

Book Review

Flora of Australia, volume 12, Mimosaceae (excl. *Acacia*), Caesalpiniaceae. Editor P.M. McCarthy. Published by CSIRO, Melbourne, 1998; 213 pp.; hardcover edition (ISBN 0 643 06298 X) \$AU 69.95; soft cover edition (ISBN 0 643 06299 8) \$AU 54.95

This volume, presents all the Caesalpiniaceae and Mimosaceae, excluding *Acacia*, native and naturalised in Australia. The Caesalpiniaceae are represented in our flora by 22 genera and 127 species; the Mimosaceae by 17 genera and well over 1000 species. This latter includes the most speciose of Australia's genera, *Acacia*, not treated in this volume. Without *Acacia*, the family is but sparingly represented, with only 43 species. Most of these grow in the wet tropical north (especially Queensland).

It is a disappointment to me that in this case *The Flora of Australia* is committed to following Cronquist's system of classification of the legumes, splitting them into three families. This, despite the confession of two of the contributors to this volume, that most specialists who study the group would include them in one family. Simply put, there are no characters that support Cronquist's classification. In fact two genera, *Pentaclethra* and *Dimorphandra*, though put in two different families by Cronquist (Mimosaceae and Caesalpiniaceae respectively) are more similar to each other than they are to any other member of their respective families. Though only a flora series, I think it unfortunate in this case that it was not decided to allow the nomenclature used to reflect our increased understanding of the systematics of the group, and to include all the legumes in one family. The editors have, in effect, perpetuated what appears to this legume researcher to be an anachronistic position. Though this is an important criticism to me, it in no way detracts from the practical value and presentation of this volume.

Seven authors contributed treatments to this book, and it is a credit to the editorial staff that they all conform to the same standard. In an afternoon in the herbarium using the keys with herbarium specimens I discovered no errors in fact, and hardly any difficulty in using them. Each couplet in the keys I used worked, and in most instances the authors are to be commended for using vegetative and reproductive characters in their couplets, thereby allowing one to identify specimens that might be fruiting or sterile.

Even though the descriptions are short, as is perhaps necessary in this series, in every one that I had to refer to, enough information was provided to clearly determine a specimen not determined for certain using the key.

I am sad to say that I did find some of the illustrations to be rather coarse and unappealing. I could not tell if this was the lack of finesse on the part of the artist, or if the line drawings were too reduced in reproduction. The line drawings are supplemented with some beautiful colour photographs (32 of mimosoids, and 32 of caesalps, each in eight plates). These photos are a wonderful addition, and bring to the fore characters that cannot be appreciated in reading the descriptions. For instance, the photo of the fruits of *Archidendron lucyi* (Fig. 21, p. xviii), *Aa. hendersonii* and *ramiflorum* (Fig. 19, 20, p. xvii) are stunning. Not only because of the unusual beauty of the fruit – all bright red with contrasting, dark seeds – but also because I was struck with the similarity of this fruit to some American genera of tribe Ingeae, like *Pithecellobium*, or *Abarema*; genera with which I am much more familiar. No description had ever conveyed that to me.

At first I was put off by the treatment of *Senna*, with its form taxa. Having known that B. Randell and B. Barlow had both worked on the groups for quite some time, I expected more. In hindsight though, after curating the collections at MEL, I see my attitude was a bit naïve. Though I would have theoretically admitted that there are groups so tokogenetically complex as to defy simple treatment, I had no personal experience with one. I see now, though, that *Senna* is such a group, and the treatment by Randell and Barlow seems rational and practical.

The contribution of the Mimosaceae (excluding *Prosopis*) presents Richard Cowan's last contribution to plant systematics. I know that Dick thoroughly enjoyed his work on the *Flora of Australia*, and his treatments almost vibrate with the enthusiasm with which he approached his work. The work has obviously benefited from Dick's experience with American Mimosaceae as the groups treated here, especially those in tribe Ingeae, have close relatives in the America's, and Dick's familiarity with those groups adds a certain soundness to his treatments. He is sorely missed.

All in all, this volume is everything it should be: sound, complete, and very practical. I can see that it will be well used by me.

James Grimes

