



MACROPHYTE DIVERSITY OF MANDWA LAKE NEARDHARNI (MELGHAT) TAHSIL, DISTRICT AMRAVATI (M.S.), INDIA

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ABSTRACT

The Mandwa Lake is principal fresh water body located in Mandwa village of Dharni tahsil in Amravati district of Maharashtra state. Dharni is a tahsil place and it is 148 km north west side of Amravati and 80 km east side from Burhanpur, Madhyapradesh It is situated at about 500 m above the mean sea level. The Macrophyte were studied from Nov-2020 to Oct-2021 during this period total 17 species of macrophytes were found in sample of water three sites A, B, and C of mandwa lake.

In the present study total 17 macrophytes species of 5 different types were recorded in this lake.

Keywords: Macrophyte diversity, Mandwa lake, Dharni Maharashtra.

INTRODUCTION

Aquatic macrophytes play a vital role in healthy ecosystems. Macrophytes are the conspicuous plants that dominate wetlands, shallow lakes and streams. They serve as primary producers of oxygen through photosynthesis provide a substrate for algae and shelter for many invertebrates. There are three types of macrophytes, floating macrophytes. Submerged plants with small leaves and growing in dense stands, provide structure, whereas floating-leaved plants and pleustophytes provide little submerged surface, but support animals such as amphibians and water birds. As a consequence, aquatic macrophytes are one of the essential ecological components wherever they occur.

In Present investigation Mandwa lake is 4 km south east side from Dharni Tahsil at about 500 m above mean sea level and is at 76°55'49''E longitude and 21°31'28'' N latitude. Mandwa Lake receives the water from the surrounding catchment areas during the monsoon period. The area of Mandwa Lake is spread over 500 acres. The depth of water is 38 feet during the monsoon and 15 feet during the summer season. The water of this lake is primary used for washing, bathing, fishing activities, agriculture and other domestic purpose but now it is at a transitional state with respect to degradation.

MATERIAL AND METHOD

Macrophytes in shallow water were collected directly while those from deeper water with the help of long handled hook. On collection the specimen were thoroughly washed, excess water soaked with filter paper, kept in polythene bags lined with filter paper and brought to the laboratory.

The specimen was identified up to species level as per the guidelines of Kodarkar (1994).

RESULT AND DISCUSSION:

Macrophytes are most of the aquatic weeds referred such as the macrophytes that grows in or near water. On the basis of habit and habitats aquatic weeds are classified into floating weeds, submerged weeds, emergent weeds, marginal weeds, filamentous weeds and algal blooms.

Narayana, *et.al.*, (2006) reported about the aquatic macrophytes of Husain sagar in Karnataka. Kiran, *et.al.*, (2006) observed about the macrophytes in the fish culture pond in Bhadra fish farm, Karnataka. Game and Salaskar (2007) recorded about the macrophytes on Malchmali lakes of Thane, Maharashtra. Sanjay Mishra and Satya Narain (2010) they observed and reported of wetlands macrophytes. Uzma Ahmad (2012) observed the aquatic macrophytes in Chautal pond at Aligarh. N.V. Harney, *et.al.*, (2013) founded 19 species of macrophytes

belonging to 5 groups in three lakes in Bhadrawati, District Chandrapur, Maharashtra. K. Harish Kumar (2015) observed the 13 species belonging to 11 families were recorded in Jannapura tank Bhadravati Taluka of Karnataka. Santosh Kumar and Narendra V. Harney (2015) reported 16 species representing 15 families from Moharli lake near Chandrapur. (M.S.).

The total of 17 species of macrophytes blonging to 5 groups are observed during the present study. Among different macrophytes, *Salvenia sp.*, *Vallisneria sp.*, *Ipomoea sp.* and *Nymphaea sp.* were founded in abundance in site A as compare to site B and site C while *Utricularia sp.* was not recorded from site A.



Table No. 1.1 : Macrophytes forms of site A , Site B, Site C

Sr.No.	Types / Life Forms	Name of the Macrophytes
1	Submerged floating weeds	<i>Ceratophyllum echinatum</i>
2	Submerged floating weeds	<i>Nymphaea odorata</i>
3	Submerged floating weeds	<i>Myriophyllum exalbescens</i>
4	Submerged floating weeds	<i>Eutricularia</i>
5	Submerged floating weeds	<i>Vallisneria americana</i>
6	Rooted floating leaves weeds	<i>Marsilea quadrifolia</i>
7	Rooted floating leaves weeds	<i>Nymphaea tuberosa</i>
8	Rooted floating leaves weeds	<i>Trapa natans</i>
9	Rooted emergent with heterophyle weeds	<i>Sagittaria sp.</i>
10	Free floating suspended submerged	<i>Lemna minor</i>
11	Free floating suspended submerged	<i>Azolla carolimana</i>
12	Free floating suspended submerged	<i>Salvinia rotundifolia</i>
13	Free floating suspended submerged	<i>Pistia stratiates</i>
14	Free floating suspended submerged	<i>Wolfia</i>
15	Free floating suspended submerged	<i>Nymphidis</i>
16	Rooted submerged hydrophytes	<i>Hydrilla</i>
17	Rooted submerged hydrophytes	<i>Ipomoea aquatica</i>

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