

There are many typographical errors in the book, and Volta's first name is consistently misspelled. The treatment of discoverers in both text and index is capricious and shows a poor sense of values. The various right- and left-hand mnemonic rules seem more confusing than helpful. The phrase "seat of emf" and the unnecessary neologism "microhm" (sic) are annoying, though terminology is usually treated carefully and sometimes with illuminating asides.

The paper used in the book does not do justice to the half tones, but the page format is pleasingly open and readable.

JOHN R. PLATT

Ryerson Physical Laboratory, University of Chicago

Pure cultures of algae: their preparation and maintenance. E. G. Pringsheim. Cambridge, Engl.: At the Univ. Press; New York: Macmillan, 1946. Pp. xii + 119. (Illustrated.) \$1.75.

Students of the algae will welcome the appearance of this valuable little work on the methods and techniques of preparing and maintaining pure cultures of algae. The author's experience over a period of many years, involving thousands of experiments, and his close familiarity with the literature make this book an authoritative account in this little-explored field.

The subject is introduced by an historical summary of the development of culture methods. This is followed by chapters dealing with the choice and use of materials, selection of various liquid and solid media, methods of isolating bacteria-free cells, suggestions for the maintenance and use of pure cultures, and the culture of species belonging to the several taxonomic groups.

The book is especially valuable because of the critical discussion of the advantages and shortcomings of different methods, procedures, and media employed in pure culture work. The use of soil-and-water cultures as a preliminary step in securing bacteria-free cultures is highly recommended. The influence of such factors as temperature, illumination, glassware, and character of the water used in media on the growth of algae is given adequate space.

On the whole, the book is stimulating and suggestive of numerous problems yet to be solved, many of which have an important bearing on the ecological relations in the world of microorganisms.

NOLAN E. RICE

*Carolina Biological Supply Company
Elon College, North Carolina*

A textbook of biochemistry. Philip H. Mitchell. New York: McGraw-Hill, 1946. Pp. xv + 640. (Illustrated.) \$5.00.

In about 600 pages of text material the author has included a surprisingly large and well-balanced body of information. Aside from a chapter on photosynthesis and a brief treatment of plant hormones, the emphasis is almost exclusively on animal biochemistry, with a

definite clinical slant. Accordingly, the book would be well suited for medical school courses in biochemistry, but less so for more general courses.

The presentation is, in the main, quite clear. It was felt, however, that for a book of this nature too many names of uncommon substances of minor importance (e.g. robinose, stachyose, brassicasterol, etc.) were included in the early parts of the text, thus making it more difficult for the beginning student to assimilate the "meat" of these sections.

For the most part, the more recent developments in the field up to two years ago have been adequately covered. The newer concepts of metabolism gained through the use of plasmapheresis, isotopes, tissue-slice studies, etc. are well presented. Such rapidly expanding subjects as biological oxidations, chemotherapy, vitamins, hormones, and dietetics have been discussed in a concise, up-to-date manner. No mention is made, however, of the important work of Beadle, Tatum, and others with X-ray-induced mutations of *Neurospora*. These studies have provided valuable information on the intermediary stages of metabolism, and the genetically different strains have proven exceptionally useful for microassays of many vitamins and amino acids.

Relatively few errors, typographical or otherwise, were noted. The author consistently misspells riboflavin, niacin, and biotin by adding a terminal "e" to each. Also, niacin is stated to be synonymous with nicotinic acid and/or its amide; actually, niacin should designate only the acid, whereas the amide is properly termed *niacinamide*. In one instance free (elemental) iodine is called *metallic* iodine.

The book contains many charts and tables and a lesser number of diagrams and photographs. Subject and author indexes are included. Very few references are cited in the text, but at the end of each chapter the author lists various monographs, review articles, and a few selected papers on topics discussed in that chapter.

All in all, this text can be recommended as a readable, up-to-date first course in biochemistry.

ROSS A. GORTNER, JR.

Wesleyan University, Middletown, Connecticut

The principles and practice of tropical medicine. L. Everard Napier. New York: Macmillan, 1946. Pp. xvi + 917. (Illustrated.) \$11.00.

World War II has been a great stimulus to the study of diseases in the tropics as well as to the publication of books on tropical medicine. Some have been comprehensive works covering the entire field, by single authors or groups of authors; others have been brief compendiums for rapid reference. Dr. Napier's book comes between these extremes. In his own words, he wishes it considered a textbook for students, practitioners, and public health workers.

The author justifiably explains his omission of smallpox, typhoid fever, tuberculosis, and diseases of the eye, and his inclusion of tularemia and certain cosmopolitan helminthic infections. He has kept the description of