

Spatial-Temporal Characteristics of Bacterioplankton in the Upper Part of Taktakorpu Water Complex

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Abstract : In the presented article, the formation of the microbiological regime in the Takhtakorpu water complex, as well as spatial-temporal changes in the quantitative indicators of bacterioplankton, were studied. Taktakorpu water complex was built as a continuation of the reconstruction and expansion project of the Samur-Absheron irrigation system in Shabran on the northeastern slope of our republic. It should be noted that with the implementation of the project, the water supply of up to 150 thousand ha of useful land in the northern region has been improved, and the drinking, technical, and irrigation water needs of the population of Baku, Sumgayit and also the Absheron Peninsula, and industrial and agricultural areas, joining the agricultural circulation of new soil areas, Takhtakorpu reservoir with a volume of 238.4 million m³, connected with them - Valvalachay- Takhtakorpu and Takhtakorpu-Jeyranbatan canals have been created, conditions have been created to increase the resources of the Jeyranbatan reservoir. Special attention is paid to the study of saprophytic bacteria in order to determine the development dynamics and biochemical activity of the microbiological regime in the Takhtakorpu Water Complex, which is of great strategic importance for our republic, to evaluate changes under the influence of anthropogenic factors, as well as to evaluate the properties of self-cleaning, mineralization features of organic substances of allochthon and autochthonous origin. One of the main goals of our research is to determine the main structural indicators of bacterioplankton in the upper part of Takhtakorpu water complex in the first three stations and analyzing their quantitative values in a certain time aspect.

Keywords : water, irrigation, sewage, wastewater

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