FORMATION BACTERIAL-ALGAL BIOMASS IN BIOLOGICAL PONDS FOR ENVIRONMENTAL PURPOSES OF CLEANING AND DISINFECTION OF WASTEWATER. A.J. Samujlenko, A.A. Denisov, V.I. Eremets,

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Wastewaters, biological treatment, activated sludge, biocenosis, nitrification, denitrification.

Performed microbiological studies of the structure, the basic regularities of the activated sludge populations functioning and the ratio of the major microbial communities in the processes of ammonification, nitrification, denitrification in wastewater treatment plant breeding complexes by biological methods. Explored the kinetics of dominant forms change of microorganisms, associated with the changing conditions of food-ratio supply at different stages of treatment.

The aim of reasearches – to determine the conditions that cause the multiplication (increase) of the dominant species of algae in the aeration tank so as to be able to recommend corrective actions for their formation in the required amount for the effective functioning of phytoplankton in the biological ponds post-treatment.

Conclusion

The results of these studies are experimental data, which allows us to formulate the optimal conditions for the formation of bacterial and algal mass necessary to implement the process post-treatment and disinfection of sewage in biological ponds phytoplankton, which are the final link in the whole chain of biological treatment systems and organo-mineral bearing wastewater utilities and industrial origin.