

Some Aquatic Hyphomycetes from Sri Lanka

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Abstract: Eighteen types of aquatic Hyphomycete conidia were found in foam samples collected from rivers and streams. Of these 11 were identified to species level and 4 to generic level; three were not identified at all. The number and types of conidia were greater in Sinitaraja Forest streams than in rivers and streams flowing through urbanized and agricultural areas.

I. Introduction

The aquatic Hyphomycetes are a relatively small group of water-inhabiting fungi. Some of these fungi complete their entire life cycle including growth, sporulation, spore liberation and dispersal below the surface of water, but some are amphibious and may have telomorphs on substrata exposed to air. Very little was known about these fungi until Ingold⁷ published his now famous paper on aquatic Hyphomycetes of decaying alder leaves. Aquatic Hyphomycetes often grow on submerged, partially decayed leaves and twigs present in fast flowing streams in wooded areas.¹¹

About 200 species of aquatic Hyphomycetes have already been described. These have been assigned to 60 form genera. A guide to the identification of the commonly encountered forms is now available.¹¹ Basically, two spore shapes can be seen: the tetra- or poly-radiate form with four long arms and the sigmoid form with curvature in more than one plane.¹¹ These spores are concentrated in a remarkable way by air bubbles which under certain conditions collect as persistent foam and scum often captured behind barriers of twigs and rocks in rivers and streams. This foam and scum provide an excellent source for collecting aquatic Hyphomycetes, although it is recognised that the spore content of foam may not actually reflect the spore content of water.¹⁴

Aquatic Hyphomycetes were first recorded in Europe. They are now known to have a worldwide distribution with the possible exception of North and South poles. Many species are world-wide in distribution, but some are more characteristic of either the warmer regions or the colder regions of the globe. Some species such as *Lamulospora curvula* and *Triscelophorus monosporus* although occurring in temperate colder regions are much more abundant in warmer tropical parts of the world.¹¹

Most fresh water biologists would regard these fungi as insignificant and unimportant members of the fresh water biota; but it is now known that in many fresh water habitats they are very abundant.