

第二届东北亚地区生物多样性国际会议

**The 2nd International Conference
on Northeast Asia Biodiversity**



摘要集

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中国·白山

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2019年8月27日-2019年8月31日

August 27th-31th, 2019

The Study of Polyporoid Fungi in Primorsky Territory (Far East of Russia)

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Abstract: The polyporoid fungi play an important role in forest ecosystems. They are considered the major wood decomposers. Currently, the polypores are spread among different orders of Agaricomycetes such as Polyporales, Hymenochaetales, Corticiales, Gloeophyllales, Russulales, and Trechisporales (Hibbett et al., 2014). They are united by morphological similarity. The hymenophore is frequently poroid. Basidiomes (fruiting bodies) of polypores are diverse: hoof-shaped (including the so-called “conks”), effused (resupinate), and pileate-stipitate forms. The substrate for them is wood at different stages of decomposition, some fungi affect the root and trunks of living trees. A number of polypores are found on the soil.

Polypores contain the important producers of substances having immunomodulatory, antitumoral, antiviral, and antihyperlipidemic effects (Zmitrovich, Kovalenko, 2016).

The first mycological collections in the Far East of Russia were sporadic and carried out by botanists. Since the 30s of the last century Lyubarsky L.V. has purposefully studied wood-destroying fungi on various forest-forming species in the south of the Russian Far East. The results of his many years of research are presented in the book “Wood-destroying fungi of the Far East” (Lyubarsky, Vasilyeva, 1975), where 106 species of polypore fungi are given for the Primorsky Territory (PT). This is the only work that collected and summarized all the information at that time on wood-destroying fungi in the Far Eastern territories. Parmasto E. in the 60s of the last century collected polypores in different territories of the Russian Far East including PT. His work has greatly expanded the list for the region with new and rare species.

Polypores in the PT are most studied in the reserves: Lazovsky, Kedrovaya Pad, Ussuriysky, and Sikhote-Alinsky (Azbukina et al., 2002 a,b, 2006; Kotkova, 2004; Bulakh et al., 2016; Viner, Kokaeva, 2017; Bukharova, 2018).

For three years (2003, 2004, and 2009) Far Eastern mycologists together with colleagues from China carried out a focused study of mycobiota in the valley of the Ussuri (both in the Russian and Chinese territories). Numerous literature data and the result of own collections were included in the monograph “Fungi of Ussuri River Valley” (Li, Azbukina, 2011). It summarizes the current data on the distribution of fungi in this area and provides a detailed list of all identified species of fungi. For the PT 149 species of polypores are indicated (Bau et al., 2011).

The field work was carried out by the author in 2007–2018, and the data was derived from both reserves and unprotected forests in PT. More than 800 specimens collected by mycologists in the PT are stored in the mycological herbarium VLA (Vladivostok).

According to the results of a thorough study of literary sources, mycological herbarium, as well as own collection, 243 species of polyporoid fungi are known in the PT. Five species (*Fomitopsis castanea*, *Ganoderma lucidum*, *Grifola frondosa*, *Polyporus umbellatus*, *Cryptoporus volvatus*) are included in the Red Data Book of the PT (2008), the first four species of which are also listed in the Red Data Book of the Russian Federation (2008).