

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

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Abstract: Fourteen species of lichen-forming, fifteen lichenicolous and one non-lichenized calicioid fungus are reported from the Leningrad Region. *Tremella coppinsii*, *Verrucaria cambrini*, *V. fusconigrescens* and *V. nigroumbrina* are reported for the first time for Russia; *Cheiromycina petri* is new to the European Russia; *Chaenothecopsis haematopus*, *Hymenelia epulotica*, *Muellerella hospitans* and *Tremella cladoniae* are new to the North-Western European Russia; *Briancoppinsia cytospora*, *Cercidospora epipolytropa*, *Cornutispora lichenicola*, *Epicladonia simplex*, *Lichenocodium xanthorhiae*, *Lichenosticta alicornaria*, *Phaeopyxis punctum* and *Syzygospora physciacearum* are new to the Leningrad Region. The most noteworthy records are briefly discussed.

INTRODUCTION

This paper continues the series of publications on new records of lichens and allied fungi in the Leningrad Region and Saint-Petersburg (Kuznetsova et al., 2007; Stepanchikova et al., 2009, 2010, 2011a,c; Kuznetsova et al., 2012; Pykälä et al., 2012). Among the 30 taxa listed here, several are reported for the first time in Saint-Petersburg, Eastern, Western or the whole Leningrad Region, others are new for the North-Western European Russia, European Russia or Russian Federation.

MATERIAL AND METHODS

The materials of this study were collected mainly in the period of 2005–2012 in the Eastern and Western Leningrad Regions, and Saint-Petersburg (ELR, WLR, SPb respectively) and were deposited in the lichen herbaria of St. Petersburg State University (LECB), Nature Research Centre, Institute of Botany in Vilnius (BILAS), Botanical Museum of University of Helsinki (H), Komarov Botanical Institute in Saint-Petersburg (LE) and in the private herbarium of Ulf Schiefelbein (herb. US). Lichenicolous fungi and *Cladonia caespiticia* were identified

by J. Motiejūnaitė, *Hymenelia epulotica* and *Verrucaria fusconigrescens* by U. Schiefelbein, *V. cambrini*, *V. nigroumbrina* and *V. tornensis* by J. Pykälä, other lichens by D. Himelbrant and I. Stepanchikova. Lichen substances in the thalli of *Cetrelia cetrarioides* were analyzed by using the standard technique of high performance thin-layer chromatography (HPTLC) in solvent systems A, B and C (Orange et al., 2001). The illustration of *Hymenelia epulotica* was made by using a Carl Zeiss STEMI-2000 CS dissecting microscope with an AxioCam ICc 3 camera. Brief discussions on the most interesting records (new to NW European Russia, European Russia or Russian Federation) are included.

The names of the main collectors in the species list are abbreviated as follows: DH – Dmitry E. Himelbrant, IS – Irina S. Stepanchikova. The subdivision of the Leningrad Region (LR) was published in our previous paper (Stepanchikova et al., 2010). North-Western European Russia comprises four regions: Leningrad Region (including Saint-Petersburg), Pskov Region, Novgorod Region and Republic of Karelia (e.g. Andersson et al., 2009). The biogeographical provinces of Eastern Fennoscandia are ab-

breviated traditionally (Kotiranta et al., 1998): Ik – Isthmus karelicus, Ka – Karelia australis. Lichenicolous fungi are marked with (#) and non-lichenized fungus with (+). The nomenclature of taxa follows mainly Nordin et al. (2011).

THE SPECIES

ARTHONIA BYSSACEA (Weigel) Almq. – SPb, Petrodvorets District, Oranienbaum, Verkhnij Park, W of Lipovaya alley, 59°54'51.1"N, 29°44'48.1"E, old historical park, on bark of old *Fraxinus excelsior* L., 20.10.2012, leg. DH & IS (LECB); same locality, between Krasnaya and Lipovaya alleys, 59°54'44.3"N, 29°44'47.9"E, old historical park, on bark of old *Quercus robur* L., 20.10.2012, leg. DH & IS (LECB). – New to SPb. Known from ELR (Stepanchikova et al., 2009) and WLR (Stepanchikova et al., 2011a). Distribution in North-Western European Russia outside of LR: not reported. Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).

BRIANCOPPINSIA CYTOSPORA (Vouaux) Diederich, Ertz, Lawrey & Van den Boom [syn. *Phoma cytospora* (Vouaux) D. Hawksw.] – WLR, Kingisepp District, Kurgal'sky protected area, Kurgolovskaya Reima islands, Khangeloda Island, S part, 59°48'54"N, 28°05'22"E, seashore, old wooden construction, on thallus of *Hypogymnia physodes* (L.) Nyl., 14.09.2012, leg. DH & IS (BILAS). – New to LR. Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Czarnota & Kukwa, 2010), Lithuania (Motiejūnaitė, 1999).

CERCIDOSPORA EPIPOLYTROPA (Mudd) Arnold – WLR, Priozersk District, Ik, Smorodinka River Valley, right bank of the Smorodinka River, upper part of the bank, 60°29'26"N, 30°09'58"E, margin of a big meadow on the place of a former Finnish village, granite boulder, on thallus of *Lecanora intricata* (Ach.) Ach., 29.08.2011, leg. IS (BILAS). – New to LR. Distribution in North-Western European Russia outside of LR: Repub-

lic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Lithuania (Motiejūnaitė et al., 2008).

CETRELIA CETRARIOIDES (Duby) W. L. Culb. et C. F. Culb. – ELR, Tikhvin District, ca. 15 km SW of Tikhvin, 4 km NE of Klinets village, 59°32'34"N, 33°15'15.5"E, old aspen forest with young spruces and *Oxalis acetosella* L., on bark of *Sorbus aucuparia* L., 20.07.2012, leg. IS & L. V. Gagarina (LECB); ELR, Tikhvin District, Uljanitsa River valley, ca. 3 km E of Strelkovo and Lavrovo villages, 60°06'39"N, 34°39'19"E, mixed forest along the brook, on bark of *Alnus incana*, 25.07.2012, leg. IS & L. V. Gagarina (LE). Both specimens contain perlatolic acid as a major substance, atranorin and anziaic acid as minor substances. – New to LR. Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway (Obermayer & Mayrhofer, 2007), Estonia (Randlane et al., 2012). Probably indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia like *Cetrelia olivetorum* (Nyl.) W. L. Culb. & C. F. Culb. (Andersson et al., 2009). This species comprises a part of *Cetrelia olivetorum* s. lat. complex of chemospecies differing from other species mainly by production of large amounts of perlatolic acid (Obermayer & Mayrhofer, 2007; Kukwa & Motiejūnaitė, 2012).

CHAENOTHECA CHLORELLA (Ach.) Müll. Arg. – SPb, Petrodvorets District, Oranienbaum, Verkhnij Park, W of Klenovaya alley, 59°54'51.3"N, 29°44'41.2"E, old historical park, on bark of old *Alnus glutinosa* (L.) Gaertn., 20.10.2012, leg. DH & IS (LECB). – New to SPb. Known from ELR (Stepanchikova et al., 2009) and WLR (Räsänen, 1944; Stepanchikova et al., 2011c). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007), Pskov Region (Istomina & Likhacheva, 2010). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).

+ *CHAENOTHECOPSIS HAEMATOPUS* Tibell – ELR, Tikhvin District, ca. 15 km SW of Tikhvin, 3 km NE of Klinets village, 59°30'27"N, 33°16'23"E, secondary spruce-aspen forest with *Vaccinium myrtillus* L. and mosses, on lignum of *Populus tremula* L., 20.07.2012, leg. IS & L. V. Gagarina (LE). – New to North-Western European Russia. Known from Republic of Komi and Khabarovsk Krai (Titov, 2006). Distribution in Fennoscandia and Baltic countries: Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012). The species is characterized by non-septate pale spores with rounded apices and K+ green reaction of red-pigmented parts of hypothecium and stalk (Titov, 2006).

CHEIROMYCINA PETRI D. Hawksw. & Poelt – ELR, Boksitogorsk District, Kolp' River Valley, ca. 4.5 km NW of Krasny Bor village, 59°59'22"N, 35°08'40"E, old spruce forest with *Sphagnum* sp., on bark of old *Salix caprea* L., 29.09.2012, leg. DH & IS (LECB). – New to European Russia. Known from Sakhalin (Printzen, 2007) and Kamchatka (Himelbrant et al., 2009). Distribution in Fennoscandia and Baltic countries: Estonia (Randlane et al., 2012), Lithuania (Motiejūnaitė et al., 2008). Lichenized hyphomycete with bluish-grey sporodochia, slightly enlarged conidiogenous cells and palmately branched multicellular conidia (Printzen, 2007). This species belongs to an indicator genus of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).

CLADONIA CAESPITICIA (Pers.) Flörke – WLR, Vsevolozhsk District, ca. 8 km SW of Lembolovo, 60°18'58"N, 30°10'32"E, secondary spruce forest with *Vaccinium myrtillus* and *Sphagnum* sp., on lignum of *Picea abies* (L.) Karst., 09.09.2011, leg. DH & IS (LECB); WLR, Vsevolozhsk District, ca. 9.5 km SSW of Lembolovo, 60°17'47"N, 30°12'03"E, secondary spruce-birch forest with ferns and *Oxalis acetosella*, on bark of *Populus tremula* (base of trunk), 15.08.2011, leg. IS (LECB); WLR, Vsevolozhsk District, Smorodinka River Valley, left bank of the Smorodinka River, floodplain, 60°28'40"N, 30°09'04"E, raised bog with pines and spruces, on lignum of *Pinus sylvestris* L., 24.08.2011, leg. IS & G. M. Tagirdzhanova (LECB). – New to WLR. Published for SPb (Zavarzin et al., 1999) on the base of only specimen collected in 19th c. by H. G.

Bongard (LE-L2226) and confirmed by T. Ahti. Distribution in North-Western European Russia outside of LR: not reported. Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999).

CORNUTISPORA LICHENICOLA D. Hawksw. & B. Sutton – WLR, Priozersk District, Ik, Smorodinka River Valley, right bank of the Smorodinka River, upper part of the bank, 60°29'26"N, 30°09'58"E, margin of a big meadow on place of former Finnish village, granite boulder, on thallus of *Parmelia saxatilis* (L.) Ach., 29.08.2011, leg. IS (BILAS); ELR, Podporozhje District, 5.5 km SEE of Vinnitsy, 60°37'41"N, 34°55'14"E, aspen forest with spruces along the brook, bark of *Picea* sp., on thallus of *Hypogymnia physodes*, 20.09.2009, leg. IS (BILAS); ELR, Podporozhje District, 50–100 m S of Chogozero Lake, left bank of the Esipruchej brook, 60°29'02"N, 35°13'46"E, swampy pine forest with spruces, bark of *Betula* sp., on thallus of *Cetraria sepincola* (Ehrh.) Ach., 22.09.2009, leg. E. S. Kuznetsova & IS (BILAS). – New to LR. Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden (Nordin et al., 2011), Estonia (Randlane et al., 2012), Lithuania (Motiejūnaitė et al., 2005).

CYPHELIUM INQUINANS (Sm.) Trevis. – SPb, Petrodvorets District, Oranienbaum, Verkhnij Park, between Klenovaya alley and pond, 59°54'58.5"N, 29°44'47.8"E, old historical park, on bark of old *Tilia cordata* Mill., base of trunk, 20.10.2012, vidi DH & IS (not collected). – New to SPb. Known from ELR (Kuznetsova et al., 2007) and WLR (Vainio, 1927). All recent records confined to old-growth forests in ELR. Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė et al., 2005). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).

EPICLADONIA SIMPLEX D. Hawksw. – ELR, Podporozhje District, ca. 13 km W of Ivinsky Razliv

Lake, NW of Rotmozero Lake, Gladkoe bog, 61°06'35"N, 34°36'23"E, old aspen-spruce forest with *Vaccinium myrtillus* and mosses on an island in swamp, on thallus of *Cladonia coniocraea* (Flörke) Spreng., 05.08.2012, leg. IS & G. M. Tagirdzhanova (BILAS). – New to LR. Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Sweden, Finland (Nordin et al., 2011), Lithuania (Motiejūnaitė, 2011).

HYMENELIA EPULOTICA (Ach.) Lutzoni – WLR, Ka, Vyborg District, Bolshoj Berezovy Island, N part of Krasny Ostrov village, 60°19'N, 28°40'E, near the path, on slate (broken pieces removed from the roof), 13.09.2010, leg. U. Schiefelbein, N. M. Alexeeva & IS (H, LECB, herb. US; Fig. 1); WLR, Ka, Vyborg District, Vyborg (Viipuri), Vanha-viipuri (old part of town), 60°43'N, 28°45'E, on littoral granite stones, 05.1875, leg. E. A. Vainio [TUR-V 24965, as additional species to *Porpidia macrocarpa* (DC.) Hertel & A. J. Schwab]. – New to North-Western European Russia. Nearest regions in European Russia: Murmansk Region (Urbanavichus et al., 2008) and Republic of Komi (Checklist..., 2003). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012). *Hymenelia epulotica* is a variable species. The thallus is immersed to epilithic, thin and finely rimose, dirty white, light-brown, grey-brown to grey. The apothecia of studied specimens are 0.2–0.5 mm in diam., immersed in the thallus, emergent to prominent. The height of hymenium varies from 75 to 120 µm. The iodine reaction of the hymenium is mostly yellow-green and in some cases red-brown or violet in the upper part but never deep blue. The very similar *H. rhodopis* has a thicker, areolate-cracked thallus and slightly bigger apothecia (0.4–0.6 mm). *H. carnosula* differs in the lower hymenium (<50 µm), the smaller ascospores (8–10 × 5–6 µm) and the deep blue reaction of the hymenium with iodine solution.

Additional specimens examined: A. Vězda. Lichenes selecti exsiccati, No. 1955 (B 600156442 – *Ionaspis epulotica*); Austria, G. Lettau, 1907 (B 600189068 – *I. epulotica* var. *crustosa*); Austria, Rieber, without year (B 600189027 – *I. epulotica* var. *patellula*); Austria, Rieber & F. Arnold, 1897 (B 600189063 – *I. epulotica* var. *depauperata*); Germany, Dr. Rehm (B 600189293 – *I. epulotica*); Germany, F. Arnold (B 60189072 – *I. carnosula*); Switzerland, G. Lettau, 1919 (B 600189295

– *I. epulotica* var. *patellula*). Examined specimens of *Hymenelia carnosula* (Arnold) Lutzoni: Germany, G. Lettau, 1895 (B 600189066 – *I. epulotica* var. *depauperata*); Germany, F. Arnold, 1860 (B 600189061 – *I. epulotica* var. *minuta*). Examined specimens of *Hymenelia rhodopis* (Sommerf.) Lutzoni: A. Vězda. Lichenes selecti exsiccati, No. 1029 (B 600156443 – *I. epulotica* var. *crustosa*); Switzerland: G. Lettau, 1917 (B 600189294); Sweden, A. H. Magnusson, 1921 (B 600189074 – *Ionaspis epulotica* var. *arctica*).

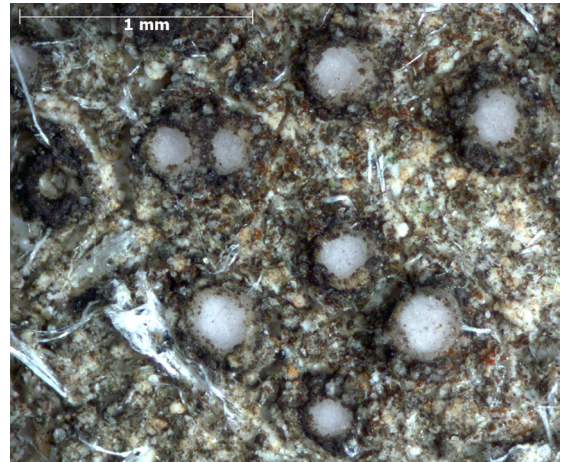


Fig. 1. *Hymenelia epulotica*, thallus with apothecia.

LECANACTIS ABIETINA (Ach.) Körb. – ELR, Tikhvin District, ca. 15 km SW of Tikhvin, 4 km NE of Klinets village, 59°32'37"N, 33°15'12"E, wet spruce forest with *Sphagnum* sp. and *Vaccinium myrtillus*, on bark of *Picea* sp., 20.07.2012, leg. IS & L. V. Gagarina (LE). – New to ELR. Previously reported from WLR (Himelbrant & Andersson, 2008). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007), Pskov Region (Istomina & Likhacheva, 2010). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Pīterāns, 2001), Lithuania (Motiejūnaitė et al., 2004). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).

LICHENOCONIUM LECANORAE (Jaap) D. Hawksw. – ELR, Volkhov District, Zagubsky Peninsula, NW of Zagub'je, S of Storozhno village, along the

shore of Ladoga Lake, 60°28'46-55"N, 32°36'08-23"E, linden forest with birches, spruces, maples and rowans, bark of *Tilia cordata* Mill., on thallus of *Hypogymnia physodes*, 21.05.2011, leg. DH & E. S. Kuznetsova (BILAS). – New to ELR. Previously reported from WLR (Kuznetsova et al., 2012). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Lithuania (Motiejūnaitė, 1999).

LICHENOCONIUM USNEAE (Anzi) D. Hawksw. – ELR, Boksitogorsk District, ca. 6 km NW of Sidorovo village, 59°57'40"N, 35°00'29"E, raised bog with pines, bark of *Pinus sylvestris*, on thallus of *Cetraria sepincola*, 28.09.2012, leg. DH & IS (BILAS). – New to ELR. Known from WLR (Alstrup et al., 2005). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Lithuania (Motiejūnaitė, 1999).

LICHENOCONIUM XANTHORIAE M. S. Christ. – SPb, Kurortny District, Sestroretskaya Lowland protected area, central part, 60°07'02"N, 30°01'52"E, raised bog with pines, bark of *Pinus sylvestris*, on apothecia of *Cetraria sepincola*, 11.09.2005, leg. DH, E. S. Kuznetsova & IS (BILAS); WLR, Kingisepp District, Kurgal'sky protected area, Kurgolovskaya Reima islands, Remisaar Island, central part, 59°48'33"N, 28°04'45"E, lichen-moss wasteland, bark of dead *Juniperus communis* L., on apothecia of *Xanthoria polycarpa* (Hoffm.) Th. Fr. ex Rieber, 13.09.2012, leg. DH & IS (BILAS); same locality, Khangeloda Island, S part, 59°48'54"N, 28°05'22"E, seashore, old wooden construction, on apothecia of *X. polycarpa*, 14.09.2012, leg. DH & IS (BILAS). – New to LR. Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Lithuania (Motiejūnaitė, 1999).

LICHENOSTICTA ALCICORNARIA (Linds.) D. Hawksw. – WLR, Kingisepp District, Kurgal'sky protected

area, Kurgal'sky Peninsula, NE of Tiskolovo village, slope of main shore of Narvsky Gulf, 59°43'20"N, 28°02'05"E, deciduous forest, on squamules of *Cladonia* sp., 22.11.2009, leg. DH & IS (BILAS). – New to LR. Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Czarnota & Kukwa, 2010), Lithuania (Motiejūnaitė et al., 2005).

MONODICTYS EPILEPRARIA Kukwa & Diederich – SPb, Kurortny District, Ik, Gladyshevsky protected area, NE part, N from the railway, 60°13'16"N, 29°31'51"E, spruce forest with birch, bark of *Pinus sylvestris*, on thallus of *Lepraria jackii* Tønsberg, 25.07.2012, leg. DH & L. V. Kuz'mina (BILAS). – New to SPb. Previously reported from ELR (Stepanchikova et al., 2011a). Distribution in North-Western European Russia outside of LR: not reported. Distribution in Fennoscandia and Baltic countries: Sweden (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Czarnota & Kukwa, 2010), Lithuania (Kukwa & Diederich, 2005).

MUELLERELLA HOSPITANS Stizenb. – WLR, Slantsy District, right bank of the Vtroja River (along the border of Pskov Region), 59°01'08"N, 27°55'43"E, mixed forest with broad-leaved trees, bark of *Fraxinus excelsior*, on apothecia of *Bacidia rubella* (Hoffm.) A. Massal., 26.09.2009, leg. DH (BILAS); WLR, Kingisepp District, Kurgal'sky protected area, Kurgal'sky Peninsula, NE of Tiskolovo village, slope of the main shore of Narvsky Gulf, 59°43'20"N, 28°02'05"E, deciduous forest, bark of *Tilia cordata*, on apothecia of *B. rubella*, 14.04.2007, leg. DH (LECB). – New to North-Western European Russia. Nearest regions in European Russia: Kaliningrad (Dedkov et al., 2007) and Murmansk (Urbanavichus et al., 2008) regions. Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Czarnota & Kukwa, 2010), Lithuania (Motiejūnaitė et al., 2005). This is a common and widespread in the Northern Hemisphere lichenicolous fungus inhabiting apothecia of *B. rubella* and, less commonly, apothecia of other species of *Bacidia*. It is characterized by polysporous asci and small, globose to subglobose spores (2–4 µm in diam.) (Clauzade et al., 1989).

OPEGRAPHA NIVEOATRA (Borrer) J. R. Laundon – ELR, Tikhvin District, Uljanitsa River Valley, ca. 1 km SE of Strelkovo village, 60°06'05.5"N, 34°36'47"E, mixed forest on slope, bark of *Populus tremula*, 21.07.2012, IS & L. V. Gagarina (LE). – New to ELR. Previously reported from WLR (Stepanchikova et al., 2011c). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999).

PHAEOPYXIS PUNCTUM (A. Massal.) Rambold, Triebel & Coppins – ELR, Podporozhje District, ca. 13 km W of Ivinsky Razliv Lake, NW of Rotmozero Lake, Gladkoe bog, 61°06'02"N, 34°35'27"E, old pine-aspen-spruce forest with dwarf shrubs and mosses on an island in swamp, bark of *Alnus glutinosa*, on thallus of *Cladonia* sp., 04.08.2012, leg. IS & G. M. Tagirdzhanova (BILAS); ELR, Podporozhje District, ca. 1 km NW of Tokari village, 61°06'49"N, 34°23'16"E, old wet spruce forest, bark of *Picea* sp., on thallus of *Cladonia digitata* (L.) Hoffm., 28.09.2007, leg. DH & IS (BILAS); ELR, Podporozhje District, 200 m S of Chogozero Lake, along the Esipruchej brook, 60°28'56"N, 35°13'43"E, swampy spruce forest with pines, on thallus of *C. macilenta* Hoffm., 22.09.2009, leg. E. S. Kuznetsova & IS (BILAS). – New to LR. Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Lithuania (Motiejūnaitė et al., 2011).

SCLEROPHORA PALLIDA (Pers.) Y. J. Yao & Spooner – SPb, Petrodvorets District, Oranienbaum, Verkhnij Park, W of Lipovaya alley, 59°54'51.1"N, 29°44'48.1"E, old historical park, on bark of old *Fraxinus excelsior*, 20.10.2012, leg. DH & IS (LECB). – New to SPb. Known from ELR (Kuznetsova et al., 2007) and WLR (Vainio, 1927). Distribution in North-Western European Russia outside of LR: Pskov Region (Istomina & Likhacheva, 2010). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė, 1999). Indicator of bio-

logically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).

SCUTULA EPIBLASTEMATICA (Wallr.) Rehm – ELR, Boksitogorsk District, ca. 10 km NE of Efimovskiy, 59°32'30"N, 34°50'43"E, old spruce-aspen forest with *Vaccinium myrtillus*, bark of *Populus tremula*, on thallus of *Peltigera praetextata* (Flörke ex Sommerf.) Zopf, 27.09.2012, leg. DH & IS (BILAS). – New to ELR. Previously reported from WLR (Triebel et al., 1997). Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012).

SYZYGOSPORA PHYSCIACEARUM Diederich – WLR, Priozersk District, Ik, Smorodinka River Valley, right bank of the Smorodinka River, 60°29'07"N, 30°09'19"E and 60°29'07"N, 30°08'08"E, spruce forest, bark of *Populus tremula*, on thalli of *Physcia aipolia* (Ehrh. ex Humb.) Fűrnr., 11 and 12.06.2011, leg. IS (BILAS). – New to LR. Distribution in North-Western European Russia outside of LR: Republic of Karelia (Fadeeva et al., 2007). Distribution in Fennoscandia and Baltic countries: Norway, Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Latvia (Czarnota & Kukwa, 2010), Lithuania (Motiejūnaitė, 1999).

TREMELLA CLADONIAE Diederich & M. S. Christ. – WLR, Priozersk District, Ik, Smorodinka River Valley, right bank of the Smorodinka River, 60°29'05"N, 30°08'06"E, spruce forest with *Vaccinium myrtillus*, green mosses and *Sphagnum* sp. patches, bark of *Betula* sp., on thallus of *Cladonia* sp., 12.06.2011, leg. IS (LE); same locality, floodplain, 60°27'48"N, 30°11'14"E, birch forest with young spruces surrounded by meliorative ditches, bark of *Betula* sp., on thallus of *Cladonia coniocraea*, 23.08.2011, leg. IS & G. M. Tagirdzhanova (BILAS); same locality, NW of Parikanjärvi Lake, 60°29'07"N, 30°09'19"E, spruce forest with *V. myrtillus* and green mosses, bark of *Betula* sp., on thallus of *C. coniocraea*, 11.06.2011, leg. IS (BILAS); WLR, Vsevolozhsk District, ca. 8 km SW of Lembolovo, 60°18'58"N, 30°10'32"E, secondary spruce forest with *V. myrtillus* and *Sphagnum* sp., lignum of *Picea abies*, on thallus of *C. co-*

niocraea, 09.09.2011, leg. DH & IS (LECB); ELR, Podporozhje District, ca. 13 km W of Ivinsky Razliv Lake, NW of Rotmozero Lake, Gladkoe bog, 61°06'35"N, 34°36'23"E, old aspen-spruce forest with *V. myrtilus* and mosses on the island in swamp, bark of *Populus tremula*, on thallus of *C. cornuta* (L.) Hoffm., 05.08.2012, leg. IS & G. M. Tagirdzhanova (BILAS). – New to North-Western European Russia. Nearest localities in European Russia: Kaliningrad (Dedkov et al., 2007) and Tula (Zhurbenko & Gudovicheva, 2013) regions. Distribution in Fennoscandia and Baltic countries: Sweden, Finland (Nordin et al., 2011), Estonia (Randlane et al., 2012), Lithuania (Motiejūnaitė, 1999). This widely distributed lichenicolous heterobasidiomycete inhabits various, mainly epiphytic species of *Cladonia* sect. *Cladonia*. Macroscopically it is similar to *Syzygospora bachmanii*, whose basidiomata are usually slightly darker and reddish brown (pinkish brown in *T. cladoniae*). The structure of basidia [aseptate and with (2–)4 short subuliform epibasidia in *S. bachmanii* and one-septate, with two cylindrical epibasidia in *T. cladoniae*] and anamorph (lunate and catenate conidia in *S. bachmanii* and asteroconidia in *T. cladoniae*) are different in these two species (Diederich, 1996). Note: asteroconidia not seen in the specimens kept in BILAS.

TREMELLA COPPINSII Diederich & G. Marson – ELR, Podporozhje District, ca. 7 km W of Ivinsky Razliv Lake, 2.5 km NE of Rotmozero Lake, 61°06'16"N, 34°42'09"E, old spruce forest with aspen, dry branches of *Picea* sp., on thallus of *Platismatia glauca* (L.) W. L. Culb. et C. F. Culb., 30.09.2008, leg. DH & IS (BILAS); ELR, Podporozhje District, ca. 11 km NE from Vazhiny, along the Krasivy stream, 60°03'53"N, 34°00'44.5"E, spruce forest with birch and aspen, *Vaccinium myrtilus*, *Oxalis acetosella* and green mosses, bark of *Picea* sp. and *Sorbus aucuparia*, on thalli of *P. glauca*, 29.09.2010, leg. DH & IS (BILAS). – New to Russia. Distribution in Fennoscandia and Baltic countries: Norway, Sweden (Nordin et al., 2011), Estonia (Randlane et al., 2012). *T. coppinsii* is known from various countries of Europe and from Asia. It inhabits lichens of the genus *Platismatia* and is characterized by reddish, applanate to pulvinate basidiomata and production of asteroconidia in mature specimens (Diederich, 1996). Asteroconidia were not present in the specimens from ELR, probably

because the basidiomata were not mature yet, but typical basidiomata and presence of subsphaerical to ellipsoid, 2–3-celled 8–11.5 x 6–10 µm basidia with longitudinal septa allowed to identify the fungus. Diederich (1996) describes basidia as 2–4-celled, but no 4-celled basidia were observed in our specimens.

VERRUCARIA CAMBRINI Servit – SPb, Kurortny District, Ik, Vicinity of Zelenogorsk, W from protected territory «Schuch'e Lake» (Haukijärvi), 60°13'21"N, 29°44'30"E, near the road, on concrete, slate and granite covered with concrete, 24.09.2008, leg. DH & IS (H, LE). – New to Russia. Distribution in Fennoscandia and Baltic countries: Finland (Pykälä, 2013). For the description see Pykälä (2013).

VERRUCARIA FUSCONIGRESCENS Nyl. – WLR, Vyborg District, Ka, Bol'shoj Berezovy Island, cape Lapchaty, 60°17'30"N, 28°33'46"E, littoral meadow, on granite boulder, 16.09.2010, leg. & det. US, conf. A. Orange (herb. US). – New to Russia. Distribution in Fennoscandia and Baltic countries: Sweden (Nordin et al., 2011), Finland (Pykälä, 2007). According to Orange et al. (2009), the species is characterized by the well-developed dark brown thallus on the black prothallus, the absence of thalline layer over the perithecia, more or less conical involucrellum and medium-sized ascospores. The specimen presented here differs in the dark brown prothallus. *V. fusconigrescens* seems to be restricted to coastal areas (Orange et al., 2009).

VERRUCARIA NIGROUMBRINA Servit – SPb, Petrodvorets District, Peterhof, Nizhnij park, Zolotaya Gorka fountain, 59°53'14"N, 29°53'50"E, on concrete (H). – New to Russia. Distribution in Fennoscandia and Baltic countries: Finland (Pykälä, 2011). For the description see Pykälä (2011).

VERRUCARIA TORNENSIS H. Magn. – SPb, Kurortny District, Ik, Serovsky Ustup projected protected area, ca. 100 m SW from bridge over the Ushkovsky brook, near road, 60°13'08"N, 29°36'38.5"E, on concrete, 06.06.2010, leg. DH, E. S. Kuznetsova & IS (H). – New to SPb. Recently reported from WLR as new to Russia (Pykälä et al., 2012). Distribution in Fennoscandia and Baltic countries: Sweden, Finland (Nordin et al., 2011).

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