AQUATIC PHYCOMYCETES COLLECTED FROM THE ATHENS STATE HOSPITAL PONDS.¹ Collections of soil and water from the Athens State Hospital ponds yielded fourteen species of fungi. This represents the first aquatic fungi collected in southeastern Ohio. Two of the species are reported from Ohio for the first time

There are five published reports of aquatic fungi from Ohio. These include two from northwestern Ohio (Beneke and Schmitt, 1961; Schmitt and Beneke, 1962) and three from southwestern Ohio (Harvey, 1952; Cooke and Bartsch, 1959; 1960). This present report adds to the records of aquatic fungi from Ohio and contains the first record of such fungi from the southeastern part of the state.

Species of aquatic fungi presented in this paper were collected from the water and soil in the Athens State Hospital ponds, Athens, Ohio, during a year-long study, from May, 1964, to April, 1965. The fungi were recovered by placing halved, boiled hemp seeds in the water or soil samples collected from the ponds and waiting for fungus growth, which was then isolated by the hyphal-tip method.

Identifications were made by using the following keys: for Saprolegniales and Blastocladiales, North American Flora (Coker and Matthews, 1937); for Chytridiales, Leptomitales and Lagenidales, the publication Aquatic Phycomycetes (Sparrow, 1960); and for the Pythiaceae, Studies on the Genus Phythium (Matthews, 1931). All identifications were verified by Dr. E. S. Beneke, Michigan State University.

The species collected represent six orders of aquatic Phycomycetes, including ten genera and fourteen species. The uniflagellate species include Blastocladia pringsheimii Reinsch and Rhizophidium carpophilum (Zopf) Fischer. The biflagellate species are Achlya bisexualis Coker and Couch, A. racemosa F. Hildebrand, Dictyuchus monosporus Leitgeb, Leptolegnia caudata DeBary, Protoachlya paradoxa Coker, Saprolegnia diclina Humphrey, S. ferax Gruith, S. parasitica Coker, Apodachlya pyrifera Zopf, Olpidiopsis vexans Barrett, Pythium aphanidermatum (Edson) Fitzpatrick and P. debaryanum Hesse. Of the above fourteen species, two, Apodachlya pyrifera and Olpidiopsis vexans, are being reported from Ohio for the first time.

The species collected were most readily obtained from November through April. The decrease in aquatic fungi collected from May through September can be explained as a seasonal decline during these months according to Waterhouse (1942). After personal communication with Dr. Beneke in November,

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1965, the hyphal-tip method of isolation was used to give the reported results.— G. L. CRANE and M. T. VERMILLION, Department of Botany, Ohio University, Athens, Ohio.

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