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NEW ESTONIAN RECORDS

Helotiales, Ascomycota

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Ionomidotis irregularis (Schwein.) E. J. Durand – kurd pigikubi – Jõgevamaa Co., Alam-Pedja Nature Reserve, Utsali, on rotten wood of a deciduous tree, 16 Oct 2007, leg. K. Põldmaa, det. K. Pärtel, TU-104143.

The species is characterised by the comparatively large (to 6 cm diam), black, tough, lobed, irregular or ear-shape apothecia. The shape distinguishes it from other members of the genus. Microsopically the species is easy to recognize due to its septate and lanceolate paraphyses which have acute tips, and the ionomidotic reaction of the apothecial tissues (the exudation of dark purple-brown in 3% KOH solution).

There is published data on the occurrence of *Ionomidotis irregularis* in Europe, North-America and Russian Far East (Zhuang, 1988; Huhtinen, 2007). In Europe the few known specimens originate from Austria, Poland (Zhuang, 1988), Germany and Switzerland (H.-O. Baral, pers. comm.). Only recently was it discovered in Nothern Europe, in an old-growth forest in Finland (Huhtinen, 2007). In Estonia it is among the largest helotiaceous fungi, one of the most extensively studied groups in the country. However, only one dubious earlier record is known from here. The species is mentioned in the list of fungi found during the excursions which followed the European Mycologists Congress held in Tallinn in 1988 (Kalamees & Vaasma, 1989). The record originates from the Nigula Nature Reserve but more precise collection data and a voucher specimen are lacking. The fungus is obviously rare in Estonia and was recently added to the Estonian Red Data List.

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Pezizales, Ascomycota

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Gyromitra fluctuans (Nyl.) Harmaja – Tartumaa Co., Mäksa Comm., Kaagvere, (58°21'15" N 26°52'46" E), on soil, 21 Mai 2008 leg. K. Kalmees, det. B. Kullman (TAA 177865).

Pseudoplectania sphagnophila (Pers.) Kreisel – Tartumaa Co., Mäksa Comm., Kaagvere, (58°21'15" N 26°52'46" E), on soil, 21 Mai 2008 leg. K. Kalmees, det. B. Kullman (TAA 177865).

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Lichens and lichenicolous fungi

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20 new fungal species, 8 of them lichenized and 12 lichenicolous fungi, are recorded first time here. Abbreviations of the distribution regions and frequency classes follow Randlane & Saag (1999). Lichenicolous fungi are indicated with #. The collector names and herbaria are abbreviated as follows: AS = Ave Suija; JM = Jurga Motiejūnaitė; PL = Piret Lõhmus; TU = herbarium of the Natural History Museum of the University of Tartu, Estonia; BILAS = Herbarium of the Institute of Botany, Lithuania.

Adelococcus alpestris (Zopf) Zopf ex Arnold – NW: Rapla Co., Raikküla comm., Jalase Nature Reserve, Lipstu heath (58°59'24"N 24°37'51"E), on thallus and apothecia of *Acarospora glaucocarpa* (Ach.) Körb. growing on limestone, 2 June 2007, leg. & det. AS (TU-42529). Freq.: rr.

Cheiromycina petri D. Hawksw. & Poelt – SE: Tartu Co., ca 2 km NW from the Aravu village (58°14'50"N 27°24'42"E), mature eutrophic boreo-nemoral forest, on *Tilia cordata*, 26 Apr 2006, leg. & det. PL (TU). Freq.: rr. – The taxon belongs to the genus that comprises five lichenized hyphomycete species (Printzen, 2007). It is characterised by bluish-grey hemisphaerical sporodochia, palmately branched multicellular conidia and slightly larger conidiogenous cells than conidial cells (differences from *C. reimeri* Printzen see below). Reported from Canada, Russia (Sakhalin), Turkey, Austria, Norway (Printzen, 2007) and Lithuania (Motiejūnaitė et al., 2008).

Cheiromycina reimeri Printzen – SE: Tartu Co., ca 2 km NW from the village Aravu (58°14'52,8"N 27°24'48,2"E), mature swamp forest with *Alnus glutinosa*, on young *Picea abies*, 21 May 2006, leg. & det. PL (TU). Freq.: rr. – The collection is mixed with *Biatora helvola* Körb. ex Hellb. This recently described species (Printzen, 2007) is similar to *C. petri*, but is clearly distinguishable by the definitely enlarged, more or less globose conidiogenous cells; from *C. flabelliformis* B. Sutton it differs by short terminal branches of the conidia (the latter has 2–5 finger-shaped cells). Until now reported from Russia (Sakhalin) and Turkey.

Dactylospora parasitica (Flörke) Zopf – WIs: Saare Co., Saaremaa island, Pidula park (58°25'16"N 22°09'09"E), on thallus of *Ochrolechia turneri* (Sm.) Hasselrot growing on *Acer platanoides*, 3 July 2007, leg. E. Leppik, det. AS (TU-55214). Freq.: rr.

Epicladonia stenospora (Harm.) D. Hawksw. – SE: Tartu Co., Vara forestry, N edge of the forest square 34 (58°35'N 26°59'E), on squamules of *Cladonia ochrochlora* Flörke, 7 Sept 2006, leg. & det. JM (BILAS-8055). Freq.: rr.

Merismatium decolorans (Rehm ex Arnold) Triebel – NW: Rapla Co., Rapla comm., Tõrma limestone outcrop (59°00'34"N 24°41'37"E), on *Lepraria neglecta* (Nyl.) Lettau growing on mosses, 2 June 2007, leg. & det. AS (TU-40850). Freq.: rr.

Micarea tomentosa Czarnota & Coppins – SE: Tartu Co., Järvselja Virgin Forest Nature Reserve (forest square 226), swamp forest (58°16'46"N 27°19'19"E), snag of *Betula* spp., on well-decayed wood, 7 June 2006, leg. PL, det. JM & PL (TU); Tartu Co., ca 2 km NW from the Siniküla village, protected eutrophic boreo-nemoral forest (58°31'13"N 26°19'20"E), windthrow of *Picea abies*, on wood of decayed root, 7 July 2006, leg. & det. PL (TU). Freq.: rr. – The recently described taxon has similarly to *M. hedlundii* Coppins stalked, whitish and tomentose pycnidia, but differs from it by more brightly coloured and continuous thallus (Czarnota, 2007). In addition, thallus of *M. tomentosa* does not react with K (*M. hedlundii* has dull orange pigment reacting K+ violet within the goniocysts) and has short (meso)condia (on average 3.2 µm in Estonian material). Although the ecology of the two species is similar (for example, both species were found in Siniküla locality in Estonia), *M. tomentosa* is considered to be more rare (Thor & Svensson, 2008). Since now it has been reported from Poland, Slovakia and Sweden (Czarnota, 2007; Thor & Svensson, 2008).

Monodictys anaptychiae (Lindau) D. Hawksw. – NE: Lääne-Viru Co., Mädapea wooded meadow (59°19'N 26°16'E), on *Anaptychia ciliaris* (L.) Körb. on *Quercus robur*, 8 June 2003, leg. & det. AS, ver. D. Hawksworth (TU). Freq.: rr. – This hyphomycete forms superficial dark brown colonies on the thallus of *A. ciliaris*. The conidia of the Estonian specimen are 2–5-celled, 6.4–11 × 5.6–9.6 µm (n=16). The fungus is rare: to date, it has been recorded from scattered localities in Germany (Hawksworth, 1975), Sweden (Wedin, 1993), England (Hawksworth, 1994) and Denmark (Alstrup et al., 2004).

Niesslia cladoniicola D. Hawksw. & W. Gams in Hawksworth – WIs: Hiiu Co., Hõralaid islet (58°53'57"N 23°03'50"E), on *Cladina arbucula* (Wallr.) Hale & W.L. Culb. (infected also with *Taeniolella beschiana* Diederich), 2 July 2007, leg. & det. AS coll. no. 816 (TU-42619). Freq.: rr.

Parmelia submontana Nádv. ex Hale – SE: Võru Co., Haanja Nature Park, eastern part of Vällamägi (57°44'04"N 27°04'05"E), eutrophic boreo-nemoral forest, sevaral thalli on a dried branch of *Corylus avellana*, 6 Oct 2006, leg. PL, det. PL & AS (TU-39231). Freq.: rr. – This species, described more than two decades ago, is very similar to *Parmelia sulcata* Taylor, but is easily recognised by loosely attached, elongated, down-orientated lobes with rolled-down lateral margins and more greenish tinge of the upper thallus surface. For the detailed description of the species characters and ecology see Gauslaa (1999) and Motiejūnaitė et al. (2003). Although *P. submontana* is considered to be a mediterranean/southern central European species (Hale, 1987), it has been reported also from numerous localities in NW Europe (England, Denmark, Norway, Sweden, Lithuania, Poland).

Raciborskiomyces peltigericola (D. Hawksw.) M.E. Barr – WIs: Hiiu Co., Vahtrepa Landscape Reserve, Vohilaid islet (58°55'28"N 23°01'11"E), on *Peltigera* sp. growing on ground, 4 July 2007, leg. & det. AS coll. no. 867 (TU-42623). Freq.: rr.

Reichlingia leopoldii Diederich & Scheid. – SE: Tartu Co., Järvselja Virgin Forest Nature Reserve (forest square 226), old eutrophic boreo-nemoral forest (58°16'45"N 27°19'26"E), on *Alnus glutinosa*, 7 June 2006, leg. PL, det. PL & AS (TU); old swamp forest (58°16'46"N 27°19'19"E), on *A. glutinosa*, 7 June 2006, leg. & det. PL (TU); NE: Ida-Viru Co., Puhatu Nature Reserve, old eutrophic boreo-nemoral forest at the Poruni river (59°10'29"N 27°47'26"E), snag of *A. glutinosa*, on bark, 15 Sept 2007, leg. & det. PL (TU). Freq.: rr. –The lichenized hyphomycete is recognizable in the field by the reddish or chocolate brown conidiophores covering its leprose thallus with *Trentepohlia* photobiont. The species seems to be widespread and common in Central Europe (Austria, Germany, Luxembourg, Switzerland, Poland) but is also found in British Isles and Lithuania (Diederich & Scheidegger, 1996; Kukwa, 2004; Lambley, 2003; Motiejūnaitė & Andersson, 2003).

Rinodina colobina (Ach.) Th. Fr. – WIs: Lääne Co., Harilaid islet (58°14'05"N 23°05'23"E), on worked timber, 1 July 2008, leg. & det. AS coll. no. 881 (TU). Freq.: rr. – The size of the ascospores of the Estonian specimen is 12–21 × 8–10.5 µm (n=11), which matches with the size given in Sheard (1967), but the lower value of the ascospore length is smaller than given in Mayrhofer & Moberg (2002).

Skyttea gregaria Sherwood, D. Hawksw. & Coppins – NE: Ida-Viru Co., Agusalu Landscape Reserve, southern part of Feodori bog, Remniku forestry, forest square 168/15 (59°02'15"N 27°39'36"E), *Polytrichum* forest site type burnt pine forest, on *Mycoblastus fucatus* (Stirt.) Zahlbr., 19 Oct 2007, leg. & det. AS coll. no. 4-72 (TU-42720). Freq.: rr.

Stigmidium cladoniicola Zhurb. & Diederich – NE: Ida-Viru Co., Agusalu Landscape Reserve, Kivinõmme forestry, forest square 124, Riiska bog (59°08'35"N 27°34'58"E), raised bog pine forest, on squamules of *Cladonia digitata* (L.) Hoffm., 2 Aug 2006, leg. & det. AS coll. no. 6 (TU-57779); SE: Tartu Co., Vara forestry, square border between forest squares no. 41 and 34 (58°38'N 26°59'E), on squamules of *Cladonia* sp., 7 Sept 2006, leg. & det. JM (BILAS 8156). Freq.: rr. – This lichenicolous fungus, decribed recently, was known, so far, only from the type locality in Komi Republic, Russia (Zhurbenko & Diederich, 2008). The characters of the specimen TU-57779 match well with the original description: the ascomata have been found only on the basal squamules of *C. digitata*; the ascospores are two-celled, hyaline, mostly biguttulate, 9.6–11.2 × 2.5–4 µm (n=8). The BILAS specimen, however, differs from the description

in the protologue in smaller ascospores: 7.5–8.5 × 2.5–3 µm (9–16.5 × 3–5 µm in Zhurbenko & Diederich, 2008). Thus in spore size it is closer to *S. microcarpum* Alstrup & J.C. David which inhabits moribund parts of *Flavocetraria cucullata* (Bellardi) Kärnefelt & A. Thell (Alstrup, 1993). Therefore the specimen BILAS 8156 is identified as *S. cladoniicola* with some doubt.

Stigmidium fuscatae (Arnold) R. Sant. – WIs: Hiiu Co., Hõralaid islet (58°53'57"N 23°03'50"E), on *Acarospora fuscata* (Schrad.) Th.Fr. growing on granite, 2 July 2007, leg. & det. AS coll. no. 826 (TU-42624). Freq.: rr.

Syzygospora bachmannii Diederich & M.S. Christ. – WIs: Hiiu Co., Hiiumaa Islets Landscape Reserve, Saarnaki islet (58°48'N 23°00'E), on *Cladonia cornuta* (L.) Hoffm. growing on soil, July 2006, leg. J. Liira, det. AS (TU-42625). Freq.: rr.

Taeniolella trapeliopseos Diederich – NW: Harju Co., Väike-Pakri island, meadow (59°19'14"N 23°59'15"E), on *Trapeliopsis flexuosa* (Fr.) Coppins & P. James growing on dried *Juniperus communis*, 28 July 2007, leg. & det. AS coll. no. 8 (TU-42620). Freq.: rr. – The fungus is recorded from Luxembourg (Diederich, 1990), Poland (Kukwa & Czarnota, 2006) and Czech Republic (Šoun et al., 2006).

Thelotrema suecicum (H. Magn.) P. James – SE: Tartu Co., Vara forestry, forest square 105, protected, old eutrophic boreo-nemoral forest (58°32'52"N 26°55'36"E), on *Tilia cordata*, 8 July 2006, leg. & det. PL (TU). Freq.: rr. – This species is very similar to *Thelotrema lepadinum* (Ach.) Ach. in the field as both have apothecia immersed in warts, but apothecia of *T. suecicum* are smaller and ascospores are non-muriform, up to 10-septate (*T. lepadinum* has at least 1–3 longitudinal septa). In Estonian material spores are 6–8 celled, on average 24.6 µm long, but 5 µm broad, i.e. 3 µm narrower than given in the literature (Foucard, 2001). The species is scatterly distributed in the world (Thor & Arvidsson, 1999; Jarman & Kantvilas, 1995, etc.).

Trapeliopsis viridescens (Schrad.) Coppins & P. James – SE: Tartu Co., Vara forestry, forest square 41/12 (58°35'N 26°39'E), old fresh boreal spruce forest, on decaying lying trunk of *Picea abies*, 10 May 2006, leg. PL coll. no. 22, det. JM (TU-39399). Freq.: rr. – This is an uncommon species, probably confined to biologically rich forests.

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