

A SLIME MOULD COLLECTION FOR COMPARISON AND IDENTIFICATION

Mayne Longnecker

The University of Iowa has long been known as a center of mycological study. The late Dr. Thomas Houston Macbride began his labors there in the late '70's, and his collections as well as his extensive library provided a basis for more recent work. Dr. Macbride's particular field of interest was the myxomycetes or slime moulds, and his writings concerning these forms have long been classic.

Following Dr. Macbride's election to the presidency of the University and his later retirement, Dr. George W. Martin came into the department of Botany to carry on its mycological tradition. It seemed entirely fitting that the first extensive publication of Dr. Martin should have been a revision of Macbride's "North American Slime Moulds" (second edition, 1922). The new book, "The Myxomycetes" (1934), in which both men collaborated, was published just after Dr. Macbride's death last year.

In order that more intelligent work may be done in various parts of the country in the classification of the myxomycetes, and for the purpose of stimulating interest in them, Professor Martin is assembling a few collections of representative forms from the herbarium at the University of Iowa, and placing these in the hands of interested individuals at strategic and widely separated locations. The specimens included have been checked against the types from which descriptions were written and have the same validity as type material.

It is the good fortune of the department of biology of Southern Methodist University to have received one of these collections for use in the study of Texas myxomycetes. The number of species is thirty-nine, and twenty-three of the sixty known genera are included. Dr. Martin has stated

that he will be able to supplement this somewhat in the future. A list of species follows:

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| <i>Ceratiomyxa fruticulosa</i> (Muell.) Macbr. | <i>Diachea leucopodia</i> (Bull.) Rost. |
| <i>Fuligo cinerea</i> (Schw.) Morg. | <i>D. splendens</i> Peck. |
| <i>Badhamia rubiginosa</i> (Chev.) Rost. | <i>Lamproderma arcyrionema</i> Rost. |
| <i>Physarum bivalve</i> Pers. | <i>Tubifera ferruginosa</i> (Batsch.) Macbr. |
| <i>Pb. cinereum</i> (Batsch.) Pers. | <i>Enteridium rozeanum</i> Wing. |
| <i>Pb. didermoides</i> (Pers.) Rost. | <i>Dictydiaethalium plumbeum</i> (Schum.) |
| <i>Pb. polycephalum</i> Schw. | Rost. |
| <i>Pb. nutans</i> Pers. | <i>Dictydium cancellatum</i> (Batsch.) Macbr. |
| <i>Pb. viride</i> (Bull.) Pers. | <i>Lycogala epidendrum</i> (Buxb.) Fries. |
| <i>Craterium leucocephalum</i> (Pers.) Ditmar. | <i>Perichaena quadrata</i> Macbr. |
| <i>C. cylindricum</i> Masee. | <i>Arcyria nutans</i> (Bull.) Grev. |
| <i>Physarella oblonga</i> (Berk. & C.) Morg. | <i>A. denudata</i> (Linn.) Sheldon. |
| <i>Mucilago spongiosa</i> (Leyss.) Morg. | <i>A. cinerea</i> (Bull.) Pers. |
| <i>Didymium squamulosum</i> (Alb. & Schw.) | <i>Hemitrichia serpula</i> (Scop.) Rost. |
| Fries. | <i>H. vesparium</i> (Batsch.) Macbr. |
| <i>D. minus</i> Lister. | <i>H. clavata</i> (Pers.) Rost. |
| <i>Diderma crustaceum</i> Peck. | <i>H. stipitata</i> (Mass.) Macbr. |
| <i>Stemonitis fusca</i> (Roth) Rost. | <i>Trichia varia</i> (Pers.) Rost. |
| <i>S. splendens</i> Rost. | <i>T. affinis</i> deBary. |
| <i>Comatricha nigra</i> (Pers.) Schroeter. | <i>Oligonema nitens</i> (Lib.) Rost. |
| <i>C. typhoides</i> (Bull.) Rost. | |

The writer will appreciate any coöperation which botanists of Texas may give him in studying these forms and will endeavor to classify any specimens sent him, with the aid of this collection and such literature as is available. Doubtful specimens will be referred to Dr. Martin. It is hoped that a good idea of the myxomycetous flora of the region may be obtained in this way in a relatively short time.

AN OLD EXPERIMENT CARRIED A STEP FURTHER

John D. Boon

An old experiment described in almost every elementary college text book that has been issued for years, illustrates how the boiling point of water may be reduced to room temperatures by boiling a small amount of water in a flask until the air has been carried out by the steam, then putting a stopper in the flask and holding it under a stream of cold