

and any disease which would tend to limit its growth might be considered as being of economic importance. During the past season the writer has collected at a number of points within the Salt Lake Valley specimens of this grass on which there was found a *Phoma* which seems not to have been heretofore recorded as occurring on it.

The species of *Phoma* under consideration does not seem to agree with any of the species described as occurring on various species of Gramineae. A review of the literature indicates that a considerable number of species of *Phoma* have been found on the Gramineae but many of them are imperfectly described, so that it is difficult to tell whether the species of *Phoma* occurring on Western wheat-grass is or is not new. In some respects it resembles *Phoma lophio stomoides* Sacc., although the spores are smaller, being as a rule less than $15\ \mu$ in length; rarely spores of $15\ \mu$ or over are found. Owing to the size of the spores and other prominent characters it is possible that the species is new. A more extended note will be published later.

P. J. O'GARA

SALT LAKE CITY, UTAH,
September 23, 1915

A FUNGUS OF UNCERTAIN SYSTEMATIC POSITION OCCURRING ON WHEAT AND RYE

For some time the writer has been studying a very interesting organism which has been found occurring on wheat and rye. Specimens of wheat and rye infected with the organism have been collected at various points in the Salt Lake Valley. The fungus seems to attack the heads of both wheat and rye some time before they emerge from the sheaths. Very often the heads are so severely attacked as not to emerge but remain permanently within the sheath. The fungus is usually found on the rachis, the glumes, the essential organs and the inner parts of the sheaths. At no time has it been found to occur on the internodes below the upper node. The effect upon the inflorescence seems to be such as to prevent the normal development of the essential organs.

The organism was readily isolated and has

been grown in pure culture for several months. It grows readily in agar, potato, rice and other media producing normal mycelium and fruiting bodies. The mycelium is white or hyaline, multi-septate and much branched, varying from about 2.5 to $5.8\ \mu$ in thickness. Perithecia-like bodies are borne on either short or long stalks on the mycelium or they may be borne terminally. Generally they are found singly but often are more or less grouped. These bodies are from 9 to $17.5\ \mu$ in diameter, being spherical or slightly oval, brown to dark brown in color and containing small refractive bodies 2.5 to $5.8\ \mu$ in diameter held in a more or less granular mass. The number of refractive bodies may vary from 1 to 6 , there being no seeming regularity in number. The walls of the perithecia-like bodies are $\frac{1}{2}\ \mu$ or less in thickness and can be readily separated from the contents, leaving the contents virtually intact.

In some respects this fungus bears a striking resemblance to *Endomyces mali* Lewis.¹ However, no sporidia are produced and the perithecia-like bodies do not contain germinating ascospores. It is therefore only the general appearance of the fungus in culture that bears a resemblance to the perithecia-bearing mycelium of *Endomyces mali*. The perithecia-like bodies of this apparently new organism are produced singly or on short branches of the mycelium or terminally without the fusion of cells or nuclei. When the perithecia-like bodies are placed in culture media germination follows within a very short time, producing a vigorous mycelium which in turn produces perithecia-like bodies in about 5 to 7 days, depending upon temperature conditions.

It has not been determined as yet what may be the function of the refractive bodies generally found in the perithecia-like structure. It is possible that these bodies may be storage material inasmuch as they have not been seen to germinate. Undoubtedly a considerable amount of cytological work must be done in order to determine the systematic position of the fungus. This work is in progress and at

¹ Bulletin No. 178, Maine Agricultural Experiment Station, April, 1910.

a later date a more extended account of the fungus will be given.

P. J. O'GARA

SALT LAKE CITY, UTAH,
September 23, 1915

THE MEETING OF SECTION C AT THE COLUMBUS MEETING OF THE AMERICAN ASSOCIATION

THE first session was held on the afternoon of Friday, December 31, in Chemistry Hall, Ohio State University, Vice-president William McPherson in the chair, with an attendance of about 70, practically all from the immediate vicinity of Columbus. The following officers were elected:

Vice-president and Chairman of the Section—

Julius Stieglitz, Chicago.

Member of Council—W. Lloyd Evans, Columbus.

Member of General Committee—M. T. Bogert, New York.

Member of Sectional Committee—A. A. Noyes, Boston.

The following papers were read:

"Some Interesting Physical and Chemical Properties of Clays" (illustrated by experiments), by Arthur S. Watts.

"The Contributions of Chemistry to the Production and Preparation of Human Food," by John F. Lyman.

"The American Chemist and the War's Problems," by James R. Withrow.

At six o'clock the members present enjoyed a very pleasant dinner in the Ohio Union. This was followed at 8 o'clock by a session, attended by about 200, at which Dr. Frank K. Cameron gave an address entitled "The Fertilizer Resources of the United States."

JOHN JOHNSTON,

Secretary of Section C

THE MATHEMATICAL ASSOCIATION OF AMERICA

ON December 30 and 31, 1915, there was held at Columbus, Ohio, the organization meeting of a new mathematical association, the call for which had been signed by 450 persons representing every state in the Union, the District of Columbia, and Canada. The

object of the new association is to assist in promoting the interests of mathematics in America, especially in the collegiate field. It is not intended to be a rival of any existing organization, but rather to supplement the secondary associations on the one hand, and the American Mathematical Society on the other; the former being well organized and effective in their field, and the latter having definitely limited itself to the field of scientific research. In the field of collegiate mathematics, however, there has been, up to this time, no organization and no medium of communication among the teachers, except the *American Mathematical Monthly*, which for the past three years has been devoted to this cause. The new organization, which has been named the Mathematical Association of America, has taken over the *Monthly* as its official journal.

There were 104 persons present at the organization meeting. The constitution and by-laws together with a full report of the proceedings will be published in the January issue of the *Monthly*. The following officers were elected:

President, Professor E. R. Hedrick, University of Missouri.

First Vice-president, Professor E. V. Huntington, Harvard University.

Second Vice-president, Professor G. A. Miller, University of Illinois.

Secretary-Treasurer, Professor W. D. Cairns, Oberlin College.

Publication Committee, Professor H. E. Slaught, University of Chicago, managing editor, Professor W. H. Bussey, University of Minnesota, and Professor R. D. Carmichael, University of Illinois.

These officers, together with the following, constitute the executive council:

Professor R. C. Archibald, Brown University; Professor Florian Cajori, Colorado College; Professor B. F. Finkel, Drury College; Professor D. N. Lehmer, University of California; Professor E. H. Moore, University of Chicago; Professor R. E. Moritz, University of Washington; Professor M. B. Porter, University of Texas; Professor K. D. Swartzel, Ohio State University; Professor J. N. Van der Vries, University of Kansas; Professor Oswald Veblen, Princeton University; Professor J. W. Young, Dartmouth College; Professor Alexander Ziwet, University of Wisconsin.