

format by including historical and ethnogeographical data. This book will be of interest to any who wish to learn about Pre-Columbian human occupation of coastal Ecuador, neotropical ethnobotany, and early South American agricultural practices. However, if the reader is comfortable using technical keys without illustrations, *The Flora of Puná Island* will primarily be a very useful fieldbook that can be used to identify plants anywhere in the coastal region of Ecuador.—Amanda K. Neill, Botanical Research Institute of Texas, 509 Pecan St, Fort Worth, TX 76102-4060, U.S.A., aneill@brit.org.

BERTIL NORDENSTAM, GAMAL EL-GHAZALY, and MOHAMED KASSAS (eds). 2000. **Plant Systematics for the 21st Century: Proceedings from a symposium held at the Wenner-Gren Centre, Stockholm, in September 1998.** (ISBN 1-85578-135-2, hbk.). Wenner-Green International Series, Vol. 77. Portland Press Ltd., 59 Portland Place, London W1B 1QW, U.K. (Orders: +44-020-7580-5530, editorial@portlandpress.com, North American orders to: Princeton Univ. Press, 41 William St. Princeton, NJ 08540, U.S.A.). \$120.00, 376 pp., numerous b&w drawings, charts, and halftones, 6 3/4" × 9 1/2".

The august title, "Plant systematics for the 21st century," may capture many purchasers for this book. If so, the readers will be soundly disappointed with their acquisition. This is not to say there are not many useful and insightful contributions; there are. But taken together, these collected papers do not fulfill the promise of the title.

In actuality, this is a festschrift for two prominent and influential Swedish botanists, Vivi Laurent-Täckholm and Gunnar Edrtman, who would have been 100 years old at the time of the symposium. Notice the more accurate characterization found in the introduction:

"In choosing the themes of the symposium we planned to give an overview of the fields of these two scholars, namely plant systematics and palynology. In addition to commemorating and remembering the contributions of Täckholm and Erdtman, we also wished to summarize current knowledge in these fields. We also aimed to include new information on some related and expanding research areas of great biological interest and significance, such as aspects of anatomy and floral odours."

Five papers are biographical. As commemorations of the contributions of Erdtman and Täckholm, respectively, six papers discuss advances in palynology, while four summarize recent studies in the flora of Egypt. Six more papers deal with current issues in plant systematics including limits to computer analysis and nomenclatural challenges. Four papers examine new techniques that have been applied to problems in particular families or orders. Finally the last paper records the panel discussion used to wrap up the symposium.

Many of the biological papers are case studies of the application of new methods to plant systematics, even the overview papers. A good example is Prance's paper on the changing focus of research on the Chrysobalanaceae over the last 40 years. Even Källersjö and Farris' paper serves primarily to highlight the contribution of Farris' computer algorithm on parsimony jackknifing. Probably the best overviews of research advances are El-Ghazaly's paper on new methods in palynology, Ferguson's paper on application of pollen morphology in systematics, and Chanda's comments on the application of palynology to understanding related fields.

While all the biological papers are excellent summaries of new methods and application of those methods over the closing decades of the 20th century, only two are truly forward looking. Kubitzki's contribution reviews the state of plant systematics. He tries to foresee the future trends in cladistic and molecular analysis, conflicting data, and information technology. Greuter is concerned for the future of plant nomenclature and the challenge to provide stable names for species and higher taxa as global conservation becomes an increasingly important goal for biologists.

The panel discussion disappoints one looking for the future prospects of plant systematics. It comes as no surprise that nearly all the speakers agreed that the top three priorities should be 1) documentation of the world's biodiversity before it is irreversibly lost, 2) conservation of that biodiversity, and 3) continued research to better understand evolutionary mechanisms. Some of the speakers mentioned increasing and improving herbarium and biological databases and retrieval. However, no room was given to developing models on how the greatly expanded databasing should be achieved. Indeed the only other reference to this important issue was a couple of paragraphs in Kubitzki's paper.

Surprisingly, I found very little on the next phase for molecular biology. That is, moving from a simplistic comparisons of nucleotide sequences in a few analyzable genes to understanding the underlying genetics of integrated character complexes of expressed phenotypes. Indeed, in Kubitzki's assessment I found just the opposite, "To this end [of interpreting character evolution] morphological or other traits can be mapped onto cladograms, which should preferably be based on molecular data." While I understand his concern of avoiding circular reasoning by using alternate data sets, I see a problematic attitude that is developing in systematics, even among the traditional morphologically oriented researchers. Are we (as a biosystematics community) to form our classifications on one or a few genes and force the interpretation of morphological characters, many of which derive from highly correlated multi-gene complexes, onto those simple gene trees? Are we falling headlong again into the trap of "one character taxonomy?" Perhaps we should be more prudent, realizing that these highly sophisticated, but philosophically simplistic methods are not showing us phylogenetic history any more than do the confusingly homoplastic morphological methods.

While this book falls short of its purported goal, nonetheless it is a valuable collection of articles. It is worth owning, especially for accessing the literature on palynology, Egyptian botany, nomenclature, and various modern systematic techniques.—Roger W. Sanders, *Associate Collections Manager, Botanical Research Institute of Texas, 509 Pecan St, Fort Worth, TX 76102-4060, U.S.A., rsanders@brit.org.*

MARK BONTA. 2003. **Seven Names for the Bellbird: Conservation Geography in Honduras.** (ISBN 1-58544-249-6, hbk.). Texas A&M University Press, John H. Lindsey Bldg., Lewis St., 4354 TAMU, College Station, TX 77843-4354, U.S.A. (Orders: 1800-826-8911, w-lawrence@tamu.edu, www.tamu.edu/upress). \$35.00, 250 pp., 35 b&w photos, 4 maps, 5 3/4" × 9 1/4".

Within the text, Mark Bonta takes an ethnographic approach to understanding the relationship between the local people of Honduras and the birds of their region, thus serving to create a bridge between academic geography and what he calls "on-the-ground conservation." The recounting of this approach and its results takes the form of individual and family histories and stories relayed throughout the text. The particular intent of the text is to dissuade the reader that humans are entirely destructive with a conscious purpose, and that in particular the relationship between Honduran locals and their avifauna is not inherently detrimental to the birds. However, Bonta does not parade his findings as assurance that the birds have a secure place in the Neotropical landscape.

The text is divided into nine separate chapters, preceded by an introduction to conservation geography, as it will be dealt with for the remainder of the text, and succeeded by an appendix listing the birds recorded for the central Olancho department of Honduras as well as a glossary of Spanish terms. The first chapter delves into the subject of "ornithophilia" (a natural love for birds) through the depiction of a young girl, Lucita, and her interaction with the birds in her area. As a standard for



Sanders, Roger William. 2003. "Plant Systematics for the 21st Century: Proceedings from a symposium held at the Wenner-Gren Centre, Stockholm, in September 1998. Wenner-Green International Series, Vol. 77 by Bertil Nordenstam, Gamal El-Ghazaly, Mohamed Kassas." *SIDA, contributions to botany* 20, 1787–1788.

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