

Book Review: Christian Puff, Kongkanda Chayamarit and Voradol Chamchumroon. 2001. **Rubiaceae of Thailand. A Pictorial Guide to Indigenous and Cultivated Genera.** Forest Herbarium, National Parks, Wildlife & Plant Conservation Department, Bangkok, Thailand. viii + 245 pp. ISBN 974-463-142-2. Price: EURO 40 or USD 50 (inclusive of airmail).

The Rubiaceae comprise one of the largest families of flowering plants in the Southeast Asian tropics, and are therefore important in the Thai flora, including about 110 genera and some 600 species. There are few consistent workers in the family in Southeast Asia, because an introduction to such a diverse array of groups and form is not an easy thing to grasp or teach, so that collectors and botanists have had few guides to go by. The many taxa that are either rare or restricted in occurrence are frequently incompletely or little documented. Thus, the Rubiaceae, like other large and diverse families, have attracted few students so far, and have languished among the so-called “difficult and perhaps untidy families”.

The appearance of this book gives hope that all this is about to change. With more than 20 years of experience in studying Thai and Southeast Asian Rubiaceae, Christian Puff, joined by co-workers Kongkanda Chayamarit and Voradol Chamchumroon who provide the Thai text to complement the main English text, now present a well organized account that is a truly effective guide to this family. As given in the subtitle, the book is meant to introduce the family botanically, in terms of its diversity of life form, vegetative and reproductive structure and biological attributes such as pollination biology and dispersal. This indispensable introduction is covered in the first two chapters of the book (General notes; Selected character states), which throughout is lavishly illustrated by colour photography and complemented by easy-to-understand diagrams.

The indigenous genera of Thailand are treated in the main part, forming Chapter 3, where the arrangement by life form (trees/treelets/shrubs; climbers; epiphytes and ant-plants; herbs) makes for a very user-friendly introduction. The photography is actually splendid, mouth-wateringly attractive in many cases. The last portion, Chapter 4, deals with the non-indigenous taxa, grouped as ornamentals and cash crops, again very informative. Most (more than 80) Thai genera are covered in this book, and there is nearly always a single page of text facing a plate of well-chosen illustrations of the genus concerned (exceptionally, genera such as *Psychotria*, *Morinda*, *Prismatomeris*, *Hydnophytum* or *Argostemma*, where variation in form and biology may be of particular interest, are given four full pages of treatment).

The account is more than just a potential novice's tool *par excellence*.

It also gives botanists specializing in other groups and other regions a highly accurate interpretation of the many forms expressing the fascinating diversity of plants encountered in the tropical forest in general. From the peculiar hooked branches of the climbing *Oxyceros*, the near-recumbent sprawling shrubby habit of *Gardenia saxatilis*, to the bizarre ant-inhabited stem-base tubers of *Hydnophytum* and *Myrmecodia* epiphytes, and herbaceous *Argostemma* species that have but a single conspicuous (in fact, somewhat oversized) leaf developed, the array represents an instructive panorama of plant form. Reproductive structure is equally varied and key types are often the basis of group recognition: syncarps formed by fruit fusion such as in *Morinda*, the peculiar cymes of *Mouretia* where scorpioid branches are broadly flattened and bear four rows of flowers fused together by their ovaries, and the show-calyces of *Mussaenda* and *Schizomussaenda*, are but some of the many interesting variations of infructescence and inflorescence form there can be in this large family.

The diversity of the Rubiaceae, as in any large and widely distributed family, is easy to appreciate in the context of radiation and adaptation in different directions, in response to climate, geography, soils or other ecological factors. Thailand covers an interesting range of climatic and floristic belts, from deciduous, seasonally dry forest in the north to wetter evergreen forest in the Thai peninsula, from the Myanmar and Indo-Chinese regions to the Malesian floristic region to its south, and includes influences from both temperate and tropical regions. Within, it has landform and vegetation from beaches to high mountains, and peat swamps to karst limestone.

This book is highly recommended to all interested in the tropical flora and represents an indispensable introduction for those wandering—by choice or chance—into the fold of the Rubiaceae.

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