REVIEW
OF
LITERATURE
Primary studies on West Bengal desmids were done more than a century back. The works were done mainly by the foreigners. Significant works were done by Wallich (1860), Hobson (1863) and Lagerheim (1888). Wallich had collected his samples from Raniganj, great coal field area of Bengal, about 180 km North West of Kolkata (within a range of 10-50 kms from the area under study). He observed 140 species of desmidiaceae from this locality. Lagerheim described 52 species and varieties under desmidiaceae. Turner (1892) contributed a monographic work on Bengal desmid flora in “The fresh water algae of East India (principally desmidiaceae)”. In this work twenty nine (29) desmid genera with 641 taxa were described, although some genera like Leptozosma, Didymoprium have lost its validity or included under other genera (Dysphinctium to Cosmarium, some Docidium to Pleurotaenium, Gymnozyga to Bambusina and Groenbladia etc.) still the work covers the largest single contribution of Indian desmidiaceae. Biswas (1925) has reported single species of Cosmarium (C. granulatum) from Calcutta. Triploceras abbreviatum Turner was later transferred to a new genera Triplastrum abbreviatum (Turner) Iyengar & Ramanathan by Iyengar & Ramanathan (1942).

Recent reports are very few and scanty in number. Pal and Santra (1993) had worked on Midnapore desmidiaceae. Only 14 taxa were reported under 8 genera in this work. These are Euastrum (6), Hyalotheca (1), Micrasterias (2), Onychonema (1), Pleurotaenium (1), Staurodesmus (1), Triploceras (1), Xanthidium (1). While Mukherjee and Srivastava (1993) contributed on the desmids of Purulia district. They reported 51 taxa under 14 genera. These are Cosmarium (15), Closterium (7), Euastrum (7), Pleurotaenium (4), Desmidium (3), Xanthidium (3), Micrasterias (2), Onychonema (2), Gonatozygon (3), Arthodesmus (1), Sphaerozosma (1), Spirotaenia (1), Staurastrum(1) and Triploceras (1). Till date no other report of desmids have been noticed except ours (Mallick & Keshri 2004 a, b).

The earlier workers have not taken ecology into consideration. From our observation we have noted that there is vast scope of study on this group of organisms both from biodiversity point of view and ecology as a whole. Since desmids are fine indicators of pollution, the study may help to a great extent in bio-monitoring the natural habitat of West Bengal.