

Chlorococales Bendusara Dam in Beed District of Maharashtra (India).

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ABSTRACT

Biodiversitital studies of Chlorococales (Chlorophyceae) of Bendusara Dam in Beed District of Maharashtra (India) were made during the period from June 2013 to May 2015 . Algal samples were collected at monthly interval form five sites of Bendusara Dam. During the period of investigation. Microphotograph and line drawings of algal taxa were made by Digital camera and camera lucida. Algal taxa of Chlorophyceae were indetified with the help of standard monographs and recent literature. In present study included eight genera. Viz *Torcchicia*, *Pediastrum*, *Teraedron*, *Oocystis*, *Ankistrodesmus*, *Coelastrum*, *Crucigenia* and *Scenedesmus* were recorded. A total eight algal genera with twenty four species of Chlorococales (Chlorophyceae) were found. Among thies *Torcchicia*, *Teraedron*, and *Scenedesmus* were dominant as compared to other taxa.

Key words – Bendusara Dam , Chlorococales and Microphotograph.

INTRODUCTION

Bendusara dam is one of the important dam in Beed district of Maharashtra (India) situated 10 Km away from Beed City. It is constructed on Bendusara river originated from Bendusara village located at Patoda Tahsil of Beed District. Water of Bendusara dam is used as a drinking and agricultural purpose of Beed city and surrounding villages. Algae constitute the main autotrophic component of aquatic ecosystem. It gain its importance in the modern time not only as alternative potential source of protein for the hungry man but also as the primary source of food for aquatic animals. Some reports (Kamat 1962 , Ashtekar and Kamat 1978. Ashtekar

1980, Andhale and Talekar 2009) very rare attention has been paid towards Chlorophyceae diversity of fresh water habitats in Marathwada region. Hence we decided to work on Biodiversitcal studies on Chlorococcales form Bendusara Dam in Beed District of Maharashtra .

MATERIALS AND METHODS

The present investigation for biodiversitcal studies on Chlorococcales was carried out form June 2013 to May 2015 on Bendusara Dam in Beed District. To study the algal biodiversity five sites were selected for the collection of algal samples. Algal samples were collected at monthly intervals in acid washed collection bottles. Floating planktonic, submerged and attached epiphytic algal samples were collected separately in collection bottles. After collection, algal samples were brought immediately in the Laboratory. The fresh as well as preserved algal forms were observed under microscope and indentified with the help of standard literature on algae (Prescott, 1951 and Philipose1967).

RESULTS AND DISSCUSSION

A total 24 algal taxa under 8 genera of Chlorococcales were indentified during the period of investigation (Table: 1). The algal genera found at all sites were *Torchisia*, *Oocystis*, *Coelastrum* and *Scenedesmus*. The genus *Teraedron*, *Ankistrodesmus*, and *Crucigenia* were represented by a single species. The *Oocystis*, *Coelastrum* and *Scenedesmus* were observed in every month. On the basis of dominance winter season is the more suitable for the growth of Chlorococcales. The similar kind of observation were made by Gonzalves. E.A. and D.B. Joshi 1943. Jain 2002, Magar 2008.

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Table.1. Algal taxa of Chlorococcales encountered from Bendusara Dam.

Sr.No.	Algal taxa	Sr.No.	Algal taxa
1	<i>Trochiscia abtusa</i>	13	<i>Scenedesmus acutiformis</i>
2	<i>Trochiscia aspera</i>	14	<i>Scenedesmus armatus</i> V <i>major</i>
3	<i>Trochiscia reticularis</i>	15	<i>Scenedesmus armatus</i> V <i>bicaudatus</i>
4	<i>Pediastrum duplex</i>	16	<i>Scenedesmus bijugatus</i>
5	<i>Pediastrum tetras</i>	17	<i>Scenedesmus dimorphus</i>
6	<i>Tetraedron trigonium</i>	18	<i>Scenedesmus dimorphous</i> F <i>atortus</i>
7	<i>Oocystis borgei</i>	19	<i>Scenedesmus longus</i> V. <i>dispar</i>
8	<i>Oocystis solitaria</i>	20	<i>Scenedesmus obliquus</i>
9	<i>Ankistrodesmus falcatus</i>	21	<i>Scenedesmus opoliensis</i>
10	<i>Coleastrum microporum</i>	22	<i>Scenedesmus quadricauda</i> V. <i>bicaudatus</i>
11	<i>Coleastrum sphearicum</i>	23	<i>Scenedesmus quadricauda</i> V. <i>maximum</i>
12	<i>Crucigenia irregularis</i>	24	<i>Scenedesmus quadricauda</i> V. <i>westii</i>