



Achlya bisexualis (Achlyaceae, Saprolegniales, Oomycota) – A new record for India

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With 2 figures

Abstract: In the present report, *Achlya bisexualis* Coker and Couch is isolated, described and illustrated based on morpho-physiological characteristics and molecular analysis. The oogonial thallus of this dioecious (heterothallic) species is mainly recognized by the presence of predominantly spherical or pyriform gemmae and spherical or obpyriform oogonia with non-maturing oospores. The isolated specimen was identified by sequences comparison of the D1/D2 domains of the LSU and ITS-rDNA. To the best of our knowledge, this is the first confirmed record in India of *Achlya bisexualis*, known in the literature as a parasite or necrotroph. Besides, neither any species of genus *Achlya* has previously been subjected to molecular evaluation from India.

Keywords: baiting technique; Chandra Prabha Wildlife Sanctuary; oomycota; straminipila; systematics; watermold; taxonomy

Introduction

Achlya Nees is an important genus of the family *Achlyaceae* (Saprolegniales, Oomycota) that belongs to the monophyletic Kingdom Straminipila (Phylum Heterokonta) (Dick 2001, Beakes et al. 2014). The members of *Achlya* have a vegetative thallus characterized by mycelium with sympodial branching, filamentous coenocytic hyphae which usually give rise to long, cylindrical, terminal zoosporangia with a specific type of achlyoid discharge (Sparrow 1960, Johnson et al. 2002). Most of the species in this genus are well-adapted to freshwater habitats and have specialized asexual propagules called