The lichens and allied fungi from the Leningrad Region and Saint Petersburg in the lichen herbarium of the University of Tartu

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Abstract: The revision of specimens in the lichen herbarium of the University of Tartu revealed 127 specimens representing 86 species from the Leningrad Region and Saint Petersburg; these include *Calicium adspersum* published as a new species for the Leningrad Region and *Carbonicola anthracophila* reported for the first time for the Eastern Leningrad Region. A curious finding is *Umbilicaria muehlenbergii*, collected in 1954 in the northern part of Karelian Isthmus. Forgotten collections by Anne-Liis Sómermaa (1972) from the territory of the modern Vepssky Forest Nature Park, by Haide-Ene Rebassoo (1988) from Maly Tuters Island (Vähä-Tytärsaari, Säyvö) and by Paul von Kühlewein ("regio Petropolitano", 19th century) are of special interest.

Keywords: historical lichen collections, Veppsky forest, Calicium adspersum, Umbilicaria muehlenbergii.

INTRODUCTION

The history of lichenological studies in the Leningrad Region (LR) and St. Petersburg (SPb) (North-Western European Russia) goes back more than 200 years. The oldest specimens available now refer to 1799. More than 200 collectors worked here afterwards, and nowadays the lichen flora of both regions can be considered rather well-known. A group of lichenologists from St. Petersburg State University initiated a special research of the regional lichen diversity in 1998, which combined detailed field studies and critical revision of the main collections from LR and SPb in different herbaria (H, H-Nyl, HFR, LE, LECB, TUR, TUR-V, UPS). Nowadays the revealed diversity of lichens and allied fungi of LR and SPb altogether counts ca 1050 species, of them about 1010 are known from LR and 575 from SPb.

Regional investigations of lichen biota are usually not sufficient without revision of herbaria. The assessment of lichen diversity of LR and SPb included complete critical revision of appropriate collections of Botanical and Mycological Museum, Natural History Museum, University of Tartu (TU). This work discovered some important and unexpected materials for these areas.

MATERIAL AND METHODS

The revision was performed by the author in 2014 and 2015. Altogether 127 specimens collected by ten persons were studied and 222 identifications were made (many herbarium envelopes contained more than one species). Most of the specimens (115) were collected in LR and only 12 – within SPb limits. Some of the specimens in TU were marked also as TAA herbarium and therefore were probably received from the former Institute of Zoology and Botany of the Estonian Academy of Sciences (now Estonian University of Life Sciences, Tartu). The specimens were collected from 30 localities, 27 of them now included in LR and the others – in SPb (Table 1).

Abbreviations for the biogeographical provinces of Eastern Fennoscandia in the list of localities are traditional (Kotiranta et al., 1998): Ik – Isthmus karelicus, Ka – Karelia australis, KI – Karelia ladogensis and Kol – Karelia olonetsensis. The subdivision of the LR was published in Stepanchikova et al. (2010); the parts of the region are abbreviated correspondently: ELR – eastern part of LR, WLR – western part. Non-lichenized saprobic fungi are marked with + in the species list. For all the species substrates, localities and

Table 1. List of localities

No	Locality estimated geographical coordinates (WCS 1984) histope	Date	Collector
Leni	norad Begion	Date	Concetor
ELR.	Tikhvin District. Venssky Forest Nature Park:		
1	Without exact locality, forest compartment (fc) not indicated	08.1972	AS
2	4 km NE of Noidala village, fc 82, 60°12'N, 35°00'E, spruce forest	21.08.1972	AS
3	4 km NE of Noidala village, fc 82–83, 60°13'N, 35°01'E	20.08.1972	AS
4	10 km NE of Noidala village, fc 87, 60°12'N, 35°06'E, pine forest	20-23.08.1972	AS
5	14 km NE of Noidala village, fc 90, 60°12'N, 35°11'E, spruce forest (burned)	20-22.08.1972	AS
6	4.5 km SW of Korbenichi village, fc 92, 60°12'N, 34°33'E, pine forest	23.08.1972	AS
7	3.5 km S of Korbenichi village, fc 94, 60°12'N, 34°36'E, spruce forest	20-21.08.1972	AS
8	4.5 km SE of Korbenichi village, fc 98, 60°12'N, 34°40'E, spruce forest	20-21.08.1972	AS
9	7 km SE of Korbenichi village, fc 100, 60°12'N, 34°43'E, spruce forest	20.08.1972	AS
10	8.5 km SE of Korbenichi village, fc 101, 60°11'N, 34°44'E, spruce forest	22.08.1972	AS
11	10 km SE of Korbenichi village, fc 103, 60°11'N, 34°47'E, spruce forest	20-22.08.1972	AS
12	3.5 km NE of Korvala village, fc 190, 60°06'N, 35°04'E	21.08.1972	AS
13	1 km NE of Korvala village, fc 192, 60°05'N, 35°02'E	20.08.1972	AS
14	3 km ENE of Korvala village, fc 193, 60°06'N, 35°04'E, spruce forest	20.08.1972	AS
15	2 km ENE of Korvala village, fc 194, 60°05'N, 35°03'E, spruce forest with pines	20.08.1972	AS
16	5.5 km ENE of Korvala village, fc 196, 60°06'N, 35°06'E, spruce forest	19 and 22.08.1972	AS
17	8 km ENE of Korvala village, fc 198, 60°05'N, 35°09'E, spruce forest	19-20.08.1972	AS
18	9 km ENE of Korvala village, fc 199, 60°05'N, 35°10'E, swampy spruce forest	22.08.1972	AS
19	10 km ENE of Korvala village, fc 200, 60°05'N, 35°11'E, spruce forest	22.08.1972	AS
ELR:	· · · · ·		
20	Kol, Lodejnoe Pole District, Nizhnesvirsky Reserve, Ladoga Lake shore, 60°40'N, 32°56'E	11.06.1995	HT
21	Podporozhje District, in the vicinity of Peldushi village, 60°26'N, 34°40'E, deciduous forest	07 and 12.07.1968	IS
WLR	:		
22	Kl, Priozersk District, Kuznechnoe (former Kaarlahti), 61°07'N, 29°52'E, rocky outcrops	07.1954	EM
23	Ka, Vyborg District, Kamennogorsk (former Antrea), surroundings of a railway station, 60°56'N, 29°09'E, rocky outcrops	12.08.1967	EN
24	Ka, Vyborg District, SW of Borodinskoe (former Sairala), N part of Lake Mikhalevoskoe (former Juoksemajärvi), Mikhalevo (former Kankaala), NE of a railway station, 61°00'N, 29°25'E, rocky outcrops	12–13.08.1967	EN
25	Ka, Kingisepp District, Baltic Sea, Gulf of Finland, proposed reserve Ingermanlandsky, Maly Tuters Island (former Vähä-Tytärsaari, Säyvö), 59°48'40"N, 26°54'31"E	06.1988	HR
26	Luga District, in the vicinity of Luga, 58°44'N, 29°50'E, pine forest	06.1966	AR & ES
27	Regio Petropolitano, without exact locality	19th century	PH
Saint Ik, K	Petersburg urortny District:		
28	Komarovo (former Kellomäki), 60°11'N, 29°48'E, pine forest	16.05.1957	HT
29	Zelenogorsk (former Terijoki), 60°12'N, 29°42'E, pine and spruce forests	18.04.1968	EN
30	Vicinity of Ushkovo (former Tyrisevä), 60°13'N, 29°37'E, pine forest	17.05.1967	EN
	-	1956	VS

other related data (including former numbers of forest compartments specified on herbarium labels) are indicated, the most interesting records or the species difficult to identify are accompanied by revision data and herbarium numbers. The names of the collectors are abbreviated as follows: PK - Paul von Kühlewein. EM - Elikonida Nikolaevna Moiseeva, EN - Eva Nilson, AR - A. P. Ravinskaya, HR - Haide-Ene Rebassoo, VS - Vsevolod Pavlovich Savicz, ES -E. O. Seman, IS - Irina Alexandrovna Shapiro, AS - Anne-Liis Sõmermaa, HT - Hans-Voldemar Trass; the main reviewers are: DH - Dmitry E. Himelbrant, and LT - Leif Tibell. Special comments are made for protected species (Tzvelev, 2000) as well as for indicators and specialized species of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009). The nomenclature of taxa follows Nordin et al. (2011).

THE SPECIES

- ALECTORIA SARMENTOSA (Ach.) Ach. subsp. SAR-MENTOSA – on bark of *Picea* sp. (8, 19) and *Pinus sylvestris* L. (1, 4, 6) branches. Red Data Book of LR (Tzvelev, 2000). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- ARCTOPARMELIA CENTRIFUGA (L.) Hale on siliceous stones (23, 24). Red Data Book of LR (Tzvelev, 2000).
- + ARTHOTHELIUM SCANDINAVICUM Th. Fr. on bark of *Picea* sp., det. DH (2, TU 12528, TAA 49014).
- BACIDIA SUBINCOMPTA (Nyl.) Arnold on bark of Populus tremula L. (1, sub Parmeliella triptophylla).
- BAEOMYCES RUFUS (Huds.) Rebent. on soil (23).
- BIATORA HELVOLA Körb. ex Hellb. on bark of *Picea* sp. (9).
- BILIMBIA MICROCARPA (Th. Fr.) Th. Fr. on bark of *Picea* sp. (7), on mosses on bark of deciduous tree (10, sub *Peltigera praetextata*).
- BRYORIA CAPILLARIS (Ach.) Brodo & D. Hawksw. on resin of *Picea* sp. (1).
- BRYORIA FURCELLATA (Fr.) Brodo & D. Hawksw. on bark of *Pinus sylvestris* (1, 4, 6).
- BRYORIA FUSCESCENS (Gyeln.) Brodo & D. Hawksw. – on bark of *Picea* sp. (8, sub *Alectoria sarmentosa* subsp. *sarmentosa*).

- CALICIUM ADSPERSUM Pers. on bark of Picea sp., det. LT, 03.11.2000 (17, TU 62861). - First record for LR. The species was reported from "St. Petersburg" without exact locality by Johann A. Weinmann (1837: 148) as *C. roscidum* Ach., but there is no voucher confirming presence of this species in any of the investigated herbaria. 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., 2015), Latvia (Piterāns, 2001), Lithuania (Motiejūnaitė & Andersson, 2003). Specialized species of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009). C. adspersum differs from other Calicium species by the presence of vellow pruina on the mazaedium and on the lower side of the excipulum, by ascospores with a distinctive ornamentation of spirally arranged ridges and verrucose thallus containing norstictic acid (Tibell, 1999).
- CALICIUM DENIGRATUM (Vain.) Tibell on lignum of *Pinus sylvestris*, det. DH (4, sub *Chaenotheca xyloxena*, TU 62922). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- CALICIUM GLAUCELLUM Ach. on bark of *Picea* sp. (8, sub *Calicium viride*).
- CALICIUM TRABINELLUM (Ach.) Ach. on bark (1, sub *Hypocenomyce scalaris*) and lignum (4, sub *Chaenotheca xyloxena*) of *Pinus sylvestris*.
- CALICIUM VIRIDE Pers. on bark of *Picea* sp. (5, 7, 8, 10, 14, 15, 17–19) and lignum of conifers (16).
- CARBONICOLA ANTHRACOPHILA (Nyl.) Bendiksby & Timdal on burnt lignum, det. DH (5, sub *Mycoblastus sanguinarius*, TAA 48772). New to ELR. Previously published for WLR (Lebedeva, 2005) and SPb (Malysheva, 1996). 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., 2015), Latvia (Piterāns,

2001), Lithuania (Motiejūnaitė, 1999). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).

- CETRARIA ACULEATA (Schreb.) Fr. on turf soil (25, sub *Cladonia pocillum*).
- CETRARIA ISLANDICA (L.) Ach. subsp. ISLANDICA on soil (29) and on bark of coniferous tree (30).
- CETRARIA SEPINCOLA (Ehrh.) Ach. on bark of *Pinus* sylvestris branches (4, 6).
- CHAENOTHECA CHRYSOCEPHALA (Turner ex Ach.) Th. Fr. – on bark of *Picea* sp. (14, sub *Calicium viride*).
- CHAENOTHECA SUBROSCIDA (Eitner) Zahlbr. on bark of *Picea* sp. (5, 8, 15, 17, 18, all specimens sub *Calicium viride*). Specialized species of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- CHAENOTHECA TRICHIALIS (Ach.) Th. Fr. on bark of *Picea* sp. (8, sub *Calicium viride*).
- CHAENOTHECA XYLOXENA Nádv. on lignum of *Pinus sylvestris*, det. DH (4, TU 62922).
- + CHAENOTHECOPSIS NANA Tibell on bark of *Picea* sp., det. AS, 1972 (18, TU 62921, TAA 48801). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- CLADONIA ARBUSCULA (Wallr.) Flot. ssp. ARBUSCULA – on soil (28).
- CLADONIA BOTRYTES (K. G. Hagen) Willd. on fruit bodies of polypores (18).
- CLADONIA DEFORMIS (L.) Hoffm. on soil (27).
- CLADONIA FLOERKEANA (Fr.) Flörke on lignum (30, leg. V. P. Savicz, 1956) and turf soil (25).
- CLADONIA FURCATA (Huds.) Schrad. on turf soil (25).
- CLADONIA POCILLUM (Ach.) Grognot on turf soil (25).
- CLADONIA PYXIDATA (L.) Hoffm. on turf soil (25, sub *C. floerkeana*).
- CLADONIA REI Schaer. on turf soil (25, sub *C. floerkeana*).
- CLIOSTOMUM LEPROSUM (Räsänen) Holien & Tønsberg – on bark of *Picea* sp., det. DH (5, 7, 8, 10–12, 14, 15, 17–19) and lignum of conifers (16). Specialized species of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- EVERNIA MESOMORPHA Nyl. on bark of *Pinus sylvestris* (4, 6) and *Picea* sp. (8).

- FELIPES LEUCOPELLAEUS (Ach.) Frisch & G. Thor – on bark of *Picea* sp., det. LT (5, 11, 17). Specialized species of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- HYPOCENOMYCE SCALARIS (Ach.) M. Choisy on bark of *Pinus sylvestris* (1, 26, 28).
- HYPOGYMNIA PHYSODES (L.) Nyl. on bark of *Picea* sp. (19), *Pinus sylvestris* (28) and lignum of conifers (21).
- HYPOGYMNIA TUBULOSA (Schaer.) Hav. on siliceous stone (23).
- ICMADOPHILA ERICETORUM (L.) Zahlbr. on rotten lignum of fallen trunks (1, 5). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- Imshaugia aleurites (Ach.) S. L. F. Meyer on bark of *Pinus sylvestris* (1, 4, 13).
- JAPEWIA TORNOENSIS (Nyl.) Tønsberg on bark of Pinus sylvestris (4, sub Lecanora cadubriae, TU 12519, TAA 48896).
- LASALLIA PUSTULATA (L.) Mérat on siliceous rocks (22).
- LECANORA CADUBRIAE (A. Massal.) Hedl. on bark of *Pinus sylvestris*, det. DH (4, TU 12519, TAA 48896).
- LECANORA HYPOPTA (Ach.) Vain. on bark of *Pinus* sylvestris (4, 13) and *Picea* sp., det. DH (17, 19).
- LECANORA PULICARIS (Pers.) Ach. on bark of *Pinus* sylvestris branches (4).
- LECANORA VARIA (Hoffm.) Ach. on bark of *Pinus* sylvestris (28, sub *Vulpicida pinastri*).
- LECIDEA ALBOFUSCESCENS Nyl. on bark of *Picea* sp., det. DH (2, 7, 11, 12).
- LECIDEA LEPRARIOIDES Tønsberg on bark of *Picea* sp., det. DH (2, sub *Arthothelium scandina-vicum*, TU 12528, TAA 49014).
- LECIDEA NYLANDERI (Anzi) Th. Fr. on bark of *Picea* sp. (2, 17) and *Pinus sylvestris* (4).
- LECIDEA TURGIDULA Fr. on bark of *Pinus sylves*tris (4).
- LOPADIUM DISCIFORME (Flot.) Kullh. on bark of *Picea* sp., det. DH (7, 10, 12, 14, 17, 18). Indicator of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- MELANELIA STYGIA (L.) Essl. on siliceous stone, det. EN (24).

- MELANOHALEA OLIVACEA (L.) O. Blanco et al. on bark of *Alnus glutinosa* (L.) Gaertn. (28), *Betula* sp. (21) and deciduous tree (23).
- MICAREA MELAENA (Nyl.) Hedl. on mossy base (3) and bark (10, 15) of *Pinus sylvestris*, det. AS, 1972.
- + MICROCALICIUM DISSEMINATUM (Ach.) Vain. on lignum of conifers (9) and thallus of *Calicium viride* on bark of *Picea* sp. (18). Specialized species of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- MYCOBILIMBIA CARNEOALBIDA (Müll. Arg.) Printzen – on bark of *Picea* sp. (11, 14) and *Populus tremula* (1).
- MYCOBLASTUS SANGUINARIUS (L.) Norman on bark (1, 3, 4, 10, 13) and lignum (6) of *Pinus sylvestris*, on bark of *Picea* sp. (2, 5, 12, 18, 19) and burnt lignum (5).
- NEPHROMA BELLUM (Spreng.) Tuck. on mosses on bark of deciduous tree (10, sub *Peltigera praetextata*). Red Data Book of LR (Tzvelev, 2000). Specialized species of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- OCHROLECHIA ANDROGYNA (Hoffm.) Arnold s. 1. on bark of *Pinus sylvestris* (16).
- PALICELLA FILAMENTOSA (Stirt.) Rodr. Flakus & Printzen – on bark of *Pinus sylvestris* branches, det. DH (4, sub *Lecanora cadubriae*, TU 12519, TAA 48896).
- PARMELIA SAXATILIS (L.) Ach. on siliceous stones (23).
- PARMELIA SULCATA Taylor on bark of *Betula* sp. (21).
- PARMELIELLA TRIPTOPHYLLA (Ach.) Müll. Arg. on bark of *Populus tremula* (1, TU 62279, TAA 49008). Red Data Book of LR (Tzvelev, 2000). Specialized species of biologically valuable forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009).
- PARMELIOPSIS AMBIGUA (Wulfen) Nyl. on bark of *Pinus sylvestris* (28) and lignum of conifers (20).
- PARMELIOPSIS HYPEROPTA (Ach.) Arnold on bark of *Pinus sylvestris* (13) and fruit bodies of polypores (18).
- PELTIGERA APHTHOSA (L.) Willd. unknown substrate (27).

- Peltigera praetextata (Flörke ex Sommerf.) Zopf – on mosses on bark of deciduous tree (10).
- PHYSCIA AIPOLIA (Ehrh. ex Humb.) Fürnr. on bark of Sorbus aucuparia L. (27).
- PLACYNTHIELLA ULIGINOSA (Schrad.) Coppins & P. James on turf soil (25, sub *Cladonia pocillum*).
- PLATISMATIA GLAUCA (L.) W. L. Culb. & C. F. Culb. – on bark of *Pinus sylvestris* (4) and *Picea* sp. (29).
- PYCNORA LEUCOCOCCA (R. Sant.) R. Sant. on bark of *Pinus sylvestris* branches, det. DH (4, sub *Lecanora cadubriae*, TU 12519, TAA 48896).
- PYCNORA SOROPHORA (Vain.) Hafellner on bark of *Pinus sylvestris*, det. DH (1, 4).
- + SAREA DIFFORMIS (Fr.) Fr. on resin of *Picea* sp. (10, TU-62931).
- + SAREA RESINAE (Fr.: Fr.) Kuntze on resin of *Picea* sp. (7, 9, 11).
- TRAPELIOPSIS GRANULOSA (Hoffm.) Lumbsch on lignum of conifers (20).
- TUCKERMANNOPSIS CHLOROPHYLLA (Willd.) Hale on bark of *Picea* sp. (8, 19) and on lignum of conifers (21).
- UMBILICARIA DEUSTA (L.) Baumg. on siliceous stone (23).
- UMBILICARIA MUEHLENBERGII (Ach.) Tuck. on siliceous rocks, det. DH (22). – This species is known from Asia and North America (Wei & Biazrov, 1991; Biazrov, 2013) and has not been reported from Europe. The specimen in TU (Fig. 1) clearly belongs to this species, which is distinguishable from other members of the genus by brown, smooth, shiny and epruinose upper side of thallus with actinodisc apothecia, typically immersed in shallow depressions, as well as by dark brown, papillate and trabeculate underside without rhizinomorphs (Hestmark, 2004).
- UMBILICARIA POLYPHYLLA (L.) Baumg. on siliceous stone, det. DH (24).
- USNEA DASYPOGA (Ach.) Nyl. on bark of *Pinus sylvestris*, det. DH (4, 16).
- USNEA GLABRESCENS (Nyl. ex Vain.) Vain. ex Räsänen – on bark of *Picea* sp. branches, det. DH (19).
- USNEA HIRTA (L.) Weber ex F. H. Wigg. on bark of *Pinus sylvestris* (4).
- USNEA SUBFLORIDANA Stirt. on bark of *Pinus sylvestris* (4).
- VULPICIDA PINASTRI (Scop.) J.-E. Mattsson & M. J. Lai – on bark of *Pinus sylvestris* (28).



Fig. 1. The specimen of *Umbilicaria muehlenbergii* (Moiseeva, TU s.n.). A – Upper surface of thallus, B – lower surface. Scale bars = 1 cm.

- XANTHOPARMELIA CONSPERSA (Ach.) Hale on siliceous stone (23, 28).
- XANTHOPARMELIA STENOPHYLLA (Ach.) Ahti & D. Hawksw. – on siliceous stone (23, sub *X. conspersa*).
- Xylographa parallela (Ach.: Fr.) Fr. on lignum of conifers (20).
- XyLOPSORA FRIESII (Ach.) Bendiksby & Timdal on burnt lignum (5, sub *Mycoblastus sanguinarius*).

DISCUSSION

The revision of herbarium specimens from LR and SPb in TU resulted in identification or verification of 86 species. One of the most interesting findings was the specimen of Calicium adspersum. The species was reported from "St. Petersburg" about 180 years ago by Weinmann (1837), but as the voucher has not been found in any of the revised herbaria, the presence of this species remained unconfirmed and doubtful until now. C. adspersum is strictly confined to old-growth spruce and oak forests in the Southern Taiga of North-Western European Russia (Andersson et al., 2009), and its record from ELR confirms the presence of suitable spruce forests in 1972 on the current territory of Vepssky Forest Nature Park. During active field investigations since 1999, C. adspersum has not been found in spruce forests of ELR. According to our observations, habitats for this species are still present in Vepssky Forest, however, the species survival should be checked.

Very interesting is the finding of *Umbilicaria muehlenbergii*, collected in 1954 in the northern part of Karelian Isthmus by Elikonida Moiseeva who at that time worked in the Division of Spore Plants of Komarov Botanical Institute in Leningrad. In accordance with the original herbarium label (written in Russian, evidently by the collector), the specimen was collected in Kuznechnoe (Priozersk District, LR) on rocky outcrops. Such landscape elements are very common in that part of LR and form suitable habitat for different species of the genus Umbilicaria. Another specimen collected together with U. muehlenbergii belonged to Lasallia pustulata, the taxon that is still present around Kuznechnoe. The specimen of U. muehlenbergii was kept in TU under "Umbilicaria indet." During the recent lichenological investigations (2015) in the vicinities of Kuznechnoe, the author did not find *U. muehlenbergii*, but the area is very extensive and the landscape is difficult. This finding is confusing and could be either an example of extraordinary remote locality or just an occasional mistake in labeling.

Important information about historical localities of the red-listed or protected species was obtained in TU, concerning the following lichens: *Alectoria sarmentosa, Arctoparmelia centrifuga, Melanelia stygia, Nephroma bellum* and *Parmeliella triptophylla* – included in the Red Data Book of LR (Tzvelev, 2000); *Calicium adspersum, C. denigratum, Carbonicola anthracophila, Chaenotheca subroscida, Felipes leucopellaeus, Lasallia pustulata* and *Lopadium disciforme* – proposed for protection in the new edition of the regional Red Data Book (in prep.).

The most interesting part of the studied material was the collection made by Anne-Liis Sõmermaa in August 1972 on the territory that belongs now to the Vepssky Forest Nature Park in ELR. This unpublished collection of 90 specimens and 58 species is the only historical information on the lichen diversity of this territory, regionally famous for its undisturbed old-growth spruce forests and referred to as a model area of the Middle Taiga in NW Russia. The revision of the collection found 12 indicator or specialized species of biologically valuable old-growth forests in North-Western European Russia (Andersson et al., 2009). Some of these species - Alectoria sarmentosa, Chaenotheca subroscida, Cliostomum leprosum, Felipes leucopellaeus and Lopadium disciforme - were collected from different localities and probably were rather widespread in the Nature Park in 1970s. All these 12 species are still present in the territory, but they are not so widespread (Kuznetsova et al., 2007a, b) due to recent forest cuttings.

Another interesting but small part of the investigated material was collected by Haide-Ene Rebassoo from Maly Tuters Island (Gulf of Finland, Baltic Sea) in June 1988. The collection consists of eight specimens from seven species only, but all of them are new for this small and remote island, extremely difficult for visiting. Only 18 species were known from the island before, according to the material collected in 1993 (Alexeeva, 2005).

Three specimens (*Cladonia deformis*, *Peltigera aphthosa* and *Physcia aipolia*) collected by Paul von Kühlewein (1798–1870) from "regio Petropolitano" ("Herbarium Horti Botanci Jurjevensis") are especially valuable as one of the oldest regional collections.

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