Indian desmids were initially studied by Turner (1892), Wallich (1860) and Lagerheim (1888). Most of the studies were restricted to the Placcoderm desmids, but very little attention was paid to the Saccoderms. Recently Agarkar and Agarkar (1977), Ashtekar and Kamat (1979), and Asoka Kumar and Patel (1985), have reported Mesotaenium berggrenii (Wittrock) Lagerh and Mesotaenium macrococcum (Kützing) Roy and Bissette, Mesotaenium mirificum Arch. and Mesotaenium caldariorum (Lagerh.) Hansg. forma, M. endlicherianum Nägeli forma respectively. The four taxa have been recorded from Bankura and Purulia districts of West Bengal.

The specimens were collected from different habitats of Bankuar and Purulia districts of West Bengal. Specimens were preserved in 4% formalin; pH, temperature and details ecological notes were recorded simultaneously. Camera lucida drawings were drawn using preserved and live specimens both.

Mesotaenium Nägeli 1849

Cells solitary or embedded in large numbers within a common watery gelatinous matrix; cells oval, either cylindrical to sub-cylindrical and with broadly rounded poles; contains a single axial, laminate chloroplast with one to several pyrenoids.

1. M. chlamydomosporum de Bary var. chlamydomosporum

Prescott et al. 1972, p. 8, pl. I, figs. 32, 33; Dillard 1990, p. 62, pl. 23, fig. 5. [Plate I, Fig. 1]

Cells oblong-cylindric, more than 2 times longer than broad, the poles broadly rounded chloroplast axial, narrow. L. 24-75 µm, W. 10-34 µm. Field No. PM-667.

Distribution : This is the first record of the species from India.

2. M. chlamydomosporum var. minus (Reinsch) West & West

Prescott et al. 1972, p. 9, pl. I, figs. 34-36; Dillard 1990, p. 63, pl. 23, fig. 6. [Plate I, Fig. 2]

Cells cylindric, 2 times longer than broad, the pole somewhat attenuated, chloroplast axial. L. 18-22 µm, W. 9-11 µm. Field No. PM - 818.

Distribution : This is the first record of the variety from India.

3. M. degreyii Turner var. breve West

Prescott et al. 1972, p. 9, pl. I, figs. 1, 2; Dillard 1990, p. 63, pl. 23, fig. 8. [Plate I, Fig. 4]
**Table**: Ecological Notes of samples

<table>
<thead>
<tr>
<th>Field No.</th>
<th>Date</th>
<th>Locality</th>
<th>pH</th>
<th>Temp.</th>
<th>Ecological Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>Nov. 19</td>
<td>Birshingha, 2000</td>
<td>5.5</td>
<td>26°C</td>
<td>Orange yellow colour algal mass attached on aquatic grass Scirpus articulatus Linn.</td>
</tr>
<tr>
<td>667</td>
<td>Dec. 01</td>
<td>Sahebbandh, 2001</td>
<td>5</td>
<td>24°C</td>
<td>Light green filaments and some whitish assemblages lodged on aquatic plants</td>
</tr>
<tr>
<td>818</td>
<td>Jan. 11</td>
<td>Susunia, 2002</td>
<td>5.5</td>
<td>19°C</td>
<td>Yellowish green assemblages lodged on submerged Hydrilla verticillata Casp.</td>
</tr>
</tbody>
</table>

Cells elliptic, more than 1.5 times longer than broad, poles rounded. Chloroplast laminate. L. 36-42 µm, W. 20-24 µm. Field No. PM-1136.

Distribution: This is the first record of the variety from India.

4. **M. macrococcum** (Kützing) Roy & Bissett

   Prescott *et al.* 1972, p. 11, pl. I, figs. 27-30; Dillard 1990, p. 63, pl. 23, fig. 10. [Plate I, Fig. 3]

   Cells elliptic, longer than broad; poles rounded, chloroplast axial. L. 26-28 µm, W. 15-16 µm. Field No. PM-44.

   This is the new record of the species from West Bengal. Previously it was recorded only by Ashtekar and Kamat (1979) from Maharashtra.

   Author thanks UGC, New Delhi for financial assistance; to the Head Department of Botany (CAS) for laboratory facilities and to Dr. Jai Prakash Keshri; and Prof. Pranjit Sarma for various help during this research work.

REFERENCES


Legends of the figures

1. *M. chlamydosporum* de Bary var. *chlamydosporum*
2. *M. chlamydosporum* var. *minus* (Reinsch) West & West
4. *M. degreyii* Turner var. *breve* West