

fungus when it first develops on the under side of an orange leaf in larvæ of the whitefly, forms a chocolate-brown (Saccardo's color chart, No. 10) stroma, which somewhat resembles the citrus red scale, *Chrysomphalus aonidum*. From the margins of this stroma there extend colorless thick-walled hyphæ. This stage of the fungus is sterile, and in this condition it was described by Webber under the name of "Brown fungus."

In the later development of the fungus (usually in the summer or fall) it sends out long, straight, colorless hyphæ, which grow, not only over the under surface of the leaf, but around the edges and upon the upper surface. On the upper surface of the leaves, upon short lateral branches of these hyphæ, are borne aggregations of cells, which seem to be characteristic sporodochia of the genus-form *Ægerita*. These sporodochia are 60 to 90 microns in diameter, and are more or less spherical clusters of inflated oval cells, 12 to 18 microns in diameter. From near the place of attachment of the sporodochium there radiate 3 to 5 hypha-like appendages, 150 to 200 microns long by 6 to 8 microns wide, one to three septate. This entire aggregation of spherical cells and appendages remains in unison, and functions as a spore. When abundant, these sporodochia present to the eye the appearance of a reddish-brown dust over the upper surface of the leaves. If the lower side of a leaf bearing brown fungous stromata happens to be turned upward for some time, the sporodochia will develop abundantly there. These sporodochia were first noticed in the fall of 1905, accompanying the "brown fungus"; but only recently has the connection between the two been proved. Their supposed connection was touched upon in 1908.²

These sporodochia are curious and interesting. When once detached from the leaf, they blow about on smooth surfaces at the least motion of the air, but on alighting upon another leaf or fairly rough paper, they tend to hold fast to it.

² "Fungi Parasitic upon *Aleyrodes citri*," Univ. of Fla., Special Studies, No. 1, p. 36.

When germinated in hanging-drop cultures these sporodochia produce hyphæ identical with those of Webber's "brown fungus." When the sporodochia are placed upon the larvæ of *Aleyrodes citri*, typical stromata of the "brown fungus" arise. During the summer and fall of 1909, sporodochia were carefully picked off under a compound microscope. A camel's hair brush, moistened with water containing these sporodochia, was drawn over live whitefly larvæ. Nine days after, the first and second stage larvæ began to show the effects of fungous infection. In sixteen days, initial stages of the stromata were evident bursting through the edges of the larvæ. At a later date, the typical brown stromata were formed, and in three months *Ægerita* sporodochia were produced by the surface hyphæ on the upper sides of the leaves.

The economic importance of this fungus makes it desirable that it should have a scientific name. The form of the sporodochium most nearly resembles that of the provisional genus *Ægerita*. The fungus was referred to Dr. Roland Thaxter, of Harvard University, who kindly examined it, and confirmed the view that it might well be placed under the name of *Ægerita* until the perfect stage was found. It is therefore proposed to designate Webber's "brown fungus" as *Ægerita webberi* n. sp. The form and appearance of the hyphæ suggest relationships to the Hypochnaceæ of the basidiomycetous fungi.

H. S. FAWCETT

A CORRECTED CLASSIFICATION OF THE EDENTATES

In a recent paper¹ the writer was led, from a consideration of various anatomical characters, to the recognition of the Edentata as a *superorder* of mammals comprising four distinct *orders*, as follows:

SUPERORDER EDENTATA (Vicq d'Azyr).

Order 1. TÆNIODONTA Cope.

Order 2. XENARTHRA Gill.

¹ "A Suggested Classification of Edentates," State University of Oklahoma, Research Bulletin, No. 2, 1909.

Order 3. PHOLIDOTA Weber.

Order 4. TUBULIDENTATA Flower.

A further examination of the literature reveals the fact that the term PHOLIDOTA Weber (1904), comprising the *Manidæ*, is antedated by PHOLIDOTA Merrem ("TENTAMEN SYSTEMATIS AMPHIBIORUM," 1820), applied to the *Reptilia*. As SQUAMATA Huxley (1872), which also has been frequently used to designate the *Manidæ*, is itself antedated by SQUAMATA Oppel (1811), applied to an order or superorder (Osborn) of *Reptilia*, it seems necessary to adopt some other name for this group. I therefore propose that the order to which the *Manidæ* belong, be called the LEPIDOTA [Gr. *λεπιδωτός*, scaly].

Making this change and listing the families, our classification of the Edentates is as follows:

SUPERORDER EDENTATA Vicq d'Azyr.

Order 1. TÆNIODONTA Cope.

Family *Conoryctidæ* Wortman.

Family *Stylinodontidæ* Marsh.

Order 2. XENARTHRA Gill.

Suborder Pilosa Flower.

Family *Bradypodidæ* Bonaparte.

Family *Megalonychidæ* Zittel.

Family *Megatheriidæ* Owen.

Family *Myrmecophagidæ* Bonaparte.

Family *Orophodontidæ* Ameghino.

Suborder Loricata Flower.

Family *Dasypodidæ* Bonaparte.

Family *Glyptodontidæ* Burmeister.

Order 3. LEPIDOTA Lane.

Family *Manidæ* Gray.

Order 4. TUBULIDENTATA Huxley.

Family *Orycteropodidæ* Bonaparte.

H. H. LANE

STATE UNIVERSITY OF OKLAHOMA,

NORMAN, OKLAHOMA,

February 15, 1910

THE NORTH CAROLINA ACADEMY OF
SCIENCE

THE ninth annual meeting of the North Carolina Academy of Science was held at Wake Forest College, Wake Forest, N. C., on April 29 and 30, 1910, with thirty-one members in attendance. The meeting of the executive committee, held on the afternoon of April 29, was followed by a general meeting for the reading and discussing of papers. At night in Wingate Memorial Hall, the academy

was formally welcomed to Wake Forest College by President W. L. Poteat. President W. C. Coker, of the academy, then delivered the presidential address, "Science Teaching in the Schools and Colleges of North Carolina."

Because of their interest to the general public, the following papers were then given with lantern slide illustrations and diagrams: "Pellagra," a preliminary report, by Professor J. J. Wolfe, of Trinity College; "Halley's Comet," by Professor A. H. Patterson, of the University of North Carolina; "The Comet, What is It?" by Professor John F. Lanneau, of Wake Forest College.

On Saturday morning, April 30, the academy reconvened for the annual business meeting. The reports of the secretary-treasurer and of various committees were heard. Forty-six new members were received into the academy. These, together with the 43 former members, give a total membership of 89. The report of the treasurer showed the finances of the academy to be in a very flourishing condition. A large and representative committee was appointed to collect data and report to the next meeting of the academy a course of study in the sciences for the high schools of the state. It is the purpose of the academy to transmit this with its recommendation to the state superintendent of public instruction and to the North Carolina Teachers' Assembly.

The following officers were chosen for the ensuing year:

President—W. H. Pegram, Trinity College, Durham, N. C.

Vice-president—W. S. Rankin, State Board of Health, Raleigh, N. C.

Secretary-Treasurer—E. W. Gudger, State Normal College, Greensboro, N. C.

Executive Committee—F. L. Stevens, A. & M. College, W. Raleigh, N. C.; H. H. Brimley, State Museum, Raleigh, N. C.; H. V. Wilson, University of North Carolina, Chapel Hill, N. C.

In point of attendance, number of new members added, number of papers read, general interest as shown in the discussion of papers, this meeting excelled any since the founding of the academy.

The following papers were presented:

The Cause of Pellagra (a preliminary report):

JAS. J. WOLFE, Trinity College, Durham, N. C.

Believing that pellagra must be an infectious disease, and that, because of its generalized nature, the organism was most likely to occur in the blood, the writer, last September, began a