A paper by Dr. G. H. Shull[2] on the apparent independence in inheritance of the stem and bud colors (anthocyan) in *Œnothera,* suggests a reference to the condition found in the new garden sunflower with wine-red on the rays. The more usual red (chestnut red, *i. e.,* red on orange) variety can nearly always be recognized in the seedling stage by the dark purple stems, a fact of utility in horticultural practise. To our surprise, when we came to raise the wine-red (red on primrose yellow) form in quantity, we found that the purple-stem character failed, in spite of the fact that the history of the plant indicated that it differed from the other red one in the yellow background, not at all in the anthocyan factor. Mr. Leonard Sutton, who grew the wine-red variety in England from our seed, also reports: "It is a remarkable fact, as you mention, that the purplish color is not shown in the stems of this new variety."[3] The question naturally arises, whether in such a case it is necessary to assume a splitting or complexity of the factor representing anthocyanin; whether it is not equally possible that some condition has arisen controlling the expression of the factor for red, that factor remaining genetically the same? In the course of breeding plants, we are doubtless too apt to assume that our recorded data represent the whole of the pertinent facts. It is evident that any given plant represents, in addition to the known "units," an assemblage of others which are unknown or merely suspected, while the known ones may have unknown properties. Thus, in spite of records and observations, the stage may be invaded at any moment by unnoticed *dramatis personæ,* and the development of the plot may belie the promise of the first acts.

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November 29, 1914

A Remarkable Microsaur from the Coal Measures of Ohio

The Amphibia of the American Coal Measures as now known are represented by eighty-eight species, representing seventeen families and five orders. All of the species of *Branchiosauria* and all of the hitherto recognized *Microsauria* are uniform in the absence of an osseous carpus and tarsus. It is thus with considerable interest that we find an osseous tarsus in a microsaurian species from Linton, Ohio. The species was described many years ago by Cope[1] and it has not since been studied until Professor Grabau recently forwarded the type specimen to me from Columbia University where it forms a part of the geological collections.

Ichthycanthus platypus, referred by Cope to the Permian genus *Eryops,* is a small microsaur which in life probably did not attain a length of more than eight inches but was of a very active nature, as seems to be indicated by the scanty remains preserved, which consist of the posterior half of the body.

At first glance the specimen recalls a reptile, such as *Eosauravus Copei* Will., but closer examination reveals remarkable differences. The femur, in its well-ossified condition and the high degree of development of the trochanters, is typically reptilian; and there is nothing strikingly amphibian in the tibia and fibula. The tarsus, however, is reptilian with its central, and the distal row being composed of five elements. All of the elements are well ossified and articulate with phalanges which have a typical amphibian arrangement with the formula 2–2–3–3–2. The sharply clawed ungual phalanges add to the anomalous nature of the species.

The recognition of the exact nature of this species adds considerably to our knowledge of the diversity of structure among the Coal Measure Amphibia. Environmental conditions prior to the Coal Measures had effected a wide diversity of structure within the group. So early in the geologic history of the land vertebrates as the Pennsylvanic the Amphibia had assumed a variety of forms which had specialized into strictly aquatic, terrestrial, sub-terrestrial and arboreal. Specialization had extended to the loss of limbs, ribs and

[2] *Journal of Genetics,* June, 1914.

[3] Letter of September, 1914.

[1] Cope, E. D., 1877, *Proc. Amer. Phil. Soc.,* p. 574; 1888, *Trans. Amer. Phil. Soc.,* p. 289, Fig. 1.

ventral armature, in a few species, and to the acquirement of claws, running legs or a long propelling tail with expanded neural and hemal arches in others. This wide diversity of structure is intensified by the recognition of *Ichthycanthus platypus* as a microsaur with an osseous tarsus, serving to confuse still further our hazy ideas of amphibian phylogenesis.

A full description with illustrations will be given of this interesting form in another place.

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THE OHIO ACADEMY OF SCIENCE

THE twenty-fourth annual meeting of the Ohio Academy of Science was held at Ohio State University, Columbus, Ohio, on November 26, 27 and 28, 1914, under the presidency of Dr. T. C. Mendenhall, of Ravenna.

The address of the president was delivered Friday evening, on the subject "Some Pioneers of Science in Ohio"; and on Saturday morning the academy listened to a very timely lecture upon "Foot and Mouth Disease," by Dean D. S. White, of the College of Veterinary Medicine of Ohio State University.

The trustees of the research fund announced a further gift of $250 from Mr. Emerson McMillin, of New York, for the encouragement of the research work of the academy.

In accordance with the report of a committee appointed a year ago, the academy voted to deposit the library of the academy with the library of Ohio State University—an arrangement which may be terminated by either party on suitable notice.

The matter of the celebration of the annual meeting of 1915 as a quarter centennial anniversary was referred to the executive committee.

Twenty-three new members were elected, making the total membership of the academy two hundred and fifty-four.

The officers of the academy for the year 1914–1915 are as follows:

President—Professor J. Warren Smith, Ohio State University and Ohio Section U. S. Weather Bureau.

Vice-presidents—(Zoology) Professor F. C. Waite, Western Reserve University; (Botany) Professor F. O. Grover, Oberlin College; (Geology) Professor C. G. Shatzer, Wittenberg College; (Physics) Professor J. A. Culler, Miami University.

Secretary—Professor E. L. Rice, Ohio Wesleyan University.

Treasurer—Professor J. S. Hine, Ohio State University.

Librarian—Professor W. C. Mills, Ohio State University.

Executive Committee, together with the president, secretary and treasurer, members ex officio—Professor C. D. Coons, Denison University; Professor T. M. Hills, Ohio State University.

Board of Trustees of the Research Fund—Professor W. R. Lazenby, Ohio State University; Professor M. M. Metcalf, Oberlin College; Professor N. M. Fenneman, University of Cincinnati.

Publication Committee—Professor J. H. Schaffner, Ohio State University; Professor C. H. Lake, Hamilton; Professor L. B. Walton, Kenyon College.

The complete scientific program follows:

Presidential Address, "Some Pioneers of Science in Ohio," Dr. T. C. Mendenhall.

Lecture, "The Foot and Mouth Disease," Dean D. S. White, College of Veterinary Medicine, Ohio State University.

Papers

"Efficacy of Lightning Rods," J. Warren Smith.

"Thunderbolt from Whitecliff Bay," Katharine Doris Sharp.

"A Preliminary Survey of Plant Distribution in Ohio," John H. Schaffner.

"Akron Fishbait Industry," Chas. P. Fox.

"The Physiographic Provinces which meet in Ohio," N. M. Fenneman.

"Color and Coat Inheritance in Guinea Pigs," W. M. Barrows.

"Note on a New Nematode Parasite of Cryptobranchus," F. H. Krecker.

"Prediction of Minimum Temperatures for Frost Protection," J. Warren Smith.

"Is a Dry Summer and Autumn Apt to be Followed by a Wet Winter and Spring with Possible Floods?" J. Warren Smith.

"Comparative Rate of Growth of Certain Timber Trees," William R. Lazenby.

"Inheritance of Taillessness in the Cat," W. M. Barrows and C. A. Reese.

"The Cause of Milk Sickness and Trembles," E. L. Moseley.