

Taxonomic structure and ecology-geographical characteristic of phytoplankton in the Lyutoga River (Sakhalin Island)

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Резюме. The article provides the data on phytoplankton composition in the basin of the Lyutoga River, which is an ecologically significant water course of Sakhalin Island. In result of surveying the estuary, main channel and tributaries of the Lyutoga River from February to December of 2011, the species composition of phytoplankton was identified, assemblage of dominant species was found, ecology-geographical characteristic (geographical distribution, habitat association, salinity, pH, saprobity) was described. The transformations of the species composition of phytoplankton were studied with distance from the estuarine zone to the upper reaches of the river. Algal flora was presented with 303 species and intraspecific taxa of microalgae and cyanobacteria belonged to 9 phyla, 16 classes, 40 orders, 65 families and 107 genera (annotated list see in the Appendix). It was based on diatoms, among which the leading families were Bacillariaceae and Naviculaceae, and the leading genera were *Nitzschia* and *Navicula*. For the first time, 34 species and intraspecific taxa of microalgae and cyanobacteria are indicated for inland water bodies of the Sakhalin region. With distance from the estuarine zone to the upper reaches of the river, the number of species, geographical groupings, planktonic forms, and alphamesosaprobiont species decreased. Mass development of *Hannaea arcus* f. *recta* were observed in the spring-summer period, *Melosira varians* and *Rhoicosphenia abbreviata* – in the autumn-winter.

Ключевые слова

algae, periphyton, ecologically significant water course, Lyutoga River, Sakhalin Island

For citation: Motylkova I.V. Taxonomic structure and ecology-geographical characteristic of phytoplankton in the Lyutoga River (Sakhalin Island). *Geosistemy perehodnykh zon = Geosystems of Transition Zones*, 2021, vol. 5, no. 4, pp. 399–427. (In Russ., abstr. in Engl.). <https://doi.org/10.30730/gtr.2021.5.4.399-427>

Для цитирования: Мотылькова И.В. Видовой состав и эколого-географическая характеристика фитоперифитона бассейна р. Лютога (о. Сахалин). *Геосистемы переходных зон*, 2021, т. 5, № 4, с. 399–427. <https://doi.org/10.30730/gtr.2021.5.4.399-427>

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