

# CURRENT LITERATURE

## MINOR NOTICES

**Nathanson's textbook of botany.**—This book<sup>1</sup> is written from a strictly physiological standpoint, structures receiving scant attention except as they are related to functions. The subject-matter is divided into two parts, the vegetative life and the reproduction. The first part is subdivided into (1) nutrition as a fundamental function of vegetative life, (2) the vegetative organs of the algae, (3) the structural plan of the organs of the higher plants, (4) the life history of the vegetative organs of the higher plants, (5) the orientation of the vegetative organs in space, and (6) the structure of the vegetative organs under special conditions of nutrition. The second part is subdivided into (1) reproduction in the lower plants, (2) mosses and cryptogams, (3) reproduction in flowering plants, (4) the relation between the vegetative life and reproduction, and (5) heredity. The book closes with a few remarks on the principal groups of plants.

This presentation could be read, with profit, by all classes of botanists, particularly by morphologists, who stand in greater need of such a presentation. Morphologists, however, can hardly regard the text as a "general botany," since it gives so little attention to development and phylogeny.—CHARLES J. CHAMBERLAIN.

**Natal plants.**<sup>2</sup>—The recent appearance of part 4 completes the sixth volume of this well known work. The present part contains descriptions and full-page illustrations of 25 species, most of which are of comparatively recent publication, hence little known. A brief chapter is added giving notes and corrections on plants mentioned in volumes I–VI inclusive. One species, *Brachystelma Franksiae* N. E. Brown, is new to science.—J. M. GREENMAN.

## NOTES FOR STUDENTS

**Physiology of lichens.**—The greatest advantage to the lichen of parasitism with the alga was formerly supposed to be that the lichen received carbon which the alga obtained from the air. But now it appears reasonable to suppose that the lichen may furnish the alga a portion of the carbohydrates which it secures from the substratum. This of course cannot occur when the lichen

<sup>1</sup> NATHANSON, A., *Allgemeine Botanik*. 8vo. pp. viii+471. figs. 394. Leipzig: Quelle und Meyer. 1912. *M* 10.

<sup>2</sup> WOOD, J. MEDLEY, *Natal Plants*. Vol. 6, p. 4, pls. 576–600. Bennett & Davis. Durban, 1912.