

***Naturally Occurring Glycosides*—Raphael Ikan (Ed.). John Wiley and Sons, Chichester, 1999, 444 pp. ISBN 0-471-98602-X, £120.**

Almost every class and subclass of natural product can occur in bound form in glycosidic combination, so that the term glycoside covers a vast range of natural substances. To describe all these compounds in a single volume would more than double the size of the present book. In order to keep the subject within reasonable bounds, the editor of this monograph has restricted coverage to 12 classes. No less than eight of the 12 are devoted to isoprenoids: cardiac glycosides, carotenoid glycosides, limonoids, saponins, steroidal alkaloids, steroidal oligoglycosides, terpenoid glycoside sweeteners and glycosidically bound volatiles. Three of the remaining four chapters cover nitrogen-based substances namely cyanogenic glycosides, glucosinolates and aminoglycoside antibiotics. The phenolic field is represented by a single chapter on anthocyanidin glycosides.

Some chapters are more all-inclusive than others. Adolph Nahrstedt, in dealing with the cyanogenic glycosides, is able to list and illustrate all 60 known structures from higher plants and insect sources. However, the chapter by Kasni and co-workers on saponins can only mention a handful of the several hundred known saponins. This chapter of 15 pages can only give a flavour of what is really a topic for book (see e.g. Hostettmann & Marston, 1994).

One of the more topical articles is the review by J. Crouzet and D. Chassagne on Monoterpenoid glycosides; these substances have come into prominence in recent years, following the recognition that glycosidically bound volatiles are quantitatively more important than the corresponding free compounds in some common fruits. This is a particularly good chapter with excellent coverage of an increasingly important topic.

In summary, this volume provides a valuable entry into the current literature on 12 classes of plant or marine glycoside. Most authors review chemical structures, natural occurrence and biosynthesis, as well as biological properties. There are many formulae and much tabular data and a useful index. With the proviso that it is not a complete account of an ever widening subject, this book can be recommended for library purchase.

References

Hostettmann, K., & Marston, A. (1994). *Saponins*. University Press, Cambridge.

Jeffrey B. Harborne
Department of Botany
University of Reading
Whiteknights
Reading RG6 6AS
UK