DOOK Reviews

Medical Toxicology of Natural Substances. Foods, Fungi, Medicinal Herbs, Plants and Venomous Animals. By Donald G. Barceloux. John Wiley & Sons, Inc., Hoboken, NJ. 2008. xxi + 1157. pp. 22 \times 29 cm. ISBN 978-0-471-72761-3. \$195.00.

This impressive text is organized into five major parts: (1) Food Borne and Microbial Toxins; (2) Fungal Toxins (mushrooms, mycotoxins); (3) Medicinal Herbs and Essential Oils (58 entries); (4) Toxic Plants (58+ species); (5) Venomous Animals (arachnids, insects, reptiles, marine invertebrates, eels, fish, and mammals). Each part is divided onto sections and then into short individual monographs for a latter total of 183. Each monograph in turn includes discussions of names (common and official binomial), exposure, principal toxins (most depict chemical structures), and a mechanism for the toxicity. Concluding each are subdivisions addressing dose-response, toxicokinetics, clinical response (acute, chronic), recommended diagnostic testing, and a brief statement on treatment. Monographs are supported by a concluding list of references. This reviewer, having taught undergraduate courses in natural products toxins and botanical supplements for over 30 years, found the text to be eminently useful and accurate. This accuracy is ensured by the monographs having been reviewed prior to publication by a panel of natural toxins experts, listed on the introductory pages. Particularly noteworthy is the 300-page Part 3 addressing an area of concern that presents continual problems in our society. The reader, in light of present food safety controversies, will also find Part 1 on food borne and microbial toxins timely and accurate.

The book's main weakness is an almost exclusive reliance on textual descriptions for identification. Only 32 pictures are included (black/white and color) for the 183 monographs. Unusual toxins like those found in the US FDA Poisonous Plant Database (www.cfsan.fda,gov/~djw/plantox.html) are not covered.

This book's price prevents its becoming a text for undergraduates, but it should be a part of the library of any scientist who deals with natural products research, as well as toxicologists and pharmacologists. It should be a principal reference for poison control centers.

Robert J. Krueger

College of Pharmacy Ferris State University Big Rapids, Michigan 49307

JM900272N

10.1021/jm900272n