

**Plants in Mangroves**, by Sanit Aksonkoae, G.S. Maxwell, Sonjai Havanond, and Somchai Panichsuko. Chalongsrat Co., Ltd., Bangkok, 1994; 120 pp; price 500 baht.

There has long been a need for an accurate and reliable reference to SE Asian mangrove plants. *Plants In Mangroves* satisfies that requirement and with some additional notes, reorganization, and corrections a second edition would even be more useful and authoritative than the present book is.

The authors, all mangrove specialists for at least 15 years, have presented colour photographs as well as English and Thai discussions for 51 species of mangrove plants. While not emphasizing plant taxonomy or having detailed descriptions of the various species, the authors have relied mostly on photographs for users of the book to identify mangrove plants. There is often much first-hand information included for each species, especially ecological notes, that adds considerable credibility to the book.

I have some suggestions that could be used to improve the book. The arrangement of species should be according to family rather than an alphabetical sequence of genera. This would assist users in having related plants together and, therefore, expedite identification. Members of the Rhizophoraceae (4 genera, 9 species), Meliaceae (2 genera, 4 species), and Tiliaceae (2 genera, 2 species) could easily be misidentified unless readers take time to peruse all the species in the book. A key to vegetative characters for each species is highly recommended. Since each mangrove plant species has its own flowering and fruiting phenology, a mangrove enthusiast would only be able to find flowers or fruits of a few species at any particular time of the year. A very easy and reliable method of presenting such a key would include: leaf type (simple or compound), leaf arrangement (opposite, spiral, alternate), and plant habit (herb, tree, climber, etc.). This would be particularly useful in genera with several species (e.g. *Avicennia*, *Bruguiera*, *Sonneratia*, etc.) which are not readily distinguished, in many cases, without reproductive material. This key could also be suitable for juvenile plants and perhaps even seedlings-which would require considerable field work since herbaria do not have such material.

Distribution, abundance, and author citations for each species would add much to the value of the book. Some of the mangrove associates, as the authors call them, e.g. *Atalantia monophylla* (L.) DC. (Rutaceae), *Calycopteris floribunda* (Roxb.) Lmk. (Combretaceae), *Clerodendrum inerme* Gaertn. (Verbenaceae), *Phoenix paludosa* Roxb. (Palmae), and a few other species should be reconsidered in a second edition of the book. Most of these mangrove associates are either beach or backshore plants and are not true mangrove components.

There are a few errors which should be corrected. *Aegialitis*, Caesalpinoideae, and Boraginaceae have been misspelled. *Amoora cucullata* Roxb. = *Aglaia cucullata* (Roxb.) Pell. (Meliaceae), "*Derris indica*" is *Pongamia (Milletia) pinnata* (L.) Pierre (Leguminosae, Papilionoideae), *Finlaysonia maritima* (Bl.) Back. = *F. obovata* Wall. (Asclepiadaceae), and *Premna obtusifolia* R. Br. = *P. corymbosa* (Burm. f.) Rottl. & Willd. var. *obtusifolia* (R.Br.) Flet. (Verbenaceae). *Avicennia* is in a tribe (Avicenniaceae) of Verbenaceae, hardly a distinct family, whatever splitting taxonomists might decree.

Some additional information, including a map, should be given to indicate the regional scope of the book. As it is the book is concerned mostly with SE Asian mangrove plants and not, as the title implies, of a worldwide scope. More information could be given in

the introduction and discussions since the English and Thai versions are often quite different. The locations, extent, condition, and conservation of mangroves in various countries is needed. The literature cited and consulted is quite minimal and needs to be expanded in an effort to improve the content and overall quality of the book.

My opinion of *Plants In Mangroves* is that it is a very useful book and needs to be revised and expanded. This should be easy since the putative experience of the authors in mangrove ecosystems and management is extensive.

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Herbarium

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