

Myxomycetes of Russia: a history of research and a checklist of species

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Keywords: Amoebozoa, bibliography, biodiversity, database, geographical distribution, literature review, Palearctic, slime molds

Article info:

Received: 06 August 2020

Accepted: 02 October 2020

Published online: 07 December 2020

Corresponding Editor: Nikki Heherson A. Dagamac

Abstract

The main objective of this paper is to provide an overview of the history and the level of research on biodiversity of myxomycetes in Russia. The first doubtless mention of myxomycetes in Russia dates back to the 18th century. Since then, numerous studies on myxomycete diversity in different regions of Russia have been published. Yu.K. Novozhilov summarized all accumulated data by publishing a list of 304 species in 2005. However, new data on species diversity, biogeography, and ecology of myxomycetes have been published in recent years. Recent research aims to fill this gap. This paper includes 321 sources, including studies published after 2005 and several works absent in previous reports. A full list of 455 myxomycete species found in Russia includes references to all literature sources. The analyzed database consists of more than 14 600 records in the “publication-region-species” format. Additionally, our research includes a detailed historical overview of the myxomycete studies in Russia. We hope that our information system, also available online at <https://russia.myxomycetes.org/>, will create a solid foundation for future studies of myxomycete biodiversity in Russia, particularly in the understudied regions.

Introduction

An assessment of myxomycete species diversity in Russia is especially relevant due to its vast territory with various landscapes and terrestrial biomes such as tundra, taiga, broad-leaved forests, dry and wet subtropics, steppes, and deserts. It should be noted that myxomycete studies of these biomes in Russia are still restricted to a limited number of sites (Novozhilov 2005). However, many new data on species diversity, biogeography, and ecology of myxomycetes have been published in recent years. These studies are based on the herbarium collections of myxomycete fruiting bodies (sporocarps) collected over decades in the field and/or obtained using the moist chamber culture technique, as well as on data from metagenomic analyses, a method that has lately been used to reveal the hidden diversity of myxomycetes (Shchepin et al. 2017, 2019a,b).

Our study aims to analyze the myxomycete distribution in Russia based on all available bibliographic sources and compile an exhaustive list of species found in each region accompanied by a reference base of the sources used.

We did not aim to perform a full critical revision of all available literature sources on myxomycete biodiversity, since it would demand additional efforts. This list was compiled to aid scientists in searching for the required bibliographic sources, as well as to save some lesser-known works from “scientific oblivion”. We also urge all researchers to refer to the indicated primary sources in order to avoid spreading possible mistakes that are almost inevitable in large biodiversity reviews like this.

Myxomycete studies in Russia

The earliest mention of myxomycetes in the territory of modern Russia might probably belong to the German botanist, Johannes Loeselius. His works considering plants of Prussia, which part has become the Kaliningrad region, included a brief description on the taxon *Fungus non vescus* XXXI

(Loeselius 1654, 1703), that might have actually been *Lycogala epidendrum* (Rostafiński 1874).

The first report of myxomycete collection in the territory of modern Russia in 18th century was made by Johann Christian Buxbaum (head of the Apothecary Garden in St. Petersburg), who worked at the Russian Academy of Sciences in 1721–1729 and provided the first fairly accurate description of the St. Petersburg Governorate flora. His work (Buxbaum 1740) included an illustration of *Lycoperdon sanguineum sphaericum* (*Lycogala epidendrum* (L.) Fr.), although the location was not indicated for this specimen. The next mention of myxomycetes was discovered in the manuscript of Stepan Krasheninnikov *Flora ingrica*, which was edited and published in 1761 by David de Gorter. In this publication, he noted two species: *Mucor embolus* L. (presumably a species of *Arcyria* or *Stemonitis*) and *Lycoperdon epidendrum* L. (*Lycogala epidendrum* (L.) Fr.), collected in the vicinity of St. Petersburg (Gorter 1761). In 1799, the Russian botanist Grigory Fedorovich Sobolewski published *Flora Petropolitana*, where he reported 13 myxomycete species for the Petersburg Governorate, although it is impossible to provide reliable modern synonyms for six of these species (Sobolewski 1799, 1802; the second publication includes the same material, but in Russian). There are only a few reports of myxomycetes in 18th-century floristic publications (Pallas 1771, 1773, 1788, 1794; Falk 1786; Georgi 1790, 1800; Stephan 1792). These studies can be referred to as a starting point for the study of myxomycete diversity in Russia.

In the 19th and early 20th centuries, at least 30 publications included data on myxomycetes. These studies covered the vicinity of Moscow (Martius 1817; Bucholtz 1897; Heyden 1899; Hennings 1903, 1904, 1906; Dokturovskiy 1905; Mosolov 1906) and St. Petersburg (Weinmann 1836; Rosanoff 1868; Rostafiński 1874, 1875; Grimm 1896), as well as Smolensk (Jaczewski 1893, 1895), Kaluga (Rostafinski 1874), Chernigov¹ (Borščow 1869), Novgorod (Tranzschel 1901), Ufa (Schell 1883) and Kazan Governorates (Shiliakow 1889), North Caucasus (Hollós 1902, 1905; Filarszky 1907), Samland (now a part of the Kaliningrad region) (Hennings 1895), Eastern Lapland (Karsten 1882), Crimea (Léveillé 1842), Si-

¹ Chernigov Governorate included a large section of the modern Bryansk region

beria (Thümen 1878, 1880a,b, 1881; Saccardo 1880), and Transbaikalia (Karsten 1906).

In 1907, Arthur Arthurovich Jaczewski published the first monograph in Russian devoted exclusively to slime molds (Jaczewski 1907). In this work, he compiled the results of previous researchers and provided a list of more than 100 species of slime molds with identification keys. Additionally, a large section of this monograph focused on various aspects of slime mold biology. This substantial publication remained the most important and, in fact, the only comprehensive source of data on myxomycetes in Russia for 86 years, until 1993.

Before the 1980s, fewer than 20 studies were published that included information on the diversity of myxomycetes. These publications addressed the myxomycete biota of the Northern European Russia (Lebedeva 1933), the former territories of Finland, that are now part of the Leningrad and Murmansk regions (Hintikka 1919), the territories of modern Nizhny Novgorod region (Murashkinskiy 1911; Jawronkowa 1914), the Kursk and the Belgorod regions (Benike 1915), Siberia (Lavrov 1927, 1929, 1931; Killermann 1943; Beglianova & Kattsyna 1973; Petrenko 1978; Eliasson & Lundqvist 1979), Kamchatka (Tranzschel 1914), and the southern Far East (Naoumoff 1914; Bunkina & Koval 1967; Bunkina 1978).

The first annual myxomycete surveys in Russia took place during student summer field courses at the Zvenigorod Biological Station of the Lomonosov Moscow State University. There T.P. Sizova began research on the myxomycete species composition of the Moscow region in the 1960s. Later, in the 1990s, such studies were conducted under the guidance of T.N. Barsukova, and since 2010 VI. Gmoshinskiy has been doing the research (Abramov et al. 2014; Adashev et al. 2014; Barsukova & Dunayev 1997; Barsukova et al. 2012; Belyaeva et al. 2017; Gerasimovich et al. 2014; Gluhareva et al. 2017; Sizova et al. 1983; Sizova & Titova 1985; etc.).

Starting from 1980, myxomycetes in different regions of the RSFSR (republic of the USSR, that currently comprises the most part of Russia) have been studied at the Komarov Botanical Institute of the Russian Academy of Sciences (Novozhilov 1980a,b, 1981a,b, 1984, 1985a,b, 1986a,b,c, 1987, 1988; Novozhilov & Krussanova 1989). As a result, based on the extensive collections and the compilation of

bibliographic sources, Yu.K. Novozhilov published an identification key for myxomycetes of Russia (Novozhilov 1993). This monograph remains thus far the main guide to myxomycete identification in Russia. The identification key contains information on 232 species, which only amounts to approximately 50% of the total number of species currently known in Russia. Additionally, the moist chamber culture technique (Novozhilov et al. 2000) has become a common technique of myxomycete species diversity studies. These studies and publications have stimulated interest in the field of myxomycete research in Russia. As a result, eight Ph.D. dissertations on myxomycete biodiversity were written within the last two decades.

A scientific community of researchers studying taxonomy, ecology, phylogeny, and biogeography of myxomycetes has formed in different regions of Russia. The researchers currently involved in the study of the myxomycete diversity in Russia are Yu.K. Novozhilov, O.N. Shchepin, I.S. Prikhodko, and N.A. Fedorova (St. Petersburg); M. Schnittler (Greifswald, Germany); V.I. Gmoshinskiy, A.V. Matveev, F.M. Bortnikov, N.I. Borzov, E.S. Gubanov, and A.A. Soldatenkova (Moscow); I.V. Zemlyanskaya (Volgograd); A.V. Vlasenko and V.A. Vlasenko (Novosibirsk); A.A. Shirokikh (Kirov); A.N. Lebedev (Tver); G.M. Melkumov (Voronezh); A.D. Luptakova and E.S. Korchikov (Samara); and V.N. Botyakov (Krasnodar territory). Most researchers actively collaborate and participate in joint projects throughout the country.

Collections of myxomycetes in Russia

Herbarium collections serve as one of the main tools for taxonomic, environmental, floristic, or faunistic work (Carine et al. 2018). In recent years characterized by rapid, often dramatic environmental and biodiversity changes, proper biological collections have become particularly valuable.

Traditionally, the main purpose of herbaria was to obtain data on the morphology and distribution of the deposited species, as well as to provide a retrospective view on the biodiversity of different regions. Herbaria also made it possible to restudy the

stored collections in order to increase the objectivity and therefore the value of the previously obtained results. At present, herbarium collections have increased in importance since they are essential sources of reference specimens of morphological species. Reference specimens are used to create libraries of marker gene sequences as a precondition for DNA barcoding (Schnittler et al. 2017).

Current estimates suggest there are at least 13 myxomycete collections in Russia. Most of them are stored in various institutions, although there are a number of private collections. At the present moment, there are 25 type specimens including 16 holotypes (13 of them are stored in LE and 6 of them – in NSK) (see Table 1). There is a lack of information on location and condition of *Trichia brevicapillata* Sizova, Titova & Darakov type specimens, that have been described in the Moscow region, and 10 taxa described by N.N. Lavrov from the vicinity of Tomsk.

In all major Russian collections myxomycete specimens are mainly stored in match boxes or occasionally in envelopes. They are situated on shelves and in herbarium cabinets in dry places without any specific conditions. In order to prevent damaging by insects some specimens undergo the procedure of preliminary freezing; in LE many specimens are isolated into individual plastic zip-lock bags to prevent the spread of insects and cross-contamination. Part of the specimens kept in the LEP herbarium have been treated with mercuric chloride.

As it was mentioned above, interest in the study of myxomycetes in Russia has grown considerably over the past 30 years, which led to the appearance of new collections in different parts of the country. The following data were obtained from a survey of collection curators. It is possible that some collections were missed during the compilation of the list.

In order to study specimens from any collection, one should contact curators of herbaria and discuss each separate inquiry.

Myxomycete collection at the Mycological Herbarium of Komarov Botanical Institute, St. Petersburg (LE)

Year of establishment: 1898. Estimated volume (specimens / different morphospecies): 30000/>300. Main regions: Belgorod, Irkutsk, Kursk, Lenin-

grad, Moscow, Murmansk, Novosibirsk, Orenburg, Pskov, Sverdlovsk, Tver, Volgograd, and Voronezh regions; republics of Adygea, Crimea, Kalmykia, Karachay-Cherkessia, Karelia, and North Ossetia–Alania; Altai, Kamchatka, Krasnoyarsk, Primorye, and Trans-Baikal territory; Chukotka autonomous area. Curator of the herbarium: Olga Viktorovna Morozova (OMorozova@binran.ru), curator of the myxomycete collection: Yuri Kapitonovich Novozhilov (yurinovozhilov@gmail.com). Link and references: <https://www.binran.ru/collections/>, Novozhilov 1983, 2007–2020. Major contributions to the collection were made by D.A. Erastova, V.I. Gmoshinsky, A.A. Jaczewski, A.P. Kosheleva, Yu.A. Morozova, Yu.K. Novozhilov, I.S. Prikhodko, N.A. Fedorova, M. Schnittler, O.N. Shchepin, A.V. Vlasenko, I.V. Zemlyanskaya and others.

Myxomycete collection at the Department of Mycology and Algology, Lomonosov Moscow State University (MYX)

Year of establishment: 2009. Estimated volume (specimens / different morphospecies): 16000/300. Main regions: Moscow, Samara, Tver, and Vladimir regions. Extensive collections represent Southern (Republic of Dagestan, Krasnodar territory) and Northern (Republic of Karelia, Murmansk region) Russia. Particularly valuable specimens were collected from the Russian Far East (Primorye territory). Curator: Vladimir Ivanovich Gmoshinsky (rubisco@list.ru). Link and references: <https://micro.depo.msu.ru>, Gmoshinsky & Matveev 2017; Gmoshinsky et al. 2011, 2018a. Major contributions to the collection were made by M.F. Akimova, A.V. Alexandrova, E.I. Andronova, T.N. Barsukova, F.M. Bortnikov, V.N. Botyakov, N.Yu. Buchtoyarova, E.N. Vinogradskaya, V.I. Gmoshinsky, E.S. Gubanov, N.I. Kireeva, A.D. Luptakova, A.V. Matveev, A.A. Mishulin, V.P. Prokhorov, T.P. Sizova, A.A. Soldatenkova.

Myxomycete collection of K.A. Fefelov, donated to the Museum of the Institute of Plant and Animal Ecology, the Ural Branch of the Russian Academy of Sciences

Year of establishment: 1999. Estimated volume (specimens): 8364. Main regions: Astrakhan, Che-

Table 1. List of type specimens that are stored in Russian collections.

Species	Voucher	Status	Notes
<i>Comatricha spinispora</i> Novozh. & D.W. Mitch.	LE 286575	Holotype	
<i>Cribaria bicolor</i> S. L. Stephenson, Novozh. & P. Wellman	LE 317311	Isotype	
<i>Dianema mongolicum</i> Novozh.	LE 46251	Holotype	There are two intact plasmodiocarps left.
<i>Diderma cattiene</i> Novozh. & D.W. Mitch.	LE 286673	Holotype	
<i>Diderma dalatense</i> Novozh., Prikhodko & Shchepin	LE 317550	Holotype	
<i>Diderma pseudotestaceum</i> Novozh. & D.W. Mitch.	LE 291396	Holotype	
<i>Diderma velutinum</i> Bortnikov	LE 318752	Holotype	
<i>Diderma velutinum</i> Bortnikov	MYX 8240	Isotype	
<i>Diderma velutinum</i> Bortnikov	LE 318753	Paratype	
<i>Didymium reticulosporum</i> Novozh. & Zemly.	LE 220327	Holotype	There was the wrong specimen number given in the publication (Novozhilov & Zemlianskaya, 2006); it should be LE220327 instead of LE204007.
<i>Didymium reticulosporum</i> Novozh. & Zemly.	LE 253367	Paratype	
<i>Didymium reticulosporum</i> Novozh. & Zemly.	LE 253362	Paratype	
<i>Echinostelium microsporum</i> A. Vlasenko	NSK 1026149	Holotype	
<i>Echinostelium microsporum</i> A. Vlasenko	NSK 1026127	Paratype	
<i>Echinostelium novozhilovii</i> A. Vlasenko	NSK 1026069	Holotype	
<i>Macbrideola vesiculifera</i> Novozh.	LE 46028	Holotype	
<i>Perichaena heterospinispore</i> Novozh., Zemly., Schnittler & S. L. Stephenson	LE 253366	Holotype	
<i>Perichaena polygonospora</i> Novozh., Zemly., Schnittler & S. L. Stephenson	LE 253364	Holotype	
<i>Perichaena taimyriensis</i> Novozh. & Schnittler	LE 204007	Holotype	
<i>Physarum australiense</i> S. L. Stephenson, Novozh. & Prikhodko	LE 327851	Holotype	
<i>Stemonitis pseudoflavogenita</i> A. Vlasenko & Novozh.	NSK 1026501	Holotype	
<i>Stemonitis pseudoflavogenita</i> A. Vlasenko & Novozh.	LE 319201	Isotype	
<i>Stemonitis pseudoflavogenita</i> A. Vlasenko & Novozh.	NSK 1026481	Paratype	
<i>Stemonitis pseudoflavogenita</i> A. Vlasenko & Novozh.	NSK 1026499	Paratype	
<i>Trichioides iridescent</i> Novozh., Hooff & Jagers	LE 266526	Holotype	

Iyabinsk, Kaliningrad, Kirov, Kurgan, Novosibirsk, Orenburg, Perm, Pskov, Sakhalin, Sverdlovsk, Tyumen, and Volgograd regions; Altai, Kamchatka, Khabarovsk, Krasnodar, and Primorye territories; republics of Altai, Bashkortostan, Buryatia, Crimea, Kabardino-Balkaria, Komi, North Ossetia – Alania; Chukotka autonomous area. Curator: Aleksandr Anatolievich Vorobyov (eng@ipae.uran.ru). Note: K.A. Fefelov personally donated his collection to the museum in 2016 and 2017; it was designated as a separate “author’s collection”.

**Personal collection of
I.V. Zemlyanskaya
(Volgograd)**

Year of establishment: 1999. Estimated volume (specimens): 6000. Main regions: Republic of Tatarstan; Astrakhan, Moscow, Samara, Tula, and Volgograd regions. Curator: Inna Vladimirovna Zemlyanskaya (ignis@list.ru). Notes: most specimens collected by I.V. Zemlyanskaya are stored in the Myxomycetes Collection at the V.L. Komarov Botanical Institute (LE); however, some specimens, which are labeled but not identified, remain in the personal collection. Nevertheless, data on the specimens are included in the general database with unique collection numbers. After identification, the materials are transferred to the Botanical Institute of the Russian Academy of Sciences for permanent storage.

**Myxomycete collection
of the Central
Siberian Botanical
Garden Herbarium (NSK)**

Year of establishment: 2007. Estimated volume (specimens / different morphospecies): 4000/210. Main regions: Khanty-Mansi autonomous area; Novosibirsk, Omsk, Tomsk, and Yaroslavl regions; Altai, Buryatia, Sakha, and Tyva republics; Altai, Krasnodar, and Trans-Baikal territories. Curator: Anastasia Vladimirovna Vlasenko (anastasiamix81@mail.ru). Link: https://csbg-nsk.ru/unu_herbarium. Note: in addition to personal collections of A.V. Vlasenko and V.A. Vlasenko, it includes N.N. Lavrov’s material (1916–1930) from the Tomsk Governorate.

**Fungarium of All-Russian Institute of
Plant Protection (LEP)**

Year of establishment: 1891. Estimated volume (specimens / different morphospecies): 2000/>150. Curator: Maria Mikhailovna Gomzhina (gomzhina91@mail.ru). Reference: Berestetskaya et al. 2012. Note: the collection is currently undergoing a critical revision.

**Myxomycete collection of the Young
Naturalists Club of Zoological Museum of
Lomonosov Moscow State University**

Year of establishment: 1992. Estimated volume (specimens / different morphospecies): 1700/140. Main regions: Moscow, Tver, and Tyumen regions. Contains a significant number of specimens from Irkutsk, Murmansk, and Ryazan regions, as well as Primorye territory. Curators: Evgeny Anatolievich Dunayev (dunayeve@mail.ru), Vladimir Ivanovich Gmoshinskiy (rubisco@list.ru). References: Dunayev & Barsukova 2002; Gmoshinskiy et al. 2018, 2020; Gmoshinskiy & Matveev 2018. Major contributions to the collection were made by O.M. Germant, N.N. Kotelenets, E.A. Dunayev, T.N. Barsukova, V.I. Gmoshinskiy.

**Myxomycete collection of the Department
of Ecology, Botany and Nature Protection,
Faculty of Biology, Samara University**

Year of establishment: 2012. Estimated volume (specimens / different morphospecies): 700/100. Main regions: Samara and Orenburg regions. Curators: Evgeny Sergeevich Korchikov (evkor@inbox.ru) and Anna Dmitrievna Luptakova (annaloseva3545@gmail.com).

**Myxomycete collection of the herbarium of
the Botanical Garden of Tver State University
(TVBG)**

Years of establishment: 1965–1967. Estimated volume (specimens / different morphospecies): 600/141. Main regions: Moscow, Pskov, and Tver regions. Curator: Aleksandr Nikolaevich Lebedev (rumat@inbox.ru). Link: garden.tversu.ru.

Table 2. List of federal subjects of the Russian Federation and number of the reported myxomycete species and related publications.

Federal subject		Number of species	Period of study	Total number of publications / journal articles
Code	Name			
AD	Republic of Adygeya	2	2002–2005	2/1
AL	Republic of Altai	165	1929–2020	15/12
ALT	Altai territory	170	1931–2020	21/15
AMU	Amur region	1	1907	1/0
ARK	Arkhangelsk region	8	1933–2002	2/2
AST	Astrakhan region	104	1907–2020	19/10
BA	Republic of Bashkortostan	105	1883–2010	6/2
BEL	Belgorod region	5	1915	1/1
BRY	Bryansk region	28	1869–2015	5/1
BU	Republic of Buryatia	27	1993–2017	4/3
CE	Chechen Republic	3	1902–2005	5/2
CHE	Chelyabinsk region	81	1907–2009	5/2
CHU	Chukotka autonomous area	50	1986–2005	7/5
CR	Sevastopol and Republic of Crimea	145	1842–2020	21/16
CU	Chuvash Republic	2	1907	1/0
DA	Republic of Dagestan	33	1902–2017	4/3
IN	Republic of Ingushetia	–	–	–
IRK	Irkutsk region	34	1979–2020	4/3
IVA	Ivanovo region	1	2005	1/0
KAM	Kamchatka territory	41	1914–2017	4/0
KB	Kabardino-Balkarian Republic	1	1907	1/0
KC	Karachay-Cherkess Republic	48	1902–2016	17/10
KDA	Krasnodar territory	105	1907–2020	13/8
KEM	Kemerovo region	1	1943	1/1
KGD	Kaliningrad region	6	1895	1/1
KGN	Kurgan region	2	1907–2002	2/1
KHA	Khabarovsk territory	44	2005–2020	3/2
KHM	Khanty-Mansi autonomous area – Yugra	87	1999–2019	7/3
KIR	Kirov region	62	2009–2019	18/2
KK	Republic of Khakassia	10	1878–1881	5/5
KL	Republic of Kalmykia	26	2003–2014	7/4
KLU	Kaluga region	41	1874–2020	5/3
KO	Komi Republic	114	2002–2019	5/2
KOS	Kostroma region	9	1907–2005	2/0
KR	Republic of Karelia	149	1882–2020	17/13
KRS	Kursk region	59	1907–2014	8/5
KYA	Krasnoyarsk territory	152	1878–2014	29/16
LEN	St. Petersburg and Leningrad region	193	1761–2019	34/18

LIP	Lipetsk region	67	1907–2005	3/0
MAG	Magadan region	49	2000–2019	3/1
ME	Republic of Mari El	2	1907	1/0
MO	Republic of Mordovia	1	1907	1/0
MOS	Moscow and Moscow region	252 (229*)	1792–2020	33/18
MUR	Murmansk region	110	1882–2020	18/13
NEN	Nenets autonomous area	–	–	–
NGR	Novgorod region	11	1907–2005	2/0
NIZ	Nizhny Novgorod region	15	1771–2005	8/1
NVS	Novosibirsk region	138	2001–2020	19/14
OMS	Omsk region	–	–	–
ORE	Orenburg region	50	1907–2009	5/1
ORL	Oryol region	14	2005–2019	2/0
PER	Perm territory	74	2005	2/0
PNZ	Penza region	2	1907–2005	2/0
PRI	Primorye territory	189	1914–2020	12/10
PSK	Pskov region	78	1907–2020	8/4
ROS	Rostov region	72	1907–2014	7/3
RYA	Ryazan region	48	1907–2020	5/2
SA	Republic of Sakha (Yakutia)	26	1978–2019	5/1
SAK	Sakhalin region	14	2005–2015	2/1
SAM	Samara region	44 (43*)	1907–2019	6/0
SAR	Saratov region	11	1907–2005	2/0
SE	Republic of North Ossetia – Alania	5	2002–2005	2/1
SMO	Smolensk region	77	1893–2005	4/2
STA	Stavropol territory	27	1902–2014	7/3
SVE	Sverdlovsk region	195	1907–2014	25/7
TA	Republic of Tatarstan	45	1889–2005	3/1
TAM	Tambov region	2	1907–2005	2/0
TOM	Tomsk region	65	1927–2005	7/3
TUL	Tula region	–	–	–
TVE	Tver region	207	1901–2020	26/12
TY	Republic of Tuva	15	2020	1/0
TYU	Tyumen region	84	1907–2020	4/2
UD	Udmurtian Republic	–	–	–
ULY	Ulyanovsk region	5	1907–2005	2/0
VGG	Volgograd region	173	1907–2018	35/15
VLA	Vladimir region	40	1997–2020	6/3
VLG	Vologda region	6	1907–2005	2/0
VOR	Voronezh region	67	1907–2018	12/5
YAN	Yamal-Nenets autonomous area	38	1998–2005	6/3
YAR	Yaroslavl region	8	1907–2020	5/3
YEV	Jewish autonomous region	–	–	–
ZAB	Trans-Baikal territory	27	1906–2019	5/3

* Number of species without doubtful records (marked with ^{DR} in the annotated species list).

Myxomycete collection of the Club of Young Nature Researchers, Faculty of Biology, Lomonosov Moscow State University

Year of establishment: 2005. Estimated volume (specimens / different morphospecies): 350/50. Main regions: Kirov and Moscow regions; republics of Buryatia, Mordovia, and Tyva; Primorye territory. Curator: Anna Sergeevna Khizhnyakova (zbs_school@mail.ru). Major contributions to the collection were made by the students of the Club of Young Nature Researchers and by A.S. Khizhnyakova.

Myxomycete collection of the Kozo-Polyansky Herbarium of Voronezh State University (VOR)

Year of establishment: 2017. Estimated volume (specimens / different morphospecies): 150/>50. Main regions: Bryansk, Lipetsk, Moscow, Oryol, Ryazan and Voronezh regions. Curator: Gavriil Mikhailovich Melkumov (agaricbim86@mail.ru). Link: <http://herbarium.bio.vsu.ru>.

Myxomycete collection of the N.V. Rudnitsky Federal Agrarian Scientific Center of the North-East

Year of establishment: 2016. Estimated volume (specimens / different morphospecies): 45/40. Main region: Kirov region. Curator: Alexandr Anatolievich Shirokikh (aleshirokikh@yandex.ru).

Myxomycete collection of the Herbarium of Federal Scientific Center of the East Asia Terrestrial Biodiversity, Far Eastern Branch of the Russian Academy of Sciences (VLA)

The authors reported (Bunkina & Koval 1967) that the specimens they examined were stored in the Laboratory of Sporophytes, Biological Institute of the Far Eastern Branch, Siberian Department of the USSR Academy of Sciences (VLA). However, the fate of the collection is currently unknown.

Annotated list of species

To compile the following annotated list of myxomycetes in Russia, we used 321 literature sources published from 1761 to 2020, among them 164 journal articles, 84 conference reports, 28 book sections, 25 books, 12 dissertations, 5 student works, and 3 nature reserves annual reports. Most of these works (215) were published in Russian; 66 in English, 17 in German (4 of these in German and Latin), 8 in Latin, 8 in French, 4 in Ukrainian, 2 in Polish, and 1 in Hungarian. Our database contains more than 14 600 records in “publication-region-species” format.

Myxomycete species names are given in accordance with Lado (2005–2020). In addition, we tend to regard *Trichia ovalispora* Hollós as a possible synonym of *T. varia* (Pers. ex J.F. Gmel.) and not as a synonym *T. contorta* (Ditmar) Rostaf. Pers. based on the author’s drawing cited in Filarszky (1907).

The regions where a species was found (see **Table 2** for the region abbreviations) and the numbers of studies that include reports of the species in this region are provided after the species name. Besides, we incorporated the cities of federal significance (Moscow, Saint Petersburg, and Sevastopol) as parts of the corresponding federal subjects: Moscow and Leningrad regions, and the Republic of Crimea, respectively.

Some older studies refer to outdated administrative units, like governorates. In such cases, we have given all modern regions that include the territories of obsolete regions as possible locations of recorded species occurrence. For example, for a species recorded from the Pskov Governorate without giving a specific location, we have cited Pskov, Novgorod, and Tver regions as the respective areas. Entries containing such controversial findings that cannot be assigned to a modern administrative unit with certainty are marked with ^{oau} in superscript. Entries of species, that caused some doubts during primary identification, are marked with the corresponding superscripts: ^{cf}, ^{aff}, ^{agg}. There are questions (Gmoshinskiy 2013, Luptakova 2019) about the accuracy of some reports considering a few species in Moscow and Samara regions. Such species records are marked with ^{dr} (dubious record). The annotated list also uses the superscripts ^{ig} (imprecise georeferencing) and ^{ds} (doubtful synonymy).

Amaurochaete atra (Alb. & Schwein.) Rostaf. – BRY: 16, 101^{OAU}; CR: 148; KR: 130; LEN: 101, 182, 183, 195, 198, 212, 237, 323; MOS: 7, 66; SMO: 99, 100, 101, 198; STA: 198; SVE: 40, 41, 48, 50, 198, 201, 212; TVE: 84; VGG: 198, 220, 223, 284, 328; VLA: 173.

Amaurochaete tubulina (Alb. & Schwein.) T.Macbr. – BU: 198; KHM: 47, 58; KIR: 108, 265; MOS: 6, 66, 198, 278; TYU: 198^{IG}.

Arcyodes incarnata (Alb. & Schwein.) O.F.Cook – AL: 134, 215; ALT: 301, 308, 317; CHE: 50, 198; CHU: 196, 198, 210, 212, 290; KHA: 84; KO: 50, 198; KYA: 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; LEN: 89, 101, 183, 195, 198, 199, 212, 237; MOS: 7, 9, 66, 70, 84, 164, 198; MUR: 196, 198, 205, 210, 212, 290; NGR: 101^{OAU}; PRI: 21; PSK: 101^{OAU}; ROS: 198, 220, 223; SVE: 50, 51, 198; TA: 101, 262; TOM: 132, 198; TVE: 19, 76, 136, 141, 198, 204; VGG: 157, 198, 212, 220, 223, 328, 336.

Arcyria affinis Rostaf. – ALT: 301, 308; AST: 198, 220, 223, 327, 328, 333; BA: 50, 198; CR: 84, 244; DA: 162; KDA: 68, 84; MOS: 1, 7, 11, 63, 64, 66, 70, 84, 164, 198; MUR: 84; PRI: 69, 74, 84, 218; PSK: 73; SVE: 49, 50, 198; TVE: 19, 76, 84, 136, 141, 198; TYU: 84; VLA: 173.

Arcyria cinerea (Bull.) Pers. – AL: 3, 134, 191, 214, 215; ALT: 215, 299, 301, 302, 306, 308, 310^{IG}, 315, 316, 317; AST: 213, 220, 221, 222, 223, 327, 328, 333; BA: 46, 50, 54; BRY: 101^{OAU}; CHE: 50, 53; CHU: 196, 198, 210, 212, 290; CR: 30, 192, 241, 242, 243, 244; IRK: 84; KDA: 68, 78, 192, 198; KHM: 47, 52, 58; KIR: 14, 108, 263, 264, 265, 268, 272, 274, 275, 276, 291; KLU: 101; KO: 50, 270; KR: 130, 212, 254; KRS: 5, 185; KYA: 103, 116, 118, 120, 121, 122, 123, 124, 129, 196, 198, 210, 211, 212, 290; LEN: 89, 101, 161, 180, 182, 183, 195, 199, 212, 237, 323; LIP: 252; MAG: 290; MOS: 1, 4, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 101, 159, 160, 164, 278; MUR: 65, 84, 196, 205, 210, 212, 290; NVS: 301, 308, 310^{IG}; ORE: 50, 53, 202; ORL: 168; PER: 50; PRI: 21, 22, 69, 74, 84, 198, 218; PSK: 73; ROS: 147, 220, 223, 335; SA: 288; SAK: 198; SAM: 153, 156; SMO: 99, 100, 101^{OAU}; STA: 101; SVE: 40, 41, 42, 44, 45, 46, 49, 50, 51, 53, 201, 212, 236; TA: 101, 262; TOM: 132; TVE: 19, 76, 84, 101^{OAU}, 136, 141, 142, 165, 166, 179, 180, 182, 204; TY: 304; TYU: 84; VGG: 110, 157, 212, 220, 223, 281, 283, 284, 285, 328, 332, 336, 338; VLA: 173; VOR: 167, 170, 171, 192, 248; YAN: 50, 196, 198, 210, 212, 290.

Arcyria denudata (L.) Wettst. – AD: 198; AL: 3, 134, 191, 215; ALT: 299, 301, 302, 306, 308; AMU: 101; AST: 198, 220, 223, 327, 328, 333; BA: 50, 198; BRY: 16, 101^{OAU}, 111, 198; BU: 198; CHE: 50, 198; CR: 30, 243, 244; KAM: 251; KDA: 101, 192, 198; KHA: 198; KIR: 263, 264, 265, 268, 272, 276, 277, 291; KK: 293^{IG}; KLU: 101, 198; KOS: 101, 198; KR: 198, 212, 254; KRS: 5, 101, 185, 198; KYA: 10, 101, 120, 122, 123, 124, 196, 198, 210, 211, 212, 290, 293^{IG}; LEN: 89, 101, 180, 182, 183, 195, 198, 199, 212, 237, 323; LIP: 198, 252; MOS: 1, 4, 6, 7, 8, 9, 11, 18, 63, 66, 70, 84, 92, 93, 94, 101, 158, 164, 175, 198, 278; NIZ: 101, 176, 198; NVS: 301, 308; PER: 50; PRI: 21, 69, 74, 84, 198, 218; PSK: 73, 101, 140, 198; ROS: 101, 147, 335; RYA: 84, 125, 198, 321; SAM: 101, 154, 156, 198; SAR: 198; SMO: 99, 100, 101, 198; STA: 101; SVE: 42, 49, 50, 51, 198, 201, 212; TA: 101, 198, 262; TOM: 132, 198; TVE: 19, 76, 84, 101, 136, 141, 142, 180, 182, 198, 204; TYU: 84; ULY: 101, 198; VGG: 101, 110, 157, 198, 212, 220, 223, 281, 284, 328, 332, 336, 338; VLG: 101, 198; VOR: 171, 248; YAR: 101.

Arcyria ferruginea Saut. – AL: 134; ALT: 301, 307, 308; DA: 162; KO: 50, 198; KR: 130, 198, 212, 240, 254; KYA: 10; LEN: 101, 183, 195, 198, 212, 237, 247; MOS: 6, 7, 9, 66, 70, 84, 198, 278; NVS: 301, 308; PER: 50; PRI: 21, 22, 74; PSK: 140; SMO: 101, 198; SVE: 49, 50, 198, 201, 212, 236; TVE: 19, 76, 136, 198, 204.

Arcyria glauca Lister – MOS^{DR}: 6, 7, 198; TVE: 79, 80, 136, 282.

Arcyria globosa Schwein. – CR: 243; LEN: 89, 101, 183, 198; LIP: 198, 252; MOS^{DR}: 6, 7, 179, 198; NGR: 101; ORL: 168; PSK: 101; TVE: 136, 142, 179, 198, 204; VOR: 167.

Arcyria helvetica (Meyl.) H.Neubert, Nowotny & K.Baumann – AL: 215; ALT: 215, 307, 316; BA: 50, 54, 198; CR: 84; KHM: 52, 58; KO: 50, 198; KYA: 122, 124; MOS: 84; NVS: 301, 308; PRI: 218; SVE: 50, 198, 201, 212, 236; TVE: 19, 76.

Arcyria imperialis (G.Lister) Q.Wang & Yu Li – ALT: 215, 301, 307, 308, 316; BA: 54; IRK: 84; MOS: 84; NVS: 301, 307, 308; PRI: 84, 218.

Arcyria incarnata (Pers. ex J.F.Gmel.) Pers. – AL: 3,

134, 214, 215; ALT: 215, 301, 308, 316; AST: 220, 223, 327, 328, 333; BA: 50, 54; BRY: 101^{OAU}, 111; CHE: 50; CHU: 196, 198, 210, 212, 290; CR: 30, 101, 192, 242, 243, 244; DA: 162; IRK: 84; KDA: 68, 78, 198; KHM: 47, 52, 58, 196; KIR: 268, 276, 277; KK: 295^{IG}; KLU: 101; KO: 50; KR: 130, 212, 240, 254; KRS: 5, 185; KYA: 10, 101, 120, 122, 123, 124, 196, 198, 210, 211, 212, 290, 295^{IG}; LEN: 89, 96, 101, 180, 182, 183, 195, 199, 212, 237, 323; LIP: 252; MAG: 290; MOS: 1, 4, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 101, 164, 278; MUR: 84; NIZ: 227^{DS}, 228^{DS}, 229^{DS}, 230^{DS}; NVS: 301, 308; ORE: 50; ORL: 168; PER: 50; PRI: 21, 74, 198, 203, 218; PSK: 73, 140; ROS: 101, 147, 220, 223; RYA: 84, 125, 321; SAM: 153, 154; SMO: 101^{OAU}; STA: 101; SVE: 40, 41, 42, 44, 45, 49, 50, 51, 201, 212, 236; TA: 101, 262; TOM: 114, 115, 132; TVE: 6, 19, 76, 84, 101^{OAU}, 135, 136, 139, 141, 142, 166, 180, 182, 204, 296; TYU: 84; VGG: 157, 212, 220, 223, 281, 284, 285, 328, 336, 338; VOR: 248; YAN: 50, 196, 210, 212, 290.

Arcyria insignis Kalchbr. & Cooke – AL: 3, 214, 215; ALT: 301, 308; BA: 50; CR: 244; KDA: 78^{CF}, 192; KO: 50; KRS: 5; KYA: 120, 122, 123, 124; LEN: 195, 212, 237; MOS: 2, 4, 6, 7, 9, 11, 64, 66, 70, 164, 179, 278; MUR: 67; NVS: 301, 308; RYA: 125, 321; SVE: 50, 201, 212, 236; TOM: 114, 115, 117, 132; TVE: 19, 76, 136, 141^{CF}, 204; VGG: 127, 157, 212, 220, 223, 328, 337.

Arcyria magna Rex – KR: 198, 212, 240, 254; MOS: 66, 70; PRI: 74^{CF}; TVE: 19, 141.

Arcyria major (G.Lister) Ing – ALT: 301, 308; CR: 241; KO: 50, 198.

Arcyria marginoundulata Nann.-Bremek. & Y.Yamam. – PRI: 218.

Arcyria minuta Buchet – AL: 215; ALT: 215, 301, 308, 310^{IG}, 315, 316, 317; AST: 198, 213, 220, 221, 222, 223, 328; BA: 50, 198; CR: 244; DA: 162; KDA: 90; KL: 198, 328; KLU: 8; KO: 50, 198; LEN: 182, 183, 195, 237; MOS: 1, 7, 9, 11, 63, 66, 70, 164; NVS: 301, 308, 310^{IG}; ORE: 198; PRI: 218; SAM: 153, 154; SVE: 50, 198, 236; TVE: 79, 136, 165, 166, 182, 198, 204, 282; VGG: 110, 157, 198, 220, 223, 328, 332, 336, 338.

Arcyria obvelata (Oeder) Onsberg – AL: 3, 134, 191, 215; ALT: 215, 299, 301, 302, 306, 308, 316; AST: 198,

220, 223, 327, 328, 333; BA: 50, 198; BEL: 12; BRY: 101^{OAU}; CHE: 50, 198; CR: 30, 84, 144, 243, 244; DA: 57, 97, 98, 162; KAM: 251; KC: 57, 97, 98; KDA: 68; KHM: 47, 52, 58; KIR: 265, 268; KLU: 101^{OAU}; KO: 50, 198; KR: 84, 143, 198, 212, 240, 254; KRS: 5, 185; KYA: 10, 122, 124, 196, 198, 210, 211, 212, 290; LEN: 89, 96, 101, 180, 182, 183, 195, 198, 199, 212, 237; LIP: 198, 252; MAG: 198; MOS: 1, 4, 6, 7, 8, 9, 11, 18, 63, 64, 66, 70, 84, 92, 94, 101, 164, 175, 179, 198, 278; MUR: 65, 67, 84, 96, 104, 196, 198, 205, 210, 212, 290; NIZ: 176; ORL: 168; PER: 50; PRI: 21, 22; PSK: 73, 84; ROS: 147, 198, 223, 335; RYA: 84, 125, 321; SAM: 153, 156; SMO: 101^{OAU}, 198; SVE: 40, 41, 43, 45, 50, 51, 198, 201, 212, 234, 236; TA: 101, 198, 262; TOM: 117, 132, 198; TVE: 19, 76, 84, 101^{OAU}, 136, 141, 142, 179, 180, 182, 198, 204; TYU: 84, 198^{IG}; VGG: 157, 198, 212, 220, 223, 284, 328, 336, 338; VLA: 173; VOR: 101, 198, 239, 248, 249.

Arcyria occidentalis (T.Macbr.) G.Lister – AL: 215; IRK: 84; KHA: 84; MOS: 6, 66, 70, 84, 198; NVS: 301, 307, 308; SVE: 198, 236; TOM: 117, 132, 198; TVE: 19, 76, 141.

Arcyria oerstedii Rostaf. – AL: 134, 215; ALT: 301, 307, 308; BEL: 12; CHE: 50, 198; KIR: 108, 265; KYA: 10, 198; LEN: 101, 183, 198, 247; MOS: 4, 6, 7, 9, 11, 66, 70, 84, 164, 198; MUR: 67; NVS: 301, 307, 308; PER: 50; PRI: 74; SMO: 101, 198; SVE: 51, 236; TVE: 19, 76, 136, 141, 198, 204; TYU: 84; VGG: 212, 336.

Arcyria pomiformis (Leers) Rostaf. – AL: 3, 191, 214, 215; ALT: 215, 301, 308, 316; AST: 198, 213, 220, 221, 222, 223, 327, 328, 333; BA: 50, 198; CHE: 50, 198; CHU: 196, 198, 210, 212, 290; CR: 30, 241, 243, 244; KDA: 68, 192, 198; KHM: 47, 52, 58; KIR: 108, 263, 264, 265, 268, 291; KO: 50, 198; KR: 198, 212, 240, 254; KRS: 185, 198; KYA: 122, 124, 129, 196, 198, 210, 211, 212, 290; LEN: 101, 161, 183, 195, 198, 199, 212, 237, 247; LIP: 198, 252; MAG: 290; MOS: 1, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 159, 160, 164, 179, 198; MUR: 196, 198, 205, 210, 212, 290; PER: 50; PRI: 69, 74, 218; PSK: 73; ROS: 198, 220, 223, 335; SAK: 198; SAM: 154, 155; SMO: 101, 198; SVE: 40, 41, 42, 44, 45, 46, 50, 51, 53, 55, 198, 201, 212, 234, 236; TA: 198; TOM: 114, 115, 117, 132, 198; TVE: 19, 84, 136, 141, 165, 166, 179, 198, 204; TYU: 84, 198^{IG}; VGG: 157, 198, 212, 220, 223, 281, 284, 285, 328, 336, 338; VOR: 192, 198; ZAB: 198.

Arcyria stipata (Schwein.) Lister – AL: 134, 215; ALT: 215, 301, 308, 316; BA: 50, 198; CR: 174, 244; KHA: 198; KHM: 52, 58; KIR: 276, 277; KYA: 112, 122, 124; LEN: 180, 181, 182, 183, 195, 198, 212, 237; MOS: 6, 7, 9, 66, 70, 84, 164, 198, 278; NVS: 301, 308; PRI: 74, 203, 218; ROS: 147; SVE: 49, 50, 51, 198, 201, 212, 236; TOM: 114; TVE: 19, 76, 141; VGG: 198, 220, 223, 328, 329; VLA: 173.

Arcyria versicolor W.Phillips – BA: 50, 198; MOS: 6, 7^{CF}, 66^{CF}, 70, 198, 278; NVS: 301, 307, 308; SVE: 236.

Arcyria virescens G.Lister – MOS^{DR}: 6, 198, 278; PRI: 218.

Badhamia affinis Rostaf. – ALT: 215, 316; AST: 198, 220, 223; IRK: 84; KIR: 276, 277; KO: 270; LEN: 182, 183, 195, 198, 212, 237; MAG: 198; MOS: 7, 11, 66, 70, 84; PRI: 74; TVE: 19, 76, 136, 179; VGG: 338.

Badhamia capsulifera (Bull.) Berk. – AST: 333; CR: 244; KGD: 91; KR: 198; KRS: 101, 185, 198; LEN: 101, 182, 183, 195, 198, 199, 212, 237, 246, 323; MOS: 7^{CF}, 66, 70, 84, 164; PRI: 74; SMO: 101, 198; TVE: 136, 139, 142, 166, 179, 204; VGG: 110, 198, 212, 220, 223, 284, 328, 332.

Badhamia cinerascens G.W.Martin – AL: 215; MOS^{DR}: 278.

Badhamia dubia Nann.-Bremek. – AL: 214, 215; SAM: 153.

Badhamia foliicola Lister – ALT: 301, 308, 316; AST: 198, 213, 220, 221, 222, 223, 327, 328, 333; BA: 54; CR: 192; KL: 328; KLU: 84; KR: 198, 212, 254; KYA: 120^{CF}, 121, 122, 123^{CF}, 124, 198; LEN: 182, 183, 195, 198, 199, 212, 237; LIP: 198, 252; MOS: 6, 7, 8, 9, 66, 70, 84, 164, 198; PRI: 22, 74; ROS: 335; RYA: 84; TVE: 19, 136; VGG: 110, 157, 198, 212, 220, 223, 284, 285, 328, 332, 338.

Badhamia goniospora Meyl. – VGG: 198, 220, 223, 284, 328, 329, 330.

Badhamia lilacina (Fr.) Rostaf. – KR: 84; KRS: 5, 198; LEN: 180; MOS: 6, 7, 66, 70, 84, 198; PSK: 73; TOM: 114, 117; TVE: 19, 136.

Badhamia macrocarpa (Ces.) Rostaf. – AL: 215; ALT: 317; AST: 198, 220, 223, 327, 328, 333; KIR: 108, 263, 264, 265, 275, 291; LEN: 182, 183, 195, 198, 212, 237; LIP: 198, 252; MOS: 6, 7, 8, 9, 11, 66, 70, 84, 164, 198; NVS: 301, 308; ORE: 50, 198; PSK: 140; ROS: 147; RYA: 125, 321; SAM: 153, 154; SE: 198; SMO: 101, 198; STA: 198; SVE: 50, 198, 201, 212; TOM: 115, 132, 198; TVE: 84, 136, 142, 166, 198, 204; VGG: 157, 198, 212, 220, 223, 284, 328, 332, 338.

Badhamia melanospora Speg. – ALT: 301, 308; MOS: 66, 70, 164.

Badhamia nitens Berk. – ALT: 317; KO: 50; MOS^{DR}: 6, 198, 278.

Badhamia panicea (Fr.) Rostaf. – ALT: 317; AST: 333; DA: 162^{CF}; KHM: 52, 58; KO: 50, 198; KR: 198, 212, 254; KYA: 10, 120, 122, 123, 124, 198; LEN: 183, 195, 198, 212, 237, 286^{DS}, 287^{DS}; MOS: 1, 6, 7, 9, 64, 66, 70, 198; NVS: 301, 308; PSK: 73^{CF}; ROS: 101, 198, 220, 223; SMO: 101, 198; STA: 198; SVE: 236; TOM: 132, 198; VGG: 198, 212, 220, 223, 328, 338; VLG: 101.

Badhamia papaveracea Berk. & Ravenel – SVE: 236.

Badhamia populina Lister & G.Lister – KR: 198, 212, 254; VGG: 198, 220, 223, 284, 328.

Badhamia spinispora (Eliasson & NLundq.) H.W.Keller & Schokn. – ALT: 315; AST: 220, 222, 223, 328, 333; CR: 244; KL: 198, 220, 222, 223, 328; VGG: 110, 157, 198, 220, 223, 328, 332, 338.

Badhamia utriculararis (Bull.) Berk. – AL: 134; AST: 198; BA: 50, 198; BRY: 101^{OAU}, 126; CHE: 50; DA: 162; KHM: 52, 58; KIR: 268, 276, 277; KO: 50, 198; KYA: 10, 122, 124, 198; LEN: 101, 182, 183, 195, 198, 199, 212, 237, 323; MAG: 198, 290; MOS: 9, 66, 70, 84, 164, 198; NVS: 301, 308; ORE: 50, 198; PER: 50; PRI: 22, 74; PSK: 140; ROS: 147, 335; SMO: 101^{OAU}; STA: 198; SVE: 42, 50, 198, 201, 212, 236; TOM: 132, 198; TVE: 136, 198, 204; VGG: 110, 157, 198, 220, 223, 284, 328, 332, 336, 338; VOR: 248.

Badhamia versicolor Lister – KR: 198; LEN: 182, 183, 198; MOS: 66, 70.

Badhamiopsis ainoae (Yamash.) T.E.Brooks & H.W.Keller – **AST:** 329, 333; **VGG:** 329.

Barbeyella minutissima Meyl. – **AL:** 215; **BA:** 50, 54, 198; **PER:** 50; **PRI:** 218; **SVE:** 50, 51, 198, 236; **TVE:** 19, 76, 141.

Brefeldia maxima (Fr.) Rostaf. – **AL:** 133, 134, 215; **BRY:** 16, 101^{OAU}; **KIR:** 277; **LEN:** 195, 198, 212, 237; **SE:** 198; **SMO:** 198; **TOM:** 133; **TVE:** 79, 80, 136, 204, 282; **VLA:** 172; **VOR:** 239, 248, 249.

Calomyxa metallica (Berk.) Nieuwl. – **AL:** 215; **ALT:** 215, 301, 308, 316, 317; **BA:** 50; **CHU:** 196, 198, 212, 290; **CR:** 244; **KDA:** 192, 198; **KHM:** 52, 58; **KO:** 50, 198; **KR:** 198, 212, 254; **KYA:** 122, 124, 196, 198, 210, 211, 212, 290; **LEN:** 198, 199, 237; **LIP:** 198; **MOS:** 7, 66, 159, 160, 164; **NVS:** 301, 308; **PRI:** 74, 218; **SA:** 288; **SAR:** 198; **SVE:** 50, 51, 198, 201, 212, 236; **TVE:** 19, 76, 141; **VOR:** 198; **YAN:** 50, 196, 198, 210, 212, 290.

Ceratiomyxa fruticulosa (O.F.Müll.) T.Macbr. – **AL:** 3, 133, 134, 214, 215; **ALT:** 215, 301, 308, 316, 317; **AST:** 220, 327, 328, 333; **BA:** 50, 54; **BRY:** 101^{OAU}, 126; **CHE:** 50; **CHU:** 196, 210, 212, 290; **CR:** 30, 243, 244; **DA:** 162; **IRK:** 84; **KAM:** 251; **KDA:** 68; **KEM:** 109; **KGD:** 91; **KHM:** 47, 58; **KIR:** 108, 263, 264, 265, 266, 267, 268, 271, 275, 291; **KLU:** 8, 101; **KO:** 50; **KOS:** 101; **KR:** 130, 212, 254; **KRS:** 5, 185; **KYA:** 116, 129, 196, 210, 211, 212, 290; **LEN:** 89, 96, 101, 180, 182, 195, 199, 212, 237; **LIP:** 252; **MAG:** 290; **MOS:** 1, 2, 4, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 101, 158, 164, 175, 278; **MUR:** 96, 196, 205, 210, 212, 290; **NIZ:** 176; **NVS:** 301, 308; **ORE:** 50; **ORL:** 168; **PER:** 50; **PRI:** 21, 22, 74, 177, 218; **PSK:** 73, 84; **ROS:** 147, 220, 335; **RYA:** 125, 321; **SAM:** 155; **SMO:** 99, 100, 101^{OAU}; **SVE:** 40, 41, 42, 43, 50, 51, 201, 212; **TOM:** 132; **TVE:** 6, 19, 76, 84, 101^{OAU}, 136, 179, 180, 182, 204, 296; **TYU:** 84; **VGG:** 157, 212, 220, 283, 284, 328, 338; **VLA:** 173; **VLG:** 101; **VOR:** 239, 248, 249; **YAN:** 50, 196, 210, 212, 290.

Clastoderma debaryanum A.Blytt – **AL:** 134, 215; **BU:** 198; **KHA:** 84, 198; **KHM:** 52, 58; **KR:** 130, 198, 212, 254; **KYA:** 122, 124; **LEN:** 195, 198, 199, 212, 237; **MOS:** 7, 66, 70; **MUR:** 65; **NVS:** 301, 308; **PER:** 50; **PRI:** 74, 84, 203, 218; **SVE:** 50, 51, 198, 201, 212, 236; **TVE:** 19, 76, 136, 141, 142, 198, 204.

Clastoderma pachypus Nann.-Bremek. – **CR:** 148; **PRI:** 74.

Collaria arcyronema (Rostaf.) Nann.-Bremek. ex Lado – **AL:** 3, 134, 191, 215; **CHE:** 50, 198; **KIR:** 268; **KO:** 50, 198; **KR:** 198, 212, 254; **KRS:** 5, 198; **KYA:** 10, 116, 120, 122, 123, 124, 198; **LEN:** 89, 101, 180, 182, 183, 195, 198, 212, 237; **LIP:** 198, 252; **MOS:** 1, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 198, 278; **MUR:** 65, 84; **NVS:** 301, 308; **PER:** 50; **PRI:** 21, 74, 203, 218; **RYA:** 84, 125, 321; **SAK:** 198; **SVE:** 42, 50, 198, 201, 212, 236; **TOM:** 114, 115, 117; **TVE:** 19, 76, 84, 136, 141, 180, 182, 198, 204; **TYU:** 84; **VGG:** 198, 212, 220, 223, 280, 328; **VLA:** 173; **VOR:** 248.

Collaria lurida (Lister) Nann.-Bremek. – **AST:** 220, 222, 223, 328; **KYA:** 122, 124; **NVS:** 301, 308; **ROS:** 198; **SVE:** 42^{CF}, 236; **VGG:** 220, 223, 328.

Collaria rubens (Lister) Nann.-Bremek. – **NVS:** 301, 308.

Colloderma oculatum (C.Lippert) G.Lister – **AL:** 215; **KHM:** 52, 58; **KR:** 212, 254; **LEN:** 195, 197, 212, 237, 261, 282; **MOS:** 6, 7, 198, 278; **PER:** 50; **PRI:** 218; **SVE:** 51, 198; **TVE:** 79, 80, 136, 142, 282.

Colloderma robustum (G.Lister ex Meyl.) Meyl. – **KR:** 198.

Comatricha alta Preuss – **AL:** 215; **DA:** 162; **KO:** 50, 198; **MOS:** 66, 70; **SVE:** 48, 50, 198; **VGG:** 88, 198, 220, 223, 281, 282, 328, 329, 338.

Comatricha anomala Rammeloo – **NVS:** 312.

Comatricha elegans (Racib.) G.Lister – **AL:** 191, 215; **ALT:** 301, 308; **CR:** 243, 244; **KDA:** 68; **KHM:** 47, 58; **KO:** 50, 198; **KR:** 198, 212, 254; **KRS:** 185, 198; **KYA:** 122, 124; **LEN:** 161, 182, 183, 195, 199, 212, 237; **MOS:** 7, 9, 11, 63, 66, 70, 198; **MUR:** 65, 67; **ORE:** 198, 202; **PRI:** 218; **PSK:** 73; **ROS:** 147, 198, 220, 223; **SVE:** 40, 41, 50, 51, 198, 201, 212, 236; **TVE:** 19, 76, 136, 141, 180, 181, 182, 198, 204; **TYU:** 198^{IG}; **VGG:** 157, 198, 220, 223, 283, 284, 285, 328, 332.

Comatricha ellae Härk. – **AL:** 214, 215; **ALT:** 215, 310^{IG}, 316, 317; **AST:** 198, 213, 220, 223, 327, 328, 333; **CHE:** 50, 198; **CR:** 243, 244; **KDA:** 68, 78; **KO:** 50, 198;

KR: 198; **LEN:** 161; **MOS:** 63, 66, 70, 84, 159, 160, 164; **MUR:** 65, 84; **NVS:** 301, 308, 310^{IG}; **PRI:** 74; **ROS:** 198, 220, 223; **SVE:** 236; **TVE:** 19, 76, 136, 141, 142, 166, 179, 204; **VGG:** 157, 198, 220, 223, 328.

Comatricha filamentosa Meyl. – **BA:** 50^{CF}, 198.

Comatricha laxa Rostaf. – **AL:** 215; **ALT:** 215, 310^{IG}, 316, 317; **AST:** 198, 213, 220, 221, 222, 223, 327, 328, 333; **CHE:** 50, 198; **CHU:** 189, 196, 198, 210, 212, 290; **CR:** 192, 244; **KDA:** 68; **KHM:** 47, 58; **KL:** 198, 220, 222, 223, 328; **KO:** 50, 198, 270; **KR:** 198, 212, 254; **KYA:** 196, 198, 210, 211, 212, 290; **LEN:** 180, 182, 183, 195, 198, 212, 237; **LIP:** 198, 252; **MOS:** 4, 6, 7, 66, 70, 84, 198, 278; **NVS:** 301, 308, 310^{IG}; **ORE:** 50, 198; **PRI:** 74, 218; **ROS:** 147; **SAM:** 154; **SVE:** 43, 50, 198, 201, 212, 236; **TVE:** 6, 19, 76, 136, 165, 166, 198, 204; **TYU:** 198^{IG}; **VGG:** 88, 110, 157, 198, 212, 220, 223, 281, 284, 285, 328, 332, 338; **VOR:** 170; **YAN:** 50, 196, 198, 210, 212, 290; **ZAB:** 26.

Comatricha longipila Nann.-Bremek. – **LEN:** 198, 282; **MOS:** 66, 70, 164; **SMO:** 198; **SVE:** 44^{CF}; **TA:** 198.

Comatricha nigra (Pers. ex J.F.Gmel.) J.Schröt. – **AL:** 3, 191, 214, 215; **ALT:** 215, 301, 308, 310^{IG}, 315, 316, 317; **AST:** 198, 220, 222, 223, 327, 328, 333; **BA:** 50, 54, 198; **BRY:** 101^{OAU}; **BU:** 198; **CHE:** 50, 198; **CHU:** 189, 196, 198, 210, 212, 290; **CR:** 84, 192, 243, 244; **DA:** 162; **KAM:** 251^{AF}; **KDA:** 68, 78, 90, 192; **KHM:** 47, 52, 58; **KIR:** 275, 276; **KLU:** 8; **KO:** 50, 198; **KOS:** 101, 198; **KR:** 130, 198, 212, 254; **KRS:** 5, 185, 198; **KYA:** 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; **LEN:** 96, 101, 180, 182, 183, 195, 198, 199, 212, 237; **LIP:** 198, 252; **MAG:** 290; **MOS:** 1, 4, 6, 7, 9, 11, 63, 66, 70, 84, 101, 160, 164, 198, 278; **MUR:** 65, 67, 104, 196, 198, 205, 210, 212, 290; **NVS:** 301, 308, 310^{IG}; **ORE:** 50, 198, 202; **PER:** 50; **PRI:** 22, 69, 74, 218; **PSK:** 73, 140; **ROS:** 147, 198, 220, 223; **RYA:** 125, 321; **SMO:** 101, 198; **SVE:** 40, 41, 42, 43, 44, 49, 50, 51, 55, 198, 201, 212, 234, 235, 236; **TA:** 101, 262; **TOM:** 132, 198; **TVE:** 19, 76, 84, 135, 136, 139, 141, 142, 165, 166, 179, 182, 198, 204; **TYU:** 84, 198^{IG}; **VGG:** 88, 110, 157, 198, 212, 220, 223, 281, 284, 285, 328, 332, 336, 338; **VLA:** 173; **VLG:** 101; **VOR:** 239, 248, 249; **YAN:** 50, 196, 198, 210, 212, 290; **ZAB:** 26.

Comatricha pulchella (C.Bab.) Rostaf. – **AL:** 3, 215; **AST:** 198, 213, 220, 221, 222, 223, 327, 328, 333; **BA:** 50,

198; **CHE:** 50, 198; **KHM:** 47, 52, 58; **KO:** 50, 198; **KR:** 84, 198; **KYA:** 196, 198, 210, 211, 212, 290; **LEN:** 101, 180, 182, 183, 195, 198, 212, 237; **MOS:** 6, 7, 8, 9, 64, 66, 70, 84, 164, 198, 278; **MUR:** 65, 67; **ORE:** 50, 198; **PER:** 50; **PRI:** 218; **ROS:** 147, 198, 220, 223; **SVE:** 42, 49, 50, 51, 198, 201, 212, 236; **TOM:** 132, 198; **TVE:** 19, 84, 141; **TYU:** 84, 198^{IG}; **VGG:** 110, 157, 212, 284, 328, 332, 337.

Comatricha reticulospora Ing & P.C.Holland – **MOS:** 84^{CF}; **MUR:** 84^{CF}.

Comatricha rigidireta Nann.-Bremek. – **KYA:** 210; **SVE:** 49, 50, 198, 212^{CF}.

Comatricha suksdorffii Ellis & Everh. – **MOS^{DR}:** 6, 198, 278; **SVE:** 198, 236.

Comatricha tenerrima (M.A.Curtis) G.Lister – **AL:** 3, 215; **ALT:** 317; **BA:** 50, 198; **CHE:** 50; **CR:** 148; **KHM:** 47, 58; **KRS:** 185, 198; **KYA:** 121, 122, 124; **LEN:** 182, 183, 195, 198, 212, 237; **MOS:** 1, 4, 6, 7, 66, 70, 198; **NVS:** 301, 308; **PER:** 50; **PRI:** 74; **SVE:** 50, 198, 201, 212; **TVE:** 19, 76, 136, 198, 204; **TYU:** 198^{IG}.

Craterium aureum (Schumach.) Rostaf. – **ALT:** 301, 308; **KDA:** 90; **KR:** 130^{CF}, 198; **KYA:** 122, 124; **LEN:** 101, 198; **MOS:** 6, 7, 11, 66, 70, 84, 198; **SVE:** 49, 50, 198, 201, 212, 236; **VGG:** 157, 198, 212, 220, 223, 328.

Craterium concinnum Rex – **MOS:** 6, 7, 66, 70, 198; **PRI:** 218.

Craterium leucocephalum (Pers. ex J.F.Gmel.) Dittmar – **AL:** 191, 215; **ALT:** 299, 301, 308; **AST:** 198, 220, 222, 223, 327, 328, 333; **BA:** 54; **CR:** 30, 242, 243, 244; **KDA:** 90; **KHA:** 198; **KOS:** 101, 198; **KR:** 198, 212, 254; **KRS:** 5, 185, 198; **KYA:** 122, 124, 196, 198, 210, 211, 212, 290; **LEN:** 101, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 198, 252; **MAG:** 288, 290; **MOS:** 1, 6, 7, 11, 63, 66, 70, 84, 198; **MUR:** 84; **NGR:** 101^{OAU}; **NVS:** 301, 308; **ORE:** 50, 198; **PRI:** 74, 203; **PSK:** 101^{OAU}, 198; **ROS:** 147, 335; **SAM:** 153, 154; **SVE:** 45, 49, 50, 198, 201, 212, 236; **TOM:** 132, 198; **TVE:** 19, 76, 136, 204; **VGG:** 157, 198, 212, 220, 223, 281, 284, 285, 328, 336, 338; **YAN:** 50, 196, 198, 210, 212, 290; **YAR:** 101, 198.

Craterium minutum (Leers) Fr. – **AL:** 3, 134, 215, 300; **ALT:** 215, 316; **CR:** 242, 243, 244; **KO:** 50, 198;

KRS: 185, 198; **LEN:** 101, 180, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 198, 252; **MOS:** 6, 7, 8, 11, 63, 64, 66, 70, 84, 198; **MUR:** 96, 104; **NVS:** 301, 308; **PRI:** 22, 218; **SMO:** 99, 100; **SVE:** 49, 50, 198, 201; **TVE:** 19, 76, 79, 80, 136, 180, 182, 204, 282, 296; **TYU:** 84; **VGG:** 198, 220, 223, 328, 338; **VLA:** 173; **YAR:** 101, 198.

Craterium obovatum Peck – **AL:** 215; **IRK:** 84; **KHA:** 198; **LEN:** 182, 183, 195, 198, 212, 237; **MOS:** 7, 8, 66; **PRI:** 74, 203, 218; **TVE:** 136, 204.

Cribaria argillacea (Pers. ex J.F.Gmel.) Pers. – **AL:** 3, 134, 191, 215; **ALT:** 194, 301, 308; **ARK:** 143; **BA:** 50, 54, 198; **CR:** 243, 244; **IRK:** 84; **KAM:** 251; **KHM:** 52, 58; **KLU:** 101, 198; **KO:** 50, 198; **KR:** 198, 212, 254; **KRS:** 185, 198; **KYA:** 10, 122, 124, 194, 198; **LEN:** 89, 101, 180, 182, 183, 195, 198, 199, 212, 237, 323; **MOS:** 1, 4, 6, 7, 9, 11, 63, 66, 70, 84, 101, 198, 278; **MUR:** 65; **PER:** 50; **PRI:** 21, 22, 194, 218; **PSK:** 140; **RYA:** 84; **SAK:** 198; **SAM:** 155, 156; **SMO:** 101, 198; **STA:** 198; **SVE:** 49, 50, 51, 198, 201, 212, 236; **TA:** 198; **TVE:** 19, 76, 136, 142, 179; **TYU:** 84; **VGG:** 198, 212, 220, 223, 328, 338; **VLA:** 173; **VOR:** 171, 248.

Cribaria atrofusca G.W.Martin & Lovejoy – **KYA:** 196^{CF}; 198, 211^{CF}, 212^{CF}, 290^{CF}; **MOS:** 63, 66, 70; **NVS:** 26; **SVE:** 198, 236.

Cribaria aurantiaca Schrad. – **AL:** 3, 134, 191, 215; **ALT:** 194, 215, 301, 308, 316; **BA:** 50, 198; **CR:** 30, 243, 244; **KHM:** 47, 58; **KO:** 50, 198; **KR:** 198, 212, 254; **KRS:** 185, 198; **KYA:** 10, 122, 124, 129, 198, 212; **LEN:** 89, 101, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 198, 252; **MOS:** 1, 4, 6, 7, 11, 63, 66, 70, 84, 164^{CF}, 198; **MUR:** 196, 198, 205, 210, 212, 290; **PRI:** 21, 22, 194, 218; **ROS:** 147, 335; **RYA:** 125, 321; **SAK:** 198; **SMO:** 101, 198; **STA:** 198; **SVE:** 40, 41, 50, 51, 198, 201, 212, 236; **TA:** 101, 198, 262; **TOM:** 132, 198; **TVE:** 19, 76, 136, 141, 142, 198, 204; **TYU:** 84, 198^{IG}; **VGG:** 157, 198, 212, 220, 223, 328, 338.

Cribaria cancellata (Batsch) Nann.-Bremek. – **AL:** 3, 134, 191, 215; **ALT:** 194, 215, 299, 301, 302, 306, 308, 316; **BA:** 50, 54, 198; **CHE:** 50, 198; **CR:** 30, 241, 243, 244; **IRK:** 84; **KAM:** 251; **KDA:** 68; **KHA:** 198; **KHM:** 47, 52, 58; **KLU:** 101, 198; **KO:** 50, 198; **KR:** 143, 198, 212, 254; **KRS:** 5; **KYA:** 10, 122, 124, 129, 194, 198; **LEN:** 89, 96, 101, 180, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 198, 252; **MOS:** 1, 4, 6, 7, 8, 9, 11, 63,

64, 66, 70, 84, 101, 164, 179, 278; **MUR:** 65, 67, 196, 205, 210, 212, 290; **NIZ:** 101, 198; **NVS:** 301, 308; **ORE:** 50, 198; **PER:** 50; **PRI:** 21, 69, 74, 84, 194, 203, 218; **PSK:** 73; **ROS:** 147; **RYA:** 84, 125, 321; **SAM:** 153, 154; **SMO:** 101, 198; **SVE:** 40, 41, 49, 50, 51, 198, 201, 212, 236; **TA:** 101, 198, 262; **TOM:** 132, 198; **TVE:** 19, 76, 84, 136, 139, 141, 142, 166, 179, 180, 182, 198, 204; **TYU:** 84, 198^{IG}; **VGG:** 198, 212, 220, 223, 281, 328, 336, 338; **VLA:** 173; **VOR:** 167, 170.

Cribaria confusa Nann.-Bremek. & Y.Yamam. – **KO:** 50, 198.

Cribaria costata Dhillon & Nann.-Bremek. – **KO:** 50, 198.

Cribaria elegans Berk. & M.A.Curtis – **AL:** 191, 300; **TVE:** 19.

Cribaria exigua Meyl. – **KO:** 50, 198; **TYU:** 198^{IG}.

Cribaria filiformis Nowotny & H.Neubert – **KR:** 198.

Cribaria intricata Schrad. – **AL:** 3, 215; **ALT:** 215, 301, 308; **KHM:** 52, 58; **KIR:** 108, 265; **KYA:** 122, 124; **MOS:** 1, 4, 6, 7, 8, 9, 63, 66, 70, 198; **NVS:** 301, 308; **PRI:** 218; **SVE:** 50, 198, 201, 212, 236; **TVE:** 19, 136, 204; **TYU:** 84; **VGG:** 27.

Cribaria languescens Rex – **AL:** 215; **ALT:** 215, 301, 308, 316; **MOS:** 1, 6, 7^{CF}, 66, 70, 84, 198; **PRI:** 218; **SVE:** 50, 198, 201, 212; **TVE:** 19, 76, 141; **VGG:** 198, 212, 220, 223, 328, 330.

Cribaria lepida Meyl. – **ALT:** 303, 317; **NVS:** 303; **VGG:** 27.

Cribaria macrocarpa Schrad. – **AL:** 215; **KDA:** 68; **LEN:** 89, 101^{OAU}, 183, 195, 198, 212, 237; **MOS:** 7, 66, 70, 84; **NGR:** 101^{OAU}; **PSK:** 101^{OAU}; **SVE:** 50, 198, 201, 212, 236; **TYU:** 84.

Cribaria macrostipitata H.Neubert & Nann.-Bremek. – **AL:** 198, 215.

Cribaria microcarpa (Schrad.) Pers. – **AL:** 198, 215; **ALT:** 194, 215, 301, 308; **BA:** 50, 198; **CR:** 244;

KIR: 267, 268, 275; **KR:** 198, 212, 254; **KYA:** 122, 124, 196, 198, 210, 211, 212, 290; **LEN:** 323; **MOS:** 1, 4, 6, 7, 64, 66, 70, 84, 164, 198; **PRI:** 69, 74, 218; **PSK:** 73; **ROS:** 147; **RYA:** 84; **SVE:** 236; **TA:** 101, 198, 262; **TVE:** 19, 76, 84; **TYU:** 84.

Cribaria minutissima Schwein. – **AL:** 3, 191, 215, 300; **ALT:** 194, 301, 308; **BU:** 194, 198; **CHE:** 50, 198; **CR:** 243, 244; **KHA:** 198; **KR:** 198, 212, 254; **MOS:** 7, 11, 66, 70; **MUR:** 65^{CF}, 67; **PRI:** 69, 74, 194, 203, 218; **TVE:** 19, 76, 141; **ZAB:** 194.

Cribaria mirabilis (Rostaf.) Massee – **AL:** 198; **KO:** 50; **SVE:** 236.

Cribaria oregana H.C.Gilbert – **CHE:** 50; **KO:** 50, 198; **KR:** 198; **MOS:** 84; **PRI:** 84, 218; **TYU:** 84.

Cribaria piriformis Schrad. – **AL:** 215; **CHE:** 50, 198; **KR:** 198; **LEN:** 89, 101, 182, 183, 195, 198, 212, 237; **MOS:** 6, 7, 66, 70, 84, 198; **NGR:** 101; **PRI:** 21, 194; **PSK:** 101; **SVE:** 50, 198, 201, 212, 236; **TVE:** 19, 84, 136, 142, 180, 182, 198.

Cribaria purpurea Schrad. – **AL:** 133, 134, 215; **ALT:** 194, 301, 308; **KHM:** 52, 58; **KO:** 50, 198; **KR:** 198, 212, 254; **KYA:** 122, 124; **LEN:** 101, 180, 182, 183, 195, 197, 198, 212, 237, 282, 323; **MOS:** 6, 84, 198; **MUR:** 65; **NVS:** 301, 308; **PRI:** 198; **PSK:** 140; **SMO:** 101, 198; **SVE:** 50, 51, 198, 212, 236; **TVE:** 19, 76, 136, 141, 142.

Cribaria rubiginosa Fr. – **AL:** 191, 198, 215; **MOS^{DR}:** 6, 198.

Cribaria rufa (Roth) Rostaf. – **AL:** 3, 215; **ALT:** 215, 301, 308, 316; **BA:** 50, 198; **CHE:** 50; **CR:** 244; **KHM:** 47, 52, 58; **KO:** 50, 198; **KR:** 130, 198, 212, 254; **KRS:** 5, 185, 198; **KYA:** 194; **LEN:** 89, 180, 182, 183, 195, 198, 212, 237, 323; **LIP:** 198, 252; **MOS:** 1, 6, 7, 11, 66, 70, 84, 198; **NVS:** 301, 308; **ORE:** 50; **PER:** 50; **PRI:** 21, 194, 218; **PSK:** 140; **RYA:** 125, 321; **SVE:** 40, 41, 45, 50, 198, 201, 212, 236; **TVE:** 19, 76, 84, 136, 141, 179; **TYU:** 198^{IG}; **VGG:** 157, 198, 220, 223, 328, 330; **VLA:** 173.

Cribaria splendens (Schrad.) Pers. – **AL:** 134, 215; **KHA:** 198; **KHM:** 52, 58; **KO:** 50, 198; **KR:** 198, 212, 254; **LEN:** 101, 183, 195, 198, 212, 237, 323; **MOS^{DR}:** 6, 101, 198; **SVE:** 50, 198, 201, 212, 236; **TA:** 198; **TVE:** 136, 142.

Cribaria tenella Schrad. – **AL:** 215; **ALT:** 215, 316; **BA:** 50, 54, 198; **BU:** 198; **CHE:** 50, 198; **CR:** 244; **KDA:** 192, 194, 198; **KHM:** 47, 52, 58; **KO:** 50, 198; **KYA:** 122, 124; **LEN:** 101, 183, 194, 195, 198, 212, 237, 323; **MOS:** 1, 7, 66, 70, 84; **PRI:** 69, 74, 218; **PSK:** 73; **RYA:** 84, 125, 321; **SVE:** 50, 51, 198, 201, 212, 236; **TA:** 101, 198, 262; **TVE:** 19, 76, 141; **TYU:** 198^{IG}; **VGG:** 198, 212, 220, 223, 328, 330.

Cribaria violacea Rex – **AL:** 215; **ALT:** 215, 301, 308, 315, 317; **AST:** 198, 213, 220, 222, 223, 327, 328, 333; **BA:** 50, 198; **CR:** 241, 242, 243, 244; **KDA:** 78, 192, 194, 198; **KHM:** 26; **KIR:** 108, 265; **KLU:** 8; **KYA:** 120, 121, 122, 123, 124, 196, 198, 210, 211, 212, 290; **LEN:** 199; **MOS:** 7, 8, 66, 84, 159, 164; **NVS:** 301, 308; **PER:** 50; **PRI:** 74, 218; **ROS:** 147; **SA:** 288; **SAM:** 155; **SVE:** 50, 51, 198, 201, 212, 236; **TVE:** 165, 166; **VGG:** 157, 198, 212, 220, 223, 328, 338.

Cribaria vulgaris Schrad. – **AL:** 191, 215; **ALT:** 194, 215; **CHE:** 198; **CR:** 243, 244; **KDA:** 90; **KO:** 50, 198; **KR:** 198, 212, 254; **KYA:** 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; **LEN:** 183, 194, 195, 198, 199, 237, 323; **MOS:** 1, 6, 7, 11, 63, 66, 70, 84, 158, 198; **MUR:** 67, 84; **PRI:** 194; **SMO:** 99, 100; **SVE:** 50, 198, 201, 212, 236; **TA:** 262; **TVE:** 19, 76, 136, 141, 142; **TYU:** 84.

Diachea bulbillosa (Berk. & Broome) Lister – **PRI:** 218.

Diachea leucopodia (Bull.) Rostaf. – **CR:** 30, 242, 243, 244; **KHA:** 198; **LEN:** 101, 180, 182, 183, 195, 198, 212, 237, 323; **MOS:** 4, 6, 7, 66, 70, 84, 198; **NVS:** 27; **PRI:** 22, 74, 203, 218; **ROS:** 335; **SAK:** 198; **SMO:** 101, 198; **TVE:** 19, 76; **VGG:** 157, 198, 212, 220, 223, 328; **VOR:** 167, 239, 249.

Diachea splendens Peck – **KHA:** 198; **LEN:** 195, 197, 212, 237, 282; **PRI:** 74, 203; **SAK:** 198.

Diachea subsessilis Peck – **PRI:** 21; **VGG:** 198, 220, 223, 284, 285, 328, 329, 330.

Diacheopsis effusa Kowalski – **KR:** 198; **MUR:** 34, 36, 196, 205, 210, 212, 290.

Diacheopsis metallica Meyl. – **BU:** 198; **KHM:** 52; **KYA:** 120, 122, 123, 124, 198; **MUR:** 34, 36; **PER:** 50; **SVE:** 44^{CF}, 48, 50, 198, 236; **TVE:** 20.

- Diacheopsis nannengae*** G.Moreno, Illana & Heykoop – **MUR:** 65^{CF} 67.
- Diacheopsis reticulospora*** Mar.Mey. & Poulain – **MUR:** 34, 36.
- Dianema corticatum*** Lister – **AL:** 215; **KL:** 198, 220, 223, 328; **KR:** 198, 212, 254; **PRI:** 218; **ROS:** 220, 223; **TOM:** 117, 132, 198; **VGG:** 212, 328.
- Dianema depressum*** (Lister) Lister – **CR:** 244; **VOR:** 239, 249.
- Dianema harveyi*** Rex – **ALT:** 317; **CR:** 148.
- Dianema mongolicum*** Novozh. – **AL:** 214, 215.
- Dianema subretisporum*** Kowalski – **KC:** 34, 217, 255.
- Dictydiaethalium plumbeum*** (Schumach.) Rostaf. – **AL:** 215; **CHU:** 196, 198, 210, 212, 290; **CR:** 148, 243, 244; **KRS:** 185, 198; **KYA:** 122, 124; **LEN:** 195, 198, 199, 212, 237; **MAG:** 198; **MOS:** 7, 9, 11, 66, 70, 84, 164, 198; **PSK:** 73, 140; **STA:** 198; **SVE:** 50; **TVE:** 136, 142, 165, 166, 198, 204; **YAN:** 50, 196, 198, 210, 212, 290.
- Diderma alpinum*** (Meyl.) Meyl. – **KAM:** 219; **KC:** 34, 217; **KR:** 35; **LEN:** 34, 35, 261; **MOS:** 6, 7, 66, 70, 198; **MUR:** 34, 36, 67.
- Diderma asteroides*** (Lister & G.Lister) G.Lister – **KO:** 50, 198; **KR:** 198, 212, 254.
- Diderma brooksii*** Kowalski – **PER:** 50; **SVE:** 198.
- Diderma chondrioderma*** (de Bary & Rostaf.) Kuntze – **KDA:** 68; **MOS:** 66, 70, 164; **PRI:** 218; **SA:** 288; **TVE:** 166.
- Diderma cinereum*** Morgan – **AST:** 198, 213; **MOS:** 63, 84; **PSK:** 73; **TVE:** 19, 76.
- Diderma cor-rubrum*** T.Macbr. – **PRI:** 218.
- Diderma crustaceum*** Peck – **MOS^{DR}:** 15; **SAM:** 153.
- Diderma deplanatum*** Fr. – **ALT:** 315; **AST:** 220, 222, 223, 328; **KYA:** 120, 122, 123, 124, 198; **LEN:** 182, 183, 195, 198, 212, 237, 323; **MOS:** 66; **MUR:** 196, 198, 205, 210, 212, 290; **NVS:** 301, 308; **PRI:** 218; **ROS:** 335; **TVE:** 19, 76; **ZAB:** 26.
- Diderma effusum*** (Schwein.) Morgan – **ALT:** 301, 308, 310^{IG}, 316; **CR:** 174; **KDA:** 90; **KR:** 198; **KYA:** 122, 124; **MOS:** 6, 7, 66, 70, 84, 198, 278; **NVS:** 301, 308, 310^{IG}; **PRI:** 74, 84, 218; **SA:** 288; **TVE:** 76; **VOR:** 171, 248, 249.
- Diderma europaeum*** (Buyck) Kuhnt – **KAM:** 219; **KC:** 34, 217; **KR:** 34; **LEN:** 261; **MUR:** 34, 36.
- Diderma evelinae*** (Meyl.) Kowalski – **ALT:** 301, 307, 308.
- Diderma fallax*** (Rostaf.) E.Sheld. – **KAM:** 297; **KC:** 34, 217; **KHM:** 52, 58; **MOS^{DR}:** 6, 198; **PER:** 50; **TVE:** 79, 80, 136, 179, 198, 204, 282.
- Diderma floriforme*** (Bull.) Pers. – **CHE:** 50, 198; **KO:** 50, 198; **KRS:** 185, 198; **LEN:** 182, 183, 195, 197, 198, 212, 237, 282; **MOS:** 7, 66, 70; **PRI:** 218^{CF}; **SAK:** 198; **SVE:** 50, 198, 236; **TVE:** 19, 141.
- Diderma globosum*** Pers. – **ALT:** 317; **CR:** 242, 243, 244; **KLU:** 101, 198; **KR:** 198, 212, 254; **LEN:** 101, 182, 183, 195, 198, 212, 246, 323; **MOS:** 6, 7, 66, 198; **PRI:** 218; **ROS:** 335; **SAK:** 198; **SAM:** 153, 154; **SVE:** 50^{CF}; **TA:** 101, 198, 262; **TVE:** 182; **VGG:** 198, 220, 223, 284, 285, 328.
- Diderma hemisphaericum*** (Bull.) Hornem. – **AL:** 3, 215; **ALT:** 317; **BA:** 253; **LEN:** 101, 182, 183, 195, 198, 212, 237, 246, 323; **MOS:** 8, 9, 66, 70, 164, 198; **NVS:** 301, 307, 308; **ORE:** 101, 198; **TVE:** 136, 165, 166, 198, 204; **VGG:** 157.
- Diderma meyerae*** H.Singer, G.Moreno, Illana & A.Sánchez – **KC:** 34, 217, 255; **MUR:** 34, 36, 67.
- Diderma montanum*** (Meyl.) Meyl. – **BA:** 54; **CR:** 174; **KDA:** 192, 198; **KHA:** 198; **KO:** 50, 198; **LEN:** 180, 182, 183, 195, 198, 212, 237; **MOS:** 64, 164, 198; **NVS:** 26; **ORE:** 198, 202; **PER:** 50; **PRI:** 74, 203; **SA:** 288; **SVE:** 50, 51; **TVE:** 19, 76, 136.

Diderma niveum (Rostaf.) E.Sheld. – ARK: 143; CHU: 196, 198, 210, 212, 290; CR: 29, 30; KAM: 198, 219; KC: 34, 217, 258; KR: 34, 35; LEN: 34, 35, 101, 183, 188, 195, 197, 198, 212, 237, 258, 261, 282; MOS^{DR}: 6, 101, 198; MUR: 34, 36, 196, 198, 205, 210, 212, 290; SMO: 101, 198; SVE: 51; TVE: 19, 20, 136, 180.

Diderma ochraceum Hoffm. – LEN: 101; MOS: 6, 101; PER: 50; SMO: 101; TA: 101, 198, 262.

Diderma pseudotestaceum Novozh. & D.W.Mitch. – PRI: 218.

Diderma radiatum (L.) Morgan – ALT: 215, 301, 308; CHE: 50, 198; CHU: 196, 198, 210, 212, 290; CR: 242, 243, 244; IRK: 84; KHA: 198; KHM: 47, 52, 58; KO: 50, 198; KR: 96, 198, 212, 254; KYA: 122, 124, 196, 198, 210, 211, 212, 290; LEN: 101, 182, 183, 195, 198, 212, 237, 246, 323; MOS: 1, 6, 7, 64, 66, 70, 84, 93, 101, 175, 198, 278; MUR: 65, 67, 84; PER: 50; PRI: 74, 203; PSK: 73; SMO: 101, 198; STA: 198; SVE: 49, 50, 198, 201, 212, 236; TA: 198; TVE: 19, 76, 84, 141; TYU: 84, 198^{IG}; VOR: 248.

Diderma saundersii (Berk. & Broome ex Massee) E.Sheld. – MOS: 66; PRI: 74; ZAB: 26.

Diderma sauteri (Rostaf.) E.Sheld. – LEN: 89, 101, 195, 198, 212, 237; PRI: 218.

Diderma simplex (J.Schröt.) E.Sheld. – KYA: 120, 122, 123, 124, 198; MOS^{DR}: 6, 7, 15, 198, 278; SVE: 50, 198, 201^{CF}, 212^{CF}; TVE: 136, 142^{CF}.

Diderma spumariooides (Fr. & Palmquist) Fr. – CR: 30, 174, 242, 243, 244; KAM: 198; KDA: 90, 192, 198; KHA: 198; LEN: 182, 183, 195, 198, 212, 237, 246; LIP: 198, 252; MOS: 7, 66, 70, 84; NGR: 101^{OAU}; PRI: 22, 84, 218; PSK: 101^{OAU}, 198; ROS: 147; SMO: 101, 198; SVE: 49; TA: 101, 198, 262; TVE: 19, 76, 136, 142; VGG: 198.

Diderma testaceum (Schrad.) Pers. – AL: 215; CR: 174, 242, 243, 244; KR: 130; LEN: 101, 182, 195, 198, 237, 323; MOS: 66, 70; PRI: 218; SMO: 101, 198; TVE: 19, 76.

Diderma umbilicatum Pers. – ALT: 215; BA: 54; MOS: 198; PER: 50; TVE: 19.

Diderma velutinum Bortnikov – PRI: 17.

Didymium anellus Morgan – AL: 214, 215; ALT: 315, 317; AST: 198, 213, 220, 222, 223, 327, 328, 333; CHE: 50, 53, 198; CR: 174, 242, 243, 244; KL: 220, 222, 223, 328; KYA: 120^{CF}, 121, 122, 123, 124, 198; LEN: 182, 183, 195, 198, 199, 212^{AGG}, 237; MOS: 66, 84, 164; NVS: 301, 308; ORE: 198, 202; PRI: 74, 218; SA: 288; SAR: 198; TVE: 76, 136, 165; VGG: 110, 157, 198, 220, 223, 284, 328, 332, 338.

Didymium annulisperorum H.W.Keller & Schokn. – NVS: 301, 307, 308.

Didymium bahiense Gottsb. – AST: 213, 220, 223, 328, 333; PRI: 218.

Didymium clavus (Alb. & Schwein.) Rabenh. – AL: 215; ALT: 315; AST: 198, 220, 223, 327, 328, 333; BA: 50, 54, 198; CHU: 196, 198, 210, 212, 290; CR: 144, 174, 242, 243, 244; KHM: 52, 58; KIR: 263, 265; KO: 50, 198; KOS: 101, 198; KR: 198; KRS: 185, 198; KYA: 10, 120, 121, 122, 123, 124, 198; LEN: 101, 180, 182, 183, 195, 198, 199, 212, 237, 323; LIP: 198, 252; MAG: 290; MOS: 4, 6, 7, 9, 11, 63, 66, 70, 84, 164, 198; NVS: 301, 308; PER: 50; PRI: 21, 218; ROS: 147; SMO: 101, 198; SVE: 50, 51, 198, 201, 212, 236; TVE: 19, 76, 136, 182; VGG: 198, 212, 220, 223, 284, 285, 328, 338; YAN: 50, 196, 198, 210, 212, 290.

Didymium comatum (Lister) Nann.-Bremek. – ALT: 301, 308; LEN: 323; NVS: 301, 308; ORE: 53.

Didymium crustaceum Fr. – ALT: 315; AST: 198, 220, 223, 327, 328, 333; BRY: 101^{OAU}; CHU: 196, 198, 210, 212, 290; KHM: 47, 58; KLU: 101^{OAU}; LEN: 101, 183, 195, 198, 212, 237, 246; MOS: 6, 7, 8, 15, 66, 70, 84, 101^{OAU}, 164, 198, 238; ROS: 147; SMO: 101^{OAU}, 198; SVE: 51; TOM: 132, 198; TVE: 6, 101^{OAU}, 136, 204; TYU: 198^{IG}; VGG: 157, 198, 212, 220, 223, 284, 328.

Didymium dachnayum (G. Walker, Silberman, Karpov, Preisfeld, P. Foster, A.O. Frolov, Novozh. & Sogin) Fiore-Donno, Kamono & Caval.-Sm. – LEN: 59, 322.

Didymium difforme (Pers.) Gray – AL: 214, 215; ALT: 315, 316, 317; AST: 198, 213, 220, 221, 222, 223,

327, 328, 333; **BA:** 46, 50, 198; **CHE:** 50, 53, 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 174; **KDA:** 78; **KL:** 220, 222, 223, 328; **KLU:** 101, 198; **KOS:** 101; **KR:** 198, 212, 254; **KYA:** 120, 121, 122, 123, 124, 196, 198, 210, 211, 212, 290; **LEN:** 101, 161, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 101^{OAU}, 198, 252; **MO:** 101^{OAU}; **MOS:** 6, 7, 8, 9, 15, 66, 70, 84, 101, 164, 198, 278; **MUR:** 196, 198, 205, 210, 212, 290; **NIZ:** 101^{OAU}, 102, 176; **ORE:** 53, 198, 202; **PNZ:** 101^{OAU}; **PRI:** 218; **PSK:** 101, 198; **RYA:** 101^{OAU}; **SAR:** 198; **SMO:** 101, 198; **SVE:** 46, 50, 51, 53, 198, 201, 212; **TA:** 101, 198, 262; **TAM:** 101^{OAU}, 198; **TVE:** 136, 142, 165, 166; **TY:** 304; **VGG:** 101, 110, 157, 198, 220, 223, 284, 328, 332, 336, 338; **VOR:** 101^{OAU}, 248, 249; **YAN:** 196, 198, 210, 290.

Didymium dubium Rostaf. – **ALT:** 301, 308, 315, 317; **AST:** 198, 220, 222, 223, 327, 328, 333; **BU:** 198; **IRK:** 198; **KAM:** 219; **KC:** 34, 217, 255; **KR:** 198, 212, 254; **KYA:** 196, 198, 210, 211, 212, 290; **LEN:** 182, 183, 195, 198, 199, 212, 237; **MOS:** 7, 8, 9, 66, 70, 198; **MUR:** 34, 36, 196, 198, 205, 210, 212, 290; **NVS:** 301, 308; **ORE:** 198, 202; **RYA:** 125, 321; **SA:** 288; **SVE:** 50, 198, 236; **VGG:** 157, 198, 212, 220, 223, 284, 328, 332, 338; **YAN:** 196, 198, 210, 290; **ZAB:** 26.

Didymium flexuosum Yamash. – **MOS:** 66^{CF}; **TVE:** 166^{CF}; **VGG:** 198, 220, 223, 257, 328, 329.

Didymium inconspicuum Nann.-Bremek. & D.W.Mitch. – **AST:** 220, 222, 223, 328, 333.

Didymium iridis (Ditmar) Fr. – **AL:** 215; **ALT:** 301, 308, 317; **AST:** 198, 213, 220, 222, 223, 328, 333; **BA:** 46, 50, 198; **CHE:** 50, 53, 198; **KDA:** 78; **KRS:** 5, 198; **MOS:** 7, 8, 63, 66, 70, 84; **NVS:** 301, 308; **ORE:** 53; **SVE:** 46, 50, 53, 198, 201, 212; **TVE:** 79, 80, 136, 137, 139, 166, 282; **VGG:** 110, 157, 198, 220, 223, 284, 328, 332; **VOR:** 167, 170, 192, 198.

Didymium karstensii Nann.-Bremek. – **ORE:** 198, 202; **PRI:** 218.

Didymium leoninum Berk. & Broome – **PRI:** 218.

Didymium listeri Massee – **KHA:** 198; **KR:** 198; **LEN:** 198.

Didymium megalosporum Berk. & M.A.Curtis – **MOS:** 84; **PRI:** 218; **VGG:** 198, 220, 223, 281, 282, 328, 338.

Didymium melanospermum (Pers.) T.Macbr. – **ALT:** 301, 308; **AST:** 198, 220, 223, 327, 328, 333; **BRY:** 101^{OAU}; **BU:** 198; **CE:** 57, 97, 98, 101; **CHU:** 196, 198, 210, 212, 290; **CR:** 30, 242, 244; **KDA:** 90; **KHM:** 47, 58; **KLU:** 101, 198; **KO:** 50, 198; **KR:** 198, 212, 254; **KRS:** 185, 198; **KYA:** 10, 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; **LEN:** 96, 101, 180, 182, 183, 195, 198, 199, 212, 237, 261, 323; **LIP:** 198, 252; **MAG:** 290; **MOS:** 4, 6, 7, 8, 11, 15, 63, 64, 66, 70, 84, 101, 198, 278; **MUR:** 65, 67; **NIZ:** 176; **PER:** 198; **PNZ:** 198; **PRI:** 21, 218; **RYA:** 84; **SA:** 288; **SAK:** 198; **SAM:** 198; **SMO:** 100, 101^{OAU}, 198; **SVE:** 49^{CF}, 50, 51, 101, 198, 201, 212, 236; **TOM:** 132, 198, 233; **TVE:** 19, 76, 84, 101^{OAU}, 135, 136, 139, 141, 165, 166, 180, 182, 198, 204; **TYU:** 198^{IG}; **VGG:** 110, 198, 212, 220, 223, 284, 285, 328, 332; **VLA:** 6, 173, 198; **YAN:** 50, 196, 198, 210, 212, 290; **YAR:** 84.

Didymium mexicanum G.Moreno, Lizárraga & Illana – **AST:** 198, 220, 222, 223, 328, 329, 333; **KL:** 328; **VGG:** 110, 332.

Didymium minus (Lister) Morgan – **ALT:** 301, 308; **BRY:** 111; **CHE:** 50, 198; **CR:** 174; **KDA:** 90; **KHM:** 47, 58; **KO:** 50, 198; **MOS:** 6, 7, 8, 9, 11, 63, 66, 70, 84, 198, 238; **PER:** 50; **PRI:** 218; **RYA:** 84; **SA:** 288; **SVE:** 40, 41, 50, 198, 201, 212, 236; **TOM:** 114, 115, 117; **TVE:** 19, 76, 136, 141; **TYU:** 198^{IG}; **VGG:** 157, 198, 212, 220, 223, 284, 328, 338; **VOR:** 198.

Didymium nigripes (Link) Fr. – **ALT:** 299, 301, 302, 306, 308, 310^{IG}, 315; **AST:** 333; **CHE:** 50, 53, 198; **CHU:** 196, 210, 212, 290; **CR:** 30, 174; **KDA:** 90; **KO:** 50, 198; **KR:** 198, 212, 254; **KRS:** 185; **KYA:** 120, 122, 123, 124, 198; **LEN:** 89, 101, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 198, 252; **MOS:** 4, 6, 7, 9, 63, 64, 66, 70, 84, 164, 198, 278; **NVS:** 301, 308, 310^{IG}; **PER:** 50; **PRI:** 21, 84, 218^{AGG}; **PSK:** 73; **RYA:** 125, 321; **SAK:** 198; **SVE:** 45, 50, 51, 198, 201, 212, 236; **TVE:** 6, 19, 76, 136, 142, 180, 182, 198, 204; **VGG:** 110, 198, 212, 220, 223, 284, 328, 332; **VLA:** 173; **VOR:** 171, 248.

Didymium nullifilum (Kowalski) M.L.Farr – **BU:** 318; **ZAB:** 26.

Didymium ochroideum G.Lister – **ALT:** 301, 308; **SA:** 288; **TY:** 304^{CF}.

Didymium perforatum Yamash. – ALT: 301, 308; MOS: 66, 70.

Didymium projectile T.N.Lakh. & K.G.Mukerji – VLA: 85.

Didymium proximum Berk. & M.A.Curtis – AL: 198, 215; MOS: 84.

Didymium pseudodecipiens ad int. – KC: 217.

Didymium quitense (Pat.) Torrend – AL: 214, 215^{CF}; ALT: 316.

Didymium reticulosporum Novozh. & Zemly. – VGG: 207, 280, 282, 324, 325, 329, 330, 331, 334.

Didymium serpula Fr. – ALT: 315; KYA: 120^{CF}, 123, 124, 198; LEN: 101, 183, 195, 197, 198, 237, 282, 323; LIP: 198, 252; MOS: 8, 63, 66, 70; NIZ: 176; SMO: 101, 198; TVE: 76; VOR: 249.

Didymium squamulosum (Alb. & Schwein.) Fr. & Palmquist – AL: 134, 215; ALT: 215, 301, 308, 310^{IG}, 315, 316, 317; AST: 198, 213, 220, 222, 223, 327, 328, 333; BA: 46, 50, 198; BRY: 101^{OAU}; BU: 198; CHE: 50, 53, 198; CHU: 198, 210; CR: 84, 174, 242, 243, 244; IRK: 198; KDA: 78, 192, 198; KK: 295^{IG}; KLU: 101^{OAU}; KR: 198, 212, 254; KRS: 5, 198; KYA: 101, 120, 121, 122, 124, 196, 198, 210, 211, 212, 290, 295^{IG}; LEN: 101, 161, 182, 183, 195, 198, 199, 212, 237, 246, 323; LIP: 198, 252; MAG: 288, 290; MOS: 4, 6, 7, 8, 9, 11, 15, 66, 70, 84, 101^{OAU}, 164, 198, 238; NIZ: 101, 198; NVS: 301, 308, 310^{IG}; ORE: 50, 53, 198, 202; PRI: 21, 74, 84, 218; SA: 288; SAM: 153, 154; SMO: 101^{OAU}, 198; SVE: 46, 50, 53, 198; TOM: 115; TVE: 19, 76, 101^{OAU}, 136, 165, 166; TY: 304; TYU: 84; VGG: 110, 157, 198, 212, 220, 223, 281, 284, 285, 328, 332, 336, 338; VOR: 167, 170; YAN: 196, 198, 210, 290.

Didymium sturgisii Hagelst. – CR: 148, 192.

Didymium trachysporum G.Lister – AST: 198, 213, 220, 221, 222, 223, 328, 333; CR: 174, 243, 244; KL: 198, 328; MOS: 15; SAR: 198; VGG: 110, 157, 198, 220, 223, 284, 328, 332, 338.

Didymium vaccinum (Durieu & Mont.) Buchet – ORE: 198, 202; VGG: 27, 280.

Echinostelium apitectum K.D.Whitney – ALT: 301, 308, 310^{IG}, 316, 317; AST: 333; CR: 241, 243, 244; KDA: 192; KIR: 108, 265; KR: 198; KYA: 122, 124; LEN: 198; MOS: 66, 164; NVS: 301, 308, 310^{IG}; PRI: 218; VGG: 110, 127, 128, 332, 337; ZAB: 26.

Echinostelium arboreum H.W.Keller & T.E.Brooks – AST: 213, 220, 222, 223, 328, 333; BA: 50; CR: 243, 244; ORE: 53; VGG: 198.

Echinostelium brooksii K.D.Whitney – AL: 215; ALT: 301, 308, 310^{IG}, 316; KR: 198; KYA: 122, 124, 196, 198, 210, 211, 212, 290; NVS: 310^{IG}; SVE: 50, 198; VGG: 128, 282, 338.

Echinostelium colliculosum K.D.Whitney & H.W.Keller – AL: 214, 215; ALT: 317; AST: 198, 213, 220, 221, 222, 223, 327, 328, 333; CR: 186, 244; ORE: 198, 202; SAR: 198; VGG: 128, 198, 220, 223, 328, 332, 338.

Echinostelium corynophorum K.D.Whitney – AL: 214, 215.

Echinostelium cribrarioides Alexop. – AL: 214, 215; SVE: 198.

Echinostelium elachiston Alexop. – AST: 333; CR: 192, 244; KDA: 192, 198; KIR: 108, 265; KYA: 122, 124; ORE: 53, 198, 202; SVE: 50, 198; VGG: 280.

Echinostelium fragile Nann.-Bremek. – AL: 215; ALT: 215, 310^{IG}, 316, 317; CR: 244; KYA: 122, 124; NVS: 310^{IG}; VGG: 128, 282, 338.

Echinostelium lunatum L.S.Olive & Stoian. – AST: 220^{CF}, 222^{CF}; CR: 192.

Echinostelium microsporum A.Vlasenko – KHM: 314.

Echinostelium minutum de Bary – AL: 214, 215; ALT: 215, 301, 308, 310^{IG}, 315, 316, 317; AST: 198, 213, 220, 221, 222, 223, 328, 333; BA: 50, 198; BU: 198; CHE: 50, 198; CHU: 196, 198, 210, 212, 290; CR: 186, 192, 241, 242, 243, 244; KDA: 78, 192, 198; KHM: 52; KIR: 274, 275, 276; KO: 50; KR: 130, 198, 212, 254; KYA: 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; LEN: 161, 195, 198, 199, 212, 237; MAG: 288, 290; MOS: 7, 66, 159, 160, 164; MUR: 196, 198, 205, 210, 212, 290;

NVS: 301, 308, 310^{IG}; **ORE:** 50; **PER:** 50; **PRI:** 74, 218; **PSK:** 140; **ROS:** 147; **SAM:** 155; **SVE:** 43, 44, 45, 50, 51, 55, 198, 201, 212, 236; **TVE:** 19, 76, 136, 165, 166, 179; **VGG:** 110, 128, 157, 198, 220, 223, 328, 332, 338; **VOR:** 192, 198; **YAN:** 50, 196, 198, 210, 212, 290.

Echinostelium novozhilovii A.Vlasenko – **KHM:** 313.

Enerthenema intermedium Nann.-Bremek. & R.L.Critchf. – **PRI:** 218.

Enerthenema papillatum (Pers.) Rostaf. – **AL:** 3, 134, 191, 214, 215; **ALT:** 301, 308, 310^{IG}, 317; **AST:** 333; **BA:** 50, 198; **CHE:** 50, 198; **CHU:** 189, 196, 198, 210, 212, 290; **CR:** 192, 243, 244; **DA:** 162; **KDA:** 90; **KHM:** 47, 58; **KK:** 250^{IG}, 294^{IG}; **KO:** 50, 198; **KR:** 198, 212, 254; **KYA:** 101, 122, 124, 196, 198, 210, 211, 212, 250^{IG}, 290, 294^{IG}; **LEN:** 101, 161, 180, 182, 183, 195, 198, 199, 212, 237, 246; **MAG:** 198, 290; **MOS:** 1, 4, 6, 7, 11, 63, 66, 70, 84, 198; **MUR:** 65, 67, 84; **NVS:** 301, 308, 310^{IG}; **ORE:** 50, 198; **PER:** 50; **PRI:** 74, 218; **PSK:** 140; **ROS:** 147; **RYA:** 84, 125, 321; **SMO:** 101, 198; **SVE:** 40, 41, 43, 50, 51, 55, 198, 201, 212, 234, 236; **TVE:** 19, 76, 84, 136, 141, 142, 179, 182, 198, 204; **TYU:** 84, 198^{IG}; **VGG:** 198, 212, 220, 223, 284, 285, 328; **VOR:** 170; **YAN:** 50, 196, 198, 210, 212, 290.

Fuligo cinerea (Schwein.) Morgan – **AL:** 3, 134, 198, 215, 300; **AST:** 198, 213, 220, 221, 222, 223, 327, 328, 333; **CR:** 244; **KIR:** 263, 265; **KL:** 198, 220, 222, 223, 328; **LEN:** 182, 183, 195, 198, 212, 237; **LIP:** 198, 252; **MOS^{DR}:** 4, 6, 7, 198; **RYA:** 84; **TVE:** 136, 204; **VGG:** 110, 157, 198, 212, 220, 223, 284, 328, 332, 336, 338; **VOR:** 167.

Fuligo intermedia T.Macbr. – **AST:** 84.

Fuligo laevis Pers. – **BA:** 50, 54, 198; **SVE:** 236.

Fuligo leviderma H.Neubert, Nowotny & K.Baumann – **AL:** 215; **ALT:** 215, 301, 302, 306, 308, 316; **BA:** 50, 54, 198; **DA:** 162; **IRK:** 84; **KDA:** 90; **KHM:** 47, 58; **KR:** 198, 212, 254; **MOS:** 1, 11, 66, 70, 84; **NVS:** 301, 308; **PRI:** 218; **PSK:** 73; **ROS:** 147, 335; **SVE:** 49, 50, 51, 198, 236; **TVE:** 19, 76, 84, 141, 166; **TYU:** 84, 198^{IG}; **VGG:** 157, 198; **VLA:** 173.

Fuligo licentii Buchet – **NVS:** 301, 307, 308.

Fuligo luteonitens L.G.Krieglst. & Nowotny – **AL:** 215; **BA:** 54; **CHE:** 50, 198; **MOS:** 84; **NVS:** 301, 307, 308; **PSK:** 73; **SVE:** 51; **TVE:** 19, 76, 141.

Fuligo megaspora Sturgis – **KDA:** 77, 78.

Fuligo muscorum Alb. & Schwein. – **AL:** 133, 134, 215; **CHE:** 198; **KYA:** 113; **LEN:** 180, 182, 183, 195, 199, 237, 323; **NVS:** 301, 307, 308; **PSK:** 73; **SVE:** 49, 50; **TOM:** 114, 115, 132, 133; **TVE:** 19, 76, 136, 204.

Fuligo septica (L.) F.H.Wigg. – **AD:** 339; **AL:** 3, 134, 191, 215; **ALT:** 215, 301, 302, 306, 308, 316, 317; **ARK:** 143, 339; **AST:** 101, 198, 282, 327, 328, 329, 333, 339; **BA:** 50, 54, 198; **BRY:** 16, 101^{OAU}, 111, 126; **CHE:** 50, 198; **CR:** 30, 101, 243, 244; **CU:** 101^{OAU}; **DA:** 162; **IRK:** 232; **KB:** 101; **KC:** 57, 97, 98, 339; **KDA:** 68, 339; **KGD:** 91; **KGN:** 339; **KHM:** 47, 52, 58; **KIR:** 263, 264, 265, 268, 275, 291; **KLU:** 8, 101, 198; **KO:** 50, 198, 339; **KR:** 84, 104, 130, 143, 198, 212, 254, 339; **KRS:** 5, 101, 185, 198, 339; **KYA:** 10, 120, 122, 123, 124, 129, 198; **LEN:** 89, 96, 101, 180, 182, 183, 195, 198, 199, 212, 237, 245, 286, 287, 323; **LIP:** 198, 252; **MAG:** 198; **ME:** 101^{OAU}; **MOS:** 1, 2, 4, 6, 7, 8, 9, 11, 18, 28, 63, 64, 66, 70, 84, 92, 94, 101, 158, 164, 175, 198, 278, 289; **MUR:** 84, 104, 339; **NIZ:** 176; **NVS:** 301, 308; **ORL:** 168; **PER:** 50; **PRI:** 21, 22, 177, 218; **PSK:** 73, 84, 140, 339; **ROS:** 147; **RYA:** 84, 125, 321; **SA:** 339; **SAM:** 101^{OAU}; **SE:** 198, 339; **SMO:** 99, 100, 101, 198; **STA:** 57, 97, 98, 101, 198; **SVE:** 40, 41, 42, 45, 49, 50, 51, 198, 201, 212, 236; **TA:** 101^{OAU}, 198, 262; **TOM:** 114, 132, 198, 233; **TVE:** 6, 19, 76, 84, 101^{OAU}, 135, 136, 139, 141, 142, 166, 179, 180, 182, 198, 204, 296; **TYU:** 84, 198^{IG}, 339; **ULY:** 101^{OAU}; **VGG:** 198, 257, 280, 281, 284, 285, 328, 338; **VLA:** 173; **VOR:** 101, 167, 170, 171, 198, 239, 248, 249, 339; **ZAB:** 105.

Hemitrichia abietina (Wigand) G.Lister – **AL:** 215; **BA:** 50, 198; **CR:** 243, 244; **KHA:** 198; **KYA:** 196, 198, 210, 211, 212, 290; **MOS:** 66, 70, 158; **NVS:** 301, 308; **PRI:** 74, 218; **SVE:** 50, 198, 212, 236; **TYU:** 84; **VGG:** 157, 198.

Hemitrichia calyculata (Speg.) M.L.Farr – **AL:** 3, 215; **ALT:** 215, 301, 308, 316; **BA:** 50, 198; **CR:** 144, 243, 244; **KIR:** 276, 277; **MOS:** 6, 7, 11, 64, 84; **NVS:** 301, 308; **PRI:** 69, 74, 84, 218; **PSK:** 73; **ROS:** 147; **RYA:** 84; **TVE:** 19, 76, 141; **TYU:** 84; **VGG:** 338.

Hemitrichia chrysospora (Lister) Lister – **MOS:** 7.

Hemitrichia clavata (Pers.) Rostaf. – **AL:** 3, 133, 134, 191, 215; **ALT:** 215, 301, 302, 306, 308, 316; **BA:** 50, 54, 198; **BEL:** 12; **BRY:** 16, 101^{OAU}; **CHE:** 50; **CR:** 144, 241, 244; **IRK:** 84; **KDA:** 90, 192, 198; **KHA:** 84, 198; **KHM:** 47, 52, 58; **KIR:** 269; **KK:** 295^{IG}; **KLU:** 8, 101^{OAU}; **KO:** 50, 198; **KR:** 198, 212, 254; **KRS:** 101, 185, 198; **KYA:** 101, 122, 124, 198, 295^{IG}; **LEN:** 101, 180, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 198, 252; **MOS:** 1, 4, 6, 7, 8, 9, 64, 66, 70, 84, 101, 159, 160, 164, 198, 278; **MUR:** 65, 196, 205, 210, 212, 290; **NVS:** 301, 308; **ORE:** 50, 198; **PER:** 50; **PRI:** 21, 74, 203, 218; **PSK:** 73; **ROS:** 147, 335; **RYA:** 84, 125, 321; **SMO:** 101^{OAU}, 198; **STA:** 198; **SVE:** 40, 41, 42, 49, 50, 51, 198, 201, 212, 236; **TA:** 101, 198, 262; **TOM:** 132, 198; **TVE:** 19, 76, 84, 101^{OAU}, 136, 141, 180, 182, 198, 204; **TYU:** 84, 198^{IG}; **VGG:** 157, 198, 212, 220, 223, 281, 328, 336, 338; **VLA:** 173.

Hemitrichia cornuviooides Lavrov – **TOM:** 133.

Hemitrichia intorta (Lister) Lister – **KIR:** 108, 265; **LEN:** 182, 195, 212, 237; **MOS:** 6, 7, 8, 9, 66, 70, 164, 198, 278; **TVE:** 19, 79, 80, 136, 180, 181, 182, 282; **VGG:** 127, 220, 223, 328, 337.

Hemitrichia leiocarpa (Cooke) Lister – **KRS:** 12; **MOS^{DR}:** 6, 7, 198; **VGG:** 198, 220, 223.

Hemitrichia leiotricha (Lister) G.Lister – **ALT:** 317; **KO:** 50, 198; **KRS:** 5, 198; **MAG:** 288^{CF}; **MOS:** 6, 7, 8, 66, 164, 198; **SVE:** 50, 198, 201, 236.

Hemitrichia minor G.Lister – **AST:** 220, 222, 223; **CHE:** 50, 53, 198; **CR:** 242, 243, 244; **KIR:** 108, 265; **KR:** 198, 212, 254; **LEN:** 198; **MAG:** 290; **MOS:** 6, 7, 8, 66, 70, 164, 198; **ORE:** 53, 198, 202; **PRI:** 74, 218; **SVE:** 46, 50, 53, 212; **VGG:** 198, 220, 223.

Hemitrichia pardina (Minakata) Ing – **AL:** 215; **ALT:** 215, 301, 308, 315, 316, 317; **AST:** 328; **KR:** 198; **KYA:** 120, 122, 123, 124, 198; **LIP:** 198; **MAG:** 288; **NVS:** 301, 308; **ORE:** 198, 202; **SA:** 288; **SAM:** 155; **SVE:** 201; **TVE:** 19, 76, 165, 166; **VGG:** 110, 328, 332, 338.

Hemitrichia serpula (Scop.) Rostaf. ex Lister – **AL:** 3, 134, 191, 215; **ALT:** 215, 301, 308, 315, 316, 317; **BA:** 50, 54, 198; **CHE:** 50, 198; **IRK:** 84; **KDA:** 192, 198; **KHA:**

198; **KIR:** 108, 265, 267, 268, 269, 275, 276, 277; **KLU:** 8; **KYA:** 10, 122, 124, 198; **LEN:** 101, 161, 182, 183, 195, 197, 198, 212, 237, 323; **MOS:** 6, 7, 9, 64, 66, 70, 84, 164, 198, 278; **NVS:** 301, 308; **ORL:** 198; **PRI:** 21, 22, 74, 84, 203, 218; **PSK:** 73, 140, 198; **SMO:** 101, 198; **SVE:** 50, 198, 201, 212, 236; **TVE:** 19, 76, 84, 136, 141, 198, 204; **TY:** 304; **TYU:** 84; **VGG:** 110, 332; **VOR:** 171, 239, 248, 249.

Kelleromyxa fimicola (Dearn. & Bisby) Eliasson – **AL:** 37, 214, 215, 318; **ALT:** 27, 318; **AST:** 198, 213, 220, 222, 223, 328, 329, 333; **BU:** 305, 318; **NVS:** 318; **ORE:** 53.

Lamproderma aeneum Mar.Mey. & Poulain – **KAM:** 219; **KC:** 34, 217; **KR:** 34; **LEN:** 35.

Lamproderma arcyrioides (Sommerf.) Rostaf. – **ALT:** 301, 308; **AST:** 198, 220, 223, 327, 328, 333; **CHU:** 196, 198, 210, 212, 290; **KC:** 34, 217; **KO:** 50, 198; **KR:** 34, 35, 198; **KRS:** 185, 198; **KYA:** 122, 124; **LEN:** 34, 35, 182, 183, 188, 195, 198, 212, 237, 261; **LIP:** 198, 252; **MOS:** 6, 7, 64, 66, 70, 198, 278; **MUR:** 34, 36, 196, 198, 205, 210, 212, 290; **PRI:** 74, 203; **TA:** 101, 198; **TVE:** 19, 20, 76, 136, 141; **TYU:** 84; **VGG:** 284.

Lamproderma cacographicum Bozonnet, Mar. Mey. & Poulain – **KC:** 34, 217; **MUR:** 34, 36.

Lamproderma carpatiensis ad int. – **LEN:** 261.

Lamproderma columbinum (Pers.) Rostaf. – **AL:** 191, 215; **BU:** 198; **KHA:** 198; **KHM:** 47, 58; **KO:** 50, 198; **KR:** 143, 198, 212, 254; **LEN:** 101, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 198, 252; **MOS:** 1, 7, 9, 66, 70, 84, 198; **MUR:** 104; **NVS:** 301, 308; **PER:** 50; **PRI:** 74, 203, 218; **PSK:** 140; **SMO:** 101, 198; **SVE:** 50, 51, 198, 236; **TA:** 101, 198, 262; **TVE:** 19, 76, 136, 141, 142, 198, 204; **TYU:** 198^{IG}; **VGG:** 220, 223, 328.

Lamproderma cristatum Meyl. – **KC:** 34, 217.

Lamproderma cucumer (Meyl.) Nowotny & H.Neubert – **KAM:** 219; **KC:** 34, 217.

Lamproderma disseminatum Kowalski – **KHM:** 47, 58; **TYU:** 198^{IG}.

Lamproderma echinosporum Meyl. – **KAM:** 219; **KC:** 34, 217.

Lamproderma echinulatum (Berk.) Rostaf. – **MOS^{DR}**: 6, 198.

Lamproderma gulielmae Meyl. – **KR**: 198, 212, 254; **TVE**: 19.

Lamproderma kowalskii A.Ronikier, Lado & Mar. Mey. – **MUR**: 34, 36^{CF}.

Lamproderma laxum H.Neubert – **SVE**: 236.

Lamproderma maculatum Kowalski – **KAM**: 219; **KC**: 34, 217; **MUR**: 34, 36; **TVE**: 20.

Lamproderma ovoideum Meyl. – **BA**: 54; **DA**: 162^{CF}; **KAM**: 219; **KC**: 34, 217, 258; **MUR**: 34, 36; **TVE**: 20.

Lamproderma pseudomaculatum Mar.Mey. & Poulain – **KAM**: 219; **KC**: 34; **MUR**: 34, 36.

Lamproderma pulchellum Meyl. – **KC**: 34, 217; **MUR**: 34, 36.

Lamproderma pulveratum Mar.Mey. & Poulain – **KAM**: 219; **KC**: 34, 216, 217, 255; **MUR**: 34, 36.

Lamproderma sauteri Rostaf. – **BA**: 54; **KAM**: 219; **KC**: 34, 217; **KHM**: 47, 58; **KR**: 34, 198, 212, 254; **KYA**: 196, 198, 210, 211, 212, 290; **LEN**: 35, 261; **MUR**: 34, 36, 196, 198, 205, 210, 212, 290.

Lamproderma scintillans (Berk. & Broome) Morgan – **AL**: 215; **ALT**: 215, 301, 308, 315, 316, 317; **CHE**: 50, 53, 198; **CR**: 244; **KDA**: 78; **KLU**: 8; **KO**: 50, 198; **LEN**: 182, 183, 195, 198, 199, 212, 237; **MAG**: 290; **MOS**: 7, 8, 15, 66, 70, 84, 164; **MUR**: 65, 96; **NVS**: 301, 308; **PRI**: 74, 203, 218; **PSK**: 140; **SA**: 288; **TVE**: 19, 76, 141; **VGG**: 157, 198, 212, 220, 223, 328.

Lamproderma spinulosporum Mar.Mey., Nowotny & Poulain – **KC**: 34, 217, 258; **KR**: 34, 35; **LEN**: 34, 35, 258; **MUR**: 34, 36.

Lamproderma splendens Meyl. – **KAM**: 219; **KC**: 34, 217; **TVE**: 20.

Lamproderma splendidissimum Mar.Mey., Bozonnet & Poulain – **KC**: 217.

Lamproderma zonatum Mar.Mey. & Poulain – **KR**: 34; **LEN**: 35; **TVE**: 20.

Leocarpus fragilis (Dicks.) Rostaf. – **AL**: 3, 134, 214, 215; **ALT**: 299, 301, 302, 306, 308, 316; **BRY**: 101^{OAU}, 111, 126; **BU**: 198; **CHU**: 196, 198, 210, 212, 290; **CR**: 30, 84; **IRK**: 198; **IVA**: 198; **KAM**: 219; **KDA**: 90; **KHM**: 47, 52, 58, 196; **KIR**: 267, 268, 269, 275, 291; **KO**: 50, 198; **KR**: 130, 198, 212, 254; **KYA**: 10, 113, 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; **LEN**: 89, 101, 180, 182, 183, 195, 198, 199, 212, 237, 261, 323; **LIP**: 198, 252; **MAG**: 198, 290; **MOS**: 1, 4, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 94, 95, 101, 158, 164, 175, 198, 278; **MUR**: 65, 205, 210, 212, 290; **NIZ**: 176; **PER**: 50, 198; **PRI**: 21, 218; **PSK**: 73, 140; **ROS**: 335; **RYA**: 84, 125, 321; **SA**: 288; **SAM**: 154, 156; **SMO**: 101, 198; **STA**: 198; **SVE**: 40, 41, 49, 50, 51, 198, 201, 212, 236; **TA**: 101, 198, 262; **TOM**: 114, 115, 132, 198; **TVE**: 6, 19, 76, 84, 135, 136, 141, 179, 180, 182, 198, 204; **TYU**: 198^{IG}; **VGG**: 198, 220, 223, 328; **VLA**: 173; **VOR**: 248; **YAN**: 196, 198, 210, 212, 290; **YAR**: 6, 84, 198; **ZAB**: 26.

Lepidoderma alpestroides Mar.Mey. & Poulain – **MUR**: 34, 36.

Lepidoderma carestianum (Rabenh.) Rostaf. – **CHU**: 196, 198, 210, 212, 290; **KAM**: 219; **KC**: 34, 217, 255, 258, 259; **LEN**: 34, 35, 188, 195, 197, 212, 237, 282; **MOS**: 8, 66^{CF}; **MUR**: 34, 36, 67, 259.

Lepidoderma chailletii Rostaf. – **KAM**: 219; **KC**: 34, 217, 255, 258, 259; **KR**: 34, 35, 259; **LEN**: 34, 35, 259, 261; **MUR**: 34, 36, 67, 196, 198, 205, 210, 212, 258, 259, 290; **TVE**: 20.

Lepidoderma crassipes Flatau, Massner & Schirmer – **KHM**: 47^{CF}, 58^{CF}; **TYU**: 198^{IG}.

Lepidoderma granuliferum (W.Phillips) R.E.Fr. – **KC**: 34, 217; **MUR**: 34, 36, 196, 198, 205, 210, 212, 290; **ZAB**: 26.

Lepidoderma peyerimhoffii Maire & Pinoy – **KC**: 34, 217, 255, 258.

Lepidoderma tigrinum (Schrad.) Rostaf. – **AL**: 215; **BA**: 54; **KDA**: 78; **KHM**: 47, 52, 58; **KO**: 50, 198; **KR**: 198, 212, 254; **KYA**: 122, 124; **LEN**: 101, 182, 183, 195,

197, 198, 199, 212, 237, 261, 282, 323; **MOS:** 6, 8, 66, 84, 198; **MUR:** 65, 67; **PER:** 50; **PSK:** 140; **SVE:** 50, 51, 198; **TVE:** 19, 76, 136, 141, 142; **TYU:** 198^{IG}.

Lepidoderma trevelyanii (Grev.) Poulain & Mar. Mey. – **BA:** 50, 198; **KR:** 198, 212, 254; **LEN:** 101, 183, 195, 197, 198, 212, 237, 282, 323; **NVS:** 301, 307, 308.

Leptoderma iridescent G.Lister – **AL:** 134; **ALT:** 301, 307; **MOS:** 164; **TOM:** 132, 198.

Licea belmontiana Nann.-Bremek. – **ALT:** 317; **AST:** 198, 213, 220, 221, 222, 223, 327, 328, 333; **CHU:** 196^{CF}, 198; **CR:** 148, 187, 192, 244; **KDA:** 192; **KIR:** 108, 265; **KLU:** 8; **KO:** 50, 198; **KYA:** 196^{CF}, 198, 211, 212^{CF}, 290^{CF}; **MOS:** 7, 8, 66, 164; **MUR:** 65; **PER:** 50; **PRI:** 218; **SVE:** 198, 236; **TVE:** 19, 76, 166; **VGG:** 127, 284, 332, 337; **VOR:** 192; **YAN:** 50, 196^{CF}, 198, 212^{CF}, 290^{CF}.

Licea biforis Morgan – **ALT:** 301, 308, 315, 316, 317; **AST:** 333; **BA:** 50, 198; **CR:** 187, 192; **KDA:** 78, 192, 198; **KYA:** 122, 124; **MAG:** 290; **MOS:** 66, 164; **PRI:** 218; **SVE:** 50, 201, 212; **TVE:** 136, 165, 166, 179, 198, 204; **VGG:** 127, 157, 198, 220, 223, 281, 284, 328, 337.

Licea castanea G.Lister – **ALT:** 317; **BA:** 198; **CR:** 192, 244; **KDA:** 192, 198; **KR:** 198, 212, 254; **KYA:** 120, 122, 123, 124, 198; **LEN:** 195, 198, 212, 237; **MOS:** 7, 66; **MUR:** 65, 67; **PER:** 50; **PRI:** 218; **SVE:** 198; **TVE:** 19; **VGG:** 110, 157, 332; **VOR:** 167, 170, 192, 198, 239, 249.

Licea chelonoides Nann.-Bremek. – **AST:** 220, 222, 223, 328; **BA:** 50, 198; **KHM:** 47, 58; **KL:** 328; **KO:** 198; **PER:** 50; **SVE:** 198, 236; **TYU:** 198^{IG}; **VGG:** 328.

Licea denudescens H.W.Keller & T.E.Brooks – **AST:** 198, 213, 220, 221, 222, 223, 327, 328, 333; **KR:** 198; **KYA:** 210^{CF}; **LEN:** 198; **MOS:** 7, 66; **VGG:** 110, 332, 337.

Licea erecta K.S.Thind & Dhillon – **ALT:** 317.

Licea inconspicua T.E.Brooks & H.W.Keller – **MOS:** 66.

Licea iridis Ing & McHugh – **BA:** 50^{CF}.

Licea kleistobolus G.W.Martin – **AL:** 215; **ALT:** 215, 301, 308, 310^{IG}, 316, 317; **AST:** 198, 213, 220, 222, 223, 327, 328, 333; **BA:** 50, 198; **CHE:** 50, 198; **CHU:** 196,

198, 210, 212, 290; **CR:** 174, 187, 192, 243, 244; **KDA:** 78, 192; **KHM:** 26; **KR:** 198, 212, 254; **KYA:** 120, 121, 122, 123, 124, 196, 198, 210, 211, 212, 290; **LEN:** 161, 195, 198, 199, 212, 237; **MOS:** 7, 15, 66, 159, 160, 164; **NVS:** 301, 308, 310^{IG}; **PRI:** 218; **ROS:** 198, 220, 223; **SAM:** 155; **SVE:** 46, 48, 50, 55, 198, 235; **TVE:** 19, 76, 165, 166; **VGG:** 157, 198, 220, 223, 328, 338; **YAN:** 50, 196, 198, 210, 212, 290; **ZAB:** 26.

Licea marginata Nann.-Bremek. – **LEN:** 195, 198, 199, 212, 237.

Licea minima Fr. – **AL:** 191, 215; **BA:** 50, 54, 198; **CHE:** 50, 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 174, 241, 243, 244; **KHM:** 47, 52, 58; **KLU:** 8; **KO:** 50, 198; **KR:** 130, 198, 212, 254; **KYA:** 122, 124, 196, 198, 210, 211, 212, 290; **LEN:** 161, 195, 198, 199, 212, 237; **MOS:** 7, 8, 66, 70, 84; **MUR:** 65, 104, 205, 210, 212, 290; **PER:** 50; **PRI:** 218; **ROS:** 147; **SVE:** 42, 43, 44, 49, 50, 51, 55, 198, 201, 212, 236; **TVE:** 19, 76, 141, 166; **TYU:** 84, 198^{IG}; **VGG:** 198, 220, 223, 280, 328; **YAN:** 50, 196, 198, 210, 212, 290.

Licea nannengae Pando & Lado – **AST:** 198, 213, 220, 222, 223, 328; **KL:** 198, 220, 222, 223, 328; **VGG:** 110, 198, 220, 223, 284, 328, 332.

Licea operculata (Wingate) G.W.Martin – **ALT:** 301, 308, 316; **BA:** 50, 198; **CHE:** 50, 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 174, 187, 192, 244; **KDA:** 192, 198; **KIR:** 275, 276; **KRS:** 185, 198; **KYA:** 118, 119, 120, 122, 123, 124, 198; **LEN:** 161, 195, 198, 199, 212, 237; **LIP:** 198; **MOS:** 7, 66, 84, 159, 160, 164; **NVS:** 301, 308; **ORE:** 198, 202; **PRI:** 74, 218; **ROS:** 198, 220, 223; **SAM:** 155; **SAR:** 198; **TVE:** 19, 76, 165, 166; **VGG:** 198, 220, 223, 328; **YAN:** 50, 196, 198, 210, 212, 290.

Licea parasitica (Zukal) G.W.Martin – **AL:** 214, 215; **ALT:** 301, 308, 310^{IG}; **AST:** 213, 220, 222, 223, 328; **BA:** 198; **CHE:** 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 174, 187, 192, 244; **KDA:** 198; **KIR:** 276; **KR:** 212, 254; **KRS:** 198; **KYA:** 120, 122, 123, 124, 198; **LEN:** 195, 198, 199, 212, 237; **LIP:** 198; **MOS:** 7, 66, 164; **NVS:** 301, 308, 310^{IG}; **ORE:** 198; **PRI:** 74, 218; **ROS:** 198; **SAR:** 198; **TVE:** 19, 76, 166; **VGG:** 110, 198, 220, 223, 284, 328, 332, 338; **VOR:** 167, 170, 192; **YAN:** 50, 196, 198, 210, 212, 290.

Licea pedicellata (H.C.Gilbert) H.C.Gilbert – **ALT:** 315, 317; **PRI:** 218.

Licea pusilla Schrad. – ALT: 315, 317; AST: 220, 222, 223, 328; BA: 54; BU: 198; CR: 148; KDA: 78; KHM: 26; KO: 50, 198; KR: 130; KYA: 122, 124; LEN: 180, 181, 182, 183, 195, 198, 212, 237, 323; MOS: 6, 7^{CF}, 8, 15, 66, 70, 198; PER: 50; PRI: 22, 74, 218; SMO: 101, 198; SVE: 42^{CF}, 44^{CF}, 50, 198, 236; TVE: 19, 76, 136, 142, 165; VGG: 127, 280, 332, 337; VOR: 248.

Licea pygmaea (Meyl.) Ing – AL: 215; PRI: 218; SVE: 236; TVE: 19, 141.

Licea rugosa Nann.-Bremek. & Y.Yamam. – PRI: 218.

Licea scintillans McHugh & D.W.Mitch. – CR: 148.

Licea scyphoides T.E.Brooks & H.W.Keller – VGG: 223.

Licea tenera E.Jahn – AL: 214, 215; ALT: 316, 317; KRS: 185, 198; KYA: 120, 121, 122, 123, 124, 198; MOS^{DR}: 6, 7, 8, 164, 198, 278; PER: 50; SVE: 198; TVE: 136, 165, 166, 179, 198, 204; VGG: 198, 220, 223, 284, 328.

Licea testudinacea Nann.-Bremek. – AL: 214, 215; ALT: 301, 308, 317; BA: 54; CHE: 50, 198; KO: 50, 198; KR: 198; KRS: 198; KYA: 122, 124, 196, 198, 210, 211, 212, 290; LEN: 198; MOS: 7, 66; MUR: 65; PRI: 218; SVE: 50, 198, 201, 212; TVE: 19, 76, 141; VGG: 198, 220, 223, 328.

Licea variabilis Schrad. – AL: 3, 134, 215, 300; ALT: 301, 308, 317; CR: 174, 243, 244; KHM: 47, 52, 58; KLU: 101, 198; KR: 198, 212, 254; LEN: 182, 183, 195, 198, 199, 212, 237; MOS: 6, 7, 8, 66, 70, 198, 278; PRI: 218; SMO: 101, 198; SVE: 50, 198, 201, 212, 236; TVE: 136, 198, 204; TYU: 198^{IG}; YAN: 50, 196, 210, 212, 290.

Licea verrucispora D.Wrigley & Lado – PRI: 218.

Lindbladia tubulina Fr. – KDA: 198; KO: 50, 198; KR: 198, 212, 254; KYA: 10, 198; LEN: 101, 182, 183, 195, 197, 198, 199, 212, 237, 282; LIP: 198, 252; MAG: 290; MOS: 6, 7, 66, 70, 198, 278; PRI: 21; SMO: 198; TA: 101, 198; TVE: 84, 136, 198, 204; TYU: 198^{IG}; VLA: 172, 173.

Listerella paradoxa E.Jahn – VOR: 32.

Lycogala confusum Nann.-Bremek. ex Ing – MOS: 63.

Lycogala conicum Pers. – KDA: 68; KIR: 268; MOS: 1, 63, 64, 66, 70, 138; PRI: 218; TVE: 79, 80, 136, 138, 198, 204, 282; VLA: 172.

Lycogala epidendrum (L.) Fr. – AL: 3, 134, 191, 214, 215, 233; ALT: 134, 215, 299, 301, 302, 306, 308, 316, 317; ARK: 143; AST: 101, 198; BA: 50, 54, 198; BEL: 12; BRY: 16, 101^{OAU}, 126; CHE: 50; CHU: 189, 196, 198, 210, 212, 290; CR: 84, 101, 150, 243, 244; DA: 162; IRK: 84, 232; KAM: 198, 251, 297; KC: 57, 97, 98; KDA: 68, 192, 198; KGD: 91; KGN: 101^{IG}; KHA: 84, 198; KHM: 47, 52, 58; KIR: 14, 263, 264, 265, 266, 268, 271, 272, 274, 275, 276, 277, 291; KK: 292^{IG}; KLU: 8, 101, 198; KO: 50, 198; KR: 84, 104, 130, 198, 212, 254; KRS: 5, 101, 185, 198; KYA: 10, 101, 103, 112, 113, 120, 122, 123, 124, 129, 196, 198, 210, 211, 212, 290, 292^{IG}; LEN: 62, 87, 89, 101, 180, 182, 183, 195, 198, 199, 212, 237, 286, 287, 323; LIP: 198, 252; MAG: 198, 290; MOS: 1, 4, 6, 7, 8, 9, 11, 18, 62, 63, 64, 66, 70, 84, 101, 158, 159, 160, 164, 175, 198, 278, 289; MUR: 65, 84, 104, 106, 205, 210, 212, 290; NIZ: 176; NVS: 198, 233, 301, 308; ORE: 50, 198; ORL: 168; PER: 50; PRI: 21, 22, 69, 74, 84, 177, 203, 218; PSK: 73, 101, 140, 198; ROS: 101, 147, 198, 220, 223, 335; RYA: 84, 125, 321; SA: 231, 288, 298, 326; SAM: 153, 155, 156; SMO: 99, 100, 101^{OAU}, 198; STA: 101, 198; SVE: 39, 40, 41, 42, 43, 45, 49, 50, 51, 101^{IG}, 198, 201, 212, 234, 236; TA: 101, 198, 262; TOM: 114, 132, 198, 233; TVE: 19, 76, 84, 101, 135, 136, 139, 141, 142, 166, 179, 180, 182, 198, 204, 296; TYU: 84, 101^{IG}, 198^{IG}; VGG: 157, 198, 212, 220, 223, 281, 284, 328, 336, 338; VLA: 6, 84, 173, 198; VOR: 167, 171, 239, 248, 249; YAN: 196, 198, 210, 212, 290; ZAB: 101, 105, 198.

Lycogala exiguum Morgan – AL: 214, 215; ALT: 215; AST: 333; BA: 50, 198; CHE: 50, 198; KDA: 90; KHA: 198; KHM: 47, 52, 58; KIR: 264, 265, 266, 271; KO: 50, 198; KRS: 5, 198; LEN: 180, 182, 183, 195, 198, 212, 237; MOS: 1, 4, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 164, 198; MUR: 84; PER: 50; PRI: 69, 74, 84, 203, 218; PSK: 73; RYA: 125, 321; SVE: 49, 50, 51, 198, 201, 236; TVE: 19, 76, 84, 136, 141, 179, 180, 182, 198, 204; TYU: 84, 198^{IG}; VGG: 198, 220, 223, 280, 284, 328; VLA: 173.

Lycogala flavofuscum (Ehrenb.) Rostaf. – AL: 3, 215, 300; AST: 198, 220, 223, 327, 328, 333; BA: 198; BEL: 12; CHE: 198; IRK: 232; KHA: 198; KIR: 276, 277; KO: 198; KR: 130; KRS: 101, 185, 198; KYA: 10, 122, 124, 198; LEN: 89, 101^{OAU}, 195, 198, 212, 237; MOS: 4, 7, 8,

18, 66, 70, 175; **NGR:** 101^{OAU}; **NVS:** 301, 308; **PRI:** 21, 22, 218; **PSK:** 73, 101^{OAU}; **ROS:** 335; **SMO:** 101; **SVE:** 198, 236; **TA:** 101, 198, 262; **TVE:** 136, 198, 204; **VGG:** 198, 212, 220, 223, 328, 338.

Macbrideola cornea (G.Lister & Cran) Alexop. – **ALT:** 317; **BA:** 50, 198; **CR:** 190, 192, 198, 241, 243, 244; **KDA:** 78, 190, 192, 198; **KIR:** 276; **KR:** 198, 212, 254; **KYA:** 196, 198, 210, 211, 212, 290; **LEN:** 161, 195, 198, 199, 212, 237; **MOS:** 66, 84, 159, 160, 164; **PRI:** 218; **SVE:** 212; **TVE:** 19, 76, 166; **VGG:** 198, 220, 223, 328, 337; **YAN:** 50, 196, 198, 210, 212, 290.

Macbrideola decapillata H.C.Gilbert – **CR:** 190, 241; **KDA:** 190, 192; **KYA:** 210; **PRI:** 218.

Macbrideola martinii (Alexop. & Beneke) Alexop. – **PRI:** 218.

Macbrideola oblonga Pando & Lado – **AL:** 214, 215; **AST:** 198, 213, 220, 221, 222, 223, 328, 333; **SAR:** 198; **VGG:** 60, 337.

Macbrideola synsporos (Alexop.) Alexop. – **AL:** 215; **CR:** 190, 192; **KDA:** 78, 190; **VGG:** 27, 337.

Meriderma aggregatum ad int. – **KC:** 34, 217; **KR:** 34, 35; **LEN:** 34, 35; **MUR:** 34, 36; **TVE:** 20.

Meriderma carestiae (Ces. & De Not.) Mar.Mey. & Poulain – **KC:** 34, 216, 217, 258; **KR:** 34, 35; **LEN:** 34, 35, 258; **MUR:** 34, 36, 67, 196, 205, 210, 212, 290; **TVE:** 20.

Meriderma cribariooides (Fr.) Mar.Mey. & Poulain – **AL:** 3, 215, 300; **CR:** 29, 30; **KC:** 34, 217; **KR:** 198; **LEN:** 182, 183, 195, 198, 237, 261; **MOS:** 7^{CF}, 66, 70; **TVE:** 20.

Meriderma echinulatum (Meyl.) Mar.Mey. & Poulain – **KC:** 34, 217; **KR:** 34, 35; **LEN:** 34, 35, 261; **MUR:** 34, 36.

Meriderma fuscatum (Meyl.) Mar.Mey. & Poulain – **MUR:** 34^{CF}, 36^{CF}, 196, 205, 210, 212, 290.

Meriderma spinulisporum ad int. – **KC:** 34, 217; **KR:** 34; **LEN:** 35; **MUR:** 34, 36; **TVE:** 20^{CF}.

Meriderma verrucosporum ad int. – **KC:** 34, 217.

Metatrichia floriformis (Schwein.) Nann.-Bremek. – **AL:** 215; **ALT:** 301, 308; **IRK:** 84; **KIR:** 268, 277; **KO:** 50, 198; **KYA:** 116, 120, 122, 123, 124, 198; **LEN:** 182, 183, 195, 197, 212, 237; **MAG:** 288; **MOS:** 7, 8, 11, 63, 64, 66, 70, 84, 164; **NVS:** 301, 308; **PRI:** 218; **PSK:** 73; **SVE:** 50, 51, 198, 201, 212, 236; **TA:** 262; **TVE:** 19, 76, 136, 141, 142, 198, 204, 282; **VGG:** 338.

Metatrichia rosea (Flatau & Nann.-Bremek.) Nann.-Bremek. – **SVE:** 50, 51, 236.

Metatrichia vesparia (Batsch) Nann.-Bremek. ex G.W.Martin & Alexop. – **AL:** 3, 134, 191, 215; **ALT:** 215, 299, 301, 302, 306, 308, 316, 317; **AST:** 198, 220, 223, 327, 328, 333; **BA:** 50, 54, 198; **BRY:** 101^{OAU}, 111, 126; **CHE:** 50, 198; **CR:** 30, 174, 243, 244; **DA:** 162; **IRK:** 84; **KAM:** 251; **KDA:** 192, 198; **KHA:** 84, 198; **KHM:** 47, 52, 58; **KIR:** 107, 108, 265, 268, 269, 273, 275, 276, 277; **KLU:** 8, 101, 198; **KO:** 50, 198; **KRS:** 5, 185, 198; **KYA:** 10, 120, 122, 123, 124, 198; **LEN:** 89, 101, 180, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 198, 252; **MOS:** 1, 4, 6, 7, 8, 9, 11, 18, 63, 64, 66, 70, 84, 101, 158, 159, 160, 164, 175, 198, 278; **MUR:** 67; **NGR:** 101, 198; **NVS:** 301, 308; **PER:** 50; **PRI:** 69, 74, 84, 203, 218; **PSK:** 73, 101, 140, 198; **ROS:** 147, 335; **RYA:** 84, 125, 321; **SAM:** 154, 155; **SE:** 198; **SMO:** 100, 101^{OAU}, 198; **STA:** 198; **SVE:** 40, 41, 42, 49, 50, 51, 198, 201, 212, 236; **TA:** 101, 198, 262; **TOM:** 114, 115, 132, 198; **TVE:** 19, 76, 79, 84, 101^{OAU}, 136, 139, 141, 142, 166, 180, 182, 198, 204; **TYU:** 84, 198^{IG}; **ULY:** 101, 198; **VGG:** 157, 198, 212, 220, 223, 284, 328, 338; **VLA:** 173, 198; **VOR:** 167, 239, 249; **ZAB:** 198.

Mucilago crustacea P.Micheli ex F.H.Wigg. – **AL:** 3, 134, 215, 300; **ALT:** 215, 301, 308, 316; **ARK:** 143; **BA:** 101^{IG}, 198; **BRY:** 111; **BU:** 198; **CE:** 198; **CHE:** 101^{IG}; **CHU:** 196, 198, 210, 212, 290; **CR:** 30, 84, 242, 243, 244; **KAM:** 219; **KDA:** 68; **KIR:** 265, 267, 268, 269, 275, 276, 277, 291; **KLU:** 101, 198; **KO:** 198; **KR:** 104, 130; **KRS:** 5, 101, 185, 198; **KYA:** 10, 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; **LEN:** 96, 101, 182, 183, 195, 198, 199, 212, 237, 246, 323; **LIP:** 198, 252; **MAG:** 198, 290; **MOS:** 4, 6, 7, 9, 63, 66, 70, 84, 101, 158, 164, 175, 198, 278; **MUR:** 84, 104; **ORE:** 101^{IG}, 198; **ORL:** 168, 198; **PER:** 50; **PRI:** 21, 22, 84, 218; **ROS:** 198, 220, 223, 335; **RYA:** 84, 125, 321; **SAM:** 154, 156; **SMO:** 101, 198; **STA:** 198; **SVE:** 50, 198; **TA:** 101, 198, 262; **TAM:** 101, 198; **TOM:** 117,

132, 198; **TVE:** 19, 76, 135, 136, 141, 142, 182, 198, 204; **VGG:** 157, 198, 212, 220, 223, 281, 284, 285, 328, 336, 338; **VLA:** 173; **VOR:** 167, 170, 171; **YAN:** 50, 196, 198, 210, 212, 290.

Oligonema flavidum (Peck) Peck – **LEN:** 182, 183, 195, 198, 212, 237; **MUR:** 65; **PSK:** 73; **ROS:** 147; **VGG:** 198, 212, 220, 223, 283, 328, 330.

Oligonema fulvum Morgan – **MOS:** 66; **SVE:** 50^{CF}.

Oligonema schweinitzii (Berk.) G.W.Martin – **ALT:** 317; **LEN:** 182, 183, 195, 198, 212, 237; **MOS:** 8; **ROS:** 147; **SMO:** 101, 198; **VGG:** 198, 212, 220, 223, 284, 328, 336.

Paradiacheopsis acanthodes (Alexop.) Nann.-Bremek. – **KYA:** 210.

Paradiacheopsis cibrata Nann.-Bremek. – **KYA:** 196^{CF}, 198, 210, 211^{CF}, 212, 290; **LEN:** 198; **SMO:** 198; **SVE:** 50, 55, 198, 201, 212; **TVE:** 19, 76; **VGG:** 198, 220, 223, 328.

Paradiacheopsis fimbriata (G.Lister & Cran) Hertel ex Nann.-Bremek. – **AL:** 214, 215; **ALT:** 215, 301, 308, 310^{IG}, 316; **CHE:** 50, 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 241, 243, 244; **KDA:** 78; **KO:** 50; **KR:** 198, 212, 254; **KYA:** 122, 124, 196, 198, 210, 211, 212, 290; **LEN:** 161, 195, 198, 199, 212, 237; **LIP:** 198, 252; **MAG:** 290; **MOS:** 7, 66, 164; **MUR:** 65; **NVS:** 301, 308, 310^{IG}; **PRI:** 218; **ROS:** 147; **SAM:** 155; **SVE:** 42, 43, 44, 45, 50, 51, 53, 55, 198, 201, 212, 236; **TVE:** 19, 76, 166; **YAN:** 50, 196, 198, 210, 212, 290; **ZAB:** 26.

Paradiacheopsis longipes Hooff & Nann.-Bremek. – **KR:** 198; **MUR:** 65.

Paradiacheopsis microcarpa (Meyl.) D.W.Mitch. ex Ing – **ROS:** 147^{CF}; **SVE:** 50, 198.

Paradiacheopsis rigida (Brândză) Nann.-Bremek. – **AL:** 198, 215; **ALT:** 301, 308, 310^{IG}, 317; **CR:** 148; **KDA:** 78^{CF}; **KYA:** 122, 124; **MOS:** 164; **NVS:** 301, 308, 310^{IG}; **PRI:** 218; **TVE:** 19; **VGG:** 27.

Paradiacheopsis solitaria (Nann.-Bremek.) Nann.-Bremek. – **ALT:** 301, 308, 310^{IG}, 316; **AST:** 198, 220, 221, 223, 327, 328, 333; **BA:** 50; **CHE:** 50, 198; **CR:**

192, 241, 243, 244; **KDA:** 78; **KIR:** 275; **KR:** 198, 212, 254; **KYA:** 122, 124; **LEN:** 161, 195, 198, 199, 212, 237; **MOS:** 66, 70, 159, 160, 164; **NVS:** 301, 308, 310^{IG}; **PRI:** 218; **SVE:** 44, 50, 55, 198, 201, 212; **TVE:** 19, 76, 136, 179; **VGG:** 127, 198, 220, 223, 328.

Perichaena calongei Lado, D.Wrigley & Estrada – **PRI:** 218.

Perichaena chrysosperma (Curr.) Lister – **AL:** 215; **ALT:** 84, 301, 308, 315, 317; **AST:** 198, 213, 220, 222, 223, 327, 328, 333; **BA:** 50, 198; **CHE:** 50, 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 192, 241, 242, 243, 244; **KAM:** 198; **KDA:** 78, 192, 198; **KHA:** 198; **KR:** 198, 212, 254; **KYA:** 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; **LEN:** 161, 182, 183, 195, 198, 199, 212, 237; **MAG:** 198; **MOS:** 7, 8, 9, 66, 70, 84, 160, 164, 198; **NVS:** 301, 308; **ORE:** 198, 202; **PRI:** 74, 218; **ROS:** 147, 198, 220, 223; **SA:** 288; **SAM:** 153; **SVE:** 46; **TOM:** 117, 132, 198; **TVE:** 19, 76, 165, 166; **VGG:** 110, 157, 198, 212, 220, 223, 284, 328, 332, 336, 338; **VOR:** 167, 170, 192, 198; **YAN:** 50, 196, 198, 210, 212, 290.

Perichaena corticalis (Batsch) Rostaf. – **ALT:** 301, 308, 316, 317; **AST:** 198, 213, 220, 221, 222, 223, 327, 328, 333; **BA:** 50, 198; **CHE:** 50; **CR:** 243, 244; **DA:** 162; **KDA:** 78, 84, 192, 198; **KHA:** 198; **KIR:** 274, 275, 276; **KK:** 292^{IG}; **KL:** 198, 220, 222, 223, 328; **KO:** 50, 198; **KR:** 198, 212, 254; **KRS:** 5, 198; **KYA:** 101, 122, 124, 198, 292^{IG}; **LEN:** 101, 161, 180, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 198, 252; **MAG:** 288; **MOS:** 1, 4, 6, 7, 8, 9, 66, 70, 84, 159, 160, 164, 198; **NVS:** 301, 308; **PRI:** 74, 218; **ROS:** 198, 220, 223, 335; **SA:** 288; **SAM:** 153, 154; **SMO:** 101, 198; **SVE:** 42, 45, 50, 198, 201, 212, 236; **TA:** 101, 198; **TOM:** 132, 198; **TVE:** 6, 19, 76, 84, 136, 142, 165, 166, 179, 180, 182, 198, 204; **TY:** 304; **VGG:** 110, 157, 198, 212, 220, 223, 281, 284, 285, 328, 332, 336, 338.

Perichaena depressa Lib. – **AL:** 134, 214, 215; **ALT:** 301, 308, 315, 316, 317; **AST:** 198, 213, 220, 221, 222, 223, 327, 328, 333; **CHU:** 196, 198, 210, 212, 290; **CR:** 243, 244; **KDA:** 78; **KL:** 198, 220, 222, 223, 328; **KO:** 50, 198; **KRS:** 185, 198; **KYA:** 121, 122, 124, 196, 198, 210, 211, 212, 290; **LEN:** 161, 182, 183, 195, 198, 199, 212, 237; **MOS:** 6, 7, 8, 66, 70, 84, 164, 198; **MUR:** 65; **NVS:** 301, 308; **ORE:** 198, 202; **PRI:** 21, 218; **SA:** 288; **SAM:** 154; **SMO:** 99, 100, 101, 198; **SVE:** 40, 41, 42, 48, 50, 198, 201, 212; **TVE:** 136, 165, 166, 179; **TY:** 304; **VGG:** 110, 157, 198, 220, 223, 281, 284, 328, 332, 336, 338; **ZAB:** 26.

Perichaena heterospinispora Novozh., Zemly., Schnittler & S.L.Stephenson – **VGG:** 224, 280, 282, 329, 330, 331, 334.

Perichaena liceoides Rostaf. – **AL:** 215, 318; **ALT:** 315, 317; **AST:** 198, 213, 220, 221, 222, 223, 327, 328, 333; **CHU:** 198, 212, 290; **CR:** 243, 244; **KDA:** 78; **KL:** 198, 220, 222, 223, 328; **KYA:** 121, 122, 124; **MOS:** 66, 70, 84; **NVS:** 318; **TVE:** 19, 76, 166; **VGG:** 110, 127, 198, 220, 223, 280, 284, 328, 332, 336, 337.

Perichaena luteola (Kowalski) Gilert – **AL:** 214, 215, 318; **ALT:** 213, 220, 223, 328, 329, 333; **BU:** 318; **CR:** 243, 244; **NVS:** 318; **ZAB:** 26.

Perichaena pedata (Lister & G.Lister) G.Lister ex E.Jahn – **AL:** 134, 215^{CF}; **ALT:** 301, 308, 315; **CR:** 174; **MAG:** 288; **MOS:** 66, 164; **NVS:** 301, 308; **SA:** 288; **SVE:** 236; **VGG:** 198, 220, 223, 328, 332, 338.

Perichaena polygonospora Novozh., Zemly., Schnittler & S.L.Stephenson – **AST:** 224, 329, 330, 333; **VGG:** 224, 330, 334.

Perichaena quadrata T.Macbr. – **AST:** 213, 220, 223, 327, 328, 333; **CR:** 148; **KL:** 220, 223, 328; **ORE:** 202; **VGG:** 110, 127, 198, 212, 220, 223, 280, 284, 328, 332, 336, 337; **ZAB:** 26.

Perichaena syncarpon T.E.Brooks – **SVE:** 50, 201^{CF}.

Perichaena taimyriensis Novozh. & Schnittler – **CHU:** 198, 206; **KYA:** 198, 206, 212; **ZAB:** 26.

Perichaena vermicularis (Schwein.) Rostaf. – **AL:** 134, 214, 215; **ALT:** 301, 308, 310^{IG}, 315, 317; **AST:** 198, 213, 220, 221, 222, 223, 327, 328, 333; **CHE:** 50, 198; **CR:** 241, 243, 244; **KDA:** 78^{CF}; **KIR:** 274, 276; **KL:** 198, 220, 222, 223, 328; **KR:** 198; **KYA:** 120, 121, 122, 123, 124, 196, 198, 210, 211, 212, 290; **LEN:** 195, 198, 199, 212, 237; **LIP:** 198; **MOS:** 7, 15, 66, 238; **NVS:** 301, 308, 310^{IG}; **ORE:** 198, 202; **SA:** 288; **SAM:** 153, 154; **SVE:** 46, 50, 198; **TVE:** 166; **TY:** 304; **VGG:** 110, 198, 212, 220, 223, 280, 284, 285, 328, 332, 336, 338; **ZAB:** 26.

Physarella oblonga (Berk. & M.A.Curtis) Morgan – **KDA:** 163; **PRI:** 163.

Physarum albescens Ellis ex T.Macbr. – **KAM:** 219; **KC:** 34, 217, 255; **LEN:** 261; **MUR:** 34, 36, 258.

Physarum album (Bull.) Chevall. – **AL:** 3, 215; **ALT:** 209, 215, 226, 301, 308, 310^{IG}, 315, 316, 317; **AST:** 198, 220, 223, 327, 328, 333; **BA:** 50, 54, 198; **CHE:** 50, 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 30, 101, 242, 243, 244; **DA:** 162; **KAM:** 251; **KDA:** 68, 198; **KHA:** 84, 198; **KHM:** 47, 52, 58; **KIR:** 14, 263, 264, 265, 267, 268, 275, 276, 291; **KLU:** 101, 198; **KO:** 50, 198, 270; **KOS:** 101, 198; **KR:** 104, 198, 212, 254; **KRS:** 5, 185, 198, 209, 226; **KYA:** 10, 120, 122, 123, 124, 129, 196, 198, 209, 210, 211, 212, 226, 290; **LEN:** 89, 101, 180, 182, 183, 195, 198, 199, 209, 212, 226, 237, 286, 287, 323; **LIP:** 198, 252; **MAG:** 290; **MOS:** 1, 4, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 101, 159, 160, 164, 179, 198, 278; **MUR:** 65, 67, 84, 104; **NVS:** 209, 226, 301, 308, 310^{IG}; **ORE:** 50; **PER:** 50; **PRI:** 69, 74, 84, 198, 203, 218; **PSK:** 73, 140; **ROS:** 147, 198, 220, 223, 335; **RYA:** 84; **SMO:** 101, 198; **SVE:** 40, 41, 42, 43, 45, 49, 50, 51, 198, 201, 209, 212, 226, 236; **TOM:** 114, 132, 198; **TVE:** 6, 19, 76, 84, 135, 136, 139, 141, 142, 166, 179, 180, 182, 198, 204; **TYU:** 84, 198^{IG}; **VGG:** 157, 198, 209, 212, 220, 223, 226, 281, 284, 285, 328, 332, 338; **VLA:** 173; **VOR:** 101, 167, 170, 198, 248; **YAN:** 50, 196, 198, 210, 212, 290.

Physarum alpestre Mitchel, S.W.Chapm. & M.L. Farr – **KAM:** 219; **KC:** 34, 217, 255.

Physarum alpinum (Lister & G.Lister) G.Lister – **AL:** 3, 215; **KAM:** 219; **KC:** 34, 217; **LEN:** 180, 182, 183, 195, 197, 198, 212, 237, 282; **MUR:** 67; **SVE:** 212.

Physarum apiculosporum Härk. – **AST:** 220, 222, 223, 328, 333; **IRK:** 33; **KYA:** 121^{CF}, 122^{CF}, 124^{CF}; **MOS:** 66; **VGG:** 110, 157, 198, 220, 223, 328, 332.

Physarum aurantiacum Shuang L.Chen, Yu Li & H.Z.Li – **PRI:** 218; **SVE:** 236.

Physarum auripigmentum G.W.Martin – **PRI:** 218.

Physarum auriscalpium Cooke – **ALT:** 310^{IG}; **KIR:** 274, 276; **KR:** 198, 212, 254; **KYA:** 122, 124; **LEN:** 195, 197, 198, 199, 212, 237, 282; **MOS:** 6, 7, 11, 64, 66, 70, 198; **NVS:** 301, 307, 308, 310^{IG}; **RYA:** 84; **SVE:** 45, 50; **TVE:** 165, 166.

Physarum bethelii T.Macbr. ex G.Lister – ALT: 301, 308, 315; KYA: 122, 124; MOS: 164; PRI: 218; ROS: 147; SVE: 48, 50, 51, 198, 235, 236; TVE: 19.

Physarum bictectum G.Lister – ALT: 301, 308; AST: 198, 220, 223, 327, 328, 333; BA: 50; BU: 198; CHE: 198; IRK: 198; KR: 198, 212, 254; LEN: 182, 183, 195, 198, 212, 237; MOS: 66, 70, 164; NVS: 301, 308.

Physarum bivalve Pers. – AL: 215; ALT: 301, 308, 316, 317; CHU: 196, 198, 210, 212, 290; CR: 30, 242, 244; KDA: 90; KO: 50, 198; KR: 96, 104, 130, 198, 212, 254; KYA: 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; LEN: 101, 182, 183, 195, 198, 199, 212, 237, 323; LIP: 198, 252; MAG: 288, 290; MOS: 6, 7, 8, 66, 70, 84, 101, 198; MUR: 196, 198, 205, 210, 212, 290; ORE: 50, 198, 202; PRI: 22, 218; ROS: 198, 220, 223, 335; SA: 288; SMO: 101, 198; SVE: 48, 50, 198; TVE: 182; VGG: 198, 212, 220, 223, 284, 328, 337; VOR: 198.

Physarum braunianum de Bary – NVS: 301, 307, 308.

Physarum carneum G.Lister & Sturgis – KR: 198, 212^{CF}, 254^{CF}.

Physarum cinereum (Batsch) Pers. – AL: 3, 214, 215; ALT: 215, 301, 308, 315, 316, 317; AST: 213, 220, 222, 223, 327, 328, 333; BA: 50, 54; CHU: 196, 210, 212, 290; CR: 174, 192, 242, 243, 244; KDA: 90; KGD: 91; KHM: 52, 58; KL: 220, 222, 223, 328; KO: 50; KR: 198, 212, 254; KYA: 210, 211, 212, 290; LEN: 89, 101, 182, 183, 195, 199, 212, 237, 323; LIP: 252; MAG: 290; MOS: 6, 7, 8, 11, 63, 66, 70, 84, 164, 278; MUR: 196, 205, 210, 212, 290; NVS: 301, 308; ORE: 202; PRI: 74, 218; SA: 288; SMO: 99, 100, 101; SVE: 49, 50, 51, 236; TOM: 132; TVE: 6, 19, 76, 79, 84, 136, 204, 282, 296; VGG: 110, 212, 220, 223, 284, 285, 328, 332, 336, 338; VOR: 248, 249.

Physarum citrinum Schumach. – CR: 30, 243, 244; LIP: 198, 252; MOS: 4, 7, 66, 70; SVE: 40, 41, 50, 201, 212, 236; TVE: 79, 136, 198, 204, 282; VOR: 248.

Physarum compressum Alb. & Schwein. – AL: 134, 215; ALT: 315, 316, 317; AST: 198, 213, 220, 222, 223, 327, 328, 333; BRY: 101^{OAU}; KDA: 78; KL: 328; KLU: 101^{OAU}; KYA: 112, 113; LEN: 101, 180, 182, 183, 195, 198, 199, 212, 237, 323; LIP: 198, 252; MOS: 6, 7, 8, 9, 66, 70, 94, 101^{OAU}, 164, 175, 198, 278; NVS: 301, 308;

PRI: 21; SMO: 101^{OAU}, 198; SVE: 46, 48, 50, 198; TOM: 132, 198; TVE: 101^{OAU}, 136, 166, 198; VGG: 110, 198, 220, 223, 328, 332, 338; VOR: 192, 198; ZAB: 26.

Physarum confertum T.Macbr. – AL: 215; KR: 198; LEN: 199; MOS: 6, 7, 63, 66, 70, 198, 278; SVE: 236; TVE: 84; VGG: 198.

Physarum conglomeratum (Fr.) Rostaf. – ALT: 302, 306; KYA: 122, 124; LEN: 183, 195, 198, 212, 323; MOS: 198; NVS: 301, 308; PRI: 218; SMO: 198; SVE: 50, 198, 201, 212; TVE: 136, 198, 204; VGG: 212, 220, 223, 328.

Physarum contextum (Pers.) Pers. – ALT: 301, 308; KO: 50, 198; KR: 198, 212, 254; LEN: 101, 180, 182, 183, 195, 198, 199, 212; MOS: 6, 7, 8, 66, 70, 84, 198, 278; MUR: 96, 104; NVS: 301, 308; ORE: 198, 202; PRI: 218; SAK: 198; SMO: 101, 198; SVE: 51; TOM: 132, 198; TVE: 19, 76, 136, 142, 198, 204; VLA: 173.

Physarum crateriforme Petch – ALT: 301, 307, 308, 317; NVS: 301, 307, 308; VOR: 170.

Physarum daamsii Nann.-Bremek. – KDA: 90.

Physarum decipiens M.A.Curtis – AL: 214, 215; ALT: 215, 301, 308, 310^{IG}, 315, 316, 317; AST: 198, 213, 220, 221, 222, 223, 327, 328, 333; CR: 192, 244; KR: 198, 212, 254; KRS: 185; KYA: 120, 121, 122, 123, 124, 198; LEN: 195, 198, 199, 212, 237; MOS: 6, 7, 66, 164, 198, 278; NVS: 301, 308, 310^{IG}; ORE: 198, 202; PRI: 218; SAM: 153; SMO: 101, 198; SVE: 50, 198, 201, 212; TOM: 198; TY: 304; VGG: 110, 157, 198, 220, 223, 284, 328, 332, 338; VOR: 167, 170, 192, 198.

Physarum dictyospermum Lister & G.Lister – MOS^{DR}: 6, 7, 198.

Physarum diderma Rostaf. – AL: 198, 215; ALT: 301, 308, 317; AST: 223, 328; MOS: 8, 66, 84; NVS: 301, 308; PER: 50; ROS: 220, 223, 335; SVE: 49, 50, 198, 236; TVE: 19, 76; VGG: 198, 220, 223, 328.

Physarum dideroides (Pers.) Rostaf. – AL: 198, 215; ALT: 307, 317; AST: 198, 213, 220, 221, 222, 223, 328, 333; CHE: 50; KL: 220, 222, 223, 328; LEN: 182, 183, 195, 198, 212, 237; LIP: 198, 252; MOS: 6, 7, 8, 9, 66, 70, 84, 164, 198; NVS: 301, 308; PER: 50; SMO: 101, 198; SVE: 198; TVE: 19,

76, 136; TY: 304; VGG: 110, 198, 220, 223, 328, 332, 338.

Physarum dispersum Y.Yamam. & Nann.-Bremek.
– NVS: 301, 308.

Physarum dubium Nann.-Bremek. & Y.Yamam. –
SVE: 236.

Physarum famintzini Rostaf. – KLU: 101, 198, 246;
KO: 50, 198; TVE: 79, 80, 136, 198, 204, 282.

Physarum flagellatum (Alexeieff) Fiore-Donno,
Kamono & Caval.-Sm. – YAR: 59.

Physarum flavigerum Berk. – AL: 134; ALT: 215,
301, 308, 315, 316; BA: 50, 198; CHE: 50, 198; CR: 243,
244; KDA: 198; KHA: 198; KO: 50, 198; KR: 130; KYA:
122, 124; LEN: 182, 183, 195, 198, 212, 237; LIP: 198,
252; MOS: 6, 7, 11, 63, 66, 70, 84, 101, 198; PER: 50;
PRI: 74, 203, 218; ROS: 147; SAM: 153, 154; STA: 198;
SVE: 49, 50, 198, 236; TVE: 19, 76, 136, 204; VGG: 198,
212, 220, 223, 328, 330.

Physarum flavidum (Peck) Peck – LEN: 182, 183,
195, 197, 198, 237, 282.

Physarum galbeum Wingate – MOS^{DR}: 6, 198.

Physarum globuliferum (Bull.) Pers. – AL: 134, 215;
ALT: 215, 301, 308, 310^{IG}, 316, 317; BA: 50, 54, 198;
CHE: 50, 198; DA: 162^{CF}; KDA: 90; KLU: 8; KO: 50,
198; KR: 198, 212, 254; KYA: 120, 122, 123, 124; LEN:
182, 183, 195, 197, 198, 212, 237, 261, 282; LIP: 198,
252; MOS: 1, 6, 7, 8, 63, 66, 70, 198; NVS: 301, 308,
310^{IG}; PRI: 69, 74, 218; ROS: 147; RYA: 84, 125, 321;
SMO: 101, 198; SVE: 42, 50, 51, 198, 201, 212, 236;
TOM: 132; TVE: 84, 136, 198, 204; TYU: 84; VOR: 248.

Physarum gyrosomum Rostaf. – ALT: 301, 308, 317;
AST: 328, 333; BU: 198; KHM: 47, 52, 58; KR: 198;
LEN: 182, 183, 195, 198, 237; LIP: 198, 252; MOS: 7,
64, 66, 70; NVS: 301, 307, 308; PSK: 198; TY: 304; TYU:
198^{IG}; VGG: 198, 220, 223, 328.

Physarum hongkongense Chao H.Chung – CR: 174.

Physarum javanicum Racib. – ALT: 301, 308; NVS:
301, 307, 308.

Physarum lakanpalii Nann.-Bremek. & Y.Yamam.
– NVS: 320.

Physarum lateritium (Berk. & Ravenel) Morgan –
AL: 215; ALT: 310^{IG}; MAG: 198; MOS: 8; NVS: 301,
308, 310^{IG}.

Physarum lenticulare Nann.-Bremek. & Y.Yamam.
– NVS: 320.

Physarum leucophaeum Fr. & Palmquist – AL: 3,
134, 198, 215; ALT: 209, 226, 301, 308, 315, 317; AST:
198, 213, 220, 222, 223, 327, 328, 333; BA: 50, 54, 198;
CR: 144, 243, 244; DA: 162^{CF}; IRK: 84; KDA: 68, 78;
KHA: 84, 198; KL: 198, 220, 222, 223, 328; KO: 50, 198;
KR: 198, 209, 212, 226, 254; KRS: 5, 185, 198, 226; KYA:
122, 124; LEN: 89, 180, 182, 183, 195, 198, 199, 209, 212,
226, 237, 323; MAG: 290; MOS: 7, 8, 9, 63, 66, 70, 84,
164, 198; MUR: 84, 196, 198, 205, 210, 212, 290; NVS:
209, 226, 301, 308; PER: 50; PRI: 74, 203, 218; ROS:
198, 220, 223; STA: 209, 226; SVE: 40, 41, 42, 49, 50, 51,
198, 201, 209, 212, 236; TVE: 19, 76, 84, 136, 165, 180,
182, 198, 204, 296; TYU: 84; VGG: 110, 157, 198, 209,
212, 220, 223, 226, 284, 328, 332, 338; VLA: 173; VOR:
167, 170; YAN: 196, 198, 210, 212, 290; ZAB: 26.

Physarum leucopus Link – AL: 3, 191, 198, 215; ALT:
301, 302, 306, 308; BA: 50, 198; CHE: 50, 198; CR: 242,
244; DA: 162^{CF}; KDA: 68, 84; KHA: 84; KO: 50, 198; KR:
198, 212, 254; LEN: 101, 180, 182, 183, 195, 198, 212, 237,
246, 323; LIP: 198, 252; MOS: 1, 7, 9, 11, 63, 64, 66, 70, 84,
164, 198; NVS: 301, 308; PER: 50; PRI: 74; SVE: 49, 50, 51,
198, 201, 212, 236; TOM: 114, 132, 198; TVE: 19, 76, 84,
136, 141, 142, 166; TYU: 84; VGG: 198, 220, 223, 284, 328.

Physarum licheniforme (Schwein.) Lado – LEN: 246.

Physarum luteolum Peck – PRI: 218.

Physarum melleum (Berk. & Broome) Massee –
KDA: 78, 84; PRI: 74, 218; VGG: 282, 338.

Physarum murinum Lister – MOS^{DR}: 6, 198, 278;
RYA: 84.

Physarum mutabile (Rostaf.) G.Lister – ALT: 310^{IG};
MOS: 7, 66, 70, 84, 164; NVS: 301, 307, 308, 310^{IG}.

Physarum newtonii T.Macbr. – **PRI:** 218.

Physarum nigripodium Nann.-Bremek. & Y.Yamam. – **NVS:** 301, 307, 308.

Physarum nitens (Lister) Ing – **AL:** 134; **MOS:** 84.

Physarum nivale (Meyl.) Mar.Mey. & Poulaing – **KAM:** 219; **KC:** 34, 209, 217, 226, 258.

Physarum notabile T.Macbr. – **AL:** 3, 198, 214^{CF}, 215^{CF}; **ALT:** 209, 215, 226, 301, 308, 316, 317; **AST:** 198, 213, 220, 221, 222, 223, 327, 328; **BA:** 50, 54, 198; **KDA:** 78; **KHA:** 84; **KHM:** 52, 58; **KIR:** 274, 276; **KL:** 198, 220, 222, 223, 328; **KO:** 50, 198; **KR:** 198; **KYA:** 120, 122, 123, 124, 198; **LEN:** 182, 183, 195, 198, 212, 237; **MOS:** 1, 6, 7, 9, 66, 70, 84, 164, 179, 198; **NVS:** 209, 226, 301, 308; **ORE:** 53, 198, 202; **PER:** 50; **PSK:** 209, 226; **SAR:** 198; **SVE:** 50, 51, 198, 201, 209, 212, 226, 236; **TVE:** 19, 76, 136, 142, 179; **TYU:** 84; **VGG:** 110, 157, 198, 212, 220, 223, 284, 328, 332, 338.

Physarum nucleatum Rex – **LEN:** 180, 181, 198; **TVE:** 19; **VOR:** 167.

Physarum nudum T.Macbr. – **ALT:** 315, 317; **AST:** 198, 220, 223, 327, 328, 333; **KYA:** 196, 198, 210, 211^{CF}, 212^{CF}, 290^{CF}; **LEN:** 195, 198, 212^{CF}, 237; **MOS:** 66, 70, 278; **SVE:** 50, 198.

Physarum oblatum T.Macbr. – **CHU:** 196, 198, 210, 212, 290; **CR:** 192, 244; **KHA:** 198; **KR:** 198, 212, 254; **KYA:** 198, 210, 211, 212, 290; **LEN:** 180, 181, 182, 183, 195, 198, 212, 237; **MAG:** 290; **PRI:** 218; **SVE:** 198, 201, 212; **TVE:** 19, 79, 80, 136, 182, 282; **YAN:** 50, 196, 198, 212, 290.

Physarum ovisporum G.Lister – **VGG:** 110, 198, 220, 223, 328, 332, 337.

Physarum penetrale Rex – **KYA:** 122, 124; **PRI:** 218; **TVE:** 76, 84; **VLA:** 172.

Physarum pezizoideum (Jungh.) Pavill. & Lagarde – **KIR:** 268, 269; **LEN:** 182, 183, 195, 198, 212, 237; **MOS:** 6, 9, 66, 70, 101, 164, 198; **ROS:** 335; **STA:** 198; **VGG:** 198, 212, 220, 223, 282, 284, 285, 328, 329, 338.

Physarum polycephalum Schwein. – **KR:** 130^{CF}; **MOS:** 6, 7^{CF}, 66, 70; **TVE:** 6, 136, 204.

Physarum pseudonotabile Novozh., Schnittler & Okun – **AL:** 209; **ALT:** 225, 226, 315; **AST:** 209, 225, 226, 333; **CR:** 257; **KC:** 225, 226; **KL:** 209; **VGG:** 27, 209, 225, 226, 280, 337.

Physarum psittacinum Ditmar – **AL:** 3, 191, 198, 215, 300; **ALT:** 301, 307, 308; **BA:** 54; **BRY:** 16, 101^{OAU}; **BU:** 198; **CHE:** 50, 198; **KIR:** 268; **KO:** 50, 198; **KYA:** 122, 124; **LEN:** 323; **MOS:** 1, 4, 6, 7, 9, 64, 66, 70, 84, 198, 278; **NVS:** 301, 307, 308; **PSK:** 73; **SVE:** 49, 50, 51, 198, 201, 212, 236; **TVE:** 6, 19, 76, 84, 136, 141, 198, 204.

Physarum pulcherrimum Berk. & Ravenel – **AL:** 215; **LEN:** 182, 183, 195, 198, 212, 237; **PRI:** 218; **RYA:** 125, 321; **TVE:** 19, 76, 141.

Physarum pulcherripes Peck – **CHE:** 50; **KO:** 50; **PER:** 50; **SVE:** 50, 198, 201, 212, 236.

Physarum pusillum (Berk. & M.A.Curtis) G.Lister – **AST:** 198, 209, 220, 222, 223, 226, 327, 328, 333; **BA:** 50, 198; **CR:** 148; **KL:** 209, 220, 222, 223, 226, 328; **KYA:** 122, 124; **MOS:** 6, 7, 66, 70, 84, 164, 198; **ORE:** 198, 202; **TVE:** 165, 166.

Physarum rubiginosum Fr. & Palmquist – **BA:** 198; **KO:** 50, 198; **KYA:** 122, 124; **LEN:** 101, 183, 195, 198, 212, 237, 246, 323; **MOS:** 6, 198, 278; **SMO:** 101, 198.

Physarum schroeteri Rostaf. – **LEN:** 182, 183, 195, 237; **NVS:** 309, 311; **PRI:** 74, 203; **ROS:** 335.

Physarum serpula Morgan – **BA:** 50; **KDA:** 78; **LEN:** 182, 183, 195, 212, 237; **MOS:** 6, 7, 8, 66, 70, 84, 278; **RYA:** 125, 321; **SVE:** 50, 201^{CF}, 212; **TVE:** 136, 142, 165, 166.

Physarum sessile Brândză – **AST:** 220, 222, 223, 328, 333; **PRI:** 218.

Physarum spectabile Nann.-Bremek., Lado & G.Moreno – **MOS:** 84; **TVE:** 19, 20, 75, 76; **TYU:** 84.

Physarum stellatum (Massee) G.W.Martin – **MOS^{DR}:** 6, 198; **PRI:** 218; **VOR:** 167, 170.

Physarum straminipes Lister – **ALT:** 317; **AST:** 198, 220, 223, 327, 328, 333; **CHE:** 50, 198; **MOS:** 198; **SVE:**

42, 50, 198, 201, 212, 236; **VGG:** 110, 157, 198, 212, 220, 223, 284, 328, 332.

Physarum sulphureum Alb. & Schwein. – **CHE:** 198; **CR:** 242, 243; **CU:** 101^{OAU}; **KHA:** 198; **KHM:** 47, 58; **KR:** 198; **KYA:** 122, 124; **LEN:** 101, 183, 195, 198, 212, 237, 246; **LIP:** 198, 252; **ME:** 101^{OAU}; **MOS:** 9, 15, 198, 238; **NVS:** 301, 307, 308; **PRI:** 74, 203; **SAM:** 101^{OAU}; **SVE:** 198, 236; **TA:** 101^{OAU}, 198, 262; **TOM:** 132, 198; **TVE:** 76; **TYU:** 198^{IG}; **ULY:** 101^{OAU}.

Physarum tenerum Rex – **KDA:** 198; **KRS:** 5, 198; **LEN:** 181, 182, 183, 195, 198, 212, 237; **MOS:** 6, 7, 9, 66, 70, 198; **PRI:** 74, 218; **RYA:** 125, 321; **SVE:** 198, 201; **TVE:** 19, 136, 180, 198, 204.

Physarum umbiliciferum Y.Yamam. & Nann.-Bremek – **PRI:** 218.

Physarum vernum Sommerf. – **AST:** 198, 220, 222, 223, 327, 328, 333; **KAM:** 219; **KC:** 34, 216, 217, 255; **KDA:** 78; **KYA:** 122, 124; **LEN:** 34, 35, 181, 182, 183, 195, 198, 212, 237; **LIP:** 198, 252; **MOS:** 7, 8, 9, 11, 15, 66, 70, 84, 164, 198; **NVS:** 301, 308; **PSK:** 198; **SAM^{DR}:** 154, 156; **SVE:** 42, 44^{CF}, 46, 49, 50, 198, 201, 212; **TVE:** 19, 136, 165, 180, 198; **VGG:** 110, 157, 198, 220, 223, 284, 285, 328, 332.

Physarum virescens Ditmar – **KR:** 198, 212, 254; **KYA:** 122, 124; **LEN:** 101, 180, 182, 183, 195, 198, 199, 212, 237, 246, 323; **MOS:** 6, 7, 8, 66, 70, 84, 198, 278; **MUR:** 196, 205, 210, 212, 290; **PRI:** 218; **PSK:** 198; **TOM:** 198; **TVE:** 19, 76, 136, 179, 198; **VGG:** 198, 212, 220, 223, 328.

Physarum viride (Bull.) Pers. – **AL:** 134, 191, 215; **ALT:** 215, 301, 308, 316; **BA:** 50, 54, 198; **CHE:** 50; **CHU:** 196, 198, 210, 212, 290; **CR:** 30, 244; **KDA:** 90; **KHM:** 47, 52, 58, 196; **KIR:** 268, 291; **KO:** 50, 198; **KR:** 198, 212, 254; **KRS:** 5, 185, 198; **KYA:** 122, 124, 196, 198, 210, 211, 212, 290; **LEN:** 89, 101, 180, 182, 183, 195, 198, 199, 212, 237; **LIP:** 198, 252; **MOS:** 1, 4, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 164, 198, 278; **MUR:** 196, 198, 205, 210, 212, 290; **NVS:** 301, 308; **ORE:** 198, 202; **PER:** 50; **PRI:** 21, 69, 74, 84, 203, 218; **PSK:** 73; **ROS:** 147, 198, 220, 223; **RYA:** 84, 125, 321; **SAM:** 153; **SMO:** 101, 198; **SVE:** 40, 41, 50, 51, 198, 201, 212, 236; **TOM:** 132; **TVE:** 19, 76, 84, 136, 141, 142, 182; **TYU:** 84, 198^{IG};

VGG: 157, 198, 212, 220, 223, 284, 328, 338; **VLA:** 173; **VOR:** 167, 170, 171, 248; **YAN:** 198, 210, 212, 290.

Protophysarum phloioignum M.Blackw. & Alexop. – **ALT:** 315, 316; **AST:** 198, 213, 220, 222, 223, 328; **VOR:** 25.

Prototrichia metallica (Berk.) Massee – **AL:** 191, 215; **CHU:** 189, 196, 198, 210, 212, 290; **KHM:** 52, 58; **KO:** 50, 198; **KYA:** 196, 198, 210, 211, 212, 290; **LEN:** 101, 183, 195, 198, 212, 237; **MAG:** 198; **PER:** 50; **PRI:** 218; **SVE:** 50, 198, 201, 212; **TVE:** 79, 80, 136, 204, 282; **YAN:** 210.

Reticularia intermedia Nann.-Bremek. – **DA:** 162; **IRK:** 84; **KHM:** 47, 58; **KIR:** 276, 277; **KO:** 50, 198; **KR:** 198; **KRS:** 5, 198; **KYA:** 122, 124; **LEN:** 182, 183, 195, 198, 212, 237; **MOS:** 66, 70, 84; **MUR:** 84; **PRI:** 74; **PSK:** 73; **ROS:** 335; **SVE:** 40, 41, 50, 51, 198, 201; **TVE:** 19, 136, 198, 204; **TYU:** 198^{IG}; **VGG:** 198, 220, 223, 284, 285, 328.

Reticularia jurana Meyl. – **CR:** 174, 243; **KR:** 149, 212, 254; **KYA:** 196, 210, 211, 212, 290; **LEN:** 195, 197, 212, 237; **NVS:** 301, 307, 308; **SVE:** 201, 212; **VGG:** 212.

Reticularia liceoides (Lister) Nann.-Bremek. – **KHM:** 52, 58.

Reticularia lycoperdon Bull. – **AL:** 3, 134, 215, 300; **ALT:** 317; **BRY:** 101^{OAU}, 126; **CHU:** 189, 196, 198, 210, 212, 290; **CR:** 84, 244; **DA:** 162; **IRK:** 84; **KDA:** 68; **KHM:** 47, 52, 58; **KIR:** 268; **KLU:** 101, 198; **KO:** 50, 198; **KR:** 104, 130, 198, 212, 254; **KRS:** 5, 101, 185, 198; **KYA:** 10, 101, 129, 198, 210; **LEN:** 89, 96, 101, 182, 183, 195, 198, 212, 237, 323; **LIP:** 198, 252; **MAG:** 198; **MOS:** 4, 6, 7, 8, 9, 11, 66, 70, 84, 164, 198, 278; **MUR:** 65, 84, 96, 104; **NIZ:** 101, 176, 198; **NVS:** 198, 233, 301, 308; **PER:** 50; **PRI:** 22, 74, 177; **PSK:** 73, 101, 140, 198; **ROS:** 147; **RYA:** 125, 321; **SAM:** 154; **SE:** 198; **SMO:** 101, 198; **STA:** 57, 97, 98, 101, 198; **SVE:** 40, 41, 50, 198, 201, 212, 236; **TA:** 101, 198, 262; **TOM:** 132, 198; **TVE:** 6, 76, 84, 135, 136, 139, 142, 166, 179, 182, 198, 204; **TYU:** 101, 198^{IG}; **VGG:** 198, 212, 220, 223, 328, 338; **VLA:** 173; **VLG:** 101, 198; **VOR:** 171, 248; **ZAB:** 198.

Reticularia olivacea (Ehrenb.) Fr. – **CHU:** 189, 196, 198, 210, 212, 290; **KR:** 130; **MAG:** 198; **MO^{DR}S:** 1: 6; **SMO:** 101, 198; **TOM:** 115.

Reticularia splendens Morgan – AL: 134, 215; ALT: 301, 308; BA: 50; BU: 198; CR: 144, 244; DA: 162; KAM: 251; KHA: 84; KHM: 47, 58; KO: 50, 198; KR: 84; KYA: 112, 113, 120, 122, 123, 124, 198; LEN: 198, 199, 237; MOS: 6, 7, 66, 70, 84, 164, 198; MUR: 65, 84; NVS: 149, 301, 308; PRI: 74, 203, 218; PSK: 73; ROS: 147, 149, 198, 220, 223; SVE: 50, 51, 149, 198; TOM: 114, 115, 117, 132, 198; TVE: 136, 204; TYU: 198^{IG}; VGG: 157, 198, 220, 223, 328, 330; VLA: 173; VOR: 167, 170.

Siphoptychium casparyi Rostaf. – AST: 198, 220, 223, 328; KO: 198; SVE: 51, 198; VGG: 281, 329.

Stemonaria gracilis Nann.-Bremek. & Y.Yamam. – CR: 145, 148; KDA: 78^{CF}; MOS: 66, 70.

Stemonaria irregularis (Rex) Nann.-Bremek., R.Sharma & Y.Yamam. – AL: 133, 134, 215; ALT: 215, 301, 308, 316; BA: 50, 198; IRK: 84; KHA: 198; KO: 50, 198; LIP: 198, 252; MOS: 6, 7, 9, 66, 70, 84, 198, 278; NVS: 301, 308; PER: 50; PRI: 74, 84, 203, 218; SVE: 45, 50, 198, 201, 212, 236; TOM: 132, 198; TVE: 84; TY: 304; VGG: 88, 198, 220, 223, 282, 328, 338; VLA: 172.

Stemonaria longa (Peck) Nann.-Bremek., R.Sharma & Y.Yamam. – AST: 198, 213, 220, 223, 327, 328, 333; CR: 30, 101, 145; KO: 50, 198; LEN: 101, 183, 195, 197, 212, 237; MOS: 6, 101, 198; ROS: 335; RYA: 125, 321; SMO: 101; SVE: 51; VGG: 88, 198, 328, 338.

Stemonaria nannengae (T.N.Lakh. & K.G.Mukerji) Nann.-Bremek., R.Sharma & Y.Yamam. – ALT: 310^{IG}; NVS: 301, 307, 308, 310^{IG}.

Stemonitis axifera (Bull.) T.Macbr. – AL: 3, 134, 191, 198, 215; ALT: 215, 301, 302, 306, 308, 316, 317; AST: 220, 223, 328; BA: 50, 54, 198; BRY: 101^{OAU}, 111; BU: 198; CE: 57, 97, 98, 101, 198; CHE: 50, 198; CHU: 196, 198, 210, 212, 290; CR: 30, 84, 101, 145, 242, 243, 244; DA: 162; IRK: 84; KAM: 251; KC: 57, 97, 98, 101, 198; KDA: 68, 84, 192, 198; KGD: 91; KHA: 84; KHM: 47, 52, 58, 196; KIR: 263, 264, 265, 268, 269; KL: 220, 222, 223, 328; KLU: 101^{OAU}; KO: 50, 198; KR: 84, 198, 212, 254; KRS: 5, 185, 198; KYA: 10, 112, 120, 122, 123, 124, 129, 196, 198, 210, 211, 212, 290; LEN: 89, 101, 180, 182, 183, 195, 198, 199, 212, 237, 286^{DS}, 287^{DS}; LIP: 198, 252; MAG: 198, 290; MOS: 1, 2, 4, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 92, 101, 164, 175, 198, 278; MUR: 67, 84,

106, 196, 198, 205, 210, 212, 290; NVS: 198, 233, 301, 308; ORE: 198, 202; ORL: 168; PER: 50; PRI: 21, 22, 69, 74, 84, 218; PSK: 73, 101, 198; ROS: 335; RYA: 84, 125, 321; SAM: 153, 156; SMO: 99, 100, 101^{OAU}, 198; STA: 198; SVE: 40, 41, 50, 51, 198, 201, 212, 234, 236; TA: 101, 198, 262; TOM: 132, 198; TVE: 6, 19, 76, 84, 101, 135, 136, 139, 141, 166, 179, 180, 182, 198, 204, 296; TYU: 84, 198^{IG}; VGG: 88, 157, 198, 212, 220, 223, 284, 285, 328, 336, 338; VLA: 173; VOR: 167, 171, 248; YAN: 50, 196, 198, 210, 212, 290; ZAB: 101, 105, 198.

Stemonitis capillitionodosa G.Moreno, D.W.Mitch., C.Rojas & S.L.Stephenson – MUR: 319.

Stemonitis flavogenita E.Jahn – AL: 134; ALT: 317; CHE: 50; CR: 145, 174, 243, 244; KO: 50, 198; KR: 198; KYA: 122, 124; LIP: 198, 252; MOS: 4, 6, 7, 66, 70, 198, 278; PER: 50; PRI: 21, 22, 74; ROS: 147; RYA: 84; SVE: 198; TVE: 6, 84, 136, 179, 198, 204; VGG: 88, 284, 285, 338.

Stemonitis fusca Roth – AL: 3, 134, 191, 215; ALT: 215, 299, 301, 302, 306, 308, 316, 317; ARK: 143; AST: 213, 220, 222, 223, 327, 328, 333; BA: 50; BRY: 16, 101^{OAU}; CHU: 196, 210, 212, 290; CR: 145, 242, 243, 244; DA: 162; KAM: 297; KC: 57, 97, 98; KDA: 78, 90, 192; KHM: 52, 58, 196; KIR: 14, 263, 264, 265, 266, 268, 269, 271, 275, 291; KK: 250^{IG}, 292^{IG}; KLU: 101; KO: 50; KOS: 101; KR: 104, 130, 143, 212, 254; KRS: 5, 185; KYA: 101, 112, 122, 124, 250^{IG}, 292^{IG}; LEN: 89, 96, 101, 183, 195, 199, 212, 237; LIP: 252; MOS: 1, 4, 6, 7, 8, 9, 11, 18, 63, 64, 66, 70, 84, 94, 101, 164, 175, 179, 278; MUR: 84, 104; NIZ: 101, 176; NVS: 233, 301, 308; ORL: 168; PER: 50; PRI: 21, 22, 74, 84, 177, 218; PSK: 73, 101; ROS: 147, 335; RYA: 125, 321; SMO: 99, 100, 101; STA: 57, 97, 98, 101; SVE: 40, 41, 42, 43, 49, 50, 51, 201, 212, 236; TA: 101, 262; TOM: 114, 132, 233; TVE: 6, 19, 76, 84, 136, 141, 179, 204; TY: 304; TYU: 84; VGG: 88, 110, 157, 212, 220, 223, 284, 285, 328, 332, 336, 337, 338; VLG: 101; VOR: 167, 170, 171, 248, 249; YAN: 210, 212, 290; YAR: 101.

Stemonitis herbarica Peck – ALT: 215, 301, 308, 316; CR: 30, 145, 174, 242, 243, 244; KYA: 122, 124; LIP: 198, 252; MOS: 4, 6, 7, 66, 70, 164, 198; PRI: 218; SVE: 50, 198, 212; TOM: 117.

Stemonitis inconspicua Nann.-Bremek. – ALT: 301, 308.

Stemonitis marjana Y.Yamam. – **PRI:** 74; **SVE:** 236.

Stemonitis pallida Wingate – **AL:** 3, 215; **AST:** 198, 220, 223, 327, 328, 333; **CHE:** 50, 198; **CR:** 30, 145, 244; **KDA:** 68; **KHM:** 47, 52, 58; **KLU:** 8; **KO:** 50, 198; **KYA:** 120, 122, 123, 124; **LEN:** 180, 181, 182, 183, 195, 198, 199, 212, 237; **MOS:** 1, 7, 8, 9, 63, 66, 70, 164, 198; **MUR:** 65; **PRI:** 74; **PSK:** 73; **SVE:** 40, 41, 42, 50, 51, 198, 201, 236; **TVE:** 19, 84, 136, 179, 180, 182, 198, 204; **TYU:** 198^{IG}; **VGG:** 88, 157, 198, 220, 223, 284, 328, 338; **VOR:** 167.

Stemonitis pseudoflavogenita A. Vlasenko et Novozh. – **KDA:** 319; **NVS:** 319.

Stemonitis splendens Rostaf. – **AL:** 3, 215; **ALT:** 215, 299, 302, 306, 316, 317; **AST:** 84, 220, 223, 327, 328, 333; **CHE:** 50, 198; **CR:** 30, 145, 244; **KDA:** 68, 90, 192; **KIR:** 265; **KR:** 84; **KRS:** 5; **KYA:** 10, 120, 122, 123, 124, 129; **LEN:** 180, 182, 183, 195, 197, 212, 237, 246, 282; **LIP:** 252; **MOS:** 4, 6, 7, 8, 9, 64, 66, 70, 84, 164, 278; **MUR:** 84; **NVS:** 301, 308; **PRI:** 74, 84, 218; **PSK:** 73, 140; **ROS:** 147; **RYA:** 84, 125, 321; **SAM:** 153, 156; **SMO:** 101; **SVE:** 50; **TOM:** 115, 132; **TVE:** 19, 76, 84, 135, 136, 139, 142, 166, 179, 182, 204; **TYU:** 84; **VGG:** 88, 157, 198, 212, 220, 223, 281, 284, 285, 328, 329, 336, 338; **VOR:** 171, 248.

Stemonitis uvifera T.Macbr. – **PRI:** 84.

Stemonitis virginiensis Rex – **BU:** 198; **CR:** 144, 145; **KHM:** 47, 58; **KO:** 50, 198; **KR:** 198, 212, 254; **LEN:** 195, 198, 199, 212, 237; **MOS:** 6, 7, 63, 66, 70, 198, 278; **MUR:** 196, 205, 210, 212, 290; **SVE:** 236; **TVE:** 19; **TY:** 304; **TYU:** 198^{IG}.

Stemonitopsis aequalis (Peck) Y.Yamam. – **AL:** 198, 215; **BA:** 54; **CR:** 148; **KDA:** 90; **KO:** 50, 198; **MOS:** 66, 70; **PRI:** 74, 218; **PSK:** 73; **SA:** 288; **SVE:** 236; **TVE:** 19, 76.

Stemonitopsis amoena (Nann.-Bremek.) Nann.-Bremek. – **AL:** 215; **ALT:** 215; **BA:** 50, 198; **CHE:** 198; **CR:** 145; **KR:** 198; **NVS:** 301, 308; **PRI:** 218; **PSK:** 73.

Stemonitopsis gracilis (G.Lister) Nann.-Bremek. – **AL:** 215; **ALT:** 215, 307, 316; **MOS:** 66, 70; **NVS:** 301, 307, 308; **PRI:** 74; **SVE:** 51; **TVE:** 76.

Stemonitopsis hyperopta (Meyl.) Nann.-Bremek. – **AL:** 191, 198, 215; **AST:** 198, 220, 223, 327, 328, 333;

BA: 54; **CR:** 145, 244; **KDA:** 78; **KL:** 198; **KO:** 50, 198; **KR:** 84, 198, 212, 254; **KYA:** 122, 124, 129; **MOS:** 1, 4, 6, 7, 9, 63, 66, 70, 84, 164, 198, 278; **MUR:** 84, 196, 205, 210, 212, 290; **PRI:** 74, 218; **PSK:** 73; **RYA:** 84; **SVE:** 40, 41, 43, 45, 50, 198, 201, 212, 236; **TVE:** 19, 76, 84, 136, 198, 204; **TYU:** 84; **VGG:** 88, 110, 157, 198, 212, 220, 223, 284, 328, 332, 338.

Stemonitopsis microspora (Lister) Nann.-Bremek. – **LEN:** 180; **SVE:** 50, 198, 201, 212.

Stemonitopsis reticulata (H.C.Gilbert) Nann.-Bremek. & Y.Yamam. – **KDA:** 78; **KR:** 254; **MOS:** 7, 66, 84; **TY:** 304.

Stemonitopsis subcaespitosa (Peck) Nann.-Bremek. – **BA:** 50; **CHE:** 198; **CR:** 241; **KYA:** 196, 198, 210, 211, 212, 290.

Stemonitopsis typhina (F.H.Wigg.) Nann.-Bremek. – **AL:** 3, 134, 198, 215; **ALT:** 215, 301, 308, 316; **BA:** 50, 198; **CHE:** 50, 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 243, 244; **DA:** 162; **KAM:** 198, 251; **KDA:** 68; **KHA:** 198; **KHM:** 47, 58; **KIR:** 263, 264, 265, 266, 268, 271, 275; **KO:** 50, 198; **KR:** 130, 198, 212, 254; **KRS:** 185, 198; **KYA:** 10, 120, 122, 123, 124, 129, 198; **LEN:** 101, 180, 182, 183, 195, 198, 199, 212, 237; **LIP:** 198, 252; **MAG:** 198, 290; **MOS:** 1, 4, 6, 7, 8, 9, 11, 63, 64, 66, 70, 84, 101^{OAU}, 158, 164, 198, 278, 289; **MUR:** 65, 84, 104; **NGR:** 101^{OAU}; **NVS:** 301, 308; **ORL:** 168; **PER:** 50; **PRI:** 21, 69, 74, 84, 218; **PSK:** 73; **RYA:** 125, 321; **SMO:** 101, 198; **SVE:** 40, 41, 49, 50, 51, 198, 201, 212, 236; **TOM:** 132, 198; **TVE:** 19, 76, 84, 101^{OAU}, 136, 141, 180, 182, 198, 204; **TYU:** 84, 198^{IG}; **VGG:** 88, 198, 212, 220, 223, 284, 328, 338; **VLA:** 173; **VOR:** 170, 248; **YAR:** 101^{OAU}.

Symphtocarpus amaurochaetoides Nann.-Bremek. – **AL:** 215; **ALT:** 301, 308, 317; **CR:** 174, 243, 244; **KHM:** 52^{CF}, 58^{CF}; **KYA:** 120, 122, 124, 198; **MOS:** 66, 70, 84; **PRI:** 218; **TVE:** 136.

Symphtocarpus confluens (Cooke & Ellis) Ing & Nann.-Bremek. – **AL:** 3, 134, 198, 215; **KDA:** 78; **KR:** 198, 212, 254; **LEN:** 182, 183, 195, 199, 212, 237; **MOS:** 6, 7, 8, 66, 70, 198, 278; **TVE:** 136, 204; **VGG:** 88, 280, 338; **VOR:** 248.

Symphtocarpus flaccidus (Lister) Ing & Nann.-Bremek. – **AL:** 198, 215; **ALT:** 301, 307, 308, 310^{IG},

316; AST: 198, 213, 220, 222, 223; BA: 50, 198; CHE: 50, 198; KHA: 198; KHM: 47, 58; KR: 84, 198, 212, 254; KYA: 122, 124; MAG: 198; MOS: 198; MUR: 84; NVS: 310^{IG}; PSK: 73; SVE: 198, 201, 212; TVE: 84, 136, 179, 198, 204; TYU: 198^{IG}; VGG: 157, 198, 220, 223, 328.

Symphtocarpus herbaricus Ing – BA: 50, 198; KHM: 47, 58; TYU: 198^{IG}.

Symphtocarpus impexus Ing & Nann.-Bremek. – CHE: 50; CR: 243, 244; KR: 103; MOS: 84; TVE: 79, 80, 84, 136, 142, 282.

Symphtocarpus trechispora (Berk. ex Torrend) Nann.-Bremek. – KR: 198.

Thecotubifera dictyoderma (Nann.-Bremek. & Loer.) Leontyev, Schnittler, S.L.Stephenson & Novozh. – KHM: 52, 58; PRI: 218; SVE: 51, 236.

Trichia affinis de Bary – AL: 134; BA: 54; KDA: 68; KYA: 10, 198; LEN: 101, 198; MOS: 7, 278; MUR: 65^{CF}; ROS: 147; TA: 101, 198, 262; TOM: 132, 198; TVE: 19, 141.

Trichia alpina (R.E.Fr.) Meyl. – AL: 134; KAM: 219; KC: 34, 217, 255; KO: 50, 198; LEN: 182, 183, 195, 197, 198, 212, 237, 282; MUR: 34, 36, 196, 198, 205, 210, 212, 290; SVE: 236; ZAB: 26.

Trichia botrytis (J.F.Gmel.) Pers. – AL: 3, 84, 191, 198, 215; ALT: 215, 301, 308; BA: 50, 54, 198; BU: 198; CHE: 50; CHU: 196, 198, 210, 212, 290; CR: 244; IRK: 198; KDA: 198; KHA: 198; KHM: 47, 52, 58; KIR: 108, 265; KLU: 84; KO: 50, 198; KR: 130, 198, 212, 254; KYA: 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; LEN: 101, 182, 183, 195, 198, 212, 237; LIP: 198, 252; MAG: 288; MOS: 4, 6, 7, 8, 9, 64, 66, 70, 84, 164, 198, 278; MUR: 65, 67, 84, 196, 198, 205, 210, 212, 290; NVS: 301, 308; PER: 50; PRI: 21, 69, 74, 203, 218; PSK: 140; SA: 288; SMO: 101, 198; SVE: 42, 49, 50, 51, 198, 201, 212, 236; TA: 101, 198, 262; TVE: 6, 19, 76, 136, 139, 141, 142, 166, 179, 180, 182, 198, 204; TYU: 198^{IG}; VGG: 27; VOR: 101, 171, 248; YAN: 50, 196, 198, 210, 212, 290.

Trichia brevicapillata Sizova, Titova & Darakov – MOS: 6, 7, 66, 70, 278, 279.

Trichia brunnea J.J.Cox – ALT: 318; AST: 220, 223; VGG: 220, 223.

Trichia contorta (Ditmar) Rostaf. – AL: 134, 215; ALT: 301, 308, 317; AST: 220, 223, 327, 328, 329, 333; BA: 50, 198; CR: 84, 148, 243, 244; DA: 162; KDA: 78, 198; KHM: 47, 58; KO: 50, 198; KR: 198, 212, 254; KRS: 12; KYA: 10, 121, 122, 124; LEN: 180, 182, 183, 195, 198, 212, 237; LIP: 198, 252; MAG: 288; MOS: 6, 7, 8, 66, 70, 84, 164, 198, 278; MUR: 65, 67, 196, 198, 205, 210, 212, 290; NVS: 301, 308; PER: 50; PRI: 218; SAM: 155; SMO: 101, 198; SVE: 48, 49, 50, 51, 198, 201, 212, 236; TA: 101, 198, 262; TOM: 115, 132, 198; TVE: 19, 76, 136, 165, 166, 180, 182, 198; TYU: 198^{IG}; VGG: 157, 198, 212, 220, 223, 284, 328, 338.

Trichia crateriformis G.W.Martin – KDA: 78^{CF}; MOS^{DR}: 6, 198, 278.

Trichia decipiens (Pers.) T.Macbr. – AL: 3, 191, 215; ALT: 215, 301, 302, 306, 308, 316; BA: 50, 54, 198; BRY: 16, 101^{OAU}; CHE: 50, 198; CHU: 189, 196, 198, 210, 212, 290; CR: 144, 241, 243, 244; DA: 162; IRK: 84; KAM: 198, 251, 297; KDA: 68; KHA: 198; KHM: 47, 52, 58; KIR: 107, 263, 264, 265, 266, 268, 269, 272, 273, 275, 276, 277, 291; KLU: 101^{OAU}; KO: 50, 198; KOS: 101, 198; KR: 104, 198, 212, 254; KRS: 198; KYA: 10, 120, 122, 123, 124, 196, 198, 210, 211, 212, 290; LEN: 89, 96, 101, 180, 182, 183, 195, 198, 199, 212, 237, 323; MAG: 290; MOS: 1, 4, 6, 7, 8, 9, 11, 18, 63, 64, 66, 70, 84, 94, 101, 164, 175, 179, 198, 278; MUR: 65, 104, 196, 198, 205, 210, 212, 290; NVS: 301, 308; PER: 50; PRI: 74, 203, 218; PSK: 73, 101, 140, 198; SAK: 198; SMO: 101^{OAU}, 198; STA: 198; SVE: 40, 41, 49, 50, 51, 198, 201, 212, 236; TA: 101, 198, 262; TOM: 132, 198; TVE: 19, 76, 84, 101^{OAU}, 136, 141, 179, 180, 182, 198, 204; TYU: 84, 198^{IG}; VGG: 198, 212, 220, 223, 284, 285, 328, 330, 338; VLA: 173; VOR: 171, 248.

Trichia elaterensis (Mulleavy) Lado – AST: 198, 213, 328, 329, 330, 333; VGG: 198, 328, 330.

Trichia erecta Rex – AL: 215; ALT: 215; BA: 54; KHM: 47, 58; KO: 50, 198; MOS: 8, 66; MUR: 196, 198, 205, 210, 212, 290; PRI: 218; SVE: 236; TVE: 19, 76, 141; TYU: 198^{IG}.

Trichia favaginea (Batsch) Pers. – AL: 3, 191, 214, 215; ALT: 215, 301, 302, 306, 308, 316; BA: 50, 54, 198;

BRY: 16, 101^{OAU}; **CHE:** 50, 198; **CR:** 30, 84, 243, 244; **DA:** 162; **KAM:** 251; **KDA:** 198; **KHA:** 198; **KHM:** 47, 58; **KIR:** 263, 264, 265, 268, 269, 272, 275, 291; **KK:** 295^{IG}; **KLU:** 101, 198; **KO:** 50, 198; **KR:** 198, 212, 254; **KRS:** 5, 101, 185, 198; **KYA:** 10, 101, 120, 122, 123, 124, 198, 295^{IG}; **LEN:** 89, 101, 180, 182, 183, 195, 198, 199, 212, 237, 286^{DS}, 287^{DS}, 323; **MOS:** 1, 4, 6, 7, 9, 11, 18, 63, 64, 66, 70, 84, 101, 164, 175, 198, 278; **MUR:** 65, 67, 196, 205, 210, 212, 290; **NGR:** 101, 198; **NVS:** 301, 308; **PER:** 50; **PRI:** 22, 74, 203, 218; **PSK:** 73, 101, 198; **RYA:** 84, 125, 321; **SAR:** 101; **SMO:** 101, 198; **STA:** 198; **SVE:** 40, 41, 49, 50, 51, 198, 201, 212, 236; **TA:** 101, 198, 262; **TOM:** 114, 132, 198; **TVE:** 6, 19, 76, 84, 101^{OAU}, 136, 141, 179, 180, 182, 198, 204; **TYU:** 84, 198^{IG}; **VGG:** 157, 198, 212, 220, 223, 328, 338; **VOR:** 167, 171, 248.

Trichia flavicomma (Lister) Ing – **AL:** 198, 215; **ALT:** 301, 307, 308; **BA:** 50, 198; **CR:** 244; **KHM:** 47, 58; **KO:** 50; **KYA:** 122, 124; **SVE:** 51, 198, 236; **TYU:** 198^{IG}.

Trichia lutescens (Lister) Lister – **AL:** 3, 215; **BA:** 50, 54, 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 244; **KDA:** 84; **KO:** 50, 198; **KR:** 130, 198, 212, 254; **KYA:** 196, 198, 210, 211, 212, 290; **MAG:** 288; **MOS:** 6, 7, 8, 9, 66, 70, 84, 164, 198, 278; **MUR:** 196, 198; **NVS:** 301, 308; **PER:** 50; **PRI:** 69, 74; **SVE:** 50, 198, 201, 212, 236; **TOM:** 132, 198; **TVE:** 76, 136; **YAN:** 50, 196, 198, 210, 212, 290.

Trichia mirabilis Nann.-Bremek. – **CR:** 148.

Trichia munda (Lister) Meyl. – **BU:** 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 242, 243; **IRK:** 198; **KO:** 50; **KR:** 198; **KYA:** 196, 198, 210, 211, 212, 290; **MAG:** 288; **MOS:** 66, 164; **PER:** 50; **PRI:** 218; **VGG:** 27, 127, 337; **YAN:** 50, 196, 198, 210, 212, 290.

Trichia papillata Adamonyte – **MOS:** 81.

Trichia persimilis P.Karst. – **AL:** 215; **ALT:** 301, 308; **CR:** 244; **DA:** 162; **IRK:** 84; **KLU:** 84; **KYA:** 10; **LEN:** 89, 101, 198; **MOS:** 7, 63, 66, 70, 84, 101, 164, 198; **MUR:** 65, 67; **NVS:** 301, 308; **PRI:** 74, 84, 218; **PSK:** 73; **SMO:** 101, 198; **TA:** 101, 198; **TOM:** 132, 198; **TVE:** 19, 76, 84, 141.

Trichia scabra Rostaf. – **AL:** 3, 134, 215; **ALT:** 215, 301, 302, 306, 308, 316, 317; **BA:** 50, 54, 198; **CHE:** 50, 198; **CR:** 30, 84, 244; **IRK:** 84; **KDA:** 198; **KHM:** 47, 52,

58; **KIR:** 14, 267, 268, 269; **KLU:** 8, 101, 198; **KO:** 50, 198; **KR:** 130, 198; **KRS:** 5, 198; **KYA:** 10, 120, 122, 123, 124, 198; **LEN:** 101, 180, 182, 183, 195, 198, 212, 237; **LIP:** 198, 252; **MOS:** 1, 6, 7, 8, 9, 11, 64, 66, 70, 84, 93, 94, 101, 164, 175, 198, 278; **MUR:** 65, 67; **NVS:** 301, 308; **PER:** 50; **PRI:** 21, 74, 218; **PSK:** 73, 198; **RYA:** 101, 198; **SAM:** 154; **SMO:** 101, 198; **STA:** 198; **SVE:** 49, 50, 198, 201, 212, 236; **TA:** 198; **TOM:** 132, 198; **TVE:** 6, 19, 76, 84, 136, 141, 179, 182, 198, 204; **TYU:** 198^{IG}; **VGG:** 157, 198, 212, 220, 223, 328, 338; **VOR:** 167, 171, 248.

Trichia sordida Johannessen – **KC:** 34, 217, 255; **KHM:** 47, 58; **TYU:** 198^{IG}.

Trichia subfuscata Rex – **AL:** 215; **BU:** 198; **KHM:** 47, 52, 58; **KO:** 50, 198; **KR:** 198, 212, 254^{CF}; **KYA:** 122, 124; **MOS:** 6, 7, 66, 70, 198; **MUR:** 65; **NVS:** 301, 308; **PER:** 50; **PRI:** 69, 74, 218; **SVE:** 198, 201, 212, 236; **TVE:** 19, 141; **TYU:** 198^{IG}.

Trichia varia (Pers. ex J.F.Gmel.) Pers. – **AL:** 3, 56, 134, 191, 214, 215; **ALT:** 56, 215, 301, 302, 306, 308, 316, 317; **ARK:** 143; **AST:** 198, 220, 223, 327, 328, 333; **BA:** 50, 54, 198; **BRY:** 16, 101^{OAU}; **CHE:** 50, 198; **CHU:** 196, 198, 210, 212, 290; **CR:** 30, 84, 144, 241, 242, 243, 244; **DA:** 162; **IRK:** 84; **KC:** 56, 57, 97, 98, 101, 198; **KDA:** 78, 84, 198; **KHA:** 84, 198; **KHM:** 47, 52, 58; **KIR:** 263, 264, 265, 267, 272, 274, 275, 276, 277, 291; **KK:** 250^{IG}, 294^{IG}; **KLU:** 101, 198; **KO:** 50, 198; **KR:** 143, 198, 212, 254; **KRS:** 5, 185; **KYA:** 10, 101, 112, 122, 124, 129, 196, 198, 210, 211, 212, 250^{IG}, 290, 294^{IG}; **LEN:** 89, 101, 180, 182, 183, 195, 198, 199, 212, 237, 323; **LIP:** 198, 252; **MAG:** 290; **MOS:** 4, 6, 7, 8, 9, 11, 18, 64, 66, 70, 84, 94, 101, 159, 160, 164, 175, 198, 278; **MUR:** 65, 67, 84; **NGR:** 101, 198; **NIZ:** 101, 176, 198; **NVS:** 56, 301, 308; **ORE:** 50; **ORL:** 168, 198; **PER:** 50; **PRI:** 21, 74, 203, 218; **PSK:** 73, 101, 140, 198; **ROS:** 147, 335; **SAM:** 153, 154; **SMO:** 99, 100, 101, 198; **STA:** 198; **SVE:** 49, 50, 51, 198, 201, 212, 234, 236; **TA:** 101, 198, 262; **TOM:** 114, 115, 132, 198; **TVE:** 19, 76, 84, 136, 141, 180, 182, 198, 204; **TYU:** 84, 198^{IG}; **VGG:** 157, 198, 212, 220, 223, 283, 328, 338; **VLA:** 173; **VOR:** 167, 171, 239, 248, 249; **YAN:** 196, 198, 210, 290.

Trichia verrucosa Berk. – **AL:** 134; **KO:** 50, 198; **KYA:** 120, 122, 123, 124; **MOS^{DR}:** 6, 7^{CF}, 198; **SVE:** 39, 50, 198; **TVE:** 19, 136, 166, 180, 181, 198, 204.

Trichiooides iridescent Novozh., Hooff & Jagers – KC: 208; SAK: 208.

Tubifera applanata (Leontyev & Fefelov) Leontyev & Fefelov – CHE: 146; CR: 146; KHA: 146; KO: 146; KR: 84; MOS: 84; PSK: 73; SVE: 146; TVE: 19, 76.

Tubifera dudkae (Leontyev & G.Moreno) Leontyev, G.Moreno & Schnittler – NVS: 149.

Tubifera ferruginosa (Batsch) J.F.Gmel. – AL: 3, 134, 149, 191, 215; ALT: 215, 299, 301, 302, 306, 308, 316; ARK: 143; BA: 50, 198; BRY: 16, 101^{OAU}, 126; CHE: 50, 198; CR: 149, 244; DA: 162; KDA: 90; KHA: 198; KHM: 47, 52, 58; KIR: 263, 265, 267, 268; KLU: 101, 198; KO: 50, 198; KR: 96, 198, 212, 254; KRS: 5, 185, 198; KYA: 10, 122, 124, 129, 198; LEN: 89, 96, 101, 180, 182, 183, 195, 198, 199, 212, 237, 286^{DS}, 287^{DS}, 323; LIP: 198, 252; MAG: 198, 290; MOS: 1, 2, 4, 6, 7, 8, 9, 11, 18, 63, 64, 66, 70, 84, 92, 101, 158, 164, 175, 198, 278; MUR: 65, 84, 196, 198, 205, 210, 212, 290; NVS: 149, 301, 308; ORL: 168; PER: 50; PRI: 21, 22, 74, 203; PSK: 73, 140; ROS: 198, 220, 223, 335; SAM: 156; SMO: 101, 198; SVE: 40, 41, 50, 51, 198, 201, 212, 236; TA: 101, 198, 262; TOM: 132, 198; TVE: 6, 19, 76, 84, 101^{OAU}, 135, 136, 141, 142, 179, 180, 182, 198, 204, 296; TYU: 198^{IG}; ULY: 101; VGG: 198, 212, 220, 223, 328, 338; VLA: 173; VOR: 167, 171, 248.

Tubifera microsperma (Berk. & M.A.Curtis) G.W.Martin – AL: 3, 198, 215^{CF}, 300; LEN: 180, 181, 182, 198; MOS: 4, 7, 66^{CF}; PSK: 140; SVE: 198, 201^{CF}, 212^{CF}; TVE: 19, 136, 180, 181, 182, 198, 204.

Willkommanglea reticulata (Alb. & Schwein.) Kuntze – ALT: 310^{IG}, 317; KHM: 58; KYA: 120, 122, 123, 124, 198; MOS: 4, 6, 7, 66, 70, 198; NVS: 301^{CF}, 308, 310^{IG}; SVE: 51, 198.

AD – 198, 339; AL – 3, 37, 56, 84, 133, 134, 149, 191, 198, 209, 214, 215, 233, 300, 318; ALT – 27, 56, 84, 134, 194, 209, 215, 225, 226, 299, 301, 302, 303, 306, 307, 308, 310, 315, 316, 317, 318; AMU – 101; ARK – 143, 339; AST – 84, 101, 198, 209, 213, 220, 221, 222, 223, 224, 225, 226, 282, 327, 328, 329, 330, 333, 339; BA – 46, 50, 54, 101, 198, 253; BEL – 12; BRY – 16, 101, 111, 126, 198; BU – 194, 198, 305, 318; CE – 57, 97, 98, 101, 198; CHE – 50, 53, 101, 146, 198; CHU – 189, 196, 198, 206, 210, 212, 290; CR – 29, 30, 84, 101, 144, 145, 146, 148, 149, 150, 174, 186, 187, 190, 192, 198, 241, 242, 243, 244, 257; CU – 101; DA – 57, 97, 98, 162; IRK – 33, 84, 198, 232; IVA – 198; KAM – 198, 219, 251, 297; KB – 101; KC – 34, 56, 57, 97, 98, 101, 198, 208, 209, 216, 217, 225, 226, 255, 258, 259, 339; KDA – 68, 77, 78, 84, 90, 101, 163, 190, 192, 194, 198, 319, 339; KEM – 109; KGD – 91; KGN – 101, 339; KHA – 84, 146, 198; KHM – 26, 47, 52, 58, 196, 313, 314; KIR – 14, 107, 108, 263, 264, 265, 266, 267, 268, 269, 271, 272, 273, 274, 275, 276, 277, 291; KK – 250, 292, 293, 294, 295; KL – 198, 209, 220, 222, 223, 226, 328; KLU – 8, 84, 101, 198, 246; KO – 50, 146, 198, 270, 339; KOS – 101, 198; KR – 34, 35, 84, 96, 103, 104, 130, 143, 149, 198, 209, 212, 226, 240, 254, 259, 339; KRS – 5, 12, 101, 185, 198, 209, 226, 339; KYA – 10, 101, 103, 112, 113, 116, 118, 119, 120, 121, 122, 123, 124, 129, 194, 196, 198, 206, 209, 210, 211, 212, 226, 250, 290, 292, 293, 294, 295; LEN – 34, 35, 59, 62, 87, 89, 96, 101, 161, 180, 181, 182, 183, 188, 194, 195, 197, 198, 199, 209, 212, 226, 237, 245, 246, 247, 258, 259, 261, 282, 286, 287, 322, 323; LIP – 101, 198, 252; MAG – 198, 288, 290; ME – 101; MO – 101; MOS – 1, 2, 4, 6, 7, 8, 9, 11, 15, 18, 28, 62, 63, 64, 66, 70, 81, 84, 92, 93, 94, 95, 101, 138, 158, 159, 160, 164, 175, 179, 198, 238, 278, 279, 289; MUR – 34, 36, 65, 67, 84, 96, 104, 106, 196, 198, 205, 210, 212, 258, 259, 290, 319, 339; NGR – 101, 198; NIZ – 101, 102, 176, 198, 227, 228, 229, 230; NVS – 26, 27, 56, 149, 198, 209, 226, 233, 301, 303, 307, 308, 309, 310, 311, 312, 318, 319, 320; ORE – 50, 53, 101, 198, 202; ORL – 168, 198; PER – 50, 198; PNZ – 101, 198; PRI – 17, 21, 22, 69, 74, 84, 163, 177, 194, 198, 203, 218; PSK – 73, 84, 101, 140, 198, 209, 226, 339; ROS – 101, 147, 149, 198, 220, 223, 335; RYA – 84, 101, 125, 198, 321; SA – 231, 288, 298, 326, 339; SAK – 198, 208; SAM – 101, 153, 154, 155, 156, 198; SAR – 101, 198; SE – 198, 339; SMO – 99, 100, 101, 198; STA – 57, 97, 98, 101, 198, 209, 226; SVE – 39, 40, 41, 42, 43, 44, 45, 46, 48, 49, 50, 51, 53, 55, 101, 146, 149, 198, 201, 209, 212, 226, 234, 235, 236; TA – 101,

List of publications reporting regional diversity studies

This list contains all literature sources that contain information about the diversity of myxomycetes in each region of Russia (abbreviations of the names of regions are given in Table 2).

198, 262; TAM – 101, 198; TOM – 114, 115, 117, 132, 133, 198, 233; TVE – 6, 19, 20, 75, 76, 79, 80, 84, 101, 135, 136, 137, 138, 139, 141, 142, 165, 166, 179, 180, 181, 182, 198, 204, 282, 296; TY – 304; TYU – 84, 101, 198, 339; ULY – 101, 198; VGG – 27, 60, 88, 101, 110, 127, 128, 157, 198, 207, 209, 212, 220, 223, 224, 225, 226, 257, 280, 281, 282, 283, 284, 285, 324, 325, 328, 329, 330, 331, 332, 334, 336, 337, 338; VLA – 6, 84, 85, 172, 173, 198; VLG – 101, 198; VOR – 25, 32, 101, 167, 169, 170, 171, 192, 198, 239, 248, 249, 339; YAN – 50, 196, 198, 210, 212, 290; YAR – 6, 59, 84, 101, 198; ZAB – 26, 101, 105, 194, 198.

Myxomycete diversity in Russia

According to the bibliographic sources, a total of 455 myxomycete species (recognized according to a morphological species concept) from 56 genera have been recorded in Russia to date, which comprises approximately 40% of the known global diversity. So far, no specimens of the following genera have been found in Russia: *Alwisia*, *Arcyriatella*, *Calonema*, *Cornuvia*, *Echinosteliopsis*, *Elaeomyxa*, *Leptoderma*, *Minakatella*, *Paradiachea*, *Physarina*, *Semimorula*, and *Trabrooksia*. However, it should be noted that environmental nucleotide sequences 92–93% similar to *Echinosteliopsis oligospora* D.J. Reinh. & L.S.Olive and clustering together with this species in 18S rDNA phylogeny were found in samples of forest ground litter from the Leningrad region (Shchepin et al. 2019a).

Out of the 455 known species, 319 species (70%) have been reported for the first time over the last 40 years and 120 species (26%) – over the last 15 years (Figure 1).

The most widespread and common species in Russia are *Lycogala epidendrum* (L.) Fr. (54 regions), *Fuligo septica* (L.) F.H.Wigg. (53 regions), and *Stemonitis axifera* (Bull.) T.Macbr. (51 regions). Almost half of species (226 out of 455) are found in 5 or fewer regions.

Myxomycetes have been recorded in 76 out of 82 regions of Russia. Despite the increased interest in myxomycetes, there are still no data on biodiversity of this group in Tula and Omsk regions,

Republic of Ingushetia, Udmurt Republic, Nenets autonomous area, and Jewish autonomous region. In addition, for 21 regions there are fewer than 10 species known (Table 2, Figure 2). Further research concerning aforementioned regions would be highly relevant.

Conclusions

The presented data indicate that the research of myxomycete diversity in Russia is still fragmentary, regarding the coverage of different regions. Only a few regions, like Moscow, Leningrad, Sverdlovsk, Tver and Volgograd regions, Altai Republic, and Altai and Primorye territories have been surveyed more exhaustively. It would require much more effort to reveal the real spatial distribution of myxomycetes. It would be even more laborious to take the hidden diversity in the group into account (amoebal populations that do not or rarely fruit in a given habitat, which thus can only be studied via metabarcoding). This annotated list is a part of a larger information system, available online at russia.myxomycetes.org. We plan to maintain this website and expand its functionality in the future.

Figure 1. Timeline of the myxomycete diversity research in Russia.

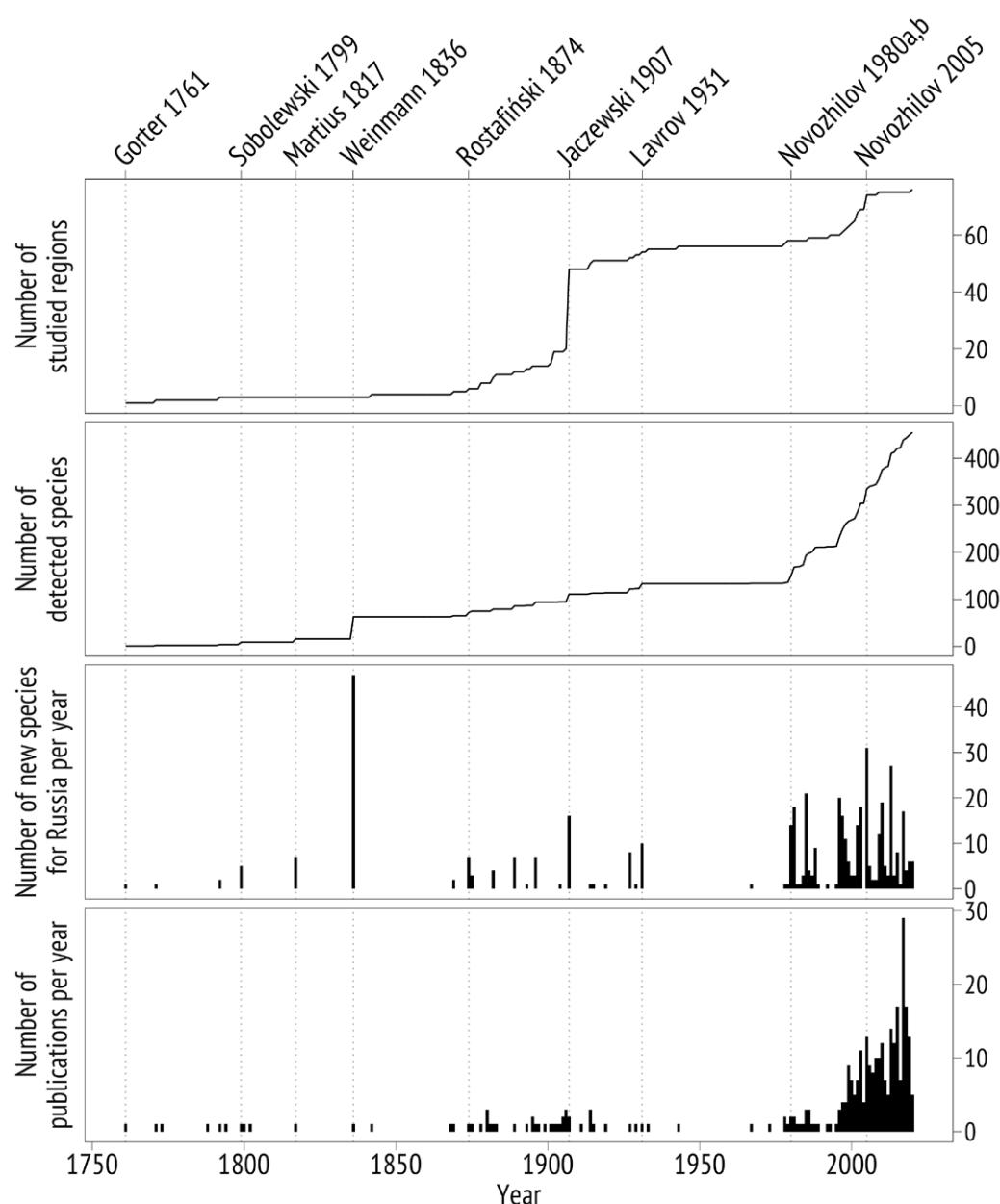
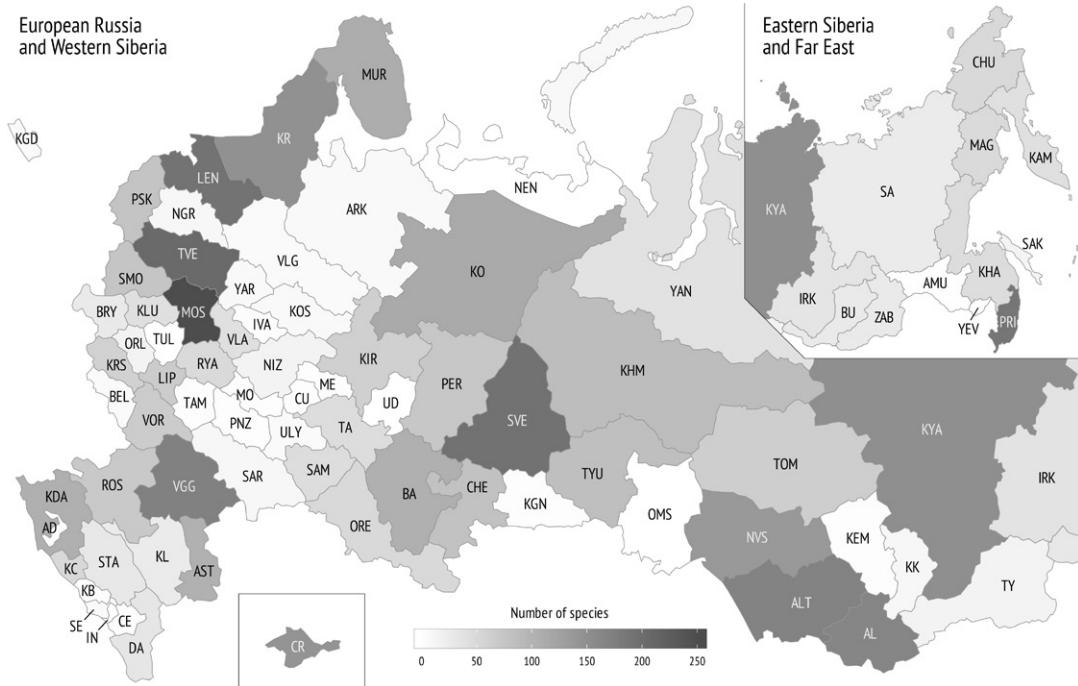


Figure 2. Number of myxomycete species found in the regions of Russia. Note: abbreviations of region names are given in accordance with Table 2.



Acknowledgements

We are grateful to all researchers of myxomycete diversity in Russia that have contributed to the myxomycetology over the last 20 years, despite the fact that some of them have changed their occupation: M.F. Akimova, N.I. Borzov, V.N. Botyakov, N.Yu. Buchtoyarova, D.A. Erastova, K.A. Fefelov, E.R. Galyakhmetova, M.M. Gomzhina, E.S. Gubanov, E.S. Korchikov, A.P. Kosheleva, A.N. Lebedev, A.D. Luptakova, G.M. Melkumov, Mishulin, A.A., Yu.A. Morozova, A.M. Nikitina, M.V. Okun, I.S. Prikhodko, B.S. Plotnikov, A.A. Shirokikh, Yu.A. Smolnyakova, A.A. Soldatenkova, E.N. Vinogradskaya, A.A. Vorobyov. We would also like to thank all school clubs that

donated to us materials collected during summer fieldwork, in particular, the Young Naturalists Club under the guidance of E.A. Dunayev and the A.S. Khizhnyakova's Young Nature Researchers Club from Moscow. Research of V.I.G. was supported by the Moscow State University Grant for the Leading Scientific Schools "Depository of the Living Systems" within the scope of the MSU Development Program and the state task of MSU, part 2 (topic number AAAA-A6-116021660084-1). O.N.S. and Yu.K.N. would like to acknowledge the support from the Russian Foundation for Basic Research (project 18-04-01232 A) and the state task of BIN RAS 'Biodiversity, ecology, structural and functional features of fungi and fungus-like protists' (AAAA-A19-119020890079-6).

References

- 1 Abramov, E.A., Adashev, V.E., Aksanova, J.V., Bessonova, I.D., Broshevitzkaya, N.D., Gebruk, A.A., Zornikova, K.V., Izumova, E.I., Koneeva, T.O., Sivova, I.N., Khamidullina, A.I. & Chursanova, E.N. 2014: Myxomycetes of Zvenigorodskaya Biological Station: species diversity in 2013 (in Russian with English abstract). In: Flora and fauna of the western part of Moscow region. Selected student research works conducted at summer field practice at S.N. Skadovsky Zvenigorod Biological Station, Vol. 7, 44–58. ZBS MSU: Zvenigorod.
- 2 Adashev, V.E., Aksanova, J.V. & Gebruk, A.A. 2014: Time-lapse photography of Myxomycetes life cycle stages methods development (in Russian with English abstract). In: Flora and fauna of the western part of Moscow region. Selected student research works conducted at summer field practice at S.N. Skadovsky Zvenigorod Biological Station, Vol. 7, 59–64. ZBS MSU: Zvenigorod.
- 3 Barsukova, T.N. 2000: Myxomycetes from Teletskoe lake vicinity, Altai State Reserve (in Russian with English abstract). *Mikologiya i Fitopatologiya* 34: 6–9.
- 4 Barsukova, T.N. 2001a: Ecological-biological peculiarities of myxomycetes on Biological Station in Zvenigorod (in Russian with English abstract). *Trudy Zvenigorodskoy Biologicheskoy Stantsii* 3: 90–91.
- 5 Barsukova, T.N. 2001b: Myxomycetes of the Aliokhin Central Chernozem Biosphere Reserve (in Russian with English abstract). *Mikologiya i Fitopatologiya* 35: 12–14.
- 6 Barsukova, T.N. & Dunayev (Dunaev), E.A. 1997: An annotated list of slime moulds (Myxomycota) from Moscow region (in Russian with English abstract). *Mikologiya i Fitopatologiya* 31: 1–8.
- 7 Barsukova, T.N., Gmoshinskii, V.I., Prokhorov, V.P. & Dunaev, E.A. 2012: The slime moulds of S.N. Skadovsky Zvenigorod Biological Station of Moscow State University (in Russian with English abstract). *Mikologiya i Fitopatologiya* 46: 122–132.
- 8 Barsukova, T.N., Prokhorov, V.P., Gmoshinskii, V.I. & Chizhov, A.O. 2010: Myxomycetes in forest parks of Moscow, Moscow region, and some areas of the Kaluga region. *Moscow University Biological Sciences Bulletin* 65: 116–118.
- 9 Barsukova, T.N., Vinogradskaya, E.N. & Akimova, M.F. 2006: Myxomycetes in forest parks in Moscow (in Russian with English abstract). *Mikologiya i Fitopatologiya* 40: 186–189.
- 10 Beglyanova, M.I. & Kattsyna, L. 1973: Myxomycetes of the southern Krasnoyarsk territory (in Russian). In: Gorbunova, T.V. (ed). Questions of botany and plant physiology, Vol. 4, 36–47. Krasnoyarskiy rabochiy, Krasnoyarsk.
- 11 Belyaeva, M.A., Zakirov, A.N., Rusanova, V.R., Suchalko, O.N., Filippova, A.A., Khitiaeva, V.V., Shmitko, A.O. & Iuzefovich, A.P. 2017: Results of myxomycetes species diversity in Skadovsky Zvenigorod Biological Station of MSU in 2015 (in Russian with English abstract). In: Gavrilov, V.M. (ed). Flora and fauna of the western part of Moscow region. Selected student research works conducted at summer field practice at S.N. Skadovsky Zvenigorod Biological Station, Vol. 8, 7–22. Moscow.
- 12 Benike, L.A. 1915: First report on flora of slime fungi from Kharkov and Kursk Governorates (in Russian). *Protocoly Obshchestva ispytateley prirody pri Imperatorskom Kharkovskom universitete* 3: 1–3.
- 13 Berestetskaya, L.I., Dmitriev, A.P. & Levitin, M.M. 2012: Mycological Herbarium of All-Russian Institute of Plant Protection (in Russian). *Plant Protection News* 3: 58–61.
- 14 Berezina, Yu.S. & Shirokikh, A.A. 2017: Slime moulds of subclass Myxogastria in forest communities and their culture in vitro (in Russian). In: *Ekologiya rodnogo kraya: problemy i puti ikh resheniya. Materialy XII Vserossiyskoy nauchno-prakticheskoy konferentsii c mezdunarodnym uchastiem. Kniga 2.* (g. Kirov, 13–14 aprelya 2017 g.), 276–279. Vyatka State University: Kirov.
- 15 Bodyagin, V.V. & Barsukova, T.N. 2009: Myxomycetes isolated from aquatic habitats of Moscow city and Moscow region (in Russian with English abstract). *Mikologiya i Fitopatologiya* 43: 281–283.
- 16 Borščow, E. 1869: Ein Beitrag zur Pilzflora der Provinz Černigow (in German). *Bulletin de l'Académie Impériale des sciences de St-Pétersbourg* 13: 219–245.
- 17 Bortnikov, F.M., Shchepin, O.N., Gmoshinskii, V.I., Prikhodko, I.S. & Novozhilov, Yu.K. 2018: *Diderma velutinum*, a new species of *Diderma* (Myxomycetes) with large columella and triple peridium from Russia. *Botanica Pacifica* 7: 47–51.
- 18 Bucholtz, F.V. 1897: List of fungi found in summer of 1896 (in Russian). *Typolithography of I.N. Kushnerev and Co partnership: Moscow.*

- ¹⁹ Buchtoyarova, N.Yu. & Gmoshinskiy, V.I. 2017: Results of the study of myxomycete (class Myxomycetes) species diversity in the southern forestry of the Central Forest Nature Reserve from 2014 to 2016 (in Russian). In: *Vklad zapovednoy sistemy v sokhranenie bioraznoobraziya i ustoychivoe razvitiye. Materialy Vserossiyskoy nauchnoy konferentsii (s mezhdunarodnym uchastiem), posvyashchennoy 85-letiyu organizatsii TsLGPBZ i 100-letiyu zapovednoy sistemy Rossii*, 69–75. Tver State University: Tver.
- ²⁰ Buchtoyarova, N.Yu., Gmoshinskiy, V.I. & Matveev, A.V. 2018: The results of the long-term monitoring of the species diversity of myxomycetes in the Central Forest National Biosphere Reserve (in Russian and English). In: *Proceedings of IV (XII) International Botanical Conference of Young Scientists in Saint-Petersburg, April 22nd–28th, 2018, 202–203*. Komarov Botanical Institute of the Russian Academy of Sciences: St. Petersburg.
- ²¹ Bunkina, I.A. 1978: Fungi (in Russian). In: Kharkevich, S.S. (ed). *Flora and vegetation of the Ussuriyskiy Nature Reserve*, 36–39. Nauka, Moscow.
- ²² Bunkina, I.A. & Koval, E.Z. 1967: Ad floram myxomycetum e regione Primorskensi [On flora of myxomycetes of Primorsky territory] (in Russian). *Novosti sistematiki nizshikh rastenii* 4: 152–153.
- ²³ Buxbaum, J.C. 1740: *Plantarum minus cognitarum centuria V, complectens plantas circa Byzantium et in Oriente observatas* (in Latin). Typographia Academiae: Petropoli.
- ²⁴ Carine, M.A., Cesar, E.A., Ellis, L., Hunnex, J., Paul, A.M., Prakash, R., Rumsey, F.J., Wajer, J., Wilbraham, J. & Yesilyurt, J.C. 2018: Examining the spectra of herbarium uses and users. *Botany Letters* 145: 328–336.
- ²⁵ Castillo, A., Illana, C. & Moreno, G. 1998: *Protophyllaceum* and a new family in the Physarales. *Mycological Research* 102: 838–842.
- ²⁶ Czernyadjeva, I.V., Afonina, O.M., Ageev, D.V., Baisheva, E.Z., Bulyonkova, T.M., Cherenkova, N.N., Doroshina, G.Ya., Drovrina, S.I., Dugarova, O.D., Dulepova, N.A., Dyachenko, A.P., Filippova, N.V., Ginzburg, E.G., Gogorev, R.M., Himelbrant, D.E., Ignatov, M.S., Kataeva, O.A., Kotkova, V.M., Kuragina, N.S., Kurbatova, L.E., Kushnevskaya, E.V., Kuzmina, E.Yu., Melekhin, A.V., Notov, A.A., Novozhilov, Yu.K., Popov, S.Yu., Popova, N.N., Potemkin, A.D., Stepanchikova, I.S., Stepanova, V.A., Tubanova, D.Ya., Vlasenko, A.V., Vlasenko, V.A., Voronova, O.G. & Zhalov, Kh.Kh. 2019: New cryptogamic records. 4 (in Russian with English abstract). *Novosti sistematiki nizshikh rastenii* 53: 431–479.
- ²⁷ Czernyadjeva, I.V., Kotkova, V.M., Zemlyanskaya, I.V., Novozhilov, Yu.K., Vlasenko, A.V., Vlasenko, V.A., Blagoveshchenskaya, E.Yu., Georgieva, M.L., Notov, A.A., Himelbrant, D.E., Muchnik, E.E., Urbanovichene, I.N., Aristarkhova, E.A., Bocharkov, M.V. & Ismailov, A.B. 2018: New cryptogamic records. 2 (in Russian with English abstract). *Novosti sistematiki nizshikh rastenii* 52: 209–223.
- ²⁸ Dokturovskiy, V.S. 1905: Minutes of meetings of the Student Circle for Study of Russian Nature (in Russian). In: *Proceedings of the Student Circle for the Study of Russian Nature, affiliated to the Moscow Imperial University. Book 2, 3–12. Typolithography of Russian Partnership of Printing and Publishing*. Moscow.
- ²⁹ Dudka, I.O. 2000: New for Ukraine nivale myxomycete species from Crimea (in Ukrainian with Russian and English abstract). *Ukrainian Botanical Journal* 57: 57–61.
- ³⁰ Dudka, I.A., Kuzub, V.V. & Romanenko, E.A. 1999: Myxomycetes of the Yalta Mountain-forest reserve (Ukraine, Crimea) (in Russian with English abstract). *Mikologiya i Fitopatologiya* 33: 307–313.
- ³¹ Dunayev, E.A. & Barsukova, T.N. 2002: Slime-mould collection (Myxomycota) of the Young Naturalists Club of the Zoological Museum of Moscow State University (in Russian). In: *Sovremennaya mikologiya v Rossii. Tom 1. Materialy 1-go Syezda mikologov Rossii*, 132. National Academy of Mycology: Moscow.
- ³² Eliasson, U. & Gilert, E. 1982: A SEM-study of *Listerella paradoxa* (Myxomycetes). *Nordic Journal of Botany* 2: 249–255.
- ³³ Eliasson, U. & Lundqvist, N. 1979: Fimicolous myxomycetes. *Botaniska notiser* 132: 551–568.
- ³⁴ Erastova, D.A. 2015: Nivicolous myxomycetes of North-Western Russia and North-Western Caucasus (in Russian). PhD thesis. V.L. Komarov BIN RAS: St. Petersburg.
- ³⁵ Erastova, D.A. & Novozhilov, Yu.K. 2015: Nivicolous myxomycetes of the lowland landscapes of the northwest of Russia. *Mikologiya i Fitopatologiya* 49: 9–18.
- ³⁶ Erastova, D.A., Novozhilov, Yu.K. & Schnittler, M. 2017: Nivicolous myxomycetes of the Khibiny Mountains, Kola Peninsula, Russia. *Nova Hedwigia* 104: 85–110.
- ³⁷ Erastova, D.A., Okun, M.V., Novozhilov, Yu.K. & Schnittler, M. 2013: Phylogenetic position of the enigmatic myxomycete genus *Kelleromyxa* revealed by SSU rDNA sequences. *Mycological Progress* 12: 599–608.

- ³⁸ Falk, J.P. 1786: Beytrage zur topographischen Kenntniss des Russischen Reichs, Bd. II (in German). Kaiserliche Akademie der Wissenschaften: St. Petersburg.
- ³⁹ Fefelov, K.A. 1997a: Impact of aerotechnogenic pollution by heavy metals and SO₂ on myxomycetes (in Russian). In: *Bezopasnost biosfery. Sbornik tezisov dokladov Vserossiyskogo molodezhnogo nauchnogo simpoziuma*, 221. Ukhta State Technical University: Yekaterinburg.
- ⁴⁰ Fefelov, K.A. 1997b: Myxomycetes as a component of forest ecosystems (in Russian). In: *Problemy izucheniya bioraznoobraziya na populyatsionnom i ekosistemnom urovne. Materialy konferentsii molodykh uchenykh-ekologov Uralskogo regiona 1–4 aprelya 1997 g.*, 237–239. Yekaterinburg.
- ⁴¹ Fefelov, K.A. 1997c: Species composition of myxomycetes (in Russian). In: *Vertical. Bulletin of young science of the Urals*, Vol. 2, 64–66. AMUoS, Orenburg.
- ⁴² Fefelov, K.A. 1998a: Myxomycetes of the city of Yekaterinburg (in Russian). In: *Bezopasnost biosfery. Sbornik tezisov dokladov II Vserossiyskogo molodezhnogo nauchnogo simpoziuma*, 102. Ukhta State Technical University: Yekaterinburg.
- ⁴³ Fefelov, K.A. 1998b: Slime moulds of burnt areas (in Russian). In: *Bezopasnost biosfery. Sbornik tezisov dokladov II Vserossiyskogo molodezhnogo nauchnogo simpoziuma*, 107. Ukhta State Technical University: Yekaterinburg.
- ⁴⁴ Fefelov, K.A. 1999a: Corticolous myxomycetes of Sverdlovsk region (in Russian). In: Chereshiev, V.A. & Kuyukina, M.S. (eds). *Sovremennye problemy ekologii, mikrobiologii i immunologii. Materialy regionalnoy konferentsii molodykh uchenykh 18–20 yanvarya 1999 goda*, Perm, 63–65. Perm.
- ⁴⁵ Fefelov, K.A. 1999b: Reaction of myxomycete communities in gradient of aerotechnogenic pollution (in Russian). In: *Razvitiye idey akademika S.S. Shvartsa v sovremennoy ekologii. Sbornik trudov konferentsii molodykh uchenykh-ekologov Uralskogo regiona 2–3 aprelya 1999 goda*, 201–205. Yekaterinburg: Yekaterinburg.
- ⁴⁶ Fefelov, K.A. 2002a: Myxomycetes of anthropogenically disturbed territories (in Russian with English abstract). In: Storozhenko, V.G. & Selochnik, N.N. (eds). *Problems of forest phytopathology and mycology. Proceedings of the 5th International Conference*, 7–10 (13) October 2002, 254–256. Moscow.
- ⁴⁷ Fefelov, K.A. 2002b: Myxomycetes of the “Sibirskiye Uvaly” Natural Park (West-Siberian Plain) (in Russian with English abstract). In: Shor, E.L. (ed). *Ekologicheskiye issledovaniya vostochnoy chasti Sibirsikh Uvalov. Sbornik nauchnykh* trudov zapovedno-prirodnogo parka “Sibirskiye Uvaly”, Vol. 1, 93–103. Priobye, Nizhnevartovsk.
- ⁴⁸ Fefelov, K.A. 2002c: Some interesting species of the myxomycetes from the city (in Russian with English abstract). In: Ryabinina, Z.N. (ed). *Biodiversity and bioresources of Urals and adjacent territories. Materials of II International Conference*, Orenburg, December 17–18, 2002, 34–35. Orenburg State Pedagogical University: Orenburg.
- ⁴⁹ Fefelov, K.A. 2003: Myxomycetes (in Russian). In: Gorchakovskiy, P.L. (ed). *Plants and fungi of the Pripyshminskie Bory National Park*, 96–98. Ural University Publishing House, Yekaterinburg.
- ⁵⁰ Fefelov, K.A. 2005: *Myxomycetes (class Myxomycetes) of Ural: taxonomical composition, ecology, geography* (in Russian). PhD thesis. Institute of Plant and Animal Ecology of the Ural Branch of the Russian Academy of Sciences (IPAE UB RAS): St. Petersburg.
- ⁵¹ Fefelov, K.A. 2006: Annotated list of myxomycetes of Visim Nature Reserve (in Russian). In: Marin, Yu.F. (ed). *Ekologicheskie issledovaniya v Visimskom biosfernem zapovednike. Materialy nauchnoy konferentsii, posvyashchennoy 35-letiyu Visimskogo zapovednika*. Yekaterinburg, 2–3 oktyabrya 2006 g., 326–329. Sredne-uralskoe knizhnoe izdatelstvo. Novoe vremya: Yekaterinburg.
- ⁵² Fefelov, K.A. 2007: Myxomycetes of Malaya Sosva Nature Reserve (in Russian). In: *Biological resources and nature management. Proceedings*, Vol. 10, 128–133. Defis, Surgut.
- ⁵³ Fefelov, K.A. 2009: Comparison of the myxomycete complexes of Ural steppes (in Russian). *Vestnik of the Orenburg State University* 6: 387–389.
- ⁵⁴ Fefelov, K.A. 2010: Basic check-list of myxomycetes from Uzhno-Uralsky State Reserve (in Russian with English abstract). *Proceedings of the Tigirek State Natural Reserve* 3: 121–124.
- ⁵⁵ Fefelov, K.A. & Plotnikov, B.S. 2002: Corticolous myxomycetes of pine (*Pinus sylvestris* L.) in urban habitat (in Russian). In: Ivanov, A.I. (ed). *Voprosy prakticheskoy ekologii. Sbornik materialov Vserossiyskoy nauchno-prakticheskoy konferentsii*, 29–30 maya 2002 g., 214–216. Penza State Agricultural Academy: Penza.
- ⁵⁶ Feng, Y. & Schnittler, M. 2015: Sex or no sex? Group I introns and independent marker genes reveal the existence of three sexual but reproductively isolated biospecies in *Trichia varia* (Myxomycetes). *Organisms Diversity & Evolution* 15: 631–650.

- ⁵⁷ Filarszky, F. 1907: Botanische Ergebnisse der Forschungsreisen von M. v. Déchy im Kaukasus (in German). In: Déchy, M. (ed). Kaukasus. Reisen und Forschungen im kaukasischen Hochgebirge, Vol. 3, 1–126. Dietrich Reimer (Ernst Vohsen), Berlin.
- ⁵⁸ Filippova, N.V. 2010: Preliminary list of fungi and myxomycetes of Khanty-Mansi autonomous area (in Russian). Khanty-Mansiysk.
- ⁵⁹ Fiore-Donno, A.M., Kamono, A., Chao, E.E., Fukui, M. & Cavalier-Smith, T. 2010: Invalidation of *Hyperamoeba* by transferring its species to other genera of Myxogastria. The Journal of Eukaryotic Microbiology 57: 189–196.
- ⁶⁰ Fiore-Donno, A.M., Meyer, M., Baldauf, S.L. & Pawłowski, J. 2008: Evolution of dark-spored Myxomycetes (slime-molds): Molecules versus morphology. Molecular Phylogenetics and Evolution 46: 878–889.
- ⁶¹ Georgi, J.G. 1790: Versuch einer Beschreibung der Russisch Kayserlichen Residenzstadt St. Petersburg und der Merkwürdigkeiten der Gegend, Bd. II (in German). Kaiserliche Akademie der Wissenschaften: St. Petersburg.
- ⁶² Georgi, J.G. 1800: Geographisch-physikalische und Naturhistorische Beschreibung des Russischen Reichs (in German). Friedrich Nicolovius: Königsberg.
- ⁶³ Gerasimovich, E.S., Pavlova, N.S., Pletenev, A.A., Podkuichenko, N.V., Rafaeva, M.P., Teteneva, N.A., Frolov, O.Yu. & Tsvetkova, M.S. 2014: Species diversity and distribution of myxomycetes of Zvenigorod Biological Station in 2012 year (in Russian with English abstract). In: Flora and fauna of the western part of Moscow region. Selected student research works conducted at summer field practice at S.N. Skadovsky Zvenigorod Biological Station, Vol. 7, 31–43. ZBS MSU: Zvenigorod.
- ⁶⁴ Gluhareva, I.D., Golovaneva, M.S., Egorov, A.V., Komendchikova, E.N., Menshikova, N.K., Myagkaya, A.V., Petrushenko, T.U., Rutškin, D.A., Ustimenko, A.A. & Hromova, M.R. 2017: Species diversity of myxomycetes in Zvenigorodskaya Biological Station of S.N. Skadovsky in 2016 (in Russian with English abstract). In: Flora and fauna of the western part of Moscow region. Selected student research works conducted at summer field practice at S.N. Skadovsky Zvenigorod Biological Station, Vol. 9, 26–43. KMK Scientific Press Ltd.: Moscow.
- ⁶⁵ Gmoshinskiy (Gmoschinskiy), V.I. 2013a: An annotated checklist of the myxomycetes of the Poriya Guba bay (White Sea): primary report (in Russian with English abstract). In: Tolmacheva, E.L. (ed). The Chronicle of Nature of the Kandalaksha Reserve for 2013 (Annual report). Book 59, Vol. 1, 1–9. Kandalaksha.
- ⁶⁶ Gmoshinskiy, V.I. 2013b: Myxomycetes of Moscow and Moscow region (in Russian). PhD thesis. Lomonosov MSU: Moscow.
- ⁶⁷ Gmoshinskiy (Gmoschinskiy), V.I. 2015: The results of the study of diversity myxomycetes of the Poriya Guba bay and Luvenga area in 2014 (in Russian with English abstract). In: Tolmacheva, E.L. (ed). The Chronicle of Nature of the Kandalaksha Reserve for 2014 (Annual report). Book 60, Vol. 1, 19–30. Kandalaksha.
- ⁶⁸ Gmoshinskiy, V.I. 2017: Results of studying myxomycetes diversity on the territory of “Utrish” reserve in 2016 (in Russian with English abstract). In: Kalinina, S.Yu. Bykhala, O.N. (ed). Terrestrial and adjacent marine ecosystems of the Abrau peninsula: structure, biodiversity and protection. Proceedings, Vol. 4, 134–140. I.V. Kazenin, Moscow.
- ⁶⁹ Gmoshinskiy, V.I. & Antonov, E.A. 2016: On the Myxomycetes biota of Primorye (in Russian with English abstract). Bulletin of the Botanical Garden-Institute FEB RAS 15: 16–19.
- ⁷⁰ Gmoshinskiy, V.I. & Matveev, A.V. 2016: Seasonal dynamics of sporophore formation in myxomycetes of Moscow and Moscow region. Mikologiya i Fitopatologiya 50: 139–147.
- ⁷¹ Gmoshinskiy, V.I. & Matveev, A.V. 2017: Myxomycete collection of the Department of Mycology and Algology (in Russian). In: Dyakov, Yu.T. (ed). Sovremennaya mikologiya v Rossii. Tom 6, 164–166. National Academy of Mycology, Moscow.
- ⁷² Gmoshinskiy, V.I. & Matveev, A.V. 2018: Revision of myxomycete collection of the Zoological Museum of Moscow State University (in Russian). In: Proceedings of IV (XII) International Botanical Conference of Young Scientists in Saint-Petersburg, April 22nd–28th, 2018, 204–205. Komarov Botanical Institute of the Russian Academy of Sciences: St. Petersburg.
- ⁷³ Gmoshinskiy, V.I. & Matveev, A.V. 2019: First data on Myxomycetes of Polistovsky Nature Reserve (Pskov region). Novosti sistematiki nizshikh rastenii 53: 279–290.
- ⁷⁴ Gmoshinskiy, V.I., Bortnikov, F.M., Matveev, A.V. & Novozhilov, Yu.K. 2020a: New data on Myxomycetes of Lazovsky State Nature Reserve (Far East, Russia). Botanica Pacifica 9: 155–164.
- ⁷⁵ Gmoshinskiy, V.I., Buchtoyarova, N.Yu. & Matveev, A.V. 2017a: First record of *Physarum spectabile* (Myxomycetes) in Russia. Botanica Lithuanica 23: 107–110.

- ⁷⁶ Gmoshinskiy, V.I., Buchtoyarova, N.Yu. & Matveev, A.V. 2017b: Study of species diversity of myxomycetes (class Myxomycetes) of the Central Forest Nature Reserve in 2015–2016 (in Russian). In: Dynamics of phenomena and processes in the natural complex of the reserve. The Chronicle of Nature. Book 56. 2016, 192–225. Central Forest State Nature Reserve: Zapovedny.
- ⁷⁷ Gmoshinskiy, V.I., Dunaev, E.A. & Sosorev, G.M. 2014: The first time record of *Fuligo megaspora* (Myxomycetes) in the territory of Russia (in Russian with English abstract). *Mikologiya i Fitopatologiya* 48: 209–211.
- ⁷⁸ Gmoshinskiy, V.I., Dunayev, E.A. & Sosorev, G.M. 2015: Results of the study [of] Mixomycota in the “Utrish” Reserve (in Russian with English abstract). In: Bykhalova, O.N. (ed). Biota protection in the State Nature Reserve “Utrish”. Proceedings. Vol. 3. 2014, 195–200. Poligraf-YuG, Maykop.
- ⁷⁹ Gmoshinskiy, V.I., Ershov, A.A., Korobkov, A.G., Lebedev, A.N., Lebedeva, M.V. & Sinitenkova, M.A. 2013: Myxomycetes (in Russian). In: Sorokin, A.S., Zinovyev, A.V., Pushay, E.S. & Tyusov, A.V. (eds). Red Data Book of the Tver region, 181–192. Tver.
- ⁸⁰ Gmoshinskiy, V.I., Ershov, A.A., Korobkov, A.G., Lebedev, A.N., Lebedeva, M.V. & Sinitenkova, M.A. 2016: Myxomycetes (in Russian). In: Orlov, S.V., Sokolov, D.L., Perova, I.S., Kokina, O.M., Turliv, A.V. & Vedernikova, E.S. (eds). Red Data Book of the Tver region, 187–196. Tverskoy Pechatny Dvor, Tver.
- ⁸¹ Gmoshinskiy, V.I., Gubanov, E.S. & Matveev, A.V. 2019a: First record of *Trichia papillata* Adamonyté (Myxomycetes) in Russia. *Botanica* 25: 16–20.
- ⁸² Gmoshinskiy, V.I., Matveev, A.V., Bortnikov, F.M. & Adashev, V.E. 2018a: Myxomycete study at the Department of Mycology and Algology, Faculty of Biology, Moscow State University (in Russian). In: Materialy Vserossiyskoy konferentsii s mezdunarodnym uchastiem, “Mikologiya i algologiya Rossii. XX – XXI vek: smena paradigm”, posvyashchennoy 100-letiyu kafedry mikologii i algologii biologicheskogo fakulteta MGU imeni M.V. Lomonosova, 110-letiyu so dnya rozhdeniya professora Mikhaila Vladimirovicha Gorlenko, pamyati professora Yurya Tarichanovicha Dyakova, 52–60. Pero: Moscow.
- ⁸³ Gmoshinskiy, V.I., Matveev, A.V. & Dunaev, E.A. 2018b: Collection of myxomycetes of Young Naturalists Circle of Zoological Museum of Moscow State University. Lomonosov Moscow State University. Occurrence dataset: <https://doi.org/10.15468/zmmwmj> (Date of access: 01.06.2020).
- ⁸⁴ Gmoshinskiy, V.I., Matveev, A.V., Gubanov, E.S., Bortnikov, F.M. & Dunayev, E.A. 2020b: Critical revision of the Myxomycetes collection of Young Naturalists Club of Zoological Museum of Moscow State University. *Botanica Pacifica* 9: 175–190.
- ⁸⁵ Gmoshinskiy, V.I., Mishulin, A.A. & Matveev, A.V. 2019b: First record of *Didymium projectile* (Myxomycetes) in Russia. *Bulletin of Moscow Society of Naturalists. Biological series* 124: 34–36.
- ⁸⁶ Gmoshinskiy, V.I., Prokhorov, V.P. & Barsukova, T.N. 2011: Myxomycet[e]s collection of the Department of Mycology and Algology of Moscow State University. *Mikologiya i Fitopatologiya* 45: 98–100.
- ⁸⁷ Gorter, D. 1761: *Flora Ingrica ex schedis Stephani Krascheninnikow confecta et propriis observationibus aucta a Davide de Gorter* (in Latin). Petropoli.
- ⁸⁸ Gorunova, A.V. & Ebel, M.A. 2017: Members of family Stemonitidae in myxomycete biota of Volga-Akhtuba Flood Plain (in Russian). In: Petrov, V.I. (ed). Aktualnye problemy eksperimentalnoy i klinicheskoy meditsiny. Materialy 75-y otkrytoj nauchno-prakticheskoy konferentsii molodykh uchenykh i studentov VolgGMU s mezdunarodnym uchastiem, 481–482. Volgograd State Medical University: Volgograd.
- ⁸⁹ Grimm, M. 1896: Zur Myxomycetenkenntniss des Gouvernements St.-Petersburg [On myxomycetes of Petersburg Governorate] (in Russian). *Scripta Botanica Horti Universitatis Imperialis Petropolitanae* 5: 157–171.
- ⁹⁰ Gubanov, E.S. & Gmoshinskiy, V.I. 2018: Results of exploring species diversity of slime molds in Nature State Reserve “Utrish” in 2017 (in Russian and English). In: Proceedings of IV (XII) International Botanical Conference of Young Scientists in Saint-Petersburg, April 22nd–28th, 2018, 207. Komarov Botanical Institute of the Russian Academy of Sciences: St. Petersburg.
- ⁹¹ Hennings, P. 1895: Beitrag zur Pilzflora des Samlandes (in German). *Jahres-Bericht des Preussischen Botanischen Vereins*: 85–90.
- ⁹² Hennings, P. 1903: Beitrag zur Pilzflora des Gouvernements Moskau (in German). *Hedwigia* 42: 108–118.
- ⁹³ Hennings, P. 1904: Zweiter Beitrag zur Pilzflora des Gouvernements Moskau (in German). *Hedwigia* 43: 66–73.
- ⁹⁴ Hennings, P. 1906: Dritter Beitrag zur Pilzflora des Gouvernements Moskau (in German). *Hedwigia* 45: 22–33.

- ⁹⁵ Heyden, K.K. 1899: Zur Pilzflora des Gouvernements Moskau (in German). *Hedwigia* 38: 269–273.
- ⁹⁶ Hintikka, T.J. 1919: Révision des Myxogastres de Finlande (in French). *Acta Societatis pro Fauna et Flora Fennica* 46: 1–43.
- ⁹⁷ Hollós, L. 1902: Adatok a Kaukázus gombáinak ismeretéhez (in Hungarian). *Növénytani Közlemények* 1: 147–155.
- ⁹⁸ Hollós, L. 1905: Beiträge zur Kenntnis der Pilzflora im Kaukasus (in German). *Mathematische und naturwissenschaftliche berichte aus Ungarn* 20: 315–325.
- ⁹⁹ Jaczewski, A. 1893: Catalogue des Champignons recueillis en Russie en 1892 à Rylkovo, gouvernement de Smolensk (in French). *Bulletin de la Société mycologique de France* 9: 212–222.
- ¹⁰⁰ Jaczewski, A.A. 1895: Catalogue of fungi of Smolensk Governorate, collected in 1892 and 1894 (in Russian). *Bulletin de la Société impériale des naturalistes de Moscou* 9: 128–130.
- ¹⁰¹ Jaczewski, A.A. 1907: *Mycological flora of European and Asian Russia. Volume II. Slime moulds* (in Russian). Typolithography of V. Richter: Moscow.
- ¹⁰² Javoronkowa 1914: Note préliminaire concernant des observations sur la germination des spores de *Didymium difforme* Duby (in French). *Bulletin de la Société Mycologique de France* 30: 402–405.
- ¹⁰³ Karpov, S.A., Novozhilov, Yu.K. & Chistiakova, L.V. 2003: A comparative study of zoospore cytoskeleton in *Sympylocarpus impexus*, *Arcyria cinerea* and *Lycogala epidendrum* (Eumycetozoa). *Protistology* 3: 15–29.
- ¹⁰⁴ Karsten, P.A. 1882: *Enumeratio fungorum et Myxomycetum in Lapponia orientali aestate 1861 lectorum* (impr. 1866) (in Latin). *Notiser ur Sällskapets pro Fauna et Flora Fennica Förhandlingar* 8: 193–224.
- ¹⁰⁵ Karsten, P.A. 1906: *Fungi in Transbaicalia, paucis exceptis prope fontes minerales Yamarovka, aestate ann. 1904 et 1905 a clar. P. Mikhno collecti* (in Latin). *Travaux de la Sous-Section Troitzkossawsk-Kiaktha Section du pays d'Amour de la Société Imperiale Russe de Géographie* 8: 60–64.
- ¹⁰⁶ Kaukonen, M. 1996: Fungi of the former Kutsa Nature Reserve. *Oulanka Reports* 16: 69–72.
- ¹⁰⁷ Kazey, A.S., Shirokikh, A.A. & Shirokikh, I.G. 2015: Myxomycetes as a source of phytostimulating bacterias (in Russian). In: *Mekhanizmy ustoychivosti i adaptatsii biologicheskikh sistem k prirodnym i tekhnogennym faktoram. Sbornik materialov Vserossiyskoy nauchnoy konferentsii* (22–25 aprelya 2015 g.), 75–77. VESI: Kirov.
- ¹⁰⁸ Khizhnyakova, A.S. & Ronko, R.V. 2009: *Myxomycetes of Nurgush Nature Reserve* (in Russian). In: *Nauchnye issledovaniya kak osnova okhrany prirodnnykh kompleksov zapovednikov i zakaznikov. Materialy Vserossiyskoy nauchno-prakticheskoy konferentsii*, 26 oktyabrya 2009 g., Vol. 1, 159–160. Staraya Vyatka: Kirov.
- ¹⁰⁹ Killermann, S. 1943: Die höheren Pilze Sibiriens (in German). *Annales Mycologici* 41: 223–298.
- ¹¹⁰ Kochergina, A.V., Zemlianskaia, I.V. & Novozhilov, Yu.K. 2005: *Myxomycetes of the Elton Natural Park* (in Russian with English abstract). In: *Gribi v prirodnnykh i antropogennykh ekosistemakh. Trudy mezhdunarodnoy konferentsii, posvyashchennoy 100-letiyu nachala raboty professora A.S. Bondartseva v Botanicheskem institute im. V.L. Komarova RAN, Sankt-Peterburg, 24–28 aprelya 2005 g.*, 300–302. Boston-spektr: St. Petersburg.
- ¹¹¹ Kolomytseva, D.Yu. & Melkumov (Mel'kumov), G.M. 2015: New data on species diversity of myxomycetes of the forest communities of the reserve “Bryansk forest” to Bryansk region. In: Pavlov, S.I. (ed). *Biological and ecological regional studies: global, Russian and regional problems. Proceedings of the 4th International Academic Conference, dedicated to the 115th anniversary of doctor of biological sciences, professor I.S. Sidoruk and doctor of agricultural sciences, professor P.A. Polozhentsev. 2015 December 7, Samara, Russian Federation, 64–67. Samara State Academy of Social Sciences and Humanities: Samara.*
- ¹¹² Kosheleva, A.P. 2000: *Myxogasteromycetes and rare macromycetes of Lower Angara region* (in Russian). In: *Ekologiya i problemy zashchity okruzhayushchey sredy. Tezisy dokladov VII Vserossiyskoy studencheskoy nauchnoy konferentsii*, 15–16. Krasnoyarsk.
- ¹¹³ Kosheleva, A.P. 2003a: *Myxomycetes of Lower Angara Region (Taseyevsky district, Krasnoyarsk territory)* (in Russian). In: *Ekologiya i problemy zashchity okruzhayushchey sredy. Tezisy dokladov X Vserossiyskoy studencheskoy nauchnoy konferentsii*, 19–20. Krasnoyarsk.
- ¹¹⁴ Kosheleva, A.P. 2003b: *Myxomycetes of swamp complexes between Ob and Tom rivers (Tomsk region, Western Siberia)* (in Russian). In: Bianki, A.M. (ed). *Anichkovskiy vestnik, No 33: Molodye biologi Sankt-Peterburga – 300-letiyu goroda. Materialy konferentsii*, 53–54. Saint Petersburg City Palace of Youth Creativity: St. Petersburg.

- ¹¹⁵ Kosheleva, A.P. 2003c: Myxomycetes of swamp complexes between Ob and Tom rivers (Tomsk region, Western Siberia) (in Russian). In: *Biologiya – nauka XXI veka. 7-aya Pushchinskaya shkola-konferentsiya molodykh uchenykh 14–18 aprelya 2003 g. Sbornik tezisov*, 180. Pushchino.
- ¹¹⁶ Kosheleva, A.P. 2004a: Myxomycetes of Stolby Nature Reserve (Krasnoyarsk territory, Eastern Siberia) (in Russian). In: *Mikologiya i algologiya – 2004. Materialy yubileynoy konferentsii, posvyashchennoy 85-letiyu kafedry mikologii i algologii MGU im. M. V. Lomonosova*, 78. Moscow.
- ¹¹⁷ Kosheleva, A.P. 2004b: Myxomycetes species new for Western Siberia (in Russian with English abstract). *Mikologiya i Fitopatologiya* 38: 41–42.
- ¹¹⁸ Kosheleva, A.P. 2004c: On study of morphological features of plasmodium of *Licea operculata* (Wing.) Martin (class Myxomycetes) (in Russian). In: *Proceedings of the 8th Conference of Young Botanists in St. Petersburg (17–21 May 2004)*, 67–68. St. Petersburg State University of Technology and Design: St. Petersburg.
- ¹¹⁹ Kosheleva, A.P. 2004d: Study of myxomycetes of Krasnoyarsk territory (in Russian). In: *Biologiya – nauka XXI veka. 8-aya Pushchinskaya shkola-konferentsiya molodykh uchenykh 17–21 maya 2004 g. Sbornik tezisov*, 209. Pushchino.
- ¹²⁰ Kosheleva, A.P. 2006: Myxomycetes from the various phytocoenoses of “Stolby” Strict Nature Reserve (Eastern Sayan, Russia) (in Russian with English abstract). *Mikologiya i Fitopatologiya* 40: 278–284.
- ¹²¹ Kosheleva, A.P. 2007a: Myxomycete diversity of the steppe mountain sections in the State Reserve “Stolby” (Eastern Sayan, Russia). In: Kovalenko, A., Melnik, V., Vedenyapina, E. & Zmitrovich, I. (eds). *XV Congress of European Mycologists*. Saint Petersburg, Russia, September 16–21, 2007. Abstracts, 128–129. TREEART LCC: St. Petersburg.
- ¹²² Kosheleva, A.P. 2007b: Myxomycetes of Stolby Nature Reserve (Eastern Sayan): taxonomical composition and ecology (in Russian). PhD thesis. V.L. Komarov BIN RAS: St. Petersburg.
- ¹²³ Kosheleva, A.P. & Novozhilov, Yu.K. 2005: Substrate (adaptive) complexes of myxomycetes in Stolby Nature Reserve (in Russian). In: *Mnogoletnie nablyudeniya v OOPT. Istoryya, sovremennoe sostoyanie, perspektivy. Sbornik statey po materialam vserossiyskoy nauchno-prakticheskoy konferentsii, posvyashchennoy 80-letiyu GPZ “Stolby”, 14–17 sentyabrya 2005 g. g. Krasnoyarsk*, 211–215. Klaretianum: Krasnoyarsk.
- ¹²⁴ Kosheleva, A.P., Novozhilov, Yu.K. & Schnittler, M. 2008: Myxomycete diversity of the state reserve “Stolby” (south-eastern Siberia, Russia). *Fungal Diversity* 31: 45–62.
- ¹²⁵ Kotelenets, N.N. & Barsukova, T.N. 2003: Myxomycetes and myxomycetophilous beetles in Oksky State Biospheric Reserve (in Russian with English abstract). *Mikologiya i Fitopatologiya* 37: 50–53.
- ¹²⁶ Kruglikov, S.A. 2007: Slime moulds (myxomycetes) of Bryansk Les Nature Reserve (in Russian). In: *Kingdom Fungi: true fungi, slime molds and lichens of the Bryansk Forest Nature Reserve*, 42–43. Bryansk.
- ¹²⁷ Kurbatova, M.E. 2017: New findings of myxomycetes in Volga-Akhtuba Flood Plain Nature Park (in Russian). In: Petrov, V.I. (ed). *Aktualnye problemy eksperimentalnoy i klinicheskoy meditsiny. Materialy 75-yy otkrytoy nauchno-prakticheskoy konferentsii molodykh uchenykh i studentov VolgGMU s mezdunarodnym uchastiem*, 487–488. Volgograd State Medical University: Volgograd.
- ¹²⁸ Kurbatova, M.E. 2018: Members of genus *Echinostelium* in myxomycete biota of Volgo-Akhtuba Flood Plain Nature Park (in Russian). In: Petrov, V.I. (ed). *Aktualnye problemy eksperimentalnoy i klinicheskoy meditsiny. Materialy 76-yy mezdunarodnoy nauchno-prakticheskoy konferentsii molodykh uchenykh i studentov*, 415–416. Volgograd State Medical University: Volgograd.
- ¹²⁹ Kutafyeva, N.P. & Kosheleva, A.P. 2005: Materials on the biota of macromycetes and myxomycetes of Sayano-Shushensky Biosphere State Reserve (in Russian). *Novosti sistematiki nizshikh rastenii* 39: 139–145.
- ¹³⁰ Kuznetsov, E.A. & Tarasov, K.L. 2008: Fungus-like protists (in Russian with English abstract). In: Tchesunov, A.V., Kaljakina, N.M. & Bubnova, E.N. (eds). *A catalogue of biota of the White Sea Biological Station of the Moscow State University*, 127–138. KMK Scientific Press Ltd., Moscow.
- ¹³¹ Lado, C. 2005–2020: An on line nomenclatural information system of Eumycetozoa: <http://www.nomen.eumycetozoa.com/> (Date of access: 01.06.2020).
- ¹³² Lavrov (Lawrow), N.N. 1927: Beiträge zur Schleimpilz-Flo- ra Sibiriens. I Schleimpilze der Umgebung von Tomsk [Materials on flora of Siberian slime moulds: I. Slime moulds of the vicinity of city of Tomsk] (in Russian with German abstract). *Izvestia Tomskogo otdeleniya Russkogo Botanicheskogo obshchestva* 2: 1–12.

- ¹³³ Lavrov, N. 1929: Formae novae myxomycetum Sibiriae [The new forms of slime molds from Siberia] (in Latin and Russian). *Animadversiones systematicae ex Herbario Universitatis Tomskensis* 4–5: 3.
- ¹³⁴ Lavrov (Lawrow), N.N. 1931: Beiträge zur Schleimpilz-Flora Sibiriens. II Schleimpilze des nördlichen und zentralen Altai [Materials on Siberian flora of slime moulds: II. Slime moulds of Northern and Central Altay] (in Russian with German abstract). *Izvestia Tomskogo otdeleniya Russkogo Botanicheskogo obshchestva* 3: 84–100.
- ¹³⁵ Lebedev, A.N. 2007: Some results of researching flora of Myxomycetes of the Tver region (in Russian with English abstract). *Tver State University Bulletin. Series: Biology and Ecology* 5: 138–140.
- ¹³⁶ Lebedev, A.N. 2008: Myxomycetes of Tver region (in Russian). PhD thesis. N.V. Tsitsin Main Botanical Garden: Moscow.
- ¹³⁷ Lebedev, A.N. 2012: Special features of *Didymium iridis* (Ditm.) Fr. distribution in Tver region (in Russian). In: *Biologicheskaya rekultivatsiya i monitoring narushennykh zemel. Materialy IX Vserossiyskoy nauchnoy konferentsii s mezhdunarodnym uchastiem, Yekaterinburg, 20–25 avgusta 2012 g.*, 141–143. Ural University Publishing House: Yekaterinburg.
- ¹³⁸ Lebedev, A.N. & Gmoshinskiy (Gmoshinsky), V.I. 2012: Distribution of *Lycogala conicum* Pers. (Myxomycetes) in Russia (in Russian with English abstract). *Yaroslavl Pedagogical Bulletin* 3: 115–117.
- ¹³⁹ Lebedev, A.N. & Notov, A.A. 2009: An annotated checklist of the slime moulds from the Botanical Garden of Tver State University (in Russian with English abstract). *Tver State University Bulletin. Series: Biology and Ecology* 13: 186–192.
- ¹⁴⁰ Lebedev, A.N. & Sinetenkova, M.A. 2013: New myxomycete species of Pskov region (in Russian). In: *SymBioS Russia 2013. Abstracts of VI Russian Congress of Young Biologists with international participation. Proceedings of Educational School “New Concepts on Topical Problems in Biology and Medicine”*, 203–204. Asprint: Irkutsk.
- ¹⁴¹ Lebedev, A.N., Gmoshinskiy, V.I. & Buchtoyarova, N.Yu. 2017: New data on Myxomycetes diversity in Central Forest Nature Reserve (Nelidovo area, Tver region) (in Russian with English abstract). *Tver State University Bulletin. Series: Biology and Ecology* 1: 217–236.
- ¹⁴² Lebedev, A.N., Notov, A.A. & Korobkov, A.G. 2008: Myxomycetes of the Udomel'skij district of the Tver region (in Russian with English abstract). *Tver State University Bulletin. Series: Biology and Ecology* 8: 136–142.
- ¹⁴³ Lebedeva, L.A. 1933: Fungi and myxomycetes of Soviet Karelia (in Russian). *Acta Instituti botanici Academiae Scientiarum URSS. Ser. 2, Fasc. 1:* 329–331.
- ¹⁴⁴ Leontyev, D.V. 2005: New data on myxomycetes in Cape Martyan Nature Reserve and Yalta Mountain-Forest Nature Reserve (in Russian). In: *Zapovedniki Kryma: zapovednoe delo, bioraznoobrazie, ekoobrazovanie. Materialy III nauchnoy konferentsii (22 aprelya 2005 goda, Simferopol, Krym). Chast I. Geografiya. Zapovednoe delo. Botanika. Lesovedenie*, 221–224. Simferopol.
- ¹⁴⁵ Leontyev, D.V. 2010: Myxomycetes from the genera *Stemonitis*, *Stemonitopsis* and *Stemonaria* in Ukraine: identification and distribution (in Russian with English abstract). *Mikrobiologiya i Fitopatobiologiya* 44: 398–409.
- ¹⁴⁶ Leontyev, D.V. & Fefelov, K.A. 2009: *Tubulifera appplanata*. A new myxomycete species from Eastern Europe and Northern Asia. *Boletín de la Sociedad Micológica de Madrid* 33: 115–127.
- ¹⁴⁷ Leontyev, D.V., Kochergina, A.V. & Morozova, I.I. 2008: Myxomycetes (in Russian). In: Popov, E.S. & Rebrev, Yu.A. (eds). *IX Rabochee soveshchanie Komissii po izucheniyu makromitsetov (Vyoshenskaya, 4–10 oktyabrya 2006 g.). Annotirovannye spiski vidov gribov i miksomitsetov. Sbornik statey*, 13–17. Rostov-on-Don.
- ¹⁴⁸ Leontyev, D.V., McHugh, R., Fefelov, K.A. & Kochergina, A.V. 2011: New and rare Myxomycetes of Ukraine. 2. Southwest Crimea. *Nova Hedwigia* 92: 245–256.
- ¹⁴⁹ Leontyev, D.V., Schnittler, M., Moreno, G., Stephenson, S.L., Mitchell, D.W. & Rojas, C. 2014: The genus *Alwisia* (Myxomycetes) revalidated, with two species new to science. *Mycologia* 106: 936–948.
- ¹⁵⁰ Léveillé J.H. 1842: Observations médicales et énumération des plantes recueillies en Tauride (in French). In: Demidoff, A. (ed). *Voyage dans la Russie méridionale et la Crimée, par la Hongrie, la Valachie et la Moldavie*, Vol. 2, 33–232. Ernest Bourdin et Cie, Paris.
- ¹⁵¹ Loeselius, J. 1654: *Plantae in Borussia sponte nascentes* (in Latin). *Typis Paschalii Mensenii: Regiomonti*.
- ¹⁵² Loeselius, J. 1703: *Flora Prussica, sive plantae in regno Prussiae sponte nascentes* (in Latin). *Sumptibus typographiae Georgiana: Regiomonti*.

- ¹⁵³ Luptakova, A.D. 2018a: Data on the biota of Myxomycetes in the bottomland forests of Sok river in Samara region (in Russian with English abstract). In: Belanova, A.P. (ed). Perspektivy razvitiya i problemy sovremennoy botaniki. Materialy IV (VI) Vserossiyskoy molodezhnoy konferentsii s uchastiem inostrannyykh uchenykh, 8–12 oktyabrya 2018 goda, g. Novosibirsk, 147–149. Akademizdat: Novosibirsk.
- ¹⁵⁴ Luptakova, A.D. 2018b: Myxomycetes of Samara region (in Russian). In: Aleshkovskiy, I.A., Andriyanov, A.V. & Antipov, E.A. (eds). International scientific conference of students and young scientists "Lomonosov-2018", 1–2. MAKS Press: Moscow.
- ¹⁵⁵ Luptakova, A.D. 2019: Myxomycetes of Krasnosamarsky woodland in Samara region (in Russian). In: Aleshkovskiy, I.A., Andriyanov, A.V. & Antipov, E.A. (eds). International scientific conference of students and young scientists "Lomonosov-2019", 1–2. MAKS Press: Moscow.
- ¹⁵⁶ Luptakova, A.D. & Korchikov, E.S. 2017: About the study of the myxomycetes of Krasnosamarsky woodland (in Russian with English abstract). In: Vasilyev, A.V. (ed). YOUNG ELPIT 2017. International Innovative Forum of Young Scientists in Framework of the VI International Environmental Congress (VIII International Scientific-Technical Conference) "Ecology and Life Protection of Industrial-Transport Complexes" ELPIT 2017 (Samara – Togliatti, Russia, 20–24 September, 2017). Proceedings of the scientific reports, 176–181. Publishing House of Samara Scientific Centre: Samara.
- ¹⁵⁷ Maniakina, M.V., Ostapenko, N.V. & Zemlianskaia, I.V. 2005: Myxomycetes of the Sherbakov Natural Park (in Russian with English abstract). In: Grify v prirodnykh i antropogennykh ekosistemakh. Trudy mezhdunarodnoy konferentsii, posvyashchennoy 100-letiyu nachala raboty professora A.S. Bondartseva v Botanicheskem institute im. V.L. Komarova RAN, Sankt-Peterburg, 24–28 aprelya 2005 g., 380–382. Boston-spektr: St. Petersburg.
- ¹⁵⁸ Martius, H. 1817: Prodromus Florae Mosquensis (in Latin). Lipsiae.
- ¹⁵⁹ Matveev, A.V. & Gmoshinsky, V.I. 2012: Myxomycetes of botanical gardens of Moscow (in Russian). In: Dyakov, Yu.T. (ed). Sovremennaya mikologiya v Rossii. Tom 3. Materialy 3-go Syezda mikologov Rossii, 133–134. National Academy of Mycology: Moscow.
- ¹⁶⁰ Matveev, A.V. & Gmoshinsky (Gmoschinsky), V.I. 2013: Myxomycetes of some botanical gardens of Moscow (in Russian). In: Terekhova, V.A. (ed). Bioindication in the Ecological Assessment of Soils and Related Habitats. Book of Abstracts of the International Conference, Moscow, 4–6 February 2013, 140. BINOM. Laboratoriya znanii: Moscow.
- ¹⁶¹ Matveev, A.V. & Gmoshinsky, V.I. 2015: First data on myxomycetes of the Botanical Garden of the Komarov Botanical Institute of RAS in moist chamber cultures (in Russian). In: Proceedings of III (XI) International Botanical Conference of Young Scientists in Saint-Petersburg 4–9 October 2015, 35–36. Komarov Botanical Institute of the Russian Academy of Sciences: St. Petersburg.
- ¹⁶² Matveev, A.V. & Gmoshinsky, V.I. 2017: First data on myxomycetes of Dagestan (in Russian). Trudy gosudarstvennogo prirodnogo zapovednika Dagestanskii 13: 20–27.
- ¹⁶³ Matveev, A.V., Gmoshinsky, V.I., Botyakov, V.N. & Novozhilov, Yu.K. 2018a: First records of *Physarella oblonga* (Myxomycetes) in Russia (in Russian with English abstract). Bulletin of Moscow Society of Naturalists. Biological series 123: 66–77.
- ¹⁶⁴ Matveev, A.V., Gmoshinsky, V.I., Prokhorov, V.P. & Kazantseva, E.S. 2018b: The myxomycetes from botanical gardens of Moscow: N.V. Tsitsin Botanical Garden of the Russian Academy of Sciences and the Botanical Garden of Moscow State University. Mikologiya i Fitopatobiya 52: 106–111.
- ¹⁶⁵ Matveev, A.V., Lebedev, A.N. & Gmoshinsky, V.I. 2014: The first data on myxomycetes of the Botanical Garden of Tver State University obtained using moist chamber cultures (in Russian). In: Problems and perspectives of the plant world investigations. International scientific and practical conference of the young scientists. Book of abstracts. Yalta, May 13–16th 2014, 119. Yalta.
- ¹⁶⁶ Matveev, A.V., Lebedev, A.N. & Gmoshinsky, V.I. 2018c: Results of long-term research of myxomycetes biota in the Tver State University Botanical Garden (in Russian with English abstract). Mikologiya i Fitopatobiya 52: 112–119.
- ¹⁶⁷ Melkumov, G.M. 2017: Species composition of plasmodial slime moulds (Myxomycetes) of Novousmansky district of Voronezh region (in Russian). In: Sovremennaya lesnaya nauka: problemy i perspektivy. Materialy Vserossiyskoy nauchno-prakticheskoy konferentsii 20–22 dekabrya 2017, 173–178. Istoki: Voronezh.
- ¹⁶⁸ Melkumov, G.M. 2019: New data on myxomycetes (Myxomycota) of Orlovskoye Polesye National Park (in Russian). In: Voskresenskaya, O.L. (ed). Sovremennye problemy meditsiny i estestvennykh nauk. Sbornik statey Mezdunarodnoy nauchnoy konferentsii, Yoshkar-Ola, 15–19

- aprelya 2019 g., Vol. 8, 145–146. Mari State University: Yoshkar-Ola.
- ¹⁶⁹ Melkumov, G.M. 2020: Hidden diversity of plasmodial myxomycetes (Myxomycetes) of Voronezh region (in Russian). In: Agafonov, V.A. (ed). Problemy botaniki: istoriya i sovremennoost. Materialy Mezhdunarodnoy nauchnoy konferentsii, posvyashchennoy 130-letiyu so dnya rozhdeniya prof. B.M. Kozo-Polyanskogo, 80-letiyu so dnya rozhdeniya prof. K.F. Khmeleva, IX nauchnogo soveshchaniya "Flora Sredney Rossii" (Voronezh, 3–7 fevralya 2020 g.), 245–248. Tsifrovaya poligrafiya: Voronezh.
- ¹⁷⁰ Melkumov, G.M. & Kolomytseva, D.Yu. 2016: First data on myxomycetes of Voronezh region obtained using moist chamber cultures (in Russian with English abstract). Proceedings of Voronezh State University. Series: Chemistry. Biology. Pharmacy 3: 85–88.
- ¹⁷¹ Melkumov, G.M. & Plotnikova, K.A. 2018: Substrate specialization of plasmodial slime molds (Myxomycetes) [in] Natural reserve of regional importance "Voronezh upland oak forest" (in Russian with English abstract). In: Morkovina, S.S. (ed). Ekologicheskie i biologicheskie osnovy povysheniya produktivnosti i ustoychivosti prirodnnykh i iskusstvenno vozobnovlennykh lesnykh ekosistem. Materialy mezhdunarodnoy nauchno-prakticheskoy konferentsii, posvyashchennoy 100-letiyu vysshego lesnogo obrazovaniya v g. Voronezh i TsChR Rossii, Vol. 1, 165–173. Voronezh State University of Forestry and Technologies named after G.F. Morozov: Voronezh.
- ¹⁷² Mishulin, A.A. 2018: New data on myxomycete biota of Vladimir region (in Russian). In: Aleshkovskiy, I.A., Andriyanov, A.V. & Antipov, E.A. (eds). International scientific conference of students and young scientists "Lomonosov-2018", 1–2. MAKS Press: Moscow.
- ¹⁷³ Mishulin, A.A., Blinova, A.V. & Gushchina, S.E. 2018: Myxomycetes and fungi of the forest seed reserve "Sudogodsky" (in Russian with English abstract). In: Gracheva, E.P. (ed). Problemy ekologicheskogo obrazovaniya v XXI veke. Trudy II Mezhdunarodnoy nauchnoy konferentsii (ochno-zaochnoy), 6–12. Arkaim: Vladimir.
- ¹⁷⁴ Moreno, G., Lopez-Villalba, A., Castillo, A., Romanenko, K.O. & Leontyev, D.V. 2017: Notes on some myxomycetes from Crimea (Ukraine). Mycotaxon 132: 649–663.
- ¹⁷⁵ Mosolov, N.A. 1906: List of fungi found in Podolsky uyezd. Second expanded edition (in Russian). Typolithography of I.N. Kushnerev and Co partnership: Moscow.
- ¹⁷⁶ Murashkinskiy, K.E. 1911: Descriptive catalogue of the National History Museum of Nizhny Novgorod Governorate Zemstvo. Issue 3. Botanical department: catalogue of the fungal herbarium (in Russian). Typography of V. Royskiy and I. Karneev: Nizhniy Novgorod.
- ¹⁷⁷ Naoumoff, M.N. 1914: Matériaux pour la flore mycologique da la Russie, Fungi ussurientes I (in French). Bulletin de la Société Mycologique de France 30: 64–83.
- ¹⁷⁸ Naumenko, Y.V., Gorbunova, I.A., Vlasenko, V.A. & Vlasenko, A.V.: Mycologic herbarium of Central Siberian Botanical Garden SB RAS. History and prospects of development (in Russian). Rastitelnyy mir Aziatskoy Rossii 29: 100–104.
- ¹⁷⁹ Notov, A.A. & Lebedev, A.N. 2009: Myxomycetes in Zavidovo National Park (in Russian). In: Fertikov, V.I. (ed). Zavidovo National Park. 80 years (1929–2009). Anniversary scientific readings, Vol. 7, 208–215. Delovoy mir, Moscow.
- ¹⁸⁰ Novozhilov, Yu.K. 1980a: Mixomycetes occurring in the Central State Forest Reservation ([and] Leningrad region) (in Russian with English abstract). Mikologiya i Fitopatologiya 14: 198–201.
- ¹⁸¹ Novozhilov, Yu.K. 1980b: New species of Myxomycetes in the U.S.S.R. (in Russian). Mikologiya i Fitopatologiya 14: 314–318.
- ¹⁸² Novozhilov, Yu.K. 1981a: Myxomycetes of Ladoga-IImen floristic region (in Russian). PhD thesis. V.L. Komarov BIN RAS: Leningrad.
- ¹⁸³ Novozhilov, Yu.K. 1981b: Polytomic figure keys for identifying myxomycetes genera and species of Leningrad region (in Russian). Mikologiya i Fitopatologiya 15: 6–16.
- ¹⁸⁴ Novozhilov, Yu.K. 1983: Myxomycete herbarium of the Komarov Botanical Institute of the USSR Academy of Sciences (in Russian). Mikologiya i Fitopatologiya 17: 449–451.
- ¹⁸⁵ Novozhilov, Yu.K. 1984: Mixomycetes occurring in Kursk region and Aliokhin State Central Chernozem Biosphere Reservation (in Russian). Mikologiya i Fitopatologiya 18: 26–28.
- ¹⁸⁶ Novozhilov, Yu.K. 1985a: Mixomycetes of the U.S.S.R. I. Genus *Echinostelium* D By. (in Russian). Mikologiya i Fitopatologiya 19: 124–128.
- ¹⁸⁷ Novozhilov, Yu.K. 1985b: Mixomycetes of the U.S.S.R. II. Genus *Licea* Schrad. (in Russian). Mikologiya i Fitopatologiya 19: 290–297.

- ¹⁸⁸ Novozhilov (Novogilov), Ju.K. 1986a: De myxomycetis nivalibus regionis Leningradensis notula [Nivicolous myxomycetes of Leningrad region] (in Russian). Novosti sistematiki nizshikh rastenii 23: 146–149.
- ¹⁸⁹ Novozhilov (Novogilov), Ju.K. 1986b: De myxomycetis paeninsulae Czukotka notula. I. [On myxomycetes of Chukotka. I.] (in Russian). Novosti sistematiki nizshikh rastenii 23: 143–146.
- ¹⁹⁰ Novozhilov, Yu.K. 1986c: Mixomycetes of the U.S.S.R. III. Genus *Macbrideola* H.C. Gilbert (in Russian). Mikologiya i Fitopatologiya 20: 102–105.
- ¹⁹¹ Novozhilov, Ju.K. 1987: De Myxomycetibus e reservato Altaiensi notula [Myxomycetes of Altai Nature Reserve] (in Russian). Novosti sistematiki nizshikh rastenii 24: 113–115.
- ¹⁹² Novozhilov, Yu.K. 1988: Epiphytic myxomycetes in some regions of the USSR. Analysis of their substrate and habitat distribution (in Russian). Mikologiya i Fitopatologiya 22: 301–307.
- ¹⁹³ Novozhilov, Yu.K. 1993a: Defitorium Fungorum Rossiae. Divisio Myxomycota. Fasc. 1. Classis Myxomycetes (in Russian). Nauka: Petropolis.
- ¹⁹⁴ Novozhilov, Yu.K. 1993b: Myxomycetes of Russia. I. Survey of the genus *Cibraria* Pers (in Russian with English abstract). Mikologiya i Fitopatologiya 27: 39–47.
- ¹⁹⁵ Novozhilov, Yu.K. 1999a: Myxomycetes of the Leningrad region (in Russian with English abstract). In: Balashova, N.B. & Zavarzin, A.A. (eds). Biodiversity of the Leningrad region. Ser. 6. (Algae. Fungi. Lichens. Bryophytes. Invertebrates. Fish and fish-like). Collection of articles, Vol. 2, 197–204. St. Petersburg University Publishing House, St. Petersburg.
- ¹⁹⁶ Novozhilov, Yu.K. 1999b: Myxomycota (in Russian). In: Karatygin, I.V., Nezdominogo, E.L., Novozhilov, Yu.K. & Zhurbenko, M.P. (eds). Russian Arctic Fungi. Check-list, 19–30. St. Petersburg State Chemical Pharmaceutical Academy, St. Petersburg.
- ¹⁹⁷ Novozhilov, Yu.K. 2000: Fungi and Slime moulds (in Russian and English). In: Tzvelev, N.N. (ed). Red Data Book of Nature of the Leningrad region. Vol. 2. Plants and Fungi, 495–652. World & Family, St. Petersburg.
- ¹⁹⁸ Novozhilov, Yu.K. 2005: Myxomycetes (class Myxomycetes) of Russia: taxonomical composition, ecology, and geography (in Russian). Doctoral dissertation. V.L. Komarov BIN RAS: St. Petersburg.
- ¹⁹⁹ Novozhilov, Yu.K. 2007: Slime moulds (in Russian). In: Tsvelev, N.N. (ed). Environment and biological diversity of Berezovye islands archipelago (the Gulf of Finland), 270–274. St. Petersburg.
- ²⁰⁰ Novozhilov, Yu.K. 2007–2020: The Myxomycetes Collection at the V.L. Komarov Botanical Institute, St. Petersburg. Occurrence dataset: <https://doi.org/10.15468/i83r9k> (Date of access: 01.06.2020).
- ²⁰¹ Novozhilov, Yu.K. & Fefelov, K.A. 2001: An annotated checklist of the myxomycetes of Sverdlovsk region, West Siberian lowland, Russia. Mikologiya i Fitopatologiya 35: 41–52.
- ²⁰² Novozhilov, Yu.K. & Kosheleva, A.P. 2006: Myxomycetes (class Myxomycetes) of Orenburg State Nature Reserve (in Russian). In: Chibilyov, A.A. (ed). Stepi Severnoy Evrazii. Materialy IV mezhdunarodnogo simpoziuma, 521–524. Gazprompechat: Orenburg.
- ²⁰³ Novozhilov, Ju.K. & Krussanova, Z.G. 1989: Myxomycetes reservati lazovi (Prov. Primorskensis) [Myxomycetes from Lazovski reserve (Primorsky territory)] (in Russian). Novosti sistematiki nizshikh rastenii 26: 69–72.
- ²⁰⁴ Novozhilov, Yu.K. & Lebedev, A.N. 2006: Annotated check-list of lignicolous myxomycetes from Tver' oblast' (in Russian with English abstract). Mikologiya i Fitopatologiya 40: 236–245.
- ²⁰⁵ Novozhilov, Yu.K. & Schnittler, M. 1996: Nivicolous Myxomycetes of the Khibine Mountains (Kola peninsula). Nordic Journal of Botany 16: 549–561.
- ²⁰⁶ Novozhilov, Yu.K. & Schnittler, M. 2000: A new coprophilous species of *Perichaena* (Myxomycetes) from the Russian Arctic (the Taimyr Peninsula and the Chukchi Peninsula). Karstenia 40: 117–122.
- ²⁰⁷ Novozhilov, Yu.K. & Zemlyanskaya, I.V. 2006: A new species of *Didymium* (Myxomycetes) with reticulate spores. Mycotaxon 96: 147–150.
- ²⁰⁸ Novozhilov, Yu.K., Hooff, H. & Jagers, M. 2015: *Trichioides iridescent*, a new genus and new species (incertae sedis in Myxomycetes). Mycological Progress 14: 1–7.
- ²⁰⁹ Novozhilov, Yu.K., Okun, M.V., Erastova, D.A., Shchepin, O.N., Zemlyanskaya, I.V., García-Carvajal, E. & Schnittler, M. 2013a: Description, culture and phylogenetic position of a new xerotolerant species of *Physarum*. Mycologia 105: 1535–1546.

- ²¹⁰ Novozhilov, Yu.K., Schnittler, M. & Stephenson, S. 1998: The myxomycetes of Russian subarctic and arctic areas. *Mikologiya i Fitopatologiya* 32: 18–29.
- ²¹¹ Novozhilov, Yu.K., Schnittler, M. & Stephenson, S.L. 1999: Myxomycetes of the Taimyr Peninsula (North-Central Siberia). *Karstenia* 39: 77–97.
- ²¹² Novozhilov, Yu.K., Schnittler, M., Zemlianskaia, I.V. & Fefelov, K.A. 2000: Biodiversity of plasmodial slime moulds (*Myxogastria*): measurement and interpretation. *Protistology* 1: 161–178.
- ²¹³ Novozhilov, Yu.K., Schnittler, M. & Zemlianskaia, I.V. 2005a: Synecology of myxomycetes in desert of the northwestern Caspian lowland (in Russian with English abstract). *Mikologiya i Fitopatologiya* 39: 40–52.
- ²¹⁴ Novozhilov, Yu.K., Schnittler, M., Vlasenko, A.V. & Fefelov, K.A. 2009: Myxomycete diversity of the Chuyskaya depression (Altay, Russia). *Mikologiya i Fitopatologiya* 43: 522–534.
- ²¹⁵ Novozhilov, Yu.K., Schnittler, M., Vlasenko, A.V. & Fefelov, K.A. 2010: Myxomycete diversity of the Altay Mountains (southwestern Siberia, Russia). *Mycotaxon* 111: 91–94.
- ²¹⁶ Novozhilov, Yu.K., Schnittler, M., Fiore-Donno, A.M., Meyer, M., Erastova, D.A., Heinrich, E. & Schepin, O.N. 2011: Taxonomical and ecological diversity of nivicolous myxomycetes of the Teberda Nature Reserve (Karakachay-Cherkessia, Russia). In: The 7th International Congress on Systematics and Ecology of Myxomycetes (ICSEM7). Proceedings, 7–8. Recife, Brazil.
- ²¹⁷ Novozhilov, Yu.K., Schnittler, M., Erastova, D.A., Okun, M.V., Schepin, O.N. & Heinrich, E. 2013b: Diversity of nivicolous myxomycetes of the Teberda State Biosphere Reserve (Northwestern Caucasus, Russia). *Fungal Diversity* 59: 109–130.
- ²¹⁸ Novozhilov, Yu.K., Schnittler, M., Erastova, D.A. & Schepin, O.N. 2017a: Myxomycetes of the Sikhote-Alin State Nature Biosphere Reserve (Far East, Russia). *Nova Hedwigia* 104: 183–209.
- ²¹⁹ Novozhilov, Yu.K., Schepin, O.N. & Schnittler, M. 2017b: A preliminary report of the diversity of nivicolous myxomycetes from the Natural Park “Vulkany Kamchatki” (in Russian and English). In: Tokranov, A.M. (ed.). Conservation of biodiversity of Kamchatka and coastal waters. Materials of the XVIII International scientific conference, dedicated to the 70th anniversary of P.A. Khomentovsky’s birthday, Petropavlovsk-Kamchatsky, November 15–16, 2017, 371–378. Kamchatpress: Petropavlovsk-Kamchatskiy.
- ²²⁰ Novozhilov, Yu.K., Zemlyanskaia, I.V., Schnittler, M. & Fefelov, K.A. 2003: An annotated checklist of the myxomycetes of the northwestern Caspian lowland. *Mikologiya i Fitopatologiya* 37: 53–65.
- ²²¹ Novozhilov, Yu.K., Zemlianskaia, I.V. & Schnittler, M. 2005b: Corticolous myxomycetes in deserts of the Northwestern Caspian lowland (in Russian with English abstract). *Mikologiya i Fitopatologiya* 39: 43–54.
- ²²² Novozhilov, Yu.K., Zemlianskaia, I.V. & Schnittler, M. 2005c: Myxomycetes of the Northwestern Caspian deserts (in Russian with English abstract). *Novosti sistematičeskikh nizshikh rastenij* 38: 164–171.
- ²²³ Novozhilov, Yu.K., Zemlyanskaya, I.V., Schnittler, M. & Stephenson, S.L. 2006: Myxomycete diversity and ecology in the arid regions of the Lower Volga River Basin (Russia). *Fungal Diversity* 23: 193–241.
- ²²⁴ Novozhilov, Yu.K., Zemlyanskaya, I.V., Schnittler, M. & Stephenson, S.L. 2008: Two new species of *Perichaena* (Myxomycetes) from arid areas of Russia and Kazakhstan. *Mycologia* 100: 810–816.
- ²²⁵ Okun, M.V. 2013: Molecular phylogeny and taxonomical status of myxomycete species of the *Physarum notabile* complex (in Russian). PhD thesis. V.L. Komarov BIN RAS: St. Petersburg.
- ²²⁶ Okun, M. 2014: Molecular phylogeny and taxonomy of the *Physarum notabile* species complex (Myxomycetes). PhD thesis. Universität Wien: Wien.
- ²²⁷ Pallas, P.S. 1771: Reise durch verschiedene Provinzen des Russischen Reichs. Erster Teil (in German). Kaiserliche Akademie der Wissenschaften: St. Petersburg.
- ²²⁸ Pallas, P.S. 1773: Travel to different provinces of the Russian Empire. Part I. (in Russian). Russian Academy of Science: St. Petersburg.
- ²²⁹ Pallas, P.S. 1788: Voyages de M. P. S. Pallas en différentes provinces de l’Empire de Russie, et dans l’Asie septentrionale. Tome premier (in French). Lagrange: Paris.
- ²³⁰ Pallas, P.S. 1794: Voyages du professeur Pallas, dans plusieurs provinces de l’Empire de Russie et dans l’Asie septentrionale. Tome premier (in French). Maradan: Paris.
- ²³¹ Petrenko, I.A. 1978: Macro- and micromycetes of Yakutian forests (in Russian). Nauka: Novosibirsk.
- ²³² Petrov, A.N. & Matosova, E.A. 2010: Synantropic myco-biota of South Prebaicalia: Myxomycetes, Ascomycetes, Heterobasidiomycetes, Aphyllonophorales, Gasteromycetes

- (in Russian with English abstract). The Bulletin of Irkutsk State University. Series: Biology and Ecology 3: 3–8.
- ²³³ Petrova, N.V. & Gorbunova, N.A. 2001: Macromycetes of southern part of Western Siberia (in Russian). Publishing House of SB RAS: Novosibirsk.
- ²³⁴ Plotnikov, B.S. 2005: Systematic structure of myxomycete communities in gradient of technogenic pollution (in Russian). In: *Ekologiya: ot genov do ekosistem. Materialy konferentsii molodykh uchenykh*, 25–29 aprelya 2005 g., 206–211. Akademkniga: Yekaterinburg.
- ²³⁵ Plotnikov, B.S. & Fefelov, K.A. 2003: Taxonomical composition of myxomycetes in the city of Yekaterinburg (in Russian). In: *Problemy globalnoy i regionalnoy ekologii. Materialy konferentsii molodykh uchenykh*, 31 marta – 4 aprelya 2003 g., 185–186. Akademkniga: Yekaterinburg.
- ²³⁶ Plotnikov, B.S. & Fefelov, K.A. 2009: Myxomycetes under the pollution gradient of a copper plant in southern taiga, the Middle Urals (in Russian with English abstract). *Mikrobiya i Fitopatobiya* 43: 33–44.
- ²³⁷ Popov, E.S., Morozova, O.V., Kotkova, V.M., Novozhilov, Yu.K., Zhurbenko, M.P., Zmitrovich, I.V. & Kovalenko, A.E. 2007: Preliminary list of fungi and myxomycetes of Leningrad region. TREEART LCC: St. Petersburg.
- ²³⁸ Prokhorov, V.P. & Bodyagin, V.V. 2007: Ecology of aquatic hyphomycetes (in Russian with English abstract). *Vestnik Moskovskogo universiteta. Seriya 16. Biologiya* 1: 19–24.
- ²³⁹ Radkova, N.A. 1995: Myxomycetes of the alder forests of Khopyor Nature Reserve (in Russian). In: *Problemy izucheniya i okhrany zapovednykh prirodnykh kompleksov. Materialy nauchnoy konferentsii, posvyashchennoy 60-letiyu Khoperskogo zapovednika* (pos. Varvarino, Voronezhskaya oblast, 21–25 avgusta 1995 g.), 45–46. Voronezh State University: Voronezh.
- ²⁴⁰ Rebhahn, M.-A., Schnittler, M. & Liebermann, B. 1999: Taxonomic relevance of pigment patterns in *Arcyria* species (Trichiales, Myxomycetes) including *Arcyodes incarnata*. *Nova Hedwigia* 69: 415–427.
- ²⁴¹ Romanenko, K.O. 2001: Corticolous and lignicolous myxomycetes of Crimean Nature Reserve (in Ukrainian). *Uchenye zapiski Tavricheskogo natsionalnogo universiteta im. V.I. Vernadskogo. Seriya: Biologiya* 14: 184–188.
- ²⁴² Romanenko, E.A. 2002a: Species diversity of litter myxomycetes in Crimean Natural Reserve (Ukraine) (in Russian with English abstract). *Mikrobiya i Fitopatobiya* 36: 51–58.
- ²⁴³ Romanenko, K.O. 2002b: Myxomycetes of the plant communities of the Crimean Natural Reserve (in Ukrainian with Russian and English abstract). *Ukrainian Botanical Journal* 59: 730–736.
- ²⁴⁴ Romanenko, K.O. 2006: *Myxomycetes of Crimean Nature Reserve* (in Ukrainian). PhD thesis. M.G. Kholodny Institute of Botany of the National Academy of Sciences of Ukraine: Kyiv.
- ²⁴⁵ Rosanoff, S. 1868: De l'influence de l'attraction terrestre sur la direction des plasmodia des myxomycètes (in French). *Mémoires de la Société impériale des sciences naturelles de Cherbourg* 14: 149–172.
- ²⁴⁶ Rostafiński, J. 1874: *Śluzowce (Mycetozoa)*, Monografia, część pierwsza (in Polish). Pamiętnik Towarzystwa Nauk Ścisłych w Paryżu 5: 1–215.
- ²⁴⁷ Rostafiński, J. 1875: *Śluzowce (Mycetozoa)*, Monografia, część druga (in Polish). Pamiętnik Towarzystwa Nauk Ścisłych w Paryżu 6: 217–432.
- ²⁴⁸ Rtishcheva, A.I. & Belova, V.E. 1992: Myxomycetes and their role in forest phytocoenoses of Voronezh region (in Russian). In: *The state and problems of the ecosystem of Usmansky pine forest. Proceedings of the Venevitinovo Educational and Research Biocenter of the Voronezh State University*, Vol. 2, 156–160. Voronezh.
- ²⁴⁹ Rtishcheva, A.I. & Rodionova, N.A. 2005: *Myxomycetes and macromycetes of Khopersky Nature Reserve* (in Russian). VGPU: Voronezh.
- ²⁵⁰ Saccardo, P.A. 1880: *Fungorum extra-europaeorum pugillus* (in Latin). *Michelia* 2: 136–149.
- ²⁵¹ Sanamyan, K.E. 2006: Preliminary report on Myxomycetes of Kamchatka with short information about their systematic position (in Russian). In: Tokranov, A.M. (ed). *Conservation of biodiversity of Kamchatka and coastal waters. Materials of VII International scientific conference, Petropavlovsk-Kamchatsky, November 28–29, 2006*, 145–149. Petropavlovsk-Kamchatskiy.
- ²⁵² Sarycheva, L.A. 1999: Fungi and myxomycetes of Galichiya Gora Nature Reserve (in Russian). Voronezh.
- ²⁵³ Schell, J. 1883: Materials for botanical geography of the Ufa and Orenburg Governorates (Cryptogamic plants) (in Russian). *Trudy obshchestva yestestvoispytateley pri Imperatorskom Kazanskom Universitete* 12: 1–93.

- ²⁵⁴ Schnittler, M. & Novozhilov, Yu.K. 1996: The myxomycetes of boreal woodlands in Russian northern Karelia: a preliminary report. *Karstenia* 36: 19–40.
- ²⁵⁵ Schnittler, M., Erastova, D.A., Shchepin, O.N., Heinrich, E. & Novozhilov, Yu.K. 2015: Four years in the Caucasus – observations on the ecology of nivicolous myxomycetes. *Fungal Ecology* 14: 105–115.
- ²⁵⁶ Schnittler M., Shchepin O.N., Dagamac N.H.A., Borg Dahl, M. & Novozhilov Y.K. 2017: Barcoding myxomycetes with molecular markers: challenges and opportunities. *Nova Hedwigia* 104: 323–341.
- ²⁵⁷ Shchepin, O.N., Dagamac, N.H., Sanchez, O.M., Novozhilov, Yu.K., Schnittler, M. & Zemlyanskaya, I.V. 2017: DNA barcoding as a tool for identification of plasmodia and sclerotia of myxomycetes (*Myxogastria*) appearing in moist chamber cultures. *Mycosphere* 8: 1904–1913.
- ²⁵⁸ Shchepin, O., Novozhilov, Yu. & Schnittler, M. 2014: Nivicolous myxomycetes in agar culture: some results and open problems. *Protistology* 8: 53–61.
- ²⁵⁹ Shchepin, O.N., Novozhilov, Yu.K. & Schnittler, M. 2016: Disentangling the taxonomic structure of the *Lepidoderma chailletii-carestanianum* species complex (*Myxogastria*, Amoebozoa): genetic and morphological aspects. *Protistology* 10: 119–129.
- ²⁶⁰ Shchepin, O.N., Schnittler, M., Dagamac, N.H.A., Leontyev, D.V. & Novozhilov, Yu.K. 2019a: Unexplored diversity of microscopic myxomycetes: evidence from environmental DNA. *Plant Ecology and Evolution* 152: 499–506.
- ²⁶¹ Shchepin O.N., Schnittler M., Erastova D.A., Prikhodko I.S., Borg Dahl, M., Azarov D.V., Chernyaeva E.N. & Novozhilov Yu.K. 2019b: Community of dark-spored myxomycetes in ground litter and soil of taiga forest (Nizhne-Svirskiy Reserve, Russia) revealed by DNA metabarcoding. *Fungal Ecology* 39: 80–93.
- ²⁶² Shiliakow, N. 1889: Zur Myxomyceten-Flora des Gouvernements Kazan [Notes on myxomycete findings in Kazan Governorate] (in Russian with German abstract). *Scripta Botanica Horti Universitatis Imperialis Petropolitanae* 2: 25–34.
- ²⁶³ Shirokikh, A.A. 2009: Preliminary data on myxomycetes of Nurgush Nature Reserve (in Russian). In: *Nauchnye issledovaniya kak osnova okhrany prirodykh kompleksov zapovednikov i zakaznikov. Materialy Vserossiyskoy nauchno-prakticheskoy konferentsii*, 26 oktyabrya 2009 g., Vol. 1, 178–183. Staraya Vyatka: Kirov.
- ²⁶⁴ Shirokikh, A.A. 2011: Lignicolous myxomycetes of Nurgush Nature Reserve (in Russian). In: Tselishcheva, L.G. (ed). *Proceedings of the Nurgush State Nature Reserve*, Vol. 1, 182–187. Staraya Vyatka, Kirov.
- ²⁶⁵ Shirokikh, A.A. 2013a: Myxomycetes of Nurgush Nature Reserve (in Russian). *Theoretical and Applied Ecology* 2: 136–142.
- ²⁶⁶ Shirokikh, A.A. 2013b: Study of myxomycete species composition of substrate complexes in Nurgush Nature Reserve (in Russian). In: *Modern problems in botanical and mycological research. Proceedings of the II international scientific and practical conference*, Minsk, November 12–14, 2013, 123–125. Publishing Centre of the Belarusian State University: Minsk.
- ²⁶⁷ Shirokikh, A.A. 2017: More on species and genetic diversity of myxomycetes (case study of Nurgush Nature Reserve) (in Russian). In: Tselishcheva, L.G. (ed). *Proceedings of the Nurgush State Nature Reserve*, Vol. 4, 148–153. Staraya Vyatka, Kirov.
- ²⁶⁸ Shirokikh, A.A. 2018: Myxomycetes of Nurgush Nature Reserve (in Russian). Staraya Vyatka: Kirov.
- ²⁶⁹ Shirokikh, A.A. & Berezina, Yu.S. 2017: Fungus-like protists as a component of forest ecosystems (in Russian). In: Savinykh, N.P., Perestoronina, O.N., Domnina, E.A., Shabalkina, S.V. & Shkaleina, M.N. (eds). *Sokhranenie lesnykh ekosistem: problemy i puti ikh resheniya. Materialy Vserossiyskoy nauchno-prakticheskoy konferentsii* (g. Kirov, 15–19 maya 2017 g.), 275–279. Raduga-Press: Kirov.
- ²⁷⁰ Shirokikh, A.A. & Panyukova, E.V. 2019: Mixomicetes (Myxomycetes) on the plain part of the Pechoroilychsky reserve of the Komi Republic (in Russian with English abstract). In: Petrenko, D.B. (ed). *Aktualnye problemy biologicheskoy i khimicheskoy ekologii. Sbornik materialov VI Mezhdunarodnoy nauchno-prakticheskoy konferentsii* (g. Mytishchi, 26–28 fevralya 2019 goda), 26–28. Moscow Region State University: Moscow.
- ²⁷¹ Shirokikh, A.A. & Shikhalyova, O.P. 2011: Results of track surveys of lignicolous myxomycetes of Nurgush Nature Reserve (in Russian). In: *Biologicheskiy monitoring prirodno-tehnogenennykh sistem. Sbornik materialov Vserossiyskoy nauchno-prakticheskoy konferentsii s mezdunarodnym uchastiem v 2 chastyakh. Chast 2.* (g. Kirov, 29–30 noyabrya 2011 g.), Vol. 2, 188–190. Loban: Kirov.
- ²⁷² Shirokikh, A.A. & Shirokikh, I.G. 2010: Diversity of myxomycetes in forest park zone of the city of Kirov (in Russian). *Immunopathology, Allergology, Infectology* 1: 54–55.

- ²⁷³ Shirokikh, A.A. & Shirokikh, I.G. 2014: Bacteria in fruit bodies of myxomycetes (in Russian). In: Netrusov, A.I. & Kolotilova, N.N. (eds). Sovremennye problemy fiziologii, ekologii i biotekhnologii mikroorganizmov. Vserossiyskiy simpozium s mezhdunarodnym uchastiem. Moskva, MGU imeni M.V. Lomonosova. Biologicheskiy fakultet. 24–27 dekabrya 2014 g.: Materialy, 255. MAKS Press: Moscow.
- ²⁷⁴ Shirokikh, A.A. & Shirokikh, I.G. 2018: Occurrence of Myxogasteromycetes in parks of the city of Kirov (in Russian). In: Materialy Vserossiyskoy konferentsii s mezhdunarodnym uchastiem, "Mikologiya i algologiya Rossii. XX – XXI vek: smena paradigm", posvyashchennoy 100-letiyu kafedry mikologii i algologii biologicheskogo fakulteta MGU imeni M.V. Lomonosova, 110-letiyu s dnya rozhdeniya professora Mikhaila Vladimirovicha Gorlenko, pamyati professora Yurya Tarichanovicha Dyakova, 242–243. Pero: Moscow.
- ²⁷⁵ Shirokikh, A.A. & Shirokikh, I.G. 2019a: Biodiversity of slime molds on reference sites of the middle and south taiga of the Kirov region (in Russian with English abstract). In: Savinykh, N.P. (ed). Sokhranenie lesnykh ekosistem: problemy i puti ikh resheniya. Materialy II Mezdunarodnoy nauchno-prakticheskoy konferentsii (g. Kirov, 27–31 maya 2019 g.), 315–319. Vyatka State University: Kirov.
- ²⁷⁶ Shirokikh, A.A. & Shirokikh, I.G. 2019b: Methodical approaches to the study of slime moulds in urban ecosystems (in Russian). In: Ashikhmina, T.Ya. (ed). Transformatsiya ekosistem pod vozdeystviem prirodnykh i antropogennykh faktorov. Materialy mezdunarodnoy nauchnoy konferentsii (g. Kirov, 16–18 aprelya 2019 g.), 132–135. Vyatka State University: Kirov.
- ²⁷⁷ Shirokikh, A.A., Poplyyanov, D.V. & Kremsal, A.V. 2017: Myxomycete findings in the city of Kirov (in Russian). In: Ashikhmina, T.Ya. (ed). Biodiagnostika sostoyaniya prirodnykh i prirodno-tehnogennykh sistem. Materialy XV Vserossiyskoy nauchno-prakticheskoy konferentsii c mezdunarodnym uchastiem. Kniga 2 (g. Kirov, 4–6 dekabrya 2017 g.), 52–57. Vyatka State University: Kirov.
- ²⁷⁸ Sizova, T.P. & Titova, Yu.A. 1985: Slime fungi on the territory of Zvenigorodskaya Biological Station (Biological Department of the Moscow State University) (in Russian with English abstract). Bulletin of Moscow Society of Naturalists. Biological series 90: 113–117.
- ²⁷⁹ Sizova, T.P., Titova, J.A. & Daracov, O.B. 1983: Species nova e genere *Trichia* (Myxomycetes) [A new species of genus *Trichia* (Myxomycetes)] (in Russian). Novosti sistematiki nizshikh rastenii 20: 121–122.
- ²⁸⁰ Skvorcova, A.V. 2017: New data on myxomycetes of Shcherbakovsky Nature Park (in Russian). In: Petrov, V.I. (ed). Aktualnye problemy eksperimentalnoy i klinicheskoy meditsiny. Materialy 75-y otkrytoy nauchno-prakticheskoy konferentsii molodykh uchenykh i studentov VolgGMU s mezdunarodnym uchastiem, 501–502. Volgograd State Medical University: Volgograd.
- ²⁸¹ Smolnyakova, Yu.A. 2013: Myxomycetes of the flood plain oak woods in interfluve of Volga and Akhtuba (in Russian). In: XVIII Regionalnaya konferentsiya molodykh issledovateley Volgogradskoy oblasti, Volgograd, 5–8 noyabrya 2013 g. Sbornik nauchnykh materialov. Napravlenie 11 "Biologiya i geografiya", 40–42. Peremeny: Volgograd.
- ²⁸² Smolnyakova, Yu.A. 2017: Problems and prospects of inclusion of slime-molds (Myxomycetes) into the regional Red Lists (in Russian). In: Vedenie regionalnykh Krasnykh knig: dostizheniya, problemy i perspektivy. Sbornik materialov III Vserossiyskoy nauchno-prakticheskoy konferentsii s mezdunarodnym uchastiem, Volgograd, 25–28 oktyabrya 2017 g., 113–115. Kruton: Volgograd.
- ²⁸³ Smolnyakova, Yu.A. & Zemlyanskaya, I.V. 2015: Myxomycetes in oak forests of the Volga-Akhtuba floodplain Nature Park (in Russian). In: Proceedings of III (XI) International Botanical Conference of Young Scientists in Saint-Petersburg 4–9 October 2015, 40. Komarov Botanical Institute of the Russian Academy of Sciences: St. Petersburg.
- ²⁸⁴ Smolnyakova, Yu.A., Kotelnikova, D.A. & Zemlyanskaya, I.V. 2015a: Myxomycetes of ravine forests of Volgograd (in Russian). In: Bioticheskie svyazi gribov: mosty mezhdu tsarstvami. Materialy VII vserossiyskoy mikologicheskoy shkoly-konferentsii s mezdunarodnym uchastiem, 2–8 avgusta 2015 g. Sbornik dokladov i tezisov, 217–224. ZBS MSU: Moscow.
- ²⁸⁵ Smolnyakova, Yu.A., Kotelnikova, D.A. & Zemlyanskaya, I.V. 2015b: Myxomycetes of the Chapurnikovskaya Balka Natural Monument (Volgograd region) (in Russian). In: Shepeleva, L.F. & Yampolskaya, T.D. (eds). Sovremennye problemy botaniki, mikrobiologii i prirodopolzovaniya v Zapadnoy Sibiri i na sopredelnykh territoriyakh. Materialy Vserossiyskoy nauchnoy konferentsii s mezdunarodnym uchastiem, posvyashchennoy 10-letiyu sozdaniya kafedry botaniki i ekologii rasteniy i kafedry mikrobiologii SurGU (SurGut, 28–29 maya 2015 g.), 99–101. Publishing Center of Surgut State University: Surgut.
- ²⁸⁶ Sobolewski, G. 1799: Flora Petropolitana (in Latin). Petropoli.

- ²⁸⁷ Sobolewski, G.F. 1802: Saint Petersburg flora (in Russian). St. Petersburg.
- ²⁸⁸ Soldatenkova, A.A. 2019: New data on myxomycetes of Yakutia and Magadan region (in Russian). In: Aleshkovskiy, I.A., Andriyanov, A.V. & Antipov, E.A. (eds). International scientific conference of students and young scientists "Lomonosov-2019", 1. MAKS Press: Moscow.
- ²⁸⁹ Stephan, F. 1792: *Enumeratio stirpium agri Mosquensis* (in Latin). Mosquae.
- ²⁹⁰ Stephenson, S.L., Novozhilov, Yu.K. & Schnittler, M. 2000: Distribution and ecology of myxomycetes in high-latitude regions of the Northern Hemisphere. *Journal of Biogeography* 27: 741–754.
- ²⁹¹ Sysuev, V.A., Shirokikh, A.A. & Shirokikh, I.G. 2014: Myxomycetes of Vyatka River Valley. In: The 8th International Congress on the Systematics and Ecology of Myxomycetes (ICSEM8). Proceedings, 22–23. Changchun, China.
- ²⁹² Thümen, F. von 1878: Beiträge zur pilz-flora Sibiriens. II (in German and Latin). *Bulletin de la Société Impériale des naturalistes de Moscou* 53: 206–252.
- ²⁹³ Thümen, F. von 1880a: Beiträge zur pilz-flora Sibiriens. III (in German and Latin). *Bulletin de la Société Impériale des naturalistes de Moscou* 55: 72–104.
- ²⁹⁴ Thümen, F. von 1880b: Beiträge zur pilz-flora Sibiriens. IV (in German and Latin). *Bulletin de la Société Impériale des naturalistes de Moscou* 55: 198–233.
- ²⁹⁵ Thümen, F. von 1881: Beiträge zur pilz-flora Sibiriens. V (in German and Latin). *Bulletin de la Société Impériale des naturalistes de Moscou* 56: 104–134.
- ²⁹⁶ Tranzschel, V.A. 1901: List of fungi collected in Valdaysky Uyezd of Novgorod Governorate (in Russian). In: Berichte der Biologischen Süsswasserstation der Kaiserlichen Naturforscher-Gesellschaft zu St. Petersburg, Vol. 1, 160–162. Typography of V.S. Balashev and Co, St. Petersburg.
- ²⁹⁷ Tranzschel, V. 1914: Die Pilze und Myxomyceten Kamtschatka's [Fungi and myxomycetes of Kamchatka] (in Russian with German abstract). In: Elenkin, A.A. (ed). *Expedition à Kamtchatka, organisée par Th. P. Riabouchinsky avec le concours de la Société Impériale Russe de Géographie. Section de Botanique. Livraison II. Plantes cryptogames de Kamtchatka: 1) algues, 2) champignons*, 535–576. Typography of P.P. Ryabushinsky, Moscow.
- ²⁹⁸ Ugarov, G.S., Mikhaleva, L.G., Abramov, A.F. & Popova, M.G. 2009: Fungi of Yakutia (in Russian). Bichik: Yakutsk.
- ²⁹⁹ Vlasenko, A.V. 2008a: Preliminary data on the myxomycetes [of] Altai krai (in Russian with English abstract). In: Dolgovyykh, S.V. (ed). *Biodiversity, ecological issues of Gorny Altai and its neighbouring regions: present, past, and future. Materials of International Conference held 22–26 september 2008, in Gorno-Altaisk, Russia, 205–208*. Gorno-Altaisk State University: Gorno-Altaisk.
- ³⁰⁰ Vlasenko, A.V. 2008b: The history of myxomycete studies in Western Siberia (in Russian). In: Dyakov, Yu.T. (ed). *Sovremennaya mikologiya v Rossii. Tom 2. Materialy 2-go Syezda mikologov Rossii*, 56–57. National Academy of Mycology: Moscow.
- ³⁰¹ Vlasenko, A.V. 2010: Myxomycetes in the pine forests on the right-bank part of the upper Ob' river (in Russian). PhD thesis. V.L. Komarov BIN RAS: St. Petersburg.
- ³⁰² Vlasenko, A.V. 2011: Myxomycetes of the Tigirek Strict Nature Reserve (an annotated check-list) (in Russian with English abstract). *Proceedings of the Tigirek State Natural Reserve* 4: 54–56.
- ³⁰³ Vlasenko, A.V. 2015: *Cribaria lepida* in Western Siberia (in Russian with English abstract). In: *Bioraznoobrazie i ekologiya gribov i gribopodobnykh organizmov severnoy Evrazii. Materialy Vserossiyskoy konferentsii s mezhdunarodnym uchastiem*. Yekaterinburg, 20–24 aprelya 2005 g., 40–42. Ural University Publishing House: Yekaterinburg.
- ³⁰⁴ Vlasenko, A.V. & Ankova, T.V. 2020: First data of the myxomycetes of the Republic of Tuva and further research prospects (in Russian with English abstract). In: Sambyla, Ch.N. (ed). *Ecosystems of Central Asia: research, conservation, rational use. Materials of the XV Ubsunur International symposium (Kyzyl, July 5–8, 2020)*, 62–64. Offset: Krasnoyarsk.
- ³⁰⁵ Vlasenko, A.V. & Dulepova, N.A. 2015: First finding of *Kelleromyxa fimicola* in the Republic of Buryatia (Eastern Siberia). *Current Research in Environmental & Applied Mycology* 5: 149–152.
- ³⁰⁶ Vlasenko, A.V. & Novozhilov, Yu.K. 2010a: Myxomycetes of the Tigirek Strict Reserve (in Russian with English abstract). In: *Mountain ecosystems of South Siberia: study, conservatin and rational nature use. The second inter-regional scientific-practical conference, devoted to the 10-year anniversary of the Tigirek State Natural Reserve establishment*, Vol. 3, 10–12. Barnaul.

- ³⁰⁷ Vlasenko, A.V. & Novozhilov, Yu.K. 2010b: Rare and new for Russia myxomycete species (Myxomycetes) found in piny forests of the right-bank of the Upper Ob' river (in Russian with English abstract). *Mikologiya i Fitopatologiya* 44: 99–108.
- ³⁰⁸ Vlasenko, A.V. & Novozhilov, Yu.K. 2011: Myxomycetes in the pine forests on the right-bank part of the Upper Ob' river (in Russian with English abstract). *Mikologiya i Fitopatologiya* 45: 465–477.
- ³⁰⁹ Vlasenko, A.V. & Vlasenko, V.A. 2014: The first records *Physarum schroeteri* (Physaraceae, Myxomycetes) in the Asian Russia (in Russian with English abstract). *Vestnik Novosibirskogo gosudarstvennogo universiteta. Seria biologiya i klinicheskaya medicina* 12: 37–39.
- ³¹⁰ Vlasenko, A.V. & Vlasenko, V.A. 2017a: Ecological features and species diversity of epiphytic myxomycetes (Myxomycetes) on an ordinary pine (*Pinus sylvestris* L.) in the forest-steppe and steppe zones of the southeast of Western Siberia (in Russian with English abstract). *Samara Journal of Science* 6: 23–27.
- ³¹¹ Vlasenko, V.A. & Vlasenko, A.V. 2017b: *Physarum schroeteri* and *Polyozellus multiplex* – rare Myxomycete and Aphyllophoroid fungus recommended for red data book of Novosibirsk region (in Russian with English abstract). *The Bulletin of Irkutsk State University. Series: Biology and Ecology* 22: 48–58.
- ³¹² Vlasenko, A.V. & Vlasenko, V.A. 2020: First Asian record of *Comatricha anomala*, a rare epiphytic corticolous myxomycete. *Karstenia* 58: 10–15.
- ³¹³ Vlasenko, A.V., Filippova, N.V. & Vlasenko, V.A. 2018: *Echinostelium novozhilovii* (Echinosteliaceae, Myxomycetes), a new species from Northern Asia. *Phytotaxa* 367: 91–96.
- ³¹⁴ Vlasenko, A.V., Filippova, N.V. & Vlasenko, V.A. 2019a: *Echinostelium microsporum* (Echinosteliaceae, Myxomycetes), a new epiphytic corticolous species from Russia. *Phytotaxa* 416: 67–72.
- ³¹⁵ Vlasenko, A.V., Novozhilov, Yu.K. & Vlasenko, V.A. 2013a: Myxomycetes of the steppe communities plains of the Altai territory (in Russian with English abstract). *Vestnik Novosibirskogo gosudarstvennogo universiteta. Seria biologiya i klinicheskaya medicina* 11: 5–12.
- ³¹⁶ Vlasenko, A.V., Novozhilov, Yu.K., Vlasenko, V.A., Shchepin, O.N., Morozova, Yu.A. & Nikitina, A.M. 2013b: Species variety and different microhabitats (substrate types) [of] slime molds (Myxomycetes) of the tape pine forests of Altai krai (in Russian with English abstract). *Vestnik Novosibirskogo gosudarstvennogo universiteta. Seria biologiya i klinicheskaya medicina* 11: 99–104.
- ³¹⁷ Vlasenko, A.V., Novozhilov, Yu.K., Shchepin, O.N. & Vlasenko, V.A. 2016: Hydrochory as certain mode of distribution of myxomycetes along floodlands in south of western Siberia (in Russian with English abstract). *Mikologiya i Fitopatologiya* 50: 14–23.
- ³¹⁸ Vlasenko, A.V., Novozhilov, Yu.K., Vlasenko, V.A., Korolyuk, A.Yu. & Dulepova, N.A. 2017: New data on the obligate coprophilous myxomycetes of Siberia (in Russian with English abstract). *The Bulletin of Irkutsk State University. Series: Biology and Ecology* 21: 50–60.
- ³¹⁹ Vlasenko, A.V., Novozhilov, Yu.K., Prikhodko, I.S., Botyakov, V.N. & Vlasenko, V.A. 2020: A new species of *Stemonitis pseudoflavogenita* from Russia, and the first record of *Stemonitis capillitionodosia* in Eurasia. *Phytotaxa* 447: 137–145.
- ³²⁰ Vlasenko, A.V., Vlasenko, V.A., Naumenko, Yu.V. & Tomoschevich, M.A. 2019b: First records of rare epiphytic species *Physarum lakhanpalii* and *Ph. lenticulare* for Russia. *Turczaninowia* 22: 72–79.
- ³²¹ Volosnova, L.F. 2014: Myxomycetes (in Russian). In: Flora of Oka Nature Reserve (vascular plants, mosses, fungi, and lichens). Proceedings of the Oka State Nature Biosphere Reserve, Vol. 30, 97–99. Golos gubernii, Ryazan.
- ³²² Walker, G., Silberman, J.D., Karpov, S.A., Preisfeld, A., Foster, P., Frolov, A.O., Novozhilov, Yu.K. & Sogin, M. 2003: An ultrastructural and molecular study of *Hyperamoeba dachnaya*, n. sp., and its relationship to the myctozoan slime moulds. *European Journal of Protistology* 39: 319–336.
- ³²³ Weinmann, J.A. 1836: Hymeno- et Gastero-Mycetes hucusque in Imperio Rossico observatos (in Latin). Petropoli.
- ³²⁴ Wrigley de Basanta, D., Lado C. & Estrada-Torres A. 2011: Spore to spore culture of *Didymium operculatum*, a new Myxomycete from the Atacama Desert of Chile. *Mycologia* 103: 895–903.
- ³²⁵ Wrigley de Basanta, D., Lado C., Garcia-Martin J.M. & Estrada-Torres A. 2015: *Didymium xerophilum*, a new myxomycete from the tropical Andes. *Mycologia* 107: 157–168.
- ³²⁶ Zakhарова, В.И., Кузнецова, Л.В., Иванова, Е.И. et al. 2005: Diversity of the flora of Yakutia (in Russian). Publishing House of SB RAS: Novosibirsk.

- ³²⁷ Zemlyanskaya, I.V. 2003a: Myxomycetes of Bogdinsko-Baskunchakskyi Nature Reserve (in Russian with English abstract). *Mikologiya i Fitopatologiya* 37: 40–47.
- ³²⁸ Zemlyanskaya, I.V. 2003b: Myxomycetes of steppes and deserts of Lower Volga region (in Russian). PhD thesis. Volgograd State Medical University, V.L. Komarov BIN RAS: Volgograd, St. Petersburg.
- ³²⁹ Zemlyanskaya, I.V. 2015: On practicability of inclusion of slime moulds in the Red Lists (in Russian). In: *Vedenie regionalnykh Krasnykh knig: dostizheniya, problemy i perspektivy. Sbornik materialov II Vserossiyskoy nauchno-prakticheskoy konferentsii s mezhdunarodnym uchastiem, Volgograd, 21–24 aprelya 2015 g., 14–20. Kruton: Volgograd*
- ³³⁰ Zemlyanskaya, I.V. 2017a: Criteria for myxomycetes being qualified as rare and declining species (in Russian). In: *Vedenie regionalnykh Krasnykh knig: dostizheniya, problemy i perspektivy. Sbornik materialov III Vserossiyskoy nauchno-prakticheskoy konferentsii s mezhdunarodnym uchastiem, Volgograd, 25–28 oktyabrya 2017 g., 3–6. Kruton: Volgograd.*
- ³³¹ Zemlyanskaya, I.V. 2017b: Monitoring of population size of rare myxomycete species included in the regional Red Lists (in Russian). In: *Vedenie regionalnykh Krasnykh knig: dostizheniya, problemy i perspektivy. Sbornik materialov III Vserossiyskoy nauchno-prakticheskoy konferentsii s mezhdunarodnym uchastiem, Volgograd, 25–28 oktyabrya 2017 g., 62–68. Kruton: Volgograd.*
- ³³² Zemlyanskaya (Zemlianskaia), I.V. & Novozhilov, Yu.K. 2010: Myxomycetes from the salt-domes near Elton lake (in Russian with English abstract). *Mikologiya i Fitopatologiya* 44: 516–523.
- ³³³ Zemlyanskaya, I. & Novozhilov, Yu. 2012: Myxomycetes (in Russian with English abstract). In: Safranova, I., Buharitsin, P. & Barmin, A. (eds). Condition and long-term changes of natural environment in Bogdinsko-Baskunchaksky Reserve, 155–163. IPK Tsaritsyn, Volgograd.
- ³³⁴ Zemlyanskaya, I.V. & Novozhilov, Yu.K. 2017: Myxomycetes (in Russian). In: Baranova, O.G. & Sagalaev, V.A. (eds). Red Data Book of the Volgograd region. Vol. 2. Plants and other organisms, 236–249. Izdat-Print, Voronezh.
- ³³⁵ Zemlyanskaya, I.V. & Rebrev, Yu.A. 2008: Myxomycetes (in Russian). In: Popov, E.S. & Rebrev, Yu.A. (eds). IX Rabochee soveshchanie Komissii po izucheniyu makromitsetov (Vyoshenskaya, 4–10 oktyabrya 2006 g.). Annotirovannye spiski vidov gribov i miksomitsetov. Sbornik statey, 58–60. Rostov-on-Don.
- ³³⁶ Zemlyanskaya, I.V. & Yanitskaya, A.V. 1999: Complex of myxomycete species formed in undisturbed phytocoenoses of the city of Volgograd (in Russian). *Vestnik Volgogradskoy meditsinskoi akademii* 55: 71–73.
- ³³⁷ Zemlyanskaya, I.V., Novozhilov, Yu.K., Smol'nyakova, Yu.A. & Kurbatova, M.Ye. 2018: New finds of Myxomycetes of the Nature Park Volgo-Akhtuba floodplain (in Russian with English abstract). *Proceedings of Voronezh State University. Series: Chemistry. Biology. Pharmacy* 2: 129–134.
- ³³⁸ Zemlyanskaya, I.V., Smolnyakova, Yu.A., Kotelnikova, D.A. & Novozhilov, Yu.K. 2016: Myxomycetes of the Nature Park “Volgo-Akhtuba Bottomland” (in Russian with English abstract). *Mikologiya i Fitopatologiya* 50: 347–353.
- ³³⁹ Zhulidov, D.A., Robarts, R.D., Zhulidov, A.V., Zhulidova, O.V., Markelov, D.A., Rusanov, V.A. & Headley, J.V. 2002: Zinc accumulation by the slime mold *Fuligo septica* (L.) Wiggers in the former Soviet Union and North Korea. *Journal of Environmental Quality* 31: 1038–1042.