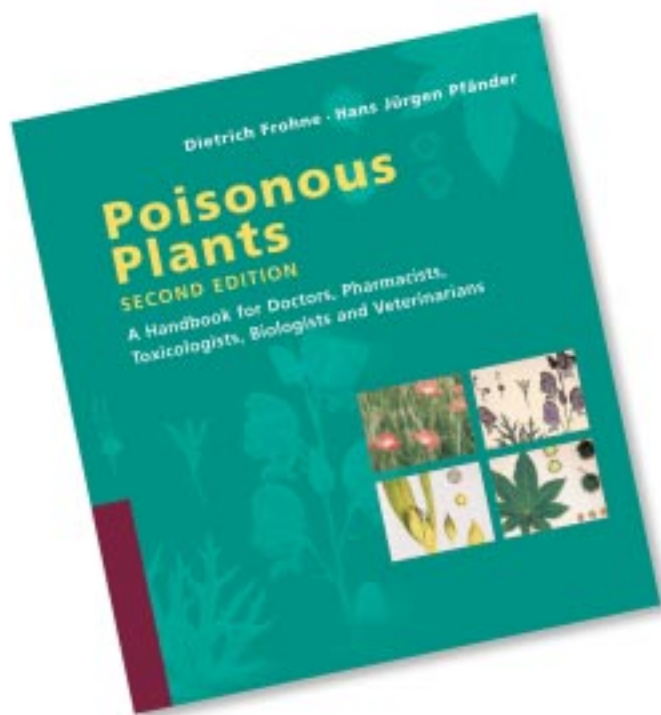


Poisonous plants: a handbook for doctors, pharmacists, toxicologists, biologists, and veterinarians second edition

Dietrich Frohne and Hans Jürgen Pfänder

Timber Press,
133 SW 2nd Avenue, Suite 450, Portland, Oregon 97204;
800.327.5680; URL: <http://www.timberpress.com>.
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(ISBN 0-88192-750-3),
480 p, approximately 224 color photos,
131 black/white illustrations, 20 tables,
115 diagrams, 24 x 27 cm (9.5 x 10.5 in).



This new version of *A Colour Atlas of Poisonous Plants*, first published in English in 1984, provides the reader with a much expanded and current resource for information on plant poisoning. As a veterinarian, I found the inclusion of information on the effects of the plants on animals to be of particular value, and it will be a useful resource for the animal-owning public. It is clearly a book intended for physicians, pharmacists, and toxicologists as it deals extensively with plant poisoning in humans. Although the authors have expanded the scope of the book to include some of the poisonous plants of North America that affect animals, the book primarily focuses on the toxic native and cultivated or ornamental plants of Central Europe. (The North American animal owner, veterinarian, or toxicologist in need of a comprehensive reference source for poisonous plants would be better served by *Toxic Plants of North America* by George E Burrows and Ronald J Tyrl.)

The introductory chapters of the book provide concise perspectives on predisposing factors to plant poisoning, the frequency of poisoning, and the identification of plants suspected of causing poisoning. It is interesting to note that the plants most commonly enquired about at Poison Control Centers in Switzerland and the United States are only 5 species (*Euphorbia*, *Dieffenbachia*, *Pyracantha*, *Ilex*, and *Philodendron* spp.), and they are common causes of poisoning in both areas, yet almost all of the 48 different plants listed occur on both continents. As most readers are not toxicologists, the authors have nicely summarized the spectrum of toxic compounds found in plants so as not to be overwhelming. Details of the toxicology are expanded upon in each individual plant section.

The core of the book is the well written and illustrated section on the individual poisonous plants, arranged alphabetically by plant family. Under each plant family listed in the book's table of contents is a list of the plant

genera that are covered. The reader can also readily find plants through the index either by their common or botanical names, and the glossary of terms makes it simple for the reader to understand the technical wording needed to accurately describe the plants. At the end of the book is a section on characteristic leaf features that help facilitate plant identification as it is often a leaf, or part of a leaf, that is presented to the physician or veterinarian and from which the cause of poisoning has to be established.

To the reader who has a strong interest in the toxicology of individual plants, each chapter provides a good review of the historical importance of the plant in causing poisoning, the principle toxic compounds in the plants, and their effects. In many cases the chemical structure of the toxin is provided. Photomicrographs of epidermal cells of a plant's pericarp provide an excellent resource for the toxicologist, physician, or veterinarian trying to determine the identification of ingested plant parts. The quality of the color pictures of the

plants or plant parts is excellent and greatly aids in plant identification for someone not familiar with plant descriptions. Each plant described is well referenced with more recent reports documenting it as a toxic plant. Veterinarians in North America will find this book useful but will soon see that it does not encompass the range of poisonous plants that are a serious problem to livestock and horses in North America. The authors have included many plants that are toxic to animals, such as *Senecio* species, but other important North American poisonous species such as the locoweeds (*Astragalus* and *Oxytropis* species) and larkspur (*Delphinium* spp.) receive only a very brief mention. Certain noxious and toxic weeds were intentionally not covered by the authors, yet plants such as halogeton (*Halogeton glomeratus*), yellow star-thistle (*Centaurea solstitialis*), and Russian knapweed (*Acroptilon repens*) are important to livestock owners and are not mentioned in the book. There are other omissions that would seem appropriate to have included from the animal poisoning perspective, such as onion poisoning (*Allium* spp.) and Easter lily (*Lilium longiflorum*)—plants that are highly poisonous to cats. The appendix providing additional notes on plants of toxicological significance in North America is unfortunately brief, and perhaps in the next edition of the book this section could be expanded appropriately.

After reviewing *Poisonous Plants*, I believe it is a well-written reference book that should be in libraries of those who want detailed information on a particular plant that is suspected of being the source of poisoning in people. Its large size and hardback format do not make it the kind of book that is easily carried in the field. And the fact that it is a hardbound book printed on high quality paper with numerous color illustrations may limit its affordability to many students.

—Anthony P Knight

Anthony P Knight is a professor of large animal veterinary medicine in the College of Veterinary Medicine and Biomedical Sciences at Colorado State University. His interest and expertise involving toxic plants has arisen from diagnosing and investigating plant poisoning in animals for many years. He co-authored *A Guide to Plant Poisoning of Animals in North America* (2001).