

## BOOK REVIEW

**Conservation of Medicinal Plants: Proceedings of an International Consultation.** Olayiwola Akerele, Vernon Heywood, and Hugh Synge (editors). Cambridge, United Kingdom: Cambridge University Press, 1991. Pp. xvi, 362. No price given (hardcover). ISBN 0-521-39206-3.

This impressive volume reports on the findings of an international meeting held in Chiang Mai, Thailand, from 21-27 March, 1988. Sponsored by the World Health Organization (WHO), the World Conservation Union (IUCN), and the World Wide Fund for Nature (WWF), it brought together experts from 16 countries to "exchange views on the problems, determine priorities and make recommendations for action" regarding the conservation of medicinal plants.

As is customary these days, the participants formulated a political call to action. Printed at the beginning of the book, The Chiang Mai Declaration calls on international agencies to "Save the Plants that Save Lives" by addressing the social and ecological deterioration that threaten plants used in health care.

The book is separated into six sections. The Introduction reviews the perspective on medicinal plants taken by the sponsoring agencies. The Issue of Medicinal Plants contains papers by Farnsworth and Soejarto, Plotkin, and Schultes. Although these overviews provide a good introduction for novices, most of the programs, concepts, and references will be familiar to practicing ethnobotanists.

The section on Science, Industry, and Medicinal Plants begins with three technical papers that analyze economic aspects of plant conservation and management. A fourth paper describes recent advances in constructing information systems and databases. Written by Synge and Heywood, two leaders in the field, it contains useful suggestions on how to use computers to arrange research data.

The remaining three sections present the applied side of medicinal plant conservation—Techniques, Policies, and Experiences. Eighteen papers review diverse topics ranging from the role of agronomy, botanical gardens, and protected areas to political, legal, and educational aspects. Case studies focus primarily on Asia (Sri Lanka, Thailand, Indonesia, India, and Bangladesh), but examples are also given from Kenya, South Africa, and Peru.

As I read through the essays, I was struck by the continuing dichotomy between *in situ* and *ex situ* conservation. Although both will ultimately be needed in any campaign to preserve medicinal plants, this book reveals an ideological difference between one camp and the other. *Ex situ* conservation is expensive, requiring the backing of a governmental or international agency. Some of the methods that are encouraged—biotechnology (Palevitch; Schumacher), botanical gardens (Heywood; He and Cheng), phytochemical research (Husain), and commercialization (Principe; Bonati)—take the resources out of the hands of local producers.

Given the current interest in intellectual property rights (IRP), it is curious that Synge and Heywood's piece on information systems should be sandwiched between these papers on commercialization and biotechnology and not found among the case studies from the Third World. This may send the message that computer networking and information sharing will ultimately benefit industrialized countries, while giving little profit to the communities from which plants and ethnobotanical lore are gleaned. In sum, this set of papers would have been enriched by a greater emphasis on how technology can help indigenous peoples and developing nations maintain a stake in their cultural heritage and natural resources.

With the essay by McNeely and Thorsell on the role of protected areas in conserving medicinals, there is a shift in emphasis: peasants and indigenous peoples are back in the equation. The case study on *in situ* conservation in Sri Lanka (Lokubandara) demonstrates how medicinal plants can be restored to natural areas through an effort involving a large sector of the population. A companion essay (de Alwis) shows how *ex situ* conservation supports this initiative.

The volume is fittingly brought to a close with a case study from South Africa (Cunningham) that exemplifies how theory and methodology from the field of

resource management can be applied to conservation of plant populations. This approach gives us the tools necessary to evaluate the status of medicinal plants in the wild and to propose alternative management methods that are acceptable to local people.

When I closed the book after reading the parting words of the WHO program manager for traditional medicine, Olayiwola Akerele, I found myself reflecting on the speed with which things are changing. In the three and a half years since the meeting was convened, the agenda advocated by the conference participants has been widely accepted and implemented in some countries. At the same time, the world ecological and social situation is increasingly dire. I recommend this volume to anyone who wants to join the battle for indigenous rights and natural conservation.

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