

ZOOPLANKTON OF SOME RIVERS OF PYASINA RIVER BASIN

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Abstract. At present, along with extensive literature on the hydrobiology of rivers of the middle latitudes, there is almost no information on the rivers of the Arctic, in particular those related to the Noril-Pyasinsk water system. The aim of the work is to obtain data on the taxonomic composition and quantitative characteristics of zooplankton of some northern rivers. The studies were carried out on the rivers of the Kara Sea basin: Norilsk, Dudypta, Agapa and Pyasina according to generally accepted hydrobiological methods. The results of studies of the Norilo-Pyasinsk system rivers (the Kara Sea basin) are presented. The taxonomic composition and quantitative characteristics of zooplankton of the Norilskaya, Dudypta and Agapa rivers are presented for the first time, and the materials on the Pyasina river are supplemented. The species diversity is represented by three groups: *Rotifera* – 22 species, *Cladocera* – 13 species, *Copepoda* – 8 species. The most widely encountered rotifers were *Keratella cochlearis*, cladoceras *Bosmina coregoni*. Large copepodas – *Heterocope appendiculata* and *Limnocalanus macrurus* – were found only in the Pyasina. The abundance and biomass of organisms varied depending on the rivers in the range of 0,20–24,08 thousand ind./m³ and 4,64–77,29 mg/m³, respectively. Zooplankton is most developed in the Agapa river due to organisms developing in the Agapa river basin lakes. For the first time, the assessment of water quality by zooplankton was carried out using the Pantle and Bukk method in the modification of the Sladечek in these rivers. The assessment showed weak pollution in the Pyasina, Dudypta and Agapa rivers (saprobity index from 1,58 to 1,68). Due to the absence of indicator species among zooplankters in the Norilskaya river the saprobiological analysis is failed. Thus, it was established that the fauna of the rivers consisted mainly of eurybionts and inhabitants of the northern and temperate zones. Also, the rivers are “low-feed” fishing facilities and slightly polluted.

Keywords: zooplankton, biodiversity, feed resources, Arctica, Taimyr, Norilskaya river, Pyasina river, Dudypta river, Agapa river, water quality, saprobity

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