



## USE OF PROTOZOA AS BIOLOGICAL INDICATORS OF WATER QUALITY AND POLLUTION

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### ABSTRACT

Protozoa have many advantages for assessing water quality due to their short life generations and more rapid response to environmental stress. This approach has been used for the investigations of the aquatic biota which take into account the general ecology of an area and the classification of water quality with respect to organic pollution (<sup>1</sup>Antipa, 1977 and <sup>2</sup>Wilber, 1969). The Jammu and Kashmir which was once bestowed with a large number of fresh water lakes is losing sheen due to over exploitation and negligence in conservation strategies. Thus, attention has been focused on bio-assessment using protozoa as bio-indicators for evaluating water quality and pollution. The protozoa as biological indicators have been used extensively in assessment of water quality throughout the world. However, very little investigations of this nature have been carried out in the lake under study. The water quality status of Anchar Lake has been seriously influenced by human activities. It is in this backdrop that the study on "Use of Protozoa as Biological Indicators of Water Quality and Pollution" was carried out in the Anchar Lake of Kashmir under different environmental conditions for a period of two years in which 30 protozoan taxa were recorded. The present investigation also aims to assess the impact of agriculture and sewage disposal on its water quality and protozoa by using different statistical tools.

**Key words:** Anchar Lake, environment stress, fresh water, protozoa, urban wetland, water quality