

**TREE FLORA OF SABAH AND SARAWAK VOLUME 3. E. Soepadmo and L. G. Saw (editors).** 2000. Forest Research Institute Malaysia, Sabah Forestry Department and Sarawak Forestry Department, Malaysia. ISBN 983-2181-06-2 (Vol. 3). 511 pp. US\$ 140 (inclusive of surface mail).

Volume 3 is a sterling addition to the series as it covers four large families: Fagaceae (4 genera and 100 species) by E. Soepadmo, Julia Sang and Rusea Go, Leguminosae–Caesalpinioideae (17 genera and 42 species) by Ding Hou, Moraceae (8 genera and 179 species) by K.M. Kochummen and Rusea Go, and Myristicaceae (5 genera and 110 species) by W.J.J.O. de Wilde.

This volume is appropriately dedicated to K.M. Kochummen, whose untimely death at the age of 67 deprived the Flora of one of its most experienced and productive contributors. In this volume, he revised the largest genus, *Ficus* with 143 species (for which there is no published *Flora Malesiana* account), as well as *Artocarpus*. In the previous volumes, he revised the Burseraceae (59 species), Celastraceae (70 species) and Ochnaceae (9 species) in Volume 1, and the Anacardiaceae (95 species) in Volume 2. Koch is sorely missed, not least because of his enthusiasm in sharing his wide experience with other members the Flora team.

Volume 3 continues the excellent standards of the previous volumes in providing comprehensive taxonomic treatments, keys where possible based on vegetative characters, and with at least one clear botanical drawing for each genus. The more comprehensive coverage of nomenclature and types than is usual in tree floras is particularly helpful in a region where few libraries have comprehensive old collections and few types are available in local herbaria. The keys, which include non-tree (less than 5 m tall and 10 cm dbh) genera and species is also helpful for a region for which there is no basic flora. Koch's key to figs is particularly useful in this respect (it includes a concise description of the non-tree species) as figs are not only encountered everywhere, but are important food sources for animals, so that the key will have a wider use beyond foresters but will also serve, for example, ecologists and zoologists. Having the diagnostic characters in italics is also a user-friendly feature of the Flora.

The wide field experience of the authors is shown in the accounts of Koch and de Wilde, where attention is drawn to the difficulty of using keys and the remedy in the case where material is either not complete (a problem in dioecious species) or ambiguous, as in the case of growth habits of figs.

Worrying is the slowing down of progress of the Flora (Volume 1 in 1995, Volume 2 in 1996 and now Volume 3 in 2000). This can be attributed in part to the lack of additional international funding between 1996 and 1999. Family accounts are in the pipeline for Volume 4, but continued

funding is critical particularly for ensuring that Senior Botanists' positions are available for people to work full-time. The Flora is indispensable to the understanding of tree biodiversity of Borneo, not only because it provides a single-volume information source on the species present, keys for their identification, their nomenclature, specific characters, distribution, ecology, uses, vernacular names, etc., but also because the accounts are bringing to light many previously undescribed species. We can only echo the earnest hope of the Director-General of Forest Research Institute Malaysia and the Directors of Forestry Departments of Sabah and Sarawak that the Project will be able to attract enough funding from both international and national agencies to continue producing the next seven volumes at yearly intervals.

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