Macrofungi of the Vakh river basin. The first data

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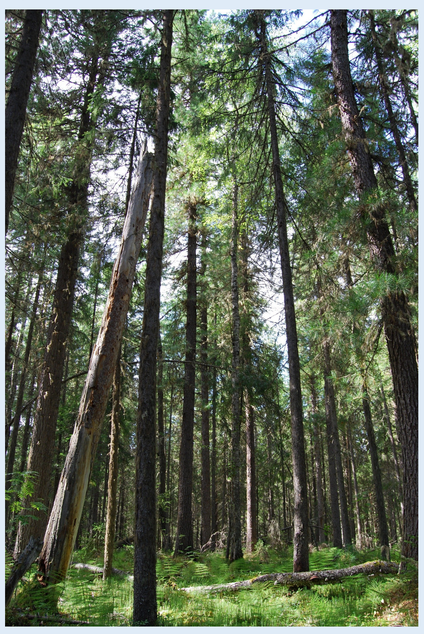
Further development of biodiversity knowledge requires an active study of species distribution and extensive search of the regional mycobiotas in order to obtain chorological data. Due to the fact that temperate latitudes are characterized by the greatest diversity of certain groups of the macromycetes, field studies in hard-to-reach areas of Western Siberia allow us to expand our understanding of species ranges. For this purpose random forays were undertaken in august of 2011 in remote area of the the Vakh river basin (KhMAO — Yugra).

Taiga mixed forests on the territory with sharply continental climate were surveyed.

In total, 115 occurrences of 87 macrofungi species, 52 genera, 29 families, 8 orders, 5 classes were noted: ascomycetes - 2 species, basidiomycetes - 85 species.
For the first time in Yugra region, four species *Cortinarius callisteus*, *C. inolens*, *C. luteo-ornatus*, *Gymnopus aquosus* were reported.

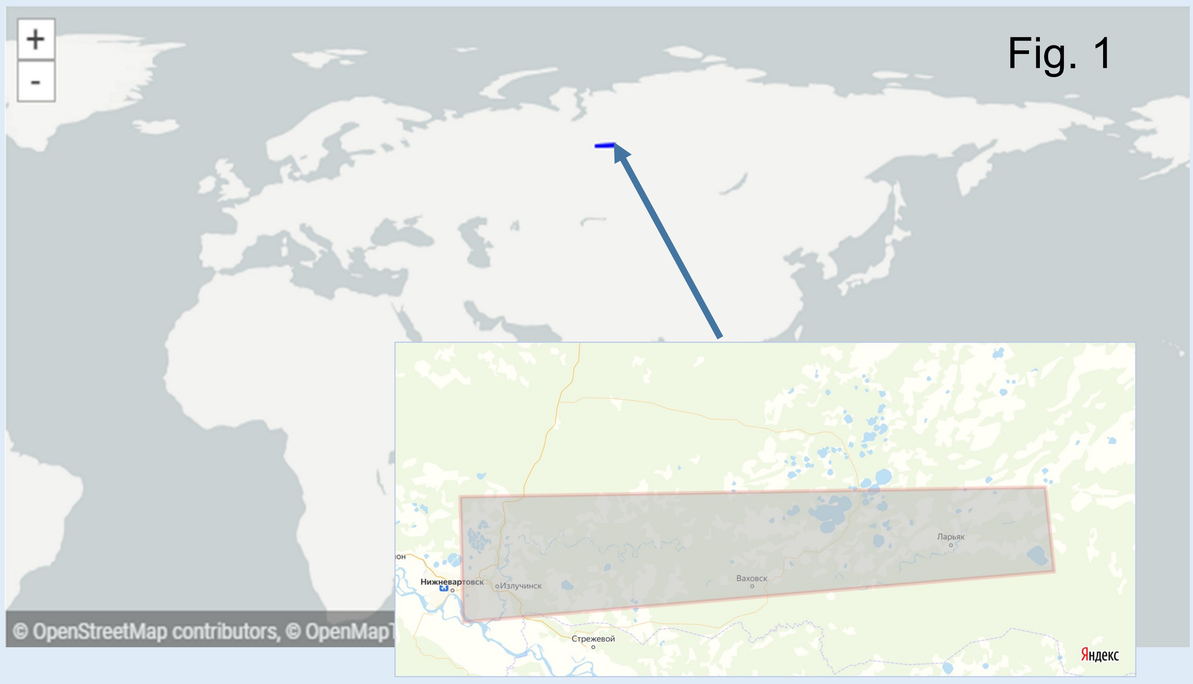
Two regionally redlisted species *Hericium coralloides* и *Chrysomphalina chrysophylla* were found.

Observations and collections were made in august of 2011 at 6 locations down the Vakh River starting from Bolshoi Lary'ak village (Fig. 1). The territory is administratively subordinate to the Khanty-Mansiysk Autonomous Okrug (Russia). The vegetation is represented by indigenous dark coniferous forests (*Picea abies*, *Pinus sibirica, Abies sibirica),* as well as old after fire forests dominated by the *Populus tremula, Betula pendula,* or *Pinus silvestris*. Forbs, low shrubs, and feather mosses predominate in the ground cover. Altitudes are from 50 to 100 m. The climate is sharply continental with long (up to 180 days) harsh and snowy winters and short (40-50 days) warm summers.



Specimens were collected, documented and preserved using the standard methods (Bondartsev, Zinger, 1955). Macroscopical descriptions were based on the study of both fresh and dried material as well as from the photographs. Dried material was examined using standard microscopical techniques. Microstructures were observed and measured at 400x and at 1000x in squash preparations in 5% KOH, Congo Red and Melzer's reagent using a Leica light microscope. The pileipellis was examined in radial section pileus preparations.

Fig. 1



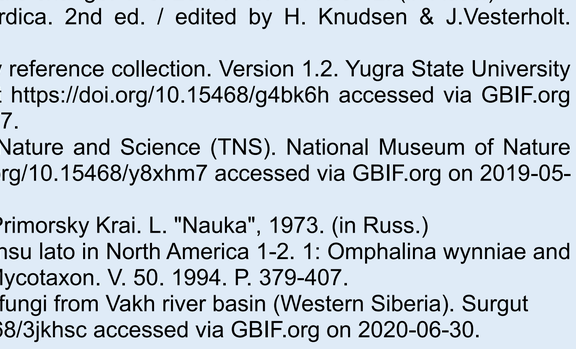
The dataset is available via GBIF (Zvyagina, 2020) and includes 115 occurrences. In total, 87 species of fungi, 52 genera, 29 families, 8 orders, 5 classes were noted: ascomycetes - 2 species, basidiomycetes - 85 species. Distribution of families by the number of species – Fig.2.

Two regionally redlisted species were met: *Hericium coralloides* и *Chrysomphalina chrysophylla.*

The fruiting body of the *H. coralloides* EZ110726-92(1) was registered in mixed forest on the old aspen fallen thrunk in the Bol'shoy Lar'yak vicinities. This species is relatively rare for the middle taiga forests (*Zvyagina, 2018),* albeit its populations state is least concern.

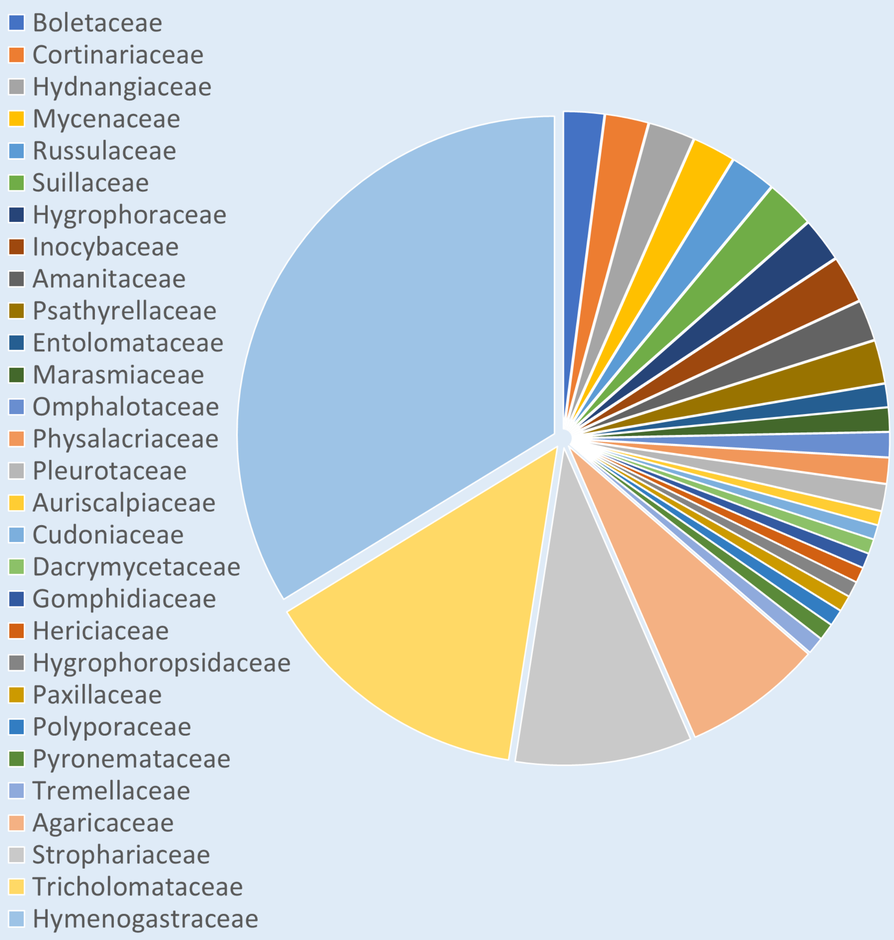
Ch. chrysophylla is redlisted in KhMAO as a rare species (Aref'ev et al., 2013). The fruiting bodies were growing on some wood buried under sphagnum in the wet pine forest. It was located on the side of a country road in the immediate vicinity of the village with a population of 40 people.

At present, the threat of loss of this habitat is minimal. However, the site may be lost as a result of road widening. Therefore, protection and surveillance are necessary.



This occurrence is second in the region. The first one was found in a wet pine forest in the south part of the Surgutskiy district on the territory of Yuganskiy State Nature reserve buffer zone (Zvyagina, Baykalova, 2017). *Ch. chrysophylla* has circumboreal distribution: Europe (Elborne, Læssøe, 2008), Asia (Filippova, 2018, Hosoya, 2018, Vasil'eva, 1973) and North America (Norvell et al., 1994) and extremally rare.

Fig. 2



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