



Toxic Plants of North America

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BOOK REVIEW. . .

Toxic Plants of North America. By George Burrows and Ronald Tyrl, Iowa State University Press, Ames, Iowa, USA. 2001. 1342 pp. ISBN 0813822661. US \$175.00 (hardcover).

As noted in the authors' introduction the objective of this book is a comprehensive digest of the taxonomic and medical/toxicologic literature about North American plants which may be toxic to animals (including humans). As such, it is more of an encyclopedia than a field guide although does include a significant amount of morphologic material. It is more of a toxicologic "Cliff's Notes" than a comprehensive medical text even though an experienced veterinarian could base a rational treatment on what is presented.

One of the enduring problems in the toxic plant literature is the wealth of anecdotal material that has become enshrined via continuous, uncritical repetition in reviews. The authors recognize this problem and while not ignoring case reports, have made an obvious effort to critically document each claim. As a result, the volume is extensively and accurately referenced to primary citations and provides a marvelous starting point for readers wishing to delve more deeply in to any specific topic.

The book is organized alphabetically by plant family. While this may alarm some taxonomic purists, it facilitates access by readers such as veterinarians or poison control specialists who need a quick summary of a particular plant. The book also includes an extremely thorough index which facilitates moving back and forth between topics quickly. Each chapter is further subdivided by genus and, when appropriate,

species. Individual sections include information on taxonomy, morphology, and distribution which can be used to "provide a quick, easy way of discriminating among the toxic taxa," the most common toxin(s) produced by the plant, and the pathogenesis, clinical signs, and lesions of poisoning. There are also separate sections on "Identification of Toxic Plants" (a primer on botanical keys for the novice), "Plant Taxa Listed by Their Principle Adverse Effects" (a reverse key based upon clinical signs of poisoning) and a section devoted specifically to problems in small animal pets.

The botanical descriptions included in each section may be sufficient for a quick start on a problem, but aren't really a substitute for a comprehensive botanical key, especially when differentiating closely related toxic and non-toxic species. Likewise the description of the medical aspects of poisoning are sufficient to get an experienced medical professional pointed in the right direction, but aren't really a comprehensive guide to diagnosis and treatment.

It would not be excessive to describe this book as the scholarly successor to Kingsbury's classic text, *Toxic Plants of North America*. Although intended for a professional audience the volume is written in clear, easily followed language and the price is probably the only significant drawback for casual users. Very highly recommended for anyone who needs to know about poisonous plants.

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