

credit either explicitly or implicitly to Eratosthenes for the discovery of the method. In particular, this was done in the two histories of mathematics recently published in our country as well as in the excellent work of reference in two volumes on the "History of Greek Mathematics," by T. L. Heath, 1921. It was, however, not done in the extensively revised second edition of the "Geschichte der Elementar-Mathematik" in seven volumes by J. Tropfke, 1921-1924.

It seems desirable to direct attention to this matter in a widely read periodical in order to facilitate the correction of such a widespread error, especially since this correction implies greater harmony in the picture of the mathematical developments due to the Greeks prior to the time of Euclid, about 300 B. C. The given method naturally suggests itself to any one who thinks seriously about the problem of determining all the prime numbers which do not exceed a given limit, and it has probably been rediscovered independently by thousands of students of mathematics. In view of the high mathematical attainments of the Greeks at the time of Euclid one would naturally be inclined to assume that this method could not have escaped being noted by the predecessors of Euclid, and it is therefore interesting to find that such an assumption is now supported by substantial historical evidence. The fact that no explicit reference to the division of the natural numbers into the two classes now known as prime and composite has as yet been found in the literature of those peoples whose civilization preceded that of the Greeks is a striking comment on their mathematical attainments.

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ECTOLOGY OR METAXENIA?

In an article entitled "Xenia and Other Influences Following Fertilization"¹ Waller discussed fully the nature of xenia and the proper use of the term and at the same time proposed the word "ectogony" as a suitable term to describe those influences which are due to the developing zygote. Recently Swingle has proposed the term "metaxenia" for "the direct effect of pollen on the tissues of the mother plant outside the embryo and endosperm." This term is open to many objections, since the word "xenia" plainly has come to mean the appearance of ordinary dominant heredity in the endosperm and not the effect of some material which might ooze out of the zygote nor of an irritation produced by its development. The influence exerted on the mother by the developing embryo is a wide-spread phenomenon in both plants and animals and is not at all confined to cases where

a xeniophyte is present. Even in the Anthophyta a considerable part of the species have so little endosperm that it can not have much if any influence on the surrounding sporophyte tissues. Any effect that is noticed in such cases presumably comes from the zygote and is thus not "metaxenia." Definite effects from the outside on living tissues are abundant outside of the reproductive processes also, ranging all the way from effects of parasites and gall insects to tight shoes, which presumably produce corns without emitting a special "corn hormone." The term "metaxenia" would, of course, also be inappropriate if applied to gymnosperms and especially in such cases as the higher liverworts where the perigynium or so-called perianth seldom reaches its normal form if fertilization of the archegonium does not take place.

Dr. Waller's term, ectogony, is correct and appropriate from every point of view, since it simply implies an effect following fertilization and thus can be used as appropriately for the effect in a liverwort gametophyte as for one in an angiospermous sporophyte, while the term metaxenia would manifestly be confusing and even absurd if applied to the first case.

If differential effects are present through a specific influence brought in with the paternal heredity they can be designated as differential ectogony. Since this effect is, no doubt, certain to receive considerable attention in the near future, the term ectogony should by all means be accepted by both botanists and zoologists.

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REPORTS

COMMITTEE OF THE AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

At the meeting of the board of directors of the American Institute of Electrical Engineers, held in New York on August 7, President Schuchardt announced the committee appointments for the administrative year commencing August 1, 1928. The chairmen of the committees appointed are as follows:

GENERAL COMMITTEES

Executive: R. F. Schuchardt, electrical engineer, Commonwealth Edison Company, Chicago, Ill.

Finance: E. B. Meyer, chief engineer, Public Service Production Company, Newark, N. J.

Meetings and Papers: H. P. Charlesworth, plant engineer, American Telephone and Telegraph Company, New York.

¹ *Ohio Jour. Sci.*, 17: 273-284, 1917.