CBIB TENTH UPDATE (UD10) (Ainsworth, A.M. & Henrici, A. 2021)

The online CBIB website is currently accessible at

http://basidiochecklist.science.kew.org/index.htm where searches of the checklist database can be performed on data incorporated up to and including 05 Feb 2015 (Update 6). Subsequent tranches of amendments have not been incorporated in the underlying database, but are accessible from the website (filed under "Latest Update") as a series of static updates (UD7–10). Unless and until uploading and incorporation resumes, the easiest way to access the current Checklist in its entirety is to consult the database together with the Compendium of updates UD7–10 inclusive (also filed under "Latest Update").

We would like to thank all those who have sent collections to the Kew Fungarium and those who have carried out sequencing work and/or analysed the resulting data. Special thanks to Kare Liimatainen and Tuula Niskanen for all their work on *Cortinarius* and to Nick Aplin, David Harries, Eric Janke, Geoffrey Kibby, Andy Overall and Mario Tortelli for sharing their DNA-supported findings.

CBIB and Species Fungorum (SF) are hosted at Kew and both present opinions on the taxonomy of British fungi. Since 2005, the two products have been updated independently, largely on a voluntary basis, with inadequate resourcing and much duplication of effort. Given the scale of contemporary taxonomic change, it should come as no surprise to find they are increasingly out of step. Our overarching objective, therefore, is to have a single "Kew taxonomic opinion" on the British & Irish *Basidiomycota* which harmonises CBIB and SF. In the meantime, the main (but not exclusive) focus of future CBIB updates will be on amendments that cannot be made within SF, such as new additions or exclusions.

ADDITIONS & AMENDMENTS TO LIST OF INCLUDED TAXA

BASIDIOMYCOTA, AGARICOMYCOTINA

Agaricus greuteri L.A. Parra, Cappelli & Kerrigan, *Fungi Europaei, Agaricus L., Allopsalliota Nauta & Bas* 1A(supl.): 345 (2013)

E: !

H: English collection on soil in broadleaved woodland glade. An albinistic collection (2020) in K from Oxfordshire (Henley-on-Thames) determined as this based on the perfect match between its ITS sequence (Alvalab) and that obtained from the holotype and documented in Fortey [FM22(1): 25-26 (2021)].

Amanita alseides Hanss, in Hanss & Moreau, *Bull. Soc. mycol. Fr.* 133: 101 (2020)

E:

H: English collections on soil in broadleaved woodland.
Collections (2020, 2019 & 2020) respectively from Essex
(Epping Forest), the Isle of Wight (Firestone Copse) and
South Hampshire (Hursley Park) determined as this based on
the perfect match between their derived ITS sequences (E.
Janke and Alvalab) and that obtained from a paratype, later
confirmed by P.-A. Moreau and documented in Kibby &
Rogerson [FM22(1): 12-15 (2021)]. There is also a collection
(2020) at K from Oxfordshire (Blenheim Estate) determined as

this based on matching of its ITS sequence (A.Yu. Biketova) with that of a paratype (99.7%).

Amanita huijsmanii F. Massart & Rouzeau, *Bull. Soc. linn. Bordeaux* 17(3): 159 (1990) [1989]

E: !

H: English collections on soil in broadleaved woodland or near parkland trees including *Quercus robur* and *Castanea sativa*. Collections (2006 & 2020) respectively from Berkshire (Windsor Great Park) and South Hampshire (Hursley Park) determined as this based on a comparison of their derived ITS sequences (K. Liimatainen & E. Janke) with that obtained from the holotype and documented in Kibby & Rogerson [FM22(1): 12-15 (2021)].

Amanita reidiana Tulloss, Amanitaceae 1(2): 4 (2015) Amanita submembranacea var. bispora D.A. Reid Amanita castaneogrisea Contu, Micol. Veg. Medit. 12(2): 146 (1997), nom. inval.

E: !

H: In woodland soil.

Move from synonymy of *A. submembranacea* and recognise as a distinct species. Two collections in K: the holotype (1980) of *A. submembranacea* var. *bispora* from Surrey (Mountain Wood) and a 2010 collection from Shropshire (Earl's Hill) determined by G.G. Kibby.

Amanita submembranacea (Bon) Gröger

Remove var. *bispora* from synonymy and recognise as a distinct species *A. reidiana* (q.v.). Delete final sentence of **Notes**.

Antrodia macra (Sommerf.) Niemelä

E: !

H: English collection on attached dead branch of *Populus* sp. Move from 'excluded' list based on morphological and DNA barcode studies. A collection (2019) from North Hampshire (Odiham Common) yielded an ITS sequence (E. Janke) which was identical to that generated from *A. macra* sensu Tomšovský *et al.* (2009) collected on Czech *Salix*. This name, as currently applied, is likely to represent a species complex.

Antrodiella serpula (P. Karst.) Spirin & Niemelä, *Mycotaxon* 96: 231 (2006)

E: !

H: English collections on wood of *Alnus glutinosa* lying on the ground.

Two collections (2020) from East Sussex (Guestling Wood & Stonelynk Wood), determined as this based on morphology and documented in Overall [FM21(4): 132-134 (2020)].

Arrhenia oniscus (Fr.) Redhead, Lutzoni, Moncalvo & Vilgalys Amend epithet ending to -us. Arrhenia is feminine but the epithet is a noun in apposition.

ASPROPAXILLUS Kühner & Maire, *Bull. trimest. Soc. mycol. Fr.* 50: 13 (1934)

Type: Aspropaxillus giganteus (Sowerby) Kühner & Maire This genus has been revived for Leucopaxillus giganteus.

giganteus (Sowerby) Kühner & Maire

Amend author name of basionym as above (and for all listed synonyms) and move this name to head the entry formerly headed by *L. giganteus* following the molecular study of Vizzini *et al.* [*Mycosphere* 3(1): 79-90 (2012)]

Calocybe ochracea (R. Haller Aar.) Bon, *Docums*

Mycol. 29(no. 115): 33 (1999)

Lyophyllum ochraceum (R. Haller Aar.) Schwöbel & Reutter, Z. Pilzk. 35: 83 (1969)

Lyophyllum favrei f. ochraceum R. Haller Aar., Schweiz. Z. Pilzk. 30: 43 (1952)

ROI:

H: In soil near broadleaved trees.

Two Irish collections (2003 & 2004) in DBN respectively from County Monaghan (Bellamont) and County Wicklow (Knocksink Wood).

Chroogomphus britannicus A.Z.M. Khan & Hora

H: In soil in plantation of *Pinus sylvestris*.

Move from synonymy of *C. rutilus* and restore as a distinct species. This is known in Britain from its English holotype (1971) and paratype (1972) preserved in K from Berkshire (Benyon's Inclosure). The ITS2 sequence recovered from the paratype is discussed in Scambler *et al.* [*IMA Fungus* 9(2): 271-290 (2018)].

Chroogomphus fulmineus (R. Heim) Courtec., *Docums Mycol.* 18(no. 72): 50 (1988)

S: !

H: In soil near Pinus.

A collection (2017) in K from Morayshire (Aviemore), determined as this based on a comparison of its ITS sequence with that of the epitype in Scambler *et al.* [*IMA Fungus* 9(2): 271-290 (2018)].

Chroogomphus mediterraneus (Finschow) Vila, Pérez-De-Greg. & G. Mir, *Errotari* 3: 68 (2006)

S: ! W: !

H: In soil under *Pinus sylvestris* (one collection under *Larix*).

Collections (2015, 2017 and 2003) respectively from Mid
Perthshire (Black Wood of Rannoch), Monmouthshire
(Hardwick Plantation) and South Aberdeenshire (Linn of Dee),
originally determined as *C. rutilus* or *Chroogomphus* sp.,
redetermined as this based on a comparison of their ITS
sequences with that of the epitype. The DNA sequence
generated from the Linn of Dee collection is documented in
Scambler *et al.* [*IMA Fungus* 9(2): 271-290 (2018)].

Chroogomphus rutilus (Schaeff.) O.K. Mill.

Move *C. britannicus* (q.v.) from synonymy as DNA barcoding has shown that it is a distinct species. Retain *C. corallinus*, which has an English holotype, as a synonym of *C. rutilus* but, for now, doubtfully listed as "? *C. corallinus*" following the discussion in Scambler *et al.* [*IMA Fungus* 9(2): 271-290 (2018)].

Chroogomphus subfulmineus Niskanen, Loizides, Scambler & Liimat., in Scambler, Niskanen, Assyov, Ainsworth, Bellanger, Loizides, Moreau, Kirk & Liimatainen, *IMA Fungus* 9(2): 285 (2018)

S.

H: In sandy soil in *Pinus* plantation.

Two collections (2003) from Morayshire (Culbin Forest), one originally determined as *C. rutilus* in Pickles *et al.* [*Molecular Ecology* 21(20): 5110-5123 (2012)], redetermined as this based on a comparison of their ITS sequences with that of the isotype in K which was collected in Cyprus. For further details, see Scambler *et al.* [*IMA Fungus* 9(2): 271-290 (2018)].

Clavulina etruriae Franchi & M. Marchetti, *Riv. Micol.* 61(1): 11 (2018)

E: ! W: !

H: British collections on soil under *Pinus* or *Tsuga*.

A collection (2018) from Pembrokeshire (Hundleton) was determined as this based on a comparison of its barcode with that derived from the holotype (D.J. Harries) and confirmed by the authors of the name. This specimen was described and illustrated in Harries [FM22(2): 47-49 (2021)]. More recent collections (2021) in K from Middlesex (Waterford Heath) and Surrey (Kew Gardens) determined on morphological characters (K. Robinson & A. Henrici).

Clitocybe houghtonii (W. Phillips) Dennis

Name changed to *Leucocybe houghtonii* following the molecular study of Das *et al.* [*Cryptog. Mycol.* 38(3): 353-406 (2017)] which included a sequenced specimen in K from Surrey (West Molesey).

Clitocybe obsoleta (Batsch) Quél.

E: !

H: English collections on soil, usually in coniferous litter. Move from 'excluded' list. Replace **Notes** with: "Collections (2014 & 2020) from Surrey (Englefield Green & Kew Gardens) determined as this based on morphology. This differs from the formerly adopted sensu auct. Brit. interpretation which is *C. fragrans*. For further details see Henrici & Kibby [FM15(4): 111-112 (2014)]."

Clitopilus abprunulus S.P. Jian, M. Karadelev & Zhu L. Yang, in Jian, Karadelev, Wang, Deng & Yang, *Mycol. Progr.* 19(8): 810 (2020)

E: !

H: In calcareous soil in broadleaved woodland. Described with an English paratype (1994) from Surrey (Norbury Park) which is preserved in K and was originally determined as *C. prunulus*.

Coprinellus deliquescens (Bull.) P. Karst., *Bidr. Känn. Finl. Nat. Folk* 32: 542 (1879)

Mis.: Coprinellus silvaticus sensu auct.

E: ! S: ! W: !

H: In soil around stumps of broadleaved trees.

Move from 'excluded' list (as *Coprinus deliquescens*). Replace **Notes** with: "Widespread and frequent fide Kibby [*Mushrooms and toadstools of Britain & Europe vol. 3* (2021)]. Note that Cooke 665 (678) Vol. 5 (1886) seems to depict a small form of *Coprinopsis atramentaria.*"

Cortinarius ainsworthii Liimat. & Niskanen, in Hyde *et al.*, Fungal Diversity 100: 244 (2020)

E: !

H: In calcareous soils of woodland or downland associated with broadleaved trees, including *Quercus, Corylus* and *Fagus*, and probably *Helianthemum*.

Described with a sequenced English holotype, now in K, collected from a *Helianthemum* bed near young *Quercus* in

West Sussex (Devil's Dyke). This specimen was described and illustrated (as *Cortinarius* sp.) in Liimatainen & Ainsworth [FM19(4): 119-135 (2018)].

Cortinarius anthracinicolor Reumaux, in Bidaud, Moënne-Loccoz, Reumaux, Carteret & Eyssartier, *Atlas des Cortinaires* (Meyzieu) 11: 570 (2001)

E: !

H: English collection on soil near Carpinus.

A collection (2020) from East Kent (Rice Wood) determined as this based on a comparison of its ITS sequence (Alvalab & K. Liimatainen) with that obtained from the type.

Cortinarius aptecohaerens Rob. Henry, *Bull. trimest. Soc. mycol. Fr.* 99(1): 91 (1983)

S:

H: Scottish collection on soil under Pinus.

A collection (2020) from Morayshire (Nethy Bridge) determined as this based on a comparison of its barcode sequence with that of the type (G.G. Kibby, M. Tortelli & K. Liimatainen).

Cortinarius argutus Fr.

E:

H: In soil near Populus.

Move from 'excluded' list. Add the above details and replace **Notes** with: "Two collections (2005 & 2013) in K, respectively from Hertfordshire (Gobions Wood) and Shropshire (Ironbridge) morphologically determined by G.G. Kibby. Sensu Rea (1922) is doubtful and the few collections named thus in K need reappraisal."

Cortinarius armeniacus (Schaeff.) Fr.

S:

H: In soil associated with Picea.

Move from 'excluded' list. Replace **Notes** with: "Several collections (2020) from Morayshire (Nethy Bridge) determined as this based on a comparison of its barcode sequence with that of the type (G.G. Kibby, M. Tortelli & B. Dima)."

Cortinarius aurae Niskanen & Liimat., in Hyde *et al., Fungal Diversity* 100: 247 (2020)

E: ! S: !

H: In soil of woodlands dominated by conifers, including *Pinus* with *Betula*, and broadleaved trees, including *Castanea sativa*. Described with a sequenced Scottish holotype, now in K, from Mid Perthshire (Black Wood of Rannoch) and an English paratype from West Kent (Mereworth Woods), the latter originally determined as *C. fagetorum* (q,v.).

Cortinarius aureocalceolatus M.M. Moser & Peintner, *Journal des JEC*, Journées Européenes du Cortinaire 5(no. 4): 30 (2002)

E: !

H: In soil near Fagus sylvatica.

One collection (2010) in K from Buckinghamshire (Mousells Wood), originally determined as *C. magicus*. Redetermination based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen).

Cortinarius britannicus Liimat. & Niskanen, in Hyde *et al.*, Fungal Diversity 100: 247 (2020)

S: !

H: Scottish collection on gley soil under planted *Fagus* sylvatica.

Described with a sequenced Scottish holotype, now in K, collected in Caithness (Olrig Wood).

Cortinarius caledoniensis P.D. Orton

Move to synonymy of C. sphagnophilus q.v.

Cortinarius caliginosus Bidaud, Moënne-Locc. & Reumaux, in Bidaud, Moënne-Loccoz, Reumaux & Henry, *Atlas des Cortinaires* (Meyzieu) 10: 514 (2000)

E: !

H: Collection in K on soil near Quercus sp.

One collection (2004) in K from North Hampshire (Thedden Copse), originally determined as *C. castaneus* var. *erythrinus* (cf.). Redetermination based on a comparison of its ITS

sequence with that of the holotype (K. Liimatainen). A more recent (2019) collection from West Sussex (Crawley) also determined as this based on an ITS sequence which was identical to that of the holotype (N. Aplin).

Cortinarius castaneus (Bull.) Fr.

E: !

H: English collection on grassland soil with *Helianthemum* and *Ouercus*.

Move from 'excluded' list. Replace **Notes** with: "A collection (2005) from South Wiltshire (Martin Down) determined as this based on a comparison (two differences) of its ITS sequence (K. Liimatainen) with that obtained from the neotype. This may be part of a species complex since the ITS sequence was identical to that derived from the holotype of *C. dunensis.*"

Cortinarius chrysomallus Lamoure

Move to 'excluded' list.

Cortinarius comptulus M.M. Moser

E: ! S: !

H: Scottish collection on soil in *Pinus*-dominated woodland with some *Betula*.

Move from 'excluded' list. Replace **Notes** with: "A collection (2015) from Mid Perthshire (Black Wood of Rannoch) determined as this based on a comparison of its ITS sequence (K. Liimatainen & T. Niskanen) with that obtained from the holotype. There is also a verified English collection awaiting accession."

Cortinarius cystidiophorus Reumaux, in Bidaud, *Docums Mycol.* 23(no. 90): 45 (1993)

E:

H: In soil near Carpinus betulus.

One collection (2000) in K from Hertfordshire (Stevenage), originally determined as *C. obtusus*. Redetermination based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen).

Cortinarius diabolicorigens Bohus, *Annls hist.-nat. Mus. natn. hung.* 68: 56 (1976)

E: !

H: English collection on soil in broadleaved woodland (*Betula, Corylus* and *Quercus*).

A collection (2020) from West Kent (Hartley Wood) determined as this based on a comparison of its barcode sequence with that of the type (G.G. Kibby, M. Tortelli & K. Liimatainen).

Cortinarius diasemospermus Lamoure

Move to synonymy of *C. pilatii* (q.v.) and delete second sentence of **Notes**.

Cortinarius ectypus J. Favre, *Ergebn. wiss. Unters. schweiz. NatnParks* 6(42): 513 (1960)

S: !

H: In woodland soil near Picea and Pinus.

A collection (2018) in K from East Perthshire (Kindrogan), determined as this based on a comparison of its ITS sequence with that of the type (K. Liimatainen).

Cortinarius eliae Bidaud, Moënne-Locc. & Reumaux, in Bidaud, Moënne-Loccoz, Reumaux & Henry, *Atlas des Cortinaires* (Meyzieu) 8: 292 (1996)

S: !

H: French holotype collection on soil near hedgerow *Quercus*, British collection near *Picea abies*.

A collection from Scotland, determined as this based on a comparison of its ITS sequence (A. Taylor & K. Liimatainen) with that of the holotype. Further details in Tortelli & Kibby [FM 21(2): 43-70 (2020)].

Cortinarius erubescens M.M. Moser

Move to 'excluded' list.

Cortinarius eucaeruleus Rob. Henry, *Doc. Mycol.* 20(77): 69 (1989)

E: !

H: In chalky soil near broadleaved trees.

Collections originally determined as *C. terpsichores* and redetermined as this based on DNA evidence were reported in Tortelli & Kibby [FM21(2): 43-70 (2020)].

Cortinarius fagetorum M.M. Moser

Move to 'excluded' list.

Cortinarius famatus Moënne-Locc. & Reumaux, in Bidaud, Moënne-Loccoz, Reumaux, Carteret & Eyssartier, *Atlas des Cortinaires* (Meyzieu) 11: 572 (2001)

F٠

H: English collection on soil under Fagus.

A collection (2020) from South Essex (Epping Forest) determined as this based on a comparison of its barcode sequence with that of the type (G.G. Kibby, M. Tortelli & K. Limatainen).

Cortinarius fennoscandicus Bendiksen, K. Bendiksen & Brandrud, *Sommerfeltia* 19: 22 (1993)

E: !

H: In soil near Betula.

A collection (2010) in K from South Aberdeen (Inverey Flats), originally determined as *C. septentrionalis* (q.v.), and redetermined based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen).

Cortinarius flexibilifolius Carteret, in Bidaud, Carteret, Eyssartier, Moënne-Loccoz & Reumaux, *Atlas des* Cortinaires (Meyzieu) 14: 906 (2004)

E: ! W: !

H: In soil near Quercus.

Two collections (2002 and 2007) in K respectively from Surrey (Kew Gardens), originally determined as *C. cf. obtusus*, and Radnorshire (Glasbury), originally determined as *C. acutus*. Redeterminations based on a comparison of their ITS sequences with that of the holotype (K. Liimatainen).

Cortinarius fulvaureus Rob. Henry

The three sequenced collections previously documented as this in CBIB were determined using a reference sequence which is no longer regarded as representing the holotype of *C. fulvaureus*. As stated previously, the three sequences also matched those derived from the holotypes of *C. rimosofissus* and *C. roseonudipes*. As the interpretation of the former reference sequence is now facing similar issues, the name *C. roseonudipes* (q.v.) is therefore currently regarded as the safest option to use (K. Liimatainen pers. comm.).

Cortinarius glabrellus Kauffman, *J. Mycol.* 13(1): 35 (1907)

E: !

H: In soil near Betula.

Two collections (2004 & 2012) in K respectively from East Sussex (Abbot's Wood), originally determined as *C. bulbosus*, and from Surrey (Lightwater), originally determined as *C. subbalaustinus*. Redeterminations based on a comparison of their ITS sequences with that of the holotype (K. Liimatainen).

Cortinarius heatherae Overall, in Hyde *et al., Fungal Diversity* 100: 249 (2020)

E: !

H: English collections on calcareous soil near *Quercus* and Saliv

New record. Described with sequenced English holotype and paratypes, now in K, collected in Middlesex (Heathrow area). Further details in Overall [FM21(3): 79-81 (2020)].

Cortinarius hinnuleoarmillatus Reumaux, in Reumaux & Moënne-Loccoz, *Bull. trimest. Féd. Mycol. Dauphiné-Savoie* 29(no. 113): 24 (1989)

E:

H: In soil with grass under Salix and Corylus.

A collection (2020) from Buckinghamshire (Rushbeds Wood), determined as this based on a comparison of its ITS sequence (P. Cullington, E. Janke) with that of the holotype.

Cortinarius hirtus (Velen.) G. Garnier, *Bibliographie des Cortinaires. D - O.* 125 (1991)

E: ! S: !

H: English collection on soil in broadleaved woodland (*Betula, Corylus, Fagus* and *Quercus*) and Scottish one in *Picea* plantation.

Collections (2020 & 2017) respectively from Buckinghamshire (Mousells Wood) and Caithness (Dunnet Forest) determined as this based on a comparison of their barcode sequences with that of the type (G.G. Kibby, M. Tortelli & K. Liimatainen).

Cortinarius hydrotelamonioides Rob. Henry, Bull. trimest. Soc. mycol. Fr. 85(4): 442 (1970) [1969]

Move entry currently headed by *C. macropodius* to synonymy of this. Move *C. pseudoprivignus* from 'excluded' list and include in synonymy. Replace **Notes** with "A single collection (2003) at K from West Norfolk (Holkham Meals) originally determined as *C. malachius* and initially redetermined as *C. macropodius* based on a comparison of its barcode sequence with that of the holotype (K. Liimatainen). However, *C. macropodius* is an invalid name and its current name is *C. hydrotelamonioides* as documented in Liimatainen *et al.* [*Fungal Diversity* 104: 291-331 (2020)]."

Cortinarius illibatus Fr.

Move *C. subdelibutus* (an illegitimate name) from the synonymy of this to the synonymy of *C. myxo-anomalus* based on a comparison of ITS barcode sequences from *C. subdelibutus* holotype and *C. myxo-anomalus* syntype. Move *C. illibatus* to 'excluded' list

Cortinarius impolitus Kauffman, *Publications Mich. geol. biol. Surv.*, Biol. Ser. 5 26: 419 (1918)

E: !

H: In soil in mixed woodland.

A single collection (2005) in K from Worcestershire (Halesowen) originally determined as *C. fusisporus*. Redetermined after matching the derived ITS sequence with that of the holotype of *C. impolitus* (K. Liimatainen).

Cortinarius jacobi-langei Bidaud, in Bidaud, Moënne-Loccoz, Reumaux, Carteret & Eyssartier, *Atlas des Cortinaires* (Meyzieu) 17(1): 1176 (2008)

W:

H: In soil in deciduous woodland.

A single collection (2001) in K from Merionethshire (Coed Llyn Mair) originally determined as *C. erubescens* (q.v.). Redetermined after matching the derived ITS sequence (identical) with that of the holotype of *C. jacobi-langei* (K. Liimatainen).

Cortinarius leiocastaneus Niskanen, Liimat. & Soop Move to 'excluded' list.

Cortinarius leproleptopus Chevassut & Rob. Henry, *Docums Mycol.* 19(no. 73): 47 (1988)

E:

H: English collection on soil in broadleaved woodland.

A collection (2020) from East Kent (Putt Wood) determined as this based on a comparison of its ITS sequence (Alvalab, J.-M. Bellanger, K. Liimatainen & P.-A. Moreau) with that obtained from the holotype.

Cortinarius lignicola Bidaud, in Bidaud, Moënne-Loccoz, Reumaux & Henry, *Atlas des Cortinaires* (Meyzieu) 6: 190 (1994)

E: !

H: English collection on soil amongst needles & rotten wood of *Picea abies*.

A collection (2009) in K from Dorset (Ashmore) originally determined as *C. sommerfeltii* (q.v.) and redetermined based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen).

Cortinarius macropodius Rob. Henry

This name was invalidly published. Move to synonymy of *C. hydrotelamonioides* (q.v.).

Cortinarius malachioides P.D. Orton

S:

H: In soil in coniferous or Betula woodland.

Move from synonymy of *C. malachius* and recognise once again as a distinct species with the above details. Replace **Notes** with: "Orton's holotype has now been sequenced and shown to be distinct in Brandrud *et al.* [*Mycol. Prog.* 17(12): 1323-1354 (2018)]. Based on ITS sequence data (K. Liimatainen), collections of this in K (1955 and 2018) have been recognised from respectively Easterness (Loch an Eilein, holotype) and South Aberdeenshire (Morrone Birkwood)."

Cortinarius melanotus Kalchbr.

E: !

H: In soil near Fagus sylvatica.

Move from 'excluded' list. Add the above details and replace **Notes** with: "A collection (2004) in K from South Hampshire (Buskett's Wood) originally determined as *C. venetus*. Redetermined after matching the derived ITS sequence (identical) with that of the neotype of *C. melanotus* (K. Liimatainen)."

Cortinarius myxo-anomalus Kühner

Move *C. subdelibutus* (an illegitimate name) from the synonymy of *C. illibatus* to the synonymy of this based on a comparison of ITS barcode sequences from *C. subdelibutus* holotype and *C. myxo-anomalus* syntype.

Cortinarius nymphicolor Reumaux, in Bidaud, Moënne-Loccoz, Reumaux & Henry, *Atlas des Cortinaires*, Pars V (Annecy): 151 (1993)

Cortinarius rickenianus Maire, nom. inval.

The name to be used for the species formerly known in Britain as *C. rickenianus* but which was invalidly published by Maire as stated in Tortelli & Kibby [FM21(2): 43-70 (2020)] and Henrici [FM21(4): 147-149 (2020)].

Cortinarius obsoletus Kühner, Bull. mens. Soc. linn. Soc. Bot. Lyon 24(2): 39 (1955)

Included based on statements in Tortelli & Kibby [FM21(2): 43-70 (2020)] and Henrici [FM21(4): 147-149 (2020) that the collection shown in Ph: 128, and determined therein as *C. fraudulosus*, is misdetermined and represents this species.

Cortinarius ovatosporus Rob. Henry, in Bidaud, Carteret, Eyssartier, Moënne-Loccoz & Reumaux, *Atlas des* Cortinaires (Meyzieu) 13: 789 (2003)

E: ! S: !

H: French collections are on calcareous soil with *Picea*. This species was originally described in 1968 by R. Henry based on a collection from England (Windsor Forest) but the publication was invalid because a type was not indicated. In the validating publication (2003), a collection from an unknown source which was preserved in Herb. PC as Hry. 972 was designated as the holotype, along with three French paratypes, but the relationship between the holotype and the Windsor Forest collection was not explained. In listing this species as present in England, we are assuming, therefore, that the Windsor Forest collection is conspecific with the holotype. There is a Scottish collection determined as this based on matching its ITS sequence (A.S. Taylor & K. Liimatainen) with that obtained from one of the paratypes.

Cortinarius pallidostriatoides Moënne-Locc. & Reumaux, in Bidaud, Carteret, Eyssartier, Moënne-Loccoz & Reumaux, *Atlas des Cortinaires* (Meyzieu) 13: 789 (2003)

W:!

H: In soil

A collection (1988) in K from Caernarvonshire (Betws-y-coed), originally determined as *C. umbonatus*, and redetermined based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen). This is *C. obtusus* s.l.

Cortinarius paralbocyaneus Eyssart., in Bidaud, Carteret, Eyssartier, Moënne-Loccoz & Reumaux, *Atlas des Cortinaires* (Meyzieu) 12: 693 (2002)

E: !

H: In soil near Betula.

A collection (1998) in K from Berkshire (Dry Sandford Pit), originally determined as *C. alboviolaceus*, and redetermined

based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen).

Cortinarius parasuaveolens (Bon & Trescol) Bidaud, Moënne-Locc. & Reumaux, *Bulletin Semestriel de la* Fédération des Associations Mycologiques Méditerranéennes 18: 23 (2000)

E: !

H: English collection on soil in broadleaved woodland. A collection (2020) from East Kent (Badgin Wood) determined as this based on a comparison of its ITS sequence (Alvalab & K. Liimatainen) with that obtained from the type.

Cortinarius phaeophyllus P. Karst.

Move to 'excluded' list.

Cortinarius pilatii Svrček, Česká Mykol. 22(4): 274 (1968) New heading for entry currently headed by *C. diasemospermus* (which now becomes a synonym) based on ITS sequence analysis (K. Liimatainen).

Cortinarius poppyzon Melot

Move to 'excluded' list.

Cortinarius pruinatus Bidaud, Moënne-Locc. & Reumaux, in Bidaud, *Docums Mycol.* 23(no. 90): 46 (1993)

E:

H: On soil near Carpinus betulus.

A collection (2014) in K from South Wiltshire (Stourhead Estate), determined as this based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen).

Cortinarius psammocephalus (Bull.) Fr.

Move to 'excluded' list.

Cortinarius pseudodaulnoyae Rob. Henry & Ramm, *Docums Mycol.* 21(no. 83): 54 (1991)

Move entry currently headed by *C. squamosocephalus* to synonymy of this. Replace **Notes** with "Collections (2017 & 2006) at K respectively from East Kent (Rice Wood) and Surrey (Vann Lake) redetermined as this and confirmed following a comparison of their barcode sequences with that of the holotype of *C. squamosocephalus* (K. Liimatainen). Bidaud & Bellanger [*Journal des J.E.C.* No. 18: 13-23 (2016)] have shown that the sequence from this holotype matches that derived from their epitype of *C. pseudodaulnoyae*, which therefore provides an earlier name."

Cortinarius pseudofusisporus Bidaud, in Bidaud, Moënne-Loccoz, Reumaux & Carteret, *Atlas des Cortinaires* (Meyzieu) 19: 1507 (2010)

E: !

H: English collection on soil near *Betula, Carpinus* and *Salix.* A collection (2020) from East Kent (Putt Wood) determined as this based on a comparison of its ITS sequence (Alvalab & K. Liimatainen) with that obtained from the type.

Cortinarius puellaris Brandrud, Bendiksen & Dima, *Agarica* 36: 19 (2015)

E: !

H: On loamy soil overlying chalk in broadleaved woodland near *Tilia*

A collection (2007) in K from Surrey (Norbury Park), determined as this based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen).

Cortinarius quercoconicus Liimat., Kytöv. & Niskanen Mis.: *Cortinarius psammocephalus* sensu CFP 4 Add the above misdetermination.

Cortinarius rickenianus Maire

An invalid name as stated in Tortelli & Kibby [FM21(2): 43-70 (2020)] and Henrici [FM21(4): 147-149 (2020)]. This species is now known as *C. nymphicolor* (q.v.).

Cortinarius roseonudipes Rob. Henry & Moënne-Locc., in Bidaud, Moënne-Loccoz, Reumaux & Henry, *Atlas des Cortinaires*, Hors-Serie 1: 150 (1997)

Current name for the specimens formerly determined as *C. fulvaureus* (q.v.).

Cortinarius rubrocinctus Reumaux, in Bidaud, Moënne-Loccoz, Reumaux & Henry, *Atlas des Cortinaires* (Meyzieu) 7: 230 (1995)

E: !

H: English collection on soil near *Betula, Carpinus* and *Populus*. A collection (2020) from East Kent (Putt Wood) determined as this based on a comparison of its ITS sequence (Alvalab & K. Liimatainen) with that obtained from the type.

Cortinarius russulaespermus Carteret, in Bidaud, Carteret, Eyssartier, Moënne-Loccoz & Reumaux, *Atlas des* Cortinaires (Meyzieu) 14: 908 (2004)

E: !

H: On soil.

A collection (2018) in K from Middlesex (Heathrow area) determined as this based on an analysis of barcode DNA, obtained by the collector, which matched that of the holotype (K. Liimatainen).

Cortinarius scoticus Niskanen & Liimat., in Hyde *et al.,* Fungal Diversity 100: 251 (2020)

S: !

H: In soil of woodlands dominated by *Pinus*.

Described with a sequenced Scottish holotype, now in K, from Mid Perthshire (Black Wood of Rannoch).

Cortinarius semiodoratus Rob. Henry, *Bull. trimest. Soc.* mycol. Fr. 109(1): 24 (1993)

E: !

H: In soil near Quercus ilex.

Two collections (2000 & 2002) in K from Surrey (Kew Gardens), originally determined respectively as *C. hinnuleus* (s.str.) and *C. safranopes* var. *sublaevispora* (cf.), and redetermined based on a comparison of their ITS sequences with that of the holotype (K. Liimatainen).

Cortinarius septentrionalis Bendiksen, K. Bendiksen & Brandrud

Move to 'excluded' list.

Cortinarius sommerfeltii Høil.

S:

H: Scottish collections from Picea plantations.

Amend details as above and replace **Notes** with: "The only collection in K named as this was from Dorset (Ashmore) but this was redetermined based on a comparison of its ITS sequence with that of the holotype of *C. lignicola* (q.v.) (K. Liimatainen). *Cortinarius sommerfeltii* is currently retained in the 'included' list based on a few documented records/collections from Scotland, where it is expected to occur, but this should be verified by sequencing data when possible."

Cortinarius sordescens Rob. Henry, *Bull. trimest. Soc. mycol. Fr.* 60: 67 (1944)

E: !

H: In soil near Carpinus or Betula.

A collection (2018) in K from East Kent (Putt Wood), determined as this based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen).

Cortinarius sphagnophilus Peck, Ann. Rep. N.Y. St. Mus. nat. Hist. 29: 42 (1878) [1876]

Move to head the entry currently under *C. caledoniensis*. The latter name becomes a synonym following Tortelli & Kibby [FM21(2): 43-70 (2020)] and Henrici [FM21(4): 147-149 (2020)].

Cortinarius splendificus Chevassut & Rob. Henry Move to 'excluded' list.

Cortinarius squamosocephalus Bidaud, Moënne-Locc. & Reumaux

Move to synonymy of C. pseudodaulnoyae (q.v.).

Cortinarius suberythrinus Moënne-Locc., in Reumaux & Moënne-Loccoz, *Bull. trimest. Féd. Mycol. Dauphiné-Savoie* 28(no. 111): 24 (1988)

E: | W: |

H: In soil near broadleaved trees (including *Salix*). Two collections (2006 and 2011) in K respectively from Carmarthenshire (Burry Port) and South Hampshire (Mockbeggar Lake). Sequenced and originally determined as *C. vernus* under which name it appears in the phylotree in Overall *et al.* [FM16(2): 45-48 (2015)]. Subsequently matched with the ITS sequence of the holotype of *C. suberythrinus* and hence redetermined as this (T. Niskanen).

Cortinarius subsaniosus Liimat. & Niskanen, in Hyde *et al.,* Fungal Diversity 100: 252 (2020)

E: !

H: English collection in coastal sand dune soil near *Salix* repens.

Described with a sequenced English holotype, now in K, collected in Westmorland (Sandscale Haws) and originally determined as *C. chrysomallus* (q.v.).

Cortinarius subsedens Rob. Henry, *Bull. trimest. Soc. mycol. Fr.* 71(3): 218, 219 (1956) [1955]

E: !

H: In soil near Castanea sativa.

A collection (2018) in K from West Kent (Mereworth Woods), determined as this based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen).

Cortinarius uraceonemoralis Niskanen, Liimat., Dima, Kytöv., Bojantchev & H. Lindstr., in Dima, Liimatainen, Niskanen, Kytövuori & Bojantchev, *Mycol. Progr.* 13(3): 876 (2014)

E: !

H: In soil near Betula and Quercus.

A collection (1995) in K from South Devon (Stover Park), originally determined as *C. phaeophyllus* (q.v.), and redetermined based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen).

Cortinarius vicinus Bidaud, Consiglio, D. Antonini & M. Antonini, in Consiglio, Antonini & Antonini, *Il Genere Cortinarius in Italia* 3: C185 (2005)

E: !

H: English collection on clay/sand soil in short mossy grass near *Quercus robur*.

A collection (2020) from East Sussex (Fairlight) determined as this based on a comparison of its ITS sequence with that obtained from an isotype collection (N. Aplin, IBERS, K. Limatainen). For more details, see Overall [FM22(2): 64-65 (2021)].

Cortinarius violaceipes Bidaud & Consiglio, in Bidaud, Moënne-Loccoz, Reumaux, Carteret & Eyssartier, *Atlas des Cortinaires* (Meyzieu) 11: 615 (2001)

E: !

H: English collection on soil under Carpinus and Fagus.
A collection (2020) from East Kent (Badgin Wood) determined as this based on a comparison of its ITS sequence (Alvalab & K. Liimatainen) with that obtained from the type.

Cortinarius viridiflavus Ammirati, Bojantchev, Liimat. & Niskanen, in Niskanen, *Index Fungorum* 197: 4 (2014) E:! W:!

H: In soil near conifers (including *Picea* and *Pinus*).
Two collections (1998 and 2000) in K respectively from Cardiganshire (Hafod) and East Cornwall (Cabilla Wood) and respectively originally determined as *C. fervidus* and *C. malicorius*. Subsequently matched with the ITS sequence of the holotype of *C. viridiflavus*, but with a few differences, and hence this was redetermined as *C. viridiflavus* s.l. (K. Liimatainen).

CRYPTOMARASMIUS T.S. Jenkinson &

Desjardin, in Jenkinson, Perry, Schaefer & Desjardin, *Mycologia* 106(1): 91 (2014)

Type: Cryptomarasmius corbariensis (Roum.) T.S. Jenkinson & Desjardin

The following change from *Marasmius* is required following the molecular analysis in Jenkinson *et al.* [*Mycologia* 106(1): 86-94 (2014)].

corbariensis (Roum.) T.S. Jenkinson & Desjardin, in Jenkinson, Perry, Schaefer & Desjardin, *Mycologia* 106(1): 91 (2014)

E: ! W: ! NI: ! ROI: !

H: British and Irish collections on dead leaves of *Hedera* or ? *Hedera*.

Amend entry as above and replace **Notes** with: "Irish collection (1979) and English collection (2018) in K respectively from Cork (near Millstreet) and West Cornwall (Illogan Woods). For further details of collections from England and Ireland, see Henrici [FM19(3): 105-107 (2018)] and for those of Welsh collections, see Aron [FM21(3): 82-84 (2020)]."

Cuphophyllus atlanticus J.B. Jordal & E. Larss., *Agarica* 42: 41 (2021)

Mis.: *Cuphophyllus canescens* sensu auct. Brit. Mis.: *Hygrocybe canescens* sensu auct. Brit.

S: !

H: On acidic to moderately calcareous soil in unimproved grazed or cut grassland.

Replace entry for *C. canescens* with the above and replace **Notes** with: "Two collections (2005 & 2012) in K respectively from Caithness (Dunbeath Strath) and Clyde Isles (Dun Hill of Glenmore), both determined as *C. canescens*, and one (2000) in E from Selkirkshire (Quaveburn), determined as *Hygrophorus lacmus*, were sequenced and redetermined as this based on a comparison of their barcodes with that derived from the holotype (B.T.M. Dentinger *et al.*). All historic British records of *Hygrocybe canescens* should be renamed as this unless DNA evidence to the contrary is available. For further details regarding the distribution of *C. canescens*, see Jordal & Larsson [*Agarica* 42: 39-48 (2021)].

Dermoloma atrocinereum (Pers.) P.D. Orton **W**: !

H: In grassland soil.

Remove from synonymy of *D. cuneifolium* and recognise as a separate species based on a comparison of a DNA barcode sequence generated from a 2014 collection from Pembrokeshire (Upton Castle) with that obtained from the Italian neotype. For further details, see Sánchez-García *et al.* [*Mycol. Prog.* 20: 11-25 (2021)].

Dermoloma bellerianum Bon, *Docums Mycol.* 28(nos 109-110): 6 (1998)

W:

H: In grassland soil.

Recognised sensu Sánchez-García et al. [Mycol. Prog. 20: 11-25 (2021)] based on a comparison of DNA sequences generated from a 2014 collection from Pembrokeshire (Upton Castle) with those obtained from other European collections. For further details, see Sánchez-García et al. [Mycol. Prog. 20: 11-25 (2021)], who were unable to obtain corresponding DNA sequences from the holotype specimen.

Dermoloma phaeopodium P.D. Orton

Dermoloma josserandii var. phaeopodium (P.D. Orton) Arnolds

E: !

H: In grassland soil.

Remove from synonymy of *D. josserandii* var. *phaeopodium* to the head of that entry. Replace **Notes** with: "Recognised at specific rank based on phylogenetic placement of a DNA barcode sequence generated from the English holotype (Devon, Membury). For further details, see Sánchez-García *et al.* [*Mycol. Prog.* 20: 11-25 (2021)].

Entoloma luteobasis Ebert & E. Ludw., Z. Mykol. 58(2): 190 (1992)

Move to head the entry currently headed by *E. ochreoprunuloides* following Brandrud *et al.* [*Agarica* 39: 31-52 (2020)] who concluded that the latter was a more recent synonym based on matching the barcode sequences dervived from the holotypes of both species (identical).

Entoloma vindobonense Noordel. & Hauskn., in Noordeloos, *Entoloma s.l.*, Fungi Europaei vol. 5 (Saronno) 5(a): 907 (2004)

E: !

H: English collection in soil in coastal dune xerophytic grassland.

A collection (2020) from West Sussex (East Head), determined as this based on a comparison of its ITS sequence with that of the holotype (N. Aplin). Further details and photos are posted online at https://www.sussexfungusgroup.co.uk.

Ganoderma adspersum (Schulzer) Donk

E: !

H: On wood of angiosperms and gymnosperms.

Remove from synonymy of *G. australe* (q.v.) as *G. adspersum* has now been recognised as a distinct species and confirmed as British sensu Fryssouli *et al.* based on a comparison of barcode sequences derived from two collections in K from Berkshire (Windsor Great Park) and one in HMAS from Surrey (Kew) with others in Fryssouli *et al.* [*Mycokeys* 75: 71-143 (2020)].

Ganoderma australe (Fr.) Pat.

F• I

H: On wood of angiosperms.

Recognised as a predominantly southern hemisphere species distinct from *G. adspersum* and confirmed as British sensu Fryssouli *et al.* based on a comparison of barcode sequences derived from two collections (K and HMAS) from Surrey (Kew & Richmond Park) with others in Fryssouli *et al.* [*Mycokeys* 75: 71-143 (2020)]. Fryssouli *et al.* suspected that the fungus had been imported into the UK with plant material.

Ganoderma tsugae Murrill, *Bull. Torrey bot. Club* 29: 601 (1902)

UK: !

H: On wood of angiosperms and gymnosperms.

A culture preserved in CBS originating from a historical UK collection (K.S.G. Cartwright, No. 189) and previously.

collection (K.S.G. Cartwright, No. 189) and previously determined as G. valesiacum, yielded a barcode sequence which matched those of this species sensu Fryssouli et al. [Mycokeys 75: 71-143 (2020)]. Their analysis included a CBSderived reference culture of G. tsugae of Canadian origin which is indicated as being derived from type material. However, the country of origin of the designated neotype, which is preserved in NY, is unknown fide the online NY Fungarium catalogue. It has not been possible to trace further collection details for the Cartwright-derived G. tsugae culture to determine its country of origin within the UK and whether it was isolated from a tree or from worked timber. When considering whether its UK presence should be regarded as an introduction, it is worth noting that the analyses of Fryssouli et al. [Mycokeys 75: 71-143 (2020)] included a sequenced collection from an Abies stump in Germany suggesting that Europe could be within its natural

Gymnopilus neerlandicus (Huijsman) Contu *Hebelomina neerlandica* Huijsman

Move to 'excluded' list.

Hebeloma psammophilum Bon

W:

H: In sand on mobile coastal dune near *Salix cinerea*. Move from 'excluded' list. Add the above details and replace **Notes** with: "A collection (2011) in K from Merionethshire (Shell Island) morphologically and molecularly confirmed by H.J. Beker & U. Eberhardt and documented in Aron [FM21(4): 135-137 (2020)]."

Hodophilus hymenocephalus (A.H. Sm. & Hesler) Birkebak & Adamčík

Move to 'excluded' list.

Hodophilus stramineus Jančovič., Dima & Adamčík, in Adamčík, Dima, Adamčíková, Corriol, Læssøe, Moreau, Cabon & Jančovičová, *Mycol. Progr.* 19(2): 121 (2019) [2020] E:! W:!

H: In soil in shaded sites within or near broadleaved woodland. Described with a Welsh holotype from Pembrokeshire (Orielton Wood). The paratypes include a redetermined English collection (2008) in K from South Somerset (Swell Wood), originally determined as *Camarophyllopsis foetens*, and a Welsh collection (2014) from Montgomeryshire (Gregynog).

Hydnellum fagiscabrosum A.M. Ainsw. & Nitare, in Nitare, Ainsworth, Larsson, Parfitt, Suz, Svantesson & Larsson, *FUSE* 7: 238 (2021)

F: 1

H: In nutrient-poor, often mossy, soil associated with *Fagaceae*; English collections usually with *Quercus* or *Castanea*.

Described with many sequenced English paratypes in K, almost all of which were previously determined as *Sarcodon scabrosus*, from Berkshire (Windsor Crown Estate), East Norfolk (St Faith's Common), South Hampshire (New Forest), Surrey (Witley Common & Woking) and West Kent (Seal Chart & Tudeley Woods). In Britain, this is the broadleaved woodland counterpart of *S. scabrosus*, which is a strict *Pinaceae* associate.

Hydnellum lepidum (Maas Geest.) E. Larss., K.H. Larss. & Kõljalg, in Larsson, Svantesson, Miscevic, Kõljalg & Larsson, *MycoKeys* 54: 41 (2019)

New heading for the entry currently headed by *Sarcodon regalis*. The latter is now recognised as a synonym of *H. lepidum* (= *S. lepidus*) following the molecular analyses in Nitare *et al.* [*FUSE* 7: 233-254 (2021)] which included sequences derived from type collections of both species. Replace **Notes** with: "Collected in 1968 and 1969 from the type locality of *S. regalis* in Berkshire (Swinley Park) but, due to redevelopment of the site for housing and absence of any further records, it had been assessed as extinct in Britain. It was shown to be extant by matching the DNA barcode obtained from a 2019 collection from South Hampshire (New Forest) with that derived from the holotype of *S. lepidus* (E. Janke & Nitare *et al.*)." Further details in Lucas & Ainsworth [FM22(3): 91-94 (2021)].

Hydnellum nemorosum A.M. Ainsw. & E. Larss., in Nitare, Ainsworth, Larsson, Parfitt, Suz, Svantesson & Larsson, *FUSE* 7: 246 (2021)

E: !

H: In nutrient-poor, often mossy, soil associated with *Fagaceae*; English collections probably with *Castanea*. Described with an English holotype (2008) and paratype (2010) in K and only known from the type locality in Berkshire (Windsor Great Park).

Hydnum subovoideisporum Niskanen & Liimat., in Niskanen *et al.*, *Mycologia*: 10.1080/00275514.2018.1477004, 20 (2018)

E: !

H: English collection on soil in broadleaved woodland. A collection (2020) from Buckinghamshire (Burnham Beeches) determined as this based on a comparison of its ITS sequence (Alvalab) with that obtained from the holotype (identical).

INCRUSTOCALYPTELLA Agerer, *Z. Mykol.* 49(2): 160 (1983)

Type: Incrustocalyptella columbiana Agerer

columbiana Agerer, *Z. Mykol.* 49(2): 161 (1983) **E:**! **W:**!

H: On fallen leaves of *Hedera* sp., *Ilex aquifolium* and *Rhododendron ponticum*.

Collections in K (2017 and 2019) respectively from Anglesey (Coed Môr) and West Cornwall (Redruth) and Welsh material initially determined as this based on morphology. There is a second known site (2019) in Anglesey (Lligwy). For more details, see Smith [FM22(2): 61-63 (2021)].

INOCYBE (Fr.) Fr.

For a general guide to the segregation of *Inocybe* and new generic placements of species formerly assigned here, see Cullington [FM21(3): 102-107 (2020)] and the relevant entries in Index/Species Fungorum online. New CBIB entries will be restricted to those species representing new additions to, or exclusions from, the British and Irish list and those requiring edits other than changes to their generic placement. These entries will be found under *Inocybe*, *Inosperma*, *Mallocybe* and *Pseudosperma* as required.

bongardii *var.* **pisciodora** (Donadini & Riousset) Kuyper Move to synonymy of *Inosperma pisciodorum*, which provides a new heading for this entry, following Cullington [FM21(3): 102-107 (2020)].

cookei *var.* **kuthanii** (Stangl & J. Veselský) Kuyper Move to synonymy of *Inosperma kuthanii*, which provides a new heading for this entry, following Cullington [FM21(3): 102-107 (2020)].

flavella P. Karst.

Move this species to *Pseudosperma* as *P. flavellum* (q.v.) and move *I. xanthocephala*, now recognised as a species in its own right, from synonymy to the head of a new entry as *P. xanthocephalum* (q.v.).

helobia (Kuyper) Bandini, B. Oertel & U. Eberh., in Bandini, Oertel, Schüssler & Eberhardt, *Mycol. bavarica* 20: 19 (2020) Move *I. lacera* var. *helobia* to the synonymy of this species following the molecular analysis in Bandini *et al.* [*Mycol. bavarica* 20: 13-101 (2020)].

ionolepis Cullington & E. Larss., in Crous et. al., *Persoonia* 45: 359 (2020)

E: !

H: English collection in broadleaved woodland on stony soil under *Fagus*.

Described with a sequenced English holotype, now in K, collected (2017) from West Gloucestershire (Forest of Dean). This specimen was described and illustrated in Crous *et al.* [*Persoonia* 45: 358-359 (2020)], illustrated (as *I. ionolepis nom. prov.*) in Cullington [FM21(3): 102-107 (2020)] and further documented in Cullington [FM22(2): 55-60 (2021)].

lacera var. helobia Kuyper

Move to synonymy of *Inocybe helobia* (q.v.).

lacunarum Vauras & E. Larss., *Karstenia* 54(1): 12 (2015) F• I

H: English collection on soil in broadleaved woodland.
A collection (2020) from South Hampshire (Stubbs Wood) determined as this based on a comparison of its ITS sequence (E. Janke) with that obtained from the holotype and documented as FRDBI 18211524.

lindrothii (P. Karst.) Vauras & E. Larss., in Larsson, Cripps & Vauras, Karstenia 54: 25 (2014)

E: !

H: English collection on soil under Betula.

A collection (2020) from Buckinghamshire (Burnham Beeches) determined as this based on a comparison of its ITS sequence (E. Janke *et al.*) with that obtained from the holotype. Further details in Cullington [FM22(3): 98-100 (2021)].

umbrinella Bres., Ann. Mycol. 3: 161 (1905)

F• I

H: English collections on soil in *Fagus* and *Quercus* woodland and with *Helianthemum* on chalk downland.

Two English collections (2008) from Buckinghamshire determined as this and supported by sequencing evidence in

Larsson *et al.* [*Persoonia* 23: 86-98 (2009)]. Move from synonymy of *I. rimosa* and include as a separate species. The above text appeared in UD5 in 2011 but, unfortunately, the corresponding changes were not made within the online database. This species is now moved to *Pseudosperma* as is *I. rimosa*.

INOSPERMA (Kühner) Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*: 10.1080/00275514.2019.1668906, 12 (2019)

Type: Inosperma calamistratum (Fr.) Matheny & Esteve-Rav.

kuthanii (Stangl & J. Veselský) Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*: 10.1080/00275514.2019.1668906, 21 (2019)

New heading for the entry formerly headed by *Inocybe cookei* var. *kuthanii* which now becomes a synonym following Cullington [FM21(3): 102-107 (2020)].

pisciodorum (Donadini & Riousset) Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*: 10.1080/00275514.2019.1668906, 22 (2019)

New heading for the entry formerly headed by *Inocybe bongardii* var. *pisciodora* which now becomes a synonym following Cullington [FM21(3): 102-107 (2020)].

quietiodor (Bon) Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*:

10.1080/00275514.2019.1668906, 22 (2019)

E: !

H: On soil in woodland.

Included as British following Cullington [FM21(3): 102-107 (2020)].

Laccaria macrocystidiata (Migl. & Lavorato) Pázmány, *Z. Mykol.* 60(1): 8 (1994)

E: !

H: English collection on coastal soil.

An English collection at K (2019) from East Sussex (Cliff End) which was determined based on its morphology.

Leucocoprinus griseofloccosus Lagardère & Eyssart., *Bull. Soc. mycol. Fr.* 132(1-2): 106 (2018)

E:

H: English collections on rotten wood of *Abies alba*, *Pseudotsuga menziesii* and probably also on *Pinus*.

Collections (2019 & 2020) from South Hampshire (New Forest) determined as this based on a comparison of their ITS sequences (E. Janke) with that obtained from the holotype and documented in Henrici & Rogerson [FM21(4): 143 (2020)].

Leucocybe houghtonii (W. Phillips) Halama & Pencakowski, in Das *et al.*, *Cryptog. Mycol.* 38(3): 369 (2017)

Name changed from *Clitocybe houghtonii* following the molecular study of Das *et al.* [*Cryptog. Mycol.* 38(3): 353-406 (2017)] which included a sequenced specimen in K from Surrey (West Molesey).

Leucopaxillus giganteus (Sowerby) Kühner & Maire Name changed to *Aspropaxillus giganteus* (q.v.).

Lindtneria hydnoidea Bernicchia & Ryvarden, *Mycol. Res.* 102(4): 503 (1998)

E: !

H: On moss on underside of log.

A collection (2014) at K from South Hampshire (High Corner Wood).

LYOPHYLLUM P. Karst.

The following changes are required in accordance with molecular data in Hofstetter *et al.* [*Cryptog. Mycol.* 35(4): 399-425 (2015)]

ambustum (Fr.) Singer

Mis.: Tephrocybe impexa sensu Orton

Move from synonymy of *Tephrocybe ambusta* to head the entry. Move *T. gibberosa*, *Lyophyllum gibberosum* and *Collybia gibberosa* from the synonymy of this to the synonymy of *Sagaranella gibberosa* (q.v.) and delete second sentence of **Notes**.

anthracophilum (Lasch) M. Lange & Sivertsen, *Beitr. Kenntn. Pilze Mitteleur.* 3: 120 (1987)

Move the entry currently headed by *Tephrocybe anthracophila* to the synonymy of this.

atratum (Fr.) Singer

Move from synonymy of *Tephrocybe atrata* to head the entry.

Macrolepiota fuliginosa (Barla) Bon

This taxon was epitypified in Vizzini *et al.* [*Mycotaxon* 117: 149-164 (2011)] where it was also reduced in rank and recognised as *M. procera* forma *fuliginosa*. However, this is not the taxon formerly treated under this name in CBIB which is *M. fuliginosa* sensu Vellinga FAN5 and which, following Vizzini *et al.* (2011), should now be recognised as *M. rhodosperma* (q.v.).

Macrolepiota rhodosperma (P.D. Orton) Migl.

Move from synonymy of *M. fuliginosa* to head the entry. *M. fuliginosa* (Barla) Bon should not be recognised as a synonym but should be replaced by "Mis.: *M. fuliginosa* sensu Vellinga FAN5". *Lepiota procera* var. *fuliginosa*, a Mediterranean taxon fide. Vizzini *et al.* [*Mycotaxon* 117: 149-164 (2011)], should be removed from synonymy. Delete second sentence of **Notes** and add: "Reinstated as a distinct species following the molecular analyses in Vizzini *et al.* [*Mycotaxon* 117: 149-164 (2011)] which included a barcode sequence derived from the holotype preserved in E and collected in 1969 from Dorset (Bewley Down)."

MALLOCYBE (Kuyper) Matheny, Vizzini & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*:

10.1080/00275514.2019.1668906, 12 (2019)

Type: Mallocybe terrigena (Fr.) Matheny, Vizzini & Esteve-Rav.

granulosa (Jacobsson & E. Larss.) Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*: 10.1080/00275514.2019.1668906, 24 (2019)

W: !

H: In coastal dune slack soil near Salix repens.

A collection (2009) in K from Anglesey (Aberffraw), originally filed as *Inocybe agardhii* aff., and recently determined based on a comparison of its ITS sequence with that of the holotype (K. Liimatainen). Documented from Anglesey (Newborough Warren) with photograph in Cullington [FM21(3): 107 (2020)].

Marasmiellus omphaliiformis (Kühner) Noordel., *Persoonia* 12(1): 35 (1983)

E: !

H: On mossy trunk of living *Populus* in valley bottom. A collection (?2020) from West Cornwall (Trelowarren Estate) documented in Penna [FM22(1): 23-24 (2021)].

Marasmiellus villosipes (Cleland) J.S. Oliveira, in Oliveira, Vargas-Isla, Cabral, Rodrigues & Ishikawa, *Mycol. Progr.* 18(5): 736 (2019)

E: !

H: English collections on soil near *Pinus* sp. or in open heathland.

Three collections (2019 & 2020) from Bedfordshire (Sandy), Buckinghamshire (Stoke Poges) and the Isle of Wight (Osborne House) determined as this based on their morphology and on a comparison of their ITS sequences (E. Janke) with those derived from specimens originating in the USA and New Zealand and assigned to *Gymnopus villosipes* sensu Petersen & Hughes [*North American Fungi* 9(3): 1-22 (2014)].

Marasmius corbariensis (Roum.) Sacc. Name changed to *Cryptomarasmius corbariensis* (q.v.). **Melanoleuca porphyropoda** X.D. Yu, in Yu, Lu, Ma, Li, Lin & Zhang, *Mycoscience* 55: 458 (2014)

E: !

H: In soil in woodland.

Described with a Chinese holotype and having a protologue that includes three English paratypes based on material (1997-2003) in K redetermined by Yu et al. [Mycoscience 55: 456-461 (2014)] based on morphological characters. The paratypes were from Buckinghamshire (Burnham Beeches), originally determined as M. verrucipes, Surrey (Horsell Common) originally determined as M. melaleuca sensu Bon; and Westmorland (Witherslack), originally determined as M. exscissa sensu Breitenbach & Kränzlin.

Mycena supina (Fr.) P. Kumm., Führ. Pilzk. (Zerbst): 108 (1871)

E: !

H: English collection on detached *Alnus* twig suspended above ground by riverside.

An English collection (2020) from East Cornwall (Sladesbridge) documented in Hardware [FM22(3): 104-106 (2021)].

MYOCHROMELLA V. Hofst., Clémençon, Moncalvo & Redhead, in Hofstetter, Redhead, Kauff, Moncalvo, Matheny & Vilgalys, *Cryptog. Mycol.* 35(4): 418 (2015) [2014]

Type: Myochromella inolens (Fr.) V. Hofst., Clémençon, Moncalvo & Redhead

The following changes from *Tephrocybe* are required following a six-gene phylogenetic analysis [Hofstetter *et al.*, *Cryptog. Mycol.* 35(4): 399-425 (2015)]:

boudieri (Kühner & Romagn.) V. Hofst., Clémençon, Moncalvo & Redhead, in Hofstetter, Redhead, Kauff, Moncalvo, Matheny & Vilgalys, *Cryptog. Mycol.* 35(4): 418 (2015) [2014]

inolens (Fr.) V. Hofst., Clémençon, Moncalvo & Redhead, in Hofstetter, Redhead, Kauff, Moncalvo, Matheny & Vilgalys, *Cryptog. Mycol.* 35(4): 418 (2015) [2014]

Panaeolus antillarum (Fr.) Dennis

E: ! S: !

H: On rotting grass or herbivore dung (*Elephas & Equus*). Move from 'excluded' list. Replace **Notes** with: "Collections (2002, 2013 & 2018) at K respectively from Surrey (Esher), Cheshire (Chester Zoo) and West Sussex (Henfield) and a collection (2006) at E from Midlothian (Edinburgh)." This species was noted for inclusion in update UD6 (2015) but, in error, was not incorporated in the online database.

Paxillus olivellus P.-A. Moreau, J.-P. Chaumeton, H. Gryta & Jargeat, in Jargeat, Moreau, Gryta, Chaumeton & Gardes, *Fung. Biol.* 120(5): 722 (2016)

E: ! S: !

H: British collections on soil associated with *Alnus glutinosa*. Segregated from *P. rubicundulus* s.l. following the analysis of Jargeat *et al.* [*Fung. Biol.* 120(5): 722 (2016)] which included two sequences derived from Scottish collections from Easterness (Glen Strathfarrar) and West Sutherland (Crossburn), both of which had previously been determined as *P. filamentosus*. An English collection (2020) from Surrey (Richmond Park) was sequenced, determined as this and documented in Overall [FM22(3): 79-84 (2021)].

PERENNIPORIA Murrill

For a general guide to the segregation of *Perenniporia* and new generic placements of species formerly assigned here, see the relevant entries in Index/Species Fungorum online. New CBIB entries will be restricted to those species representing new additions to, or exclusions from, the British and Irish list and those requiring edits other than changes to their generic placement. These updates will be found under *Truncospora* and *Vanderbylia* as required.

ochroleuca (Berk.) Ryvarden

This species was originally described in 1845 from material collected in Australia. A modern Australian collection was included in the molecular analyses of Spirin *et al.* [*Nova Hedwigia* 100(1-2): 159-175 (2014)] where it was shown to be phylogenetically distinct from the species formerly recorded in Europe under this name. The latter is now recognised in the segregate genus *Truncospora* as *T. atlantica* (q.v.).

Phanerochaete galactites (Bourdot & Galzin) J. Erikss. & Ryvarden, *Cortic. N. Eur.* (Oslo) 5: 1005 (1978)

W:!

H: Welsh collection on dead stem of *Rubus fruticosus* agg. A Welsh collection at K (2019) from Glamorganshire (Kenfig).

Pholiota chocenensis Holec & M. Kolařík, *Mycol. Progr.* 13(2): 401 (2013) [2014]

E: !

H: On a woodchip pile.

A collection (2021) from East Sussex (Byerly Wood), determined as this based on a comparison of its ITS sequence with that of the holotype and paratype (N. Aplin). Further details and photos are posted online at https://www.sussexfungusgroup.co.uk and documented in Aplin [FM22(3): 85-90 (2021)].

PSEUDOSPERMA Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*: 10.1080/00275514.2019.1668906, 11 (2019)

Type: Pseudosperma sororium (Kauffman) Matheny & Esteve-Rav.

flavellum (P. Karst.) Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*: 10.1080/00275514.2019.1668906, 28 (2019)

Move from *Inocybe* and move *I. xanthocephala* from synonymy to head of new entry as *P. xanthocephalum* (q.v.).

rimosum (Bull.) Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*: 10.1080/00275514.2019.1668906, 31 (2019) Move from *Inocybe* (see comments for *I. umbrinella*).

spurium (Jacobsson & E. Larss.) Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*: 10.1080/00275514.2019.1668906, 31 (2019)

S: !

H: On soil in woodland.

Included as British following Cullington [FM21(3): 102-107 (2020)] based on an analysis of sequenced material from Caithness (E. Larsson).

umbrinellum (Bres.) Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*: 10.1080/00275514.2019.1668906, 32 (2019) Move from *Inocybe* (see comments for *I. umbrinella*).

xanthocephalum (P.D. Orton) Matheny & Esteve-Rav., in Matheny, Hobbs & Esteve-Raventós, *Mycologia*: 10.1080/00275514.2019.1668906, 32 (2019)

Move from synonymy of *Inocybe flavella* and recognise (again) as a distinct species following Cullington [FM21(3): 102-107 (2020)].

Rhodocollybia filamentosa (Velen.) Antonín, *Čas. morav. Mus. Brne*, Vědy Přírodní 71(1-2): 91 (1986)

S:

H: Scottish collection on sandy soil under *Pinus sylvestris*. A collection (2020) from Easterness (The Queen's Forest), determined as this by G.G. Kibby.

Rhodocybe asanii Seslı & Vizzini, *Turkish Journal of Botany* 41(2): 202 (2017)

F.

H: On soil with needle litter of *Picea*.

A collection (2020) from East Sussex (Tilgate Park), determined as this based on a comparison of its ITS sequence with that of the holotype (N. Aplin).

Rhodocybe asyae Sesli & Vizzini, *Turkish Journal of Botany* 41(2): 205 (2017)

E: !

H: On soil of a grassy verge under Pinus.

A collection (2019) from East Sussex (Tilgate Park), determined as this based on a comparison of its ITS sequence with that of the holotype and published with a photograph in Aplin [Adastra 2019 (Sussex Biodiversity Record Centre): 5 (2020)].

Rhodocybe fumanellii Ferrari, Vizzini & Fellin, in Vizzini, Ferrari, Ercole & Fellin, *MycoKeys* 36: 26 (2018)

E: !

H: On decomposing log pile in broadleaved woodland. A collection (2020) from Buckinghamshire (Rushbeds Wood), determined as this based on a comparison of its ITS sequence with that of the holotype (P. Cullington, E. Janke) and illustrated in Cullington [*BMS Newsletter* 2021(1): 5-6].

Russula recondita Melera & Ostellari, in Melera, Ostellari, Roemer, Avis, Tonolla, Barja & Narduzzi-Wicht, *Mycol. Progr.*: 10.1007/s11557-016-1256-y, [12] (2016)

E: ! S: !

H: On soil and, in Britain, usually associated with *Quercus* or *Tilia* but also detected in an ectomycorrhizal root of *Pinus sylvestris*.

A collection (2020) in K from East Norfolk (Norwich), originally determined as *Megacollybia platyphylla* was redetermined as this based on a comparison (99.9% match) of its ITS sequence with that of the holotype and with other conspecific sequences of UK origin (England, Scotland) in the UNITE database (R. Wright). Kibby [FM19(3): 75-76 (2018)] stated that this species is "quite common" in Britain, however it should be noted that historical records were probably filed under *Russula praetervisa* or *R. pectinatoides*.

Russula violaceoincarnata Knudsen & T.

Borgen, Persoonia 14(4): 509 (1992)

S: !

H: On soil near *Betula* sp. along a grassy forest path. A collection (2019) from Easterness or Moray (Abernethy Forest), determined as this based on a comparison of its ITS sequence with those obtained by Finnish authors (R. Wright) and documented in Tortelli [FM21(4): 126-128 (2020)].

SAGARANELLA V. Hofst., Clémençon, Moncalvo & Redhead, in Hofstetter, Redhead, Kauff, Moncalvo, Matheny & Vilgalys, *Cryptog. Mycol.* 35(4): 418 (2015) [2014]

Type: Sagaranella tylicolor (Fr.) V. Hofst., Clémençon, Moncalvo & Redhead

The following changes from *Tephrocybe* are required following a six-gene phylogenetic analysis [Hofstetter *et al.*, *Cryptog. Mycol.* 35(4): 399-425 (2015)]:

gibberosa (Jul. Schäff.) V. Hofst., Clémençon, Moncalvo & Redhead, in Hofstetter, Redhead, Kauff, Moncalvo, Matheny & Vilgalys, Cryptog. Mycol. 35(4): 419 (2015) [2014]
E: ! S: !

H: In coniferous litter, nitrophilous.

Move *Tephrocybe gibberosa*, *Lyophyllum gibberosum* and *Collybia gibberosa* from the synonymy of *T. ambusta* (now recognised as *Lyophyllum ambustum*) to the synonymy of this new entry. This was recognised as a British species and one which was distinct from *T. ambusta* (post NCL) by Orton [*Notes R. bot. Gdn Edinb.* 29(1): 76 (1969)], a distinction supported by Hofstetter *et al.* [*Cryptog. Mycol.* 35(4): 399-425 (2015)]. Orton stated that this differed from *T. ambusta* i.a. in not necessarily being associated with burnt ground. A 2001 collection at E from Peeblesshire (Dawyck), an Orton (1967) collection from Mid Perthshire (Camghouran) and two

collections (1975 & 1991) at K from Warwickshire (Sutton Coldfield).

tylicolor (Fr.) V. Hofst., Clémençon, Moncalvo & Redhead, in Hofstetter, Redhead, Kauff, Moncalvo, Matheny & Vilgalys, Cryptog. Mycol. 35(4): 419 (2015) [2014] Sagaranella tesquorum (Fr.) V. Hofst., Clémençon, Moncalvo & Redhead, in Hofstetter, Redhead, Kauff, Moncalvo, Matheny & Vilgalys, Cryptog. Mycol. 35(4): 419 (2015) [2014]

Sarcodon regalis Maas Geest.

Move to synonymy of entry headed by $Hydnellum\ lepidum\ (q.v.).$

SERTULICIUM Spirin, Volobuev & K.H. Larss., in Spirin, Volobuev, Viner, Miettinen, Vlasák, Schoutteten, Motato-Vásquez, Kotiranta, Hernawati & Larsson, *Mycol. Progr.* 20(4): 460 (2021)

Type: *Sertulicium niveocremeum* (Höhn. & Litsch.) Spirin & K.H. Larss.

granuliferum (Hallenb.) Spirin & Volobuev, in Spirin, Volobuev, Viner, Miettinen, Vlasák, Schoutteten, Motato-Vásquez, Kotiranta, Hernawati & Larsson, *Mycol. Progr.* 20(4): 461 (2021)

E: !

H: English collection on dead wood of *Corylus*. A collection (2020) from South Hampshire (Crab Wood) determined as this based on its morphology and on a comparison of its ITS sequence (E. Janke) with that of the holotype of *Sistotremastrum guttuliferum*, which was placed in the synonymy of *Sertulicium granuliferum* in Spirin *et al.* [*Mycol. Progr.* 20(4): 453-476 (2021)].

niveocremeum (Höhn. & Litsch.) Spirin & K.H. Larss., in Spirin, Volobuev, Viner, Miettinen, Vlasák, Schoutteten, Motato-Vásquez, Kotiranta, Hernawati & Larsson, *Mycol. Progr.* 20(4): 466 (2021)

Sistotremastrum niveocremeum (Höhn. & Litsch.) J. Erikss. New heading for entry currently headed by Sistotremastrum niveocremeum (which now becomes a synonym) following the molecular studies of Spirin et al. [Mycol. Progr. 20(4): 453-476 (2021)].

SPHAGNURUS Redhead & V. Hofst., in

Redhead, Index Fungorum 202: 1 (2014)

Type: Sphagnurus paluster (Peck) Redhead & V. Hofst.
The following change from Tephrocybe is required following a six-gene phylogenetic analysis [Hofstetter et al., Cryptog. Mycol. 35(4): 399-425 (2015)]:

paluster (Peck) Redhead & V. Hofst., in Redhead, *Index Fungorum* 202: 1 (2014)Name changed from *Tephrocybe palustris*.

TEPHROCYBE Donk

The following changes are required in accordance with molecular data in Hofstetter *et al.* [*Cryptog. Mycol.* 35(4): 399-425 (2015)]

ambusta (Fr.) Donk

Move *Lyophyllum ambustum* from synonymy to head this entry. Move *T. gibberosa, Lyophyllum gibberosum* and *Collybia gibberosa* from the synonymy of this to the synonymy of *Sagaranella gibberosa* (q.v.) and delete second sentence of **Notes**.

anthracophila (Lasch) P.D. Orton

Move to synonymy of Lyophyllum anthracophilum (q.v.).

atrata (Fr.) Donk

Move Lyophyllum atratum from synonymy to head this entry.

boudieri (Kühner & Romagn.) Derbsch Name changed to *Myochromella boudieri* (q.v.).

inolens (Fr.) M.M. Moser Name changed to *Myochromella inolens* (q.v.).

palustris (Peck) Donk Name changed to *Sphagnurus paluster* (q.v.).

tylicolor (Fr.) M.M. Moser Name changed to *Sagaranella tylicolor* (q.v.).

Tremella imshaugiae Diederich, Coppins, R.C. Harris, Millanes & Wedin, *Bull. Soc. Nat. luxemb.* 121: 242 (2020) S: !

H: On thalli of *Imshaugia aleurites*.

Scottish holotype (2013) and paratype (1999) collections at E, respectively from Easterness (Glen Feshie) and South Aberdeen (valley of Allt na Claise Moire).

Tremella macrobasidiata J.C. Zamora, Pérez-Ort. & V.J. Rico, *Lichenologist* 43(5): 408 (2011)

S: !

H: On discoloured (orange brown to blackish) apothecia of *Lecanora chlarotera*.

A collection at E (2015) from East Lothian (The Brunt) and also reported from Moray (near Forres).

Tremella tubulosae Diederich, Coppins, J.C. Zamora, Millanes & Wedin, *Bull. Soc. Nat. luxemb.* 121: 243 (2020)

S: !

H: On thalli of *Hypogymnia tubulosa* inducing gall formation. Scottish holotype (2008) and two paratype (1999) collections at E, respectively from South Aberdeen (Glen Fenzie), East Sutherland (Loch Fleet) and Moray (Culbin Forest).

Tricholoma hemisulphureum (Kühner) A. Riva ex Boffelli, in Boffelli, *Riv. Micol.* 59(3): 208 (2016) *Tricholoma sulphureum* var. *hemisulphureum* Kühner, in Bon, *Mycol. helv.* 3(3): 325 (1989)

E: ! W: !

H: In grassland on calcareous soil, associated with *Helianthemum nummularium*.

Likely to be a common associate of *Helianthemum* nummularium. Raised from being recognised as a variety of *T. sulphureum* based on studies reported in Heilmann-Clausen *et al.* [*Persoonia* 38: 38-57 (2017)].

Tricholoma quercetorum Contu, *Micol. Veg. Medit.* 18(2): 94 (2004) [2003]

E: !

H: English collections on soil near *Quercus*.

Collections (2020) from East Sussex (Fairlight) and Surrey (Richmond Park), the former determined as this (sensu Heilmann-Clausen *et al.*, 2017) based on 100% matching of its ITS sequence (N. Aplin) with that obtained from a collection so named from Portugal. For further details see Overall [FM22(1): 18-21 (2021)].

Tricholoma sulphureum *var.* **hemisulphureum** Kühner, in Bon, *Bull. trimest. Féd. Mycol. Dauphiné-Savoie* 28(no. 110): 15 (1988)

This is an invalid name which was validated in 1989. This entry should be deleted and replaced by that headed by \mathcal{T} . hemisulphureum (q.v.).

TRUNCOSPORA Pilát, *Sb. Nár. Mus. v Praze*, Rada B, Prír. Vedy 9(2): 108 (1953) Type: *Truncospora ochroleuca* (Berk.) Pilát

atlantica Spirin & Vlasák, in Spirin, Kout & Vlasák, *Nova Hedwigia* 100(1-2): 166 (2014) [2015]

Mis.: Perenniporia ochroleuca sensu auct. Brit.

E: ! W: ! O: Channel Islands: !

H: On dead attached and fallen wood of a wide range of broadleaved trees and shrubs, quite frequent in Cornwall and the Channel Isles, elsewhere usually found near the coast and perhaps restricted by winter temperatures.

Recorded along the west coast of Britain northwards to Pembrokeshire and along the south coast eastwards to East Sussex. Formerly recorded (since 1987) in Britain and the Ch. Is. as *Perenniporia ochroleuca*, a name now regarded as belonging to one or more non-European species in Spirin *et al.* [*Nova Hedwigia* 100(1-2): 159-175 (2014)]. A specimen in K from West Sussex (Mill Hill) was sequenced and its barcode matched that of the holotype (B. Douglas).

Tubaria vinicolor (Peck) Ammirati, Matheny & Vellinga, in Matheny, Vellinga, Bougher, Ceska, Moreau, Neves & Ammirati, *Mycologia* 99(4): 580 (2007) *Naucoria vinicolor* Peck, *Bull. Torrey bot. Club* 36(6): 334 (1909)

E: !

H: On disturbed soil in gardens.

A collection (2001) in K from Surrey (Kew Gardens), originally determined as *Cortinarius anthracinus* which was redetermined based on a comparison of its ITS sequence (K. Liimatainen) with those of this taxon s. Matheny *et al.*, [*Mycologia* 99(4): 569-585 (2007)]. This is a saprotrophic species previously known from Western USA.

BASIDIOMYCOTA, PUCCINIOMYCOTINA

BOURDOTIGLOEA Aime, in Aime, Urbina, Liber, Bonito & Oono, *Mycologia* 110(1): 144 (2018) Type: *Bourdotigloea vestita* (Bourdot & Galzin) Aime

concisa Spirin & G. Trichies, in Spirin, Malysheva, Trichies, Savchenko, Põldmaa, Nordén, Miettinen & Larsson, Fungal Systematics and Evolution 2: 322 (2018)

E: !

H: English collection on fallen wood of *Fagus sylvatica*. Described with an English paratype collected in 1923 by Pearson from East Sussex (Buckhurst Park) and formerly determined by Bourdot as *Platygloea vestita*.

vestita (Bourdot & Galzin) Aime, in Aime, Urbina, Liber, Bonito & Oono, *Mycologia* 110(1): 144 (2018)

Name changed from *Helicogloea vestita*. Molecular studies reported in Aime *et al.* [*Mycologia* 110(1): 136-146 (2018)] have shown that this species is not congeneric with the type of *Helicogloea*.

CHIONOSPHAERA D.E. Cox

The included lichenicolous species *C. coppinsii* and *C. lichenicola* have been shown not to be closely related to the generic type and both are now accommodated in the new genus *Crittendenia* (q.v.).

CRITTENDENIA Diederich, Millanes, M. Westb., Etayo, J.C. Zamora & Wedin, in Millanes, Diederich, Westberg & Wedin, *Lichenologist* 53: 111 (2021)

Type: *Crittendenia coppinsii* (P. Roberts) Diederich, M. Westb., Millanes & Wedin

coppinsii (P. Roberts) Diederich, M. Westb., Millanes & Wedin in Millanes, Diederich, Westberg & Wedin, *Lichenologist* 53: 113 (2021)

Name changed from Chionosphaera coppinsii.

lichenicola (Alstrup, B. Sutton & Tønsberg) Diederich, Millanes & Wedin in Millanes, Diederich, Westberg & Wedin, *Lichenologist* 53: 113 (2021)

Name changed from *Chionosphaera lichenicola*.

Helicogloea angustispora L.S. Olive

Note the change of epithet spelling from that of the protologue (*augustispora*). It is clear from the protologue that the distinguishing character of this species is the narrow

basidiospores and hence *angusti*- was intended. This qualifies as an orthographic/typographic error to be corrected [ICN Shenzhen Code Art. 60.1].

Helicogloea farinacea (Höhn.) D.P. Rogers Name changed to *Saccosoma farinaceum* (q.v.).

Helicogloea pellucida Spirin & V. Malysheva, in Spirin, Malysheva, Trichies, Savchenko, Põldmaa, Nordén, Miettinen & Larsson, *Fungal Systematics and Evolution* 2: 334 (2018)

H: English collection on decorticated *Salix* log. An English collection at K (2019) from Mid-west Yorkshire (Otley).

Helicogloea vestita (Bourdot & Galzin) P. Roberts Name changed to *Bourdotigloea vestita* (q.v.).

SACCOSOMA Spirin, in Spirin, Malysheva, Trichies, Savchenko, Põldmaa, Nordén, Miettinen, Larsson, *Fungal Systematics and Evolution* 2: 336 (2018)

Type: Saccosoma farinaceum (Höhn.) Spirin & K. Põldmaa

farinaceum (Höhn.) Spirin & K. Põldmaa, in, Malysheva, Trichies, Savchenko, Põldmaa, Nordén, Miettinen, Larsson, Fungal Systematics and Evolution 2: 337 (2018) Name changed from Helicogloea farinacea which becomes a synonym. Molecular studies reported in Spirin et al. [Fungal Systematics and Evolution 2: 311-340 (2018)] have shown that this species is not closely related to the types of either Helicogloea or Saccoblastia (which was shown to be a synonym of Helicogloea) and therefore a new genus was required to accommodate it. Spirin et al. (2018) published a barcode sequence derived from a specimen in K from Surrey (Witley Common) which matched that of their designated neotype.

ALIEN BASIDIOMYCETES

Coniophora arachnoidea Pat., Bull. Soc. mycol. Fr. 28(1): 31 (1912)

Original description based on material on fallen banana leaves in Guinée Française (Guinea-Conakry). A single (2020) English collection in K from a tropical glasshouse (Surrey, Kew Gardens, Princess of Wales Conservatory) on soil near a pond.

ADDITIONS & AMENDMENTS TO LIST OF EXCLUDED TAXA

BASIDIOMYCOTA, AGARICOMYCOTINA

antillarum (Fr.) Dennis, Panaeolus Move to 'included' list.

argutus Fr., Cortinarius Move to 'included' list.

armeniacus (Schaeff.) Fr., Cortinarius Move to 'included' list.

castaneus (Bull.) Fr., Cortinarius Move to 'included' list.

chrysomallus Lamoure, Cortinarius

Move from 'included' list following sequencing and redetermination, as the holotype of the new species *C. subsaniosus* (q.v.), of the single voucher collection in K (from Westmorland, Sandscale Haws) which was supporting its CBIB inclusion. Further details in Hyde *et al.* [Fungal Diversity: 10.1007/s13225-020-00439-5 (2020)].

comptulus M.M. Moser, Cortinarius Move to 'included' list.

deliquescens (Bull.) Fr., Coprinus Move to 'included' list as *Coprinellus deliquescens*.

erosa (Fr.) Sacc., Collybia

Name changed to *Sagaranella erosa* (Fr.) V. Hofst., Clémençon, Moncalvo & Redhead, in Hofstetter, Redhead, Kauff, Moncalvo, Matheny & Vilgalys, *Cryptog. Mycol.* 35(4): 419 (2015) [2014].

erubescens M.M. Moser, Cortinarius Move from 'included' list following sequencing and redetermination, as *C. jacobi-langei* (q.v.), of the single voucher collection in K (from Merionethshire, Coed Llyn Mair) which was supporting its CBIB inclusion (K. Liimatainen).

fagetorum M.M. Moser, Cortinarius

Move from 'included' list following sequencing and redetermination, as a paratype of the new species *C. aurae* (q.v.), of the single voucher collection in K (from West Kent, Mereworth Woods) which was supporting its CBIB inclusion. Further details in Hyde *et al.* [*Fungal Diversity:* 10.1007/s13225-020-00439-5 (2020)].

hymenocephalus (A.H. Sm. & Hesler) Birkebak & Adamčík, Hodophilus

Move from 'included' list. Now regarded as a North American, but not a European, species following Adamčík *et al.* [*Mycological Progress* 19(2): 111-125 (2020)] who provide a key to the European taxa.

illibatus Fr., Cortinarius

Move from 'included' list as currently lacking molecular evidence for inclusion. Move *C. subdelibutus* (an illegitimate name) from the synonymy of this to the synonymy of *C. myxo-anomalus* based on a comparison of ITS barcode sequences from *C. subdelibutus* holotype and *C. myxo-anomalus* syntype.

lasiosperma Bres., Mycena

Retain in 'excluded' list but as a synonym of *Mycenella lasiosperma* (Bres.) Locq., *Revue Mycol.*, Paris 8: 3 (1943). Delete third sentence of **Notes**.

leiocastaneus Niskanen, Liimat. & Soop, Cortinarius Move from 'included' list following sequencing and redetermination, as *C. furfuraceus*, of the single voucher collection in K (from North Somerset, Stockhill Plantation), which was supporting its CBIB inclusion (K. Liimatainen).

macra (Sommerf.) Niemelä, Antrodia Move to 'included' list.

neerlandicus (Huijsman) Contu, Gymnopilus *Hebelomina neerlandica* Huijsman

Move from 'included' list. Of the five specimens in K collected from Surrey (Esher/Oxshott) and originally named as *Hebelomina neerlandica*, two have now been sequenced and redetermined as white/pale forms of *G.* cf. *penetrans*. Hence the remaining three have been similarly redetermined. Further details in Eberhardt *et al.* [*Plant Ecology & Evolution* 151(1): 96-109 (2018)].

obsoleta (Batsch) Quél., Clitocybe Move to 'included' list.

permixta (Barla) Pacioni, Macrolepiota This taxon was epitypified in Vizzini *et al.* [*Mycotaxon* 117: 149-164 (2011)] where it was also reduced in rank and recognised as *M. procera* forma *permixta*. Extend the final sentence of **Notes** with the following: "sensu Vellinga FAN5 which, following Vizzini *et al.* (2011), should now be

phaeophyllus P. Karst., Cortinarius
Move from 'included' list following sequencing and
redetermination, as *C. uraceonemoralis* (q.v.), of the single
voucher collection in K (from South Devon, Stover Park),
which was supporting its CBIB inclusion (K. Liimatainen).

poppyzon Melot, Cortinarius

recognised as M. rhodosperma".

Move from 'included' list following sequencing, matching with the sequence from a holotype and redetermination, as *C. quarciticus*, of the single voucher collection in K (from South Aberdeenshire, Inverey), which was supporting its CBIB inclusion (K. Liimatainen). This collection was documented (as *C. poppyzon*) in Kibby & Burnham [FM10(1): 19-23 (2009)]. Although the name *C. poppyzon* Melot predates *C. quarciticus* H. Lindstr., Melot's type specimens have not been made available for DNA sequencing.

psammocephalus (Bull.) Fr., Cortinarius

Move from 'included' list. The taxon formerly in the 'included' list was *C. psammocephalus* sensu CFP 4: 18 (1998), a species associated with deciduous trees. However, Liimatainen [*Index Fungorum* No. 344 (2017)] concluded that this was not *C. psammocephalus* in the original sense and hence it is now excluded. *Cortinarius psammocephalus* sensu CFP 4 is now recognised as *C. quercoconicus* (q.v.).

psammophilum Bon, Hebeloma Move to 'included' list.

pseudoprivignus Rob. Henry, Cortinarius
Delete **Notes** and move to synonymy of *C. hydrotelamonioides* in the 'included' list following Liimatainen *et al.* [*Fungal Diversity* 104: 291-331 (2020)].

saccharinus Romagn., Coprinus Move to 'included' list as *Coprinellus saccharinus*.

septentrionalis Bendiksen, K. Bendiksen & Brandrud, Cortinarius

Move from 'included' list following sequencing and redetermination, as *C. fennoscandicus* (q.v.), of the single voucher collection in K (from South Aberdeen, Inverey Flats), which was supporting its CBIB inclusion (K. Liimatainen).

splendificus Chevassut & Rob. Henry, Cortinarius Move from 'included' list following sequencing, matching with a reference sequence and redetermination, as *C. xanthophyllus* (a nom. inval. fide Index Fungorum) sensu Garnica, Frøslev & Moënne-Loccoz, of the single voucher collection in K (from Northamptonshire, Easton Hornstocks), which was supporting its CBIB inclusion (K. Liimatainen).