



## Algal Study of a Pond at Village Dasane

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### Abstract:

Pond located at village Dasane is near Malegaon city-Dist-Nasik, Maharashtra has been studied for its algae. Three sample stations were studied. Algal samples collected from three sampling stations. In all 45 algal taxa were identified from pond of Dasane. Out of 45 taxa 11 are belonging to Cyanophyceae and 19 of chlorophyceae. The chlorophyceae and Cyanophyceae members are given in this paper. The presence of some algal taxa like *Oscillatoria*, *Spirulina*, *Chlorella*, *Closterium*, *Scenedesmus* showed that water of pond of Dasane is polluted.

### Key words:

Dasane pond, Algae, Pollution.

### Introduction:

Algae play an important role in the productivity of any aquatic system and form the basic food chain. Algal diversity have been studied by many workers in India (Zafar, A.R.1967, Desikachary, T.V 1959, Philipose,M.T.1960). No study was carried on this pond. Therefore present study was under taken. The pond of Dasane situated 15 Km from Malegaon, Near Dasane, on Malegaon - Khadki Road. The Direction of this pond is West – East, The size of pond is 200 meter long and 150 meters wide. Maximum depth is 3 meters in rainy season. This study was carried out from July 1997 to December 1997.

### Material and methods:

Three sampling Stations were fixed for this study i.e.D1 – Near Bandhara of pond, D2- Near Dasane Khadki road, station D3 – towards village Khadki. The algal samples were collected from above mentioned three sampling stations,for six months on monthly basis. The algal samples were preserved in 4% formalin and taxonomic studies were carried with the help of standard literature on the subject.

### Results and discussion:

List of Blue green and Green algal found in pond of Dasane

*Aphanoca psabiformis* A. Br.

*Merismopedia minima* Beck

*M. punctata* Meyen

*M. glauca*(Ehr.) Nag.

*Dactylococcopsis raphidioides* Hansg.

*Spirulina subtilissima* kutz.ex Gomont





*M. gigantean* schmidle  
*Oscillatoria subbrevis* schmidle  
*M. subbrevis* S. minor Desikachary  
*N. chikensis* Biswas  
*N. tenuisvartergstina* Rabenh.  
*Chlamydomonas nasuta* korsh  
*C. psuedopertyi* pasch  
*Chlorella vulgaris* Beijennck  
*Ankistrodesmus falcatus* [cord.] Ralf  
*Coelastrum microporum* Naeg.  
*Scenedesmusdimorphus* (Turpin) Kutz.  
*S. spp.*  
*S. bijuga* (Turp) Lag.  
*Ulothrix subtilissima* Rabenh  
*Oedogonium maharashtran* Kamat  
*Spirogyra granulate* JAO  
*Spirogyra ellipsospora* Transeau  
*Closterium tumidum* Johns  
*C. cynthia* var. *Jenneri* (Ralfs) Krieg.  
*C. parvulum* Naeg.  
*C. diana* Ehr.  
*C. Vensu* Kuetz  
*Cosmarium costatum* Nordst  
*C. biretum* Breb.

In all 45 algal taxa were identified from pond of Dasane. Out of 45 taxa 11 are belonging to Cyanophyceae (BGA) and 19 of Chlorophyceae the list of Cyanophyceae and Chlorophyceae members is given here.

The BGA is represented by 5 genera and 11 species and green algae consist of 10 genera and 18 species. *Closterium* is the largest genus having 5 species in green algae. *Oscillatoria* is the largest genus having 10 species in BGA.

### Conclusion:

The conclusion of this work is, the BGA forms grow well throughout the study period but more in winter. *Oscillatoria* forms the largest genus. In chlorophyceae *Closterium* is the largest genus. The presence of taxa like *Oscillatoria*, *Spirulina*, *Chlorella*, *Closterium*, *Scenedesmes* showed that the water of pond of Dasane is polluted. Similar observations were made by Hosmani and Bharti (1980).

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