Phytochemistry, 1976, Vol. 15, pp. 581–582. Pergamon Press. Printed in England.

BOOK REVIEWS

Natural Products Chemistry: Vol. 1. Edited by K. NAKANISHI, T. GOTO, S. ITO, S. NATORI and S. NOZOE 562 pp. 1974, Academic Press, New York. Price: £15.60.

Any attempt to cover the whole of natural products chemistry in only a thousand pages must be applauded—on the face of it, it seems to be an impossible task. However, this team of Japanese authors have brilliantly succeeded by the simple expedient of drastic selection from the recent literature of only those topics which are truly representative and significant. In the first of two volumes there are two general chapters on classification and physicochemical data which are followed by four dealing with mono- and sesquiterpenes, diterpenes, higher terpenoids and steroids. Six chapters covering all the remaining classes of natural compounds will be dealt with in a second volume yet to be published.

What we have here is a veritable mine of information on terpenoid chemistry and biochemistry which, although not completely comprehensive, does include discussion of a wide range of interesting and fascinating isoprenoids. Representatives of all the major structural types are dealt with in respect of their physical properties, structural elucidation, natural occurrence, chemical synthesis, biosynthesis and (where appropriate) function. Most of the information is presented concisely in visual form with a host of structural formulae. The chapter on steroids, for example, has 29 sections and deals *inter alia* with such important topics of recent interest as ecdysones, antheridiol, yeast sterols, bufadienolides, withanolides, pregnanes from starfish and steroid defence substances from water beetles.

The presentation of natural product chemistry can easily become boring and tedious if handled in the wrong way—chemistry library shelves carry many such dull texts. This book is quite different; it makes lively, informative and fascinating reading and is a book to browse through with enjoyment and pleasure. It should enjoy a large sale.

University of Reading J. B. HARBORNE

Recent Advances in the Chemistry and Biochemistry of Plant Lipids: Edited by T. A. GILLIARD and E. I. MERCER. Phytochemical Society Symposia Series No. 12, Academic Press, London, 1975. 398 pp. £10.80.

The rapid development of interest in plant lipid biochemistry over the last decade has not been particularly well reflected by the contents of the library bookshelves, and prior to this volume only two books existed which were specifically devoted to this topic. Both of these have now been largely overtaken by events and the appearance of this volume, which represents the proceedings of a symposium arranged by the Phytochemical Society and the Lipid Group of the Biochemical Society in April 1974, is most timely. Moreover this book does not fail, as many documented proceedings fail, in coverage and evenness of presentation. All the Chapters are by leading workers in various fields of plant lipid biochemistry, and nearly all of them are well organised discussions of original work put into the context of current knowledge. The selection of topics is such that a pretty blanket coverage of the most important chemical and biochemical elements of the subject are concerned, with the exception of analytical methods. The reason for this latter omission is clearly that few really novel analytical methods of value have appeared in recent years, and a would-be entrant to this area of lipid research can be safely referred to earlier published works with little danger of picking up obsolescent techniques.

The major audience for this book will undoubtedly be researchers in the field, although graduate students might well find much of it intriguing and comprehensible. I enjoyed this book, and can thoroughly recommend it.

Unilever Research, Welwyn, Herts B. W. NICHOLS

Studies in Biology No. 54. The Biology of Plant Phenolics: by JOHN R. L. WALKER. Edward Arnold 1975 pp. 57, £2.30

This book is the latest addition to the excellent series "Studies in Biology". The aim of this book is to provide a general introductory view of plant phenolics. Its approach is constructed within four themes—(1) structure and classification, (2) biosynthesis and metabolism, (3) function and (4) degradation by microorganisms. The area of plant phenolics claims wide interest, as it covers economic (lignin), aesthetic (flowers) and genetic questions. The author has succeeded admirably in introducing sophisticated chemical structures in a simplified and clear manner without loss to the importance of the respective area. The expedience of including a chapter on simple practical experiments, with the aim of stimulating students' interest in plant phenolics, is questionable.

A useful list of general texts and specialist articles is given. The book can be highly recommended to those who want an introduction to this expanding area.

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