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ORIGINAL ARTICLE

AN ASSESSMENT OF TESTATE AMOEBA (PROTOZOA) ASSEMBLAGE BASED ON ATITUDINAL GRADIENT IN PROTECTED AREAS OF WEST BENGAL

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Abstract: Testate amoeba, the polyphyletic group comprising of amoeboid protozoans are enclosed in a distinctively unique covering called test (shell). They are the abundant, diverse and widely distributed microbial group which is used for ecological studies and acts as ecological health predictor organism. The testate amoeba diversity decreases with increasing latitude: ±300 taxa in Arctic from a total of ±2000, and a decline in nebelid species richness were observed in the high southern latitudes. In this study we assessed the assemblage of the testate amoeba in the fresh water sample collected from the protected areas of West Bengal. Higher species richness was found at lower altitude within the selected protected areas for the study conducted. Altitude has a negative correlation with diversity of testate amoeba.

Key words: Testate amoeba, diversity, altitudinal gradient, protected areas, West Bengal.

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