BOOK REVIEW. Wild Orchids of Peninsular Malaysia. P.T. Ong, P. O'Byrne, W.S.Y. Yong & L.G. Saw. 2011.

Kepong: Forest Research Institute Malaysia. 28.9 cm \times 22.8 cm, hard cover. 196 pp. ISBN 978-967-5221-66-8. Price RM 150.

It is estimated some 10 per cent of all flowering plants are orchids, with perhaps 22,500 species worldwide. The Malay Peninsula has an impressive diversity, with around 900 species and 143 genera enumerated for the political part that is Peninsular Malaysia, a tally now expected to reach c. 1000 species as exploration proceeds through to many areas previously much less accessible. This orchid flora has 400-plus species in common with that of the wetter territories around—each of Borneo, Sumatra, Thailand—and less so with regions more seasonal or farther away, thus some 300 species with Java, c. 160 species with the Philippines, and just 60 species shared with Papua New Guinea. A fifth of Peninsular Malaysian orchids are endemic, not found elsewhere.

There are seven chapters: Introduction, Diversity, Habitats, Pollination, Classification, Scientific Research & Conservation, and The Path Ahead (the last essentially concluding statements centring on propagating the orchid message and contributing to orchid protection and conservation). Conservation discussion provides a variety of snippets, dealing even with orchid thievery that all too often feeds an obsession in the bid for unique possessions. Good summary accounts of the orchids of various vegetation types found in Peninsular Malaysia, from the lowlands to mountaintops, and on specialised substrates such as limestone, are given.

The key emphasis is on the impressive diversity in size, habit and floral structure and display. Some key facts are referenced by numbers referring to sources listed at the end of the book. There is, throughout, an attempt to explain would-be technical terms, from "species" and "genus" across a wide range to, for example, "heterotrophic mycotrophs", the annointed term for non-chlorophyll-producing (so typically leafless) orchids that rely on the absorption of materials broken down by their fungal associates for their nutrition. Interesting snippets of information are carefully infused, covering such aspects as the adaptations of epiphytes, CAM photosynthesis and, of course, pollination. The information on pollination definitely provides many highlights and perhaps is the single most original aspect of this book, even though practically all areas covered have been wonderfully, albeit briefly, managed. Original information on pollination is included, revealing a newly emphasised area of investigation that not many, except the patiently observant, methodically curious and well-equipped, can partake. This fascination emerges early, as the very first photo with the opening main text already mentions the "rather nasty, fishy scent" of Bulbophyllum virescens flowers

Text style is creative (a few section titles may appear to be an effort) and imaginatively crafted 'stories' teach a great deal about orchid specialisations and biology. One could certainly say that no part of this book tends to the verbose. After just some 60 pages of the most interesting primary information, the survey of representatives from the different orchid subfamilies takes the form of a *slab* of richly illustrated pages—evoking a curiously rebellious *deja vu* as it piles up an impressive

compilation of richly coloured illustrations somewhat reminiscent of all big illustrated accounts, yet with the biological and ecological sense they are organised, and by the time the reader reaches this portion of the book, it is all too clear that a great deal of knowledge and experience have been behind this.

A *lot* of effort has been put into photographing orchids and assembling illustrative images for the many topics covered, so essentially a variety of useful illustrated glossaries aid the beginner's initiation into a systematically woven (and may I add, eagerly pursued) introduction to orchid diversity. The authors are also the main photographers (you can tell that *they* enjoy orchids). There is a case for wondering if glossy art paper was the best choice for this book but colour printing is well served. Heavy use is made of black page backgrounds, to provide maximum contrast. Some extreme bursts of colour are cleverly choreographed into the account. And—the bizarre view of pollinating blowflies crawling all over a *Bulbophyllum lasianthum* inflorescence on the back cover simply closes this account with a thump.

K.M. Wong

Singapore Botanic Gardens