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NEW SPECIES FOR REGIONAL MYCOBIOTAS OF RUSSIA. 8. REPORT 2023

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A total of 83 fungal species including one ascomycete (*Helvella macropus*) and 82 basidiomycete species have been recorded for the first time from 18 administrative regions of Russia: Republic of Buryatia (2), Republic of Dagestan (7), Republic of Mordovia (30), Republic of Tyva (6), Primorsky Krai (1), Zabaykalsky Krai (3), Arkhangelsk Oblast (5), Irkutsk Oblast (4), Kaluga Oblast (1), Leningrad Oblast (1), Murmansk Oblast (7), Nizhny Novgorod Oblast (1), Novgorod Oblast (3), Novosibirsk Oblast (2), Pskov Oblast (1), Tyumen Oblast (10), Saint Petersburg Federal City (1), and Khanty-Mansi Autonomous Okrug (1 species). An annotated species list containing the data on locality, substrate, habitat type, date of collection, and voucher numbers is provided. *Pluteus vellinae* is reported as the first record in Russia. *Aurantiporus priscus*, *Bolbitius sibiricus*, and *Mycopan scabripes* are recorded in Russia for the second time. *Hypsizygus marmoreus* is reported for the third time. New data on little-collected fungal species such as *Botryobasidium botryoideum*, *Fibrodontia gossypina*, *Lycoperdon rupicola*, *Neohypochnicium cremicolor*, *Postia luteocaesia*, *Psathyrella gordonii*, and *Xylodon pruinosus*, is presented. Complete sequences of ITS1–5.8S–ITS2 nuclear ribosomal DNA for 16 species reported have been generated and submitted to the GenBank database.

Keywords: Ascomycota, Basidiomycota, biodiversity, DNA barcodes, fungal distribution, Russia

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INTRODUCTION

The present report is the eighth in the series of articles devoted to the new regional records of fungi (Bolshakov et al., 2016, 2018, 2020; Svetasheva et al., 2017; Volobuev et al., 2019, 2021a, 2022).

An annotation record includes the data on species location, substrate, habitat, and herbarium documentation. Voucher specimens are deposited in LE (Saint Petersburg), AR (Arkhangelsk), INEP (Apatity), and NSK (Novosibirsk) herbaria. Duplicates of all specimens are stored in LE.

MATERIALS AND METHODS

Material was collected and identified using light microscopy technique by the authors abbreviated as follows: Sergey V. Volobuev (SV), Sergey Yu. Bolshakov (SB), Lyudmila B. Kalinina (LK), Vladimir I. Kapitonov (VK), Yury A. Rebriev (YuR), Yuliya R. Khimich (YuKh), Vyacheslav A. Vlasenko (VV), Oleg N. Ezhov (OE), Ivan V. Zmitrovich (IZ), and other persons 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., 2021, 2022) as well as other papers partly referenced in previous reports (Bolshakov et al., 2016; Svetasheva et al., 2017). Species registered for more than 25 regions are noted as widespread.

Molecular identity of some studied specimens has been confirmed by ITS1–5.8S–ITS nrDNA sequence analysis. DNA extraction, PCR amplification and sequencing were performed followed Volobuev et al. (2021b). Newly generated sequences were submitted to GenBank.

RESULTS

ASCOMYCOTA

PEZIZOMYCETES

Pezizales

Helvella macropus (Pers.) P. Karst. – new to Murmansk Oblast.

Distribution in Russia: IVA, KHA, KR, LEN, NGR, VOR, PRI.

Specimens examined: Murmansk Oblast, Tersky District, the Turiy Peninsula, 66.61678° N, 34.37766° E, on soil in old-growth spruce forest, 13.08.2022, coll. M.N. Kozhin, det. YuKh (LE F-342557, dupl. INEP 3672); Kirovsk, Khibiny Mts., slope of Mount Yuksporr, 67.64060° N, 33.72898° E, on fallen trunk of *Picea obovata* in mixed spruce-small-leaved forest, 25.08.2022, coll. and det. YuKh (INEP 3679).

BASIDIOMYCOTA

AGARICOMYCETES

Agaricales

Arrhenia spathulata (Fr.) Redhead – new to the Republic of Dagestan.

Distribution in Russia: ARK, KGD, KRS, LEN, MAG, MUR, RYA, SPE, VGG.

Specimen examined: Republic of Dagestan, Derbentsky District, vicinity of Naryn-Kala citadel (part of the Derbent fortress), 42.04309° N, 48.27777° E, on mosses in herb-mosses oak forest, 31.10.2021, coll. and det. SV (LE F-342526). GenBank accession number – OR225909 (ITS nrDNA).

Bolbitius sibiricus Bulyonk., E.F. Malysheva et L.B. Kalinina – new to Primorsky Krai.

Distribution in Russia: NVS.

Specimens examined: Primorsky Krai, Ussuriysk, vicinity of Gorno-Taezhnoe settlement, 47.70399° N, 132.16241° E, on rotten wood of *Tilia* sp. in wet deciduous forest with *Tilia* sp., *Quercus mongolica*, *Acer mono*, *Juglans mandshurica* and *Fraxinus* sp., 18.08.2020, coll. and det. LK (LE F-342533); *ibid.*, 43.70367° N, 132.16209° E, on rotten wood of deciduous tree in wet deciduous forest with *Tilia* sp., *Quercus mongolica*, *Acer mono*, *Juglans mandshurica* and *Fraxinus* sp., 21.08.2021, coll. and det. LK (LE F-342534).

Bovista paludosa Lév. – new to the Republic of Tyva.

Distribution in Russia: AL, IRK, KM, KO, KYA, MAG, TYU.

Specimens examined: Republic of Tyva, Piy-Khemsy District, 29 km north-eastward from Turan village, 52.31930° N, 94.23820° E, on soil, 04.08.2022, coll. A.V. Vlasenko, det. VV (LE F-342570, dupl. NSK 1017287); *ibid.*, 52.31240° N, 94.22680° E, on soil, among mosses, 03.08.2022, coll. A.V. Vlasenko, det. VV (LE F-342569, dupl. NSK 1017334). GenBank accession numbers – OQ874520, OQ874523 (ITS nrDNA).

B. tomentosa (Vittad.) De Toni – new to Zabaykalsky Krai.

Distribution in Russia: AL, ARK, AST, BEL, KGD, KL, LEN, MAG, NVS, SVE, VGG, YAN.

Specimen examined: Zabaykalsky Krai, Kalarsky District, Kodar Ridge, valley of the Oleniy Rog River, 56.80150° N, 117.31480° E, on soil in mountain tundra, 04.08.2021, coll. I.V. Enushchenko, det. YuR (LE F-342221).

Calvatia cretacea (Berk.) Lloyd – new to the Republic of Tyva.

Distribution in Russia: AL, ARK, BEL, CHE, CHU, KYA, MAG, ROS, SA, SE, SVE, YAN.

Specimen examined: Republic of Tyva, Piy-Khemsy District, 28 km north-eastward from Turan village, 52.31240° N, 94.22680° E, on soil in meadow, 03.08.2022, coll. A.V. Vlasenko, det. VV (LE F-342568, dupl. NSK 1017333). GenBank accession number – OQ874522 (ITS nrDNA).

C. turneri (Ellis et Everh.) Demoulin et M. Lange – new to the Republic of Buryatia and the Republic of Tyva.

Distribution in Russia: AL, ALT, ARK, CHU, KAM, KO, KYA, MAG, SVE, TYU, YAN.

Specimens examined: Republic of Buryatia, Okinsky District, valley of the Khelgin River, 52.51710° N, 98.82356° E, on soil in mountain tundra, 21.06.2017, coll. I.V. Enushchenko, det. YuR (LE F-342236); Republic of Tyva, Todzhinsky District, watershed of the Arzhan-Khem and Khelgin Rivers, 52.54270° N, 98.72620° E, on soil in mountain tundra, 21.06.2017, coll. I.V. Enushchenko, det. YuR (LE F-342235).

Clitocybe odora (Bull.) P. Kumm. – new to the Republic of Dagestan.

Distribution in Russia: widespread species.

Specimen examined: Republic of Dagestan, Derbentsky District, vicinity of Naryn-Kala citadel (part of the Derbent fortress), 42.04309° N, 48.27777° E, on soil in herb-mosses oak forest, 31.10.2021, coll. and det. SV (LE F-342524). GenBank accession number – OR225910 (ITS nrDNA).

Cristinia helvetica (Pers.) Parmasto – new to the Republic of Mordovia.

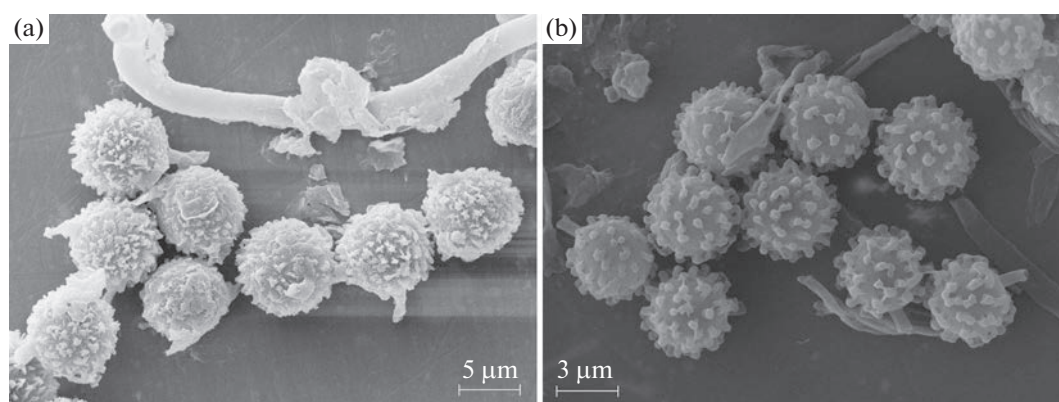


Fig. 1. Scanning electron micrograph (SEM) of basidiospores: a – *Disciseda hyalothrix* LE 2044; b – *Lycoperdon ericaeum* LE F-342324 (photos Yu.A. Rebriev).

Distribution in Russia: ARK, DA, KO, KR, LEN, NIZ, NVS, ORL, PER, PRI, SAK, SPE, SVE, TA, TVE, TYU, VGG, VLG, VOR.

Specimens examined: Republic of Mordovia, Temnikovskiy District, Temnikov town, park imeni 50-Letiya VLKSM, 54.61547° N, 43.23143° E, on fallen branch of *Alnus glutinosa* in black alder forest, 28.09.2015, coll. and det. SB (LE 314479); Tengushevskiy District, 5 km north-eastward from Standrovo village, 54.65230° N, 42.74098° E, on fallen branch of *A. glutinosa* in hygrophilous herb black alder forest, 11.08.2015, coll. and det. SB (LE 314603).

Disciseda hyalothrix (Cooke et Masee) Hollós – new to Irkutsk Oblast and the Republic of Buryatia.

Distribution in Russia: ALT, KB.

Specimens examined: Irkutsk Oblast, Irkutsk city, near the confluence of the Kaya River with the Irkut River, 52.28920° N, 104.23740° E, on soil in dry meadow, 03.04.2021, coll. I.V. Enushchenko, det. YuR (LE F-342240); Republic of Buryatia, Barguzinskiy District, on the way from Suvo to Badom villages, 53.66670° N, 109.50000° E, on soil in steppe, 06.06.1911, coll. M. Korotky, det. YuR (LE 2044, Fig. 1, a).

Hebeloma alpinum (J. Favre) Bruchet – new to Novosibirsk Oblast.

Distribution in Russia: AL, ARK, CHU, KO, KYA, YAN.

Specimen examined: Novosibirsk Oblast, Novosibirsk city, Akademgorodok, Uchenykh str., 10, 54.83350° N, 83.10710° E, on soil in plantation of *Betula pendula* and *Padus maackii*, 27.08.2022, coll. T.V. Vlasenko, M.V. Vlasenko, det. VV (LE F-342567, dupl. NSK 1017415). GenBank accession number – OQ874528 (ITS nrDNA).

Hohenbuehelia fluxilis (Fr.) P.D. Orton – new to Pskov Oblast.

Distribution in Russia: CHE, KR, KYA, LEN, LIP, MOS, NGR, UD.

Specimen examined: Pskov Oblast, Bezhanitsky District, buffer zone of the Polistovsky Nature Reserve, Plavnikskoe Boloto trail, 57.09891° N, 30.36961° E, on dead standing tree of *Alnus* sp. in aspen forest with birch and rowan in undergrowth, 06.08.2021, coll. and det. LK (LE F-342537).

Hypsizygus marmoreus (Peck) H.E. Bigelow – new to the Republic of Dagestan.

Distribution in Russia: KYA, ORL.

Specimen examined: Republic of Dagestan, Magaramkent'skiy District, Samurskiy National Park, Delta Samura area, vicinity of Primorskiy village, 41.87864° N, 48.50992° E, on living tree of *Populus* sp. in liana poplar forest, 18.10.2021, coll. and det. SV (LE F-342529). GenBank accession number – OR225906 (ITS nrDNA).

Lycoperdon ericaeum Bonord. – new to Irkutsk Oblast.

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

Specimen examined: Irkutsk Oblast, Angarskiy District, the right bank of the Malaya Yelovka River, near the Yelovsky reservoir, 52.48850° N, 103.81330° E, on sandy soil in forb-grasses edge of the pine forest, 06.08.2022, coll. I.V. Enushchenko, det. YuR (LE F-342324, Fig. 1, b).

L. frigidum Demoulin – new to Zabaykalskiy Krai.

Distribution in Russia: AL, CHU, IRK, MAG, SA, SVE, TY.

Specimen examined: Zabaykalskiy Krai, Kalarskiy District, Kodar Ridge, upper reaches of the Oleniy Rog River, near the Sygkhtinskiy glacier, 56.80150° N, 117.31480° E, on soil in bedrock riegel, 22.08.2021, coll. I.V. Enushchenko, det. YuR (LE F-342273).

L. lambinonii Demoulin – new to the Republic of Tyva.

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

Specimen examined: Republic of Tyva, Piy-Khemskiy District, 28 km north-eastward from Turan village, 52.31240° N, 94.22680° E, on soil, 03.08.2022, coll. A.V. Vlasenko, det. VV (LE F-342565, dupl. NSK 1017330). GenBank accession number – OQ874521 (ITS nrDNA).

L. rupicola Jeppson, E. Larss. et M.P. Martín – new to Zabaykalskiy Krai.

Distribution in Russia: AL, ALT, KHA, MAG.

Specimen examined: Zabaykalskiy Krai, Kalarskiy District, Kodar Ridge, 56.80150° N, 117.31480° E, on mosses in mountain tundra, 03.07.2021, coll. I.V. Enushchenko, det. YuR (LE F-342287).

Melanoleuca arcuata (Bull.) Singer — new to Novosibirsk Oblast.

Distribution in Russia: AL, KK, KR, LEN, MUR, PNZ, ROS, SPE, TVE.

Specimen examined: Novosibirsk Oblast, Novosibirsk city, Akademgorodok, Uchenykh str., 10, 54.83350° N, 83.10710° E, on soil in plantations of *Betula pendula* and *Padus maackii*, 27.08.2022, coll. T.V. Vlasenko, M.V. Vlasenko, det. VV (LE F-342564, dupl. NSK 1017338). GenBank accession number — OQ874524 (ITS nrDNA).

Mycena acicula (Schaeff.) P. Kumm. — new to Arkhangelsk Oblast.

Distribution in Russia: widespread species.

Specimens examined: Arkhangelsk Oblast, Plesetsky District, vicinity of Sheleksa railway station, 62.89670° N, 40.30890° E, on soil in herb-rich larch forest, 30.08.2021, coll. OE, det. IZ (AR 3695); Shenskursky District, vicinity of Shegovary village, 62.37560° N, 42.94890° E, on soil in mixed coniferous-deciduous forest, 17.09.2022, coll. OE, det. IZ (AR 3676).

M. pura (Pers.) P. Kumm. — new to the Republic of Dagestan.

Distribution in Russia: widespread species.

Specimen examined: Republic of Dagestan, Magaramkentsky District, Samursky National Park, Delta Samura area, vicinity of Primorsky village, 41.87749° N, 48.53043° E, on fallen branch of *Euonymus* sp. in herb-rich poplar forest with oak, 17.10.2021, coll. and det. SV (LE F-342528). GenBank accession number — OR225907 (ITS nrDNA).

Mycopan scabripes (Murrill) Redhead, Moncalvo et Vilgalys — new to Novgorod Oblast.

Distribution in Russia: KGD.

Specimen examined: Novgorod Oblast, Borovichsky District, vicinity of abandoned Dubku village, 58.35774° N, 34.08576° E, on litter in mixed forest with aspen and oak, 05.10.2019, coll. and det. LK (LE F-342535).

Pluteus vellengae Justo, Ferisin, Ševčíková, Kaygusuz, G. Muñoz, Lebeuf et S.D. Russell — new to Russia.

Specimen examined: Leningrad Oblast, Kingissepsky District, vicinity of Kaibolovo village, the Suma River canyon, 59.57050° N, 28.83484° E, on rotten branch of deciduous tree on island in stream with elm and black alder, 21.07.2019, coll. and det. LK (LE F-342532, Fig. 2, c).

Psathyrella gordonii (Berk. et Broome) A. Pearson et Dennis — new to Novgorod Oblast.

Distribution in Russia: KM, PNZ, PRI, SPE, VGG.

Specimen examined: Novgorod Oblast, Chudovsky District, vicinity of Perehod village, 59.08809° N, 31.85179° E, on litter in aspen forest with *Rhamnus cathartica* and *Salix* spp. in undergrowth, 13.07.2019, coll. and det. LK (LE F-342536).

Radulomyces confluens (Fr.) M.P. Christ. — new to the Republic of Mordovia.

Distribution in Russia: widespread species.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 8 km south-westward from Lesnoy village, 54.44621° N, 42.64510° E, on fallen branch of *Quercus robur* in nemoral herb oak forest, 12.08.2015, coll. and det. SB (LE 314637).

Rickenella swartzii (Fr.) Kuyper — new to Novgorod Oblast and Saint Petersburg Federal City.

Distribution in Russia: ALT, KHM, KLU, LEN, MAG, MUR, NVS, PRI, PSK, TA, TOM, UD, VLG, YEV.

Specimens examined: Novgorod Oblast, Novgorodsky District, Volynskie dubravy nature protected area, near Volyn' village, 58.60626° N, 31.52985° E, on mossed trunk in mixed forest with spruce, aspen and oak in undergrowth, 06.07.2018, coll. and det. LK (LE F-342538); Saint Petersburg Federal City, Kalininsky District, Piskaryovsky city park, 59.99917° N, 30.40389° E, among mosses in park with pine and birch, 09.10.2022, coll. and det. LK (LE F-342539).

Tricholoma matsutake (S. Ito et S. Imai) Singer — new to Murmansk Oblast.

Distribution in Russia: IRK, KHA, KHM, KYA, LEN, PRI, TOM.

Specimen examined: Murmansk Oblast, Tersky District, 82 km of the Kandalaksha-Umba road, 66.86686° N, 33.97486° E, on soil in lichen pine forest by the road, 28.08.2022, coll. and det. YuKh (LE F-342559, dupl. INEP 3680).

Xerula pudens (Pers.) Singer — new to the Republic of Dagestan.

Distribution in Russia: AD, BEL, KDA, KM, KRS, KYA, LIP, PNZ, ROS, SAM, SEV, TA, TUL, ULY, VOR.

Specimen examined: Republic of Dagestan, Tabasarsansky District, vicinity of Darvag settlement, 42.04473° N, 48.03850° E, on soil in herb-rich oak forest, 23.10.2021, coll. and det. SV (LE F-342531, Fig. 2, b). GenBank accession number — OR225908 (ITS nrDNA).

Amylocorticiales

Ceraceomyces tessulatus (Cooke) Jülich — new to the Republic of Mordovia.

Distribution in Russia: widespread species.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 2 km westward from Marlyay village, 53.83146° N, 42.62743° E, on fallen trunk of *Quercus robur* in nemoral herb pine forest with oak, 12.11.2015, coll. SB, det. IZ (LE 314412).

Atheliales

Athelia bombacina (Link) Pers. — new to the Republic of Mordovia.

Distribution in Russia: AL, ARK, BA, BEL, IRK, KHA, KHM, KIR, KM, KO, KR, KYA, LEN, MUR, NGR, NIZ, NVS, ORE, ORL, PER, SA, SPE, SVE, TOM, TYU.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 0.5 km northward from Shiringushi village, 53.86270° N, 42.78473° E, on fallen branch of *Pinus sylvestris* in nemoral herb pine forest, 12.11.2015, coll. and det. SB (LE 314728).

A. neuhoffii (Bres.) Donk — new to the Republic of Mordovia.

Distribution in Russia: ARK, CHE, KAM, KGD, KHM, KIR, KR, LEN, SVE.

Specimen examined: Republic of Mordovia, Tengu-shevsky District, 4.5 km westward from Barashevo village, 54.53857° N, 42.80133° E, on fallen trunk of *Picea abies* in nemoral herb pine forest, 11.11.2015, coll. SB, det. IZ (LE 314729).

Leptosporomyces galzinii (Bourdod) Jülich — new to the Republic of Mordovia.



Fig. 2. Basidiomata of some collected species *in situ*: a – *Neolentinus cyathiformis* LE F-342552 (photo S.V. Volobuev); b – *Xerula pudens* LE F-342531 (photo S.V. Volobuev); c – *Pluteus vellengae* LE F-342532 (photo L.B. Kalinina); d – *Aurantiporus priscus* AR3673 (photo O.N. Ezhov); e, f – *Caloboletus radicans* LE F-342530 (photo S.V. Volobuev).

Distribution in Russia: widespread species.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 3 km westward from Marlyay village, 53.83113° N, 42.62762° E, on fallen trunk of *Pinus sylvestris* in nemoral herb pine forest, 12.11.2015, coll. SB, det. SB and IZ (LE 314628).

Auriculariales

Auricularia mesenterica (Dicks.) Pers. – new to Nizhny Novgorod Oblast.

Distribution in Russia: widespread species.

Specimens examined: Nizhny Novgorod Oblast, Lukoyanovsky District, Imeni Stepana Razina settlement, 54.89200° N, 44.29400° E, on oak sleepers, 10.08.1964, coll.

P.A. Suvorov, det. SV (LE 210926); vicinity of Sanki village, 54.83490° N, 44.23300° E, on fallen trunk of *Tilia cordata*, 09.05.1998, coll. V.A. Spirin, det. SV (LE 210927); 4 km south-eastward from Pokrovka village, 54.70900° N, 44.35510° E, on fallen trunk of *Fraxinus excelsior*, 27.07.1999, coll. V.A. Spirin, det. SV (LE 210928); Pochinkovsky District, 6 km south-eastward from Kommunar village, 54.62390° N, 44.41520° E, on fallen trunk of *Quercus robur*, 21.05.1999, coll. V.A. Spirin, det. SV (LE 210929). All of these specimens were previously reported for the region as *Chondrostereum purpureum* (Pers.) Pouzar (Spirin, 2003).

Pseudohydnum gelatinosum (Scop.) P. Karst. – new to Murmansk Oblast.

Distribution in Russia: widespread species.

Specimens examined: Murmansk Oblast, Tersky District, the Turiy Peninsula, 66.61297° N, 34.37723° E, on fallen trunk of *Picea obovata* in old-growth herbaceous spruce forest with an admixture of rowan, 13.08.2022, coll. YuKh and Borovichev E. A., det. YuKh (LE F-342558, dupl. INEP 3669, INEP 3670).

Boletales

Caloboletus radicans (Pers.) Vizzini – new to the Republic of Dagestan.

Distribution in Russia: BA, BEL, CU, KGD, KM, LIP, MO, MOS, ORE, PER, PNZ, SAM, SAR, SEV, SPE, TA, TUL, VGG.

Specimen examined: Republic of Dagestan, Magaramkentsky District, Samursky National Park, Delta Samura area, vicinity of Primorsky village, 41.82095° N, 48.53242° E, on soil in herb-rich hornbeam forest with oak and ash, 16.09.2022, coll. and det. SV (LE F-342530, fig. 2, e, f). GenBank accession number – OR225905 (ITS nrDNA).

Cantharellales

Botryobasidium botryoideum (Overh.) Parmasto – new to Tyumen Oblast.

Distribution in Russia: KO, KYA, PRI, TY.

Specimen examined: Tyumen Oblast, Tobolsk city, 58.27116° N, 68.49600° E, on fallen trunk of *Populus tremula* in birch forest with aspen, 30.06.2022, coll. and det. VK (LE F-342543).

B. capitatum (Link) Rossman et W.C. Allen – new to Tyumen Oblast.

Distribution in Russia: widespread species.

Specimen examined: Tyumen Oblast, Tobolsk city, 58.28930° N, 68.46641° E, on fallen trunk of *Populus tremula* in aspen-birch forest with pine, 27.07.2021, coll. and det. VK (LE F-342548).

B. conspersum J. Erikss. – new to Tyumen Oblast.

Distribution in Russia: AL, ARK, CHE, DA, DON, KDA, KO, LEN, LUG, NGR, NIZ, NVS, ORL, PER, PRI, SAM, SPE, SVE, TVE.

Specimen examined: Tyumen Oblast, Tobolsky District, vicinity of Belaya village, 58.27532° N, 68.69336° E, on fallen trunk of *Pinus sylvestris* in pine forest, 24.08.2021, coll. and det. VK (LE F-342547).

B. obtusisporum J. Erikss. – new to the Republic of Mordovia.

Distribution in Russia: AL, IRK, KDA, KHM, KIR, KO, KR, KYA, LEN, MUR, NVS, ORL, PER, PRI, SPE, SVE, TVE, YAN.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 0.5 km eastward from Yavas village, 54.42135° N, 42.87331° E, on fallen trunk of *Pinus sylvestris* in mosses – dwarf shrub pine forest, 29.09.2015, coll. and det. SB (LE 314578, LE 314579).

B. vagum (Berk. et M.A. Curtis) D.P. Rogers – new to Tyumen Oblast.

Distribution in Russia: widespread species.

Specimen examined: Tyumen Oblast, Tobolsky District, vicinity of Vinokurovo village, 58.35162° N, 68.34105° E, on fallen trunk of *Pinus sibirica* in Siberian pine forest with spruce and fir, 15.04.2021, coll. and det. VK (LE F-342549).

Sistotrema coroniferum (Höhn. et Litsch.) Donk – new to the Republic of Mordovia.

Distribution in Russia: BA, KGN, LEN, OMS, PER, SVE.

Specimen examined: Republic of Mordovia, Tengu-shevsky District, 4.5 km westward from Barashevo village, 54.53830° N, 42.80224° E, on fallen trunk of *Populus tremula* in nemoral herb pine forest, 11.11.2015, coll. SB, det. SB and IZ (LE 314731).

S. resinicystidium Hallenb. – new to Murmansk Oblast.

Distribution in Russia: ARK, DA, KHM, KO, KR, NIZ, NVS, SVE, TVE, TYU.

Specimen examined: Murmansk Oblast, Lovozersky District, 67.48844° N, 35.05292° E, on log of *Pinus sylvestris* in pine forest, 10.08.2021, coll. and det. YuKh (LE F-342561, dupl. INEP 3500).

Corticiales

Vuilleminia coryli Boidin, Lanq. et Gilles – new to the Republic of Mordovia.

Distribution in Russia: ARK, BRY, KDA, KLU, LEN, LIP, MOS, NIZ, ORL, PSK, RYA, SAM, SPE, SVE, TUL, TVE, VGG, VOR.

Specimens examined: Republic of Mordovia, Zubovo-Polyansky District, 0.5 km northward from Shiringushi village, 53.86268° N, 42.78429° E, on dry dead branch of living *Corylus avellana* in nemoral herb pine forest, 12.11.2015, coll. and det. SB (LE 314475); 0.5 km south-eastward from Udevo village, 53.84751° N, 42.59173° E, on dead standing stem of *C. avellana* in nemoral herb birch forest, 12.11.2015, coll. and det. SB (LE 314476).

Geastrales

Geastrum pectinatum Pers. – new to Arkhangelsk Oblast.

Distribution in Russia: AMU, BEL, KGD, KHA, KK, KM, KO, KR, KYA, LEN, LIP, MOS, NGR, NIZ, NVS, PNZ, PRI, PSK, ROS, SMO, SPE, SVE, TA, TVE, VOR.

Specimen examined: Arkhangelsk Oblast, Primorsky District, Solovetsky archipelago, Bolshoy Solovetsky Island, vicinity of Varyazhsky village, 65.02320° N, 35.73845° E, on soil in spruce forest, 05.08.2021, coll. OE, det. OE and IZ (AR 3721).

G. rufescens Pers. – new to the Republic of Dagestan.

Distribution in Russia: AL, ALT, BEL, BRY, DA, KC, KK, KM, KR, KRS, LEN, LIP, MO, PNZ, PRI, ROS, RYA, SPE, SVE, TA, TOM, TVE, UD, VGG, VOR.

Specimen examined: Republic of Dagestan, Gunibsky District, Verkhny Gunib Nature Park, 42.40759° N, 46.90312° E, on soil in pine forest with birch, 06.10.2018, coll. SV, det. YuR (LE F-342554).

G. schmidelii Vittad. – new to Irkutsk Oblast.

Distribution in Russia: AL, ALT, AST, BEL, KC, KGD, KHR, KK, KYA, LIP, PER, PNZ, PRI, ROS, RYA, SAR, SVE, TA, TUL, TY, UD, VGG, VOR.

Specimen examined: Irkutsk Oblast, Irkutsk city, near the confluence of the Kaya River with the Irkut River, 52.28920° N, 104.23740° E, on sandy soil in psammophytic steppe, 16.04.2020, coll. I.V. Enushchenko, det. YuR (LE F-342263).

Gloeophyllales

Neolentinus cyathiformis (Schaeff.) Della Magg. et Trassin. — new to Kaluga Oblast.

Distribution in Russia: widespread species.

Specimen examined: Kaluga Oblast, Ulyanovsky District, Kaluzhskiy Zaseki Nature Reserve, vicinity of Nagaya village, 53.62336° N, 35.86784° E, on fallen trunk of *Populus tremula* in herb-fern aspen forest with oak, maple and linden, 18.08.2022, coll. N.V. Shakhova, det. SV (LE F-342552, Fig. 2, a, voucher for the strain LE-BIN 4895). GenBank accession number — OR225904 (ITS nrDNA).

Hymenochaetales

Kneiffiella subalutacea (P. Karst.) Jülich et Stalpers — new to the Republic of Mordovia.

Distribution in Russia: widespread species.

Specimen examined: Republic of Mordovia, Temnikovskiy District, Temnikov town, park imeni 50-Letiya VLKSM, 54.62211° N, 43.22884° E, on fallen branch of *Pinus sylvestris* in pine forest, 28.09.2015, coll. and det. SB (LE 314557).

Kurtia argillacea (Bres.) Karasiński — new to the Republic of Mordovia.

Distribution in Russia: widespread species.

Specimen examined: Republic of Mordovia, Temnikovskiy District, Temnikov town, park imeni 50-Letiya VLKSM, 54.62211° N, 43.22884° E, on fallen trunk of *Pinus sylvestris* in pine forest, 28.09.2015, coll. and det. SB (LE 314639).

Lyomyces sambuci (Pers.) P. Karst. — new to Khanty-Mansi Autonomous Okrug.

Distribution in Russia: widespread species.

Specimen examined: Khanty-Mansi Autonomous Okrug, vicinity of Shapsha village, 60.08250° N, 69.45611° E, on fallen branch of *Populus tremula* in herb-fern Siberian pine forest with aspen and birch, 26.07.2022, coll. N.V. Shakhova, det. SV (LE F-342553, voucher for the strain LE-BIN 4966). GenBank accession number — OR225903 (ITS nrDNA).

Onnia tomentosa (Fr.) P. Karst. — new to Murmansk Oblast.

Distribution in Russia: widespread species.

Specimen examined: Murmansk Oblast, Tersky District, Kideretsky Island (near the Turiy Peninsula, western coast), 66.59634° N, 34.37551° E, on soil in blueberry spruce forest, 13.08.2022, coll. M.N. Kozhin, det. YuKh (LE F-342555, dupl. INEP 3665).

Tubulicrinis calothrix (Pat.) Donk — new to the Republic of Mordovia.

Distribution in Russia: AL, ARK, BEL, IRK, KHM, KO, KR, KYA, LEN, MUR, NVS, ORL, PER, PRI, SPE, SVE, TA, TVE, TY, TYU, VLG, VOR, YAN, ZAB.

Specimens examined: Republic of Mordovia, Zubovo-Polyansky District, 3.5 km south-eastward of Vysha village, Boloto Bolshoye protected area, 53.81122° N, 42.39896° E, on fallen branch of *Picea abies* in nitrophilous herb black alder forest, 14.08.2015, coll. and det. SB (LE 314512); 0.5 km eastward from Yavas village, 54.42135° N, 42.87331° E, on fallen trunk of *Pinus sylvestris* in mosses — dwarf shrub pine forest, 29.09.2015, coll. and det. SB (LE 314513, LE 314580).

T. subulatus (Bourdot et Galzin) Donk — new to the Republic of Mordovia.

Distribution in Russia: widespread species.

Specimens examined: Republic of Mordovia, Temnikovskiy District, 6.5 km eastward from Yavas village, 54.42832° N, 42.96324° E, on fallen branch of *Pinus sylvestris* in mosses — dwarf shrub pine forest, 30.09.2015, coll. and det. SB (LE 314511); 0.5 km south-eastward from Udevo village, 53.84670° N, 42.59071° E, on fallen branch of *P. sylvestris* in nemoral herb birch forest, 12.11.2015, coll. and det. SB (LE 314590).

Xylodon nesporii (Bres.) Hjortstam et Ryvarden — new to the Republic of Mordovia.

Distribution in Russia: widespread species.

Specimens examined: Republic of Mordovia, Temnikovskiy District, Temnikov town, park imeni 50-Letiya VLKSM, 54.62287° N, 43.22728° E, on fallen trunk of *Acer platanoides* in birch forest, 28.09.2015, coll. and det. SB (LE 314566); *ibid.*, 54.60994° N, 43.23210° E, on dead standing tree of *Salix* sp. in nemoral herb pine forest, 28.09.2015, coll. and det. SB (LE 314572); *ibid.*, 54.62211° N, 43.22884° E, on fallen branch of *Pinus sylvestris* in pine forest, 28.09.2015, coll. and det. SB (LE 314573); Zubovo-Polyansky District, 5 km westward from Marlyay village, 53.83146° N, 42.62743° E, on fallen trunk of *Quercus robur* in nemoral herb pine with oak forest, 12.11.2015, coll. and det. SB (LE 314722); 3.5 km north-westward from Potma village, 54.14634° N, 42.86856° E, on fallen trunk of *Pinus sylvestris* in mosses — dwarf shrub pine forest, 13.08.2015, coll. and det. SB (LE 314922).

X. pruinus (Bres.) Spirin et Viner — new to Tyumen Oblast.

Distribution in Russia: KYA, NIZ, SVE.

Specimen examined: Tyumen Oblast, Tobolsky District, vicinity of Belaya village, 58.27532° N, 68.69336° E, on fallen branch of *Betula* sp. in mixed forest with pine, birch and aspen, 26.09.2019, coll. and det. VK (LE F-342542).

Polyporales

Aegerita candida Pers. — new to the Republic of Mordovia.

Distribution in Russia: DON, KDA, KIR, KR, LEN, NIZ, ORE, ROS, RYA, SVE, TVE, VLG.

Specimen examined: Republic of Mordovia, Temnikovskiy District, Temnikov town, park imeni 50-Letiya VLKSM, 54.61547° N, 43.23143° E, on fallen branch of *Alnus glutinosa* in black alder forest, 28.09.2015, coll. SB, det. IZ (LE 314593).

Aurantiporus priscus Niemelä, Miettinen et Manninen — new to Arkhangelsk Oblast.

Distribution in Russia: LEN.

Specimen examined: Arkhangelsk Oblast, Shenkursky District, Shegovary village, vicinity of Tsyganikha place, 62.40338° N, 43.00694° E, on fallen trunk of *Pinus sylvestris* in lichen pine forest, 17.09.2022, coll. OE, det. OE and IZ (LE F-342540, dupl. AR 3673, Fig. 2, d).

Ceriporia bresadolae (Bourdot et Galzin) Donk — new to the Republic of Mordovia.

Distribution in Russia: ARK, AST, CHE, DA, LIP, NIZ, ORL, PER, PNZ, TA, TY, YAN.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 0.5 km northward from Shiringushi village, 53.86307° N, 42.78420° E, on fallen branch of *Pinus sylvestris* in nemoral herb pine forest, 12.11.2015, coll. and det. SB (LE 314418).

Cinereomyces lindbladii (Berk.) Jülich – new to the Republic of Mordovia.

Distribution in Russia: widespread species.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 3.5 km north-westward from Potma village, 54.14634° N, 42.86856° E, on fallen trunk of *Pinus sylvestris* in mosses – dwarf shrub pine forest, 13.08.2015, coll. and det. SB (LE 314405).

Hyphoderma litschaueri (Burt) J. Erikss. et Å. Strid – new to the Republic of Mordovia.

Distribution in Russia: KDA, KIR, LEN, ORE, ORL, PER, SVE, TVE, TYU, VLG, YAN.

Specimen examined: Republic of Mordovia, Tengu-shevsky District, 4 km northward from Khlebino village, the shore of Piyavskoye Lake, 54.66859° N, 42.81776° E, on fallen trunk of *Populus tremula* in boreal-nemoral herb pine forest, 11.08.2015, coll. and det. SB (LE 314594).

H. transiens (Bres.) Parmasto – new to Tyumen Oblast.

Distribution in Russia: BEL, KDA, KLU, KM, LEN, LIP, MO, ORL, SAM, SVE, TVE, VLG.

Specimen examined: Tyumen Oblast, Tobolsky District, vicinity of Belaya village, 58.27678° N, 68.69433° E, on fallen trunk of *Tilia cordata* in aspen forest with linden, 24.08.2021, coll. and det. VK (LE F-342544).

Meruliopsis violacea (Fr.) Bondartsev – new to Arkhangelsk Oblast.

Distribution in Russia: CHE, KHM, KIR, KYA, LEN, MO, MOS, NIZ, NVS, PER, SVE, TA, UD.

Specimen examined: Arkhangelsk Oblast, Plesetsky District, Kenozersky National Park, Plesetsky sector, vicinity of Shishkino village, 62.00790° N, 38.02173° E, on fallen trunk of *Picea obovata* in mixed coniferous-deciduous forest, 21.08.2021, coll. OE, det. SV and OE (LE F-342541, dupl. AR 3617).

Metulodontia nivea (P. Karst.) Parmasto – new to Murmansk Oblast.

Distribution in Russia: AMU, ARK, KC, KDA, KGD, KLU, KO, KR, LEN, MO, NGR, NIZ, NVS, ORL, PER, PSK, SAM, SVE, TA, TVE, TYU.

Specimen examined: Murmansk Oblast, Pechengsky District, Pasvik Nature Reserve, north-western foothills of Mount Kalkupya, 69.30447° N, 29.34630° E, on fallen trunk of *Populus tremula* in aspen forest, 23.08.2017, coll. and det. YuKh (LE F-342556, dupl. INEP 3370, INEP 3373).

Neohypochnicum cremicolor (Bres.) N. Maek. – new to the Republic of Mordovia.

Distribution in Russia: KO, OMS, TVE.

Specimen examined: Republic of Mordovia, Tengu-shevsky District, 5 km north-eastward from Standrovo village, 54.65203° N, 42.74007° E, on fallen trunk of *Alnus glutinosa* in hygrophilous herb black alder forest, 11.08.2015, coll. and det. SB (LE 314636).

Niemelaea consobrina (Bres.) Zmitr., Ezhov et Khimich – new to the Republic of Mordovia.

Distribution in Russia: ARK, KM, LEN, MUR, TVE, UD.

Specimen examined: Republic of Mordovia, Temnikovsky District, Temnikov town, park imeni 50-Letiya VLKSM, 54.61547° N, 43.23143° E, on dead standing trunk of *Salix* sp. in black alder forest, 28.09.2015, coll. and det. SB (LE 314620).

Phanerochaete calotricha (P. Karst.) J. Erikss. et Ryvar-den – new to the Republic of Mordovia.

Distribution in Russia: ARK, BEL, DA, KHM, KO, KR, LEN, MUR, NIZ, NVS, ORE, ORL, PER, ROS, SAM, SPE, SVE, VGG.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 7 km south-westward from Lesnoy village, 54.43901° N, 42.64864° E, on fallen trunk of *Acer platanoides* in nemoral herb linden forest, 12.08.2015, coll. and det. SB (LE 314605).

Ph. galactites (Bourdote et Galzin) J. Erikss. et Ryvar-den – new to the Republic of Mordovia.

Distribution in Russia: ARK, BEL, KR, NIZ, ORL, TYU, VLG.

Specimen examined: Republic of Mordovia, Temnikovsky District, Temnikov town, park imeni 50-Letiya VLKSM, 54.61547° N, 43.23143° E, on dead standing tree of *Salix* sp. in black alder forest, 28.09.2015, coll. and det. SB (LE 314635).

Phlebia subochracea (Bres.) J. Erikss. et Ryvar-den – new to Tyumen Oblast.

Distribution in Russia: ALT, ARK, BA, CHE, IRK, KDA, KHM, KO, LEN, MO, OMS, ORE, ROS, SVE, VGG, VLG, VOR.

Specimen examined: Tyumen Oblast, Tobolsky District, vicinity of Vesnina village, 58.32872° N, 68.14586° E, on fallen trunk of *Salix fragilis* in floodplain willow forest, 22.07.2021, coll. and det. VK (LE F-342545).

Postia caesia (Schrad.) P. Karst. – new to the Republic of Mordovia.

Distribution in Russia: widespread species.

Specimen examined: Republic of Mordovia, Temnikovsky District, 2.5 km eastward from Yavas village, 54.42209° N, 42.89567° E, on fallen trunk of *Picea abies* in mosses – dwarf shrub spruce forest, 30.09.2015, coll. and det. SB (LE 314500).

P. luteocaesia (A. David) Jülich – new to the Republic of Mordovia.

Distribution in Russia: LEN, MOS, NGR, ORL, PSK.

Specimen examined: Republic of Mordovia, Temnikovsky District, 5.5 km eastward from Yavas village, 54.42652° N, 42.94678° E, on fallen trunk of *Pinus sylvestris* with *Postia leucomallella* (Murrill) Jülich in mosses – dwarf shrub spruce forest, 30.09.2015, coll. and det. SB (LE 314306).

Rhizoporia hyalina (Spirin, Miettinen et Kotir.) Audet – new to the Republic of Mordovia.

Distribution in Russia: ARK, DA, KR, LEN, MOW, NIZ, ORL, SAM, SVE, TY.

Specimens examined: Republic of Mordovia, Tengu-shevsky District, 4 km northward from Khlebino village, the shore of Piyavskoye Lake, 54.66831° N, 42.81756° E, on fallen branch of *Populus tremula* in sphagnum birch forest, 11.08.2015, coll. and det. SB (LE 314937); Zubovo-Polyansky District, 4 km south-westward from Lesnoy village,

54.44301° N, 42.64668° E, on fallen branch of *Populus tremula* in nemoral herb linden forest, 12.08.2015, coll. and det. SB (LE 314938).

Trametopsis cervina (Schwein.) Tomšovský — new to the Republic of Mordovia.

Distribution in Russia: widespread species.

Specimen examined: Republic of Mordovia, Temnikovskiy District, 6 km northward from Stary Gorod village, 54.73620° N, 43.07562° E, on fallen trunk of *Prunus padus* in nitrophilous herb linden forest, 05.08.2015, coll. and det. SB (LE 311587).

Xanthoporus syringae (Parmasto) Audet — new to Irkutsk Oblast.

Distribution in Russia: ARK, CHU, IRK, KO, MAG, MUR, RYA, SVE.

Specimen examined: Irkutsk Oblast, Olkhonsky District, valley of the Solntsepad River, 54.03730° N, 108.25600° E, on fallen trunk of *Pinus sibirica* in Siberian pine forest, 27.08.2013, coll. I.A. Gorbunova, det. VV (LE F-342562, dupl. NSK 1014997). GenBank accession number — OQ874527 (ITS nrDNA).

Russulales

Asterostroma laxum Bres. — new to Murmansk Oblast.

Distribution in Russia: ARK, CU, KDA, KHM, KO, KR, SVE, VLG.

Specimens examined: Murmansk Oblast, Kirovsk, Khibiny Mts., the southwest slope of the Poachvumchorr Ridge, 67.67364° N, 33.61978° E, on stump of *Picea obovata* in spruce forest, 10.09.2019, coll. and det. YuKh (LE F-342560, dupl. INEP 3300); Pechengsky District, Pasvik Nature Reserve, northern part of the reserve, vicinity of Glukhaya plotina area, 69.35414° N, 29.80492° E, on fallen trunk of *Pinus sylvestris* in pine forest, 05.09.2018, coll. and det. YuKh (INEP 3415).

Lactarius pubescens Fr. — new to the Republic of Tyva.

Distribution in Russia: widespread species.

Specimen examined: Republic of Tyva, Kyzylsky District, 20 km north-eastward from Cherbi village, 51.91970° N, 94.86640° E, on soil in aspen-birch-larch forest, 10.08.2020, coll. A.V. Vlasenko, det. VV (LE F-342566, dupl. NSK 1017340). GenBank accession number — OQ874525 (ITS nrDNA).

Peniophora lilacea Bourdot et Galzin — new to the Republic of Mordovia.

Distribution in Russia: ARK, DON, KDA, LIP, PSK, ROS, RYA.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 6 km south-westward from Lesnoy village, 54.44711° N, 42.64649° E, on fallen branch of *Ulmus* sp. in nemoral herb linden forest, 12.08.2015, coll. and det. SB (LE 314640).

Russula exalbicans (Pers.) Melzer et Zvára — new to the Republic of Tyva.

Distribution in Russia: widespread species.

Specimen examined: Republic of Tyva, Todzhinsky District, 48 km northward from Sevi village, 52.91580° N, 94.99220° E, on soil, 08.08.2020, coll. A.V. Vlasenko, det. VV (LE F-342563, dupl. NSK 1017345). GenBank accession number — OQ874526 (ITS nrDNA).

Vararia investiens (Schwein.) P. Karst. — new to Tyumen Oblast.

Distribution in Russia: widespread species.

Specimen examined: Tyumen Oblast, Tobolsk city, 58.29112° N, 68.47239° E, on fallen branch of *Picea obovata* in coniferous forest with *Betula* × *aurata*, 26.05.2022, coll. and det. VK (LE F-342551).

Thelephorales

Tomentella neobourdotii M.J. Larsen — new to the Republic of Mordovia.

Distribution in Russia: ARK, IRK, KDA, KHA, KM, KR, KYA, LIP, NGR, NVS, PRI, SA, SAK, SPE, SVE, TVE, TY, VLG, YAN, ZAB.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 6.5 km north-eastward from Vysha village, 53.87795° N, 42.46754° E, on fallen trunk of *Betula* sp. with *Mycocacia fuscoatra* (Fr.) Donk in sphagnum birch forest, 14.08.2015, coll. and det. SB (LE 314532).

Trechisporales

Fibrodontia gossypina Parmasto — new to the Republic of Mordovia.

Distribution in Russia: DA, KDA, KHM, KO, LIP.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 5 km south-westward from Lesnoy village, 54.44711° N, 42.64649° E, on fallen trunk of *Acer platanoides* in nemoral herb linden forest, 12.08.2015, coll. and det. SB (LE 314596).

Sistotremastrum suecicum Litsch. ex J. Erikss. — new to Tyumen Oblast.

Distribution in Russia: ARK, IRK, KHM, KM, KO, KR, KYA, LEN, MUR, NIZ, NVS, PRI, PSK, SPE, SVE, TVE, YAN.

Specimen examined: Tyumen Oblast, Tobolsk city, 58.20477° N, 68.24676° E, on fallen trunk of *Populus tremula* in aspen forest with birch and linden, 17.04.2021, coll. and det. VK (LE F-342546).

Subulicystidium longisporum (Pat.) Parmasto — new to Tyumen Oblast.

Distribution in Russia: widespread species.

Specimen examined: Tyumen Oblast, Tobolsky District, vicinity of Suzgun village, 58.21974° N, 68.19132° E, on fallen trunk of *Tilia cordata* in linden forest with aspen and birch, 13.07.2022, coll. and det. VK (LE F-342550).

Trechispora candidissima (Schwein.) Bondartsev et Singer — new to the Republic of Mordovia.

Distribution in Russia: AL, ARK, BRY, DA, IRK, KAM, KEM, KM, KO, LEN, MOS, NIZ, NVS, ORL, SPE, SVE, TOM, TVE.

Specimen examined: Republic of Mordovia, Zubovo-Polyansky District, 4 km westward from Marlyay village, 53.83146° N, 42.62743° E, on fallen trunk of *Quercus robur* with *Byssocorticium atrovirens* (Fr.) Bondartsev et Singer in nemoral herb pine with oak forest, 12.11.2015, coll. and det. SB (LE 314411).

DACRYMYCETES

Dacrymycetales

Dacrymyces chrysocomus (Bull.) Tul. — new to Arkhangelsk Oblast.

Distribution in Russia: AMU, KEM, KHM, KM, KO, LEN, MOW, OMS, PRI, PSK, SVE, TOM, TVE.

Specimens examined: Arkhangelsk Oblast, Kargopolsky District, Kenozersky National Park, Kargopolsky sector, vicinity of Okhotnichya zaimka hut, 61.73260° N, 38.01410° E, on fallen trunk of *Picea obovata* in mixed coniferous-deciduous forest, 12.07.2016, coll. OE, det. OE and IZ (AR 2744); Shenkursky District, vicinity of Shegovary village, 62.37560° N, 42.94890° E, on fallen trunk of *Pinus sylvestris* in floodplain, 21.09.2020, coll. and det. OE (AR 3434).

DISCUSSION

A total of 83 macromycete species, including one species (*Helvella macropus*) from the phylum *Ascomycota* and 82 species from the phylum *Basidiomycota*, have been recorded for the first time from 18 administrative regions of Russia.

One of regional mycological novelties, *Pluteus vellengae*, is reported as new species to Russia based on specimen collected in Leningrad Oblast. This wood-inhabiting species was described in 2022, has a Holarctic distribution and has been known from Central and Southern Europe, Western Asia, and North America (Ševčíková et al., 2022). The finding of *P. vellengae* from Leningrad Oblast confirmed the presence of this species in Eastern Europe.

Noteworthy are fungal finds which are reported for Russia only for the second time and for the third time. Three species — *Aurantiporus priscus*, *Bolbitius sibiricus*, and *Mycopan scabripes* — are listed for Russia as the second occurrences. Among them, *Aurantiporus priscus* described from old-growth forests and developing basidiomata on large and long-ago fallen conifer trunks (Niemelä et al., 2012), was previously known in Russia as a protected polypore fungus for Leningrad Oblast only (Geltman et al., 2018). *Bolbitius sibiricus* was recently described from vicinity of Novosibirsk, and until now this species was known only from type locality (Crous et al., 2021). New records from Primorsky Krai listed above extend the global distributional range of the species from the south of Siberia to the south of the Russian Far East. *Mycopan scabripes* was earlier registered in the Northwest European Russia from Kaliningrad Oblast only (Dedkov et al., 2007). The species *Hypsizygus marmoreus* is recorded by the third finding besides the known localities in Oryol Oblast (Volobuev et al., 2020) and Krasnoyarsk Krai (Malysheva et al., 2017).

New data on distribution of some little-collected fungal species such as *Botryobasidium botryoideum*, *Fibrodontia gossypina*, *Lycoperdon rupicola*, *Neohypochnicium cremicolor*, *Postia luteocaesia*, *Psathyrella gordonii*, and *Xylodon pruinus*, is presented. In particu-

lar, the cited finding of *Xylodon pruinus* from Tyumen Oblast is the first reliable record of the species in Western Siberia. However, some collections of *Xylodon detriticus* (Bourdot) K.H. Larss., Viner et Spirin [= *Lagarobasidium detriticum* (Bourdot) Jülich] on a woody substrate may actually refer to *Xylodon pruinus*, with which it was previously synonymized (Viner et al., 2018).

In addition to traditional microscopic identification, ITS1–5.8S–ITS2 nuclear ribosomal DNA sequences were obtained from the specimens studied and compared with the reference sequences from the GenBank database. Complete sequences of ITS nrDNA have been generated and submitted to the GenBank database for *Arrhenia spathulata*, *Bovista paludosa*, *Caloboletus radicans*, *Calvatia cretacea*, *Clitocybe odora*, *Hebeloma alpinum*, *Hypsizygus marmoreus*, *Lactarius pubescens*, *Lycoperdon lambinonii*, *Lyomyces sambuci*, *Melanoleuca arcuata*, *Mycena pura*, *Neolentinus cyathiformis*, *Russula exalbicans*, *Xanthoporus syringae*, and *Xerula pudens*.

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Новые виды для микобиот регионов России. 8. Информационное сообщение — 2023

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Представлены данные о находках 83 видов грибов, включая один вид сумчатых (*Helvella macropus*) и 82 вида базидиальных грибов, выявленных впервые для Республики Бурятия (2), Республики Дагестан (7), Республики Мордовия (30), Республики Тыва (6), Приморского края (1), Забайкальского края (3), Архангельской (5), Иркутской (4), Калужской (1), Ленинградской (1), Мурманской (7), Нижегородской (1), Новгородской (3), Новосибирской (2), Псковской (1), Тюменской (10) областей, Санкт-Петербурга (1), Ханты-Мансийского автономного округа (1). Аннотированный список включает данные о местонахождениях, местообитаниях, субстратах и датах сбора приводимых видов с указанием коллекционных номеров микологических гербариев. Впервые для России приводится *Pluteus vellingae*. Виды *Aurantiporus priscus*, *Bolbitius sibiricus* и *Mycoran scabripes* указываются для России во второй раз, вид *Hypsizygus marmoreus* отмечен третьей находкой. Представлены новые данные о малоизвестных видах грибов, таких как *Botryobasidium botryoideum*, *Fibrodontia gossypina*, *Lycoperdon rupicola*, *Neohypochnicium cremicolor*, *Postia luteocaesia*, *Psathyrella gordonii* и *Xylodon pruinosus*. Получены и депонированы в международную базу данных Генбанк полные нуклеотидные последовательности ITS1–5.8S–ITS2 области ядерной рибосомальной ДНК для 16 изученных видов.

Ключевые слова: аскомицеты, базидиомицеты, биоразнообразие, ДНК-штрихкоды, распространение грибов, Россия