

APPENDIX 2

a). Paper published:

i). 'Some Aquatic Hyphomycetes from Satara District'

Bioinfolet 2008.5 (4): 426-427.

b). Paper accepted for publication Bioinfolet publication

i). Some interesting aquatic hyphomyceteous fungi from Satara District (M.S.).
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SOME AQUATIC HYPHOMYCETES FROM SATARA DISTRICT

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Aquatic hyphomycetes are those which complete their cycle on submerged substrate in well aerated water. The fungi most commonly observed on decaying leaves in streams are typical aquatic hyphomycetes (Ingold 1942). They are characterized by tetradiate, sigmoid, coiled, appendaged or branched conidia. They play an important role as plant colonizers and contribute significantly in the processing of plant litter detritus. (Barlocher 1974) Collection of foam and leaf litter was worked from different aquatic bodies in and around Satara from Aug. 2007 to Aug. 2008. Submerged leaf litter, decaying stem pieces and foam accumulated at barriers of ponds and streams were collected in sterile polythene bags and plastic jars respectively. The collected leaf litter samples were washed in the laboratory thoroughly with tap water and then cut into small pieces and placed for incubation in sterile petridishes, containing sterile water at 20°C. The leaf bits were scanned under low power microscope. The foam samples were fixed in FAA (5%) (Formaldehyde 5ml; Acetic acid 5ml; 90% Ethyl alcohol 90 ml.) on the site to avoid conidial germination and scanned under low power microscope.

1. *Campylospora filicladia* Nawawi.
Trans. Brit. Mycol. Soc. 63: 604, 1974.
Fig.-1.

Conidia tetradiate, hyaline, conidial apices rounded, conidial span 25-37 μ m; branches hair like thin, longer than conidia 9-23 μ m long. Collected in foam and leaf litter from Patoghar stream, Dist. Satara.

2. *Flabellocladia tetradia* Nawawi.
Trans. Brit. Mycol. Soc. 65: 175, 1985.
Fig.-2.

Submerged aquatic, mycelium branched hyaline, septate; conidiophore simple; conidia hyaline, tetradiate in appearance bearing three appendages, 3-4 septate, main axis 9 μ m; arms 96 μ m long, 3 μ m at apex X 6 μ m at base, 4-6 celled, with or without terminal cell. Collected in foam sample from Kas, Dist. Satara.

3. *Helicosporium phragmitis* Honnel
Annls. Mycol. 3: 338, 1905.
Fig.-3.

Colonies raised, cottony pale grey, conidiophores loosely branched, colorless to pale brown, 120-200 μ m X 3-5 μ m; conidia helically coiled, 2-4 times in one plane, colorless, 12-21 μ m in diameter and 1.5-2.5 μ m thick, filamentous 7-15 septate. Collected in foam sample and leaf litter, from pond near Collector's office, Satara.

4. *Scolecobasidium variable* Barron and Bush
Can. J. Bot., 40: 83-84, 1962.
Fig.-4.

Colonies effuse, brown colored, partly immersed; mycelium septate, pale brownish; conidiophore macronematous, mononematous, unbranched, straight, short, cylindrical 12-13 μ m X 1.5-3 μ m; conidia cylindrical rounded at the ends, constricted at the septate, 9-15 μ m X 2-3.5 μ m. Collected on submerged leaf litter, from Godoll lake, Satara.

5. *Stachyidium bicolor* Link
Magzin. Ges. Naturf. Berlin 3: 5, 1809.
Fig.-5.

Colonies effuse, cottony mass of mycelium on the substratum; mycelium immersed, septate, branched, whitish to greenish; conidiophore erect, branched, macronematous, mononematous, pale brown in

golden yellow, 210-450 μm X 4-7 μm , septate; conidogenous cell are arranged in phalides, cylindrical rounded at apex, cylindrical to ellipsoidal, hyaline to pale olive, smooth, aseptate, 3-5 μm X 2-3 μm . Collected on submerged decaying stem and foam, from Yevteshwar, Dist. Satara.

6. *Triscelophorus acuminatus* Nawawi.
Trans. Brit. Mycol. Soc. 64:248, 1975.
 Fig.-6.

Submerged, conidia hyaline, tetra- radiate main axis 51 μm -60 μm X 1-1.5 μm at apex X upto 6 μm widest at base; 3 laterals present, 22-50 μm X 3-4 μm , 7-8 septate. Collected in foam sample from Kas, Dist. Satara.

The species viz., *Campylospora filicladia*, *Flabellocladia tetracladia*, *Triscelophorus acuminatus* were reported in foam samples. While, *Helicosporium phragmitis*, *Scolecobesidium variable*, *Stachyidium bicolor* were reported from submerged leaf litter and decaying stems.

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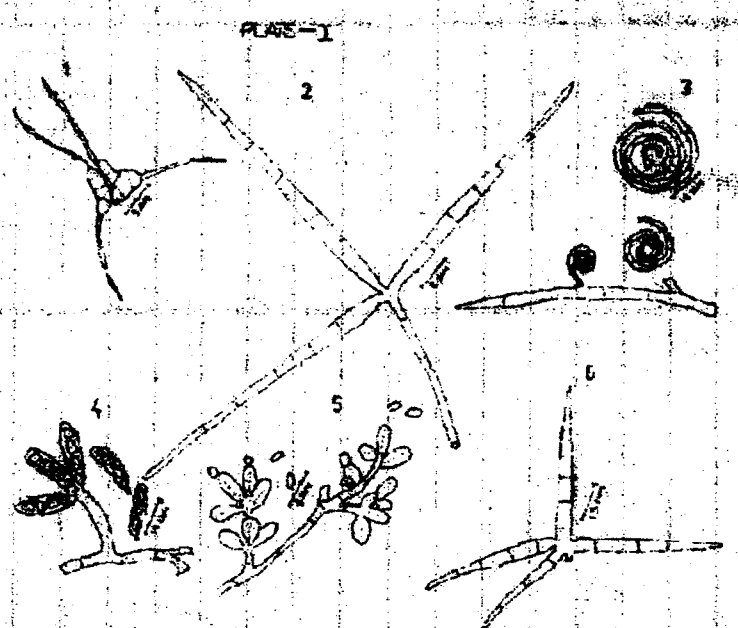


Fig. 1. 1. *Campylospora filicladia*. 2. *Flabellocladia tetracladia*. 3. *Helicosporium phragmitis*. 4. *Scolecobesidium variable*. 5. *Stachyidium bicolor* 6. *Triscelophorus acuminatus*.