

## Diversity of Desmids in Bendusara Dam

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### ABSTRACT

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Bendusara Dam is one of the important dam in Beed district of Maharashtra (India), situated 10 Km away from Beed City. The water body of this dam supporting the growth of different species of aquatic fauna and flora including algae. The present study deals with the seasonal variation of algae which conducted for the period of two year during June 2014 to May 2015 .The present investigation reveals that the dam are rich in algal abundance with Chlorophyceae, Charophyceae, Bacillariophyceae, Euglenophyceae and Cyanophyceae. Among Chlorophyceae desmids are dominant Group Such as Cosmarium With 08 species, Euastrum With 02 species and Desmidium with single species. Seasonal Fluctuation in growth of desmids is quite interesting in decreasing order of seasons like summer, winter and monsoon.

**Key words:** Bendusar Dam, Cosmarium and Chlorophyceae

### I. INTRODUCTION

Bendusara dam is one of the important dam in Beed district of Maharashtra (India) situated 10 Km away from Beed City. Bendusara River originated from Bensur 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 are a diverse group of plant kingdom, comprising large heterogeneous assemblage of autographs. Fresh water bodies are the habitats where an algae grows abundantly and found in diverse form. Except few reports (Kamat 1962, Ashtekar and Kamat 1978, Ashtekar 1980, Andhale 2009) very rare

attention has been paid towards algal diversity of fresh water habitats in Marathwada region.

### II. MATERIALS AND METHODS

The present investigation for diversity of desmids was carried out from June 2014 to May 2015 on Bendusara Dam in Beed district of Maharashtra (India). To study the diversity of desmids 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 (Smith 1950, Prescott 1951 and Philipose 1967).

### III. RESULTS AND DISSCUSSION

Diversity of desmids study of Bendusara Dam in Beed district of Maharashtra (India). The present investigation reveals that the dam are rich in algal abundance with Chlorophyceae, Charophyceae, Bacilariophyceae, Euglinophyceae and Cyanophyceae. Among Chlorophyceae desmids are dominant Group Such as *Cosmarium* With 08 species, *Euastrum* With 02 species and *Desmidium* with single species. Seasonal Fluctuation in growth of desmids is quite interesting in decreasing order of seasons like summer, winter and monsoon (Table 1). Result of present study agreed with the results of Freitas, J. F. and Kamal, N.D. (1979), Astekar, P.V. (1980), Misra P.K. and Srivastava Anand Kumar (2003), Andhale S.B. (2008), Talekar S. M. and M. J. Jadhav (2009) and Yadav S.G. and P.V. Ashtekar (2007),

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**Table No.1 Desmids in Bendusara Dam.**

Sr. No.	Name of Desmids	S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>
01	Euastrum ireegulare	+	+	+
02	Euastrum spinulosum	+	+	+
03	Cosmarium contractum	+	-	-
04	Cosmarium libogense V.inevolutum.	-	+	+
05	Cosmarium margaritatum F. minor	+	-	-
06	Cosmarium obtusatum	+	+	+
07	Cosmarium speciosum V. simplex	-	+	+
08	Cosmarium subcostatum	+	-	+
09	Cosmarium sublatereundatum	+	-	-
10	Cosmarium bioculatum	+	+	-
11	Desmidium pseudostreptonema	+	-	-