

## BOOK REVIEWS

**Flora of the Venezuelan Guayana. Volume 2. Pteridophytes, Spermatophytes; Acanthaceae–Araceae.** Volume Editors: Paul E. Berry, Bruce K. Holst & Kay Yatskievych. General Editors: Julian A. Steyermark, Paul E. Berry & Bruce K. Holst. Illustrations by Bruno Manara. St Louis: Missouri Botanic Garden, and Oregon: Timber Press, Inc. 1995. 706pp. ISBN 0 88192 326 5. US\$65.00 (hardback).

This volume is the first of the floristic treatments for the *Flora of the Venezuelan Guayana* and follows on from the introduction to the ecology and biogeography of the area presented in Volume 1 (reviewed in *Edinb. J. Bot.* 54: 355–356 (1997)). It covers all the pteridophyte families found in the Flora area and 11 families of spermatophytes. The remaining 190 seed plant families are to be treated in alphabetical order in subsequent volumes. All the native and naturalized vascular plants that occur in the southern Venezuelan states of Amazonas, Bolivar and Delta Amacuro are included. All 671 pteridophyte species from 92 genera and 29 families are represented, with a short introduction by Alan R. Smith who is also responsible for most of the accounts. The spermatophytes in this volume include 614 species from 117 genera from some large and important families, and the accounts are written by a number of mostly American, but also European and Venezuelan, authors. The biggest flowering plant families in this volume are the *Annonaceae*, *Apocynaceae* and *Araceae* which are all represented in the area by more than 100 species, whilst the *Aquifoliaceae* is represented by 69 species in one genus (*Ilex*).

The family accounts contain a complete description of the family and the genera and include the worldwide variation of these taxa. However, full descriptions of species are not present but the keys and illustrations should enable accurate identification of most species. Valuable information under each species is given, including synonymy relevant to the Flora area, common and vernacular names and habitat and elevational range. The bracketed dichotomous keys are concise and easy to use to identify the genera and species in the Flora area. There are illustrations for half the species, at least one per genus, and these are clear although sometimes rather diagrammatic.

The biggest drawback of the Flora is the alphabetical arrangement of the families and the physical size of the book. Hence this volume covers a ragbag of only 11 flowering plant families in a large and heavy tome. It will be very useful for pteridologists since all ferns are treated in a single volume but will be of limited value to those interested in identifying flowering plants. Not even the distinction between monocots and dicots is made so that this volume covers a mixture of eight dicot families and three monocot families. It would be more valuable if a systematic approach had been taken to avoid the absurdity of closely related families being placed (under an evolutionarily arbitrary, alphabetical system) in different volumes. The limits of these families are likely, given the state of flux of modern classifications,

to be subsequently modified. For example, *Asclepiadaceae* narrowly misses being in this volume on alphabetical grounds despite its close relationship with *Apocynaceae* and the debate over boundaries between the two families. Such incongruities are dependent on the classification adopted by contributing authors and make the arrangement of this Flora biologically arbitrary.

It is inevitable, given the diversity that occurs in the Flora area, that multiple volumes are required but the format could have been adjusted so that more taxa could be accommodated in each volume. In particular the illustrations could have been better organized: in this volume many of the illustrations are scattered throughout the text and it may have been a more efficient use of space and easier to refer to them if they had all been separated onto plates (although this would require some reduction in size, and therefore clarity, of the illustrations). By eliminating detailed descriptions of species the volume of the Flora has been somewhat restricted but it is still a weighty tome at just under two kilograms, and much more shelf space is needed before all the flowering plant families will be covered.

Despite these criticisms the Flora is an ambitious attempt to produce an inventory and identification guide at the species level to an extensive region of South America and is much needed. It is the first attempt to cover such a large area in northern South America and it must be applauded for this. It is clearly laid out and pragmatic in its approach to species descriptions, and one hopes that subsequent volumes will follow rapidly so that an important and botanically fascinating area will be documented in an invaluable and pioneering Flora.

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**Common Families of Flowering Plants.** Michael Hickey & Clive King. Cambridge: Cambridge University Press. 1997. 212pp. ISBN 0 521 57281 9. £40 (hardback). ISBN 0 521 57609 1. £14.95 (paperback).

Fifteen years ago when studying flowering plant families in an undergraduate classification course, 'Hickey and King' (*100 Families of Flowering Plants*, ed. 1) was our bible. No other modern textbook offered the same range of diagrams and discussion of floral morphology in a form suitable for students. A welcomed second edition appeared in 1988, which I used as a reference when running my own courses in flowering plant classification. When I was beginning a course this spring, *Common Families of Flowering Plants* arrived on my desk for review. So I have put it to the test in the classroom, as well as comparing this 'cut-down' version with the full 'Hickey and King'.

*Common Families of Flowering Plants* covers 25 of the more common (temperate) families, in a larger (A4) format than its elder brother. It is designed to give an introduction to characteristics of plant families, and so be of use to botany students and others wanting a knowledge of flower structure, such as botanical artists and