

Some fresh water filamentous green algae from Faizabad district of Uttar Pradesh, India

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Accepted : October, 2009

Key words : Algae, Chlorophyceae

Present communication deals with Morphotaxonomic descriptions of ten taxa belonging to order Chaetophorales, Ulotrichales, Cladophorales and Zygnematales of class Chlorophyceae. Number of Species of each genus given in Parenthesis *Stigeoclonium* Kuetzing (1), *Schizomeris* Kuetzing (1), *Mougeotia* Agardh(1), *Pithophora* Wittrock (1) and *Spirogyra* Link (5). Maximum species richness occurs in genus *Spirogyra* Link, all these forms have been collected from lentic water bodies of Faizabad district of U.P

Biodiversity has gained its importance as many flora and fauna are disappearing without documentation, with this regards algal flora of Faizabad district of Uttar Pradesh have explored and investigated to give a clear algal composition.

Contribution in diversity status of Indian fresh water algae has recently been made by Sen and Gupta (1988), Tewari *et al.* (1999) Kant and Vohra (1999), Misra *et al.* (2001, 2002, 2003, 2004, 2005), Singh and Srivastava (2002), Prakash *et al.* (2005) and Srivastava and Misra (2007).

In the present communication Morphotaxonomic description of nine taxa are given in detail.

Random sampling methods have been applied in Algal sampling from tributaries of Rapti and Saryua rivers. Sampling has been done by means of planktonic net. Samples were preserved in 4% formalin. Detailed studies were made by staining the materials by Iodine and mounting in glycerine. Microphotographs have been taken by Nikon Labophot II microscope with camera attachment.

Morphotaxonomic description:

Stigeoclonium farcatum Berthold (Fig. 9):

Nurul Islam (1963), P. 53, Pl. 32, Fig. 3 – 4, Prasad and Misra (1992), P. 61, Pl. 9, Fig. 8

Thallus attached, forming cushion like prostrate system from which erect filaments develop, prostrate filament branched with lateral filament developing

adjacent to each other, erect filaments develop from cell, unbranched, slightly constricted at septa, cells cylindrical to somewhat barrel shaped apices usually blunt. Cell of erect filament 5.5-6.5µm broad, 6-7µm long

Locality- Saryua tributaries Faizabad

Collection No. and Date- FZB (9.06.08).

Schizomeris leibleinii Kuetz (Figs. 9):

Prescott (1951), P. 105, Pl. 7, Fig. 11, 12 and 13, Tiffany and Britton (1952), P. 102, Pl. 29, fig. 276.

Filaments cylindrical and sometime constricted at the intervals of few cells, uniseriate filament, with acuminate apices and basal hold fast cell, cross wall extended upto the margin of longitudinal wall, older filament multiserial with brick like quadrangular cells, each cell with one parietal, band shaped or massive chloroplast; vegetative cell 46-47µm broad, 38-65µm long, older filament have cell 52-53µm broad.

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Pithophora varia Wille (Fig. 3):

Prescott (1951), P. 140, Pl. 24, Fig. 56, Tiffany and Britton (1952), P. 48, Pl. 12, Fig. 87-88, Prasad and Misra (1992), P. 55-56, Pl. 7, Fig. 9-10

Filament long, branching solitary, cell cylindrical, cell wall thin, terminal akinete elongated, ovoid with blunt conical apex. Cell of main filament 48-49µm broad, 400-730µm long, cell of basal scalariform and lateral conjugation nch, 28-30µm broad, 660-665µm long, akinete 70-71µm broad, 210µm long.

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Spirogyra biformis Jao (Fig. 1):

Randhawa (1959), P. 317 Fig. 293

Vegetative cells 48µm broad, 45-75µm long chloroplast 2 making 1.5-4.5 turn, conjugation scalariform, tubes formed by both the gametangia. Zygospore ellipsoid with rounded ends, zygospore 48µm broad.

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