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 described 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
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. Cylindrocyctis 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 µm
long, 12.5 µm 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 µm long, 12
µm broad. Length breadth ratio below 2.
Mathbaria, Pirojpur, Station No. 3, Date of collection 16 August, 2004; planktonic in
pond ecosystem.
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 m$^2$, 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 µS/cm, alkalinity 1.0 meq/l, NO$_3$-N 77.51 µg/l, soluble reactive silicate (SRS) 6.47 µg/l, soluble reactive phosphorus (SRP) 34.13 µg/l and chlorophyll a 63.25 µg/l.

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References


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