



BOOK REVIEWS

Common Fragrance and Flavor Materials, by K. BAUER, D. GARBE and H. SURBURY, Third Edition, Wiley, VCH, Weinheim, 1997. 278 pp. £60. ISBN 3-517-28850-3.

Not having consulted the two earlier editions, I cannot comment directly on the revisions that have taken place for this third edition. However, the authors assure the readers that many improvements have taken place. In particular, references have been added to the second half of the book, allowing newcomers to find an original literature report for all essential oils listed. Some readers may be disappointed that some aspects of fragrance materials have not been covered extensively (e.g. floral fragrance constituents) but the authors do clearly state that this book is expressly aimed at the general reader rather than the specialist.

As such, I found this book well succeeds in its objectives. The first half of the book deals with single fragrance components, which are gathered together according to their chemical structures from aliphatics and terpenoids, through cycloaliphatics, and aromatics to phenolics and heterocyclic derivatives. By contrast, the second half lists the constituents of the natural raw materials of the flavour and fragrance industry in alphabetical order from allium oils to ylang-ylang oil. Some practical details of oil isolation and notes on fragrance classification are also included. At the end there is a list of CAS registry numbers, as well as a general index and 45 references. All phytochemicals working with the volatiles of plants will find this a useful compendium to have on their bookshelves.

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Studies in Natural Products Chemistry, edited by ATTA-UR-RAHMAN, vol. 19, Structure and Chemistry (part E), 1997, viii + 850, Elsevier, \$509.50.

The first volume of this series appeared less than ten years ago (in 1988), and the series has always fulfilled its aims of providing timely reviews of all aspects of natural products' chemistry. It must be said at the outset, that the price of the more recent volumes has taken them quite beyond the reach of 'mere mortals', and most librarians will baulk at the price of this present volume. So what is on offer that justifies the expenditure?

There are some undoubtedly highlights in this book, especially for the synthetic chemist. Well over 100 pages are devoted to a review of various recent approaches to the dendrobatid alkaloids, especially the pumiliotoxins, histrionicotoxins, indolizidines and (most timely of all) epibatidine. One could argue that most of this chemistry is reviewed in *Natural Product Reports* (though in much less detail). There are also weighty chapters on the synthesis of cannabinoids from olivetol and various monoterpenoids, and the preparation of the important anticancer agent quinocarcin and related structures. This latter chapter includes biological activity data, a useful feature that

is so often lacking from this type of account. The use of aliphatic nitro compounds for the construction of natural products is especially welcome, since this topic has not been covered for 20 years. Methodology also features prominently in a chapter on the synthesis of marine haloethers, and the discussion of enzyme-mediated biomimetic syntheses will be of considerable contemporary interest. The account of synthetic approaches to the newly discovered glycosidase inhibitors, the mannostatins and cyclophellitols, is also timely. Towards the end of the book, there are two useful reviews: one on the isolation and purification of polysaccharides from plants and micro-organisms, and one, by Geoffrey Cordell, that summarizes his views on recent methods for identification of classes of natural products present in crude extracts. This is of particular importance given the great current interest in rapid throughput screening.

Such highlights would normally attract a wide readership, but I am afraid that the publisher has essentially ensured that only a very few libraries will purchase the book, and these extremely useful reviews will, in consequence, be read by a mere handful of natural products chemists.

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