

Book Reviews and Abstracts

In our last issue, Volume 4 Number 1, Gary Paul Nabhan did not receive full recognition for his review of *Medicinal Plants of the Bible* (p. 14). I apologize for this oversight. I have adopted the convention of using initials for reviews written by the *Journal* staff and spelling out the names and addresses of outside contributors.

Charles H. Miksicek
Book Review Editor

Book Review

Ethnobotany in the Neotropics. Edited by G. T. Prance and J. A. Kallunki. Bronx: The New York Botanical Garden, 1984. 156 pp. paper, index, illustrated, \$29.75 U.S. Orders, \$30.75 non-U.S. Orders.

Ethnobotany in the Neotropics contains the proceedings of a symposium, by the same name, presented at the 1983 Society for Economic Botany meetings. It is the inaugural issue in the *Advances in Economic Botany* series to be published by the Institute of Economic Botany at The New York Botanical Garden. Although the title suggests all of the New World tropics, the geographical focus of most of the papers in the volume is Amazonian South America.

This collection contains a mixture of both short topical studies and longer treatises. The longest paper in the volume, by Plowman, is a fascinating, detailed study of the history, taxonomy, cultivation, phytochemistry, and ethnobotany of two species and four varieties of coca, *Erythroxylum coca* and *E. novogranatense*. Other contributions that focus on the ethnobotany of various taxonomic groups include palms (Balick), manioc (Boster), Solanaceae (Heiser), and edible fungi (Prance). Ayala Flores presents a more generalized paper on Peruvian plants with medicinal or toxic properties. Lewis and Elvin-Lewis explore the realm of ethnodentistry, the use of botanical agents by the Jivaro for tooth extraction or hygienic blackening. The article by Posey on the agricultural ecology of the Kayapo examines the continuum between "domesticated" and "wild" plants and suggests that there is no clear-cut demarcation between "natural" and "managed" forest in much of Amazonia. Van den Berg's contribution includes an annotated "flora" of plants found in the open-air market in Belem, Brazil.

All too often, ethnoscientists are strangers to the area they are studying. Ayala Flores, Posey, and van den Berg are residents of the Neotropics. Berlin emphasizes the value of training local informants to gather ethnobiological specimens and data. This collaborative approach can provide a wealth of information and new insight into understanding a traditional culture's view of the natural world.

The overall layout of the volume is identical to its parent journal, *Economic Botany*. The only reservation I have about this publication is that \$29.75 seems a little expensive for a journal as opposed to a book format. Nevertheless all researchers in the field of economic botany will look forward to the next issue of *Advances*.

CHM

Book Review

Usos de los Helechos en Suramerica con Especial Referencia a Colombia (Uses of ferns in South America with special reference to Colombia). Maria Teresa Murillo. Bogota: Universidad Nacional de Colombia, 1983. 156 pp., illustrated, (no price listed).

This book is a compendium of the ethnobotany of South American (primarily Colombian) ferns, written at the suggestion of Dr. Richard E. Schultes and published in connection with the bicentennial of the Royal Botanical Expedition of 1783. It represents a remarkably thorough review of the relevant literature, and an extensive survey of the National Herbarium in Bogota, where the author is located.

The book is divided into two primary sections. The first includes a key to the orders and families of Colombian ferns, accompanied by formal botanical descriptions of each family and line drawings of representative taxa. The second part lists nearly 130 species of ferns, horsetails, and lycopods utilized by the peoples of South America, along with a botanical description of each, their vernacular names in various regions, the approximate distribution of each within Colombia, and a series of quotations describing in detail how each plant is used. This section is accompanied by 12 full-page, color plates illustrating several of the species.

Unfortunately, the two sections of the book are not very well coordinated. Despite the presence of the familial keys, there is no key to species, nor even any indication of which species is in which family, making it nearly impossible to use the book as a field guide. Nevertheless, there is much information of interest not only to students of South American ethnobotany but also to ethnopteridologists of other continents as well.

The entire book is in Spanish.

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Book Review

Ralamuli Nutugala Go'ame (Comida de Los Tarahumaras). Albino Mares Trias. Published privately by: Don Burgess McGuire, 911 12th Street, Safford, Arizona 85546. 1982. 502 pp. \$10.00.

Most ethnobiological works are written by outsiders who come from very different cultures, and who have to struggle to understand the ways of the people they are studying. This book, however, the fourth written by Mares, a Tarahumara of Guazapares, Chihuahua, Mexico, discusses over 100 edible plants, fungi, and caterpillars, both wild and domesticated, consumed by the natives of the author's home area. It is written in the native Tarahumara language with a parallel text in Spanish, and contains descriptions of the different varieties of each species, and the manner in which each is utilized, plus photographs of most of the species. Most of the photographs are excellent, although a few did not reproduce very well. The book also includes an introduction by Don Burgess McGuire of the Summer Institute of Linguistics, and an appendix by Dr. Robert Bye of the University of Colorado, listing the scientific binomials of most of the species discussed.

Written by a nonprofessional, the book does tend to be a bit folksy in spots, although it appears rather thorough in what it attempts to do. The appendix is difficult to use, with no apparent order to the listings. The book is interesting primarily because of its novelty, and because of its inherently emic point of view, which is unusual in ethnobiological literature.

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Book Review

Desert Resources and Technology, Vol. 1. Alam Singh, Ed. Jointly published Scientific Publishers and Geotech-Academia, Jodhpur, India: 1983. Pp. 368, figs. and tables. \$60.00.

A vast country, India has such a diversity of ecological areas that to gather together notes on the wide range of dryland resources and technology of such an area is in itself a formidable task. It has been well done in this first volume—so well that we are left anxiously awaiting a second contribution.

The volume is divided into eight chapters, contributed by 13 scientists, almost all Indian: 1) Fauna of the Indian desert; 2) Water reclamation for potable use; 3) Desalinization of water; 4) Unsaturated flow in an arid environment; 5) Solar and wind energies; 6) Ravine lands—reclamation and use; 7) Pasture development; 8) Economic and medicinal plants of Indian deserts. Each chapter has a specific bibliography, usually very inclusive.

The contributions are, naturally, of varying excellence, but all offer vital material not hitherto available or easily obtainable. This book will be of interest to all environmentalists working in xeric areas in any part of the world, and the eighth chapter is of significance especially to economic botanists.

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Book Review

The Heirloom Gardener. Carolyn Jabs. San Francisco: Sierra Club Books, 1984. 288 pp. \$17.95 cloth, \$9.95 paper.

Every plant breeder knows the importance of maintaining a wide genetic base from which to draw new material, but few realize the extent of diversity available in obscure locations in the United States. Few lay people fully comprehend the importance of this need, nor truly appreciate the important role they have played and can continue to play in maintaining this genetic diversity. Now there is a book which fills this gap between amateur and professional, and provides valuable information to both.

In her book *The Heirloom Gardener*, Carolyn Jabs examines from numerous angles and with unsurpassable clarity and depth, the problem of the heirloom plant variety, the old traditional lines of fruits and vegetables found across the U.S. and preserved by hobbyists and backyard gardeners. She explains in terms easily understandable to the average lay person, the importance of genetic diversity and the risks of uniformity. She discusses the tendency of large seed companies to emphasize large scale field crops, and the resulting decline in the number of varieties offered by these companies over the last 100 years. She also outlines the inadequacies of existing governmental germplasm storage programs, which concentrate on imported races and wild strains at the expense of equally valuable traditional North American varieties.

She then discusses who is growing these traditional varieties today, and why they are doing so. These people include hobbyists who collect varieties of certain crops, seed sharing organizations, smaller, regional seed companies, and living history museums which try to reconstruct gardens of pioneers or of famous figures such as Lincoln and Jefferson. She also describes how to go about obtaining seeds from such sources, and provides instructions to lay people on how to harvest and store seeds, and how to graft stock from fruit trees.

For the professional interested in doing research on these plants, the most valuable part of the book would probably be the appendices, which provide extensive annotated listings of seed companies, seed exchanges, federal seed repositories, and living historical farms and museums, as well as giving a bibliography of selected historical sources, old horticultural books, and old seed catalogs.

For the ethnobotanist, the historical depth in the book provides an enlightening picture of the social forces which have been influencing genetic diversity and crop evolution in this country for over two centuries. The book also serves to remind us that there is a tremendous potential for the study of traditional plants right here within our own culture.

It would be rather easy for a book on this kind of topic to be written in a dry, factual tone. Jabs, however, writes in a very clear, vivid style, using interesting, personalized examples, but yet relating such a wealth of information as to betray a thorough knowledge of the subject.

I have absolutely no reservations about recommending the book as a source of information for the interested backyard gardener, as a reference book for professionals, or as supplementary reading material for undergraduate courses in ethnobotany, economic botany, plant breeding, crop evolution, or even introductory botany.

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