Tetracladium maxilliforme - A rare aquatic Hyphomycetes

S.C. SATI and R. JOSHI
Department of Botany, Kumaun University, Nainital 263002

Key words: Aquatic Hyphomycetes, new additions, aquatic fungi

Aquatic Hyphomycetes are the frequent colonizers of decaying plants leaves and twigs in any fast flowing freshwater stream. A little is known about the Indian aquatic Hyphomycete (1). In Kumaun Himalayan region these fungi are being surveyed by Sati and his coworkers (2,3). During a collection of these fungi from a freshwater high altitude stream, Snow view (2270 m a.s.l.) Nainital, Kumaun Himalaya, some conidia of unusual types were also found growing on submerged decaying leaves of Quercus leucotrichophora A. camus and Acer oblongum Wall. ex DC. Later with the help of pertinent literature these were identified as the conidia of Tetracladium maxilliforme (Rostrup) Ingold. The present fungus forms a new addition to the Indian Mycoflora. Slide specimen of the fungus have been submitted in the Botany Department, Kumaun University, Mycological Specimens (KUMS) Nainital and a brief account of the isolate is provided hereunder:

Tetracladium maxilliforme (Rostrup) Ingold
(Fig. 1 A-B)

Growing on submerged decaying leaves, aquatic fungus with branched, septate mycelium. Conidiophores apical or lateral, simple or less branched. Conidiogenous cells with truncate scars. Conidia typically tri-radiate finger like, primary branches arising at one level. Conidial axis distally digitiform, subclavate, 11-15 × 2.5-3 µm, septate, scar truncated to rounded, without basal extension. At 4-7 µm above the scar the two lateral elements develop opposite to each other; one of them digitiform, 10-15 × 2.6 µm, 0-1 septate, the other branch acicular, initially parallel to the axis and then curving outward, 7-16 × 1.5-2 µm, 0-1 septate. The digitiform branch bears at its middle part, an abaxial acicular element similar to the first, 16-25 × 1.5-2 µm.


This species was first described by Rostrup in 1894 under the genus Titaea and replaced in the genus Tetracladium by Ingold after a thorough discussions (4). It has also been recorded as parasite of Trifolium leaves producing sporodochia (5).

Fig. 1. A-B: Different mature conidia of Tetracladium maxilliforme
A perusal of available literature indicates that it is rare in occurrence and distribution (6). Earlier it has been reported only from England, North America and Spain but now also being recorded from India.

REFERENCES


Received for publication November 24, 1998