

БИОРАЗНООБРАЗИЕ, СИСТЕМАТИКА,  
ЭКОЛОГИЯ

УДК 582.28 : 581.95 (470 + 571)

NEW SPECIES FOR REGIONAL MYCOBIOTAS OF RUSSIA. 5. REPORT 2020

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Received March 1, 2020; revised May 1, 2020; accepted May 11, 2020

A total of 72 basidiomycete species have been recorded for the first time from 13 administrative regions of Russia: Altai Krai, Altai Republic, Arkhangelsk Oblast, Bryansk Oblast, Kostroma Oblast, Leningrad Oblast, Murmansk Oblast, Novgorod Oblast, Novosibirsk Oblast, Oryol Oblast, Yaroslavl Oblast, Saint-Petersburg, Yamalo-Nenets Autonomous Okrug. An annotated species list containing the data on location, substrate, habitat type and voucher numbers is provided. *Melanogaster intermedius*, *Phlebia femsjoensis*, *Suillus aurihymenius* are reported as the first records in Russia. *Coprinellus subpurpureus* is recorded in Russia for the second time, *Gymnopus vernus*, *Helicogloea compressa*, *Hypsizygus marmoreus* and *Jaapia argillacea* are reported for the third time.

**Keywords:** biodiversity, basidiomycetes, fungal distribution, Russia

**DOI:** 10.31857/S0026364820060033

## INTRODUCTION

The present report is the fifth in the series of articles devoted to the new regional records of fungi (Bolshakov et al., 2016, 2018; Svetasheva et al., 2017; Volobuev et al., 2019).

An annotation record includes the data on species location, substrate, habitat, and herbarium documentation. The material was loaded in LE (St. Petersburg), SVER (Ekaterinburg), NSK (Novosibirsk), AR (Arkhangelsk), INEP (Apatity) herbaria as well as in the private collection of Yuriy A. Rebriev – YuR (Rostov-on-Don). Duplicates of all specimens are stored in LE.

## MATERIALS AND METHODS

Material was collected by Lyudmila B. Kalinina (abbreviated as LK), Yuriy A. Rebriev (YuR), Anton G. Shiryaev (ASh), Oleg N. Ezhov (OE), Yuliya R. Khimich (YuKh), Artyom V. Leostrin (AL), Sergey Yu. Bolshakov (SB), Vyacheslav A. Vlasenko (VV), Anastasiya V. Vlasenko (AV), Turmunkh Dejidmaa (TD), Sergey V. Volobuev (SV), Nataliya V. Shakhova (NSh) and other persons indicated in the text.

The specimens were identified by Sergey Yu. Bolshakov (abbreviated as SB), Lyudmila B. Kalinina (LK), Yuriy A. Rebriev (YuR), Anton G. Shiryaev (ASh), Sergey V. Volobuev (SV), Yuliya R. Khimich (YuKh), Vyacheslav A. Vlasenko (VV), Ivan V. Zmitrovich (IZ), and other experts indicated in the text.

To shorten the names of administrative regions of Russia we have used the international standard codes ISO 3166-2:RU (ISO, 2010). Republic of Crimea was abbreviated as KM.

Data on the fungal species distribution in Russia is based on the updated database on Agaricomycetes diversity (Bolshakov et al., 2017), as well as other papers partly referenced in previous reports (Bolshakov et al., 2016; Svetasheva et al., 2017).

## RESULTS

### *Agaricomycetes*

#### *Agaricales*

*Apioperdon pyriforme* (Schaeff.) Vizzini – new for Arkhangelsk Oblast.

Distribution in Russia: widespread species across the territory.

Specimens examined: Arkhangelsk Oblast, Onezhsky District, Onezhskoye Pomorye National Park, Chernavshino station, 64.3500°N, 37.31667°E, on litter in mixed forest with *Betula*, *Populus*, *Picea*, 14.08.2019, coll. and det. YuR (YuR 3687, dupl. LE 321695); Primorsky District, Onezhskoye Pomorye National Park, Kotovo station, 64.68333°N, 36.73333°E, on litter in deciduous forest (*Betuletum*), 23.08.2019, coll. and det. YuR (YuR 3669, dupl. LE 321693); Arkhangelsk, 64.53441°N, 40.52280°E, on buried wood in lawn under *Larix*, 31.08.2019, coll. and det. YuR (YuR 3686, dupl. LE 321694).

*Arrhenia retiruga* (Bull.) Redhead – new for Murmansk Oblast.

Distribution in Russia: KO, LEN, PSK, ROS, TUL.

Specimen examined: Murmansk Oblast, Kirovsk Urban Okrug, Khibiny Mts, western slope of Kuelporr Mountain, 67.82394°N, 33.63902°E, on the moss in spruce forest, 19.09.2018, coll. and det. YuKh (INEP 2651, dupl. LE 321822).

*Bovista plumbea* Pers. – new for Arkhangelsk Oblast.

Distribution in Russia: AD, AL, ALT, AMU, BEL, BRY, CHE, CU, IRK, KB, KC, KGD, KHA, KHM, KIR, KK, KLU, KM, KRS, KYA, LEN, LIP, MAG, ME, NGR, NVS, PNZ, PRI, PSK, ROS, RYA, SA, SE, SMO, SPE, STA, SVE, TA, TOM, TVE, TY, UD, VGG, VOR.

Specimens examined: Arkhangelsk Oblast, Onezhsky District, Onezhskoye Pomorye National Park, Purnema village, 64.38333°N, 37.41667°E, on soil in pastured meadow, 13.08.2019, coll. and det. YuR (YuR 3654, dupl. LE 321698); Primorsky District, Onezhskoye Pomorye National Park, Kotovo station, 64.68333°N, 36.73333°E, on soil in mixed forest with *Betula*, *Picea*, *Pinus*, 21.08.2019, coll. and det. YuR (YuR 3666, dupl. LE 321699).

*Bovistella utrififormis* (Bull.) Demoulin et Rebriev – new for Arkhangelsk Oblast.

Distribution in Russia: widespread species across the territory.

Specimens examined: Arkhangelsk Oblast, Onezhsky District, Onezhskoye Pomorye National Park, Parusnoe station, 64.56667°N, 36.86667°E, on soil in meadow, 24.08.2019, coll. and det. YuR (YuR 3675, dupl. LE 321700); the same place, Purnema village, 64.38333°N, 37.41667°E, on soil in pastured meadow, 29.08.2019, coll. and det. YuR (YuR 3684, dupl. LE 321801).

*Clavaria rosea* Fr. – new for Yamalo-Nenets Autonomous Okrug.

Distribution in Russia: KGD, LEN, MUR, NGR, ORL, SVE, TOM, TUL.

Specimen examined: Yamalo-Nenets Autonomous Okrug, Labytnangi town, Zelenaya Gorka, Arctic Research Station of IPAE UrB RAS, 37 m a.s.l., 66.6503°N, 66.4003°E, on soil in botanical garden, 17.08.2019, coll. and det. ASH (SVER(F) 94041, dupl. LE 321831).

*Clavulinopsis umbrinella* (Sacc.) Corner – new for Yamalo-Nenets Autonomous Okrug.

Distribution in Russia: KGD, KHA, KHM, LEN, MUR, ORL, SVE, TOM, YEY.

Specimen examined: Yamalo-Nenets Autonomous Okrug, Shuryshkary District, eastern macroslope of the Polar Urals, valley of the Synya River, 273 m a.s.l., 65.6003°N, 62.4669°E, on soil under grasses in *Sorbus* and *Betula* bushes, 13.08.2019, coll. and det. ASH (SVER(F) 94036, dupl. LE 321832).

*Coprinellus subpurpureus* (A.H. Sm.) Redhead, Vilgalys et Moncalvo – new for Leningrad Oblast.

Distribution in Russia: PSK.

Specimen examined: Leningrad Oblast, Lomonosovsky District, vicinity of Lopukhinka village, 59.73966°N, 29.41331°E, on wood embedded in water at water edge of the Lopukhinka River, 10.08.2018, coll. and det. LK (LE 330281, fig. 1, b).

Note. The second locality in Russia. Both Russian findings were detected in July in wet habitats in full accordance with protologue (Smith, 1948). Rare species known in Europe from Poland, Finland, Norway, Germany, Great Britain, and Denmark (Gierczyk et al., 2011).

*Cystostereum murrayi* (Berk. et M.A. Curtis) Pouzar – new for Murmansk Oblast.

Distribution in Russia: ARK, KDA, KHM, KIR, KM, KO, KOS, KR, KYA, LEN, NGR, NVS, PER, RYA, SVE, TA, TYU, UD, ZAB.

Specimen examined: Murmansk Oblast, Tersky District, regional natural monument “Vodopad na reke Chapoma”, southern bank of the Chapoma River, 66.16863°N, 38.90941°E, on fallen trunk of *Picea abies* in spruce forest, 11.08.2019, coll. and det. YuKh (INEP 2600, dupl. LE 321823).

*Flammula alnicola* (Fr.) P. Kumm. – new for Oryol Oblast.

Distribution in Russia: AD, AL, ALT, AMU, BEL, BRY, BU, IRK, KB, KC, KDA, KGD, KGN, KHA, KHM, KIR, KM, KR, KYA, LEN, LIP, MAG, MO, MOS, MOW, NVS, ORE, PER, PNZ, PRI, PSK, ROS, RYA, SE, SMO, SPE, SVE, TA, TOM, TVE, UD, ULY, VLG, VOR, YAN, YAR, ZAB.

Specimen examined: Oryol Oblast, Mtsensky District, vicinity of Volya village, 53.24660°N, 36.50011°E, on dead crumbled stump of *Malus domestica* in old orchard, 22.08.2019, coll. SV, NSh, det. LK (LE 314780; voucher for the strain LE-BIN 4362).

*Gymnopus vernus* (Ryman) Antonin et Noordel. – new for Leningrad Oblast.

Distribution in Russia: TOM, UD.

Specimen examined: Leningrad Oblast, Lomonosovsky District, vicinity of Vilpovitsy village (klint), perspective protected area “Vilpovitsky”, 59.75293°N, 29.65581°E, on buried twigs of deciduous trees on the slope with *Ulmus*, *Acer*, *Fraxinus*, 07.04.2018, coll. and det. LK (LE 330279, fig. 1, a).

Note. The third finding in Russia. Basidiomata appear in early spring (March – April) on twigs of deciduous trees, often close to the border of melting snow. According to Antonin, Noordeloos (2010) the species is rare, but widespread in Europe.

*Hemistropharia albocrenulata* (Peck) Jacobsson et E. Larss. – new for Saint-Petersburg.

Distribution in Russia: KHA, LEN, MOS, NGR, PNZ, PRI, PSK, SVE, TA, TOM, TUL, UD.

Specimen examined: Saint-Petersburg, Primorsky District, vicinity of Lisiy Nos village, 60.02508°N, 30.06097°E, on soil at the base of living *Populus tremula* in spruce forest with *Populus tremula* and *Oxalis acetosella*, 12.09.2019, coll. and det. E. A. Palomozhnykh (LE 330092).

*Hohenbuehelia grisea* (Peck) Singer – new for Leningrad Oblast.

Distribution in Russia: KIR, ROS, TOM.

Specimen examined: Leningrad Oblast, Kirovsky District, protected area “The Lava River Canyon”, 59.89502°N, 31.58708°E, on standing dead *Alnus* (?) in



**Fig. 1.** Basidiomata of rarely registered fungi in Russia: a – *Gymnopus vernus* LE 330279 (photo by L. Kalinina); b – *Coprinellus subpurpureus* LE 330281 (photo by L. Kalinina); c – *Pluteus inquilinus* LE 314784 (photo by S. Volobuev); d – *Calocera glossoides* LE 321645 (photo by S. Bolshakov); e–f – *Hypsizygus marmoreus* LE 314782 (photos by S. Volobuev).

mixed stands with *Ulmus*, *Alnus*, 18.11.2017, coll. and det. LK (LE 330278).

*Hypsizygus marmoreus* (Peck) H.E. Bigelow – new for Oryol Oblast.

Distribution in Russia: KYA, PRI.

Specimen examined: Oryol Oblast, Orlovsky District, vicinity of Zhilina village, 53.01848°N, 36.03529°E, on living *Malus domestica* in old orchard, 23.08.2019, coll. and det. SV (LE 314782, fig. 1, e, f, voucher for the strain LE-BIN 4379).

Note. This is the first record of the species in the European part of Russia. The ITS region of nrDNA from the specimen cited above has been sequenced (GenBank number – MW036174).

*Lignomyces vetlinianus* (Domański) R.H. Petersen et Zmitr. – new for Leningrad Oblast.

Distribution in Russia: KHM, KO, MOS, NGR, PRI, SVE, YEV.

Specimen examined: Leningrad Oblast, Gatchinsky District, vicinity of Tarasino village, “Glebovskoye Boloto” protected area, 59.14638°N, 30.57001°E, on fallen trunk of *Populus tremula* in mixed forest (*Picea abies*, *Populus tremula*, *Betula* sp.), 08.07.2020, coll. and det. D.A. Tomchin (LE 330097).

*Lycoperdon ericaeum* Bonord. – new for Arkhangelsk Oblast.

Distribution in Russia: AD, AL, KK, LEN, LIP, PNZ, PRI, PSK, ROS, SE, TOM.

Specimen examined: Arkhangelsk Oblast, Primorsky District, Onezhskoye Pomorye National Park, Kotovo station, 64.68333°N, 36.73333°E, on soil in mixed forest with

*Betula*, *Picea*, 22.08.2019, coll. and det. YuR (YuR 3668, dupl. LE 321803).

*L. excipuliforme* (Scop.) Pers. – new for Arkhangelsk Oblast.

Distribution in Russia: widespread species across the territory.

Specimens examined: Arkhangelsk Oblast, Onezhsky District, Onezhskoye Pomorye National Park, Parusnoe station, 64.56667°N, 36.86667°E, on soil in mixed forest with *Betula*, *Populus*, *Picea*, 26.08.2019, coll. and det. YuR (YuR 3679, dupl. LE 321804); Arkhangelsk, 64.53441°N, 40.52280°E, on soil in lawn under *Larix*, 31.08.2019, coll. and det. YuR (YuR 3685, dupl. LE 321805).

*L. lambinonii* Demoulin – new for Arkhangelsk Oblast.

Distribution in Russia: AD, AL, CHE, IRK, KAM, KC, KDA, KYA, MAG, MO, MOS, NGR, PRI, ROS, RYA, SVE, TOM, TYU, ULY, YAN.

Specimen examined: Arkhangelsk Oblast, Primorsky District, Onezhskoye Pomorye National Park, Kotovo station, 64.68333°N, 36.73333°E, on litter in meadow, 21.08.2019, coll. and det. YuR (YuR 3667, dupl. LE 321806).

*L. molle* Pers. – new for Arkhangelsk Oblast.

Distribution in Russia: AD, AL, ALT, AMU, BEL, CHE, DA, IRK, KC, KDA, KGD, KHA, KHM, KK, KM, KR, KYA, LEN, MAG, MO, NGR, NVS, PNZ, PRI, PSK, ROS, RYA, SA, SAK, SAM, SAR, STA, SVE, TA, TOM, TUL, TVE, TY, UD, YAN, YEV.

Specimens examined: Arkhangelsk Oblast, Primorsky District, Onezhskoye Pomorye National Park, Kotovo station, 64.68333°N, 36.73333°E, on litter in mixed forest with *Betula*, *Picea*, *Pinus*, 21.08.2019, coll. and det. YuR (YuR

3664, dupl. LE 321807); the same place, Parusnoe station, 64.56667°N, 36.86667°E, on litter in mixed forest with *Betula*, *Populus*, *Picea*, 26.08.2019, coll. and det. YuR (YuR 3677, YuR 3678, dupl. LE 321808, LE 321809).

*L. pratense* Pers. — new for Arkhangelsk Oblast.

Distribution in Russia: AL, ALT, AMU, AST, BEL, BU, IRK, KC, KGD, KM, KO, KRS, KYA, LIP, MO, MOS, NGR, NVS, PNZ, PSK, ROS, RYA, SA, SE, SPE, SVE, TA, TOM, TY, UD, VOR, YAN.

Specimen examined: Arkhangelsk Oblast, Onezhsky District, Onezhskoye Pomorye National Park, Parusnoe station, 64.56667°N, 36.86667°E, on soil in meadow, 24.08.2019, coll. and det. YuR (YuR 3674, dupl. LE 321810).

*L. umbrinum* Pers. — new for Arkhangelsk Oblast.

Distribution in Russia: AD, AL, ALT, AMU, BEL, CE, CHE, KAM, KB, KC, KDA, KGD, KHA, KHM, KIR, KK, KM, KO, KR, KYA, LEN, LIP, MAG, ME, MO, MOS, MUR, NGR, NVS, PNZ, PRI, ROS, RYA, SA, SAK, SE, STA, SVE, TA, TOM, TUL, TVE, UD, VOR.

Specimens examined: Arkhangelsk Oblast, Onezhsky District, Onezhskoye Pomorye National Park, vicinity of Purnema village, 64.35000°N, 37.31667°E, on litter in mixed forest with *Betula*, *Populus*, *Picea*, 16.08.2019, coll. and det. YuR (YuR 3663, dupl. LE 321811); the same place, Parusnoe station, 64.56667°N, 36.86667°E, on litter in mixed forest with *Betula*, *Populus*, *Picea*, 24.08.2019, coll. and det. YuR (YuR 3673, dupl. LE 321812), 27.08.2019, coll. and det. YuR (YuR 3682, dupl. LE 321813).

*Merismodes anomala* (Pers.) Singer — new for Altai Krai and Altai Republic.

Distribution in Russia: ARK, CHE, KYA, LEN, MOS, MOW, NIZ, NVS, OMS, PNZ, PSK, SA, SMO, SPE, SVE, TOM, TVE, YAN.

Specimens examined: Altai Krai, Zmeinogorskiy district, near the Tigirek village, eastern bank of the Bolshoy Tigirek River, 51.11188°N, 82.92480°E, on fallen branch of *Betula pendula* in birch forest, 05.07.2007, coll. AV et VV, det. VV (NSK 1014544); Altai Republic, Kosh-Agachsky District, near Belyashi (Zhasater) village, southern bank of the Zhasater River, 49.69128°N, 87.43480°E, on fallen branch of *Alnus* sp. in swamp with bushes, 23.08.2019, coll. VV, AV, TD, det. VV (NSK 1014476, dupl. LE 321689).

*Mucronella flava* Corner — new for Altai Republic.

Distribution in Russia: ARK, BA, KHM, KIR, KR, LEN, MO, MUR, PSK, SPE, SVE, TOM, TVE.

Specimen examined: Altai Republic, Kosh-Agachsky district, near Belyashi (Zhasater) village, 49.72418°N, 87.39444°E, on fallen branch of *Picea obovata* in larch-cedar-spruce forest, 23.08.2019, coll. AV et VV, det. VV (NSK 1014545, dupl. LE 321688).

*Mycetinis querceus* (Britzelm.) Antonín et Noordel. — new for Leningrad Oblast.

Distribution in Russia: AD, AL, BRY, IRK, KB, KC, KGD, KHM, KK, KLU, KM, KYA, LIP, MOS, NGR, PNZ, RYA, SAM, SE, TA, TUL, VOR.

Specimens examined: Leningrad Oblast, Kingiseppsky District, vicinity of Velikino village, 59.63113°N, 28.60464°E, on fallen leaves of *Quercus robur* in old-growth *Quercus robur* alley, 22.10.2018, coll. D.A. Tomchin, det. LK (LE 330283); vicinity of Sisto-Palkino village, 59.79557°N, 28.90602°E, on fallen leaves of *Quercus robur* at the roadside with *Quercus robur* and *Tilia cordata*, 04.11.2017, coll. and det. LK (LE 330282).

*Nidularia deformis* (Willd.) Fr. — new for Arkhangelsk Oblast.

Distribution in Russia: AL, BEL, KR, KRS, LEN, MAG, MOS, NGR, PNZ, PSK, ROS, RYA, SAK, SPE, SVE, TA, TOM, TVE, VOR.

Specimen examined: Arkhangelsk Oblast, Onezhsky District, Onezhskoye Pomorye National Park, Parusnoe station, 64.56667°N, 36.86667°E, on rotten wood near the house, 24.08.2019, coll. and det. YuR (YuR 3670, dupl. LE 321815).

*Panellus ringens* (Fr.) Romagn. — new for Novgorod Oblast.

Distribution in Russia: IRK, KC, KHA, KO, KYA, LEN, PRI, PSK, SPE, TOM.

Specimen examined: Novgorod Oblast, Borovichsky District, vicinity of Dubki village, 58.35823°N, 34.08815°E, on bark of *Alnus incana* in mixed stands with *Picea*, *Alnus*, *Populus tremula*, 05.10.2019, coll. and det. LK (LE 330276).

*Pleurotus calypttratus* (Lindblad ex Fr.) Sacc. — new for Novgorod Oblast.

Distribution in Russia: AMU, CHE, IRK, KGN, KHA, KHM, KO, KYA, LEN, LIP, MAG, NVS, ORE, PER, PNZ, PRI, RYA, SAM, SPE, SVE, TA, TOM, TYU, UD, VGG, YEV.

Specimen examined: Novgorod Oblast, Borovichsky District, vicinity of Rovnoye village, 58.28389°N, 34.04106°E, on standing *Alnus* in roadside stands with *Populus tremula*, *Alnus incana*, 16.05.2020, coll. and det. LK (LE 321738).

*Pluteus aurantiorugosus* (Trog) Sacc. — new for Novgorod Oblast.

Distribution in Russia: AMU, KHA, KYA, LEN, NVS, PER, PNZ, PRI, ROS, SPE, TA, TOM, TUL, YEV.

Specimen examined: Novgorod Oblast, Novgorodsky District, vicinity of Savino village, 58.53713°N, 31.43849°E, in cavity of rotten stump of deciduous tree in floodplain forest with *Quercus robur*, *Alnus glutinosa*, *Populus tremula*, 11.07.2020, coll. and det. LK (LE 321685).

*P. inquilinus* Romagn. — new for Oryol Oblast.

Distribution in Russia: KR, MOS, NGR, ULY.

Specimen examined: Oryol Oblast, Mtsensky District, vicinity of Volya village, 53.246603°N, 36.500111°E, on fallen branches of *Malus domestica* in old orchard, 22.08.2019, coll. SV, NSh, det. LK (LE 314784, fig. 1, c).

*P. umbrosoides* E.F. Malysheva — new for Leningrad Oblast.

Distribution in Russia: KYA, PRI, SAM.

Specimen examined: Leningrad Oblast, Lomonosovsky District, vicinity of Lopukhinka village, 59.73921°N, 29.40941°E, on fallen log in roadside in riparian forest with *Ulmus* sp. and *Alnus* sp., 10.08.2018, coll. and det. LK (LE 330280).

*Ramariopsis crocea* (Pers.) Corner — new for Yamalo-Nenets Autonomous Okrug.

Distribution in Russia: AL, AMU, ARK, BA, CHE, KGD, KHA, KHM, KR, LEN, MO, MOS, MUR, NVS, ORL, PER, PRI, PSK, SAK, SVE, TOM, TUL, TVE, VLA, YEV, ZAB.

Specimen examined: Yamalo-Nenets Autonomous Okrug, Shuryshkary District, eastern macroslope of the Polar Urals, the Synya River valley, 332 m a.s.l., 65.6003°N, 62.4669°E, on litter under grasses and ferns, in birch forest, 13.08.2019, coll. and det. ASH (SVER(F) 94038, dupl. LE 321837).

*Simocybe haustellaris* (Fr.) Watling — new for Novgorod Oblast.

Distribution in Russia: KR, KYA, LIP, PER, PNZ, PRI, PSK, TA, VOR, YAR.

Specimen examined: Novgorod Oblast, Novgorodsky District, vicinity of Savino village, 58.53713°N, 31.43849°E, on underside of deciduous tree bark in floodplain forest with *Quercus robur*, *Alnus glutinosa*, *Populus tremula*, 11.07.2020, coll. and det. LK (LE 321686).

*Tricholoma vaccinum* (Schaeff.) P. Kumm. — new for Novgorod Oblast.

Distribution in Russia: AL, AMU, BEL, BU, IRK, KHA, KHM, KO, KYA, LEN, MOS, PER, PNZ, PRI, SMO, SPE, SVE, TOM, TY, UD, VLG, YEV.

Specimen examined: Novgorod Oblast, Borovichsky District, vicinity of Dubki village, 58.35992°N, 34.08861°E, on soil in coniferous forest, 05.10.2019, coll. and det. LK (LE 330277).

*Volvariella bombycina* (Schaeff.) Singer — new for Bryansk Oblast.

Distribution in Russia: AD, AMU, AST, BA, BEL, CE, CHE, IRK, KB, KDA, KGD, KHA, KHM, KIR, KK, KLU, KM, KRS, KYA, LIP, MO, MOS, NVS, ORE, PER, PNZ, PRI, ROS, RYA, SAM, SPE, SVE, TA, TOM, UD, ULY, VGG, VLG, VOR.

Specimen examined: Bryansk Oblast, Trubchevsky District, Bryansk Forest Nature Reserve, quarter 10, Proletarskiy area, 52.53817°N, 34.05956°E, on dry dead standing *Populus nigra* in oak forest with aspen, 27.08.2018, coll. NSh, SV, det. SV (LE 314785, voucher for the strain LE-BIN 4106).

#### Atheliales

*Athelia cystidiolophora* Parmasto — new for Arkhangelsk Oblast.

Distribution in Russia: BA, KR, NIZ, SPE, TVE, VOR.

Specimen examined: Arkhangelsk Oblast, Plesetsky District, vicinity of Sheleksa railway station, 62.88098°N, 40.36754°E, on fallen trunk of *Betula* sp. in mixed forest, 04.09.2019, coll. OE, det. IZ (AR 3362, dupl. LE 321696).

*A. salicum* Pers. — new for Arkhangelsk Oblast.

Distribution in Russia: CE, CHE, KGD, KR, LEN, MOS, MUR, ORE, ORL, PER, PRI, PSK, ROS, SE, SVE, VGG.

Specimen examined: Arkhangelsk Oblast, Plesetsky District, vicinity of Sheleksa railway station, 62.9033°N, 40.2903°E, on fallen trunk of *Salix* sp. in pine forest, 04.09.2019, coll. OE, det. IZ (AR 3363, dupl. LE 321697).

*Tylospora fibrillosa* (Burt) Donk — new for Murmansk Oblast.

Distribution in Russia: KO, KR, KYA, LEN, PER, PSK, SPE, SVE, TOM, TVE.

Specimen examined: Murmansk Oblast, Tersky District, regional natural monument “Vodopad na reke Chapoma”, southern bank of the Chapoma River, 66.16863°N, 38.90941°E, on fallen trunk of *Picea abies* and litter in spruce forest, 11.08.2019, coll. and det. YuKh (INEP 2610, dupl. LE 321827).

#### Boletales

*Leucogyrophana sororia* (Burt) Ginns — new for Yamalo-Nenets Autonomous Okrug.

Distribution in Russia: ARK, KO, KR, LEN, MUR, NIZ, NVS, ORE, RYA, SVE, TVE.

Specimen examined: Yamalo-Nenets Autonomous Okrug, Labytnangi town, Zelenaya Gorka, Arctic Research Station of IPAE UrB RAS, 37 m a.s.l., 66.6503°N, 66.4030°E, on old rotten woody house basement (pine or siberian pine), 17.08.2019, coll. ASh, det. H. Kotiranta (SVER(F) 94042, dupl. LE 321834).

*Melanogaster intermedius* (Berk.) Zeller et C.W. Dodge — new for Arkhangelsk Oblast.

Distribution in Russia: New for Russia.

Specimen examined: Arkhangelsk Oblast, Onezhsky District, Onezhskoye Pomorye National Park, Chernavshino station, 64.35000°N, 37.31667°E, in soil in mixed forest with *Betula*, *Pinus*, *Picea*, 16.08.2019, coll. and det. YuR (YuR 3660, dupl. LE 321814).

*Pseudomerulius aureus* (Fr.) Jülich — new for Murmansk Oblast.

Distribution in Russia: AL, ARK, BEL, BRY, IRK, KDA, KHM, KIR, KO, KR, KYA, LEN, MO, NGR, NIZ, NVS, ORL, PER, PSK, RYA, SPE, SVE, TA, TOM, TVE, TY, TYU, UD, VLA, VLG, YAN, YEV, ZAB.

Specimen examined: Murmansk Oblast, Kandalaksha District, regional natural monument “Nyamozerskiye kedry”, 66.97094°N, 31.41006°E, on fallen trunk of *Pinus sylvestris* in pine forest, 29.08.2019, coll. and det. YuKh (INEP 2526, dupl. LE 321826).

*Rhizopogon roseolus* (Corda) Th. Fr. — new for Arkhangelsk Oblast.

Distribution in Russia: BEL, BU, CHU, IRK, KGD, KHM, KM, KRS, KYA, LEN, MAG, MO, MUR, NGR, NVS, PNZ, PRI, PSK, ROS, SA, SEV, SVE, TA, TOM, VOR.

Specimen examined: Arkhangelsk Oblast, Onezhsky District, Onezhskoye Pomorye National Park, Chernavshino station, 64.35000°N, 37.31667°E, in soil in coniferous forest (Pinetum), 14.08.2019, coll. and det. YuR (YuR 3656, dupl. LE 321818).

*Serpula lacrymans* (Wulfen) J. Schröt. — new for Yamalo-Nenets Autonomous Okrug.

Distribution in Russia: AST, IRK, KAM, KDA, KGD, KM, KO, KR, KRS, KYA, LEN, LIP, MAG, MO, MOS, MOW, MUR, PNZ, PSK, ROS, RYA, SAR, SE, SMO, SPE, SVE, TA, TOM, UD, VOR, YEV, ZAB.

Specimen examined: Yamalo-Nenets Autonomous Okrug, Priuralsk District, Harp village, jail territory, 74 m a.s.l., 66.8242°N, 65.7841°E, on the walls in the cellar, 30.09.2018, coll. I. P. Naskokov, det. ASh (SVER(F) 94045, dupl. LE 321839).

*Suillus aurihymenius* X.F. Shi et P.G. Liu — new for Altai Republic.

Distribution in Russia: New for Russia.

Specimen examined: Altai Republic, Kosh-Agachsky District, near Belyashi (Zhasater) village, southern bank of the Zhasater River, 49.69141°N, 87.43446°E, on soil in larch forest, 23.08.2019, coll. AV, VV, det. VV (NSK 1014458, dupl. LE 321692).

Note. The species was described in 2016 from Heilongjiang, Greater Khingan Mountains Area (China) based on basidiomata collected under *Larix gmelinii*, and it also was found in Inner Mongolia (China). This species differs from *Suillus tridentinus* by its reddish gold hymenium color, stronger reddish-brown discoloration of the context, and less squamulose pileus (Shi et al., 2016). The analysis of the newly generated ITS nrDNA sequence (GenBank number — MT302579) with BLAST showed the identity (more than 99.5%) with *S. aurihymenius* sequences.

*Cantharellales*

*Botryobasidium intertextum* (Schwein.) Jülich et Stalpers – new for Novgorod Oblast.

Distribution in Russia: AL, ARK, BEL, KHM, KLU, KO, KR, KYA, LEN, NIZ, PER, SPE, SVE, TVE.

Specimen examined: Novgorod Oblast, Chudovsky District, 2 km southwestward to the Krasnofarorny settlement, vicinity of the old cemetery, 59.121°N, 31.813°E, on fallen trunk of *Quercus robur* in nemoral herbs oak forest, 25.07.2019, coll. and det. SB (LE 321670).

*Cantharellus pallens* Pilát – new for Novgorod Oblast.

Distribution in Russia: KGD, KIR, KR, LIP, ORL, PNZ, TA, TOM, TUL.

Specimen examined: Novgorod Oblast, Novgorodsky District, vicinity of Borki village, 58.38263°N, 30.98714°E, on soil in nemoral herbs oak forest with *Corylus avellana*, 12.07.2020, coll. LK, det. SB (LE 321840).

*Craterellus melanoxeros* (Desm.) Pérez-De-Greg. – new for Leningrad Oblast.

Distribution in Russia: CHE, MO, SVE, TUL.

Specimen examined: Leningrad Oblast, Kingiseppsky District, vicinity of Vel'kota village, 59.585°N, 28.806°E, on soil in mixed stands (*Quercus robur*, *Populus tremula*, *Corylus avellana*), 09.07.2019, coll. and det. S.V. Krivosheev (LE 321668).

*Sistotrema octosporum* (J. Schröt. ex Höhn. et Litsch.) Hallenb. – new for Arkhangelsk Oblast.

Distribution in Russia: CHE, IRK, KAM, KDA, KHM, KO, KR, KYA, LEN, LIP, MUR, NGR, NIZ, NVS, ORL, PRI, PSK, SPE, TVE, TY, YAN.

Specimen examined: Arkhangelsk Oblast, Primorsky District, vicinity of Malye Korely village, 64.45423°N, 40.96329°E, on fallen trunk of *Betula* sp. in spruce forest, 22.08.2019, coll. OE, det. IZ (AR 3392, dupl. LE 321819).

*Geastrales*

*Sphaerobolus stellatus* Tode – new for Arkhangelsk Oblast.

Distribution in Russia: AD, CHE, IRK, KAM, KHM, KM, KYA, LEN, LIP, MAG, ME, MOS, MOW, MUR, NGR, PRI, PSK, ROS, RYA, SE, SMO, SVE, TA, TOM, TUL, TVE, UD, VOR, YAR.

Specimen examined: Arkhangelsk Oblast, Onezhsky District, Onezhskoye Pomorye National Park, Chernavshino station, 64.35000°N, 37.31667°E, on rotten wood near the house, 14.08.2019, coll. and det. YuR (YuR 3657, dupl. LE 321820); the same place, Parusnoe station, 64.56667°N, 36.86667°E, on rotten wood near the house, 24.08.2019, coll. and det. YuR (YuR 3671, dupl. LE 321821).

*Hymenochaetales*

*Hydnoporia tabacina* (Sowerby) Spirin, Miettinen et K.H. Larss. – new for Yaroslavl Oblast.

Distribution in Russia: common in forest and forest-steppe zones.

Specimen examined: Yaroslavl Oblast, Pervomaysky District, vicinity of Sokolovo village, 58.41821°N, 40.24682°E, on dead standing tree of *Alnus incana* in mixed stands with *Picea*, *Pinus sylvestris*, *Betula*, and *Populus tremula*, 25.07.2018, coll. AL, det. SV (LE 314781).

*Lyomyces sambuci* (Pers.) P. Karst. – new for Murmansk Oblast.

Distribution in Russia: AL, ARK, BEL, BRY, CE, IRK, KAM, KDA, KGD, KGN, KLU, KM, KO, KR, KYA, LEN, LIP, MO, MOS, MOW, NGR, NIZ, NVS, ORE, ORL, PER, PRI, PSK, ROS, RYA, SA, SAM, SMO, SPE, SVE, TOM, TUL, TVE, TY, VGG, YEV, ZAB.

Specimen examined: Murmansk Oblast, Tersky District, regional natural monument "Ametisty mysa Korabl'", 66.30166°N, 36.32893°E, on the log on the coast of Kandalaksha Gulf (White Sea), 09.08.2019, coll. and det. YuKh (INEP 2630, dupl. LE 321824).

*Muscinipta laevis* (Fr.) Redhead, Lücking et Lawrey – new for Murmansk Oblast.

Distribution in Russia: KM, LEN, SPE.

Specimen examined: Murmansk Oblast, Kirovsk Urban Okrug, Khibiny Mts, the Kuniyok River Valley, 67.83100°N, 33.64616°E, on the moss (*Pleurozium schreberi*) in clear-cutting of 2012 year, passed by fire in 2013 year (originally pine forest), 19.09.2018, coll. and det. YuKh (INEP 2650, dupl. LE 321825).

*Phellogilus nigrolimitatus* (Romell) Niemelä, T. Wagner et M. Fisch. – new for Yaroslavl Oblast.

Distribution in Russia: AL, ARK, BU, CHE, IRK, KAM, KDA, KHA, KHM, KIR, KO, KOS, KR, KYA, LEN, MO, MOS, MUR, NGR, NIZ, NVS, PER, PSK, SA, SPE, SVE, TA, TOM, TVE, TY, UD, ULY, VOR, YAN, ZAB.

Specimen examined: Yaroslavl Oblast, Pervomaysky District, ca. 0.7 km southwestward to Sokolovo village, 58.41840°N, 40.24670°E, on decaying trunk of *Picea* sp. in mixed stands with *Picea*, *Pinus sylvestris*, *Betula*, and *Populus tremula*, 25.07.2018, coll. AL, det. SV (LE 314783).

*Xylodon nespori* (Bres.) Hjortstam et Ryvarden – new for Novgorod Oblast and Yaroslavl Oblast.

Distribution in Russia: ARK, BA, BEL, BRY, IRK, KDA, KHM, KO, KYA, LEN, LIP, MOS, NIZ, ORE, ORL, PER, PRI, PSK, ROS, RYA, SA, SAM, SVE, TUL, VOR.

Specimens examined: Novgorod Oblast, Batetsky District, Batetsky settlement vicinity, 58.64296°N, 30.26941°E, on fallen deciduous trunk in mixed forest with *Corylus avellana*, *Populus tremula*, *Alnus* sp., *Quercus robur*, 22.08.2019, coll. LK, det. SB (LE 321649). Yaroslavl Oblast, Danilovsky District, vicinity of Erdenevo village, 58.23063°N, 40.42565°E, on fallen trunk of *Picea* sp. in mixed stands with *Picea*, *Pinus sylvestris*, *Betula*, and *Populus tremula*, 22.07.2018, coll. AL, det. SV (LE 314786).

*Jaapiales*

*Jaapia argillacea* Bres. – new for Arkhangelsk Oblast.

Distribution in Russia: KDA, KHM.

Specimen examined: Arkhangelsk Oblast, Primorsky District, Mudyugsky landscape protected area, 64.9112°N, 40.2328°E, on fallen branch of *Pinus sylvestris* in coniferous forest, near the swamp, 26.08.2016, coll. OE, det. IZ (AR 2814, dupl. LE 321802).

*Polyporales*

*Amyloporia xantha* (Fr.) Bondartsev et Singer – new for Yaroslavl Oblast.

Distribution in Russia: widespread in forest zone.

Specimen examined: Yaroslavl Oblast, Danilovsky District, vicinity of Erdenevo village, riverside of the Lunka River, 58.23571°N, 40.42031°E, on fallen trunk of *Picea* sp. in mixed stands with *Picea*, *Pinus sylvestris*, *Betula*, and *Populus tremula*, 22.08.2019, coll. AL, det. SV (LE 314787).

*Antrodia minuta* Spirin – new for Kostroma Oblast.

Distribution in Russia: BA, KYA, LEN, LIP, MOW, NIZ, ORL, SAM, SVE, TY, UD.

Specimen examined: Kostroma Oblast, Nerekhtsky District, ca. 1 km southwestward to Neznanovo village, 57.43740°N, 40.48407°E, on fallen trunk of *Populus tremula* in mixed stands with *Populus tremula*, *Acer platanoides* and *Tilia cordata*, 11.07.2018, coll. AL, A. A. Efimova, det. SV (LE 314789).

*Antrodiella ichnusana* Bernicchia, Renvall et Arras – new for Yamalo-Nenets Autonomous Okrug.

Distribution in Russia: LEN, MUR, ROS, SAM.

Specimen examined: Yamalo-Nenets Autonomous Okrug, Shuryshkary District, eastern macroslope of the Polar Urals, valley of the Synya River, 300 m a.s.l., 65.6003°N, 62.4669°E, on fallen dead branch of *Alnus incana* in mixed forest, 13.08.2019, coll. and det. ASH (SVER(F) 94044, dupl. LE 321830).

*Aurantiporus fissilis* (Berk. et M.A. Curtis) H. Jahn ex Ryvarden – new for Novosibirsk Oblast.

Distribution in Russia: AL, ALT, BA, BRY, CHE, IRK, KEM, KHA, KHM, KIR, KLU, KM, KO, KR, KRS, KYA, LEN, ME, MO, MOS, MOW, NGR, NIZ, ORE, ORL, PNZ, PRI, ROS, RYA, SAM, SPE, SVE, TA, TUL, TVE, TYU, UD, VOR, ZAB.

Specimen examined: Novosibirsk Oblast, Novosibirsk, Zolotodolinskaya str., 21, 54.83525°N, 83.10479°E, on a living *Malus* sp., 30.09.2016, coll. and det. VV (NSK 1014543, dupl. LE 321828).

*Fibroporia gossypium* (Speg.) Parmasto – new for Yamalo-Nenets Autonomous Okrug.

Distribution in Russia: ALT, AMU, ARK, BEL, CHE, IRK, IVA, KIR, KO, KOS, KR, KRS, KYA, LEN, ME, MO, MUR, NIZ, NVS, ORE, PER, PNZ, ROS, RYA, SMO, SPE, SVE, TA, TOM, TVE, VOR.

Specimen examined: Yamalo-Nenets Autonomous Okrug, Labytnangi town, Old Port, 11 m a.s.l., 66.6503°N, 66.4169°E, on the wooden base of old house (pine or siberian pine), 17.08.2019, coll. ASH, det. H. Kotiranta (SVER(F) 94043, dupl. LE 321833).

*Phanerochaete alnea* (Fr.) P. Karst. – new for Novgorod Oblast.

Distribution in Russia: AL, BEL, CHE, DA, KAM, KR, LEN, NIZ, ORL, PER, PRI, SVE.

Specimen examined: Novgorod Oblast, Borovichsky District, Dubinita stow, 58.35940°N, 34.09078°E, on fallen *Quercus robur* trunk in nemoral herbs oak forest, 05.10.2019, coll. LK, det. SB (LE 321647).

*Ph. cumulodentata* (Nikol.) Parmasto (= *Phanerochaete magnoliae* (Berk. et M.A. Curtis) Hjortstam et Ryvarden *sensu auct. Eur.*) – new for Arkhangelsk Oblast.

Distribution in Russia: BRY, CHE, KGN, KHM, KIR, KO, KR, LEN, LIP, NIZ, NVS, ORL, ROS, SAM, SPE, SVE, TYU, VGG, YEV.

Specimen examined: Arkhangelsk Oblast, Plesetsky District, Kenozersky National Park, vicinity of Shishkino village, 62.07851°N, 38.21672°E, on fallen trunk of *Populus*

*tremula* in mixed forest, 19.08.2019, coll. OE, det. IZ (AR 3284, dupl. LE 321816).

*Phlebia femsjoensis* (Litsch. et S. Lundell) J. Erikss. et Hjortstam – new for Arkhangelsk Oblast.

Distribution in Russia: New for Russia.

Specimen examined: Arkhangelsk Oblast, Plesetsky District, vicinity of Sheleksa railway station, 62.9043°N, 40.2899°E, on fallen trunk of *Pinus sylvestris* in green moss-dwarf shrub pine forest, 04.09.2019, coll. OE, det. IZ (AR 3329, dupl. LE 321817).

*Postia ptychogaster* (F. Ludw.) Vesterh. – new for Altai Republic and Yamalo-Nenets Autonomous Okrug.

Distribution in Russia: ARK, KGD, KHA, KHM, LEN, MOS, NGR, NVS, PSK, RYA, SVE, TA, TVE, TYU, UD, VLG, YAN.

Specimens examined: Altai Republic, Kosh-Agachsky District, near Belyashi (Zhasater) village, western bank of the Argut River, 49.7346°N, 87.34851°E, on fallen trunk of *Picea obovata* in spruce-larch forest, 20.08.2019, coll. and det. VV (NSK 1014481, dupl. LE 321691). Yamalo-Nenets Autonomous Okrug, Shuryshkary District, eastern macroslope of the Polar Urals, valley of the Synya River, 300 m a.s.l., 65.6003°N, 62.4669°E, on stump of *Picea* sp. in mixed deciduous-coniferous forest, 13.08.2019, coll. and det. ASH (SVER(F) 94046, dupl. LE 321836).

*Skeletocutis papyracea* A. David – new for Yaroslavl Oblast.

Distribution in Russia: ARK, BA, KHM, KIR, KO, KR, LEN, MO, MOS, MUR, NIZ, ORL, PSK, TVE, VOR.

Specimen examined: Yaroslavl Oblast, Pervomaysky District, vicinity of Sokolovo village, riverside of the Sot River, 58.41619°N, 40.24819°E, on fallen trunk of *Picea abies* in mixed stands with *Picea*, *Pinus sylvestris*, *Betula*, and *Populus tremula*, 25.07.2018, coll. AL, det. SV (LE 314788).

#### Sebacinales

*Ditangium cerasi* (Schumach.) Costantin et L.M. Dufour – new for Novgorod Oblast.

Distribution in Russia: IVA, KC, KDA, KHA, KHM, KO, KYA, LEN, PRI, SVE, UD, YAN.

Specimen examined: Novgorod Oblast, Borovichsky District, Dubinita stow, 58.35998°N, 34.09564°E, on fallen *Populus tremula* trunk in nemoral herbs oak forest, 05.10.2019, coll. LK, det. SB (LE 321650).

#### Thelephorales

*Hydnellum aurantiacum* (Batsch) P. Karst. – new for Altai Republic.

Distribution in Russia: ARK, CHE, KGD, KIR, KO, KR, KYA, LEN, MUR, NGR, NVS, PRI, SVE, TOM, UD, YEV.

Specimen examined: Altai Republic, Kosh-Agachsky District, near Belyashi (Zhasater) village, northern bank of the Zhasater River, 49.69328°N, 87.4381°E, on soil in larch forest, 21.08.2019, coll. AV, TD, det. VV (NSK 1014478, dupl. LE 321687).

*Tomentella radiosa* (P. Karst.) Rick – new for Novgorod Oblast.

Distribution in Russia: AL, AMU, ARK, BEL, BRY, IRK, KC, KDA, KHM, KLU, KO, KR, KYA, LEN, LIP,

**Table 1.** Species richness of macroscopic basidiomycetes within the regions studied

Region	New species reported	Total species number
Altai Krai	1	691
Altai Republic	5	1132
Arkhangelsk Oblast	19	761
Bryansk Oblast	1	478
Kostroma Oblast	1	133
Leningrad Oblast	7	1974
Murmansk Oblast	6	907
Novgorod Oblast	18	818
Novosibirsk Oblast	1	1127
Oryol Oblast	3	548
Saint Petersburg	1	1095
Yamalo-Nenets Autonomous Okrug	8	599
Yaroslavl Oblast	5	326

MUR, NIZ, NVS, ORL, PER, PRI, PSK, ROS, SA, SAK, SPE, SVE, TVE, TY, VOR, YAN, ZAB.

Specimen examined: Novgorod Oblast, Batetsky District, Batetsky settlement vicinity, 58.64299°N, 30.26939°E, on very rotten deciduous wood in mixed forest with *Corylus avellana*, *Populus tremula*, *Alnus* sp., *Quercus robur*, 22.08.2019, coll. LK, det. SB (LE 321655).

*T. stuposa* (Link) Stalpers – new for Novgorod Oblast.

Distribution in Russia: AD, AL, AMU, ARK, DA, IRK, KC, KDA, KHA, KO, KR, KYA, LEN, LIP, MO, MOS, MUR, NVS, ORL, PER, PRI, PSK, ROS, SA, SAK, SE, SPE, SVE, TVE, TY, VGG, VOR, YAN, ZAB.

Specimen examined: Novgorod Oblast, Chudovsky District, 2 km southwestward to the Krasnofarforny settlement, vicinity of the old cemetery, 59.121°N, 31.813°E, on fallen trunk of *Quercus robur* in nemoral herbs oak forest, 25.07.2019, coll. and det. SB (LE 321671).

*Tomentellopsis echinospora* (Ellis) Hjortstam – new for Novgorod Oblast.

Distribution in Russia: AMU, ARK, BEL, BRY, KAM, KHM, KIR, KO, KR, KYA, LEN, MO, MUR, NIZ, NVS, PRI, PSK, ROS, RYA, SAK, SPE, SVE, TOM, TVE.

Specimen examined: Novgorod Oblast, Borovichsky District, Dubinitsa stow, 58.36027°N, 34.09387°E, at the base of fallen *Quercus robur* trunk in nemoral herbs oak forest, 05.10.2019, coll. LK, det. SB (LE 321658).

#### *Trechisporales*

*Trechispora confinis* (Bourdot et Galzin) Liberta – new for Novgorod Oblast.

Distribution in Russia: BA, BEL, CHE, LIP, MUR, ORE, PER, TVE.

Specimen examined: Novgorod Oblast, Novgorodsky District, Borki village, 58.3823°N, 31.0126°E, on deciduous fallen trunk in old manor park with deciduous trees (*Quercus robur*, *Tilia cordata*, *Populus tremula*), 23.08.2019, coll. E. A. Palomozhnykh, det. SB (LE 321678).

*T. nivea* (Pers.) K.H. Larss. – new for Novgorod Oblast.

Distribution in Russia: ARK, CHE, KHM, KM, KR, KYA, LEN, MO, MUR, ORL, SPE, SVE, TOM, TVE, TY, ZAB.

Specimen examined: Novgorod Oblast, Chudovsky District, 2 km southwestward to the Krasnofarforny settlement, vicinity of the old cemetery, 59.121°N, 31.813°E, on fallen trunk of *Quercus robur* in nemoral herbs oak forest, 25.07.2019, coll. and det. SB (LE 321672).

#### *Dacrymycetes*

##### *Dacrymycetales*

*Calocera glossoides* (Pers.) Fr. – new for Novgorod Oblast.

Distribution in Russia: NIZ, PRI, SAK, SVE.

Specimen examined: Novgorod Oblast, Chudovsky District, 2 km southwestward to the Krasnofarforny settlement, vicinity of the old cemetery, 59.121°N, 31.813°E, on fallen trunk of *Quercus robur* in nemoral herbs oak forest, 11.10.2018, coll. SB, det. V. F. Malysheva (LE 321645, fig. 1, d, LE 321646).

Note. The first confirmed finding for European Russia besides Murashkinsky (1911).

#### *Atractiellomycetes*

##### *Atractiellales*

*Helicogloea compressa* (Ellis et Everh.) Malysheva et K. Põldmaa – new for Novgorod Oblast.

Distribution in Russia: PSK, SPE.

Specimen examined: Novgorod Oblast, Chudovsky District, 2 km southwestward to the Krasnofarforny settlement, vicinity of the old cemetery, 59.121°N, 31.813°E, on fallen trunk of *Populus tremula* in nemoral herbs oak forest, 25.07.2019, coll. and det. SB (LE 321669).

## DISCUSSION

The distribution of the new records of 72 new species within the regions is shown in the Table 1.

All listed species can be divided into three groups. The first one includes widespread species known from more than 20 regions of Russia. They are recorded for the first time from the unexplored or insufficiently studied in fungal diversity regions, namely *Amyloporia xantha*, *Apioperdon pyriforme*, *Aurantiporus fissilis*, *Bovista plumbea*, *Bovistella utriformis*, *Fibroporia gossypium*, *Flammula alnicola*, *Hydnoporia tabacina*, *Lycoperdon excipuliforme*, *Lycoperdon lambinonii*, *L. molle*, *L. pratense*, *L. umbrinum*, *Lyomyces sambuci*, *Phanerochaete alnea*, *Pleurotus calyptratus*, *Rhizopogon roseolus*, *Serpula lacrymans*, *Sistotrema octosporum*, *Sphaerobolus stellatus*, *Tomentella radiosa*, *T. stuposa*, *Tomentellopsis echinospora*, *Xylodon nespori*. The second group is represented by species which distribution is restricted to



specific habitats or vegetation zones as well as species with unclear distribution due to small or inconspicuous basidiomata: *Antrodia minuta*, *Antrodiella ichnusana*, *Arrhenia retiruga*, *Athelia cystidiolophora*, *A. salicum*, *Botryobasidium intertextum*, *Calocera glossoides*, *Cantharellus pallens*, *Clavaria rosea*, *Clavulinopsis umbri-nella*, *Craterellus melanoxeros*, *Cystostereum murrayi*, *Ditangium cerasi*, *Hemistropharia albocrenulata*, *Hohenbuehelia grisea*, *Hydnellum aurantiacum*, *Leucogyrophana sororia*, *Lignomyces vetlinianus*, *Lycoperdon ericaeum*, *Merismodes anomala*, *Mucronella flava*, *Muscinipta laevis*, *Mycetinis querceus*, *Nidularia deformis*, *Panellus ringens*, *Phanerochaete cumulodentata*, *Phellogilus nigrolimitatus*, *Pluteus aurantiorugosus*, *P. inquilinus*, *P. umbrosoides*, *Postia ptychogaster*, *Pseudomerulius aureus*, *Ramariopsis crocea*, *Simocybe haustellaris*, *Skeletocutis papyracea*, *Trechispora confinis*, *T. nivea*, *Tricholoma vaccinum*, *Tylospora fibrillosa*, *Volvariella bombycina*. Species of the third group are new for Russia or rarely recorded from the territory: *Melanogaster intermedius*, *Phlebia fensjoeensis*, *Suillus aurihymenius*, are reported as the first records in Russia. *Coprinellus subpurpureus* is recorded for the second time, *Gymnopus vernus*, *Helicogloea compressa*, *Hypsizygus marmoreus* and *Jaapia argillacea* are reported for the third time.

The authors are very grateful to Heikki Kotiranta (Helsinki, Finland) and V. F. Malysheva (St. Petersburg, Russia) for the identification of *Fibroporia gossypium*, *Leucogyrophana sororia*, and *Calocera glossoides*, and to E.A. Palomozhnykh, D.A. Tomchin, S.V. Krivosheev (St. Petersburg, Russia), I.P. Naskokov for specimens kindly provided at our disposal. The work of SB, LK, SV, NSh, and IZ has been carried out within the framework of the institutional research project of the Komarov Botanical Institute (AAAA-A19-119020890079-6) using the equipment of the Core Facility Centre “Cell and Molecular Technologies in Plant Science” at the Komarov Botanical Institute, RAS (St. Petersburg, Russia). The study of SV was partially supported by the Grant of the President of the Russian Federation (MK-3216.2019.11). The work of YuR was carried out within the frame of the government assignment for the South Science Center of RAS (project AAAA-A19-119011190176-7). The work of AS was funded by RFBR (project № 18-05-00398). The work of YuKh was carried out within the framework of the institutional research project (N AAAA-A18-118021490070-5) of the Institute of North Industrial Ecology Problems of the Kola Scientific center of RAS and was partially supported by RFBR (grant N 17-44-510841 p\_a). The work of VV, AV and TD on study of fungi of the Altai Republic was funded by RFBR and MCESSM according to the research project 19-54-44002 Mong\_T, study of fungi of the Novosibirsk Region was carried out as part of a State Task to the Central Siberian Botanical Garden, the Siberian Branch of RAS, project AAAA-A17-117012610055-3. Herbarium specimens from MG Popov Herbarium (NSK), Novo-

sibirsk, were used. The work of OE was carried out in frameworks of State Task (AAA-A18-118011690221-0).

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**Новые виды для микобиот регионов России.****5. Информационное сообщение – 2020**

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Представлены данные о находках 72 видов базидиальных грибов, выявленных впервые для Алтайского края, Республики Алтай, Архангельской, Брянской, Костромской, Ленинградской, Мурманской, Новгородской, Новосибирской, Орловской, Ярославской областей, Санкт-Петербурга, Ямало-Ненецкого автономного округа. Аннотированный список включает данные о местонахождениях, местообитаниях, субстратах и датах сбора приводимых находок, с указанием коллекционных номеров микологических гербариев. Впервые для России приводятся *Melanogaster intermedius*, *Phlebia femsjoeensis*, *Suillus aurihymenius*. Вид *Coprinellus subpurpureus* указывается для России во второй раз, виды *Gymnopus vernus*, *Helicogloea compressa*, *Hypsizygus marmoreus* и *Jaapia argillacea* отмечены третьими находками.

**Ключевые слова:** биоразнообразие, базидиомицеты, распространение грибов, Россия