



## Studies on soil algae of beed district Maharastra

S.G. YADAV, R.M. KADAM AND S.K. AWAD

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**SUMMARY :** An extensive study was carried out on algal taxonomy of Beed district in Marathwada region of Maharashtra for the period of three years *i.e.* from January 2006 to December 2008. Different habitats were selected as study area like pools, ponds, cisterns, talaos, dams, streams, streamlets, rivers, polluted water passages, puddles, nursery ponds, dripping rocks and moist soil. The present paper deals with a total of 66 taxa under 24 genera belonging to Chlorophyceae, Xanthophyceae and Cyanophyceae encountered as soil algae. In present investigation, the members of Cyanophyceae were found dominant.

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many workers, but little attention has been paid on soil algae in Maharashtra. (Marathe, 1960, 1969; Kamat and Patel, 1973; Ashtekar, 1980; Kolte and Goyal, 1985; Bhoge *et al.*, 2007 a and b) and to fulfil this lacuna, the present investigation was carried out.

> Algae growing on the moist soil are found mostly during the rainy seasons. The collections were made from the moist soils of the sides of streams, talaos, dams, rivers. The algal samples were collected from moist soils and all the necessary precautions were taken while collecting the samples.On return to laboratory, the collections were observed under the light microscope and collections were preserved in 4 per cent formalin added with 5 per cent glyecrin. The identifications were performed by reffering to the standard literature and monographs (Desikachary, 1959).

iversity of algae in India from different

habitats has been extensively studied by

A total of 66 taxa under 24 genera was encountered from soil samples, of which 59 taxa were under 19 genera which belonged to Cyanophyceae, 1 genus of Xanthophyceae and 6 taxa under 4 genera of Chlorophyceae. *Botrydium granulatum* represented the Xanthophyceae. Among Chlorophyceae Protococcus was found very dominantly followed by Gloeocystis, Elakatothrix and Closterium are all were found with single species. Among Cyanophyceae Oscillatoria dominated the algal flora followed by Phormidium, Lyngbya, Chroococcus Gloeocapsa. The genera like Aphanothece, Aphanocapsa, Nostoc and Calothrix were found in good number. Gloeothece, Merismopedia, Myxosarcina, Hydrococcus, Schizothrix, Symploca, Microcoleus, Hydrocoleus, Cylindrospermum and Anabaena were found with their single species. Overall the soil algal flora was dominated by the members of Cyanophyceae. (Ashtekar, 1980; Kamat and Patel, 1973; Sardeshpande and Goyal, 1981; Bhoge et al., 2007 (a and b); Gonzalves and Gangla (1949); Chaporkar et al. (1984).

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Key Words : Algal taxonomy, Soil algae

Author for correspondence :

## S.G.YADAV

Department of Botany, Shivaji Mahavidyalaya, Renapur, LATUR (M.S.) INDIA Email: shankar.yadav4 @gmail.com See end of the article for Coopted authors'