

Lichen Herbarium of the Institute of Marine Geology and Geophysics of the FEB RAS (SAK): preliminary results of the inventory

Ezhkin, Alexander K., <https://orcid.org/0000-0002-2242-2250>, ezhkin@yandex.ru

Kaganov, Vladimir V., <https://orcid.org/0000-0003-1444-9813>, vladimir.kaganov@mail.ru

Institute of Marine Geology and Geophysics of the Far Eastern Branch of RAS, Yuzhno-Sakhalinsk, Russia

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Abstract. The organization of the lichen herbarium in the Institute of Marine Geology and Geophysics of the FEB RAS was initiated in 2014 after a number of integrated expeditions in the Sakhalin Region. The herbarium is based on the collections of Aleksander K. Ezhkin and Vladimir V. Kaganov. A significant amount of lichen samples was collected in protected areas of the Sakhalin Region, in wild remote sites, and in areas of volcanic activity. Currently, a part of the collection (1178 samples, 307 species) is mounted and stored in the Laboratory of plant ecology and geoecology, which is about 1/8 of all herbarium material of lichens stored in the Institute of Marine Geology and Geophysics of the FEB RAS.

Keywords:

biological collections, biodiversity, Russian Far East, Sakhalin, Kuril Islands

For citation: Ezhkin A.K., Kaganov V.V. Lichen Herbarium of the Institute of Marine Geology and Geophysics of the FEB RAS (SAK): preliminary results of the inventory. *Geosistemy perehodnykh zon = Geosystems of Transition Zones*, 2024, vol. 8, No. 3, pp. 228–243. (In Russ., abstr. in Engl.). <https://doi.org/10.30730/gtrz.2024.8.3.228-243>; <https://www.elibrary.ru/scbnro>

Для цитирования: Ежкин А.К., Каганов В.В. Гербарий Института морской геологии и геофизики ДВО РАН (SAK): первые результаты инвентаризации. Геосистемы переходных зон, 2024, т. 8, № 3, с. 228–243. <https://doi.org/10.30730/gtrz.2024.8.3.228-243>; <https://www.elibrary.ru/scbnro>

List of publications on the lichen flora of the Sakhalin Region

1. Oxner A.N. 1948. [Little-known and new lichens for USSR]. *Botanicheskii zhurnal of NA USSR*, 5(2): 92–99. (In Ukr.).
2. Satô M. 1936. Notes on the lichen flora of Minami-Karahuto, or the Japanese Saghalien. *Bull. of the Biogeographical Society of Japan*, 6(11): 97–121.
3. Satô M. 1936. Notes on the lichen flora of Tisioma or the Kuriles. *Shokubutusugaku Zasshi*, 50: 610–617.
4. Rassadina K.A. 1967. [New and interesting species and forms of the genus *Hypogymnia*]. *Novosti sistematiki nizshikh rastenii*, 4: 289–300. (In Russ.).
5. Roms O.G. 1967. [Few powdered lichens of the southern part of Sakhalin Island]. *Ukraïns'kiy botanichniy zhurnal*, 24(1): 102–104. (In Russ.).
6. Oxner A.N., Blyum O.B. 1971. [To lichen flora of the Soviet Far East. I. Family Peltigeraceae]. *Novosti sistematiki nizshikh rastenii*, 8: 249–263. (In Russ.).
7. Dombrovskaya A.V. 1987. [The genus *Stereocaulon* in the Russian Far East]. In: *Botanicheskie issledovaniya za Polyarnym krugom*. Apatity: Nauka, p. 47–65. (In Russ.).
8. Insarov G.E., Pchelkin A.V. 1988. [Quantitative characteristics of the state of the epiphytic lichen flora of the “Kurilskiy” Reserve]. Moscow: Gos. komitet SSSR po gidrometeorologii AN SSSR, 174 p. (In Russ.).
9. Bredkina L.I., Dobrysh A.A., Makarova I.I., Titov A.N. 1992. [To flora of lichens of Kunashir Island (Kuril Islands)]. *Novosti sistematiki nizshikh rastenii*, 28: 90–94. (In Russ.).
10. Titov A., Tibell L. 1993. *Chaenothecopsis* in the Russian Far East. *Nordic Journal Botany*, 13: 313–329. <https://doi.org/10.1111/j.1756-1051.1993.tb00055.x>
11. Dobrysh A.A. 1999. [New and rare species of the genus *Rhizocarpon* (*Rhizocarpaceae*, Lichens) from Iturup Island (Kuril Islands) and Sakhalin Island]. *Botanicheskii zhurnal = Botanical Journal*, 84(7): 133–135. (In Russ.).
12. Tchabanenko S.I. 1999. [Lichens of the “Kurilskiy” Reserve (Kunashir Island)]. In: [Study of the vegetation cover of the Russian Far East]. Vladivostok: Dal'nauka, p. 221–228. (*Trudy botanicheskikh sadov DVO RAN*; vol. 1). (In Russ.).
13. Tchabanenko S.I. 2002. [Summary of lichen flora of the south of the Russian Far East]. Vladivostok: Dal'nauka, 232 p. (In Russ.).
14. Joneson S., Kashiwadani H., Tschabanenko S., Gage S. 2004. *Ramalina* of the Kurile Islands. *The Bryologist*, 107(1): 98–106. [https://doi.org/10.1639/0007-2745\(2004\)107\[98:ROTKI\]2.0.CO;2](https://doi.org/10.1639/0007-2745(2004)107[98:ROTKI]2.0.CO;2)
15. Makryi T.V., Taran A.A., Tchabanenko S.I. 2010. *Collema complanatum* (Collemataceae) – a new species for lichen flora of Russia. *Botanicheskii zhurnal = Botanical Journal*, 95(7): 989–991. (In Russ.).

16. Davydov E.A., Tchabanenko S.I., Makryi T.V., Khanin V.A. **2011**. The second confirmed record of *Umbilicaria pulvinaria* (Lichenized Ascomycota) since its original description in 1914. *Turczaninowia*, 14(2): 119–122.
17. Davydov E.A., Yakovchenko L.S., Urbanavichene I., Konoreva L., Chesnokov S., Kharpkhaeva T., Obermayer W. **2020**. *Umbilicaria orientalis* – a new species of *Umbilicaria* subg. *papillophora* with an East Asian distribution: morphological delimitation and molecular evidence. *The Lichenologist*, 52(5): 353–364. <https://doi.org/10.1017/S0024282920000389>
18. Davydov E.A., Yakovchenko L., Konoreva L., Chesnokov S., Ezhkin A., Galanina I., Paukov A. **2021**. New records of lichens from the Russian Far East. II. Species from forest habitats. *Opuscula Philolichenum*, 20: 54–70.
19. Galanina I.A. **2013**. Lichens of fir-spruce and larch forests with the kuril bamboo understory in the south of Sakhalin Island. *Bull. of the North-East Scientific Center FEB RAS*, 2(34): 86–94. (In Russ.).
20. Kondratyuk S., Lökö L., Zarei-Darki B., Haji Moniri M., Tchabanenko S., Galanina I., Yakovchenko L., Ezhkin A., Hur J. **2013**. Five new *Caloplaca* species (*Teloschistaceae*, Ascomycota) from Asia. *Acta Botanica Hungarica*, 55(1–2): 41–60. <https://doi.org/10.1556/ABot.55.2013.1-2.4>
21. Ezhkin A.K. **2016**. [Lichens of the Natural Reserve "Starodubskie dubnyaki" on Sakhalin Island]. *Bulletin of Sakhalin Museum*, 1(23): 248–253. (In Russ.).
22. Ezhkin A.K., Galanina I.A. **2014**. Additions to the lichen biota of the Sakhalin Island. *Novosti sistematiki nizshikh rastenii*, 48: 233–248. (In Russ.).
23. Ezhkin A.K., Galanina I.A. **2016**. Epiphytic lichens of deciduous trees in the city of Yuzhno-Sakhalinsk and specifics of their distribution by sensitivity to the anthropogenic impact. *Bull. of the North-East Scientific Center FEB RAS*, 4: 95–107. (In Russ.).
24. Ezhkin A.K., Kordyukov A.V. **2016**. Peculiarities of epiphytic lichen cover parameters change in surrounding of the Mendeleev Volcano, the Kunashir Island. *Bull. of Botanical Garden Institute FEB RAS*, 15: 23–25. (In Russ.).
25. Skirina I.F., Salokhin A.V., Tsarenko N.A., Skirin F.V. **2016**. New locations of protected lichens of Sakhalin Island. *Turczaninowia*, 19(2): 54–63. (In Russ). <https://doi.org/10.14258/turczaninowia.19.2.6>
26. Sheard J.W., Ezhkin A.K., Galanina I.A., Himelbrant D.E., Kuznetsova E., Shimizu A., Stepanchikova I., Thor G., Tønsberg T., Yakovchenko L.S., Spribille T. **2017**. The lichen genus *Rinodina* (*Physciaceae*, *Caliciales*) in north-eastern Asia. *The Lichenologist*, 49(6): 617–672. <https://doi.org/10.1017/S0024282917000536>
27. Zhurbenko M.P., Ezhkin A.K., Skirina I.F., Ohmura Y. **2017**. *Dactylospora anziae*, a new lichenicolous ascomycete on Anzia from East Asia. *Folia Cryptogamica Estonica*, 54: 13–16. <https://doi.org/10.12697/fce.2017.54.03>
28. Ezhkin A.K. **2018**. *Megalospora porphyritis* (Tuck.) RC Harris, a new record for Russia. *Botanica Pacifica*, 7(2): 143–145. <https://doi.org/10.17581/bp.2018.07208>
29. Konoreva L.A., Tchabanenko S.I., Ezhkin A.K., Schumm F., Chesnokov S.V. **2018**. New and noteworthy lichen and allied fungi records from Sakhalin Island, Far East of Russia. *Herzogia*, 31(1): 276–292. <https://doi.org/10.13158/099.031.0123>
30. Konoreva L., Chesnokov S., Yakovchenko L., Ohmura Y., Davydov E.A. **2020**. New records to the lichen biota of Russia. I – Sakhalin Region, with new records for the Russian Far East and the Asian part of Russia. *Botanica Pacifica*, 9(2): 161–173. <https://doi.org/10.17581/bp.2020.09203>
31. Kordyukov A.V., Ezhkin A.K. **2018**. The broadleaf forests of the Arkansas river basin (Sakhalin). *Problems of Regional Ecology*, 2: 56–59. (In Russ.). <https://doi.org/10.24411/1728-323X-2018-12056>
32. Ezhkin A.K., Jørgensen P.M. **2018**. New records of *Pannariaceae* (Lichenized Ascomycota) from Sakhalin and the Kuril Islands, Russian Far East. *Evansia*, 35(2): 43–52. <https://doi.org/10.1639/0747-9859-35.2.043>
33. Ezhkin A.K., Schumm F. **2018**. New and noteworthy records of lichens and allied fungi from Sakhalin Island, Russian Far East, II. *Folia Cryptogamica Estonica*, 55: 45–50. <https://doi.org/10.12697/fce.2018.55.06>
34. Ezhkin A.K. **2019**. Addition to lichen biota of the "Kurilskiy" Reserve (Kunashir Island). *Bull. of Botanical Garden Institute FEB RAS*, 22: 36–43. (In Russ.). <https://doi.org/10.17581/bbgi2204>
35. Ezhkin A.K. **2022**. Lichens of relic larch forests on Shikotan Island (Kurile Islands). *Bulletin of Sakhalin Museum*, 4(41): 20–29. (In Russ.).
36. Ezhkin A.K. **2022**. Epigaeic lichens in thermal habitats on the Southern Kuriles. *Geosistemy perehodnykh zon = Geosystems of Transition Zones*, 6(4): 380–387. (In Russ.). <https://doi.org/10.30730/gtrz.2022.6.4.380-387>
37. Ezhkin A.K. **2023**. Addition to the lichen flora of Shikotan Island (Southern Kurils). *Bulletin of the North-East Scientific Center FEB RAS*, 2: 65–75. (In Russ.). <https://doi.org/10.34078/1814-0998-2023-2-65-75>
38. Galanina I.A., Ezhkin A.K. **2019**. The genus *Rinodina* in the Kuril Islands (Russian Far East). *Turczaninowia*, 22(4): 5–16. <https://doi.org/10.14258/turczaninowia.22.4.1>
39. Gerasimova J.V., Ezhkin A.K., Beck A. **2018**. Four new species of *Bacidia* s.s. (*Ramalinaceae*, *Lecanorales*) in the Russian Far East. *The Lichenologist*, 50: 603–625. <https://doi.org/10.1017/S0024282918000397>
40. Gerasimova J.V., Ezhkin A.K., Davydov E.A., Beck A. **2021**. Multilocus-phylogeny of the lichen-forming genus *Bacidia* s. str. (*Ramalinaceae*, *Lecanorales*) with special emphasis on the Russian Far East. *The Lichenologist*, 53(6): 441–455. <https://doi.org/10.1017/S0024282921000396>
41. Gagarina L.V., Ezhkin A.K. **2020**. To the study of the lichen genus *Usnea* (*Parmeliaceae*) in Kunashir Island (Sakhalin Region, Russia). *Novosti sistematiki nizshikh rastenii*, 54: 467–478. <https://doi.org/10.31111/nsnr/2020.54.2.467>
42. Tchabanenko S.I., Konoreva L.A., Chesnokov S.V. **2018**. Lichens collected in the Sakhalin Botanical Garden: New records to Russia, the Russian Far East and Sakhalin Island. *Botanica Pacifica*, 7: 71–79. <https://doi.org/10.17581/bp.2018.07111>
43. Kaganov V.V., Ezhkin A.K. **2019**. New habitats of protected species of lichens found on the Sakhalin Island. *Bull. of Botanical Garden Institute FEB RAS*, 21: 1–8. (In Russ.). <https://doi.org/10.17581/bbgi2101>
44. Kaganov V.V., Ezhkin A.K. **2023**. Addition to the lichen flora of Sakhalin Island. *Botanicheskii Zhurnal = Botanical Journal*, 108(12): 1128–1134. (In Russ.). <https://doi.org/10.31857/S0006813623120050>
45. Popov E.S., Chesnokov S.V., Konoreva L.A., Ezhkin A.K., Stepanchikova I.S., Kuznetsova E.S., Himelbrant D.E., Galanina I.A., Tchabanenko S.I. **2020**. *Stictis* s.l. (*Ostropales*, Ascomycota) in the Russian Far East. *Botanica Pacifica*, 9(2): 95–102. <https://doi.org/10.17581/bp.2020.09201>
46. Yakovchenko L., Davydov E.A., Paukov A., Konoreva L., Chesnokov S., Ohmura Y. **2020**. New records of arcticalpine lichens from the Russian Far East. *Herzogia*, 33(2): 455–472. <https://doi.org/10.13158/heia.33.2.2020.455>
47. Galanina I.A., Ezhkin A.K., Ohmura Y. **2021**. The genus *Rinodina* (*Physciaceae*, Lichenized Ascomycota) of the Sakhalin Island (Russian Far East). *Botanicheskii Zhurnal*, 106(2): 147–165. <https://doi.org/10.31857/S0006813621020034>
48. Frolov I.V., Prokophiev I.A., Yakovchenko L.S., Galanina I.A., Ezhkin A.K. **2022**. *Coppinsiella extermiorientalis* (*Teloschistaceae*, lichenized Ascomycota), a new species from the Russian Far East and a new genus to the region. *Phytotaxa*, 549(2): 219–229. <https://doi.org/10.11646/phytotaxa.549.2.7>

49. Tolpysheva T.Yu., Varlygina T.I. **2021**. To study the lichens of Iturup Island (Kuril Islands). *Bull. of Moscow Society of Naturalists. Biological series*, 126(3): 20–24. (In Russ.).
50. Chesnokov S.V., Konoreva L.A. **2021**. Addition to the lichen flora of Iturup Island (Sakhalin Region, Russian Far East). *Novosti sistematiki nizshikh rastenii*, 55: 379–392. <https://doi.org/10.31111/nsnr/2021.55.2.379>
51. Chesnokov S.V., Konoreva L.A. **2022**. Checklist of lichens of Shikotan Island (Southern Kuril Islands, Russian Far East). *Novosti sistematiki nizshikh rastenii*, 56: 413–440. <https://doi.org/10.31111/nsnr/2022.56.2.413>
52. Ezhkin A.K., Galanina I.A., Romanyuk F.A. **2023**. First data on lichens from Matua Island, Far East of Russia. Families *Physciaceae* and *Caliciaceae*. *Geosistemy perehodnykh zon = Geosystems of Transition Zones*, 7(2): 206–211. <https://doi.org/10.30730/gtrz.2023.7.2.206-211>
53. Chesnokov S.V., Pan'kova V.V., Konoreva L.A. **2023**. *Fissurina inabensis* (*Graphidaceae*, Ascomycota), a new record to Russia from Shikotan Island. *Turczaninowia*, 26(1): 116–123. <https://doi.org/10.14258/turczaninowia.26.1.12>
54. Glazkova E.A., Konoreva L.A., Chesnokov S.V. **2023**. To study of the lichen biota of Chirpoi Island (Sahkalin Region, Kuril Islands). *Bull. of Botanical Garden Institute FEB RAS*, 30: 1–9. <https://doi.org/10.17581/bbgi3001>
55. Ezhkin A.K. **2020**. Lichens of the “Lagunoozernyy Relict Forest” Protected area on Kunashir Island. *Biodiversity and Environment of Protected Areas*, 2: 38–48. (In Russ.). <https://doi.org/10.25808/26186764.2020.71.46.002>
56. Ezhkin A.K. **2020**. Lichens of the natural monument “Highlands of Chekhov Mountain”, Sakhalin Island. *Biodiversity and Environment of Protected Areas*, 4: 25–38. (In Russ.). <https://doi.org/10.25808/26186764.2020.97.66.002>
57. Galanina I.A., Ezhkin A.K., Yakovchenko L.S. **2018**. *Rinodina megistospora* (*Physciaceae*) in the Russian Far East. *Novosti sistematiki nizshikh rastenii*, 52(1): 133–139. <https://doi.org/10.31111/nsnr/2018.52.1.133>
58. Ezhkin A.K., Davydov E.A. **2024**. *Fuscopannaria mediterranea* and *F. sorediata* (*Pannariaceae*, lichenized Ascomycota), new records for the Far East of Russia. *Botanica Pacifica*, 13(1): 1–5. <https://doi.org/10.17581/bp.2024.13107>
59. Ezhkin A.K. **2019**. Lichens of wood substrates in areas of solfataric activity on Southern Kuriles. *Geosistemy perehodnykh zon = Geosystems of Transition Zones*, 3(2): 256–263. (In Russ.). <https://doi.org/10.30730/2541-8912.2019.3.2.256-263>
60. Ezhkin A.K., Davydov E.A. **2021**. New records of lichens of the genus *Umbilicaria* Hoffm. from Paramushir and Sakhalin islands. *Bulletin of the North-East Scientific Center FEB RAS*, 1: 75–80. (In Russ.). <https://doi.org/10.34078/1814-0998-2021-1-75-80>
61. Ezhkin A.K. **2023**. Addition to lichen flora of Shikotan Island (the Southern Kurils). *Bulletin of the North-East Scientific Center FEB RAS*, 2: 65–75. DOI: 10.34078/1814-0998-2023-2-65-75
62. Stepanchikova I.S., Gagarina L.V. **2014**. Taking up, identifying and storing lichenological collections. In: *Russia's lichen flora: biology, ecology, diversity, distribution, and methods of studying lichens*. Moscow; St. Petersburg: KMK Scientific Press, 204–219. (In Russ.).
63. Koroteeva T.I. **2016**. Bryophyte herbarium in Institute of Marine Geology and Geophysics of the FEB RAS. *Bull. of Botanical Garden Institute FEB RAS*, 15: 41–42.