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Zooplankton as an indicator of river ecological condition

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Abstract

© 2016, International Journal of Pharmacy and Technology. All rights reserved. Long-term studies (2013-2015) of Kazanka river ecological state were performed. In order to evaluate the water quality the zooplankton community indicators were used. The physical-chemical indicators of the river Kazanka water were studied. Zooplankton samples were selected and analyzed using standard hydro biological techniques. The quantitative indicators (abundance and biomass) of zooplankton were revealed and biotic indices were calculated. The analysis of zooplankton community structure showed the decline of species diversity during the study period. The values of saprobity index in most cases allowed to include the river into β -mesosaprobic zone (moderately polluted water). Physical and chemical indicators of water demonstrated the river pollution as the result of untreated sewage income of various origin, including storm water runoff from the city. The river pollution in the city makes an impact on the zooplankton community, it causes the decrease of quantity indicators and the decline of species diversity.

Keywords

Indicator, Pollution, Small river, Zooplankton