2450 Book Reviews

This book provides an excellent up-to-date exposition of our knowledge of the biochemistry of carotenoids in plants. Its main value will be as a useful and convenient source of information to research workers, although without doubt many of the chapters will be used as a source of lecture material and will be recommended reading for advanced students in the appropriate disciplines of the life sciences.

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Terpenoids and Steroids—Volume 10, Specialist Periodical Report: by J. R. Hanson (Senior Reporter). Royal Society of Chemistry, 1981. 284 pp. Hardcover, £45, \$115.

It was in 1967 that the Royal Society of Chemistry (or the Chemical Society as it was then called) commenced publication of a series of annual specialist reports aimed at providing systematic and detailed reviews of the literature concerning a whole range of selected topics in chemistry. These reports have proved to be invaluable sources of material over the years in that they have generally been comprehensive in their coverage and accurate in their detail.

The work under review (Terpenoids and Steroids— Volume 10) deals with the isolation, structural determination, biosynthesis, biological activity, chemical synthesis and reactions of the title compounds, and covers the literature published between September 1978 and August 1979 (or perhaps a little later in some chapters). The present reviewer finds it a little unfortunate that the usual coverage of the monoterpenoids has been omitted this year (for reasons not specified), but we are promised that this deficit will be rectified in Volume 11. Apart from this omission, the present volume follows the now wellestablished pattern, with individual chapters dealing with sesquiterpenoids, diterpenoids, triterpenoids, carotenoids and polyterpenoids, and steroids (physical methods, and steroid reactions and partial syntheses). It is interesting to note that more than one-third of the book (i.e. some 100 pages) is devoted entirely to the sesquiterpenes and this is

a reflection of the marked increase in reports of sesquiterpene isolation, structural determination and synthesis: indeed over 50 germacrane sesquiterpenes alone were identified or structurally determined during the period under review! This is not to say that other areas have been dormant. It becomes clear from the chapter dealing with diterpenoids that the recent increase in structures described means that the diterpenes now rival the sesquiterpenes in their variety of skeleta.

One can only commend the hard work of the contributors to this volume in combing the literature so efficiently and in presenting their material in such a concise and clearly written manner. This book is not, of course, riveting bed-time reading, but it must surely rank as one of the most important sources for the research worker in the terpenoid field. It has been said many times before, but it is well worth repeating, that no worker can really afford to be without this series, and I have no hesitation in recommending this particular volume. However, at the present price, very few of us will be able to afford to be with this work much longer. If this series is to survive the RSC will have to rethink its price structure and/or production methods. At £45 this book will not be in the hands of those who need it most, and if Volume 11 is published at a higher price it will not even appear on the library shelf.

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Woods Injurious to Human Health: by BJORN HAUSEN. De Gruyter, Berlin, 1981. DM69 (ca \$30.00).

This book is an English translation of Dr. Hausen's original German volume published in 1973, which has been updated and somewhat enlarged. It is, as Prof. R. H. Thomson's forword indicates, a notable contribution to our knowledge of the effect of the chemical constituents of woods on the health of those who work with them. Most of the toxic effects involve dermatitis and respiratory disorders, but there are more serious ramifications, such as, adenocarcinoma and Hodgkin's disease (disorder of lymphoid tissues) which are associated with those working with wood.

The book has a general introduction, which covers in broad outline the clinical aspects of wood toxicology, taxonomy and chemistry. The main section of the volume is a systematic review which gives the names of the trees and, where known, the causative chemical agents of the various dermatological effects. My only quarrel is that here the author has listed plants in alphabetical order by their local names and there is thus no possibility of observing correlations in activity between members of the same genus or family. To some extent, this is overcome by an extensive index system but it might have been

supplemented by a few summary tables. The last four chapters of the book deal specifically with respiratory diseases and the more serious illnesses mentioned above.

An important feature of this treatise is the fact that the chemistry is reasonably well dealt with and the formulae of all the important toxic constituents are given. In addition, the author has taken the trouble to show by diagrams and photographs the etiology of the various diseases and has outlined their underlying physiology and biochemistry.

The volume is certainly a notable effort, covering about 280 odd species of trees, many of which of course show multiple effects. The descriptions of each species include origin, use and chemical constituents. Although the author has not drawn attention to the fact that the majority of compounds dealt with most certainly confer resistance of the trees to animals other than ourselves and to phytopathogens, I thoroughly recommend this volume to all who are interested in secondary compounds and their multifarious effects.

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