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Book Reviews

***Modern Fungicides and Antifungal Compounds II*; Edited by H. Lyr, P.E. Russell, H.W. Dehne and H.D. Sisler, Intercept Publishers, Andover, England, 1999. 505 pp. ISBN 1-898298-60-2. £85.**

One hundred and twenty nine scientists from 16 countries gathered together for a conference on fungicides in Germany in May 1998 and this volume under review is essentially the proceedings of that meeting. In total, there are 62 relatively short chapters discussing recent research on both synthetic and naturally occurring antifungal agents. Most contributions are highly specific research papers, e.g. on the sensitivity of *Venturia inaequalis* to Cyprodinil, but there are also some more general reviews, e.g. new targets for fungicide discovery by A.B. Orth.

The volume is divided into seven sections and these headings give a clear indication of the content of the

individual chapters. The headings are: current status and development of fungicide science; mode of action; influence of fungicides on host plant physiology; integrated control of plant diseases; management of fungicide resistances; induced resistance; and natural products and biological control. Undoubtedly, the main emphasis is on synthetic fungicides and those seeking the latest information on natural antifungal agents will not find a great deal to interest them here. This volume is clearly targeted towards plant pathologists, although other plant scientists will no doubt benefit from dipping into these pages.

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***The atlas of spectral data of sesquiterpene hydrocarbons*; Daniel Joulain & Wilfried A. König. E.B.-Verlag, Hamburg, 1998, ISBN 3-930826-48-8, \$700.**

The sesquiterpene hydrocarbons are a group of non-polar compounds which are widely distributed in Nature, mainly in the higher plants and liverworts. Although their odours are, in general, weak, they are present in many essential oils. However they do form a useful taxonomic marker. Without good reference data, such as provided in this book, they are often difficult to characterise.

The authors have collected together the spectroscopic data on over three hundred sesquiterpene

hydrocarbons. For most compounds there is the trivial name, Chemical Abstracts index name and registry number, ¹H-NMR spectral data (most at 200 MHz or better), a plot of the mass spectrometric data and the Kovats retention index. In 72% of examples there is also ¹³C-NMR data. Where more than one set of data was available both have been quoted. If available, the multiplicity of NMR signals have been indicated but there is no attempt to assign signals to particular atoms of the compound. An unfortunate feature of the presentation is that the mass spectrometric data is on the back of the sheet containing the rest of the data for a given compound.

In most cases where the absolute configuration is known it is shown on the formula. Unfortunately the

authors do not appear to understand the Chemical Abstracts Service conventions for representing first relative and then absolute stereochemistry. This has resulted in a number of garbled stereochemical statements.

For many compounds the data is previously unpublished. This volume should become an essential reference for anyone who needs to identify sesquiterpene hydrocarbons. It shows that mass spectra and reten-

tion times may be almost identical for compounds with different but closely related structures. However with NMR spectral data too, they can be readily distinguished.

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