Book Reviews

Selection, Preparation and Pharmacological Evaluation of Plant Material. By Elizabeth M. Williamson, David T. Okpako, and Fred J. Evans. John Wiley & Sons, Chichester, U.K. 1996. ix + 228 pp. 15.5 × 23.5 cm. ISBN 0-471-94217-0. $39.95 (pbk).

The present initial volume, part of a new and welcome series dealing with pharmacological methods in phytochemistry, is concerned with the selection, preparation, and pharmacological evaluation of plant materials. Some of the most commonly used methods for the screening of natural products are presented. A number of the methods described have been part of classical experimental pharmacology for some time, but others have not been previously discussed in a textbook.

Such topics as the criteria for selecting plants for investigation, the presentation of dose−response curves, and the preparation of plant materials are covered. The treatment of diseases of the gastrointestinal tract, as well as of the liver, and the cardiovascular and respiratory systems is covered. Other chapters deal with anti-inflammatory and analgesic activity, diabetes, the nervous system, and endocrine activity.

A second volume now in the planning stage will deal with toxicological evaluation, chemotherapy, isolated cell and enzyme systems, and alternatives to animal testing.

This book is recommended to pharmacologists and those with a general interest in natural products.

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Chemistry and Toxicology of Diverse Classes of Alkaloids. Edited by Murray S. Blum. Alaken, Inc., Fort Collins, Co. 1996. 386 pp. 16 × 23.5 cm. ISBN 1-880293-04-8. $99.50.

The first chapter, entitled Toxic Alkaloids Pertinent to Cancer Chemotherapy and authored by G. T. Tan and J. M. Pezzuto, is a thorough coverage of the occurrence, chemistry, pharmacology, clinical applications, and mechanism of action of the *Catharanthus* indole dimers, as well as of acronycine, camptothecin, the *Cephalotaxus* tetracyclics, ellipticine, indicine *N*-oxide, and swainsonine.

Atta-ur-Rahman and M. I. Choudhary are responsible for the second chapter, Toxic Alkaloids and Other Nitrogenous Compounds from Marine Plants, which is organized according to the various structural classes. It was originally supposed to complement an accompanying chapter on toxic alkaloids from marine invertebrates by Walter and Kertsz, which however does not make an appearance anywhere in spite of the claim to the contrary. Even so, Atta-ur-Rahman and Choudhary have performed very well in collecting in a short chapter the relevant data and references on marine guanidine alkaloids such as tetrodotoxin and saxitoxin, indole, pyrrole, and miscellaneous alkaloids including the macrocyclic bases.

Among terrestrial animals, arthropods have emerged as preeminent synthesizers of alkaloids, mostly of the piperidine, pyrrolidine, pyrrolizidine, indolizidine, and indole types. Since there are estimated to be between 15 000 and 20 000 species of ants, and relatively few have been analyzed, these insects should prove a treasure trove for new alkaloids in the future. This theme, together with the toxicology of the arthropod bases, is the subject for the third chapter, Chemistry and Toxicology of Arthropod Alkaloids, ably written by M. S. Blum, who is also the editor for the book.

W. Z. Antkowiak has contributed an outstanding chapter on the Chemistry and Toxicology of Mushroom Alkaloids; and J. M. Jacyno has done the same for the diterpenoid alkaloids which now number more than 400.

The final chapter is Bioactive Marine Alkaloids from Okinawan Waters, by T. Higa and J. Tanaka. The majority of these compounds are derived from coral-reef organisms and are of great structural variety.

The volume is highly recommended to the specialists in the field of natural products.

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Additions and Corrections

1995, Volume 38

George A. Brine,* Peter A. Stark, Young Liu, F. Ivy Carroll, P. Singh, Heng Xu, Richard B. Rothman: Enantiomers of Diastereoisomeric *cis*-*N*-[1-(2-Hydroxy-2-phenylethyl)-3-methyl-4-piperidyl]-*N*-phenylpropanamides: Synthesis, X-ray Analysis, and Biological Activities.

Resynthesis and reanalysis of the four stereoisomers revealed that isomers (2*S*,3*R*,4*S*)-**1a** and (2*R*,3*S*,4*R*)-**1c** had been reversed in the binding data reported in Table 2. A corrected Table 2 (abbreviated to stereoisomer binding data) is given below. All other reported biological data are correct. Our binding data are now consistent with data later reported by Wang and coworkers [*J. Med. Chem.* **1995**, *38*, 3652−3659].

Table 2. In Vitro Ligand Binding Results (Corrected)

	K_i (nM ± SD) [B ± SD]				
compound	μ	δ	κ	μ/δ	μ/κ
(2*S*,3*R*,4*S*)-**1a**	0.005 ± 0.002	84.06 ± 10.74	41.7 ± 1.4	16812	8340
(HCl salt)	[1.11 ± 0.05]	[0.96 ± 0.10]	[1.03 ± 0.03]		
(2*R*,3*R*,4*S*)-**1b**	0.013 ± 0.002	103.42 ± 13.20	122.2 ± 7.3	7955	9400
(oxalate salt)	[0.94 ± 0.28]	[0.77 ± 0.08]	[1.05 ± 0.06]		
(2*R*,3*S*,4*R*)-**1c**	47.7 ± 7.21	>1.5 μM	>0.5 μM	ND	ND
(HCl salt)	[0.98 ± 0.05]				
(2*S*,3*S*,4*R*)-**1d**	16.47 ± 1.07	>3 μM	>0.5 μM	ND	ND
(oxalate salt)	[0.92 ± 0.02]				

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Jeewoo Lee, Nancy E. Lewin, Peter Acs, Peter M. Blumberg, and Victor E. Marquez*: Conformationally Constrained Analogues of Diacylglycerol. 13.[1] Protein Kinase C Ligands Based on Templates Derived from 2,3-Dideoxy-L-*erythro(threo)*-hexono-1,4-lactone and 2-Deoxyapiolactone.

Page 4915. In Scheme 8, compound **28** should go to target **6** (not **4**) and compound **34** should go to target **4** (not **6**).

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