CYLINDROCYSTIS MENEGH. (CHLOROPHYTA): A NEW RECORD FOR BANGLADESH

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Abstract

Cylindrocyctis brebissonii Menegh. and C. crassa var. elliptica West and West have been illustrated and discribed in this paper as new report for Bangladesh.

In Bangladesh, saccoderm desmids are poorly represented compared to its counterpart placoderms. Of the six genera of saccoderm desmids (Smith 1950) only two such as *Netrium* and *Gonatozygon* have so far been reported from Bangladesh. The genus *Netrium* is represented by four species (Islam 1970, Islam and Akter 1999). On the other hand the genus *Gonatozygon* is represented by six species (Islam 1970, Islam and Chowdhury 1979, Islam and Haroon 1980, Islam *et al.* 1980, Islam and Irfanullah 1999 and Aziz and Tanbir 2003).

The present authors, while working on some plankton samples collected from a domestic pond of Mathbaria Upazila Sadar of Pirojpur district (southern part of Bangladesh) came across the occurrence of *Cylindrocystis brebissonii* Menegh. and *C. crassa* var. *elliptica* West and West hitherto unreported. Details of the study site and sampling procedure have been presented in Khondker *et al.* (2006).

Division: Chlorophyta, Class: Chlorophyceae, Order: Desmidiales, Family: Mesotaeniaceae

1. Cylindrocystis brebissonii Menegh.

(Fig. 1)

(Croasdale and Grönblad 1964, 148, 1: 10; Ling and Tyler 2000, 129, 56:1)

Cells short cylindrical, slightly reniform, poles broadly rounded, cell wall prominent, fully filled up with protoplasm, chloroplasts 2, one in each semicell, stellate. Cell 33.0 $\,\mu m$ long, 12.5 $\,\mu m$ broad. Length breadth ratio above 2.

Mathbaria, Pirojpur, Station No. 3, Date of collection 16 August, 2004; planktonic in pond ecosystem.

2. C. crassa var. elliptica West and West

(Fig. 2)

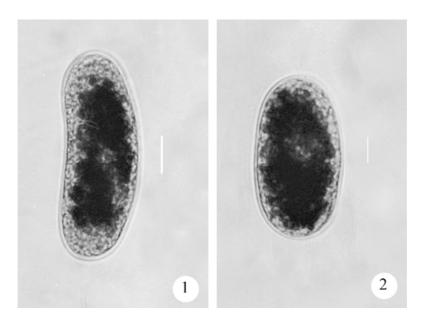
(Croasdale and Grönblad 1964, 148, 1: 18)

Cells ovate to short cylindric, poles broadly rounded, cell wall prominent, fully filled up with protoplasm, chloroplasts 2, one in each semicell, stellate. Cell 20 $\,\mu$ m long, 12 $\,\mu$ m broad. Length breadth ratio below 2.

Mathbaria, Pirojpur, Station No. 3, Date of collection 16 August, 2004; planktonic in pond ecosystem.

190 KHONDKER et al.

The described two species of desmids occurred in a freshwater domestic pond of village South Mithakhali. Some limnological data of the pond at the time of sampling were: pond area 460 m², pond depth 2.24 m, air temperature 31.2°C, water temperature 30.8°C, pH 8.2, total dissolved solids (TDS) 382 mg/l, conductivity 782 μ S/cm, alkalinity 1.0 meq/l, NO₃-N 77.51 μ g/l, soluble reactive silicate (SRS) 6.47 μ g/l, soluble reactive phosphorus (SRP) 34.13 μ g/l and chlorophyll *a* 63.25 μ g/l.



Figs. 1-2: 1. Cylindrocystis brebissonii, 2. C. crassa var. elliptica.

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