

## FEATURES OF THE MYCOBIOTA OF THE KUNASHIR ISLAND

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Kunashir Island is the southernmost island of the Great Ridge of the Kuril Islands. It is formed by four active volcanoes. The climate is humid continental. Forests occupy up to 70 % of the total area of the island. The vegetation mostly consist of spruce (*Picea jezoensis*, *P. glehnii*), fir (*Abies sachalinensis*), and mixed deciduous forests with lianas and Kuril bamboo underbrush. The mountains are covered with cedar pine (*Pinus pumila*), herbaceous flowers or bare rocks.

The fungi of the Kunashir Island been studied insufficiently. There were known only 118 species of the Basidiomycetes fungi in this territory before our research (Koval, 1960; Nikolaeva, 1963; Parmasro, 1965; Kõljalg, 1996; Bulakh et al., 1999).

The material was collected in August–September 2016–2017. Our research covered the central and southern part of the island.

Fungi on the island are found everywhere. In the forests, its mostly grow in places with a rare cover of bamboo, on the near-trunk circles near tree trunk, on the edge of the forest.

To date, 274 species of agaricoid and 105 species of aphylophoroid fungi are known for the territory of Kunashir Island. Of these, 247 species of agaricoid and 43 species of aphylophoroid fungi are first found in this territory.

Two species of the genus *Laetiporus* (*L. cremeiporus* and *L. montanus*) were previously classified as *L. sulphureus*. The East Asian species *L. cremeiporus* is occurs on hardwoods, most often on oak. The mountain species *L. montanus* is inhabit on conifers.

The fungi mycorrhiza-forming with fir trees prevail on the island, less – with cedar pine, spruce, birch and oak. The high humidity of the substrate promotes abundant forming of fruitbodies of litter saprotrophs – the destroyers of plant litter – leaves and bamboo trunks: *Marasmius epiphyllus*, *Favolaschia sachalinensis* and *Tetrapyrgos subdendrophora*. For the first time, the fungus *Marasmiellus alliiodorus* was found, abundantly bearing on the bark of branches of old trunks of the relict tree *Taxus cuspidate*. Such fungi as *Gymnopilus liquiritiae*, *Fomitopsis pinicola*, *Pycnoporellus fulgens* are common wood destroyers of fir.

Rare species that are listed in the Red Book of the Russia (2008), such as *Chroogomphus tomentosus*, *Porphyrellus porphyrosporus*, *Strobilomyces strobilaceus*, *Polyporus umbellatus* and *Dictyophora duplicata* were found on the Kunashir Island.

In addition to these species, Kunashir also has species listed in the Red Data Book of the Sakhalin region (2005), such as *Harrya chromapes*, *Cyanoboletus pulverulentus*, *Rhodotus palmatus*, *Amanita caesarea* var. *caesareoides*, *Bondarzewia mesenterica*, *Russula granulata*, *Catathelasma imperiale*.

*Sparassis crispa*, listed in the Red Book of the Sakhalin Region, was marked



previously on the Kunashir Island. According to modern, it was found that the Far Eastern samples belong to *S. latifolia* (Desjardin et al., 2004; Wang et al., 2004). The species is distribution broadly in East Asia and grows in association with conifers.

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