

REVIEW

C.L. CHAN, A. LAMB, P.S. SHIM & J.J. WOOD. 1994. *Orchids of Borneo, Volume 1*. The Sabah Society, Kota Kinabalu, in association with the Bentham-Moxon Trust, Royal Botanic Gardens, Kew, UK, 1994. xvii + 402 pp., 100 line drawings, 22 colour plates. ISBN 967-99947-3-2. Price £ 30.00.

Three years after publication of volume 2, which was entirely devoted to *Bulbophyllum* (by J.J. Vermeulen), volume 1 of what should become a complete iconography of the Orchids of Borneo has appeared. Each volume is projected to contain a hundred species, which means that eventually fifteen volumes will line up on our shelves. If the pace of production is not increased, most of us will be retired or dead by then. I really hope to live to see the completion of this series, because it is magnificent! It invites comparison with the legendary series 'Venezuelan Orchids Illustrated' by Dunsterville & Garay, both in format and in the quality of the illustrations. The text is much better, however, giving not only descriptions, but also elaborate notes on habitat and ecology, distribution, etymology and miscellaneous topics.

This first volume starts with general chapters in which, apart from the inevitable introduction to the orchid family, a useful survey is given of the various habitats in Borneo with their characteristic orchid species. It is a pity that there are no illustrations of at least some of these habitats here, but one can find several in volume 2. No reference is made to them in the present volume, however.

Volume 1 also contains a key to the circa 150 genera occurring in Borneo; this is the only part of the book about which I am not very enthusiastic. The key consists of three separate parts, one to the (so-called) saprophytic genera, one to the subtribe Aeridinae and one to the remaining genera. One is assumed to know which key to use, an assumption which is highly questionable. Perhaps even the uninitiated can recognize a 'saprophyte' (although a novice may also look for *Nervilia* or *Pachystoma* in this key – and look in vain), but it is asked too much, I think, of the average user to assume that he or she knows how to recognize a member of the subtribe Aeridinae. There is no way of knowing from this book which characters distinguish the Aeridinae from the other orchids (briefly, the Aeridinae contain all the monopodial orchids related to *Vanda* and *Phalaenopsis*). The user who has taken this initial hurdle, and tries to use the key to the remaining genera will encounter further obstacles. First of all, there is an error in the numbering: the second lead of couplet 25 points to couplet 31; this must be 33. Secondly, there are a number of errors in the characters attributed to the genera. *Spiranthes* can only be identified by incorrectly assuming that it has non-sectile pollinia. To reach *Eulophia* or *Cymbidium* one has to count four pollinia, while there are in fact only two pollinia which are incompletely cleft at the base, as is correctly noted in some of the descriptions. One can argue that there are four partly fused pollinia, but then this should have been explained in the key; as it is one has to choose between 2 and 4, most users will try 2, and end up with *Collabium*. *Flickingeria convexa* will be identified as *Dendrobium*, as it does not have superposed stems. *Agrostophyllum laterale* does not normally have terminal inflorescences, and therefore will key out as *Poaephyllum*. Contrary to lead 2 of couplet 71 at least one species of *Podochilus* in Borneo does have laterally flattened leaves. That

all Coelogyninae have terminal inflorescences is technically speaking true, but in several genera the inflorescences may appear on specialized leafless and pseudobulb-less shoots which most users of the key will probably interpret as being lateral inflorescences; these users will then not be able to identify to genus such a common Borneo orchid as *Coelogyne swaniana*.

The main part of this book consists of line drawings and descriptions of 100 species in 44 genera. This part leaves very little, if anything, to be desired. The quality of the drawings ranges from good to superlative (the latter by Chan Chew Lun), and the text is excellent. As far as I can see all species are correctly named, with two exceptions noted. The species here identified as *Pristiglottis hasseltii* is in my opinion *P. hydrocephala* (J.J. Sm.) Cretz. & J.J. Sm. and *Liparis latifolia* (Blume) Lindl. is based on a later homonym (*Malaxis latifolia* Blume not J.E. Sm.) and therefore illegitimate; it should probably be called *L. robusta* Hook. f.

There are new species in the genera *Acanthephippium*, *Bulbophyllum*, *Ceratochilus*, *Dendrobium*, *Nephelaphyllum*, and *Phaius*, and there is a new genus, *Spongiola*, a member of the subtribe Aeridinae, with a single endemic species.

An identification list, a glossary, and an index conclude this beautiful book.

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