

OLPIDIOPSIS : A PARASITIC FUNGUS FROM ALKALINE WATERS

During the course of study of aquatic mycoflora of Indian alkaline ponds, the authors isolated five species of the genus *Olpidiopsis* parasitising members of the family Saprolegniaceae inhabiting the aforesaid habitat. This paper embodies the descriptions of two species of the genus *Olpidiopsis* viz., *O. braziliensis* and *O. vexans* recorded for the first time from this country (India). For the remaining three only the variations from the originally described forms have been mentioned. The hosts were isolated using boiled hempseed as bait.

1. *O. achlyae* Mc Larty; Fig. 1

Parasitic in *Achlya* sp., isolated from pond water (pH 7.7). This isolate differs from those of DAS-GUPTA AND JOHN (1953) and DAYAL AND THAKURJI (1968) in having smaller sporangia and resting spores.

2. *O. braziliensis* Sparrow; Fig. 2

Thallus endobiotic, holocarpic, sporangia elliptical, measuring 127-161 × 40-60 μm , wall thin and smooth, with one to two cylindrical exit tubes. Zoospores not observed. Resting spores spherical, hyaline, 31 μm in diam., with granular contents and central globules, wall smooth and thick, companion cells 1-3, globose or ellipsoidal, 17-20 μm in diam., hyaline and smooth walled.

Parasitic in the hyphae of *Achlya* sp., isolated from pond water (pH 7.7). Although this isolate possesses larger sporangia, smaller resting spore and companion cells which are higher in number than reported earlier (SPARROW, 1960), but has been identified as *O. braziliensis* following the key given by SPARROW (1960) and also keeping in mind the criteria later emphasised by SRIVASTAVA (1966, 1975). This is the first record from India.

3. *O. fusiformis* Cornu ; Fig. 3

Parasitic in the hyphae of *Achlya* sp., isolated from pond water (pH 7.7). This isolate differs in having smaller sporangia than the isolate of CORNU (1872) and SRIVASTAVA AND BHARGAVA (1963), but agrees much more with the isolate of REINSCH (1878), BUTLER (1907) and SPARROW (1932).

4. *O. saprolegniae* (Braun) Cornu var. **levis**; Fig. 4

Parasitic in the hyphae of *Saprolegnia ferax*, isolated from pond water (pH 7.7). COKER (1923) has not given any measurement of various structures and hence, no comparison could be made with his isolate. The only difference which could be observed is that the male cells in the present isolate have thicker walls than that of COKER's isolate.

5. *O. vexans* Barnett; Fig. 5

Sporangia 1-2, formed in the terminal swellings of the host hyphae, elliptical 100-217 × 31-67 μm with colourless and smooth wall. Resting spore spherical with thin warty

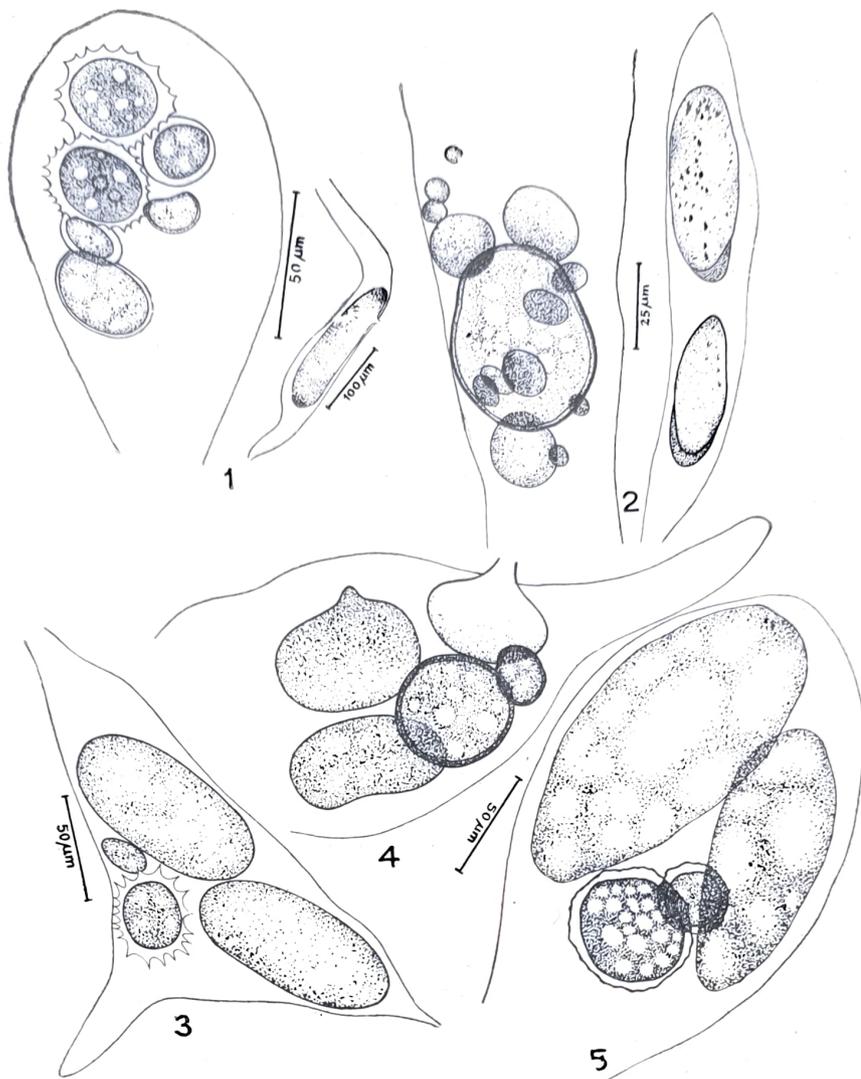


Fig. 1. *Olpidiopsis achlyae*, Fig. 2. *O. braziliensis*, Fig. 3. *O. fusiformis*, Fig. 4. *O. saprolegniae* var. *levis*, Fig. 5. *O. vexans*.

exospore and thick endospore, measuring 34-50 μm in diam. Companion cell one to each resting spore, spherical, commonly 17 μm in diam., with smooth colourless wall.

Parasitic in the hyphae of *Achlya* sp., isolated from pond water (pH 7.7). This isolate differs from the original one in having longer sporangia and smaller resting spores. This is the first record from India.

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