

Author(S): Aaliya Ismat Baba, Aadil Hamid Sofi, Sami Ullah Bhat* and Ashok K. Pan
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Institute: Department of Environmental Science, University of Kashmir, Srinagar, India

Abstract

This study deals with the taxonomic composition of Periphytic algae of River Sindh in the Sonamarg area in terms of species composition and density carried out during 2009. Periphytic algal community was represented by 49 taxa belonging to four classes namely Bacillariophyceae (32), Chlorophyceae (9), Cyanophyceae (7) and Xanthophyceae (1). The number of common species recorded from all the sites were 11 while as genera/species like *Vaucheria* sp., *Navicula appendiculata*, *Meridion* sp., *Fragillaria* sp., *Brachysira virea*, *Rhizoclonium* sp., *Oedogonium capillare*, *Mougeotia* sp., *Oscillatoria* sp., *Merismopedia* sp., *Leptolyngbya* sp., *Ceolospharum* sp., *Calothrix* sp. were observed from only one particular site. Bacillariophyceae was the dominant group both in diversity and density and included 32 taxa contributing 87% of total periphytic algal population. Chlorophyceae forming the second dominant class was represented by 9 genera comprising 8.5% of the total periphytic algae. Cyanophyceae ranked third in its dominance pattern with 7 genera forming 4.5% of all the periphytic algae. Xanthophyceae was represented by only one species of *Vaucheria* sp. found only at Thajwas Gar. Amongst the study sites highest (2.64) values of Shannon Weiner Index was found at Baltal and lowest (1.99) at Sonamarg while as highest (0.77) and lowest (0.55) Sorensen's Similarity coefficient were found between Baltal/Sonamarg and Yashmarh/Thajwas Gar.