

New national and regional biological records for Finland 1. Contributions to agaricoid and ascomycetoid taxa of fungi

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Here we present records on 59 fungal taxa, based on recent field work and on herbarium studies. Of those 22 are reported here as new to Finland. Information concerning 37 taxa published elsewhere, is brought here together. Coordinates are given in Uniform Coordinate System (UCS).

Bolbitius psittacinus Hauskn., Antonín & Polčák
FINLAND. Regio aboënsis (Ab/V), Turku, Ruissalo, SWW of Choraesus spring, on old track to Hekkaniitty. Deciduous forest with *Quercus robur*, *Tilia cordata*, *Corylus avellana*, *Betula*, *Populus tremula* and *Salix caprea*, on twig of *Betula*. UCS 671194:323384, coll. Katri Kokkonen & Jukka Vauras 23973, 28.VIII.2006, det. Katri Kokkonen & Jukka Vauras by ITS 2008, conf. Anton Hausknecht 2009 (with notation: "micro: spores faintly large, but in all other characters as in type from Czech Republic"), Herb. TUR-A. FINLAND. Ostrobotnia ultima (Obu/PeP), Keminmaa, Kallinkangas. Between herb-rich *Picea abies* dominated forest on calcareous ground and a hiking path, on litter. UCS 7304351:3386685, coll. Hilikka Lahti & Unto Söderholm (H6036148), coll. Hilikka Lahti 100/12, Herb. TUR-A, 06.IX.2012, det. Jukka Vauras & Tea v. Bonsdorff 2012.

Very rare in temperate – boreal zone, four localities known from Europe.

Bryocentria destruens Döbbeler

FINLAND. Tavastia borealis (Tb/PH), Laukaa, Valkola-Mäkikylä, SE-side of Huutlamminmäki. On *Sanionia uncinata*. UCS 6929–6931:435–436, coll. Seppo Huhtinen & Peter Döbbeler, 10.IX.2004, det. Peter Döbbeler (holotype, TUR). Döbbeler 2010.

Camarophyllopsis atrovelutina (Romagn.) Argaud

FINLAND. Nylandia (N/U), Helsinki, Kumpula – Toukola. Grass-herb forest (*Oxalis acetosella*, *Pyrola rotundifolia*). Near decayed stump of *Picea abies*, almost bare mull, litter scanty. UCS 6678:3386, coll. Reima Saarenoksa 29981, 04.VIII.1981, det. Ilkka Kytövuori 2011, Herb. H.

Clitopilus cystidiatus Hauskn. & Noordel

FINLAND. Ostrobotnia ultima (Obu/PeP), Rovaniemi, Katisko-ojan lehto, *Picea*-forest at creek, 7358903:3466930, coll. & det. Tapio Kekki 382, 09.IX.2011, Herb.

TUR; FINLAND. Karelia borealis (Kb/PK), Lieksa, Koli National Park, Mäkränaho. Meadow with short grasses and herbs, scattered *Betula*. UCS 70010:6424, coll. & det. Katri Kokkonen 317/11, 12.IX.2011, Herb. TUR; FINLAND. Karelia borealis (Kb/PK), Lieksa, Koli National Park, Mäkränaho. Mixed forest dominated by *Betula* beside the meadow, grassy undergrowth. UCS 70009:6424, coll. & det. Katri Kokkonen 514/12, 30.VIII.2012, Herb. TUR.

***Cortinarius acutispissipes* Rob. Henry**

FINLAND. Alandia (Al/A), Eckerö, Skag, Ängelund. Mesic to damp *Picea abies* dominated, mixed forest. UCS 670:309, coll. Kalevi Alho, Unto Laine & Terttu Lempiäinen, 10.IX.1981, det. Kare Liimatainen, Tuula Niskanen & Ilkka Kytövuori by comparing ITS with the type 2012, TUR068125.

Closely related to *C. alboviolaceus*.

***Cortinarius badiolaevis* Niskanen, Liimat.,**

Mahiques, Ballarà & Kytöv.

FINLAND. Alandia (Al/A), Jomala, Gottby, between Djurvik and Torp, ca. 1 km N from Djurvik, W side of the small dust road from Norrgård to Högberg. Spruce (*Picea abies*) forest with some *Populus tremula*, *Betula* and *Pinus sylvestris*, mossy ground or needle litter, on calcareous ground. UCS 66895-7:30984-7, coll. Tuula Niskanen & Kare Liimatainen 06-289, 24.X.2006, det. Kare Liimatainen & Tuula Niskanen 2012, H6029343. FINLAND. Alandia (Al/A), Vårdö, Sandö, near Sandö sund. Pine (*Pinus sylvestris*) heath forest on sandy soil, 6703:3134, coll. Tuula Niskanen & Kare Liimatainen 06-301, 26.X.2006, det. Kare Liimatainen & Tuula Niskanen 2012, Herb. H.

In mesic to dry coniferous forests, presumably with *Pinus* and *Picea*, on calcareous soil. In Nordic countries also at Sweden. Rare in hemiboreal – boreal zone. Knudsen & Vesterholt 2012.

***Cortinarius brunneocalcarius* Niskanen, Liimat.**

& Kytöv.

FINLAND. Regio kuusamoënsis (Ks/Ks), Kuusamo, Oulanka, Kiutaköngäs. In coniferous forest (*Picea*, *Pinus*) on calcareous ground. UCS 7365–6:3604, coll. Tuula Niskanen, Ilkka Kytövuori & Kare Liimatainen 02–809, 18.IX.2002, det. Ilkka Kytövuori, Kare Liimatainen, Tuula Niskanen 2012.

Very rare, in Europe only known so far from Kuusamo, Finland. Niskanen *et al.* 2012.

***Cortinarius campester* Reumaux**

FINLAND. Regio aboënsis (Ab/V), Turku, Ruissalo, Honkapirtti. Deciduous forest of *Quercus robur*, *Corylus avellana* and some *Betula* on mull soil. UCS 67117–9:32329–31, coll. Tuula Niskanen & Kare Liimatainen 04–1048,

05.X.2004, H6031399, det. Kare Liimatainen & Tuula Niskanen by comparing ITS with the type 2012.

A small-sized species in section *Hydrocybe/Incrustati*.

Cortinarius cedretorum* Maire ss. Jeppesen *et al.

FINLAND. Alandia (Al/A), Jomala, Önningsby, N of Södervik. Mesic *Picea abies* forest with some *Pinus sylvestris* and *Betula* on calcareous ground. UCS 66863–7:1123–6, coll. Tuula Niskanen & Kare Liimatainen 06–312, 27.X.2006, H6029332, det. Kare Liimatainen & Tuula Niskanen by ITS 2012.

With conifers on calcareous ground; very rare in hemiboreal – boreal zone; in Nordic countries also known from Sweden.

***Cortinarius epipurrus* Chevassut & Rob. Henry**

FINLAND. Regio aboënsis (Ab/V), Lohja, Jalassaari, Tamminiemi, nature reserve area. By the lake shore, deciduous forest (*Tilia cordata*, *Quercus robur*, *Populus tremula*, *Betula*, *Corylus avellana*). UCS 66820–2:33265–9, coll. Tuula Niskanen & Ilkka Kytövuori 04–884, 19.IX.2004, det. Kare Liimatainen, Tuula Niskanen & Ilkka Kytövuori by comparing ITS with the type 2012, H6029984.

Section *Hinnulei*.

***Cortinarius griseascens* Rob. Henry ex Bidaud,**

Moëne-Loec. & Reumaux

FINLAND. Regio aboënsis (Ab/V), Turku, Ruissalo, Honkapirtti. Deciduous forest of *Quercus robur*, *Corylus avellana* and some *Betula* on mull soil. UCS 67117–9:32329–31, coll. Tuula Niskanen & Kare Liimatainen 04–1042, 05.X.2004, det. Kare Liimatainen & Tuula Niskanen by comparing ITS with the type 2012, H6031415.

Section *Hinnulei*.

***Cortinarius impennoides* Bidaud, Moëne-Loec.**

& Reumaux

FINLAND. Regio kuusamoënsis (Ks/Ks), Kuusamo, Oulanka, Ampumavaara, S slope. Old, mossy, mesic grass-herb spruce forest (*Picea abies*) with some *Betula*, *Pinus sylvestris* and *Populus tremula*. UCS 73665–8:36035–9, coll. Tuula Niskanen & Kare Liimatainen 05–143, 17.IX.2005, det. Tuula Niskanen & Kare Liimatainen by comparing ITS with the type 2012, H6029902.

In mesic to dryish coniferous forests, on acid to calcareous ground, common in hemiboreal – boreal zone; in Nordic countries also known from Norway and Sweden. Knudsen & Vesterholt 2012.

***Cortinarius mattiae* Soop.**

FINLAND. Lapponia Kittilensis (KiL/LKi), Kolari, E side of the small road Teuravuoma – Lappea (Korkealehdontie), opposite to Haapasaaajo, S of the crossing of Kotasaaajo. Mesic spruce heath forest. UCS 7460:3358, coll. Ilkka Kytövuori 98-1127, det. Kare Liimatainen & Tuula Niskanen by comparing ITS with the type 2012. Herb. H. FINLAND. Tavastia australis (Ta/EH), Juupajoki commune, Sahajoki-river ravines between Moisionvuori and road 58. *Picea abies* forest with *Betula*. UCS 6862:3368, coll. Mario Tortelli (Niskanen 04–117), 19.VIII.2004, det. Tuula Niskanen & Kare Liimatainen by comparing ITS with the type 2012, H6029375.

In mesic *Picea* forests to dry sandy *Pinus forests*, occasional in boreal zone; in Nordic countries also known from Sweden. Knudsen & Vesterholt 2012.

***Cortinarius pini* Brandrud**

FINLAND. Regio aboënsis (Ab/V), Parainen, Ålön, Petteby, Stornäset, E of Nedergård. Rich grass-herb spruce forest with *Corylus*, *Populus tremula*, *Quercus* etc., pines on rocky places, calcareous ground. Coll. Ilkka Kytövuori 90–2288, 30.IX.1990, det. Kare Liimatainen, Tuula Niskanen & Ilkka Kytövuori by comparing ITS with the type 2012, H6032728.

With *Pinus* on calcareous soil; very rare in hemiboreal – boreal zone; in Nordic countries also known from Sweden and Norway.

***Cortinarius squamulifer* Bidaud & Reumaux**

FINLAND. Regio aboënsis (Ab/V), Turku. Ruissalo, Honkapirtti. Deciduous forest of *Quercus robur*, *Corylus avellana* and some *Betula* on mull soil. UCS 67117–9:32329–31, coll. Tuula Niskanen & Kare Liimatainen 08–057, 03.IX.2008, det. Kare Liimatainen & Tuula Niskanen by comparing ITS with the type 2012, H6001952.

A species in section *Hinnulei*.

***Cortinarius subcastaneus* Bidaud & Reumaux**

FINLAND. Tavastia australis (Ta/EH), Urjala, NE of Urjala centre, by the road E63, SW of Tarpianjoki, Hakki-la, Peräperko, W and E of the main road. *Betula* dominated forest. UCS 67886:33138, coll. Tuula Niskanen, Mika Toivonen & Kare Liimatainen 04–019, 06.VII.2004, det. Kare Liimatainen & Tuula Niskanen by comparing ITS with the type 2012, H6031400.

A small-sized species in section *Hydrocybe/Incrustati*.

***Cortinarius turgidoides* Rob. Henry**

FINLAND. Ostrobothnia kajanensis (Ok/Kn), Suomussalmi, by the road 843, Särkkä, between Isonelavaara and Ruohovaara, NW of Pärämönjärvi, Pärämönsärkkä. Dry

Pinus sylvestris heath forest on sandy soil with some *Picea* and *Betula*. UCS 7223:3619, coll. Tuula Niskanen, Ilkka Kytövuori & Kare Liimatainen 02–638, 16.IX.2002, det. Tuula Niskanen, Ilkka Kytövuori & Kare Liimatainen by comparing ITS with the type 2012, H6031917.

Mostly in dry *Pinus* forests, also in *Picea* forests and in subalpine *Betula* forests; common in hemiboreal – subalpine zone; in Nordic countries also known from Norway and Sweden. Knudsen & Vesterholt 2012.

***Cortinarius venustissimus* Bidaud.**

FINLAND. Ostrobothnia ultima (Obu/PeP), Tervola, Louepalo, Kätkävaaran marmorilouhos. Dryish grass-herb pine forest with some *Betula*, *Populus* and *Picea*. UCS 7348:3407, coll. Ilkka Kytövuori 07–659, 23.VIII.2007. Regio kuusamoënsis (Ks/Ks), Kuusamo, Oulanka National Park, N-side of the small road to Mataraniemi. Dry, sandy pine forest. UCS 7366:3604, coll. Ilkka Kytövuori 07–814, 26.VIII.2007. Lapponia kittilensis (Lkk/KiL), Muonio. In dry (to mesic) *Pinus* forests, coll. Ilkka Kytövuori, 11.VIII.2001, det. Tuula Niskanen, Ilkka Kytövuori & Kare Liimatainen by comparing ITS with the type 2012.

Rare in boreal zone, but might be overlooked; in Nordic countries also known from Sweden. Knudsen & Vesterholt 2012.

***Cortinarius violaceorubens* Moënné-Locc. & Reumaux**

FINLAND. Regio aboënsis (Ab/V), Salo, Kisko, Liuhto, Viiramäki. Mesic, partly moist spruce forest (*Picea abies*) on rich ground with some *Betula*, *Populus tremula* and *Pinus sylvestris*. UCS 6693–4:3310, coll. Tuula Niskanen & Kare Liimatainen 07–062, 2.VIII.2007, det. Tuula Niskanen & Kare Liimatainen by comparing ITS with the type 2012, H6001807.

Closely related to *C. cyanites*.

***Dacampia rufescentis* (Vouaux) D. Hawksw.**

FINLAND. Ostrobothnia media (Om/KP), Alajärvi, Kuparikallio. On *Peltigera rufescens*. UCS 7004:3349, coll. A.L. Backman, 26.VI.1907. Herb. TUR.

Five more collections from same host from Ab, Ok, Obu, all found and determined by Arto Puolasmaa. Puolasmaa et al. 2012.

***Dematioscypha richonis* (Boud.) Huhtinen var. *olivacea* (Vel.) Huhtinen**

FINLAND. Regio aboënsis (Ab/V), Parainen, Houtskari, Jungfruskär, Skarpnäs, *Alnus* forest with abundant *Prunus padus*; fallen branch, UCS 66842:31710, coll. & det. Sepu Huhtinen 11/91, 08.X.201, Herb. TUR.

***Entoloma incanum* (Fr.: Fr.) Hesler**

FINLAND. Regio kuusamoënsis (Ks/Ks), Kuusamo, Oulanka National Park, near Nurmisaarenrinne, lower course of the dried brook Tulilammenpuro. Rich mixed forest dominated by *Picea abies*, at the bottom of brook amongst herbs and mosses. UCS 73645:36095, coll. Katri Kokkonen 497/07 & Esteri Ohenoja, 28.VIII.2007, Herb. TUR. UCS 736463:360952, coll. Katri Kokkonen & Jukka Vauras 25247F, 3.IX.2007, Herb. TUR-A. FINLAND. Regio kuusamoënsis (Ks/Ks), Kuusamo, Oulanka National Park, Liikasenvaara. Valley of the lower course of the brooklet Lippihetteenpuro. Mossy bottom of brook valley on calcareous ground. With *Ribes spicatum*, *Filipendula ulmaria*, *Geranium sylvaticum*, *Galium boreale*, *Angelica sylvestris*, *Ranunculus acer*, *Hylocomium splendens*, *Rhytidadelphus triquetrus*. UCS 736473:360922, alt. 170 m a.s.l., coll. Katri Kokkonen & Esteri Ohenoja, 28.VIII.2007, OULU F76553. All determinations by K. Kokkonen, E. Ohenoja & J. Vauras 2007.

Rare in temperate – boreal zone (in meadows, too). Knudsen & Vesterholt 2012.

***Galerina similis* Kühner**

FINLAND. Tavastia australis (Ta/EH), Tampere, Näsinkallio, on the southern side of the park, on mosses of the upright slope of the rock, UCS 682600:332728 and 682601:332733, coll. & det. Lasse Kosonen, 31.10.2010 and 19.10.2012, Herb. TUR.

***Geoglossum asaeptatum* Nitare**

FINLAND. Tavastia australis (Ta/EH), Hämeenlinna, Aulanko, Levonkallio, rich forest with mainly *Picea abies*, on forest track with moved soil. UCS 67712:33641, coll. Olli Lakanniemi, 01.XI.2011, det. Unto Söderholm, conf. Johan Nitare, Herb. TUR (Mauri Lahti 181/11).

***Hawksworthiana peltigericola* (D. Hawksw.) U.**

Braun

FINLAND. Nylandia (N/U), Loviisa, Pernaja, Hardom. On *Peltigera spuria*. UCS 671:345, coll. F.W. Klingstedt, 20.VIII.1912, det. Arto Puolasmaa, Herb. TUR.

The species has been found from ten more collections of *Peltigera* from Ab, Sa, Lkk, all determinations are by A. Puolasmaa. Puolasmaa et al. 2012.

***Hobsoniopsis santessonii* (Lowen & D.**

Hawksw.) D. Hawksw.

FINLAND. Nylandia (N/U), Hanko, Tvärminne, Långskär. On *Peltigera scabrosa*. UCS 6640:3290, coll. Kallervo Linkola, 6.VII.1911, det. Arto Puolasmaa, Herb. H.

There are by now 16 additional collections on this host from Ab, Ta, Kb, Obu, Le, Li, all determined by A. Puolasmaa. Puolasmaa et al. 2012.

***Hydropus moserianus* Bas.**

FINLAND. Tavastia australis (Ta/EH), Nokia, Tottijärvi, Sorvantie. In young, dense *Picea abies*-plantation. On needle litter. UCS 6818312: 3304981, coll. Lasse Kosonen 16.XII.2000, det. Tea v. Bonsdorff & Ilkka Kytövuori & Seppo Huhtinen 2010, Herb. TUR.

Very rare in temperate – boreal zone, but probably overlooked. Knudsen & Vesterholt 2012.

***Hypocrea parmastoi* Overton**

FINLAND. Savonia australis (Sa/ES), Heinävesi, Kermajärvi, Korpisaari. On the underside of a fallen *Pinus sylvestris* trunk. UCS 6924521:3593422, coll. & det. Jorma Pennanen 731, 22.IX.2008, conf. Seppo Huhtinen, Herb. TUR. FINLAND. Tavastia australis (Ta/EH), Tampere, Iidesjärvi, SE -corner. On a fallen *Alnus* branch. UCS 682330:333087, coll. & det. Lasse Kosonen 15/10, 18.X.2010, conf. Walter Jaklitsch, Herb. TUR.

***Inocybe acutoides* Kokkonen & Vauras**

FINLAND. Regio kuusamoënsis (Ks/Ks), Kuusamo, Liikasenvaara, Jäkälämutkanlampi. *Salix* thicket by the river Oulankajoki, near *S. phyllicifolia*, *S. lapponum*, *Ranunculus repens*, *Filipendula ulmaria*, *Potentilla palustris*, *Calamagrostis canescens*, *Galium palustre* and *Scutellaria galericulata*; amongst leaf litter, *Climacium dendroides* and *Calliargon cordifolium*, alt. ca. 138 m. UCS 73581:36182, coll. Katri Kokkonen 575/07, 01.IX.2007 (holotype TUR-A, isotypes GB, H, WTU).

Occasional in boreal zone, mainly in *Salix* thickets on alluvial inland lake and river shores. Collections from Tb, Sb, Kb, Obu, Ks, Lkk, Le, Li. Herb. H, OULU, TUR-A. Kokkonen & Vauras 2012.

***Inocybe amicta* Kokkonen & Vauras**

FINLAND. Regio kuusamoënsis (Ks/Ks), Kuusamo, Oulanka National Park, NW of Kiutaköngäs, north side of the river Oulankajoki, near the Oulanka Research Station, by path in shore forest, near *Pinus sylvestris*, *Betula*, *Populus tremula*, *Alnus incana*, *Prunus padus*, *Sorbus aucuparia*, *Juniperus communis*, *Vaccinium vitis-idaea*, *Rubus saxatilis*, *Thymus serpyllum* ssp. *tanaënsis*, *Solidago virgaurea*, *Fragaria vesca*, *Melica nutans*, *Campanula rotundifolia*, *Galium boreale*, *Ribes spicatum*, *Maianthemum bifolium*, *Achillea millefolium* and *Angelica sylvestris*, amongst litter and mosses, few on bare ground, soil with mull and fine sand, alt. ca. 158 m. UCS 73660:36037, coll. Jukka Vauras & Katri Kokkonen 61/09, 14.VIII.2009 (holotype TUR-A, isotypes GB, H, WTU).

Rare in boreal zone, mainly with *Pinus sylvestris* or *Picea abies* on somewhat calcareous soil. Collections from Sb, Ks. Herb. TUR-A. Kokkonen & Vauras 2012.

Inocybe borealis M. LangeSyn. *I. heterochrominea* Grund & Stuntz.

FINLAND. Nylandia (N/U), Vantaa, Mustavuori, W margin. Herb-rich forest with *Alnus incana*, *Betula*, *Corylus avellana*, *Picea abies*, *Populus tremula*, *Prunus padus*, *Salix caprea*, *Aegopodium podagraria*, *Convallaria majalis*, *Oxalis acetosella* and *Equisetum*, on soil with mull and clay. UCS 6682:3397, coll. Reima Saarenoksa 17488 dubl, 18.VIII.1988, det. Katri Kokkonen & Jukka Vauras 2009.

Rather rare in hemiboreal – boreal zone. Collections from Ab, N, St, Sb, Kb, Ks, PeP, KiL, Li, also known from Sweden (Torne Lappmark), Svalbard, Greenland (holotype) and North America. Herb. TUR, TUR-A. Kokkonen & Vauras 2012.

Inocybe boreocarelica Kokkonen & Vauras

FINLAND. Karelia borealis (Kb/PK), Nurmes, Tervavaara, W slope, old-growth heath forest dominated by *Picea abies*, near *Picea*, *Betula*, *Sorbus aucuparia*, *Vaccinium myrtillus* and *Maianthemum bifolium*, amongst *Hylocomium splendens*, alt. ca. 125 m. UCS 7058:3606, coll. Katri Kokkonen 25/09 30, VII.2009 (holotype TUR-A, isotype WTU).

Collected from only three localities in Kb, and in Norway, Sör-Tröndelag, from a subalpine pastured forest with *Betula pubescens* ssp. *czerepanovii*. Herb. TUR-A. Kokkonen & Vauras 2012.

Inocybe bufonia Kokkonen & Vauras

FINLAND. Karelia borealis (Kb/PK), Nurmes, Tervavaara, W slope, spruce swamp, near *Picea abies*, *Betula*, *Equisetum sylvaticum*, *Maianthemum bifolium* and *Dryopteris expansa*, amongst *Sphagnum girgensohnii*, alt. ca. 116 m. UCS 7058:3605, coll. Katri Kokkonen 45/09, 05.VIII.2009 (holotype TUR-A, isotype WTU).

Rare in boreal zone, in moist forests dominated by *Picea abies*. Collections from Ab, St, Kb, Ks, Obu. Herb. H, OULU, TUR-A. Kokkonen & Vauras 2012.

Inocybe ericetorum Vauras & Kokkonen

FINLAND. Lapponia inarensis (Li/InL), Utsjoki, Kevo, Kutuniemi, dry heath forest with *Betula pubescens* ssp. *czerepanovii* and *Pinus sylvestris* on sandy soil, on old forest track, alt. ca. 90 m. UCS 7742:3500, coll. Jukka Vauras 10522F, 18.VIII.1995 (holotype TUR-A).

Rare in hemiboreal – boreal zone, but probably overlooked. On small sandy roads and road banks on sandy soils near *Pinus sylvestris* and *Betula*. Collections from Ab, St, Kb, Li, also from Bohuslän, Sweden. Herb. TUR, TUR-A. Kokkonen & Vauras 2012.

Inocybe giacomii J. FavreSyn. *I. hinnulea* Kühner, *I. johannae* Kühner, *I. striaeapes* Kühner

FINLAND. Savonia borealis (Sb/PS), Kuopio, Vehmersalmi, Litmaniemi, by old dance pavilion. Old yard, near *Betula*, *Pinus sylvestris* and *Picea abies*. UCS 69612:35640, coll. Jukka Vauras 9198F, 11.VIII.1994, det. Katri Kokkonen & Jukka Vauras 2009.

Rare in boreal zone. At least with *Pinus sylvestris* and *Betula nana* on fairly acid, sandy soils. Collections from St, Sa, Sb, Kb, Li. Herb. TUR, TUR-A. Kokkonen & Vauras 2012.

Inocybe kittilensis Kokkonen & Vauras

FINLAND. Lapponia kittilensis (Lkk/KiL), Kittilä, SE side of the church village, south of the camping place, near the swimming shore, ca. 120 m east of the river Ounasjoki, wood pastured by sheep, nearby *Salix phylicifolia*, *Betula*, *Picea abies*, *Pinus sylvestris*, *Salix caprea* and *Populus tremula*, amongst leaf litter, alt. ca. 176 m. UCS 75080:34124, coll. Katri Kokkonen 188/08, 28.VIII.2008 (holotype TUR-A).

Likely very rare in boreal zone, only known from the type locality. Herb. TUR-A. Kokkonen & Vauras 2012.

Inocybe lapponica Kokkonen & Vauras

FINLAND. Lapponia inarensis (Li/InL), Utsjoki, Kevo, N of Kutuniemi, south of the mouth of the river Rässejohobohki, at foot of northern slope, in a moist site with *Betula pubescens* ssp. *czerepanovii* and *Salix*, amongst scattered mosses (e.g. *Polytrichum*) and *Betula* litter, alt. ca. 76 m. UCS 77431:35006, coll. Jukka Vauras 10521F, 18.VIII.1995 (holotype TUR-A).

Rare in boreal zone. Mostly on fairly moist soils near *Betula* and *Salix*, also upon timberline. Collections from Ks, Lks, Le, Li, also from Sweden, Jämtland. Herb. OULU, TUR, TUR-A. Kokkonen & Vauras 2012.

Inocybe myriadophylla Vauras & E. Larss.

FINLAND. Regio aboënsis (Ab/V), Lohja, Virkkala, Kyrkstad, ca. 450 m NNW of the church, E side of the road Tynninharjuntie, on bank, forest margin with *Pinus sylvestris*, *Picea abies*, *Salix caprea*, *Betula pendula* and *Populus tremula*, alt. ca. 60 m. UCS 66788:33334, coll. Jukka Vauras 19678F, 01.VII.2003 (holotype TUR-A, isotypes GB, H, WTU).

Rare in hemiboreal zone, at least with *Betula* on calcareous soil. Collections from Ab, also from Sweden, Närke. Herb. H, OULU, TUR-A. Vauras & Larsson 2012.

Inocybe paludicola Kokkonen & Vauras

FINLAND. Karelia borealis (Kb/PK), Nurmes, Ylikylä, 120 m S of Lake Viitajärvi, pine fen, beside overgrown ditch, near *Pinus sylvestris*, *Betula pubescens*, *B. nana*, *Alnus incana*, *Salix phylicifolia*, *Picea abies* seedling, *Menyanthes trifoliata*, *Andromeda polifolia*, *Chamaedaphne calyculata*, *Carex pauciflora* and *Vaccinium oxycoccos*, amongst *Sphagnum*, alt. ca. 98 m. UCS 70625:36053, coll. Katri Kokkonen 21/09, 30.VII.2009 (holotype TUR-A, isotype WTU).

Rare in boreal zone, in open mesotrophic to eutrophic *Pinus sylvestris* fens with *Betula*, *Salix* and *Picea abies*. Collections from Ab, Kb, Ok, Obo. Herb. OULU, TUR, TUR-A. Kokkonen & Vauras 2012.

Inocybe porcorum Vauras & Kokkonen

FINLAND. Regio aboënsis (Ab/V), Kemiönsaari, Västanfjärd, Billböle, Svinberget, Åkerbacka, E slope, bank of main road at margin of open forest with *Pinus sylvestris*, *Betula*, *Picea abies* and *Salix caprea*, alt. ca. 19 m. UCS 66677:32617, coll. Jukka Vauras 21444F, 15.VII.2004 (holotype TUR-A, isotypes H, GB, WTU).

Very rare in hemiboreal zone, only known from the type locality. Kokkonen & Vauras 2012.

Inocybe pseudoteratargus Vauras & Kokkonen

FINLAND. Alandia (Al/A), Jomala municipality, Möckelö, SW of Kovaberget, camping place, on mossy lawn near *Picea abies* and *Pinus sylvestris*, alt. ca. 3 m. UCS 6685:3106, coll. Jukka Vauras 7676F, 23.IX.1992 (holotype TUR-A, isotypes GB, H, WTU).

Occasional in hemiboreal – boreal zone, in coniferous and deciduous forests. Collections from Al, Ab, Ta, Tb, Sb, Kb, Obo, Ks, Obu, Lks, Li, also from Sweden, Värmland, and Estonia, Hiiu-maa. Herb. OULU, TUR, TUR-A. Kokkonen & Vauras 2012.

Inocybe purpureobadia Esteve-Rav. & A. Caball.

FINLAND. Nylandia (N/U), Hanko, Lappohja, SW of the village, Lappvikmalmarna, between the road and the sea; dry *Pinus sylvestris* heath forest on sand. UCS 66485–8:32888–9, coll. Ilkka Kytövuori & Mika Toivonen 4128, 03.IX.2004, det. Jukka Vauras & Katri Kokkonen 2010.

Very rare in hemiboreal – boreal zone; collections from N, Ks, also from Estonia, Ida-Viru. Herb. TUR, TUR-A. Described from Spain (Esteve-Raventós & Caballero Moreno 2009). Kokkonen & Vauras 2012.

Inocybe silvae-herbaceae Kokkonen & Vauras

FINLAND. Savonia borealis (Sb/PS), Kuopio, Pitkälähti, E side of the northern lake Matkusjärvi, herb-rich moist forest with mainly *Picea abies*, *Populus tremula* and *Salix caprea*, by path, alt. ca. 105 m. UCS 6970:3529, coll. Jukka Vauras 2268F, 16.VIII.1986 (holotype TUR-A, isotypes GB, WTU).

Occasional in hemiboreal – boreal zone, in rich, mostly moist forests with *Picea abies*, preferably on calcareous soil. Collections from Ab, Ta, Tb, Sb, Kb, Ok, Obu, Lkk, also from Sweden, Medelpad, and Norway, Buskerud. Herb. H, OULU, TUR, TUR-A. Kokkonen & Vauras 2012.

Inocybe spuria Jacobsson & E. Larss.

FINLAND. Regio aboënsis (Ab/V), Turku, Ilpoinen, on bank of a trail in forest with mainly *Picea abies* and *Pinus sylvestris*. UCS 67108:32403, coll. Jukka Vauras 2607, 14.VII.1987, Herb. TUR-A.

Very rare in hemiboreal – boreal zone; known also from Sweden (Jämtland, Medelpad) and Norway (Oppland), and molecular data indicates its occurrence in Canada and USA. Jacobsson & Larsson 2009.

Inocybe subporospora Kuyper

FINLAND. Savonia borealis (Sb/PS), Pielavesi, Pajuskylä, Pukarankangas, bank of the main road, on small dry meadow on sandy soil, near *Pinus sylvestris*, *Picea abies*, *Betula* and *Populus tremula*. UCS 7014:3495, coll. Jukka Vauras 20909, 23.IX.2003, det. Jukka Vauras 2009. Collected also from Obu, Rovaniemi, by Tapio Kekki 2010.

Rare in temperate – boreal zone, but probably overlooked. In sandy, open habitats with conifers or *Salix*. Known also from Sweden, Norway and Denmark. Herb. TUR.

Inocybe umbrinella Bres.

FINLAND. Regio aboënsis (Ab/V), Lohja, Virkkala, Kyrkstad, E of the limestone processing plant, bank of the road Tynninharjuntie, near *Pinus sylvestris*, *Picea abies*, *Betula*, *Populus tremula* and *Salix caprea*. UCS 66790:3334, coll. Jukka Vauras 7676F, 16.VII.1998.

Very rare in temperate – hemiboreal zone, also known from Sweden, Gotland, and Denmark. Herb. TUR-A. Larsson *et al.* 2009.

Lyophyllum konradianum (Maire) Konrad

FINLAND. Nylandia (N/U), Porvoo, Sannainen, Ekbacka nature conservation area. In mixed grass-herb forest with *Picea abies*, *Quercus robur*, *Tilia cordata* and *Populus tremula*, on litter. UCS 6701112:3435322, coll. Tea v.

Bonsdorff 10–038, 21.IX.2010, det. Ilkka Kytövuori & Tea v. Bonsdorff 2012, Herb. H.

Very rare in temperate – boreal zone; known localities in other Nordic countries are: Sweden (Sk: Ravlunda). Knudsen & Vesterholt 2012.

Microscypha cajaniensis Huhtinen

FINLAND. Ostrobothnia kajanensis (Ok/Kn), Hyrynsalmi, Iso-Pöhlövaara, S-side of the road running over the hill, on *Ptilidium pulcherrimum* intermixed with *Lophozia* sp. growing on old and mossy spruce trunk in an old-growth forest. UCS 716770:357718, coll. Seppo Huhtinen & Anne Lesonen, 06.VI.2005, det. S. Huhtinen (TUR, holotype). Huhtinen et al. 2010.

Moellerodiscus tenuistipes (J. Schröt.) Dumont

FINLAND. Karelia borealis (Kb/PK), Outokumpu, Rikkaranta, Talviniemi. On leaves of *Potentilla palustris*. UCS 6964:3589, coll. & det. Marja Pennanen 100622, 22.VI.2010, Herb. TUR.

There is also another collection of this new genus to Finland, collected from the same site (10.VII.2010).

Mycena agrestis Aronsen & Maas Geest.

FINLAND. Nylandia (N/U), Hanko, Kolalahti. On sandy soil, on the shore (dune forest) with *Pinus sylvestris*. Growing with *Arctostaphylos uva-ursi*. UCS 6641663:3276101, coll. Ville Kälviäinen & Tero Taipale, 25.X.2009, det. Tea v. Bonsdorff 2009, conf. Arne Aronsen (H6018848).

Very rare in temperate – boreal zone; known localities in other Nordic countries are Norway (type locality) and Sweden (Skåne). von Bonsdorff & Aronsen 2011.

Otidea mirabilis Bolognini & Jamoni

FINLAND. Regio aboënsis (Ab/V), Karjalohja, Karkaliniemi, Karkali Strict Nature Reserve, S of the central field. Spruce forest mixed with *Betula* etc., on ground rich in litter (needles) under spruce (in deep shadow). UCS 6685:3323, coll. Tauno Ulvinen, 14.IX.1978, det. Matteo Carbone 2009.

Very rare in hemiboreal – boreal zone, mainly in rich forests. Collections from Ab, Kb and Ks, also known e.g. from Sweden, Gotland. Herb. OULU, TUR, TUR-A. Carbone et al. 2010.

Protounguicularia nephromatis (Zhrub. &

Zavarzin) Huhtinen, D. Hawksw. & Ihlen

FINLAND. Karelia borealis (Kb/PK), Lieksa, Pielisjärvi, Louhivaara, Kirkisenvaara. On *Nephroma bellum*. UCS 7019:3698. No date, coll. Matti Laurila, det. Arto Puolasmaa & Seppo Huhtinen 2008.

Since the first finding six more collections on *N. bellum* from Sb to Li have been determined by Arto Puolasmaa. One collection from PH (Saarijärvi) is on *N. resupinatum* (det. A. Puolasmaa 2008). Huhtinen et al. 2008.

Pseudobaeospora albidula Bas.

FINLAND. Regio aboënsis (Ab/V), Lohja, Torhola, Torholanluola. At and below the cave, small terraces fairly steep, lower down gentle S-slope. Rich dryish grass-herb forest with hardwood trees and bushes and some spruces, mostly bare soil. Alt. 40–50 m. UCS 6686:3326, coll. Ilkka Kytövuori 93–509, 93–513, 29.VIII.1993, det. Ilkka Kytövuori 2011, Herb. H.

Pseudobaeospora pillodii (Qué.) Wasser (*P. oligophylla* (Singer) Singer)

FINLAND. Tavastia australis (Ta/EH), Lammi, Mataramäki, Santala. Grass-herb forest dominated by *Picea abies* (OMT), young *Alnus incana* nearby. Coll. Mauri Korhonen & Risto Tuomikoski 22.IX.1977, det. Ilkka Kytövuori 2011. Herb. H. FINLAND. Savonia borealis (Sb/PS), Suonenjoki, Paaspää, Vääntö. 20 year old field planted for *Pinus sylvestris*. Grew in a low ditch with *Salix* bushes. UCS 6937582:35170521, coll. Lotta Sundström, 19.IX.2011, det. Tea v. Bonsdorff 2012. Herb. JYV.

Russula minutula Velen.

FINLAND. Regio aboënsis (Ab/V), Turku, Ruissalo, Tammimäki, S slope, herb-rich forest, near *Tilia cordata*, *Quercus robur* and *Corylus avellana*. UCS 67116:32336, coll. & det. Katri Kokkonen 8/07, 28.VII.2007, conf. Juhani Ruotsalainen 2008. Collected also in three other localities in Ruissalo in 2007 by Katri Kokkonen (det. Juhani Ruotsalainen 2008).

Very rare in temperate – hemiboreal deciduous forests of Sweden, Norway and Denmark. Herb. TUR. Ruotsalainen & Huhtinen 2011.

Russula pyriodora Ruots.

FINLAND. Ostrobothnia kajanensis (Ok/Kn), Paltamo, Tololanmäki, Kylmämpuro Nature Protection Area. UCS 713875:355055, coll. Mauri Lahti & Juhani Ruotsalainen 8415F, 21.VIII.2011, (holotype KUO, isotype TUR).

Likely rare in boreal zone, at brooksides in rich forests with *Picea abies*, *Alnus incana*, *Salix* and *Betula*, preferably on calcareous soil. Collections from Sb, Ok, Herb. KUO, TUR. Ruotsalainen & Huhtinen 2011.

Stigmatidium peltidae (Vain.) R. Sant.

FINLAND. *Tavastia australis* (Ta/EH), Lammi, Vantervehmas, Kalliojärvi. On *Peltigera*. UCS 6792–3:3394, coll. G. Lång, 1899, det. Arto Puolasmaa. Herb. H.

In addition to this first collection, there are 24 additional collections from Ab, N, Ka, Sa, Tb, Sb, Kb, Om, Obu, Ks, Lkk, Le, all determined by A. Puolasmaa. Puolasmaa et al. 2012.

Venturiocistella pini (Höhn.) Baral

FINLAND. *Karelia borealis* (Kb/PK), Outokumpu, Raivionmäki. On cortex of fallen *Pinus sylvestris*. UCS 69596:36024. 21.XI.2009, coll. Marja Pennanen 091140, det. Seppo Huhtinen. Herb. TUR.

Xenonectriella lutescens (Arnold) Weese

FINLAND. *Nylandia* (N/U), Sipoo, Löparö, On *Peltigera*. UCS 6682:3412. 12.VIII.1916, coll. T. Anttila, det. Arto Puolasmaa. Herb. H.

In addition to this first collection, there are three additional ones from Ab, Ta, Sa (det. A. Puolasmaa). Puolasmaa et al. 2012.

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