Malaysian Journal of Science **17A**: 63 (1996)

REVIEWS

Pitcher-plants of Borneo by A. Phillips and A. Lamb. Kota Kinabalu: Natural History Publications (Borneo) Sdn. Bhd. in association with Royal Botanic Gardens (Kew) and Malaysian Nature Society, 1996. 171 + x pp (ISBN 983-812-009-X)

Although there are a number of books on the general subject of Carnivorous Plants, within which there would be a section on Nepenthes (commonly referred to as tropical pitcher plants), there are very few solely devoted to the topic of Nepenthes plants. This new book "Pitcher-plants of Borneo" makes a much-needed contribution to the general knowledge of, and interest in, these plants.

The book consists of 5 chapters: (i) Discovery and History, (ii) The Pitcher Plant, (iii) Ecology and Natural History, (iv) Pitcher Plants in Folklore, and (v) The Borneo Species and Selected Hybrids. The first and fourth chapters tell of the colourful background of events and belief regarding Nepenthes. The language used is simple and non-technical. Still, readers may find some of the terms unfamiliar (what, for example, are the 'Wardian cases' mentioned in page 11?). Incidentally, Wardian cases refer to the specially-constructed portable greenhouses that were used for shipping (this was the age before Federal Express and DHL) tropical native plants from the South-east Asia region to Europe.

The second and third chapters are excellent accounts of the structure of Nepenthes plants and the life-and-death drama that takes place inside the pitcher. Different types of carnivorous plants have different trapping mechanisms and that of the pitcher plant is a 'passive' trap. Though not as spectacular as 'active' trapping mechanisms such as that of the Venus fly-trap the structure of the pitchers is just as interesting. It may surprise the reader to know that despite their carnivorous nature some pitcher plants host certain kinds of spiders and ants as house guests.

The fifth and last chapter is, perhaps, the most important part of the book. There are descriptions of the 32 species, and some of the resultant natural hybrids, found in Borneo. What is very remarkable is that some 24 of these 32 species are found only in Borneo. (The total number of recorded *Nepenthes* species in the world is about eighty.) Incidentally, there is one species that is described in "Nepenthes of Mount Kinabalu" (Kurata, 1976) which is not mentioned in the Phillipps and Lamb list of 32 species. Is the omission of *Nepenthes alata* Blanco an oversight or could it be that this species, which is found in Peninsular Malaysia, Philippines and Sumatra, no longer exists in Borneo?

The careful observations of the authors have resulted in a significant contribution to the store of information on tropical pitcher plants. However, this does not mean that there is not much left for further research. Indeed, a careful reading of the book would show that there are still many areas that are waiting for intrepid and patient discoverers. Some of the areas that readily come to mind are: (i) research on specific species, (ii) research on flowering and pollination, (iii) research on pitcher formation, and (iv) research on hybrids and hybridisation. No doubt other readers can suggest further research areas when they are studying the contents of this book.

This is certainly a book worth acquiring for those interested in tropical pitcher plants. Indeed, its clear photographs, watercolour pictures, line drawings, and user-friendly language make the book also a good one for those with a general love for nature and its beautiful and unusual plants.

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