

## BOOK REVIEW

**Flora of Peninsular Malaysia. Series II: Seed Plants, Volume 4. Malayan Forest Records No. 49.** Edited by R Kiew, RCK Chung, LG Saw & E Soepadmo. 2013. Forest Research Institute Malaysia, Kepong. 405 pp. RM100/USD 75.

The *Flora of Peninsular Malaysia* project is progressing remarkably well, with the fourth volume of the seed plants series released late last year. This volume includes eight taxonomic revisions, namely Actinidiaceae, Cabombaceae, Crypteroniaceae, Goodeniaceae, Meliaceae, Memecylaceae, Opiliaceae and Pandaceae, altogether 166 taxa in 29 genera. As anticipated, this volume is well structured and produced.

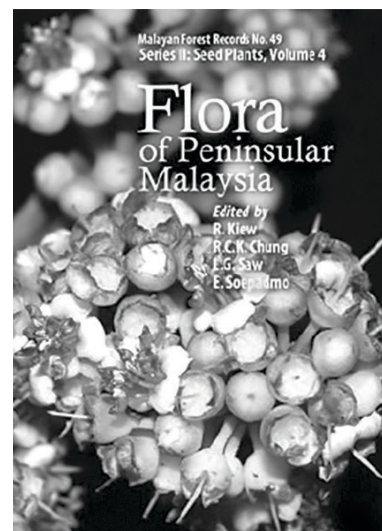
The volume begins with a short chapter on conservation by L.S.L. Chua that includes two tables summarising (i) the number of native taxa for each Red List category assessed using the IUCN Red List Categories and Criteria (Version 3.1), and (ii) a list of threatened (i.e., Critically Endangered, Endangered and Vulnerable), Data Deficient and Rare taxa, recorded in the volume. The taxonomic accounts of the eight families are then presented in alphabetical order. The format of each revision is quite standard, as in any long-running *Flora* series, following styles adopted for the first volume. There are taxonomic keys provided to distinguish genera, as well as species, for all the families revised, and these keys are easy-to-use.

The bulk of this volume is the account of the Meliaceae by D.J. Mabberley and C.M. Pannell, with a contribution by J.M. Edmonds for *Toona*. The account has a total of 15 genera and 106 species of which 51 species are in the genus *Aglaia*. This genus was revised by Caroline M. Pannell who has spent many years working diligently on this very diverse genus and who has already contributed taxonomic accounts for the *Tree Flora of Malaya* (1989), *Flora Malesiana* (1995), and the *Tree Flora of Sabah and Sarawak* (2007). Also included in the Meliaceae account is a list of useful spot characters to identify Meliaceae

genera in Peninsular Malaysia. This list is not only useful for botanists, but also foresters and naturalists. A new term ‘berryoid’ is introduced to define the fruit type of some Meliaceae taxa, such as *Aglaia*, *Lansium*, *Pseudoclausena*, *Reinwardtiadendron* and *Walsura*, that cannot be considered either a berry or a capsule based on the current classification of fruit types.

The second largest family in the volume is the Memecylaceae which includes the two genera *Lijndenia* (1 species) and *Memecylon* (32 species). The well-researched account by M. Hughes contains some very informative figures to guide users through the taxonomy of Peninsular Malaysian *Memecylon* based on the morphological characters of the anther, if fertile materials are available, or based on leaf size, shape and venation prominence, when only non-fertile materials are available. However, I noticed that in Figure 3 (page 278), an illustration of “*M. megacarpum*” is included amongst a selection of Peninsular Malaysian *Memecylon* species with distinct marginal veins. Perhaps it would have been better to illustrate “*M. pseudomegacarpum*” instead of *M. megacarpum* which is endemic to Borneo. Likewise, in the “Foreword” and “Acknowledgements” sections, the family is erroneously referred to as “Memecylonaceae”.

In contrast to these two large-sized families, the rest are fairly small and straightforward, namely Actinidiaceae (2 genera, 11 species), Cabombaceae (1 genus, 2 species), Crypteroniaceae (2 genera, 3 species), Goodeniaceae (1 genus, 1 species),



Opiliaceae (4 genera, 4 species) and Pandaceae (2 genera, 4 species).

This volume is well illustrated with 67 line-drawings representing slightly fewer than half of the taxa enumerated in the volume. On the other hand, distribution maps are provided for almost all of the species treated in the volume. At the end, just before the index, there are 30 pages of colour plates for some of the taxa. With the publication of this volume, 46 seed plants families

(see inner back cover of the book) have now been revised for the *Flora of Peninsular Malaysia* and we eagerly look forward to the next one.

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