

## Book review

**Biochemistry of plant secondary metabolism.** Annual Plant Reviews, Volume 2. Edited by Michael Wink. 1999. 358 pp. Sheffield Academic Press, Sheffield. £85.00. ISBN 1-8493-4085-3.

In his introduction to this volume we are reminded by the Editor that tens of thousands of secondary metabolites have been isolated and identified from higher plants and still only 20–30% of plants have been analysed. This is clearly a research area where progress can and will be made in the next decade. What this text endeavours to achieve is to give an up-to-date summary of the biochemistry of secondary compounds. In many ways this objective is well met in this very well produced and attractive text book. Recent enzymological data is reviewed together with new areas of research based upon molecular biology and transgenic plants. Expert summaries on alkaloids and betalains by M.F. Roberts and D. Strack are complemented by a critical review on the biosynthesis of cyanogenic glycosides, glucosinolates and non-protein amino acids by D. Selmar. The biosynthesis of phenylpropanoids is reviewed by M. Petersen, D. Strack and U. Matern and the biochemistry of terpenoids

(including monoterpenes, sesquiterpenes, sterols and steroid saponins) is covered in detail by J. Gershenzon and W. Kreis. M. Wink and P.G. Waterman discuss the use of secondary compounds in chemotaxonomy and molecular phylogeny. There are plenty of points of interest in this book, however it is probably fair to say that unlike its companion text (*Functions of plant secondary metabolites and their exploitation in biotechnology*) there is little of direct interest for plant pathologists. It is unfortunate that the biochemistry of phenylpropanoids, flavonoids and related products are not comprehensively covered in this book, especially as many of these compounds are particularly important in plant–pathogen interactions. Nevertheless this book contains an extraordinary amount of information on secondary metabolism in plants and will be a useful addition to any library.

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