## **Book Reviews**

Tyler's Herbs of Choice: The Therapeutic Use of Phytomedicinals. By James E. Robbers and Varro E. Tyler (Purdue University). The Haworth Press, Inc., Binghampton, NY. 1999. x + 287 pp.  $15 \times 21$  cm. \$39.95. ISBN 0-7890-0159-4.

This book is a new revised version of the first edition in which new scientific information, including clinical studies and advances in mechanism of action, have been added. Also, additional popular herbs have been added since the first edition. This edition, like the first edition, is well written and easy to use. It contains up-to-date and extremely useful information on all aspects of phytomedicines.

The book contains twelve chapters, plus a preface and an index. Chapter 1 describes basic principles and elegantly discusses important issues related to phytomedicines. The second chapter reviews the herbal regulatory dilemma– the regulatory "Tower of Babel" as the authors describe it! Chapter 3 describes "how to use the remaining chapters" along with some of the rationale for inclusions of the herbs found in Chapters 4-12. It also includes a discussion of Commission E Monographs.

The remaining chapters (4-12) are titled with specific syndromes (digestive system problems, kidney, urinary tract and prostate problems, respiratory tract problems, cardiovascular problems, nervous system disorders, endocrine and metabolic problems, arthritic and musculoskeletal disorders, problems of the skin, mucous membranes, and gingiva, and performance and immune deficiencies) and contain monographs of the herbs used for these conditions. Each chapter starts with a review of the basic pharmacologic principles of each problem or disorder and is then followed with the herbal monographs.

The herbal monographs provide a summary of the known information on each herb with appropriate references to relevant literature.

I would highly recommend this new edition to any and all persons who desire an authoritative and accurate description of the current status of the use of herbs in the United States today.

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Chinese Materia Medica: Chemistry, Pharmacology and Applications. By You-Ping Zhu (China–Netherlands Medical and Pharmaceutical Centre, Groningen, The Netherlands). Harwood Academic Publishers, Amsterdam, Netherlands. 1998. vii + 706 pp. 17  $\times$  24.5 cm. \$120.00. ISBN 90-5702-285-0.

This book consists of twenty-two chapters covering more than 360 of the most commonly used Chinese herbs. The first five chapters describe theories and practice of Chinese Materia Medica; these chapters cover characteristics,

processing, guidelines for application, and sources and production of Chinese Materia Medica. The following 17 chapters deal with individual herbs that are arranged based on the concepts of Traditional Chinese Medicine. Data provided for each individual herb are Names in Chinese, English, and Latin, General Description, Chemistry, Pharmacology, Functions and Applications, Side Effects and Toxicity, Dosage, and References; a color picture of each herb would have been appreciated. In each general description section, a detailed botanical name, the part of herb which is used, its habitat, its collecting season, and its processing, if any, are briefly mentioned. In the Chemistry section, the absence of structural drawings is a drawback; however, the author does summarize all chemical constituents discovered from each herb to date, including their quantities if they are available. In the Pharmacology section, the biological activities of each herb observed to date are arranged by a modern pharmacological system, such as anti-inflammatory, cardiotonic, diuretic, sedative effects, and others. In the Functions and Applications section, two parts are given. One is a Traditional Description part that mentions how this herb was used in a traditional Chinese way. The other one is an Application part that gives current clinical usage arranged by the modern Western medical system. In the Side Effects and Toxicity section, both clinical and animal observations either from the herb itself or its constituents or from both of these are summarized briefly. In each section, research literature up to 1997 is provided. Due to the author's Chinese educational background, abundant research citations originally published in the Chinese language are included, which makes this book unique compared to similar books written by Western scholars. At the end of the book, four Indexes of Latin Names, English Names, Chinese Names, and Pharmacological Actions are provided to help readers find herbs quickly in different ways.

The herbs in this book are classified according to the basic concepts of Traditional Chinese Medicine, such as Qi, Blood, Ying, Yang, Wind, and Dampness, which are totally different from Western medicine's modern philosophy. Thus, the author could usefully have included a chapter explaining these basic concepts. Also, a general description could have introduced each individual drug class instead of starting directly with individual herbs. The book is worthwhile as a reference for medical doctors, herbalists, and researchers who want to have a better understanding of Chinese Materia Medica.

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African Ethnobotany: Poisons and Drugs. Hans Dieter Neuwinger (St. Leon-Rot, Germany). Chapman and Hall, Weinheim, Germany. 1999. xviii + 941 pp.  $19 \times 27$  cm. \$119.95. ISBN 3-8876-30661.

Neuwinger's title is misleading as this book focuses on only a single aspect of plant use: the hunting arrow poisons used throughout subsaharan Africa. Nevertheless, his volume is a marvelous and comprehensive treatment. While only 269 species are treated in the book, the information provided for each does go well beyond their use as hunting aids. More importantly, the plants that yield arrow poisons are not a group of random interest in pharmaceutical research; arrow poison plants have yielded D-tubocurarine, physostigmine, reservine, and other compounds with therapeutic use. African hunting poisons are mostly fast-acting cardiac poisons in contrast to the muscle relaxants like curare that predominate in South America. Neuwinger has spent nearly 30 years in the field and in the library, and he has amassed and organized a tremendous amount of information on the 269 species he considers to be important constituents of arrow poisons in Africa. His fascination with every aspect of the subject is obvious in his writings.

The volume begins with a brief preface and introduction and ends with a discussion of fish poisoning plants (including a comprehensive list of species used as fish poisons), a review of literature about traditional African medicine organized by country, and plant name and subject indices. The majority of the book consists of individual treatments of species organized alphabetically by family and genus, but when several species of the same genus are treated, they are organized within the genus according to their importance as hunting and medicinal plants, toxicological similarity, or close botanical relationship. For each species treated, a botanical name and synonyms are provided, although there are some errors in the citation of author names, and the place of original publication is not provided. The nomenclatural information is followed by a botanical description and, in most cases, an illustration redrawn by Neuwinger from a variety of African floras cited at the end of the literature section. The map provided shades the countries where use as an arrow poison has been documented but is somewhat misleading as it is a map neither of the species distribution nor of its real area of use. The list of vernacular names that follows is organized by country and each is attributed to a particular tribe. The list is very comprehensive, but unfortunately there is no complete index to the vernacular names. Two sections that follow discuss the use of each species as hunting poisons and traditional medicines and provide information on which parts are used, how preparations are made and

administered, and how use varies from one part of Africa to another. Neuwinger claims that the section on chemistry "is the focal point of the book, since up till now only widely dispersed details have been given in scientific periodicals." Here he presents a detailed and well-referenced summary of the chemistry of each species, often with chemical structures and discussion of the chemistry well beyond a simple list of compounds that have been isolated. Likewise, the pharmacology section that follows is well-referenced and provides a thorough discussion of the physiological effects of each active compound. Full citation of literature is provided at the end of each species treatment. Eight color plates in the center of the book illustrate many of the species and document some of the preparation methods.

While the list of species treated is limited, the depth of treatment makes Neuwinger's book an invaluable reference to anyone interested specifically in African arrow poisons, or more generally in medicinal plants or their chemistry. Acokanthera, Parquetina, Strophanthus, and seven more genera provide the primary ingredients for most formulations, but throughout African each of the 269 species is used in some manner. The breadth of treatment for each species and the long list of literature provided will greatly facilitate access to chemical or pharmacological information about any of these species. But Neuwinger's book is also fascinating to browse and read because of the inclusion of a broad range of information he has accumulated in years of studying these plants. His captivating reviews cover historical methods of preparations and packaging, often provide detailed anthropological information about the indigenous groups, their distribution in Africa, and particularly their arrows and other hunting equipment, and even discuss modern instances of murder attributable to arrow poisons. While Neuwinger has certainly produced the most thorough review of African arrow poisons to date. this book will also be of great interest to anthropologists, botanists, chemists, pharmacologists, and anyone interested in the economic aspects of African natural history.

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