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## Book review

*The Alkaloids vol.* 52; Edited by G.A. Cordell. 391+ix pp. Academic Press, London. \$135. ISBN 0-12-469552-3

Alkaloid aficionados have come to look forward to each new volume in this long-running Academic Press series as a valuable contribution to the knowledge on this most interesting group of natural compounds. They will not be disappointed in this most recent publication.

The book contains five chapters dealing with different aspects of alkaloids. The first chapter by Leslie Gunatilaka considers alkaloids from the plants of a geographical area, Sri Lanka. The compounds are classified according to chemical type but this treatment is complemented by tables listing source plants and the alkaloids alphabetically. A wealth of detail of information is presented concisely but emphasises that comparatively little has been investigated in the way of biological activity compared with chemical aspects.

The next review concentrates on one particular chemical type of indole alkaloids, the sarpagine group and the chemical emphasis is even more pronounced. The chapter, written by a Mauri Lounasmaa and colleagues from Helsinki, is the first comprehensive review in fifteen years and so is a timely update on this subject, providing many data on the chemical aspects of these alkaloids. Less than half a page out of over eighty is devoted to pharmacology and it is not clear why such attention has been paid to this group of compounds in view of the comparatively small amount of interesting activity.

The third chapter is very different and is a welcome collation of the evidence for an alkaloid of topical interest because of its claimed therapeutic effects. The Polish–American team of Popik and Skolnick have written an interesting account of the pharmacology, clinical evidence and toxicity of ibogaine and closely-

related compounds. Ibogaine has attracted much attention in recent years because of claims made for its value as an anti-addictive agent. A surprising amount of in vivo, in vitro and receptor-binding work is reported but the point is clearly made that more needs to be done to establish the therapeutic credentials of this alkaloid.

The steroidal alkaloids from marine organisms form the subject of the fourth chapter by Atta-ur-Rahman and Choudhary, two renowned alkaloid chemists from Pakistan. The size and structural complexity of some of the compounds described is fascinating and emphasises the new vistas into alkaloid chemistry which have been opened by the surge of research in animal sources in the last decade or two. Again, it is noticeable that reports of biological activity are comparatively few and those that are reported reflect the prevalent screening systems for antibacterial or cytotoxic activity rather than more specialised targets.

The final chapter concentrates on a chemical, or more precisely biogenetic, type of alkaloid, the monoterpenes and is written by the editor of the series, Geoff Cordell, with his usual thoroughness and clarity of expression. The occurrence of these alkaloids, not only as naturally-occurring compounds, but as artefacts from the use of ammonia in work-up procedures and as products of microbial metabolism in the gut, is fully described although the paucity of information available on biological activity is again noticeable.

This volume should be part of the library of any alkaloid chemist and contains sufficient interesting material to be purchased by those with broader phytochemical and pharmacological interests.

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