

New records of lichens and allied fungi from the Leningrad Region, Russia. II

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Abstract: Thirty species of lichens, one lichenicolous fungus and two non-lichenized fungi are reported from the Leningrad Region (Eastern, Western or Saint-Petersburg). *Candelaria pacifica*, *Lecanora compallens*, *Monodictys epilepraria* and *Vezdaea retigera* are reported for the first time for Russia, *Gregrella humida* is new to European Russia, *Micarea hedlundii* and *Strangospora microhaema* are new to North-Western European Russia. *Arctomia delicatula* var. *acutior*, *Coenogonium luteum* and *Lepraria aff. atlantica* are new to the Leningrad Region. Brief discussions on most interesting records are included.

Kokkuvõte: Samblike ja nendega seotud seente uued leitud Leningradi oblastist, Venemaalt. II

Esitatakse andmeid 30 liheniseerunud, ühe liihenikoolse ning kahe mittelihiheneerunud seene leidudest Leningradi oblasti ida- ja lääneosas ning Sankt-Peterburgis. *Candelaria pacifica*, *Lecanora compallens*, *Monodictys epilepraria* ja *Vezdaea retigera* on esmasleitud Venemaal; *Gregrella humida* on esmasleid Venemaa Euroopa-osas; *Micarea hedlundii* ja *Strangospora microhaema* on uued Venemaa Euroopa-osa loodepiirkonnale ning *Arctomia delicatula* var. *acutior*, *Coenogonium luteum* ja *Lepraria aff. atlantica* on uued Leningradi oblastile. Lisatud on ka lühikesed arutelud liikide kohta.

INTRODUCTION

This article continues the series of publications on the important findings of lichens in Leningrad Region (Kuznetsova et al., 2007; Stepanchikova et al., 2009b, 2010c). Among 33 taxa some are recorded as new to the Eastern, Western or the whole Leningrad Region, some of them are new to the North-Western European Russia, European Russia or Russian Federation.

MATERIAL AND METHODS

Main part of material was collected in September–October 2008, 2009 and 2010 in the Eastern Leningrad Region (ELR) and in 2007–2009 in the Western Leningrad Region (WLR). Furthermore, some specimens in the lichen herbaria of Botanical Museum of University of Helsinki (H) and Komarov Botanical Institute of Russian Academy of Sciences (LE) were investigated. Cited specimens are deposited in the herbaria of St. Petersburg State University (LECB), LE and H. Lichen substances were analyzed by standard technique of thin-layer chromatography with using of solvent systems A, B, and C (Orange et al.,

2001) by the first and third authors. Illustrations were made by using light microscope Carl Zeiss Axioskop 40 with camera QImaging MicroPublisher 5.0 RTV and dissecting microscope Carl Zeiss STEMI-2000 CS with camera AxioCam ICc 3. Brief discussions on most interesting records (new for LR, NW European and whole European Russia, or Russian Federation) are included.

Names of main collectors in the species list are abbreviated as follows: DH – Dmitry Himelbrant; EK – Ekaterina Kuznetsova; IS – Irina Stepanchikova. Districts of Leningrad Region (LR) are abbreviated in the following order: K – Kingisepp District; LU – Luga District; P – Podporozh'e District; PR – Priozersk District; SPb – Saint-Petersburg; T – Tikhvin District; V – Volkov District; VB – Vyborg District. The subdivision of LR was published in our previous paper (Stepanchikova et al., 2010c). North-Western European Russia is understood in limits of four regions: Leningrad Region (including Saint-Petersburg), Pskov Region, Novgorod Region and Republic of Karelia (see Andersson et al., 2009). The biogeographical provinces of Eastern

Fennoscandia are abbreviated traditionally (e.g. Kotiranta et al., 1998): Ik – Isthmus karelicus, Ka – Karelia australis, Kl – Karelia ladogensis, Kol – Karelia olonetsensis. Lichenicolous fungus is marked with (#) and non-lichenized fungi with (+).

THE SPECIES

ARCTOMIA DELICATULA Th. Fr. var. ACUTIOR (Nyl.)

Henssen – ELR, P: ca. 8 km E of Ladva village ($60^{\circ}22'47''$ N, $35^{\circ}13'26''$ E), old-growth swampy spruce-birch forest, on bark of old *Salix caprea*, 30.09.2010, leg. DH & IS (H).

– New for LR. Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Jørgensen, 2007). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). It differs from other crustose cyanolichens by the fusiform multiseptate spores (Jørgensen, 2007).

BACIDINA CALIGANS (Nyl.) Llop & Hladun – ELR, P: ca. 6 km E of Ladva village ($60^{\circ}24'10''$ N, $35^{\circ}10'16''$ E), roadside, on lignum covered with dust, 01.10.2010, leg. DH & IS (H).

– New for ELR, but not rare in SPb (e.g. Himelbrant et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden (Santesson et al., 2004), Finland (Pykälä, 2006), Lithuania (Motiejūnaitė, 2009). Distribution in North-Western European Russia outside of LR: not reported.

BACIDINA DELICATA (Larbal. ex Leight.) V. Wirth & Vězda – ELR, P: 5 km SEE of Ladva village ($60^{\circ}22'38''$ N, $35^{\circ}09'22''$ E), roadside, on old bone, 30.09.2010, leg. DH & IS (H). – New for ELR, but not rare in WLR and SPb (e.g. Himelbrant et al., 2006; Stepanchikova et al., 2009a). Distribution in Fennoscandia and Baltic countries: Sweden (Santesson et al., 2004), Finland (Pykälä, 2007), Lithuania (Motiejūnaitė, 1999). Distribution in North-Western European Russia outside of LR: not reported.

BIATORIDIUM MONASTERIENSE J. Lahm ex Körb. – ELR, T: vicinity of Babya Gora ($60^{\circ}08'05''$ N, $33^{\circ}48'21''$ E), aspen forest with rowans and young spruces on the stream bank, on bark of *Populus tremula*, 15.07.2010, leg. EK (LE L7629); same place ($60^{\circ}08'31''$ N, $33^{\circ}48'32''$ E), mixed aspen-spruce forest on the stream bank, on bark of *Populus tremula*,

15.07.2010, leg. EK (LE L7597). – New for ELR, rare in WLR (Alexeeva & Himelbrant, 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Lithuania (Motiejūnaitė, 1999). Distribution in North-Western European Russia outside of LR: not reported. Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).

CANDELARIA PACIFICA M. Westb. & Arup – SPb: Petrovorets District, Stary Peterhof, Sergievka Park, on bark of *Alnus glutinosa*, 31.08.1925, K. A. Rassadina (LE L8084); same place, near the Oranzherejny Pond ($59^{\circ}54'43''$ N, $29^{\circ}50'08''$ E), on bark of *Tilia cordata*, 12.09.1925, K. A. Rassadina (LE L8085); Lesotekhnicheskaya Academy (Forest-Technical Academy) Park ($59^{\circ}59'N$, $30^{\circ}21'E$), on bark of deciduous tree, 03.1907, A. A. Elenkin (LE L8088); WLR, LU: Luga (vicinity of $58^{\circ}44'N$, $29^{\circ}51'E$), on bark of deciduous tree, 1900, A. A. Elenkin (LE L8087). All specimens sterile. – New for Russia. Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Westberg & Arup, 2010). It differs from *C. concolor* (Dicks.) Stein by the absence of lower cortex, small squamule-like lobes with blastidiate granules and few rhizines. Some specimens have tendency to form a blastidiate crust with sparse lobes (Westberg & Arup, 2010 and literature cited therein). The species is relatively rare in LR, all the specimens were collected only in the southwestern part of the region in the beginning of 20th century. No specimens of *C. concolor* from LR are known to us.

CLIOSTOMUM GRIFFITHII (Sm.) Coppins – ELR, V: western shore of Zagubsky Peninsula, between Mel'nicchny stream and Cherny cape ($60^{\circ}28'46-55''$ N, $32^{\circ}36'08-23''$ E), mixed spruce-maple-lime-black alder forest, on bark of *Acer platanoides* and *Tilia cordata*, 03.10.2010, leg. DH & IS (H). – New for ELR, rare in WLR (e.g. Alexeeva & Himelbrant, 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999). Distribution in North-Western European Russia outside

of LR: Republic of Karelia (Fadeeva et al., 2007), Novgorod Region (Kataeva, 2009), Pskov Region (Istomina & Likhacheva, 2010).

CLOSTOMUM LEPROSUM (Räsänen) Holien & Tønsberg – WLR, Ik, PR: 2.5 km W of Petrovskoe (Petäjärvi), bank of the Volchja (Saijanjoki) River ($60^{\circ}37'57''N$, $30^{\circ}03'48''E$), pine forest on the slope, on bark of *Pinus sylvestris*, leg. IS (H), the specimen contains atranorin and caperatic acid; K: Kurgal'sky Peninsula, NE of Tiskolovo village, slope to the Narvsky Gulf shore ($59^{\circ}43'20''N$, $28^{\circ}02'05''E$), old-growth deciduous forest with spruces, on bark of *Picea abies*, 14.04.2007, leg. DH (H, fertile specimen). – New for WLR, restricted to old-growth spruce forests in ELR (Kuznetsova et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).

COENOGONIUM LUTEUM (Dicks.) Kalb & Lücking (syn. *Dimerella lutea* (Dicks.) Trevis.) – ELR, V: western shore of Zagubsky Peninsula, between Mel'nichny stream and Cherny cape ($60^{\circ}28'46''-55''N$, $32^{\circ}36'08''-23''E$), mixed spruce-maple-lime-black alder forest, on bark of old *Tilia cordata*, 03.10.2010, leg. DH & IS (LE). – New for LR, very rare in European Russia. Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Jüriado et al., 2000), Latvia (Piterāns, 2001). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007); Pskov Region: 5.05.1995, J. Hermansson 4781 (UPS L-061894), 4787 (UPS L-061895). Probably indicator of biologically valuable old-growth broad-leaved forests. It differs from the very common *C. pineti* (Ach.) Lücking & Lumbsch by yellow-orange apothecia, smaller ascospores and conidia (Smith et al., 2009).

CRYPTODISCUS GLOEOCAPSA (Nitschke ex Arnold) Baloch, Gilenstam & Wedin (syn. *Bryophaagus gloeocapsa* Nitschke ex Arnold) – ELR, P: ca. 6 km NEE of Ladva village, on naked soil, 01.10.2010, leg. DH & IS (H, LE). – New

for ELR, rarely collected in SPb (Himelbrant et al., 2005; Stepanchikova et al., 2009a). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, (Santesson et al., 2004), Lithuania (Motiejūnaitė et al., 2007). Distribution in North-Western European Russia outside of LR: not reported. Ephemeral pioneer lichen, inhabiting recently disturbed soil.

DICTYOCATENULATA ALBA Finley & E. F. Morris – ELR, V: western shore of Zagubsky Peninsula, between Mel'nichny stream and Cherny cape ($60^{\circ}28'46''-55''N$, $32^{\circ}36'08''-23''E$), mixed spruce-maple-lime-black alder forest, on bark of *Acer platanoides* (base of trunk), 03.10.2010, leg. DH & IS (H). – New for ELR. This species was recently recorded as new for Fennoscandia, European Russia and SPb (see discussion in Stepanchikova et al., 2010c). Our specimen has numerous synnemata 0.15–0.90 mm tall (Fig. 1). Record of *D. alba* from Zagubsky Peninsula is the northernmost in the world.



Fig. 1. *Dictyocatenulata alba*, with typical, well-developed synnemata.

GREGORELLA HUMIDA (Kullh.) Lumbsch – ELR, Kol, P: ca. 6 km N of Pid'ma village and 7 km N of the Svir' River ($61^{\circ}01'52''N$, $34^{\circ}38'51''E$), roadside, on naked sand-clay soil undisturbed during last 8–10 years, 02.10.2010, leg. DH & IS (H). – New for European Russia. Distribution in Fennoscandia and Baltic

countries: Sweden, Finland (Santesson et al., 2004). Ephemeral pioneer lichen, normally inhabiting recently disturbed clayey soil. Crustose cyanolichen characterized by thallus dissolved in cortical goniocysts, red-brown apothecia with thin and soon excluded proper exciple (Fig. 2), simple ellipsoid ascospores (Jørgensen, 2007).



Fig. 2. *Gregrella humida*, thallus with apothecia.

LECANORA COMPALLENS Herk & Aptroot – WLR, Ka, VB: Sovetsky (St. Johannes), between central part of Sovetsky and Landyshevka (Kirjola) ($60^{\circ}31'N$, $28^{\circ}41'E$), on lignum, 25.10.1893, leg. Ch. E. Boldt (H 8005231); LU: near the mouth of Obla River ($58^{\circ}42'36''N$, $29^{\circ}40'25''E$), mixed aspen-spruce forest, on lignum of *Picea abies*, 30.05.2009, leg. IS (LECB). Both specimens contain usnic acid and zeorin. – New for Russia (see also Stepanchikova et al., 2011). Distribution in Fennoscandia and Baltic countries: Estonia (Suija et al., 2009), Latvia (Czarnota & Kukwa, 2010), Lithuania (Prigodina-Lukošienė et al., 2003). Crustose sorediate species similar to *L. expallens* Ach. but differing in the absence of xanthones (van Herk & Aptroot, 1999).

LECANORA EXPALLENS Ach. – ELR, V: western shore of Zagubsky Peninsula, between Mel'nichny stream and Cherny cape ($60^{\circ}28'46''-55''N$, $32^{\circ}36'08''-23''E$), mixed spruce-maple-lime-black alder forest, on bark of *Tilia cordata*, 03.10.2010, leg. DH & IS (H, LECB). Specimen contains usnic and thiophanic acids,

cf. arthothelin, unidentified xanthone called “expallens unknown” and zeorin. – New for ELR, known from WLR and SPb (Brenner, 1886; Stepanchikova et al., 2010a). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007), Pskov Region (Istomina & Likhacheva, 2010).

LECANORA HYPOTELLA (Nyl.) Grummann – ELR, Kol, P: ca. 7 km NNW of Pid'ma village, ca. 4 km E of Lake Pid'mozero ($61^{\circ}02'10''N$, $34^{\circ}37'52''E$), swampy spruce forest with pine and birch, on bark of *Picea abies*, 02.10.2010, leg. DH & IS (H). – New for ELR, rare in SPb (Stepanchikova et al., 2009a). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007).

LECANORA THYSANOPHORA R. C. Harris – WLR, K: eastern shore of Kurgal'sky Peninsula, 4.5 km S of Lipovo village ($59^{\circ}42'32''N$, $28^{\circ}12'16''E$), swampy old-growth black alder-spruce forest with birch and aspen, on bark of *Alnus glutinosa*, 12.04.2007, leg. DH (LECB). Specimen contains atranorin, usnic acid, zeorin and several terpenoids called “thysanophora unknowns” (see Harris et al., 2000). – This species was only briefly noted from Kurgal'sky Peninsula (the only record from NW European Russia) as *L. cf. thysanophora* (Himelbrant & Andersson, 2008), but without any data on lichen substances, ecology and exact locality. Here its identity is confirmed by the analysis of secondary lichen metabolites. Distribution in Fennoscandia and Baltic countries: Estonia (Suija et al., 2007), Latvia (Motiejūnaitė et al., 2006), Lithuania (Motiejūnaitė et al., 2003). Distribution in North-Western European Russia outside of LR: not reported. This species usually does not form apothecia and is characterized by yellowish-green central part of thallus dissolving into soredia and radially oriented, cottony, byssoid, white-blue hypothallus (Harris et al., 2000).

LEPRARIA aff. ATLANTICA Orange – ELR, T: 300 m SE of Ekshozero Lake, Logozerka River valley ($60^{\circ}14'05''N$, $35^{\circ}08'46''E$), spruce forest, on bark of *Picea abies*, 29.09.2005, leg. EK & DH (LECB). Specimen contains roccellic/angardianic, porphyritic acids and atranorin (trace). Specimen differs from the description of species by corticolous habitat (see also Kukwa et al., 2003) and the trace amount of atranorin. – New for LR. Previously reported for Russia only once from Karelia keretina, Republic of Karelia (Kukwa et al., 2003). Distribution in Fennoscandia and Baltic countries: Norway (Santesson et al., 2004), Estonia (Jüriado et al., 2002). Distribution in North-Western European Russia outside of LR: Republic of Karelia (see above).

+ LEPTORAPHIS ATOMARIA (Ach.) Szatala – ELR, P: ca. 6 km E of Ladva village ($60^{\circ}24'10''N$, $35^{\circ}10'16''E$), roadside, on bark of *Populus tremula*, 01.10.2010, leg. DH & IS (H, additional to *Strangospora microhaema*). – New for ELR, but rather common in WLR and SPb (e.g. Stepanchikova et al., 2010b; Stepanchikova et al., 2011). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Latvia (Piterāns, 2001). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007), Novgorod Region (Kataeva, 2009).

MICAREA HEDLUNDII Coppins – ELR, Kol, P: ca. 11 km NE of Vazhny village, near the Kra-sivyy stream ($60^{\circ}03'53''N$, $34^{\circ}00'44''E$), old-growth spruce forest with birch and aspen, on lignum of *Picea abies*, 29.09.2010, leg. DH & IS (H). – New for NW European Russia. Indicator of biologically valuable old-growth forests (Czarnota, 2007; Smith et al., 2009). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Lithuania (Motiejūnaitė et al., 2003). Distinguished from other *Micarea* by olive-brown thallus composed of goniocysts, numerous stalked pinkish to gray-brown pycnidia with white tomentum and mainly simple ascospores.

MONODICTYS EPILEPRARIA Kukwa & Diederich – ELR, Kol, P: ca. 4 km SWW from Grishino village, along the Mutny stream ($60^{\circ}04'14''N$, $34^{\circ}00'32''E$), spruce forest with aspens, on

thallus of *Lepraria* sp. growing on bark of *Picea abies*, 29.09.2010, leg. DH & IS (H). – New for Russia, European Russia. Distribution in Fennoscandia and Baltic countries: Sweden (Kukwa & Diederich, 2005; Ihlen & Wedin, 2008), Estonia (Suija et al., 2006), Latvia (Czarnota & Kukwa, 2010), Lithuania (Kukwa & Diederich, 2005). A common lichenicolous fungus confined to *Lepraria* species and producing brown muriform conidia. For the characteristics of the species see Kukwa & Diederich (2005).

OCHROLECHIA TURNERI (Sm.) Hasselrot – ELR, V: western shore of Zagubsky Peninsula, between Mel'nichny stream and Cherny cape ($60^{\circ}28'46\text{--}55''N$, $32^{\circ}36'08\text{--}23''E$), mixed spruce-maple-lime-black alder forest, on bark of *Tilia cordata*, 03.10.2010, leg. DH & IS (LECB). Specimen contains variolaric acid and two substances called “microstictoides unknowns” (see Kukwa, 2008). – New for ELR, known from SPb (Himelbrant et al., 2006). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999). Distribution in North-Western European Russia outside of LR: Pskov Region (Istomina & Likhacheva, 2010).

OPEGRApha RUFESCENS Pers. – ELR, P: W of Yukssovskoe Lake, Shimaksa River, 5.3 km NW of Konets village ($60^{\circ}55'27''N$, $34^{\circ}51'28''E$), mixed aspen-spruce-pine forest near the river, on bark of *Populus tremula*, 02.10.2008, leg. DH & IS (LECB); V: western shore of Zagubsky Peninsula, between Mel'nichny stream and Cherny cape ($60^{\circ}28'46\text{--}55''N$, $32^{\circ}36'08\text{--}23''E$), mixed spruce-maple-lime-black alder forest, on bark of *Acer platanoides* and *Tilia cordata*, 03.10.2010, leg. DH & IS (H). – New for ELR, but rather common in WLR and SPb (e.g. Himelbrant et al., 2006; Stepanchikova et al., 2010b). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007), Novgorod Region (Kataeva, 2009), Pskov Region (Istomina & Likhacheva, 2010).

OPEGRAPHA VULGATA Ach. – ELR, Kol, P: 6.5 km W of Ivinsky Flood and 11 km E of Posad village ($61^{\circ}06'00''N$, $34^{\circ}42'52''E$), spruce forest with aspens, on bark of *Sorbus aucuparia*, 30.09.2008, leg. DH & IS (LECB); ca. 5 km NW of Pid'ma village and ca. 6 km N of the Svir' River, left bank of the Pid'ma River, old aspen forest with spruces surrounded by cutting area, on bark of *Picea abies*, 02.10.2010, leg. DH & IS (H); V: western shore of Zagubsky Peninsula, between Mel'nichny stream and Cherny cape ($60^{\circ}28'46\text{--}55''N$, $32^{\circ}36'08\text{--}23''E$), mixed spruce-maple-lime-black alder forest, on bark of *Tilia cordata*, 03.10.2010, leg. DH & IS (H). – New for ELR, rare in SPb and WLR (e.g. Alexeeva & Himelbrant, 2007; Malysheva, 2003). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007), Pskov Region (Istomina & Likhacheva, 2010).

+ PERIODOTHELIA FULIGUNCTA (Norman) D. Hawksw. – ELR, V: western shore of Zagubsky Peninsula, between Mel'nichny stream and Cherny cape ($60^{\circ}28'46\text{--}55''N$, $32^{\circ}36'08\text{--}23''E$), mixed spruce-maple-lime-black alder forest, on bark of *Tilia cordata*, 03.10.2010, leg. DH & IS (H). Saprobiic non-lichenized fungus characterized by black perithecia, 1-septate, constricted at the septum, brown ascospores and occurrence on bark of old broad-leaved trees. – New for ELR, known from WLR (Erastova et al., 2009). Distribution in Fennoscandia and Baltic countries: Lithuania (Motiejūnaitė, 2005). Distribution in North-Western European Russia outside of LR: not recorded.

+ PHAEOCALICIUM POLYPORAEUM (Nyl.) Tibell – ELR, Kol, P: ca. 7 km NNW of Pid'ma village and 8 km N from the Svir' River ($61^{\circ}01'59''N$, $34^{\circ}37'35''E$), spruce-birch forest near the road, on fruit bodies of *Trichaptum pargamenum* (Fr.) G. Cunn. growing on *Betula* sp., 02.10.2010, leg. V. A. Spirin (H). – New for ELR, rare in WLR and SPb (Himelbrant & Titov, 2007). Distribution in Fennoscandia and Baltic countries: not recorded. Distribution in North-Western European Russia outside of LR: not recorded.

RAMALINA FASTIGIATA (Pers.) Ach. – ELR, V: western shore of Zagubsky Peninsula, between Mel'nichny stream and Cherny cape ($60^{\circ}28'46\text{--}55''N$, $32^{\circ}36'08\text{--}23''E$), mixed spruce-maple-lime-black alder forest, on bark of dead trunk of *Acer platanoides*, 03.10.2010, leg. DH & IS (LECB 2010-11-36). – New for ELR, rare in WLR [the only available specimen is from Hogland: 1875, E. A. Vainio (TUR-V 01297, TUR-001234); most part of specimens cited from LR actually either belong to other species (e.g. Brenner, 1886) or absent in herbaria]. Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007), Pskov Region (Istomina & Likhacheva, 2010).

RINODINA EFFLORESCENS Malme – WLR, LU: 2.5 km E of Oredezh, vicinity of Krasnaya hill, near Beloe Lake ($58^{\circ}48'33''N$, $30^{\circ}29'22''E$), oak forest, on bark of *Quercus robur*, 31.05.09, leg. IS (H). Specimen contains pannarin, zeorin and secalonic acid A (see Elix & Tønsberg, 1999). – New for WLR, known from ELR (Kuznetsova et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Lithuania (Motiejūnaitė et al., 2003). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007).

SCHISMATOMMA PERICLEUM (Ach.) Branth & Rostr. – ELR, V: western shore of Zagubsky Peninsula, between Mel'nichny stream and Cherny cape ($60^{\circ}28'46\text{--}55''N$, $32^{\circ}36'08\text{--}23''E$), mixed spruce-maple-lime-black alder forest, on bark of *Tilia cordata*, 03.10.2010, leg. DH & IS (H). Rediscovered in ELR after 135 years, where previously it was known from Nikol'sky (Nikola) settlement, which is now inundated by the Ivinsky Razliv reservoir (see Elfving, 1878; Kuznetsova et al., 2007; original specimens preserved in UPS and H). In the studied area the species has been also reported from WLR, but all collections from there were made at the end of XIX century [specimens collected by A. O. Kihlman (Kairamo) in H; see also Brenner,

1886], and thus the species should be still noted as extinct in that area. Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Lithuania (Motiejūnaitė, 2006). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Indicator of biologically valuable old-growth forests in North-Western European Russia (Andersson et al., 2009).

STRANGOSPORA MICROHAEMA (Norman) R. A. Anderson – ELR, P: ca. 6 km E of Ladva village ($60^{\circ}24'10''N$, $35^{\circ}10'16''E$), roadside, on bark of *Populus tremula*, 01.10.2010, leg. DH & IS (H). – New for North-Western European Russia. Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004). Crustose lichen with evanescent thallus and very small scarlet to red, matt, K- apothecia without pruina (Smith et al., 2009).

THELOCARPON SUPERELLUM Nyl. – ELR, Kol, P: ca. 6 km N of Pid'ma village and 7 km N of the Svir' River ($61^{\circ}01'52''N$, $34^{\circ}38'51''E$), roadside, on naked sand-clay soil undisturbed during last 8–10 years, 02.10.2010, leg. DH & IS (H). – New for ELR, very rare in SPb (Stepanchikova et al., 2009a). Distribution in Fennoscandia and Baltic countries: Sweden, Finland (Santesson et al., 2004), Lithuania (Motiejūnaitė & Andersson, 2003). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007).

THROMBIUM EPIGAEUM (Pers.) Wallr. – same place and substrate as for *Thelocarpon superellum*, 02.10.2010, leg. DH & IS (H). – New for ELR, known from WLR (Wainio, 1878). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007), Novgorod Region (Kataeva, 2009).

VEZDAEA ACICULARIS Coppins – ELR, Kol, P: ca. 7 km NNW of Pid'ma village and 8 km N of the Svir' River ($60^{\circ}22'38''N$, $35^{\circ}09'22''E$), roadside, on naked soil, 02.10.2010, leg. DH & IS (H). – New for ELR, rare in SPb (Stepanchikova et al., 2009a). Distribution in Fennoscandia and Baltic countries: Swe-

den (Svensson & Westberg, 2010), Finland (Pykälä, 2006), Lithuania (J. Motiejūnaitė, personal communication). Distribution in North-Western European Russia outside of LR: not recorded. The only species in the genus with needle-shaped 7–11-septate ascospores and sparse short paraphyses (Fig. 3), which commonly do not reach the surface of hymenium (Giralt et al., 1993; Smith et al., 2009).

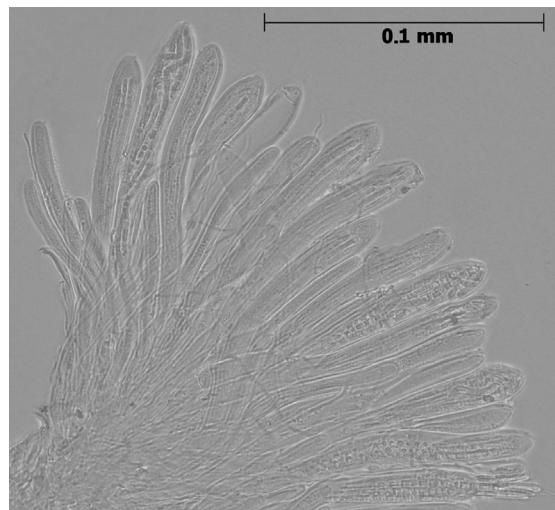


Fig. 3. *Vezdaea acicularis*, apothecium slice.

VEZDAEA AESTIVALIS (Ohlert) Tscherm.-Woess & Poelt – ELR, V: ca. 4 km SE of Kiselnja village ($59^{\circ}58'25''N$, $32^{\circ}14'37''E$), spruce forest with deciduous trees, on mosses on bark of *Ulmus* sp., 17.09.2009, leg. DH & IS (H); P: 3 km SEE of Vinnitsy village ($60^{\circ}38'57''N$, $34^{\circ}54'56''E$), aspen forest, on mosses on bark of *Populus tremula*, 20.09.2009, leg. IS (LECB). – New for ELR, once recorded in SPb (Poelt & Döbbeler, 1975; Malysheva & Svjazeva, 1995; LE L8148). Distribution in Fennoscandia and Baltic countries: Sweden, Finland (Santesson et al., 2004), Estonia (Randlane & Saag, 1999), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999). Distribution in North-Western European Russia outside of LR: not recorded. Characterized by adnate, rather big apothecia to 1 mm diam., contorted and anastomosed paraphyses entwining asci, and 1(–3)-septate ascospores, which are verrucose when mature (Giralt et al., 1993; Smith et al., 2009).

VEZDAEA RETIGERA Poelt & Döbbeler – ELR, Kol, P: ca. 6 km N of Pid'ma village and 7 km N of the Svir' River (61°01'52"N, 34°38'51"E), roadside, on naked sand-clay soil undisturbed during last 8–10 years, 02.10.2010, leg. DH & IS (H). Differs from other species of the genus by the goniocysts with short spines, small hemisphaerical apothecia to 0.3–0.6 mm in diam., long paraphyses entwining ascii and simple smooth ascospores (Giralt et al., 1993; Smith et al., 2009). – New for Russia. Distribution in Fennoscandia and Baltic countries: Norway (Santesson et al., 2004), Sweden (Svensson & Westberg, 2010), Finland (Pykälä, 2007).

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