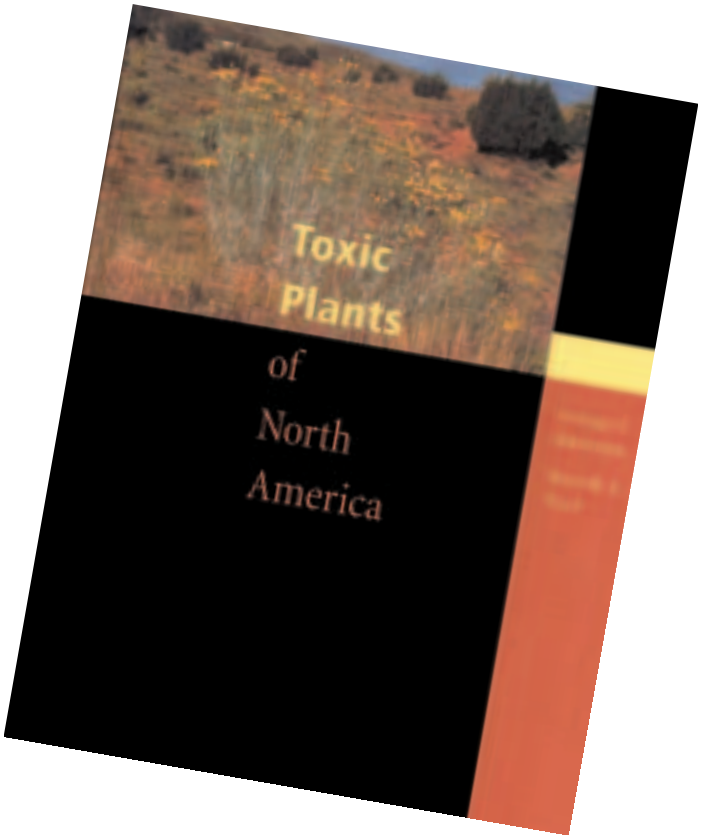

Toxic Plants of North America

George E Burrows and Ronald J Tyrl

Iowa State University Press, 2121 State Ave, Ames, Iowa 50014-8300. URL: http://www.isupress.com. Hardcover, 1342 p, 2001, ISBN 0-8138-2266-1, US$ 175.

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This huge book (22 x 28 cm [8.5 x 11 in]; 1342 pages) is an encyclopedic account of the poisonous plants of North America. The book begins with a brief introduction describing the objectives, scope, organization, and format of the text. Families of vascular plants are then listed alphabetically, with ferns, gymnosperms, monocots, and dicots all grouped into a single alphabetical list. Included for each family is a family description with notes on the natural history and uses of the plants. The genera that include poisonous species are then listed alphabetically, and each generic account includes a description of the genus, a list of toxic species, distribution and habitat, disease problems, disease genesis, clinical signs, pathology, and treatment. Each family account then concludes with an extensive bibliography.

Both native species and commonly used ornamentals are included, and the toxic effects of these plants on animals and humans are extensively described and referenced. Also included are many notes on medicinal uses of the species. Although the text is dense and detailed, helpful listings in the side margins of each page are included so that at a quick glance the reader can see a drawing of the plant, a map of its distribution, a listing of the problematic species, an indication of what plant parts are involved, a summary of the symptoms, and a list of the toxic compounds.

A total of 76 families are described in detail, beginning with the Aceraceae and concluding with the Zygophyllaceae. In addition, a listing of families of questionable toxicity is provided at the end of the text, as well as an account of how to identify toxic plants by using keys and manuals and the diagnostic characters of 24 major families. Several other helpful listings are given after the taxonomic account: 1) plant genera by their principal adverse effects (that is, hallucinatory plants, plants causing hepatic damage, and so on); 2) plants of particular concern for pets; 3) an extensive glossary of botanical terms; and 4) terms related to toxic effects and symptoms, concluding with a 75-page index.

This text is the most comprehensive account ever published of toxic plants in North America. It will be extremely useful for a wide variety of professionals, including botanists, horticulturists, animal scientists, agronomists, toxicologists, range scientists, agricultural extension agents, personnel at poison control centers, wildlife biologists, ecologists, farmers, as well as for students and for anyone in the general public interested in learning more about the toxic effects of plants. I highly recommend it and am already using it extensively in my own research and writing.

— Ron Jones

Ron Jones is a Professor in the Biology Department at Eastern Kentucky University. His area of specialty is the aster family.