Jensen, L.M. Kohn & T. Schumach.

- Lanzia luteovirescens* (Roberge ex Desm.) Dumont & Korf – C [62]
Rutstroemia firma (Pers.) P. Karst. – C [62]

Family Sclerotiniaceae Whetzel

- Botryotinia fuckeliana* (de Bary) Whetzel as anamorph *Botrytis cinerea* Pers. – C [22, 105]
Ciboria amentacea (Balb.) Fuckel – O
Ciboria batschiana (Zopf) N.F. Buchw. (=*Sclerotinia pseudotuberosa* (Rehm) Rehm) – C [22, 38]
Ciboria betulae (Woronin) W.L. White – R [22]
Ciboria caucus (Rebent.) Fuckel – R
Ciboria coryli (Schellenberg) N.F. Buchw. – O
Ciborinia whetzelii (Seaver) Seaver
Dumontinia tuberosa (Bull.) L.M. Kohn – C [22, 38, 62]
Monilinia fructigena (Aderh. & Ruhland) Honey as anamorph *Monilia fructigena* (Pers.) Pers. – C [22, 105]
Monilinia laxa (Aderh. & Ruhland) Honey as anamorph *Monilia laxa* (Ehrenb.) Sacc. & Voglino – O [22]
Sclerencoelia fascicularis (Alb. & Schwein.) Pärtel & Baral (=*Encoelia fascicularis* (Alb. & Schwein.) P. Karst.) – O [22, 38]
Sclerotinia pseudotuberosa (Rehm) Rehm – C [22]
Sclerotinia sclerotiorum (Lib.) de Bary – C

Family Tympanidaceae Baral & Quijada

- Holwaya mucida* (Schulzer) Korf & Abawi – R
Tympanis alnea (Pers.) Fr. (reidentified from *Tympanis conspersa* (Fr.) Fr.) – R [22]

HELOTIALES INCERTAE SEDIS

- Trimmatostroma betulinum* (Corda) S. Hughes – C
Trimmatostroma salicis Corda – C

ORDER LEOTIALES Korf & Lizoň

Family Bulgariaceae Fr.

- Bulgaria inquinans* (Pers.) Fr. – R [22, 38]

ORDER RHYTISMATALES M. E. Barr ex Minter

Family Cryptomycetaceae Höhn.

- Potebniamyces pyri* (Berk. & Broome) Dennis (=*Phaciella discolor* (Mouton & Sacc.) Potebnia) [22]

Family Rhytismataceae Chevall.

- Cocomyces coronatus* (Schumach.) De Not. – O [22]
Colpoma quercinum (Pers.) Wallr. – O [22]
Lophodermium pinastri (Schrad.) Chevall. – C [22]
Propolis farinosa (Pers.) Fr. – C [22, 62]
Rhytisma acerinum (Pers.) Fr. + anamorph *Melasmia acerina* Lév. – C [22, 62]
Rhytisma punctatum (Pers.) Fr. + anamorph *Melasmia punctata* Thüm. – C [22, 105]
Rhytisma salicinum (Pers.) Fr. + anamorph *Melasmia salicina* Lév. – R [22]
Therrya fuckelii (Rehm) Kujala (reidentified from *Therrya pini* (Alb. & Schwein.) Höhn.) – C [22]

ORDER THELEBOLALES P.F. Cannon

Family Thelebolaceae Eckblad

- Coprotus disculus* Kimbr., Luck-Allen & Cain – R
Coprotus niveus (Fuckel) Kimbr., Luck-Allen & Cain – R
Thelebolus crustaceus (Fuckel) Kimbr. – R
Thelebolus polysporus (P. Karst.) Otani & Kanzawa – R

CLASS ORBILIOMYCETES O. E. Erikss. & Baral

ORDER ORBILIALES Baral, O. E Erikss., G. Marson & E. Weber

Family Orbiliaceae Nannf.

Arthrobotrys oligospora Fresen. – R

Orbilia carpobolooides (P. Crouan & H. Crouan) Baral (= *Habrostictis carpobolooides* (P. Crouan & H. Crouan) Boud.) – R

Orbilia xanthostigma (Fr.) Fr. – C [22]

CLASS PEZIZOMYCETES O.E. Erikss. & Winka

ORDER Pezizales J. Schröt. in Engler & Prantl

Family Ascobolaceae Boud. ex Sacc.

Ascobolus albidus P. Crouan & H. Crouan – R

Ascobolus furfuraceus Pers. – R

Ascobolus sacchariferus Brumm. – R

Saccobolus thaxteri Brumm. – R

Family Chorioactidaceae Pfister

Desmazierella acicola Lib. – R

Family Discinaceae Benedix

Discina fastigiata (Krombh.) Svrček & J. Moravec (= *Gyromitra fastigiata* (Krombh.) Rehm) – C [62, 66]

Gyromitra esculenta (Pers.) Fr. – C [62]

Gyromitra gigas (Krombh.) Cooke – R

Family Helvellaceae Fr.

Helvella atra J. König – R [22]

Helvella compressa (Snyder) N.S. Weber – R

Helvella corium (O. Weberb.) Massee – R

Helvella crispa (Scop.) Fr. – O [22]

Helvella elastica Bull. – R [22]

Helvella lacunosa-complex – R [22]

Helvella macropus (Pers.) P. Karst. – R [22]

Helvella queletii Bres. (= *Paxina queletii* (Bres.) Stangl)

Family Morchellaceae Rchb.

Morchella esculenta (L.) Pers. (= *M. vulgaris* (Pers.) Boud., = *M. conica* Pers.) – O [62]

Ptychoverpa bohemica (Krombh.) Boud. (= *Verpa bohemica* (Krombh.) J. Schröt.) – O [22, 38, 62]

Family Pezizaceae Dumort.

Peziza ampliata Pers. [62]

Peziza apiculata Cooke – R

Peziza arvernensis Boud. – R [62]

Peziza badia Pers. – R

Peziza badioides Donadini – O

Peziza domiciliana Cooke – R [62]

Peziza granularis Donadini – R

Peziza phyllogena Cooke – O [62]

Peziza varia (Hedw.) Alb. & Schwein. (=*Peziza cerea* Sowerby, =*Peziza micropus* Pers., =*Peziza repanda* Wahlenb.) – C [62]

Peziza vesiculosa Bull. (=*Pustularia vesiculosa* (Bull.) Fuckel) – O [22]

Family Pyronemataceae Corda

Anthracobia melaloma (Alb. & Schwein.) Boud.

Anthracobia subatra (Rehm) M.M. Moser

Anthracobia tristis (E. Bommer, M. Rousseau & Sacc.) Boud.

Cheilymenia stercorea (Pers.) Boud. (=*Lachnea stercorea* (Pers.) Gillet) [58]

Geopyxis carbonaria (Alb. & Schwein.) Sacc. – O [22]

Humaria hemisphaerica (F.H. Wigg.) Fuckel – C [22, 62]

Neottiella atrichi Benkert (=*Muscia catharinea* Gzhitsk.) – O [62]

Otidea alutacea (Pers.) Massee – R

Paratrichophaea boudieri (Grelet) Bronckers – R [62]

Pseudombrophila hepatica (Batsch) Brumm. (=*Ascobolus vinosus* Berk.) [58]

Pyronema domesticum (Sowerby) Sacc. – C

Scutellinia crinita (Bull.) Lambotte (reidentified from *Scutellinia scutellata* (L.) Lambotte) – C [22, 62]

Scutellinia nigrohirtula (Svrček) Le Gal – O [62]

Family Rhizinaceae Bonord.

Rhizina undulata Fr. – C [22]

Family Sarcoscyphaceae Le Gal ex Eckblad

Microstoma protractum (Fr.) Kanouse – R [22]

Sarcoscypha austriaca (Beck ex Sacc.) Boud. – C [62]

Family Sarcosomataceae Kobayasi

Conoplea fusca Pers. – R

Conoplea olivacea Fr. – R

Urnula craterium (Schwein.) Fr. – O [62]

PEZIALES INCERTA SEDIS

Chromelosporium carneum (Pers.) Hennebert – R

Oedocephalum glomerulosum (Bull.) Sacc. – R

CLASS SORDARIOMYCETES O. E. Erikss. & Winka

SUBCLASS HYPOCREOMYCETIDAE O. E. Erikss. & Winka

ORDER CORONOPHORALES Nannf.

Family Chaetosphaerellaceae Huhndorf, A.N. Mill. & F.A. Fernández

Chaetosphaerella phaeostroma (Durieu & Mont.) E. Müll. & C. Booth as anamorph *Oedemium minus* (Link) S. Hughes – O

ORDER HYPOCREALES Lindau, in Engler & Prantl

Family Bionectriaceae Samuels & Rossman

Hydropisphaera peziza (Tode) Dumort. – C [22]

Nectriopsis exigua (Pat.) W. Gams as anamorph *Verticillium rexianum* (Sacc.) Sacc., reidentified from
Nectriopsis candicans (Plowr.) Maire – C [22]

Stromatonectria caraganae (Höhn.) Jaklitsch & Voglmayr
 (=*Cryphonectria caraganae* (Höhn.) Sacc.) – R

Family Clavicipitaceae (Lindau) Earle

Beauveria bassiana (Bals.-Criv.) Vuill. – O [22]

- Claviceps purpurea* (Fr.) Tul. – O [22]
Cordyceps militaris (L.) Link – R [22]
Epichloë typhina (Pers.) Tul. & C. Tul. – R [22]
Simplicillium lamellicola (F.E.V. Sm.) Zare & W. Gams
 (= *Verticillium lamellicola* (F.E.V. Sm.) W. Gams) – R
Tolypocladium capitatum (Holmsk.) Quandt, Kepler & Spatafora (= *Elaphocordyceps capitata* (Holmsk.) G. H. Sung, J. M. Sung & Spatafora; = *Cordyceps capitata* (Holmsk.) Link) – R [22]
Tolypocladium ophioglossoides (J.F. Gmel.) Quandt, Kepler & Spatafora (= *Elaphocordyceps ophioglossoides* (Ehrh.) G. H. Sung, J. M. Sung & Spatafora; = *Cordyceps ophioglossoides* (Ehrh.) Link) – R
Torrubiella arachnophila (J. R. Johnst.) Mains – R [22]

Family Hypocreaceae De Not.

- Calcarisporium arbuscula* Preuss – O [14]
Gliocladium album (Preuss) Petch – O
Hypocrea citrina (Pers.) Fr. – R [22, 87]
Hypocrea crystalligena Jaklitsch – R [31]
Hypocrea koningii Lieckf., Samuels & W. Gams as anamorph *Trichoderma koningii* Oudem. – R [22, 87]
Hypocrea lixii Pat. as anamorph *Trichoderma harzianum* Rifai – O [22, 87]
Hypocrea minutispora B.S. Lu, Fallah & Samuels – O [22, 81, 87]
Hypocrea pachybasioides Yoshim. Doi as anamorph *Trichoderma polysporum* (Link) Rifai – R [22, 87]
Hypocrea pulvinata Fuckel – R [22, 87]
Hypocrea rufa (Pers.) Fr. as anamorph *Trichoderma viride* Pers. – R [22, 58, 87]
Hypocrea sinuosa P. Chaverri & Samuels – R [30, 87]
Hypocrea strictipilosa P. Chaverri & Samuels – C [3, 22, 30, 87, 105]
Hypocrea subeffusa Jaklitsch – R [31]
Hypocrea sulphurea (Schwein.) Sacc. – R [3, 22, 31, 87]
Hypocrea viridescens Jaklitsch & Samuels as anamorph *Trichoderma viridescens* (A.S. Horne & H.S. Will.) Jaklitsch & Samuels – R [31]
Hypomyces aurantius (Pers.) Tul. as anamorph *Cladobotryum varium* Nees – C [22]
Hypomyces cervinigenus Rogerson & Simms as anamorph *Mycogone cervina* Ditmar – R [22]
Hypomyces chrysospermus Tul. & C. Tul. as anamorph *Sepedonium chrysospermum* (Bull.) Fr. – C [22]
Hypomyces microspermus Rogerson & Samuels as anamorph *Sepedonium microspermum* Besl – O [22]
Hypomyces ochraceus (Pers.) Tul. & C. Tul. (= *Hypomyces armeniacus* Tul. & C. Tul.) as anamorph *Cladobotryum verticillatum* (Link) S. Hughes – C [22]
Hypomyces odoratus G.R.W. Arnold as anamorph *Cladobotryum mycophilum* (Oudem.) W. Gams & Hooz. – R [22]
Hypomyces polyporinus Peck as anamorph *Cladobotryum clavisporum* (D.J. Gray & Morgan-Jones) Rogerson & Samuels – R
Hypomyces rosellus (Alb. & Schwein.) Tul. as anamorph *Cladobotryum dendroides* (Bull.) W. Gams & Hoozemans – O [22]
Hypomyces semitransluscens G.R.W. Arnold as anamorph *Cladobotryum fungicola* (G.R.W. Arnold) Rogerson & Samuels – O [22]
Hypomyces sp. as anamorph *Cladobotryum stereicola* (G.R.W. Arnold) Rogerson & Samuels (= *Sympodiophora stereicola* G.R.W. Arnold) – O [14]
Hypomyces stephanomatis Rogerson & Samuels as anamorph *Stephanoma strigosum* Wallr. – O [22]

Sphaerostilbella aureonitens (Tul. & C. Tul.) Seifert, Samuels & W. Gams as anamorph *Gliocladium penicillloides* Corda – R
Sporopagomyces chrysostomus (Berk. & Broome) K. Pöldmaa & Samuels – R [22]

Family Nectriaceae Tul. & C. Tul.

Acrostalagmus luteoalbus (Link) Zare, W. Gams & Schroers – R [22]
Aphanocladium album (Preuss) W. Gams – C
Dialonectria episphaeria (Tode) Cooke (=*Cosmospora episphaeria* (Tode) Rossman & Samuels) – C [22]
Cosmospora purtonii (Grev.) Rossman & Samuels – O [22]
Fusarium oxysporum Schltdl. – O [17, 22]
Fusicolla epistroma (Höhn.) Gräfenhan & Seifert – R
Nectria cinnabrina (Tode) Fr. cum anamorph *Tubercularia vulgaris* Tode – C [22]
Nectria decora (Wallr.) Fuckel (=*Calonectria decora* (Wallr.) Sacc.) – R [22]
Nectria dematiosa (Schwein.) Berk. – R
Nectria magnusiana Rehm (=*Cosmospora magnusiana* (Rehm) Rossman & Samuels – R [22]
Neonectria ditissima (Tul. & C. Tul.) Samuels & Rossman (=*Neonectria galligena* (Bres.) Rossman & Samuels) as anamorph *Cylindrocarpon heteronema* (Berk. & Broome) Wollenw. – R [22]
Neonectria punicea (J.C. Schmidt) Castl. & Rossman (=*Nectria punicea* (J.C. Schmidt) Fr.) – R [22]
Pseudonectria tilachlidii W. Gams as anamorph *Tilachlidium brachiatum* (Batsch) Petch (=*Isaria brachiata* (Batsch) Schumach. – O [22]
Stylolectria purtonii (Grev.) Gräfenhan (=*Cosmospora purtonii* (Grev.) Rossman & Samuels) – O [22]

HYPocreales incertae sedis

Stilbella byssiseda (Pers.) Seifert – R [22]

ORDER MICROASCALES Luttr. ex Benny & Kimbr.

Family Ceratocystidaceae Locq.

Ceratocystis pilifera (Fr.) C. Moreau (=*Ophiostoma piliferum* (Fr.) Syd. & P. Syd.) – O

Family Microascaceae Luttr. ex Malloch

Doratomyces stemonitis (Pers.) F.J. Morton & G. Sm. (=*Stysanus fimetarius* (P. Karst.) Massee & E.S. Salmon) [58]

SUBCLASS SORDARIOMYCETIDAE O.E. Erikss. & Winka

ORDER BOLINIALES R.F. Cannon

Family Boliniaceae Rick

Camarops polysperma (Mont.) J.H. Mill. – R

ORDER CONIOCHAETALES Huhndorf, A.N. Mill. & F.A. Fernández

Family Coniochaetaceae Malloch & Cain

Coniochaeta velutina (Fuckel) Cooke – R

ORDER DIAPORTHALES Nannf.

Family Diaporthaceae Höhn. ex Wehm.

Diaporthe arctii (Lasch) Nitschke (=*Phomopsis arctii* (Lasch) Traverso) – C

Diaporthe caraganae Jacz. – O [22]

Diaporthe eres Nitschke – O [22]

Family Gnomoniaceae G. Winter

- Cryptosporella suffusa* (Fr.) L.C. Mejía & Castl. (=*Ophiovalsa suffusa* (Fr.) Petr.) – O [22]
Diaporthella aristata (Fr.) Petr. – R [22]
Discula pyri (Fuckel) Höhn. (=*Myxosporium piri* Fuckel) [105]
Discula umbrinella (Berk. & Broome) M. Morelet (non *Apiognomonia errabunda* (Roberge) Höhn.) – R [22]
Ophiognomonia intermedia (Rehm) Sogonov (=*Discula betulina* (J. Kickx f.) Arx) – R
Ophiognomonia setacea (Pers.) Sogonov (=*Gnomonia setacea* (Pers.) Ces. & De Not.) – R [22]
Plagiostoma apiculatum (Wallr.) L.C. Mejía (=*Cryptodiaporthe apiculata* (Wallr.) Petr.) – R
Septomyxa negundinis Allesch. – O

Family Melanconidaceae G. Winter

- Melanconis stilbostoma* (Fr.) Tul. & C. Tul. as anamorph *Melanconium bicolor* Nees – C [22]
Melanconium betulinum J.C. Schmidt & Kunze – C

Family Pseudovalsaceae M.E. Barr

- Pseudovalsa umbonata* (Tul.) Sacc. – R [22]

Family Valsaceae Tul. & C. Tul.

- Amphiporthe leiphaemia* (Fr.) Butin – R
Cryptosporella hypodermia (Fr.) Sacc. (=*Valsa hypodermia* (Fr.) Fr.) [105]
Cytospora ceratosperma (Tode) G.C. Adams & Rossman (=*Valsa ceratosperma* (Tode) Maire, =*Valsa ceratophora* Tul. & C. Tul., =*Cytospora sacculus* (Schwein.) Gvrit.) [22, 105]
Cytospora fugax (Bull.) Fr. (=*Valsa salicina* (Pers.) Fr.) [22]
Cytospora leucostoma (Pers.) Sacc. (=*Valsa persoonii* Nitschke, =*Leucostoma persoonii* (Nitschke) Höhn.) [22]
Cytospora microspora (Corda) Rabenh. [105]
Hypospilina pustula (Pers.) M. Monod – R [105]
Valsa ambiens subsp. *ambiens* (Pers.) Fr. as anamorph *Cytospora leucosperma* (Pers.) Fr. (=*Cytospora ambiens* Sacc.) – C [22, 105]
Valsa ceratosperma (Tode) Maire + anamorph *Cytospora sacculus* (Schwein.) Gvrit. – C [22]
Valsa nivea (Hoffm.) Fr. (=*Leucostoma niveum* (Hoffm.) Höhn.) – C [22]
Valsa persoonii Nitschke (=*Leucostoma persoonii* (Nitschke) Höhn.) as anamorph *Cytospora cincta* Sacc. (=*Valsa cincta* (Fr.) Fr., =*Leucostoma cinctum* (Fr.) Höhn.) [105]
Valsa salicina (Pers.) Fr. – O [22]
Valsa sordida Nitschke as anamorph *Cytospora chrysosperma* (Pers.) Fr. – C
Valsella melastoma (Fr.) Fuckel (=*Valsa melastoma* Fr.) – [22, 105]

DIAPORTHALES INCERTAE SEDIS

- Sirococcus conigenus* (Pers.) P.F. Cannon & Minter – [O]

ORDER OPHIOSTOMATALES Benny & Kimbr.

Family Ophiostomataceae Nannf.

- Ophiostoma ulmi* (Buisman) Melin & Nannf. – R [22]

ORDER PHYLLACHORALES M. E. Barr

Family Phyllachoraceae Theiss. & P. Syd.

- Phyllachora graminis* (Pers.) Fuckel – R [22]
Polystigma fulvum Pers. ex DC. (=*Polystigma ochraceum* (Wahlenb.) Sacc.) – R [22]
Polystigma rubrum (Pers.) DC. – O [22]

ORDER SORDARIALES Chadef. ex D. Hawksw. & O. E. Erikss.

Family Cephalothecaceae Höhn.

Albertiniella polyporicola (Jacz.) Malloch & Cain – R [16, 22]

Family Chaetomiaceae G. Winter

Chaetomium bostrychodes Zopf – O

Chaetomium elatum Kunze – R [22]

Chaetomium globosum Kunze ex Fr. – O [22]

Chaetomium robustum L.M. Ames – R

Family Chaetosphaeriaceae Réblová, M.E. Barr & Samuels

Chaetosphaeria inaequalis (Grove ex Berl. & Voglino) W. Gams & Hol.-Jech. as anamorph *Gonytrichum caesium* var. *caesium* Nees – O

Chaetosphaeria ovoidea (Fr.) Constant., K. Holm & L. Holm as anamorph *Menispora glauca* Pers. – R

Chaetosphaeria pulviscula (Curr.) C. Booth – O

Chaetosphaeria sp. as anamorph *Menispora ciliata* Corda – R

Melanopsammella vermicularioides (Sacc. & Roum.) Réblová, M.E. Barr & Samuels as anamorph

Chloridium virescens var. *virescens* (Pers.) W. Gams & Hol.-Jech. – R

Family Lasiosphaeriaceae Nannf.

Cercophora coprophila (Fr.) N. Lundq. (=*Podospora coprophila* (Fr.) Niessl) [58]

Lasiosphaeria ovina (Pers.) Ces. & De Not. – C [22]

Lasiosphaeris hirsuta (Fr.) A.N. Mill. & Huhndorf (=*Lasiosphaeria hirsuta* (Fr.) Ces. & De Not.) – C [22]

Lasiosphaeris hispida (Tode) Clem. (=*Lasiosphaeria hispida* (Tode) Fuckel) – R [22]

Podospora decipiens (G. Winter) Niessl

Podospora levii Milovtz. [58]

Podospora pauciseta (Ces.) Traverso (=*Podospora anserina* (Rabenh.) Niessl)

Ruzenia spermoides (Hoffm.) O. Hilber (=*Lasiosphaeria spermoides* (Hoffm.) Ces. & De Not.) – O

Family Nitschkiaceae (Fitzp.) Nannf.

Acanthonitschkea tristis (Pers.) Nannf. – R

Bertia moriformis (Tode) De Not. – O [22]

Nitschzia cupularis (Pers.) P. Karst. – R [22]

Family Sordariaceae G. Winter

Sordaria fimicola (Roberge ex Desm.) Ces. & De Not. – R [58]

Sordaria superba De Not. – O

ORDER TRICHOSPHAERIALES M. E. Barr

Family Helminthosphaeriaceae Samuels, Cand. & Magni

Echinospaeria canescens (Pers.) A.N. Mill. & Huhndorf (=*Lasiosphaeria canescens* (Pers.) P. Karst.) – R [22]

Endophragmiella oblonga (Matsush.) S. Hughes – R

Spadicoides atra (Corda) S. Hughes – O [120]

Family Trichosphaeriaceae G. Winter

Brachysporium nigrum (Link) S. Hughes – O

Brachysporium obovatum (Berk.) Sacc. – O

SORDARIOMYCETIDAE INCERTAE SEDIS

- Phomatospora dinemasporium* J. Webster (=*Dinemasporium strigosulum* (P. Karst.) Mussat) – R
Plectosporium alismatis (Oudem.) W.M. Pitt, W. Gams & U. Braun (=*Plectosphaerella alismatis* (Oudem.) A.J.L. Phillips, A. Carlucci & M.L. Raimondo, =*Spermosporina alismatis* (Oudem.) U. Braun) – O [17, 22]
Thyronectria berolinensis (Sacc.) Seaver (=*Nectria berolinensis* (Sacc.) Cooke) – O [22]
Thyronectria coryli (Fuckel) Jaklitsch & Voglmayr (=*Nectria coryli* Fuckel) – R

SUBCLASS XYLARIOMYCETIDAE O. E. Erikss. & Winka

ORDER XYLARIALES Nannf.

Family Amphisphaeriaceae G. Winter

- Amphisphaeria millepunctata* (Fuckel) Petr. – R [22]
Discosia artocreas (Tode) Fr. – R
Lepteutypa fuckelii (Nitschke) Petr. – R [22]
Pestalotiopsis stevensonii (Peck) Nag Raj – O

Family Diatrypaceae Nitschke

- Anthostoma gastrinum* (Fr.) Sacc. – R [22, 105]
Anthostoma melanotes (Berk. & Broome) Nitschke – R [22]
Cryptosphaeria eunomia (Fr.) Fuckel – R [22]
Cryptosphaeria ligniota (Fr.) Auersw. – C [22]
Diatrype bullata (Hoffm.) Fr. – O [22]
Diatrype decorticata (Pers.) Rappaz – R
Diatrype stigma (Hoffm.) Fr. – C [22]
Diatrype undulata (Pers.) Fr. – R [22]
Diatrypella favacea (Fr.) De Not. – C [22]
Diatrypella quercina (Pers.) Cooke – C [22]
Eutypa lata (Pers.) Tul. & C. Tul. – C [22]
Eutypa maura (Fr.) Sacc. (=*Eutypa acharii* Tul. & C. Tul.) – C
Eutypa sparsa Romell – R
Peroneutypa scoparia (Schwein.) Carmarán & A.I. Romero (=*Eutypella scoparia* (Schwein.) Ellis & Everh.) – O

Family Xylariaceae Tul. & C. Tul.

- Annulohypoxylon multiforme* var. *multiforme* (Fr.) Y.M. Ju, J.D. Rogers & H.M. Hsieh – C [22]
Biscogniauxia cinereolilacina (J.H. Mill.) Pouzar – R [22]
Biscogniauxia marginata (Fr.) Pouzar – O [22]
Biscogniauxia repanda (Fr.) Kuntze – R [22]
Daldinia childiae J.D. Rogers & Y.M. Ju – C [12, 22]
Daldinia fissa Lloyd – C [12, 22]
Daldinia loculata (Lév.) Sacc. – R [12, 22]
Daldinia pyrenaica M. Stadler & Wollw. – C [8, 12, 22]
Hypoxylon cercidicola (Berk. & M.A. Curtis) Y.M. Ju & J.D. Rogers – R [22]
Hypoxylon crocopeplum Berk. & M.A. Curtis – R [22]
Hypoxylon fuscum (Pers.) Fr. – C [22]
Hypoxylon howeanum Peck – O [5, 22]
Hypoxylon macrocarpum Pouzar – O [22]
Hypoxylon perforatum (Schwein.) Fr. – R [22]

- Hypoxyton petriniae* M. Stadler & J. Fourn. – R [22]
Hypoxyton rubiginosum (Pers.) Fr. – C [22]
Kretzschmaria deusta (Hoffm.) P.M.D. Martin – C [22]
Lopadostoma pouzarii Granmo & L.E. Petrini – R [22]
Nemania confluens (Tode) Læssøe & Spooner – R [22]
Nemania serpens (Pers.) S.F. Gray – C [22]
Rosellinia britannica L.E. Petrini, Petrini & S.M. Francis – R [22]
Rosellinia corticium (Schwein.) Sacc. – O [22]
Rosellinia subsimilis Sacc. – O [22]
Rosellinia thelena (Kunze) Rabenh. – R
Xylaria filiformis (Alb. & Schwein.) Fr. – R [22]
Xylaria hypoxylon (L.) Grev. – C [22]
Xylaria longipes Nitschke – R [22]
Xylaria polymorpha (Pers.) Grev. – C [22]

CLASS DOTHIDEOMYCETES O. E. Erikss. & Winka

ORDER BOTRYOSPHARIALES C. L. Schoch, Crous & Shoemaker

Family Botryosphaeriaceae Theiss. & Syd.

- Botryosphaeria quercuum* (Schwein.) Sacc. – O [22]
Botryosphaeria sarmentorum A.J.L. Phillips, Alves & Luque + anamorph *Diplodia malorum* Fuckel,
= *Diplodia melaena* Lév., = *Diplodia pruni* Fuckel + *Dothiorella sarmentorum* (Fr.) A.J.L. Phillips, Alves & Luque – O
Botryosphaeria obtusa (Schwein.) Shoemaker as anamorph *Sphaeropsis malorum* Peck – O [22]
Botryosphaeria visci (Kalchbr.) Arx & E. Müll. + anamorph *Sphaeropsis visci* (Sollm.) Sacc. – C [79]
Camarosporium visci Sacc. – O
Phyllosticta chelidonii Bres. (= *Phoma glaucii* Brunaud) – R [17, 18, 22]
Phyllosticta cruenta (Kunze ex Fr.) J. Kickx f. – C [22]
Phyllosticta polygonorum Sacc. – R [17, 22]
Phyllosticta populina (Fuckel) Sacc. (= *Phyllosticta intermixta* Seaver) – R [22]
Phyllosticta potentillae Sacc. – R [17, 22]
Phyllosticta tiliae Sacc. & Speg. – O [17, 22]
Sphaeropsis irregularis Berk. & M.A. Curtis – [67]
Sphaeropsis sapinea (Fr.) Dyko & B. Sutton (= *Diplodia pinea* (Desm.) J. Kickx f.) – C

ORDER CAPNODIALES Woron.

Family Davidiellaceae C.L. Schoch, Spatafora, Crous & Shoemaker

- Cladosporium cladosporioides* (Fresen.) G.A. de Vries – O
Cladosporium herbarum (Pers.) Link – C [17, 22]
Cladosporium iridis (Fautrey & Roum.) G.A. de Vries – C
Cladosporium lycoperdinum Cooke – C

Family Mycosphaerellaceae Lindau

- Cercospora beticola* Sacc. – C (in agroecosystems only)
Cercospora virgaureae (Thüm.) Allesch. (= *Cercospora cana* Sacc.) [105]
Mycosphaerella isariphora (Desm.) Johanson – O
Passalora aesculina (Ellis & Kellerm.) U. Braun & Crous (= *Cercospora aesculina* Ellis & Kellerm.) – O [17, 18]

- Passalora ferruginea* (Fuckel) U. Braun & Crous (= *Mycovellosiella ferruginea* (Fuckel) Deighton) – R [17, 22, 105]
- Passalora fraxini* (DC.) Arx (= *Cercospora fraxini* (DC.) Sacc., non *Cercospora fraxini* Ellis & Kellerm.) [105]
- Passalora graminis* (Fuckel) Höhn. – C [17, 22]
- Passalora microsora* (Sacc.) U. Braun (= *Mycosphaerella microsora* Syd.) – O [17, 22]
- Passalora murina* (Ellis & Kellerm.) U. Braun & Crous – R [17, 18, 22]
- Phloeospora maculans* (Berenger) Allesch. (= *Mycosphaerella mori* (Fuckel) F.A. Wolf) – O [22]
- Ramularia centaureae-atropurpureae* Bubák [17, 18, 22]
- Ramularia grevilleana* (Oudem.) Jorst. (= *Ramularia arvensis* Sacc., = *Mycosphaerella fragariae* (Tul.) Lindau) – C [22]
- Ramularia lactea* (Desm.) Sacc. – O [17, 22]
- Ramularia lamii* var. *lamii* Fuckel – O [17, 22]
- Ramularia rhabdospora* (Berk. & Broome) Nannf. – R [17, 22]
- Ramularia silenes-procumbentis* Karak. – R [17, 18, 22]
- Ramularia tricherae* Lindr. – O [17, 22]
- Ramularia urticae* Ces. [105]
- Septoria aegopodii* Desm. ex J. Kickx (= *Mycosphaerella podagrariae* (Roth) Petr.) – C [22]
- Septoria crataegi* Desm. ex J. Kickx fil. – R
- Septoria erigerontis* Peck – O [17, 22]
- Septoria geranii* Roberge ex Desm. – R [22]
- Septoria lamiicola* Sacc. – R [17, 22]
- Septoria lycopersici* var. *lycopersici* Speg. [105]
- Septoria lysimachiae* (Lib.) Westend. – R [17, 22]
- Septoria oenotherae* Westend. – R [17, 22, 105]
- Septoria polygonorum* Desm. – O [17, 22]
- Septoria pyricola* (Lib.) Desm. (= *Mycosphaerella pyri* (Auersw.) Boerema) – C [17, 22, 105]
- Septoria ribis* (Lib.) Desm. (= *Mycosphaerella ribis* Sacc., = *M. grossulariae* (Fr.) Lindau) – C [22]
- Septoria salicicola* (Fr.) Sacc. (= *Mycosphaerella salicicola* (Fr.) Johanson ex Oudem.) – R
- Septoria salicis* Westend. – R [22]
- Septoria tabacina* Died. – R [17, 18, 22]
- Septoria tritici* Desm. (= *Mycosphaerella graminicola* (Fuckel) J. Schröt.) – C (in agrocenoses only)
- Septoria urticae* Roberge & Desm. – R [17, 22]
- Septoria verbascicola* Berk. & M.A. Curtis [17, 22]
- Sphaerulina frondicola* (Fr.) Verkley, Quaedvlieg & Crous (= *Septoria populi* Desm., = *Mycosphaerella populi* (Auersw.) J. Schröt.) – O [17, 22]
- Sphaerulina quercicola* (Desm.) Quaedvlieg, Verkley & Crous (= *Septoria quercicola* Sacc.) – R
- Sphaerulina westendorpii* Verkley, Quaedvlieg & Crous (= *Septoria rubi* Westend.) – C [22]

ORDER DOTHIDEALES Lindau

Family Magnaportheaceae P.F. Cannon

Thyrostroma carpophilum (Lév.) B. Sutton as anamorph *Stigmina carpophila* (Lév.) M.B. Ellis, (= *Clasterosporium carpophilum* (Lév.) Aderh.) – C (in agrocenoses only)

Family Saccotheciaceae Bonord.

Aureobasidium pullulans (de Bary & Löwenthal) G. Arnaud – C

ORDER MYTILINIDIALES E.W.A. Boehm, C.L. Schoch & Spatafora

Family Mytilinidiaceae Kirschst

Taeniolella alta (Ehrenb.) S. Hughes – R
Taeniolella stricta (Corda) S. Hughes – O

ORDER HYSTERIALES Lindau

Family Hysteriaceae Chevall.

Hysterium angustatum Pers. – R [22]
Hysterium pulicare (Lightf.) Pers. – O [22]
Hysterobrevium mori (Schwein.) E.W.A. Boehm & C.L. Schoch (=*Hysterographium mori* (Schwein.) Rehm) – O [22]
Hysterobrevium smilacis (Schwein.) E.W.A. Boehm & C.L. Schoch (=*Gloniopsis smilacis* (Schwein.) Underw. & Earle, =*Gloniopsis curvata* (Fr.) Sacc.) – C [22]
Hysterographium fraxini (Pers.) De Not. – R [22]

ORDER PATELLARIALES D. Hawksw. & O.E. Erikss.

Family Patellariaceae Corda

Patellaria atrata (Hedw.) Fr. (=*Lecanidion atratum* (Hedw.) Endl.) – O [62]

ORDER PLEOSPORALES Luttrell ex M.E. Barr

Family Cucurbitariaceae G. Winter

Cucurbitaria acervata (Fr.) Fr. – R [22]
Cucurbitaria caraganae P. Karst. + anamorph *Camarosporium caraganae* P. Karst. – C [22]
Cucurbitaria elongata (Fr.) Grev. – O [22]
Cucurbitaria naucosa (Fr.) Fuckel (=*Gibberidea naucosa* (Fr.) Kuntze) – R [22]
Gibberidea visci Fuckel – C [22]

Family Didymellaceae Gruyter, Aveskamp & Verkley

Ascochyta calystegiae Sacc. – R [22]
Ascochyta chelidonii Kabát & Bubák *Ascochyta chelidoniicola* Melnik) – O [17, 18, 22]
Ascochyta pisi Lib. [105]
Ascochyta viciae-pisiformis Bubák [105]
Boeremia exigua var. *exigua* (Desm.) Aveskamp, Gruyter & Verkley (=*Phyllosticta petasitidis* Ellis & Everh.) [105]
Epicoccum nigrum Link – R
Hendersonia biseptata f. *pruni-domesticae* Sacc. [105]
Hendersonia mali Thüm. [105]
Hendersonia vagans Fuckel [105]

Family Didymosphaeriaceae Munk

Didymosphaeria futilis (Berk. & Broome) Rehm – R [22]

Family Leptosphaeriaceae M.E. Barr

Coniothyrium montagnei Castagne – R [17, 22]
Leptosphaeria acuta (Fuckel) P. Karst. – C
Leptosphaeria doliolum (Pers.) Ces. & De Not. – C
Ophiobolus erythrosporus (Riess) G. Winter – O

Family Lophiostomataceae Sacc.

Lophiostoma compressum (Pers.) Ces. & De Not. – R [22]
Lophiostoma vagabundum Sacc. – R
Sigarispora caulinum (Fr.) Thambug., Wanasinghe, Kaz. Tanaka & K.D. Hyde (=*Lophiostoma caulinum* (Fr.) Ces. & De Not.) – O

Family Montagnulaceae M.E. Barr

Paraconiothyrium tiliae (F. Rudolphi) Verkley & Gruyter (=*Asteromella tiliae* (F. Rudolphi) Butin & Kehr) – O

Family Massariaceae Nitschke

Aglaospora profusa (Fr.) De Not. – R

Massaria anomia (Fr.) Petr.

Massaria platanoidea Voglmayr & Jaklitsch

Massaria vomitoria Berk. & M.A. Curtis (reidentified from *Massaria inquinans* (Tode) De Not.) – R [22]

Family Massarinaceae Munk

Helminthosporium velutinum (Link) Link – O

Vaginatispore fuckelii (Sacc.) Thambugala, Wanasinghe, Kaz. Tanaka & K.D. Hyde (=*Lophiostoma fuckelii* Sacc.) – R

Family Melanommataceae G. Winter

Melanomma pulvis-pyrius (Pers.) Fuckel – R [22]

Pseudotrichia mutabilis (Pers.) Wehm. – R [22]

Family Phaeosphaeriaceae M.E. Barr

Ampelomyces quisqualis Ces. (=*Cicinobolus cesatii* de Bary) – R [105]

Parastagonospora avenae (A.B. Frank) Quaedvlieg, Verkley & Crous (=*Septoria avenae* A.B. Frank) [105]

Phaeosphaeria vagans (Niessl) O. E. Erikss. – R [22]

Stagonospora atriplicis (Westend.) Lind (=*Phyllosticta atriplicis* Desm.) [105]

Family Pleomassariaceae M.E. Barr

Prosthemium betulinum Kunze (=*Pleomassaria siparia* (Berk. & Broome) Sacc.) – R

Prosthemium stellare Riess (=*Pleomassaria holoschista* (Berk. & Broome) Sacc.) – R

Splanchnonema argus (Berk. & Broome) Kuntze as anamorph *Myxocystis polycystis* (Berk. & Broome) Sacc. – R

Stegonsporium pyriforme (Hoffm.) Corda – R

Family Pleosporaceae Nitschke

Alternaria alternata (Fr.) Keissl. (=*Macrosporium solani* Cooke) – C [105]

Bipolaris sorokiniana (Sacc. in Sorokin) Shoemaker (=*Cochliobolus sativus* (S. Ito & Kurib.) Drechsler ex Dastur) – C (in agrocnoses only)

Dendryphiopsis atra (Corda) S. Hughes (=*Kirschsteinothelia atra* (Corda) D. Hawksw., =*K. aethiops* (Sacc.) D. Hawksw. – O

Pleospora herbarum (Pers.) Rabenh. – O [22]

Family Polystomellaceae Theiss. & Syd.

Dothidella ulmi (C.-J. Duval) G. Winter (=*Platychora ulmi* (J. Schröt.) Petr.) – O [22]

Family Sporangiaceae Munk

Sporormia lageniformis Fuckel (=*Sporormiella lageniformis* (Fuckel) S.I. Ahmed & Cain) – R [58]

Sporormiella australis (Speg.) S.I. Ahmed & Cain – O

Sporormiella minima (Auersw.) S.I. Ahmed & Cain – O

Sporormiella vexans (Auersw.) S.I. Ahmed & Cain – R

Family Tubeufiaceae M.E. Barr

Tubeufia cerea (Berk. & M.A. Curtis) Höhn. – R [22]

Family Venturiaceae E. Müll. & Arx ex M.E. Barr

Venturia inaequalis (Cooke) G. Winter as anamorph *Fusicladium dendriticum* (Wallr.) Fuckel
 (= *Fusicladium pomii* (Fr.) Lind) – C [22, 105]

Venturia pirina Aderh. as anamorph *Fusicladium pyrorum* (Lib.) Fuckel – O [22, 105]

Venturia tremulae Aderh. as anamorph *Fusicladium radiosum* var. *radiosum* (Lib.) Lind. (= *Pollaccia radiososa* (Lib.) E. Bald. & Cif.) – O [22]

ASCOMYCOTA INCERTAE SEDIS

Bactrodesmium betulincola M. B. Ellis – R

Bispora betulina (Corda) S. Hughes – R

Cacumisporium capitulatum (Corda) S. Hughes – R

Colletotrichum dematium (Pers.) Grove – C

Cordana pauciseptata Preuss – R

Cryptocoryneum condensatum (Wallr.) E.W. Mason & S. Hughes – C

Dothiopsis pyrenophora (Fr.) P. Karst. ex Sacc. [105]

Eversia subopaca (Cooke & Ellis) J.L. Crane & Schokn. – R

Exosporium tiliae Link – C

Geniculospora inflata (Ingold) Sv. Nilsson ex Marvanová & Sv. Nilsson – R [67]

Hansfordia pulvinata (Berk. & M.A. Curtis) S. Hughes (= *Dicyma pulvinata* (Berk. & M.A. Curtis)
 Arx) – R

Labrella agrostidis (Lib.) Sacc. (= *Cheilaria agrostidis* Lib.) – R [17, 22]

Lylea tetracoila (Corda) Hol.-Jech. – C

Monodictys capensis R.C. Sinclair, Boshoff & Eicker – O [120]

Monodictys putredinis (Wallr.) S. Hughes – C

Mycosylva setosa Udagawa & Furuya – R [4]

Nematogonum ferrugineum (Pers.) S. Hughes – R

Phoma graminis Westend. – R [22]

Phoma macrostoma Mont. – R [22]

Phoma verbenaceae Tassi – R [17, 18, 22]

Plectosphaerella alismatis (Oudem.) A.J.L. Phillips, Carlucci & M.L. Raimondo (= *Spermoporina alismatis* (Oudem.) U. Braun) [22]

Rhinotrichella globulifera G. Arnaud ex de Hoog – R [15]

Rutola graminis (Desm.) J.L. Crane & Schokn. – R [17, 18, 22]

Selenosporella gliocladioides Helfer – R

Sphaeropsis irregularis Berk. & M.A. Curtis – R [67]

Sporidesmium folliculatum (Corda) E.W. Mason & S. Hughes – O

Stagonosporopsis artemisiicola (Hollós) Aveskamp, Gruyter & Verkley (= *Phoma artemisiicola* Hollós,
 reidentified from *Phoma artemisiae* Henn.) – R [17, 22]

Taeniolina scripta (P. Karst.) P.M. Kirk – O

Trichothecium roseum (Pers.) Link – O

Variocladium giganteum (S.H. Iqbal) Descals & Marvanová (= *Tricladium giganteum* S.H. Iqbal) – R
 [67]

Unconfirmed records:

Antrodiella semisupina (Berk. & M.A. Curtis) Ryvarden [22, 113] – the name was wrongly applied to
 Antrodiella fragrans (A. David & Tortić) A. David & Tortić

- Antrodia pulvinascens* (Pilát) Niemelä – O [114] – a misused name for the species, which we reidentified as a recently described species *Antrodia hyalina* Spirin, Miettinen & Kotir. [106]
- Arcyria globosa* Schwein. [46, 48] – reidentified as *A. pomiformis* (Leers) Rostaf.
- Atopospora betulina* (Fr.) Petr. [22] – incorrect identification
- Capnodium salicinum* Mont. [22] – wrongly given in the list as teleomorph of *Fumago vagans* Pers. (nomen invalid)
- Collaria biasperospora* (Kowalski) Dhillon & Nann.-Bremek. ex Ing [46, 47] – reidentified as *C. arcyronema* (Rostaf.) Nann.-Bremek. ex Lado.
- Cucurbitaria acervata* var. *triseptata* Spag. [105] – published by Spagorov in 1915 as var. nov., nomen nudum; modern placement unknown
- Cucurbitaria moricola* Sacc. [22] – incorrect identification
- Didymella quercina* Petr. [22] – incorrect identification
- Eutypa flavovirens* (Pers.) Tul. & C. Tul. [22] – reidentified as *Eutypa maura* (Fr.) Sacc.
- Fumago vagans* Pers. [100] – nomen invalid; the type collection is composed of a mixture of *Aureobasidium pullulans*, *Cladosporium herbarum* and some other moulds
- Fusicoccum pini* (Preuss) Sacc. – the name was wrongly applied to *Sirococcus conigenus* (Pers.) P.F. Cannon & Minter
- Hypocrea gelatinosa* (Tode) Fr. [22, 87] – reidentified as *Hypocrea strictipilosa* P. Chaverri & Samuels
- Hypoxyton julianii* L.E. Petrini [22] – reidentified as *Hypoxyton crocopeplum* Berk. & M.A. Curtis
- Junghuhnia semisupiniformis* (Murrill) Ryvarden [9] – a misused name for the species, which we reidentified later as *Antrodiella fragrans* (A. David & Tortić) A. David & Tortić
- Licea iridis* Ing & McHugh [46-47] – aberrant member of Physarales.
- Licea tenera* E. Jahn [46] – not a myxomycete.
- Mycosphaerella bellona* (Sacc.) Hara (=*Sphaerella bellona* Sacc.) [105] – incorrect identification of *Mycosphaerella pyri* (Auersw.) Boerema
- Nectriopsis candicans* (Plowr.) Maire [22] – reidentified as *Nectriopsis exigua* (Pat.) W. Gams
- Neonectria coccinea* (Pers.) Rossman & Samuels [22] – reidentified as *Neonectria ditissima* (Tul. & C. Tul.) Samuels & Rossman
- Phoma artemisiae* P. Henn. [22] – reidentified as *Stagonosporopsis artemisiicola* (Hollós) Aveskamp, Gruyter & Verkley
- Phanerochaete sordida* (P. Karst.) J. Erikss. & Ryvarden – O [22, 114] – this is a name for a more northerly-distributed taxon, which was not confirmed from Gomolsha Forests. Instead, the occurrence of the closely related *Phanerochaete livescens* (P. Karst.) Volobuev & Spirin was proven [119]
- Physarum daamsii* Nann.-Bremek. [46, 47] – reidentified as *Badhamia panicea* (Fr.) Rostaf.
- Physarum straminipes* Lister [46, 47] – reidentified as *Badhamia melanospora* Speg.
- Rosellinia glabra* (Fuckel) L.E. Petrini [22] – reidentified as *Rosellinia thelena* (Fr.) Rabenh.
- Sacidium petasitis* Spag. [105] – published by Spagorov in 1915 as sp. nov., nomen nudum; modern placement unknown
- Scutellinia scutellata* (L.) Lambotte [22] – reidentified as *Scutellinia crinita* (Bull.) Lambotte
- Serpula lacrymans* (Wulfen) P. Karst. – R [13, 22] – listed here, as it was always registered in the indoor-environment, and was never recorded in the wild forested areas.
- Strobilurus tenacellus* (Pers.) Singer [93] – reidentified as *Strobilurus stephanocystis* (Hora) Singer.
- Tubifera casparyi* (Rostaf.) T. Macbr. [46, 48] – reidentified as *Tubifera ferruginea* (Batsch) J.F. Gmel. sensu str.

Tubifera microsperma (Berk. & M.A. Curtis) G.W. Martin [46–48] – on the basis of this and several other specimens the new species *Tubifera pseudomicrosperma* Leontyev, Schnittler & S.L. Stephenson was described.

Valsella melastoma (Fr.) Sacc. – incorrect identification.

Literature cited

1. Adl SM, Simpson AGB, Lane CE, Lukeš J, Bass D, Bowser SS, et al. 2012. The revised classification of Eukaryotes. *Journal of Eukaryotic Microbiology* 59 (5), pp. 429–514. doi:10.1111/j.1550-7408.2012.00644.x
2. Akulov OYu, Atemasova TA, Bartenev OF, Viter SG, Vlaschenko AS, Zinenko OI, Korshunov OV, Saidahmedova NB, Skorobogatov EV, Utevsky OYu. 2006. Reorganization of the functional zoning of the National nature park “Gomilshansky lisy.” *Nature Reserves in Ukraine* 12 (2), pp. 73–79, [in Ukrainian]
3. Akulov OYu, Bereznytskyi OA. 2005. New for Ukraine *Hypocreales* and data on their distribution. Fungi in anthropogenic ecosystems: book of abstracts, Komarov Botanical Institute, Saint-Petersburg, pp. 22–27, [in Russian]
4. Akulov OYu, Holubtsova YuI. 2010. Second record of coprophilous micromycete *Mycosylva setosa* from Ukraine. *Mycology and Phytopathology* 44 (6), pp. 497–500, [in Russian]
5. Akulov OYu, Leontyev DV, Kuzub VV. 2003. *Hypoxyylon howeianum* Peck – new for Ukraine species of Xylariales. In: Atemasov AA (ed.), Scientific research in the territories of nature reserves of Kharkiv region. V. N. Karazin Kharkiv National University, Kharkiv, pp. 11–15, [in Russian]
6. Akulov OYu, Leontyev DV. 2001. *Acrasida* and *Protostelida* representatives new to Ukraine. Actual problems of botany and ecology: book of abstracts, M. G. Kholodny Institute of Botany, Nizhin, p. 10, [in Russian]
7. Akulov OYu, Leontyev DV. 2008. Fungi of the Red Data Book of Ukraine from the National Nature Park “Gomilshansky lisy.” *Ukrainian Botanical Journal* 65 (4), pp. 586–589, [in Ukrainian]
8. Akulov OYu, Ordynets OV, Stadler M. 2005. New data on the distribution of *Daldinia pyrenaica* M. Stadler & Wollweber. Actual problems of botany and ecology: book of abstracts, M. G. Kholodny Institute of Botany, Uman, pp. 17–18, [in Ukrainian]
9. Akulov OYu, Ordynets OV. 2006. New data on the distribution of *Junghuhnia semisupiniforme* (Murrill) Ryvarden. Actual problems of botany, ecology and biotechnology: book of abstracts, M. G. Kholodny Institute of Botany, Kyiv, pp. 31–32, [in Ukrainian]
10. Akulov OYu, Ordynets OV. 2006. Rare fungi from the National Nature Park “Gomilshansky lisy”. In: Atemasov, A.A. (ed.), Scientific research in the territories of nature reserves of Kharkiv region. V. N. Karazin Kharkiv National University, Kharkiv, [in Russian]
11. Akulov OYu, Prydiuk MP. 2007. The preliminary checklist of boletoid fungi of Ukraine. *Pagine di Micologia* 27, pp. 117–144
12. Akulov OYu, Stadler M. 2008. Critical revision of data about *Daldinia* species in Ukraine, in: Current Mycology in Russia. National Academy of Mycology, Moskow, p. 47, [in Russian]
13. Akulov OYu, Usichenko AS, Leontyev DV, Yurchenko EO, Prydiuk MP. 2003. Annotated checklist of aphyllophoroid fungi of Ukraine. *Mycena* 2 (2), pp. 1–76
14. Akulov OYu. 2011a. New and noteworthy species of anamorphic mycoparasitic fungi in Ukraine. 1. *Ukrainian Botanical Journal* 68 (2), pp. 244–253, [in Ukrainian]
15. Akulov OYu. 2011b. New and noteworthy species of anamorphic mycoparasitic fungi in Ukraine. 2. *Ukrainian Botanical Journal* 68 (3), pp. 426–235, [in Ukrainian]
16. Akulov OYu. 2013. Morphological features, distribution and ecological preferences of *Albertiniella polyporicola* (Jacz.) Malloch & Cain. *Chornomorski Botanical Journal* 9 (4), pp. 553–558, [in Ukrainian]
17. Andrianova TV. 2004. Mitosporic fungi of projected Homilshanskyi National Nature Park and its vicinity (Ukraine). *Ukrainian Botanical Journal* 61(4), pp. 56–64, [in Ukrainian]
18. Andrianova TV. 2004. New for Ukraine mitosporic fungi from Kharkiv forest-steppe. *Ukrainian Botanical Journal* 61(4), pp. 26–35, [in Ukrainian]
19. Belya (Svyokon) OV. 2012. Gasteromycetes of the Left-bank Ukraine (PhD thesis). V. N. Karazin Kharkiv National University, Kharkiv, [in Ukrainian]
20. Chuzhykova SH. 1976. Comparative analysis of aquatic fungi species compositions of waterbodies with different chemical characteristics. V. N. Karazin Kharkiv National University, Kharkiv, [in Russian]
21. Czerniaev VM. 1845. Nouveaux Cryptogames de l’Ukraine et quelques mots sur la flore de ce pays. *Bulletin de la Societe Imperiale des Naturalistes de Moscou* 18 (3), pp. 132–167
22. Dudka IO, Heluta VP, Andrianova TV, Hayova VP, Tykhonenko YuYa, Prydiuk MP, et al. 2009. Fungi of the nature reserves and national nature parks of Eastern Ukraine. Aristey, Kyiv, 734 p., [in Ukrainian]

23. Haavik LJ, Billings SA, Guldin JM, Stephen FM. 2015. Emergent insects, pathogens and drought shape changing patterns in oak decline in North America and Europe. *Forest Ecology and Management* 354, pp. 190–205. doi:10.1016/j.foreco.2015.06.019
24. Hansen K, Læssøe T, Pfister DH. 2002. Phylogenetic diversity in the core group of *Peziza* inferred from ITS sequences and morphology. *Mycological Research* 106 (8), pp. 879–902. doi: 10.1017/S0953756202006287
25. Hausknecht A. 2009. A monograph of the genera *Conocybe* Fayod and *Pholiotina* Fayod in Europe. Alassio: Edizioni Candusso, 968 p.
26. Heilmann-Clausen J, Aude E, van Dort K, Christensen M, Piltaver Aj, Veerkamp M, et al. 2014. Communities of wood-inhabiting bryophytes and fungi on dead beech logs in Europe – reflecting substrate quality or shaped by climate and forest conditions? *Journal of Biogeography* 41 (12), pp. 2269–2282. doi:10.1111/jbi.12388
27. Heluta VP, Akulov OYu. 2012. *Leccinum* species (Boletales, Basidiomycota), new and rare in Ukraine. *Ukrainian Botanical Journal* 69 (6), pp. 886–900, [in Ukrainian]
28. Hibbett DS, Binder M, Bischoff JF, Blackwell M, Cannon PF, Eriksson OE, et al. 2007. A higher-level phylogenetic classification of the Fungi. *Mycological Research* 111 (5), pp. 509–547. doi:10.1016/j.myres.2007.03.004
29. Hjortstam K, Ryvarden L. 2009. A checklist of names in *Hyphodontia* sensu stricto - sensu lato and *Schizopora* with new combinations in *Lagarobasidium*, *Lyomyces*, *Kneiffiella*, *Schizopora*, and *Xylodon*. *Synopsis Fungorum* 26, pp. 33–55
30. Jaklitsch WM. 2009. European species of *Hypocrea* Part I. The green-spored species. *Studies in Mycology* 63, pp. 1–91. doi:10.3114/sim.2009.63.01
31. Jaklitsch WM. 2011. European species of *Hypocrea* part II: species with hyaline ascospores. *Fungal Diversity* 48 (1), pp. 1–250. doi:10.1007/s13225-011-0088-y
32. Justo A, Hibbett DS. 2011. Phylogenetic classification of *Trametes* (Basidiomycota, Polyporales) based on a five-marker dataset. *Taxon* 60, pp. 1567–1583
33. Justo A, Minnis AW, Ghignone S, Menolli N Jr., Capelari M, Rodrigues O, Malysheva EF, Contu M, Vizzini A. 2011. Species recognition in *Pluteus* and *Volvopluteus* (Pluteaceae, Agaricales): morphology, geography and phylogeny. *Mycological Progress* 10 (4), pp. 453–47. doi:10.1007/s11557-010-0716-z
34. Kholmohortsev RE, Akulov OYu. 2006. New for Ukraine species *Russula pectinatoides* Peck from National Nature Reserve “Gomolshanskie lesa.” Biology: from a molecule up to the biosphere: book of abstracts, V. N. Karazin Kharkiv National University, Kharkiv, [in Russian]
35. Kirk PM, Cannon PF, Minter DW, Stalpers JA. 2008. Ainsworth & Bisby’s Dictionary of the Fungi. CABI, 771 p. ISBN 978 0 85199 826 8
36. Kirk PM, Cooper J. “Index Fungorum”, [<http://www.indexfungorum.org/Index.htm>]
37. Kotiranta H, Saarenoksa R, Kyttövuori I. 2009. Aphyllophoroid fungi of Finland: A check-list with ecology, distribution, and threat categories. *Norrlinia* 19. Botanical Museum, Finnish Museum of Natural History, Helsinki, 223 p. ISBN 978 952 10 5310 8
38. Krasnikova OM. 2008a. New data on the discomycetes of Kharkiv forest-steppe. Youth and Progress of Biology IV: book of abstracts, Ivan Franko National University of Lviv, Lviv, pp. 98–99, [in Ukrainian]
39. Krasnikova OM. 2008b. New for Ukraine *Pezicula* Tul. & C. Tul., collected on the territory of Kharkiv forest-steppe. Modern mycology in Russia. II Congress of Russian Mycologists: book of abstracts, National Academy of Mycology, Moscow, p. 72, [in Russian]
40. Langer E, Langer G, Popa F, Rexer KH, Striegel M, Ordynets A, et al. 2015. Naturalness of selected European beech forests reflected by fungal inventories: a first checklist of fungi of the UNESCO World Natural Heritage Kellerwald-Edersee National Park in Germany. *Mycological Progress* 14 (11), pp. 1–7. doi:10.1007/s11557-015-1127-y
41. Leontyev DV, Eliasson U, Kochergina AV, Morozova II. 2009. New and rare myxomycetes of Ukraine. 1. East Forest-Steppe. *Karstenia* 49, pp. 61–67
42. Leontyev DV, Fefelov KA. 2009. *Tubulifera appplanata*, a new Myxomycete species from Eastern Europe and Northern Asia. *Bulletin de Sociedad Micologica de Madrid* 33 (1), pp. 115–127
43. Leontyev DV, Fefelov KA. 2012. Nomenclatural status and morphological notes on *Tubifera appplanata* sp. nov. (Myxomycetes). *Mycotaxon* 120 (1), pp. 247–251. doi:10.5248/120.247
44. Leontyev DV, Moreno G. 2011. *Reticularia dudkae*. A new myxomycete species from oak forests of eastern Ukraine. *Bulletin de Sociedad Micologica de Madrid* 35 (1), pp. 85–94
45. Leontyev DV, Schnittler M, Stephenson SL. 2015. A critical revision of the *Tubifera ferruginosa* complex. *Mycologia* 107 (5), pp. 959–985, doi:<http://dx.doi.org/10.3852/14-271>

46. Leontyev DV. 2006a. Species composition of Myxomycota in Gomolsha Forests national nature park (Ukraine). *Mikologiya i Fitopatologiya* 40 (2), pp. 101–107, [in Russian]
47. Leontyev DV. 2006b. New records of Myxomycetes in Ukraine. *Mikologiya i Fitopatologiya* 40 (3), pp. 218–230, [in Russian]
48. Leontyev DV. 2007. Myxomycetes of the National Nature Park “Gomolsha Forests” (PhD thesis). M.G. Kholodny Institute of Botany, Kyiv, [in Russian]
49. Leontyev DV. 2010. Myxomycetes from genera *Stemonitis*, *Stemonitopsis* and *Stemonaria* in Ukraine: identification and distribution. *Mikologiya i Fitopatologiya* 44 (5), pp. 398–409, [in Russian]
50. Leontyev DV. 2013. Myxomycetes from the genera *Comatricha*, *Macbrideola* and *Paradiacheopsis* in Ukraine: identification and distribution. *Mikologiya i Fitopatologiya* 47 (3), pp. 159–168, [in Russian]
51. Leontyev DV. 2016. Myxomycetes of the family Reticulariaceae: molecular phylogeny, morphology and systematics (Thesis for Doctor of Science (Dr Sci) degree in Biology). M.G. Kholodny Institute of Botany, Kyiv, [in Ukrainian]
52. Lohvinenko LI. 1972. Ecologic and taxonomic survey of phycomycetes of selected Ukrainian water bodies (PhD thesis), Kharkiv State University, Kharkiv, [in Russian]
53. Lohvinenko LI. 1987. Aquatic fungi of the upper and middle parts of Siversky Donets river basin. V. N. Karazin Kharkiv National University bulletin 308, pp. 39–44, [in Russian]
54. Lohvinenko LI, Mescheryakova RI, Korol OI. 1983. Leptomitales of Ukraine. V. N. Karazin Kharkiv National University bulletin 4, pp. 39–42, [in Russian]
55. Mescheryakova RI, Lohvinenko LI, Pylypenko VF. 1972. Substrate specificity of some aquatic phycomycetes. *Mycology and Phytopathology* 6 (2), pp. 161–164, [in Russian]
56. Mescheryakova RI. 1981. Aquatic fungi of Beloe Lake in the Basin of Severskyi Donets River. V. N. Karazin Kharkiv National University bulletin, Floristics, physiology and immunity of plants 211, pp. 18–20, [in Russian]
57. Milovtsova MO. 1935. Aquatic fungi of Kharkiv and its vicinity, in: *Transactions of Botanical Institute*. Kharkiv, pp. 28–37, [in Ukrainian]
58. Milovtsova MO. 1937. Materials to mycobiota of Ukrainian SSR, in: *Transactions of Botanical Institute*. Kharkiv, pp. 17–22, [in Ukrainian]
59. Mishuk SS. 2011a. Aquatic fungi of Siverskyi Donets River (MSc thesis). V. N. Karazin Kharkiv National University, Kharkiv, [in Ukrainian]
60. Mishuk SS. 2011b. New for Ukraine aquatic fungi from the middle reach of Siverskyi Donets river. *Biology: from a molecule up to the biosphere VI: book of abstracts*, V. N. Karazin Kharkiv National University, Kharkiv, pp. 494–495, [in Ukrainian]
61. Mishuk SS. 2011c. Water quality assessment of the Siverskyi Donets river middle reaches with bioindication method. *Biology: from a molecule up to the biosphere VI: book of abstracts*, V. N. Karazin Kharkiv National University, Kharkiv, pp. 496–497, [in Ukrainian]
62. Morozova (Yatsiuk) II, Vodyanytska OS. 2013. Contribution to the species composition of discomycetes of National Nature Park “Homilshanski lisy.” Actual problems of botany and ecology: book of abstracts, M. G. Kholodny Institute of Botany, Sholkine, pp. 49–50, [in Ukrainian]
63. Morozova (Yatsiuk) II. 2011a. New records of myxomycetes *Comatricha filamentosa* Meyl. and *Reticularia olivacea* (Ehrenb.) Fr. (Myxomycota) in Ukraine. *Ukrainian Botanical Journal* 68 (4), pp. 618–624, [in Ukrainian]
64. Morozova (Yatsiuk) II. 2011b. Rare species of Myxomycetes and conditions of their fruitification. *Biology: from a molecule up to the biosphere VI: book of abstracts*, V. N. Karazin Kharkiv National University, Kharkiv, pp. 497–499, [in Ukrainian]
65. Morozova (Yatsiuk) II. 2014. New records of bryophylous discomycetes in the Kharkiv forest-steppe. *Biology: from a molecule up to the biosphere IX: book of abstracts*, Kharkiv, pp. 138–139, [in Ukrainian]
66. Morozova (Yatsiuk) II. 2014. New records of discomycetous fungi from Ukraine. *Turkish Journal of Botany* 38 (2), pp. 398–405. doi:10.3906/bot-1301-14
67. Nedilko OP. 1999. Final report on the scientific-research work “Search and study of new mycobiota representatives in the North-East Ukraine.” V. N. Karazin Kharkiv National University, Kharkiv, [in Ukrainian]
68. Nguyen NH, Landeros F, Orijel RG, Hansen K, Vellinga EC. 2013. The *Helvella lacunosa* species complex in western North America: cryptic species, misapplied names and parasites. *Mycologia* 105 (5), pp. 275–1286. doi: 10.3852/12-391
69. Nordén J, Penttilä R, Siitonens J, Tomppo E, Ovaskainen O. 2013. Specialist species of wood-inhabiting fungi struggle while generalists thrive in fragmented boreal forests. *Journal of Ecology* 101 (3), pp. 701–712. doi:10.1111/1365-2745.12085
70. Ordynets OV, Akulov OYu, Usichenko AS. 2007. *Albatrellus cristatus* (Fr.) Kotl. & Pouzar, a rare aphylophoroid fungus firstly recorded in the left-bank Ukraine. *Biodiversity. Ecology. Adaptation. Evolution III: book of abstracts*, Odessa, p. 94, [in Ukrainian]

71. Ordynets OV, Akulov OYu. 2006a. New data about distribution of *Phlebia rufa* (Pers. ex Fr.) M.P. Christ. and *Phlebia acerina* Peck in Eastern Europe. Biology: from a molecule up to the biosphere I: book of abstracts, V. N. Karazin Kharkiv National University, Kharkiv, [in Russian]
72. Ordynets OV, Akulov OYu. 2006b. Rare fungus *Piptoporus quercinus* (Schrad.) P. Karst. from the National Nature Park "Gomilshansky lisy". In: Atemasov AA (ed.), Scientific research in the territories of nature reserves of Kharkiv region. V. N. Karazin Kharkiv National University, Kharkiv, [in Russian]
73. Ordynets OV, Akulov OYu. 2010. Species of aphyllophoroid fungi to be included to the next edition of the Red Data Book of Ukraine. The Plant Kingdom in the Red Data Book of Ukraine: Implementing the Global Strategy for Plant Conservation II: book of abstracts, Kyiv, pp. 233–238, [in Ukrainian]
74. Ordynets OV, Akulov OYu. 2012. Izumska luka as a unique hotspot of fungal diversity in Eastern Ukraine. Nature Reserves in Ukraine 18 (1–2), pp. 30–37, [in Ukrainian]
75. Ordynets OV, Usichenko AS. 2007. New data on the wood-inhabiting fungi (Aphyllophorales Rea) of Left-Bank Ukraine. Actual problems of natural sciences: book of abstracts, Nizhyn Gogol State University, Nizhyn, pp. 12–13, [in Ukrainian]
76. Ordynets OV. 2009a. Members of *Leucogyrophana mollusca*-complex in Ukraine. Biology: from a molecule up to the biosphere IV: book of abstracts, V. N. Karazin Kharkiv National University, Kharkiv, Ukraine, pp. 303–304, [in Ukrainian]
77. Ordynets OV. 2009b. *Trametes ljubarskii* Pilát – a rare polypore species firstly recorded in Ukraine. The Journal of Volodymyr Hnatiuk Ternopil National Pedagogical University, Biology 4 (41), pp. 76–82, [in Ukrainian]
78. Pärtel K, Baral HO, Tamm H, Pöldmaa K. 2016. Evidence for the polyphyly of *Encoelia* and *Encoelioidae* with reconsideration of respective families in Leotiomycetes. Fungal Diversity, 37 p. doi:10.1007/s13225-016-0370-0
79. Phillips AJL, Alves A, Pennycook SR, Johnston PR, Ramaley A, Akulov OYu, Crous PW. 2008. Resolving the phylogenetic and taxonomic status of dark-spored teleomorph genera in the Botryosphaeriaceae. Persoonia 21 (1), pp. 29–55. doi:10.3767/003158508X340742
80. Potebnya AO. 1916. Fungal parasites on higher plants of Kharkiv and adjacent guberniya. Agricultural experimental station of the Kharkiv region, Kharkiv, [in Russian]
81. Poulain M, Meyer M, Bozonnet J, Kohn A. 2011. Les Myxomycètes. Fédération mycologique et botanique Dauphiné-Savoie, 1119 p. ISBN: 978-2951854024
82. Prylutskyi OV, Akulov OYu. 2006. *Hypocrea minutispora* B.S. Lu, Fallah & Samuels – a new for Ukraine species from the National Nature Park "Gomilshansky lisy." Biology: from a molecule up to the biosphere I: book of abstracts, Kharkiv, pp. 89–90, [in Ukrainian]
83. Prydiuk MP. 2007. New and rare for Ukraine species of the genus *Coprinus* (Pers.: Fr.) Gray. 2. The representatives of the section *Coprinus*. Ukrainian Botanical Journal 64(4), pp. 581–591, [in Ukrainian]
84. Prydiuk MP. 2014. New and rare for Ukraine species of the family Coprinaceae. 3. Genus *Coprinus* (section *Coprinus*) Ukrainian Botanical Journal 71(3), pp. 357–363, [in Ukrainian]
85. Prydiuk MP. 2015. Flora fungorum Ucrainiae. Bolbitiaceae et Coprinaceae. Interservis, Kiev, 598 p. [in Russian]
86. Prydiuk MP. 2016. New and rare for Ukraine species of the genus *Galerina*, subgenus *Tubariopsis* (Strophariaceae). Ukrainian Botanical Journal 73(1), pp. 61—71. [in Ukrainian]
87. Prylutskyi OV, Akulov OYu. 2007. Fungi of the genus *Hypocrea* Fr. in Ukraine. Youth and progress in Biology: book of abstracts, Lviv, p. 141, [in Ukrainian]
88. Prylutskyi OV, Akulov OYu. 2008a. First record of the rare species *Syzygospora tumefaciens* (Ginns & Sunhede) Ginns in Ukraine. The modern Mycology in Russia: book of abstracts, p. 231, [in Russian]
89. Prylutskyi OV, Akulov OYu. 2008b. Fungi of the genus *Leucoagaricus* in Ukraine and their conservation status. Museum-reserve: an ecology and a culture: book of abstracts, Veshenskaya, pp. 115–116, [in Russian]
90. Prylutskyi OV, Ordynets OV. 2010. Basidial macromycetes in burned pinewood from NNP "Gomilshansky lisy." Actual problems of botany and ecology: book of abstracts, pp. 86–87, [in Ukrainian]
91. Prylutskyi OV. 2007. New data about distribution and substrate preferences of *Hypocrea strictipilosa* Chaverri & Samuels. Biology: from a molecule up to the biosphere II: book of abstracts, Kharkiv, p. 354, [in Ukrainian]
92. Prylutskyi OV. 2008. Infrageneric structure of the *Amanita muscaria*-complex in Kharkiv forest-steppe. Youth and progress in Biology: book of abstracts, Lviv, pp. 114–115, [in Ukrainian]
93. Prylutskyi OV. 2010. Fungi of the genus *Strobilurus* Singer from Kharkiv forest-steppe. Biology: from a molecule up to the biosphere V: book of abstracts, Kharkiv, pp. 387–388, [in Ukrainian]

94. Prylutskyi OV. 2011a. An experience of adaptation of the plot-based mycological inventory methods on the territory of NNP "Gomilshansky lisy." Biology: from a molecule up to the biosphere VI: book of abstracts, V. N. Karazin Kharkiv National University, Kharkiv, pp. 501–502, [in Ukrainian]
95. Prylutskyi OV. 2011b. Distribution, ecological and conservation features of *Pleurotus calyptratus* (Agaricales) in Ukraine. Ukrainian Botanical Journal 68 (5), pp. 780–784, [in Ukrainian]
96. Prylutskyi OV. 2011c. Fungi of the genus *Mycena* (Pers.) Roussel from Kharkiv forest-steppe. Chornomorski Botanical Journal 7 (4), pp. 365–378, [in Ukrainian]
97. Prylutskyi OV. 2011d. Preliminary data about gilled agarics (Agaricaceae, Basidiomycota) from National Nature Park "Gomilshansky lisy." Botany and Mycology: challenges and perspectives for 2011–2020: book of abstracts, pp. 214–216, [in Ukrainian]
98. Prylutskyi OV. 2013. Substrate preferences of pleurotoid fungi in Kharkiv Forest-Steppe. Studia Biologica 7 (1), pp. 131–138, [in Ukrainian]
99. Prylutskyi OV. 2015. *Inocybe* (Agaricales, Basidiomycota) in Kharkiv forest-steppe, Eastern Ukraine. Current Research in Environmental & Applied Mycology 5 (4), pp. 408–417. doi:10.5943/cream/5/4/13
100. Robich G. 2003. *Mycena d'Europa*. A.M.B. Fondazione, Centro Studi. Micologici, Vicenza, 728 p.
101. Saidahmedova NB, Filatova OV, Prylutskyi OV, Akulov OYu, Biatov AP. 2012. NNP "Gomilshansky lisy". In: Phytodiversity of nature reserves and national nature parks of Ukraine. Kyiv, pp. 152–175, [in Ukrainian]
102. Savchenko AO. 2011. New records of the *Dacrymyces* Nees species in Ukraine. Biology: from a molecule up to the biosphere VI: book of abstracts, V. N. Karazin Kharkiv National University, Kharkiv, pp. 502–504, [in Ukrainian]
103. Shkorbatov LA. 1927. Materials to the investigation of aquatic fungi of Kharkov guberniya. In: Scientific reports in biology. Kharkiv, pp. 73–85, [in Russian]
104. Sorokin NV. 1871. Mycological essays. Proceedings of the Nature Investigators Society of the Kharkiv University 3, p. 48, [in Russian]
105. Spagorov GE. 1915. Materials to the flora of parasitic fungi of Kharkov guberniya. Proceedings of the Nature Investigators Society of the Kharkiv University 49, p. 12, [in Russian]
106. Spirin V, Miettinen O, Pennanen J, Kotiranta H, Niemelä T. 2013. *Antrodia hyalina*, a new polypore from Russia, and *A. leucaena*, new to Europe. Mycological Progress 12, pp. 53–61. doi:10.1007/s11557-012-0815-0
107. Strakhov TD. 1916. Fungi of Kharkiv vicinity. Typography of B. G. Bengis, Kharkiv, [in Russian]
108. Tedersoo L, Harend H, Buegger F, Pritsch K, Saar I, Kõjalg U. 2014. Stable isotope analysis, field observations and synthesis experiments suggest that *Odontia* is a non-mycorrhizal sister genus of *Tomentella* and *Thelephora*. Fungal Ecology 11, pp. 80–90. doi: 10.1016/j.funeco.2014.04.006
109. Treboux OYu. 1913. List of parasitic fungi collected in Kharkov guberniya. Proceedings of the Nature Investigators Society of the Kharkiv University 46, p. 18, [in Russian]
110. Usichenko AS, Akulov OYu, Leontyev DV. 2001. Wood-degrading fungi of Kharkiv region. Plant and environment: book of abstracts, V. N. Karazin Kharkiv National University, Kharkiv, pp. 105–107, [in Russian]
111. Usichenko AS, Akulov OYu. 2005. New for Ukraine and Left-Bank Ukraine aphyllophore fungi revealed on the territory of National Nature Park "Gomilshansky lisy." Actual problems of botany and ecology: book of abstracts, M. G. Kholodny Institute of Botany, Uman, pp. 24–25, [in Russian]
112. Usichenko AS, Ordynets OV, Glushenko VI. 2006. On taxonomy of *Phellinus robustus* (P. Karst.) Bourd. & Galz. *F. robiniae* Bond. and related species. The Journal of V. N. Karazin Kharkiv National University, Biology 3 (729), pp. 236–239, [in Russian]
113. Usichenko AS. 2009. New records of aphyllophoroid fungi from the north-east of Ukraine. Chornomorski Botanical Journal 5 (2), pp. 276–289, [in Ukrainian]
114. Usichenko AS. 2010. Aphyllophoroid fungi of the Kharkiv forest-steppe (PhD thesis). V. N. Karazin Kharkiv National University, Kharkiv, [in Ukrainian]
115. Usichenko AS. 2011. Rare aphyllophoroid fungi from the Gomilshanski Lisy National Nature Park. Ukrainian Botanical Journal 68 (4), pp. 570–580, [in Ukrainian]
116. Vellinga EC. 2001. *Macrolepiota*. In: Noordeloos ME, Kuyper ThW, Vellinga EC. Flora agaricina neerlandica 5. CRC Press, pp. 64–73. ISBN 9789054104957
117. Vellinga EC, de Kok RPJ, Bruns TD. 2003. Phylogeny and Taxonomy of *Macrolepiota* (Agaricaceae). Mycologia 95 (3), pp. 442–456. doi:10.2307/3761886

- 118.Venturella G, Altobelli E, Bernicchia A, Di Piazza S, Donnini D, Gargano ML, et al. 2011. Fungal biodiversity and in situ conservation in Italy. *Plant Biosystems* 145 (4), pp. 950–957. doi:10.1080/11263504.2011.633115
- 119.Volobuev S, Okun M, Ordynets A, Spirin V. 2015. The *Phanerochaete sordida* group (Polyporales, Basidiomycota) in temperate Eurasia, with a note on *Phanerochaete pallida*. *Mycological Progress* 14, pp. 1–13. doi:10.1007/s11557-015-1097-0
- 120.Zlenko OB, Morozova (Yatsiuk) II. 2013. New records of dematioid Hyphomycetes from Kharkiv region. Youth and progress of biology IX: book of abstracts, Lviv, pp. 121–122, [in Ukrainian]