DIVERSITY OF SCENEDESMUS IN FRESHWATER LAKES OF MYSORE

DR. SHANKAR P HOSMANI

PROFESSOR AND HEAD
DEPARTMENT OF BIOTECHNOLOGY,
SBRR MAHAJANA FIRST GRADE COLLEGE,
JAYALAKSHMIPURAM, MYSORE-570012

ABSTRACT

Diversity of fresh water Scenedesmus species in seven lakes of Mysore has been discussed. Fourteen species were recorded. The PAST Software program was applied to derive the various diversity indices. Highest number of taxa was recorded in Makanahally Lake and Bilikere Lake. Species dominance was in Kalale Lake. Kabani Lake and Kalale Lake are heavily polluted according to the Shannon and Weiner Index. Evenness of species is high in Kabani Lake. Scenedesmus bijugatus var. graveeitzii had the highest diversity. Canonical Correspondence Analysis (CCA) showed that S. bijugatus var. gravenetzii and S. obliques were negatively correlated to about twelve physical and chemical parameters. Diversity measures have potential applications in conservation strategies and serve as an important tool in understanding the distribution of fresh water algae. Species of Scenedesmus constitute a major group in aquaculture and hence their diversity is of significance

KEY WORDS: Chemical, Conservation, Diversity, Indices, Lake, Physical, Scenedesmus.