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NEW ESTONIAN RECORDS

Mosses

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Fifteen species were recorded for the first time in Estonia last year, although the latest additions to Estonian bryoflora were published quite recently (Vellak et al., 2006). All newly recorded species are mosses. Majority of new species were identified from the earlier collected material from the herbariums of the Natural History Museum of Tartu University (TU), Estonian University of Life Sciences (TAA), Estonian Museum of Natural History (TAM) and Tallinn Botanical Garden (TALL). Two species have been identified during revision of collections of G. K. Girgensohn from the middle of the XIX century, located at TAA, TU and TAM. Some new species were found during the inventories of the bryophytes of protected areas (Leis, 2006; Kannukene, 2007).

Four of the species (*Hamatocaulis lapponicus, Herzogiella turfacea, Hypnum fertile* and *Orthotrichum patens*) are redlisted in whole Europe (ECCB, 1995). Two first of them belong to the Appendix II species list of EU Habitats Directive. The majority of new species are rare or even absent from the neighbouring countries of Estonia.

BRYOPHYTA

Campylopus fragilis (Brid.) Bruch & Schimp. – rabe kõverharjak – 1st loc.: Harju Co., Kernu forest range, Külmallika, fen, 26 July 1995, leg. K. Vellak, det. M. Leis (2006) (TU). More base-tolerant than the other species of the genus, most commonly on soil in rock crevices, often near the sea, also on peat and rotten wood (Smith, 1978). Quite widespread species in almost whole Europe, Macaronesia, E Africa, Japan, Turkey, Himalaya, N, C, and S America (Nyholm, 1986), occurs in E Siberia and S Far East (Ignatov et al., 2006). Absent from Finland (Ulvinen, 2002), Latvia and Lithuania (Ignatov et al., 2006). In Scandinavia fairly common in Vestland of Norway, elswhere rare (Nyholm, 1986).

Cynodontium bruntonii (Sm.) Bruch & Schimp – Bruntoni penihammas – 1st loc.: Lääne-Viru Co., Käsmu, in pine forest nearby "Suure Jaani erratic bolder", on stones, 10 June 1994, leg./det. M. Leis (2006) (TU, TAA). Grows in crevices of siliceous rocks. Distributed in Europe, Azores and Canaries. In Scandinavia scattered in western provinces, elswhere rare (Nyholm, 1986), present also in Ukraine and Kasakhstan (Ignatov et al., 2006). Redlisted in North-Leningrad region as near threatened (Rassi et al., 2001). Absent from Latvia and Lithuania (Ignatov et al., 2006).

Dicranodontium denudatum (Brid.) E.Britton – paljas lõhehammas – 1st loc.: Saare Co.: Saaremaa Is., Odalätsi, sands, 12 Sep 1967, leg. L. Kannukene, det. M. Leis (7 Feb 2006) (TAM, TU, TAA). 2nd loc.: Valga Co., Otepää Nature Park, Lake Pühajärv, Kloostri Is., on the coast slope, 18 July 2006, leg./det. M. Leis (TAA, TAM). Grows on rocks, humus-rich soil and on decaying wood (Nyholm, 1986). Widespread distribution in holarctic and boreal regions (Boros, 1968). In Scandinavia getting rare towards east (Nyholm, 1986). Rather common in Norway and Sweden (Söderström, 1996), very rare in Latvia (Ābolina, 2002) and Lithuania (Jukoniene, 2002), occurs in Belarus and Ukraine (Ignatov et al., 2006). Redlisted in Finland as endangered (Rassi et al., 2001) and in Karelia as vulnerable (Kotiranta et al., 1998).

Ditrichum pallidum (Hedw.) Hampe – kahvatu jõhvsammal – 1st loc.: Ida-Viru Co., Ontika cliff, on seashore on clayey outcrop, 10 June 1993, leg./det. M. Leis (9 Feb 2006) (TU, TAA, TAM). Grows on loamy calcareous soil (Nyholm, 1986). Rather rare and with circumpolar disconnected distribution (Boros, 1968). Occurs in C, E and S Europe, Azores, Caucasus, Turkey, SE Siberia, Korea, Japan, N America (Nyholm, 1986), in Ukraine, in S and E Siberia, in S Far East (Ignatov et al., 2006). Redlisted in Sweden as regionally extinct (Gärdenfors, 2005) and

absent from Finland (Ulvinen et al., 2002), Latvia, Lithuania and NW Russia (Ignatov et al., 2006).

Grimmia laevigata (Brid.) Brid. – püst-rahnik – 1st loc.: Hiiu Co., Hiiumaa Is., Sarve Landscape Reserve, in a field on the southern side of a big erratic bolder, 27 Aug 1998, leg. L. Kannukene, det. M.Leis & L.Kannukene (16 Nov 2006) (TAM, TAA). Grows on dry basic rocks or bolders in warm exposed habitats (Nyholm, 1998). By Boros (1968) nearly cosmopolitan xeric species. Redlisted in Sweden as near threatened (Gärdenfors, 2005). Absent from Finland (Ulvinen et al., 2002), Latvia and Lithuania (Ignatov et al., 2006).

Hamatocaulis lapponicus (Norrl.) Hedenäs – lapi kurdsirbik – 1st loc.: Pärnu Co., Tolkuse bog, in a big bog-pool, in water, 17 June 1986, leg. L. Kannukene, det. N.Ingerpuu (1 Dec 2006) (TALL, TAM, TU, TAA). Grows in wet mires, sometimes submerged in lakes. Distributed in N Eurasia and W North America (Hedenäs 2003). It occurs in Finland (Ulvinen et al., 2002) and Sweden (Söderström, 1996), in Latvia and in arctic areas of Russia (Ignatov et al., 2006). Redlisted in whole Europe as vulnerable (ECCB, 1995), in Finland as vulnerable (Rassi et al, 2001), in Sweden as endangered (Gördenfors, 2005), in Karelia and Murmansk region as rare (Kotiranta et al., 1998).

Hedwigia stellata Hedenäs – täht-lumilehik – 1st loc.: Hiiu Co., Hiiumaa Is., Sarve Landscape Reserve, alvar birch forest, on an erratic boulder, 28 July 1998, leg./det. L. Kannukene (27 May 2006) (TAM). 2nd loc.: Saare Co., Vilsandi Is., alvar forest, on an erratic bolder, 24 July 1994, leg./det. L. Kannukene (Feb 2007) (TAM). Usually grows on base-rich but non-calcareous, exposed rocks and boulders. Distribution in Europe outside N Europe is imperfectly known, but apparently somewhat suboceanic-Mediterranen, occurs also in W North America (Nyholm, 1998). In Russia this species is only known in Far East (Ignatov et al., 2006). In Scandinavia it occurs quite often in Sweden, seldom in Norway. Absent from Finland (Ulvinen et al., 2002), Latvia and Lithuania (Ignatov et al., 2006).

Herzogiella turfacea (Lindb.) Z.Iwats. – lame ebaulmik – 1st loc.: Ida-Viru Co., Agusalu Landscape Reserve, wet mixed forest, on a heavily rotten log, Aug 2006, leg. J. Paal, det. K. Vellak; checked N. Ingerpuu, L. Hedenäs (Dec 2006) (TU). 2nd loc.: Ida-Viru Co., Puhatu Nature Reserve, Kivinõmme forest range, marshy alder forest on the bank of Puhatu River, on decaying wood, 2 Aug 2006, leg./det. M. Leis (Feb 2007) (TAA). Grows mainly on decaying wood in moist coniferous forests. Circumpolar but disconnected distribution. Registered in Scandinavia, Karelia, Siberia, Far East, Japan and North America (Ignatov & Ignatova., 2004). Absent from Latvia (Ābolina, 2002) and Lithuania (Jukoniene, 2002). Redlisted in whole Europe as rare (ECCB, 1995), in Finland as vulnerable (Rassi et al., 2001). In Sweden not rare or threatened any more (Gärdenfors, 2005).

Hypnum fertile Sendtn. – tihe ulmik – 1st loc.: Tartu Co., Tartu, Annemõisa, in the forest on a log, 29 July 1852, leg./det. G.K. Girgensohn, checked (2006) N. Ingerpuu & K. Vellak (TAA Girg. Herb. No 308). Occurs mainly on large spruce logs and on ground in moist forests (Frey et al., 2006). Confined distribution area in Europe (Ignatov & Ignatova, 2004). The nearest findings to Estonia are in Karelia (Ignatov et al., 2006). Absent from Scandinavia (Söderström, 1996), may be extinct in Latvia (Ābolina, 2002), and has been excluded from the list of the mosses in Lithuania (Jukoniene, 2002). Our voucher specimen has been collected from the area of present town buildings, so it is possible that the species is also extinct in Estonia.

Orthotrichum patens Bruch ex Brid. – laiuv tutik – 1st loc.: Valga Co., Otepää Nature Park, Lake Pühajärv, Suur Lepassaar Is., on the base of a treetrunk, 18 July 2006, leg./det. M. Leis (TAA). Occurs on broad-leaved trees. Has circumpolar confined distribution, rare but scattered in N, W and C Europe (Nyholm, 1998). Registered in Ukraine, Belarus, Moldova, Caucasus and C Asia (Ignatov et al., 2006). Rare in Latvia (Ābolina, 2002) and Lithuania (Jukoniene, 2002). Redlisted in Europe as regionally threatened (EBBC, 1995), in Finland as critically edangered (Rassi et al., 2001), in Sweden as vulnerable (Gärdenfors, 2005).

Orthitrichum pylaisii Brid – kurdkael-tutik – 1st loc.: Lääne-Viru Co., Loksa distr., NNO-

coast of Mohni Is., in seawater influence area, on an erratic boulder with *Schistidium maritimum* var. *piliferum*, 12 Sep 1997, leg. L.Kannukene., det. M. Leis & L.Kannukene (26 Jan 2007) (TAM, TAA). Grows on non-calcareous as well as calcareous rocks in mountain regions in alpine and arctic zones, often found on bird cliffs. Widespread in the north – N Europe, Greenland, N Asia, N and W North America (Nyholm, 1998). Estonian locality is on the southern border of the distribution area (Lewinsky, 1993).

Pohlia andalusica (Höhn.) Broth. – andaluusia pirnik – 1st loc.: Tartu Co., by Tartu (Dorpat), undated (middle of XIX century), leg. G. K. Girgensohn, det. L. Kannukene (20 Feb 2007) (TAM Girg. Herb. No 176 sub nom. *Bryum annotinum* Hedw.). 2nd loc.: Tartu Co., Maarja, Tamme inn, in the clay-pit and on the nearby ditch banks, 2 Nov 1849, leg. G.K. Girgensohn, det. M.Leis (21 Feb 2007) (TAA Girg. Herb. Nr. 176 a) sub nom. *Bryum annotinum* Hedw.). Grows usually on bare soil in forests, on river banks, roadbanks, bluffs, sand-quarries, rarely among tundra vegetation and on decayed wood in forests (Chernyadieva, 1999). Circumpolar distribution, more rare in arctic or southern regions (Ignatov & Ignatova., 2003). Recently registered in Latvia (Ignatov et al., 2006). In Scandinavia known only by literature data (Söderström, 1998).

Pohlia annotina (Hedw.) Lindb. – karik-pirnik – 1st loc.: Põlva Co., on the bank of Lake Valgjärv (Malta, 1930). 2nd loc.: Ida-Viru Co., Püssi Station, in the forest on the bank of a ditch (Malta, 1930). 3rd loc.: Ida-Viru Co., Puhatu Nature Reserve, Permisküla, in bog forest on a sandy path, 11 June 2006, leg. T. Ploompuu, T. Kupper, M. Leis, det. M. Leis (TAA). Usually on bare soil of stream banks, bluffs and sand-quarries, less common on bare soil and exposed roots in forests; rarely on fine-grained soil of rock cervices. Occurs in European Russia, Belorus and Ukraine. There are few localities in Archangelsk Province, Altai and Kamchatka. Also known in W, C and S Europe, Madeira, Turkey, China and North America (Chernyadieva, 1999). Quite widespread in Sweden and Finland (Söderström, 1998), very rare in Lithuania (Jukoniene, 2002) and absent from Latvia (Ābolina, 2002). Redlisted in North Leningrad region as rare (Kotiranta et al., 1998).

Schistidium submuticum H.H. Blom – könt-lõhistanukas – 1st loc.: Hiiu Co., Hiiumaa Is., Sarve Landscape Reserve, moist *Sesleria*-alvar, on a limestone shingle, 28 Aug 1998, leg./det. L. Kannukene (24 Apr 2006) (TAM). Grows usually on exposed calcareous rocks, often on wall-tops. In C Norway grows abundantly on moist, low and gently sloping limestone ledges. Endemic to Europe. A rare taxon in Scandinavia. Has a north-eastern distribution except for the disjunct occurence in Ireland, and is probably common in calcareous areas throughout much of European Russia (Blom, 1995).

Syntrichia caninervis Mitt. var. astrachanica Ignatov, Ignatova & Suragina – kõrbekeerik – 1st loc.: Lääne-Viru Co., Varangu, in the old chalk-pit on the bank of a ditch, 19 June 2006, leg./det. M. Leis, checked by M. S. Ignatov (TAA, TAM). The variety has been described in Astrakhan Province in Russia in 2002. Grows on soil, sand and gyps outcrops, sometimes in xeric, exposed habitats among steppe vegetation. It probably represents a unique case of stalked gemmae in the genus (Ignatov et al., 2002).

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Pezizales (Ascomycetes)

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Aleuria bicucullata Boud. – Tartu Co., Nõo comm., Vapramäe landscape protected area, (58°15'N 26°28'E), on soil on path, 9 Oct 2006 leg. B. Kullman, det. B. Kullman (TAA 188623).

Lamprospora crouanii (Cooke) Seaver – Ida-Viru Co., Illuka comm., Kurtna landscape protection area, lake Martiska (59°15.979'N 27°34.372'E), on ground, 28 Sept 2006 leg. H. Tamm, det. B. Kullman (TAA 192322).

Peziza alaskana E.K. Cash – Ida-Viru Co., Alajõe comm., Smolnitsa landscape protected area by Lake Peipsi, (59°00.5'N 27°36.3'E), on damp sand dune among the *Juncus*, 1 Oct 2006 leg. B. Kullman, det. B. Kullman and H. Tamm (TAA 188616, 188617).

Peziza apiculata Cooke – Saare Co., Muhu comm., Kuivastu village (58°34.88'N 23°21.68'E), on ground along gravel road, 17 Sept 2006 leg. and det. H. Tamm (TAA 192294).

Sphaerosporella brunnea (Alb. & Schwein.) Svrček & Kubička – Tartu Co., Nõo comm., Kabelimägi, (58°15.3'N 26°28.5'E), on fire site, 9 Oct 2006 leg. B. Kullman, det. B. Kullman (TAA 188621).

Trichophaea hybrida (Sowerby) T. Schumach. – Saare Co., Muhu comm., northern coast of Kesselaid islet (58°38.27' N 23°25.55'

E), on limestone cliff, 15 Oct 2006 leg. H. Tamm, det. H. Tamm and B. Kullman (TAA 192334).

Lichens and lichenicolous fungi

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Altogether 22 new species are reported, 14 of them are lichenized, seven are lichenicolous and one is mainly saprobic fungus. Abbreviations of country regions and frequency classes follow Randlane & Saag (1999). Cited specimens are kept in the lichenological herbaria of University of Tartu (TU) and Uppsala University (UPS). Lichenicolous fungi are indicated by # and poorly lichenized, saprobic fungi by +.

Abrothallus caerulescens Kotte – NW: Harju Co., Jõelähtme comm., ca 3 km from Raasiku towards Anija, (59°22'N 25°13'E), on *Xanthoparmelia* sp. (infected also with *Lichenostigma cosmopolites* Hafellner & Calatayud) growing on granite, about 1985, leg. T. Kull, det. A. Suija. (TU-39258). Freq: rr.

Bacidia pycnidiata Czarnota & Coppins – NE: Jõgeva Co., Puurmani comm., Altnurga village, Pikknurme forestry, Altnurga ash forest (58°32'40"N 26°17'00"E), alt. ca 20–30 m, on a fallen *Prunus padus*, 22 June 2005, leg. & det. G. Thor, coll. no. 18981 (TU-33355; UPS). Freq.: rr. – *B. pycnidiata* is a recently described lichen, which has characteristic pale, sessile, long-necked pycnidia (Czarnota & Coppins, 2006). The taxon is so far known only from three localities in Central Europe (Czech Republic and Poland), and a suggestion was made that it might be a synanthropic lichen. In Estonia it was found in an old-growth deciduous forest, a potential woodland key habitat, growing together with *Anisomeridum polypori* (Ellis & Everh.) M. E. Barr and *Lecania cyrtella* (Ach.) Th. Fr., as well as the liver-wort *Radula complanata* (L.) Dum. On the same locality, also *Acrocordia cavata* (Ach.) R. C. Harris, *Arthonia byssacea* (Weigel) Almq., *Fuscidea arboricola* Coppins & Tønsberg, *Lecania cyrtella* (Ach.) Th. Fr., *L. naegelii* (Hepp) Diederich & van den Boom, *Micarea prasina* Fr., *Phlyctis agelaea* (Ach.) Flot. and *Steinia geophana* (Nyl.) Stein were collected (all in UPS).

Bacidina inundata (Fr.) Vězda – NE: Ida-Viru Co., Puhatu Nature Reserve, Illuka comm., Poruni special management zone, at the Poruni river (59°10'18"N 27°47'08"E), on granite stone, 10 June 2006, leg. & det. A. Suija (TU-45002); Puhatu Nature Reserve, Illuka comm., Kivinõmme forestry, forest square 89, at Puhatu stream (59°09'46"N 27°38'58"E), on granite stone, 2 Sep 2006, leg. & det. A. Suija coll. no. 108 (TU); SE: Valga Co., Otepää Nature Park, at Mülke stream (58°00'58"N 26°28'58"E), on granite stone, 16 Sep 2006, leg. & det. A. Suija (TU-39343). Freq.: r.

Biatora sphaeroidiza (Vain.) Printzen & Holien – NE: Ida-Viru Co., Puhatu Nature Reserve, Illuka comm., Permisküla forestry, Gorodenka special management zone, forest square 60/25 (59°09'48"N 27°49'02"E), *Aegopodium* site type aspen forest, on *Tilia cordata*, 4 Aug 2006, leg. & det. A. Suija, coll. no. 74 (TU). Freq.: rr. – The specimen was found together with *Arthothelium ruanum* (A. Massal.) Körb., *Phlyctis argena* (Spreng.) Flot. and *Micarea* cf. *prasina* Fr. The species is very much similar to *Biatora ocelliformis* (Nyl.) Arnold, however, the upper part of hymenium is greyish brown and reacts C+ orange.

Biatoridium delitescens (Arnold) Hafellner – NW: Lääne Co., Hanila comm., Puhtu-Laelatu Nature Reserve, Laelatu overgrown wooded meadow (58°35'13"N 23°34'36"E), on *Quercus robur*, 21 June 2006, leg. & det. E. Leppik (TU-39541). Freq.: rr. – The taxon differs from similar *Biatoridium monasteriense* Körb. by the thallus which consists of scattered granules or lies in the substrate, and by the tips of paraphyses which are not distinctly enlarged (Hafellner, 1994).

+ Chaenothecopsis nigra Tibell – NE: Ida-Viru Co., Agusalu Landscape Reserve, Illuka comm., Kivinõmme forestry, forest square 164 (59°07'13"N 27°34'36"E), *Oxalis-Myrtillus* site type spruce forest, on roots of a fallen spruce, 3 Sep 2006, leg. A. Suija, coll no. 151, det. P. Lõhmus (TU-39431). Freq.: rr. – The species was found along with *Psilolechia lucida* (Ach.) M. Choisy.

Epigloea urosperma Döbbeler – NE: Ida-Viru Co., Agusalu Landscape Reserve, Illuka comm., Kivinõmme forestry, forest square 123 (59°08'36"N 27°34'25"E), on *Placynthiella icmalea* (Ach.) Coppins & P. James growing on decaying stump, 2 Sep 2006, leg. & det. A. Suija, coll. no. 131 (TU-39432); Puhatu Nature Reserve, Illuka comm., Kivinõmme forestry, forest square 69 (59°10'04''N 27°39'14"E), on *P. icmalea* (Ach.) Coppins & P. James growing on roots of a fallen tree, 2 Sep 2006, leg. & det. A. Suija, coll. no. 106 (TU-39433). Freq.: rr. – This is the only lichenicolous member of the otherwise algicolous fungi. Besides its habit, the species is characterized by the multispored asci and ascospores with filiform appendages. Since its original description (Döbbeler, 1994) with scattered localities from various European countries (Austria, England, Germany, Switzerland and Sweden), additional records have been reported only from Spain (Pérez-Ortega & Barreno, 2006).

Graphium samogiticum Motiej. & Alstrup – SE: Valga Co., Otepää Nature Park, overgrown gravel pit close to Kastolatsi (58°05'27"N 26°29'01"E), on *Verrucaria bryoctona* (Th. Fr.) Orange growing on ground, 18 July 2006, leg. A. Suija, det. J. Motiejūnaitė (TU-39356). Freq.: rr. – This is the second lichenicolous species in the genus which otherwise comprises saprobic or weakly parasitic species (Motiejūnaitė & Alstrup, 2006). Until now, the species was known from a few localities in Lithuania.

Lecanora thysanophora R. C. Harris – NE: Lääne-Viru Co., Rakvere comm., Lasila special conservation area (59°15'19"N 26°12'20"E), on *Quercus robur* in the hazel grove, 14 July 2006, leg. & det. E. Leppik (TU); Ida-Viru Co., Puhatu Nature Reserve, old deciduous forest at the Poruni river (59°10'29"N 27°47'26"E), on *Quercus robur*, *Tilia cordata*, *Alnus glutinosa* and *Fraxinus excelsior*, 15 Sep 2006, leg. & det. P. Lõhmus (TU); SE: Valga Co., Otepää Nature Park, Pühajärv lake, Lepassaar island (58°01'21"N 26°27'01"E), deciduous forest with *Tilia cordata*, *Quercus robur*, *Betula pendula* and *Picea abies*, on *Quercus robur*, 18 July 2006, leg. & det. A. Suija (TU). All specimens were verified by M. Kukwa. Freq.: r. – TLC: unidentified terpenoid "thysanophora unknown", atranorin, usnic acid and zeorin. The lichen is similar to *Haematomma ochroleucum* (Neck.) J. R. Laundon var. *ochroleucum* which is rather frequent in Estonia. White fimbriate prothallus and presence of an unidentified terpenoid "thysanophora unknown" are the most reliable diagnostic characters for identifying *Lecanora thysanophora* (Harris et al., 2000). The species is widely distributed in northeastern North America but is in Europe recorded mainly from its central part (Austria, Germany, Lithuania, Poland, Romania, Slovakia); Estonian localities are the northernmost in Europe so far.

Micarea botryoides (Nyl.) Coppins – NE: Ida-Viru Co., Agusalu Landscape Reserve, Illuka comm., Alajõe forestry, forest square 95/7 (59°04'34"N 27°29'50"E), drained swamp spruce forest, on decayed stump, 3 Aug 2006, leg. & det. A. Suija, coll. no. 38 (TU). Freq.: rr.

Milospium lacoizquetae Etayo & Diederich – NE: Ida-Viru Co., Agusalu Landscape Reserve, Illuka comm., Kivinõmme forestry, forest square 167 (59°07'30"N 27°36'12"E), on *Cladonia* sp. growing on decaying stump, 2 Aug 2006, leg. & det. A. Suija coll. no. 25 (TU-39437). Freq.: rr. – This is a tiny fungus with cushion-like blackish sporodochia which is confied to epiphytic *Cladonia* species. So far recorded from Central Europe: Austria (Hafellner et al., 2004), Czech Republic (Kocourková & Boom, 2005), Germany (Brackel & Kocourková, 2006), and Western Europe: Great Britain (Coppins, 2005), Spain and France (Etayo & Diederich, 1996).

Mycobilimbia pilularis (Körb.) Hafellner & Türk – SW: Pärnu Co., Nigula Nature Reserve, Jäärja forestry, forest square 85/5 (58°01'N 24°42'E), old forest with *Fraxinus excelsior*, *Tilia cordata*, *Alnus incana*, on *Fraxinus excelsior*, 24 Apr 2001, leg. P. Lõhmus, det. A. Suija (TU-39228); SE: Tartu Co.,

Vara forestry, forest square 41/12 (58°35'N 27°00'E), old *Oxalis* site type spruce and pine forest, on *Betula* sp., 10 May 2006, leg. P. Lõhmus, coll. no. 25, det. J. Motiejūnaitė (TU-39368). Freq.: rr.

Nectriopsis lecanodes (Cesati) Diederich & Schoers – WIs: Hiiu Co., Harilaid islet, in the middle of the islet (58°58'15"N 23°05'04"E), among the junipers, on *Peltigera* sp. growing on ground, 4 July 2006, leg. & det. A. Suija, coll. no. 772 (TU-39372); SE: Tartu Co., Haaslava comm., Vooremäe gravel pit (58°16'35"N 26°52'47"E), on *Peltigera* sp. growing on ground, 8 Sep 2006, leg. & det. A. Suija (TU-39373). Freq.: rr.

Parmelia ernstiae Feuerer & A. Thell – SW: Pärnu Co., Laiksaare forestry, forest square 254/1 (58°03'N 24°41'E), *Filipendula ulmaria* site type mixed forest with spruce, on the trunk of deciduous tree, 29 July 1999, leg. I. Jüriado, coll. no. 265/7, det. T. Randlane (TU-33949); WIs: Hiiu Co., Vohilaid islet, in eastern part of the islet (58°55'17"N 23°01'44"E), pine-wood, on *Pinus sylvestris*, 6 July 2005, leg. A. Suija & M. Nõmm, coll. no. 748, det. T. Randlane (TU-33948). Both specimens were verified by A. Thell. Freq.: rr. – This recently described macrolichen is morphologically distinguished from its closest relative, *Parmelia saxatilis* Ach., by a pruinose upper surface and by frequent occurrence of both isidia and lobulae which usually are entirely pruinose. Furthermore, the distinction of *P. ernstiae* as a separate species is confirmed by its unique DNA sequences (Feuerer & Thell, 2002). The lichen is predominantly epiphytic, contrary to *P. saxatilis*, which preferably grows on siliceous rocks and boulders and is corticolous only occasionally. It was originally described from northwestern Germany but has now been reported from several European countries (Belgium, Czech Republic, France, Great Britain, Luxembourg, Spain, Sweden) and Canary Islands.

Pyrenidium actinellum Nyl. – SE: Valga Co., Otepää Nature Park, Pursa special management zone, Arula stream (58°02'27"N 26°22'59"E), on *Trapelia placodioides* Coppins & P. James growing on granite, 16 Sep 2006, leg. & det. A. Suija (TU-39395). Freq.: rr.

Ramonia luteola Vězda – NW: Harju Co., c. 25 km W of Tallinn, Keila Joa, W shore of the Keila River, up to 300 m N from the waterfall (59°24'N 24°17'E), on the base of an *Ulmus glabra* in a mixed broadleaved deciduous forest, 13 July 1990, leg. & det. G. Thor, coll. no. 9403 (UPS). Freq.: rr. – A few apothecia of the species were found. In the same collection, also *Thelopsis flaveola* is present. On the same locality, also e.g. *Acrocordia gemmata* (Ach.) A. Massal., *Anisomeridium polypori* (Ellis & Everh.) R. C. Harris, *Bacidina phacodes* (Körb.) Vězda, *Ochrolechia turneri* (Sm.) Hasselrot, *Opegrapha culmigena* Libert, *O. niveoatra* (Borrer) J.R. Laundon, *Scoliciosporum sarothamni* (Vain.) Vězda and *Strigula stigmatella* (Ach.) R. C. Harris were collected.

Taeniolella pertusariicola D. Hawksw. & H. Mayhofer – NE: Ida-Viru Co., Agusalu Landscape Reserve, Kivinõmme forestry, forest square 164/4 (59°07'19"N 27°34'38"E), drained swamp spruce forest, on thallus of *Ochrolechia androgyna* (Hoffm.) Arnold growing on the base of *Picea abies*, 2 Sep 2006, leg. & det. A. Suija, coll. no. 138 (TU-45015). Freq.: rr.

Thelidium zwackhii (Hepp) A. Massal. – NW: Rapla Co., Raikküla comm., Nuudi springs (58°52'35"N 24°43'16"E), on limestone shingle in the water, 23 July 2002, leg. & det. A. Suija, coll. no. 45 (TU-39242). Freq.: rr.

Thelocarpon impressellum Nyl. – SE: Tartu Co., Haaslava comm., Vooremäe sand pit (58°16'35"N 26°52'47"E), on the ground, 8 Sep 2006, leg. E. leppik, det. A. Suija (TU). Freq.: rr. – The species is characterized by above depressed, truncated ascomata, presence of simple, not ramified paraphyses, I+ pale blue asci and simple, 6–8 x 4–4.5 µm ascospores. According to Kocourková-Horáková (1998), it can be found in various habitats (soil, wooden trunks, etc.) in rather humid conditions. The distribution data of all *Thelocarpon* species are scarse. As ascomata are tiny and regarded as shortliving, then all species might be much overlooked. The above mentioned collection is mixed with *Verrucaria bryoctona* (Th. Fr.) Orange.

Thelopsis flaveola Arnold – NW: Harju Co., c. 25 km W of Tallinn, Keila Joa, W shore of the Keila River, up to 300 m N from the waterfall (59°24'N 24°17'E), at the base of an *Ulmus glabra* in a mixed broadleaved deciduous forest, 13 July 1990, leg. & det.

G. Thor, coll. no. 9403 (UPS). Freq.: rr. – A few apothecia of *Ramonia luteola* are present in the collection.

VERRUCARIA AQUATILIS Mudd – SE: Valga Co., Otepää Nature Park, lake Pühajärv, Lepassaar island (58°01'21"N 26°27'01"E), on granite pebbles at the coast, 18 July 2006, leg. & det. A. Suija (TU-39438). Freq.: rr.

VERRUCARIA ELAEOMELAENA (A. Massal.) Arnold – NW: Rapla Co., Raikküla comm., Nuudi springs (58°52'35"N 24°43'16"E), on limestone shingle in the water, 23 July 2002, leg. & det. A. Suija, coll. no. 45, ver. J. Motiejūnaitė (TU-39242). Freq.: rr.

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