

XV. REVIEWS

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ENGEL, D.H. & S. PHUMMAI. 2000. **What's that tree? A field guide to tropical plants of Asia.** 279 pp. Times Editions, Singapore. ISBN 981g-204-917-7. Paperback. Numerous colour photographs. Price: USD 29.90.

On-line bookstore: <http://www.timesone.com.sg/te>

The beautifully photographed *Ficus racemosa* with its distinct cauliflorous habit on the cover, enticed me to flip to the succeeding pages of this lavishly illustrated volume. Besides the vivid and appealing photographs, the book has a very unique approach in keying and identifying some 300 most common plants in the Southeast Asian parks, highways and other similar places of interest.

Realizing that few people have a knowledge of botanical classification, the authors, David H. Engel, a landscape architect, and Suchart Phummai, a civil engineer and naturalist, devised a very practical approach in identifying their subjects.

You don't have to key out the unknown species by the use of an intimidating dichotomous key. Engel and Phummai ably arranged the contents of their book into Trees, Shrubs, Vines and Groundcovers, and Bedding Plants. Under each category, the species are listed or arranged by flower colour (red, pink violet, white, yellow), by foliage, and by fruit.

Hence, if you are interested to know the name of a tree with yellow flowers, you simply turn to the page on Trees: Yellow Flowering and there you will be able to match the living tree with the photographs in full colour.

This is commendable since a plant may not flower or fruit throughout the year. So in the absence of one character, another distinct one can help a curious individual identify a plant in question.

Under shrubs, the authors have a special subgroup: Color Anomalies (because the flowers change color in a day such as *Hibiscus mutabilis* (Changeable Rose) or in three days like *Brunfelsia hopeana* (Yesterday, Today and Tomorrow) and the like.

Indeed this volume, which is very handy, can be an ideal companion and field guide of a traveler, plant hobbyist, naturalist or a botany student in any Southeast Asian country. The description is devoid of the complex Botanical Latin, instead it includes a wealth of very important practical information written simply. Information on habit, uses (medicine, food, landscape, etc.), and ecological preferences are indicated while harmful effects of some are emphasized to warn readers. The classic botanical description with the family name of the species is also available in the Appendix if desired.

Sincerely concerned of the readers' plight in understanding botanical terms not already covered by the illustrations and terminologies of the various shapes of leaves, flowers, fruits, and seeds in the introductory chapter, the authors have inserted a glossary in the Appendix. And for some readers who might be interested in pronouncing the common names of the plants, a guide to the pronunciation of Bahasa Indonesia, Filipino, Thai, and Vietnamese is also included there.

Indeed, the book, *What's that tree*, offers much to its readers. It should have been better titled *What's that plant*, to reflect its diverse contents which include shrubs and herbs. I was touched by the authors' hope to inspire readers to study plants of Southeast

Asia in greater detail and, most importantly, to regard the plant world with *deeper insights* and *respect*. However, to better serve this purpose, I believe the book should be made locally produced in each Southeast Asian country or that a popular edition should be printed, maybe subsidized, and marketed at an affordable price. At USD 29.90 per copy, the book is certainly prohibitive to most students and young professionals of Southeast Asia (perhaps excluding Singapore!).

How I wish each high school library, university library, and beginning botany student would have a copy of this inspiring work. Developing love for Botany should start at a youthful high school age! Who knows, the crisis of plant taxonomists in the Malesian region would then start to decline?

As a botanist, I could not help but comment on the use of coconut as an example of a nut. This is a very common error. The coconut fruit is a drupe! There are a few print errors: *Gliciridium* (p. 31) for *Gliricidia* and *Malaviscus* (p. 131) for *Malvaviscus*. The photograph labeled *Pyrus malus* of the *Rosaceae* (p. 89 & p. 112) seems to be the Southeast Asian starapple, *Chrysophyllum cainito* (*Sapotaceae*). Also, I wish that authors of botanical names had been added at least in the Appendix where technical botanical description and family names are given. These, however, are extremely minor spots in a very well-written, uniquely designed and presented, monumental piece of work worth emulating. — I.E. BUOT, JR.

SOEPADMO, E. & L.G. SAW (Eds.). 2000. **Tree flora of Sabah and Sarawak. Volume Three.** Sabah Forestry Department, Malaysia, Forest Research Institute Malaysia, Sarawak Forestry Department, Malaysia. ISBN 983-2181-06-2 (vol. 3). USD 140.00.

The third volume of the Tree flora of Sabah and Sarawak ('TFSS') is finally published, as no additional international funding was available between 1996 and 1999. It contains 4 plant families only, *Fagaceae*, *Caesalpinaceae* (here treated as *Leguminosae*—*Caesalpinioideae*), *Moraceae*, and *Myristicaceae* and is dedicated to the late K.M. Kochummen, better known to his friends as Koch. In total 431 tree species are covered, most of them (c. 250) have been treated in a Flora Malesiana account.

Personally I had a strong interest in the *Moraceae* as *Ficus* is, due to its high diversity, one of the difficult genera in Borneo. Kochummen's account is very useful as it covers 143 species, including the epiphytes, climbers, stranglers, or creepers. This floristic revision is long awaited by the forester and biologist as well, as *Ficus* is one of the important sources of fruits for either mammals or birds and very well collected and documented in herbaria. With the present key at hand, which is not always easy to use (one still often needs correctly identified herbarium specimens for reference), one will be able to identify most of the Bornean material. This still is a time-consuming process as the key heavily depends in the first lead on several categories of growth forms. When trying to identify our own collections from East Kalimantan it seems that the information on growth form on the labels is in contrast to the respective description of the species.

Therefore one has to try more than one possibility as with regard to habit. It is a pity that the number of drawings which would make the identification a little bit easier is relatively low (6 only), of which one, *Ficus deltoidea*, cannot be mistaken. Less than 10% of the species considered to be treelets or trees is illustrated and the (local) user would certainly have appreciated a much higher number of drawings.

The other three families are treated by the Malesian experts of the groups who also already contributed to Flora Malesiana. The identification of *Caesalpinioideae* (Ding Hou, L) should pose no problem to the even unexperienced user as all genera are relatively small and therefore the keys straightforward. Unfortunately, some of the drawings (*Crudia ornata*, *Sindora wallichii*) are in sharp stylistic contrast to the others. This should be certainly avoided in future volumes. The *Fagaceae* have been treated by one of the editors (Soepadmo, with assistance of S. Julia and R. Go). Identification of sterile plants with the help of vegetative and field characters, often necessary for ecological aims and during forest inventories, seems almost impossible in the large genera *Lithocarpus* (61 spp) and *Castanopsis* (21 spp). The account shows that collecting and inventory work in Borneo is still needed as 11 species have been described as new after the Flora Malesiana treatment published in 1972. This is more than 10% of the formerly known number of species. One of the most diverse families are the *Myristicaceae* represented by 5 genera in Borneo. This account has been written by De Wilde (L) and is based on his larger contribution to Flora Malesiana, which happened to be published when I received this copy for review. The identification, especially in the largest genus *Knema* (44 spp), is hampered considerably as one needs to have flower buds, flowers, and fruits at the same time (example: lead 5: Flowers wholly or largely glabrescent ... 6; 6. Fruits glabrescent ... 7; 7. Flower buds more or less mitriform). Unfortunately, the chance to collect all these stages simultaneously from a single one specimen is very low.

For *Horsfieldia* (39 spp) De Wilde at least provides two keys, one for male flowering specimens and one for female flowering and fruiting specimens, which facilitate use. Comparing the number of species in Borneo with those occurring in Sabah and Sarawak, it can be concluded that the latter group represents almost 90% of the total number. This makes the TFSS a very useful tool for all who need to know about the floristic composition of the island of Borneo. Additionally information on vernacular names, distribution, ecology, and use is given. It is a pity that so far no funding could be found to combine efforts in Brunei, Kalimantan, Sabah, and Sarawak to write a Flora of Borneo as this would have a synergetic effect on the faster progress of the Tree flora.

This volume, as are the other two, is a very fine example of a much needed regional flora and everybody interested in the botanical diversity of Borneo is strongly advised to buy a copy. The book is very well printed, hardbound, and costs USD 140.00 for more than 500 printed pages. In my opinion this money is very well-spent, although university libraries or students in the region may have a different view. — P.J.A. KEßLER

STRAVER, H. & A. BOELENS. 2000. *Atlas Maluku*. 37 pp. Landelijk Steunpunt Educatie Molukkers. ISBN 90-73388-88-0.

Research in Malesia is severely hampered by the absence of recent, reliable atlases. The best one for Indonesia is still the 'Atlas van Tropisch Nederland' (1938), while for the other areas one has to do with road, pilot, and tourist maps that usually lack indices. It is therefore a good reason to mention the present publication which portrays the Moluccas in a number of detailed maps (**with index**). The booklet is clearly concerned with people as many place names are given, while most rivers and mountains have none. A large part is devoted to diagrams and maps with geographical, geological, sociological, and economical data. — J.F. VELDKAMP.