

In addition there are several chapters, devoted to the general biology of the algae, mostly not covered in existing treatises. Chapters on Micro-technique, Methods for the Cultivation of Algae, Ecology of Marine Algae, Cytology of Algae, Sexuality of Algae, and Physiology and Biochemistry of Algae make this a valuable reference book for those interested in algology.

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MCDUGALL, W. B., and SPERRY, O. E. *Plants of Big Bend National Park*. U. S. Government Printing Office, Washington. XII+1-209 pp. 190 figs. 1951. \$1.00.

An excellent and helpful work for both the amateur and professional botanist. The figures, except for a few line drawings in the beginning to aid the amateur, are half-tone photographs, and are good. There is a key to the families of the Pteridophytes and Spermatophytes, and, in general, there are keys to genera and to species if several are involved.

In an area as large and complex as the park, new records are certain to be found. This is especially true for weedy plants along the Rio Grande flood plain. Unless the collector is there the right year, and between floods, certain plants cannot be found. Two species of *Rorippa*, two more genera of the Umbelliferae (*Apium* and *Ammoselinum*), *Gilia longiflora*, *Veronica peregrina* var. *xalapensis*, and *Evax* are among the plants we have at hand not recorded by the authors.

The authors are to be praised for writing this flora. Professional botanists will welcome it for dealing with an area far removed from regions well covered taxonomically. Though the authors may be too optimistic in believing that even an amateur will be able "to identify accurately and determine the name of any plant he may find in the park," the amateur will be able to identify enough of them to add to his enjoyment of this scenic area.

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KIRBY, HAROLD. *Materials and Methods in the Study of Protozoa*. University of California Press, Berkeley and Los Angeles, California. x+72 pp. \$2.50.

This is a valuable book for the beginning Protozoologist. The techniques explained are mostly for securing, maintaining and making preparations of

protozoa for observation. There are three sections of this cardboard-covered book, page size 11×8½ with references at end of each section. The first seventeen pages deals with collection and cultivation methods for free-living protozoa. Culture media recipes are given alphabetically from Agar to Zumstein media. The second section, ten pages, is devoted to collection and cultivation methods for symbiotic protozoa. Third is the twenty-nine-page section devoted to technical methods of study and preservation ranging from aceto-carmin stain thru Fixation fluids, Haematoxylin staining to Wright stain. A complete eight-page index is found at the end of the book.

M. A. RUSSELL,  
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MARTIN, GUSTAV J. *Biological Antagonism—The Theory of Biological Relativity*. The Blakiston Co., Philadelphia 5, Pa. vii+516 pp. illus. 1951. \$8.50.

The author presents authoritatively, completely, and concisely the concept of biological relativity, as based upon an extensive study of biological antagonisms and as seen in and related to amino acids, hormones, minerals, purines, enzymatic structure and action, pyrimidines, and vitamins. He relates such a basic concept to the fields of chemotherapy, immunology, and pharmacology. The coverage of the whole study of metabolite analogues is thorough and complete, and yet concise enough as to make the book an excellent reference work for research students and investigators in the fields of chemotherapy, immunology, pharmacology, and medicine. The over 1900 references are carefully selected and arranged, and represent a complete survey of pertinent literature. The index is quite comprehensive and well arranged. The text matter includes 64 figures and 44 tables.

B. BERNARR VANCE,  
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YOUNG, J. Z. *Doubt and Certainty in Science*. Clarendon Press, Oxford. VIII+168 pp. illus. 1951.

The author, in eight lectures comprising the Reith Lecture Series for 1950 and comments thereupon, presents a simple, clear explanation of the phenomena of brain and nerve functioning. He does this by comparison with computing machines, "mechanical brains." No other subject illustrates