Perspectives of **Biodiversity** and **Climate Change**

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FRESHWATER ALGAL DIVERSITY OF CHIMMONY DAM, THRISSUR DISTRICT, KERALA

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ABSTRACT

The significance of algae to life on Earth is astounding. They serve a vital role in the upkeep of the food chain and the production of oxygen. Moreover, it is an ideal indicator of water pollution and supports aquatic ecosystems. The present study is an attempt to explore the algal diversity of Chimmony Dam, which lies across Kurumali River, a tributary of Karuvannur River, Thrissur District, Kerala, that lies at 76°27'E longitude and 10°26'N latitude. Karuvannur River is one of the major freshwater sources of Thrissur district, which flows through the famous Kole lands of Thrissur. The study was carried out for a period of one year, from June 2017 to May 2018. During the period of study, 46 species of phytoplankton were identified which come under 27 genera belonging to six taxonomic classes. Out of these 22 species belong to Chlorophyceae followed by Bacillariophyceae (13 sp.), Euglenophyceae (6 sp.), Cyanophyceae (2 sp.), Dinophyceae (2 sp.) and Chrysophyceae (1 sp.).

Keywords: Bacillariophyceae, Chimmony dam, Chlorophyceae, Karuvannur river, Kurumali river.

INTRODUCTION

Microalgae is a highly diverse group of organisms significant for unraveling the mysteries of nature that plant life holds. (Kumar et al., 2011). Algal taxonomy is a key discipline in phycology and is critical for algal genetics, physiology, ecology, applied phycology and particularly bioassessment (Manoylov, 2014). The role of microbial diversity in ecosystem functioning is becoming increasingly recognized. Hence, phytoplankton research is of great importance for any scientific use of water resources. Algae receive most of their nutrition from dissolved chemicals in the water. Since algae are frequently employed as

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