

agents. Although most of the plants used as hunting poisons are also used in African ethnomedicine, however, most traditional African remedies are in fact food plants and not poisonous. The map of Africa included with each entry does not depict distribution of the plant species but to the countries where the plants are used for hunting. This could be misleading since it is conventional to associate such maps with distribution.

This book is well researched and will be an excellent reference book for pharmacists, chemists, toxicologists, ethnopharmacologists, and anybody interested in the constituents and activity of medicinal plants. For those working specifically on the ethnobotany, phytochemistry, or pharmacology of African medicinal plants, this is undoubtedly one of the most important volumes to have on their shelf.

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**Comparative Ethnobotanical Studies of the Amerindian Groups in Coastal Ecuador.** Edited by Anders S. Barfod (Aarhus University, Denmark) and Lars Peter Kvist (Royal Veterinary and Agricultural Highschool, Denmark). The Royal Danish Academy of Sciences and Letters, Copenhagen, Denmark. 1996. 166 pp. 21 × 25.5 cm. DKK 300.00. ISBN 87-7304-278-1.

This book represents a very comprehensive contribution to the knowledge of the ethnobotanical use of plants by three groups of indigenous people in Coastal Ecuador. The botanical rigor of this publication is excellent. All collections are documented with voucher herbarium specimen numbers so that any specialist in the future may consult the data and verify the determinations as listed. The illustrations are well produced and give the reader a sense of the peoples with whom the authors worked. There is an index to scientific names and to vernacular names. These indexes make this book a highly useful tool for future researchers who are seeking to work with the flora and knowledge of these cultures as it relates to plants for various uses, whether they be agricultural, ornamental, medicinal, or otherwise.

The results section describes the contents of 80 tables listing plant uses. Categories include timber, construction materials, social products, food, and notably nearly 40 different tables on medicinal uses. The different medicinal use tables are divided into a variety of subcategories. There is an interesting discussion of the curing ceremonies and the cultural context of healing by shamans. In the extensive section on medicinal uses of plants, the authors have replicated what can be referred to as "old style ethnobotanical research." The medicinal plant section lacks any real medical analysis. It also reflects a fairly significant cultural bias on the part of the authors regarding the potential origin and use of medicinal plants and their potential to yield biodynamic constituents. The specific cultural bias to which the authors have succumbed is an overinterpretation of the "doctrine of signatures." The cultural bias

is matched by a lack of medical scientific rigor regarding the signs and symptoms of the diseases or illnesses being treated. An ethnobotanist and physician research team would have dramatically enhanced the accuracy and utility of their medicinal plant data. In some sections there is reference to a common fungal infection that, if photographs were taken of that fungal infection and showed to a tropical physician, could easily be identified to species and help further understand what exactly is being treated by these people. This lack of medical assessment or analysis is fairly consistent throughout the entire sections on medicinal plants. There is virtually no discussion of potential efficacy of any of the treatments as observed by the scientist or reported by the healers, so no qualitative differentiation of any sort is made.

Indigenous disease medical systems and disease descriptions are often distinct from the western paradigm, but there are often underlying physiological conditions that can be recognized as cross-culturally relevant by western trained physicians working with healers and shamans. It is in part a disservice to the medical systems of these cultures to not employ a specialist to work with their specialist when looking at medicinal plants.

One other feature of this publication that requires more attention is the intellectual property rights of indigenous peoples and the Convention on Biological Diversity. The authors do make a statement that "all intellectual rights to the information presented in this paper remain with the indigenous communities in Ecuador". This is critical. Considering the intense debate and discussion on this topic, it would be appropriate to refer to the specific statements of indigenous organizations such as COICA about their views on intellectual property rights. There is no indication that there was a prior form of consent or discussion among the various groups about ultimate publication of this document including the medicinal plant information that is contained therein. Clearly this will be a critical feature of subsequent future publications that involve indigenous knowledge.

The authors are clearly highly skilled botanists and general field researchers. The shortcomings mentioned should not overshadow the significance of this well-documented publication. It does highlight the need for interdisciplinary research, particularly when it comes to looking at the highly complex issue of culture, medical systems, and medicinal plant utilization.

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**Ethnobotany—Principles and Applications.** By C. M. Cotton. Roehampton Institute, London. John Wiley & Sons, Inc., New York, NY. 1996. ix + 424 pp. 15 × 22.5 cm. \$49.95. ISBN 0-471-95537-X.

Designed for the undergraduate student in ethnobotany, this book will prove useful to anthropologists