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**SURVEY OF AQUATIC HYPHOMYCETES FROM VISAPUR DAM IN
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SURVEY OF AQUATIC HYPHOMYCETES FROM VISAPUR DAM IN AHMEDNAGAR DISTRICT OF MAHARASHTRA, INDIA.

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Abstract: During our Aquatic Hyphomycetes studies from the dam of Visapur village of Ahmednagar district. We have collected some aquatic Hyphomycetes members encountered foam samples, water analysis, and submerged leaves collected from Visapur Dam. These fungi namely viz., *Anguillospora crassa*, *Campylospora chaetocladia*, *Chaetendophragmia triangularia*, *Diplocladiella scalaroides*, *Flageollospora penicillioides*, *Lunulospora curvula*.

Keywords: Aquatic Hyphomycetes from Visapur Dam.

Introduction: Aquatic Hyphomycetes in habit decaying plant parts in clean, watery settings all over the globe (Ingold, 1975). Approximately 600 species have been documented from different regions of the world (Hyde & Goh, 1996). Several species have been recorded from India. (Subramanian & Bhat, 1981; Sridhar & Kaveriappa, 1982, 1984, 1989; Chandrashekhara *et al.* 1986; Sridhar *et al.* 1992). Aquatic Hyphomycetes of the river Kempu Hole in the Western Ghat forest of the state of Karnataka. (Chandrasekhara *et al.*, 1986).

This paper provided correct identification and photograph for quickly identifying aquatic Hyphomycetes, which is being reported first time from Visapur Dam. We have collected six species of freshwater hyphomycetes collected in Visapur Dam from Ahmednagar District of Maharashtra.

Material and Method: To discover the hyphomycete flora, foam samples, water analysis, and submerged leaves were analyzed (Ingold, 1975; Iqbal and Webster, 1973; Webster, 1975). Submerged leaves and twigs were gathered in polythene bags from quickly moving streams at dam sites and incubated in sterile distilled water at room temperature (30°C). On alternating days, leaf blades, petioles and tiny twigs were screened for hyphomycete colonies. These naturally produced foam samples were collected and preserved in formalin-acetic-alcohol (FAA) on the spot. They were afterwards examined in the laboratory for the presence of hyphomycete spores using a compound microscope. A total of two litre of water samples were collected from various places and transported to the laboratory in polythene bottles. The detailed studies and through scrutiny of literatures revealed (Subramanian & Bhat, 1981; Sridhar & Kaveriappa, 1982, 1984, 1989; Chandrashekhara *et al.* 1986; Sridhar *et al.* 1992).

Result and Discussion:

1. *Anguillospora crassa* Ingold, *Trans. Br. Mycol. Soc.* 41: 365-372. 1958..

Description: S or L-shaped, 118–200 × 18–20 µm, at middle region, tapering up to 8–10 µm at ends, conidia hyaline.

Matrix: Foam sample and Submerged leaves.

Locality: Visapur dam.

Date: 4 July 2022.

Note: Current specimen were assigned for the species *Anguillospora crassa* since they have the same traits and size. The Western Ghat forests of Karnataka's Sridhar and Kaveriappa (1984) were the first to gather this species from submerged leaves in a wet setting Ramesh

and Vijaykumar (2005), Ahire *et al.*, (2009), Upadhy. *et al.*, (2012), Sreekala & Bhat (2016), Sati and Tiwari (1989–90), Chandrasekhar *et al.*, (1986), Manoharachary and Bhairanath (1985). This species is being documented for the first time in freshwater from the research area.

2. *Campylospora chaetocladia* Ranzoni, *Farlowia*. 4:371-337. 1953.
Description: Conidia composed of two parts, proximal half triangular, 3–4 septate, 8–12.5 µm high, 10–12 µm wide at the base, distal half allantoids, 3–4 celled, 9–13 µm long, 3.5–5.0 µm wide. Appendages arise from end cell setae like 30–40 µm long.
Matrix: Submerged leaves.
Locality: Visapur dam.
Date: 30 July 2022.
Note: The current fungus has traits with the species *Campylospora chaetocladia*. In freshwater bodies, this species is often found.
This particular species was discovered on the submerged leaves of numerous plants in freshwater near Mangalore in the Western Ghats of Karnataka State and Jabalpur (Chandrasekhar *et al.*, 1986; Sridhar and Kaveriappa, 1988, 1989; Ramesh and Vijaykumar, 2005). In the research region, the current species is uncommon. It has been reported for the first time from Gujarat state by Ahire *et al.* (2009). This species is rarely occur in study area in Ahmednagar District.
3. *Chaetendophragma triangularia*. Matsushima var. *africana* Pirozynski. *Mycol Pap.* 129: 42-44. 1972.
Description: Conidiophores up to 74.2µm long and 6.3–9.0 µm thick. Conidia with rostrum 38–42 µm long, 6.3–9.0 µm thick in the broadest part, mostly 4 septate, rostrum usually 18–38 µm long, middle 3 cells brown, apex cell pale brown, lateral appendages 12–33 µm long narrow tapering, lateral appendages are either on one side or on both the sides.
Matrix: Foam sample and submerged wood.
Locality: Visapur dam.
Date: 11 Aug 2022.
Note: Except for the smaller conidia, the characters in the current collection resemble those in the original description. India is where Rajashekar and Kaveriappa (1992) first noted its presence. The state of Maharashtra is where the unusual species was initially discovered by Ghanwat and Reddy, (2011). reported that this species is of rare occurrence and it is being reported for the first time from Ahmednagar district.
4. *Diplocladiella scalaroides* Arnaud ex Ellis., *More Dematiaceous Hyphomycetes* CMI: 229. 1976.
Description: Conidia V-shaped conidiophores 22–48 µm long, 3–4 µm thick. Conidia 2 armed 15–40 µm wide and basal cell 2–4 × 2–3 µm, 8 celled, five of its eight cells are brown but basal cells are colourless.
Matrix: submerged leaves. Locality:
Visapur dam.
Date: 30 Aug 2022.
Note: The current species shares several traits with the one in the initial description. One observable difference from the known species is the lack of unpigmented hair-like cells on both arms. Previously, reports of this species from Hyderabad Madhasudan Rao and Manoharachary, (1980), Karnataka, Sridhar and Kaveriappa, (1989), Ramesh and Vijaykumar (2005), and Maharashtra were made Borse and Patil, (2007). conidia in foam Patil and Borse, (2015). It is occasionally occur in study area.
5. *Flagellospora penicillioides* Ingold., *Trans. Brit. Mycol. Soc.* 27:41. 1944.
Description: Conidiophores hyaline, erect, septate, penicillate, irregularly branched, bi-or tetra verticillate, 25–250 µm. X 2.0–2.5 µm. At the first branch, micronematous.

Conidiogenous cells phialidic, apical, usually 3 on each branch, hyaline, 17–22 μm . x 2.0–2.5 μm . Conidial primordium, which bears finger-like protrusion of the conidiogenous cell, elongates and curves, septates, and is released. Mature detached conidia hyaline, walls thin and smooth, sigmoid or curved in 1 or 2 planes, tapering 43–45 μm . x up to 2 μm . with one usually median septum per spore.
 Matrix: Foam sample and submerged wood.

Date: 10 Jan 2023.

Locality: Visapur dam.

Note: The specimen is recognized based on dimensions and characteristics that match the original description of the species. This species was discovered by Sridhar and Kaveriappa in Karnataka in (1986), and they declared it new to India. Later, Sati and Tiwari (1992) obtained it from the Kumaun Himalaya area on submerged leaves. It is often seen and has just been discovered in Maharashtra. This species rarely occur in study area.

6. *Lunulospora curvula* Ingold. *Trans.Br.mycol. Soc.* 25:339-417. 1942.

Description: Conidia have a crescent-shaped appearance, are inflated in the middle, taper towards the ends, and have a noticeable connection scar right below the inflated region on one side of the convex surface 45–60 μm . Broad in the inflated region and 1.5–2.0 μm at both ends. Subramanian and Bhat (1981) first reported this species in India. Later, Sridhar and Kaveriappa (1986) collected it on submerged leaves from various localities in Karnataka state. and Gujarat Conidia in foam samples Patil and Borse, (2015d). It is frequently encountered, which is being reported from the study area.

Matrix: Foam samples and submerged leaves.

Date: 7 Feb 2023.

Locality: Visapur dam.

Photoplates:



Figure 1



Figure 2

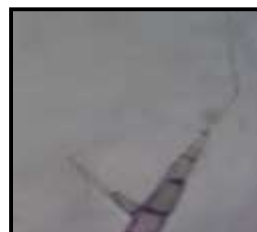


Figure 3

Chaetendophragma



Arnauia ex Ellis.



Ingold.



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