THE ONT. NAT. SC. BULLETIN-NO. 7.

It may be said to the intending collector that the sporangial stage is as easily preserved as the mosses. A layer of the wood or stratum upon which the sporangia form must be lifted with them and when this becomes dry it may be glued into the top or bottom of a shallow pill-box. Care has to be taken in most cases to avoid the crushing of the extremely delicate fructifications. The few that happen to be too tall for a ¹/₄ to ³/₈ inch pill-box may be glued in with their sides parallel to the bottom of the box. In the herbarium I have never seen them attacked by insect pests.

The MYXOMYCETES are a group of organisms of obscure genetic relationship. They may be characterized in brief as fungus-like organisms destitute of mycelium, producing from resting spores amoeba-like swarm-spores which increase by division and finally aggregate or fuse into masses of protoplasm called plasmodia which develop resting-spores. By many they are regarded as animals and are called "Mycetozoa."

They are usually classified into one order of parasites on living plants and two orders of saprophytes—the Acrasieae consisting of incompletely fused zoospores and Myxogasters in which the plasmodium consists of completely fused zoospores.

Species of the last order only are named in the following list :

Spores exposed : No. 1.

1. Ceratiomyxa mucida (Pers.), white or watery-white; no mycelium. Common on wet, rotten wood in hot weather.

Spores enclosed in sporangia : Nos. 2-51. Lacking capillitium : Nos. 2-7.

2. Licea biforis, Morgan, n. s. I found this on dead black ash near Granton in 1892, and sent it to the late A. P. Morgan who published the description in the following year. The sporangia, but for the color, which is bright yellow-brown, suggest the oyster-shell barklouse. The dark yellow, globose spores are 10-11 microns in diameter.

3. Licea variabilis, Schrad. Dull red to black, spores yellow, rough, 14 mic.

4. *Tubulina cylindrica*, Bull. Spores rusty. The aethalium which may be as large as a dime or larger passes through a bright red stage which is very attractive.

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