

major way, by nucleation and growth and by surface reactions, in contrast to barrier films for which high-field ion transport is all-important. The absence of an extensive discussion of the nucleation and growth of anodic films is the most serious fault in the book.

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Natural Products

Recent Developments in the Chemistry of Natural Phenolic Compounds.

W. D. Ollis, Ed. Pergamon, New York, 1961. viii + 237 pp. Illus. \$12.

This book, which represents the proceedings of a symposium on plant phenolics held in Bristol in April 1960, should be a required addition to any substantial library on natural products. The contributors, English, German, and Swiss organic chemists, are members of a group that meets several times each year with the object of promoting "the advancement of the knowledge of phenolic and related constituents of plants."

The book is composed of 12 chapters, the first six of which deal extensively with the biosynthesis of plant phenolics. Chapters 1 to 3, written by R. W. Richards, W. C. Whalley, and H. Grisebach, respectively, give a most satisfactory picture of our present knowledge of the biosynthesis of phenolic compounds and of the biogenetic relationships between them.

In chapter 4, W. D. Ollis and I. O. Sutherland present an excellent review of the occurrence, structure, and synthesis of those phenolic natural products which contain isoprenoid moieties.

Some recent studies on the intramolecular free-radical coupling of phenols, made by C. H. Hassall and A. I. Scott and their collaborators, are summarized in chapter 5. This chapter is highly recommended to any organic chemist interested in natural products. As the authors point out, the importance of this coupling reaction is bound to grow as we understand more about the biosynthesis not only of plant phenolics but also of alkaloids and fungal metabolites.

The remaining six chapters are of a more specific nature and deal with the isolation and structure determination of such diverse phenolic compounds as the gallotannins, tannins from algarobilla, biflavonyls, phenolic C-glycosides, the betacyanins, and antibiotics related to rutilantinone and the pyrromycinones.

The entire book is well written and attractively printed; it contains a wide abundance of structural formulas and references. In particular, it is a relief to see that the editor has used Arabic instead of Roman numerals to number the individual structures. Typographical mistakes have been kept to a minimum.

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For Amateur Coleopterists

Beetles. Ewald Reitter. Translated by Paul Hamlyn. Putnam, New York, 1961. 205 pp. Illus. \$20.

A combination of art and science, with art predominant, this book is spectacular. It is primarily a demonstration of the art of photographing in color the largest, most colorful, and most bizarre beetles of the world and of shadowing and printing these photographs, enlarged two or three times, so that the beetles seem to be alive—great armored animals glistening in the sun. One has to look very closely to find the spot on the right elytron from which the mounting pin was withdrawn. There are 60 full-page (9.5 by 13.3 inch) color plates with the names of the beetles and other information about them on the facing left-hand pages. From one to nine species are illustrated in each plate, a total of 224. Where there is marked difference in ornamentation between male and female, specimens of both sexes may be shown. In one instance a large grub is pictured.

It really does not matter very much that there are also 66 pages of two-column, double-spaced text about beetles—the picture is the thing wherein to capture the attention and admiration of layman and entomologist alike. This is a "gee-whiz" or "oh, my" book, not a book for identification of American beetles, nor even of European beetles, which are stressed because the

book was originally written in German and published in Germany under the title, *Der Käfer*. Of the species pictured, only six are found in the United States; most are tropical.

I hope this book will stimulate the development of amateur entomology in the United States, which lags behind European countries and Japan in this delightful collecting hobby. For would-be American coleopterists the most useful part of *Beetles* gives suggestions for finding, catching, killing, labeling, and preserving beetles in a collection. To sum up, this is a book to be given to those who may be susceptible to its pictures.

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New Books

Biological and Medical Sciences

Advances in Carbohydrate Chemistry. Melville L. Wolfrom, Ed. Academic Press, New York, 1961. 421 pp. Illus. \$14.50.

Chemical Aspects of the Structure of Small Peptides. An introduction. Dorothy Wrinch. Plenum Press, New York, 1960. 194 pp. \$7.50.

Clinical Aspects of Genetics. F. A. Jones, Ed. Lippincott, Philadelphia, Pa., 1961. 203 pp. Illus. Paper, \$6.

Conditioned Reflexes. An investigation of the physiological activity of the cerebral cortex. I. P. Pavlov. Dover, New York, 1962. 445 pp. Paper, \$2.25 (reprint).

Handbook for Ambulance Room Attendants. C. E. Watson. Bailliere, Tindall and Cox, London, 1961 (order from Williams and Wilkins, Baltimore, Md.). 120 pp. Illus. \$1.95.

Industrial Microbiology. Anthony H. Rose. Butterworths, Washington, D.C., 1961. 294 pp. Illus. \$10.50.

Méthodes Chimiothérapiques en Psychiatrie. Jean Delay and Pierre Deniker. Masson, Paris, 1961. 496 pp. Illus. NF. 55.

Methods and Materials for Teaching the Biological Sciences. David F. Miller and Glenn W. Blaydes. McGraw-Hill, New York, ed. 2, 1962. 463 pp. Illus. \$7.95.

Modern Problems of Nutrition. J. C. Somogyi, Ed. Karger, New York, 1962 (order from Albert J. Phiebig, White Plains, N.Y.). 180 pp. Illus. Paper, \$8.20.

A Monograph of the World Species of Hypoxylon. Julian H. Miller. Univ. of Georgia Press, Athens, 1961. 170 pp. + plates. \$6.50.

Radiolésions, Radiocancers et Radioprotection Chimique. D. J. Mewissen. Éditions Arscia, Brussels, Belgium, 1961. 287 pp. Illus.

A Short History of Clinical Pathology. W. D. Foster. Livingstone, London, 1961 (order from Williams and Wilkins, Baltimore, Md.). 166 pp. + plates. \$6.50.