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*Caloplaca* Th. Fr. [7], *Lobaria* (Schreb.) Hoffm. [7], *Pilophorus* Th. Fr. [7], *Rhizocarpon* DC. [7], *Mycobilimbia* Rehm [6], and *Xanthoria* (Fr.) Th. Fr. [6].

## LECCINUM SPECIES IN THE MIDDLE TAIGA OF WESTERN SIBERIA

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The mycoflora of West Siberian middle taiga is poorly investigated. The most of researches have been focused on wood-decaying fungi. The other groups of macromycetes including boletes have not been characterized. A study of *Leccinum* species is presented here. The Bolshoy Yugan river is a left tributary of the Ob. Types of vegetation represented here are: taiga dark coniferous forests and secondary pine and small-leaved mossy dwarf-shrub forests. The climate of this area is continental with moderately warm summers and moderately severe winters.

50 specimens of 10 species from 2 sections of the genus – *Leccinum* (*L. aurantiacum*, *L. duriusculum*, *L. percandidum*, *L. versipelle*, *L. vulpinum*) and *Scabra* (*L. holopus*, *L. roseofractum*, *L. scabrum*, *L. schistophillum*, *L. variicolor*) – were collected in 1997–2006 in the area of Bolshoy Yugan's basin. Nine of them have been detected before in the southern part of Western Siberia and *L. schistophillum* is new for Western Siberia. We have had some difficulty identifying specimens with red pileus (*L. aurantiacum*, *L. vulpinum*). According to the identification keys, *L. aurantiacum* and *L. vulpinum* differ in mycorrhizal partners and tissue staining patterns when cut. Mycorrhizal partners were impossible to determine because 21 obscure specimens were collected in pine forests with aspen. We observed varying intensity of tissue staining in these specimens, but there was no clear distinction between colour tinges. The specimens were divided into two groups based on microscopic characteristics. The first group included specimens having short spores (12–14 µm) and indistinctly septate, 5–10 µm wide pileipellis hyphae with spherical vacuoles staining purple-brown in KOH and obtuse or acuminate terminal elements. These characters combined with dark reddish brown cup surface and almost non-bruising flesh were present in 5 specimens. The other group included specimens characterized by longer spores (16–18 µm) and pileipellis consisting of tangled septate cylindrical elements 5–10 µm wide, with obtuse or acuminate termini, elongated vacuoles and granules staining bright reddish-brown or yellowish in KOH. These characteristics could be combined with either dark reddish brown or bright orange cap. Most of specimens distinctively change colour when cut, a few stain only slightly or not at all. We tentatively identify the first group of specimens as *L. vulpinum*, the second group as *L. aurantiacum*. The most distinct differences between these groups of specimens consisted in spores size and pigmentation of the pileipellis hyphae. In Melzer's we observed abundant spherical vacuoles in the pileipellis hyphae *L. vulpinum* in contrast to *L. aurantiacum*. Two specimens had macro- and microscopic characteristics *L. aurantiacum*, but context stained red when cut and not darkened.

Comparison descriptions of the species in diverse publications produced many questions. This circumstance very embarrassed identification.