

BOOK REVIEW: *Flora of Peninsular Malaysia. Series II: Seed Plants (Malayan Forest Records 49), Volume 10. Edited by R. Kiew, R.C.K. Chung & L.G. Saw. 2023.*

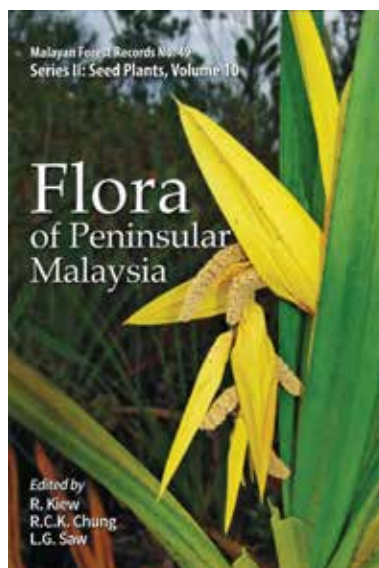
Kepong, Malaysia: Forest Research Institute Malaysia. 258 × 186 × 210 mm, hardback, 308 pp. ISBN 978-967-2810-64-3. RM 87 (individual), USD 52 (individual or institution) excl. packing & postage.

This instalment of the *Flora of Peninsular Malaysia* is the tenth in a series that began publishing in 2010, only some 20 years following the fourth and last volume of the *Tree Flora of Malaya* (1972–1989). This has given the opportunity to provide much more coverage than trees alone, aiming to comprehensively enumerate the flora, as well as incorporate much additional information in the detailed descriptions than afforded in most earlier accounts. The illustrations, comprising line-drawings (with at least one full plate per genus), photographs (compiled at the end of each volume) and distribution maps for Peninsular Malaysia, are a well-conceived feature of the series.

All ten volumes have involved various participating editors but throughout have been headed by Dr Ruth Kiew, a stalwart of Malaysian botany who has performed a wonderful job in organising the teamwork and effort towards the *Flora*. She joined the Forest Research Institute Malaysia, where this *Flora* is based, in 2006, and has otherwise done much to shed light on plant conservation issues, through floristic surveys across the country, especially with the limestone flora.

Thus far, the ten volumes have covered 84 families and much of another family (Apocynaceae). Some 140 families remain to be treated, including some very diverse groups, which will no doubt push the endeavour towards novel lines of research. In this, the support given through the Ministry of Natural Resources & Environmental Sustainability (earlier the Ministry of Energy & Natural Resources, also Natural Resources & Environment) has been, and will be, a pivotal strength that will carry through not only the publication, but also fieldwork and exploration, on which good *Flora* revisions must necessarily depend. The accelerating rate of transformation of today's landscape is an additional spectre that hangs over the prospect of an updated *Flora* that will inform conservation efforts.

Volume 10 comprises the Dipentodontaceae (by A.M. Aliaa Athirah: a single genus with one species in Peninsular Malaysia), Ebenaceae (R.P.J. de Kok & C. Puglisi: a single genus, 63 species), Pandanaceae (H.J. Beentje & M.W. Callmender: 3 genera, 45 species), Sabiaceae (I. Nadiah: 2 genera, 10 species), and Sphenocleaceae (A.R. Rafidah: a single genus, 1 species). *Diospyros* in the Ebony family (Ebenaceae) is one of three entities in the Malayan rain forest (the other two being Anisophylleaceae and Myristicaceae) that we know of represented with Massart's tree-architectural model (as defined by Hallé, Oldeman & Tomlinson in their classic 1978 treatise on tree architecture); the stems are very upright or orthotropic with spirally arranged leaves, and distinct tiers of horizontally disposed (plagiotropic) branches bearing leaves in two ranks. Structurally, their younger stages are easy to pick out in a survey and then



easy to distinguish by other simple characteristics. De Kok & Puglisi provide two keys to *Diospyros*, one based on flowering material, the other on fruiting specimens, very useful in this group. Likewise, Beentje & Callmander's Pandanaceae account is highly welcome, being the first modern complete treatment of the genera in Malaya, which distinction is informed by molecular insights. Their account begins with an illustration of *pandan* growth habits by the late Professor B.C. Stone, American botanist and reader at the University of Malaya in Kuala Lumpur and long-standing specialist of Pandanaceae, who is commemorated in the genus *Benstonea* Callm. & Buerki. Stone once referred to the pandans as the "big game of the plant world". The pandans are notoriously difficult to make specimens of on account of their often prickly-lined, strap-shaped leaves, and given their mostly dioecious nature (males and females as separate plants, as also with *Diospyros*) frequently lead to incomplete representation as collections. Thus a number of taxa are still known only from a single sex.

The quality of production is excellent. The entire series is a worthwhile acquisition not only for libraries and institutions, but also for individuals interested in the natural history and botany of the Malay Peninsula. With this stage of progress, the imperative to plough on and continue this most laudable mission must surely gain precedence.

K.M. Wong

Singapore Botanic Gardens