



STUDIES ON AQUATIC MACRO INVERTEBRATES AND VERTEBRATES IN KHANDALA DAM, NALDURG - OSMANABAD

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ABSTRACT

The present paper deals with the studies on phytoplankton diversity in khandala dam osmanabad (M.S) india. The work was carried out during the year 2021 (jan to dec).

The Phytoplankton's represents the biological wealth of water body. These are the autotrophic component of the plankton community. They are ecologically significant as they trap light energy and convert into organic material. Investigation of Phytoplankton diversity in khandala dam shows Chlorophyta (7), Cyanophyta (6), Bacillariophyta (8) and Euglenophyta (1) species

KEYWORDS: *Phytoplankton diversity of khandala dam Naldurg - Osmanabad.*

INTRODUCTION

Planktons are very small organisms which swim on the water surface and drift at the mercy of water currents, those of plant origin i.e. Phytoplankton. Phytoplanktons are biological indicators of water quality in pollution studies, Evaluation of Phytoplankton Population terms of their diversity, density, biomass spatial and temporal distribution and Productivity is important in management of an ecosystem. Phytoplankton play a vital role in the ecosystem of the environment is related to fish catch potential of a reservoir. The main source of food for fishes because of chief source of food of fishes. Literature about the phytoplankton diversity in India indicates availability of many reports i.e. Zafar (1964), Vyas and Kumar (1968), Trivedy et al, (1985), Banker et al (2005) etc. Present investigation was carried out as there is no report on Phytoplankton diversity of khandala dam.

MATERIAL AND METHODS

For the scientific study, the samples were collected by using a plankton net with 38 cm diameter of the mouth and a bolting silk No.20. An iron tube was tied to the tapering end of the net and the opening of the collecting tube was covered by a piece of bolting silk, securely tied with cotton thread so that Phytoplankton collected through the net could be easily transferred into separate plastic bottles. Fresh Phytoplankton was used for taxonomic identification and remaining preserved in 5% formalin for further investigation. Identification of Phytoplankton was done with the help of standard literature i.e. Pennak (1978), Tonapi (1980) and Agrawal (1999) etc.

RESULTS AND DISCUSSIONS

During the period of investigation, from Chlorophyta (07), which dominated the tank, Cyanophyta (6), Bacillariophyta (8) and Euglenophyta were recorded.

Table No.1.
Phytoplankton diversity in khandala Dam Dist. Omanabad.(2021)

Sr. No.	Class	Species
1	Chlorophyceae(07)	Spirogyra sp. cosmarium sp. Oedogonium sp. Closteriu macerosum sp. clorella vuigarius SP. volvox sp, ulothrix sp.
2	Cyanophyceae (06)	(6) Anabena sp. Chroococcus sp. spirulina sp. Lyngbya sp. 0Scillatoria sp. Nostoc sp.
3	Bacillariophyceae(08)	Gyrosigma sp. Diatoms sp. Cymbela sp. melosira sp. fragillaria sp. Navicula sp. synedra sp. cyclotella sp.
4	Euglenophyceae(01)	Phacus sp.

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