

BOOK REVIEW

Plants From the Markets of Thailand by Christiane Jacquat. Editions Duang Kamol (DK), Bangkok, 1990; pp. 251, price 390 Baht.

Dr. Jacquat, a Swiss archaeo-ethnobotanist, has produced an unusual, colourful, and certainly unique book combining botany and culture. The bulk of the book includes the identities, Thai and English names, short descriptions, uses, and 341 colour plates for 241 wild and cultivated plants in the following categories: edible and medicinal plants, ornamental plants, plants used for packaging, and a short section about two trees with useful wood/resin and bark. There is also information about Thailand's geography, ethnic composition, climate, forests, and food.

The edible and medicinal plants include algae and fungi, fern allies and ferns, and flowering plants. Ornamental plants have fern allies and ferns as well as flowering plants, while only flowering plants are discussed under packaging plants. There is a glossary of botanical terms, list of references, and indices to botanical, Thai, and English names.

I do have some comments that could be used to improve future editions of the book. The introductory part about Thai forests should be revised since much of it is incorrect. The term "jungle" is not a scientific term and should be replaced with tropical monsoonal evergreen (not tropical rain) forest. Although the terms "dry evergreen" and "hill evergreen" forests are commonly, but unfortunately uncritically, used for Thai forests, these ill-defined and inappropriate terms create confusion and need to be properly explained. "Mixed deciduous" forests are not, as the author writes, a cross between "dry evergreen" and deciduous forests. They are, indeed, predominantly teak-dominated deciduous forests. The paragraph about "dry dipterocarp" (= deciduous dipterocarp-oak) forests having 3 layers strains my imagination. Bamboos are, furthermore, not trees, but giant grasses.

As far as the vascular plants are concerned, it is obvious that the author was very careless in her selection of botanical references since much of this information is incorrect. I have found at least 28 species with wrong names as well as 73 species with incorrect author citations. A book such as this should have been reviewed by a competent plant taxonomist familiar with the Thai flora and relevant botanical literature before being published. Furthermore, "official" as it may be, standard transliteration of Thai names into English is often incorrect, the resultant spellings often being mispronounced by those not familiar with the Thai language.

The botanical descriptions for each species have; unfortunately, been copied from sometimes inaccurate botanical literature which has led to further complications that the author, obviously, never thought about. Among the misidentified species, for example, "*Coleus parvifolius* Bth." the correct author citation being (Willd.) Bth. which is now known as *Plectranthus parvifolius* Willd., the photo (193) is obviously of *Plectranthus rotundifolius* (Poir.) Spreng., but the description is that of another species. Similarly, "*Acacia rugata* Merr." (p. 39), for which the correct author citation is (Lmk.) B.-H. ex Voigt, is a synonym of *Acacia concinna* (Willd.) DC. The matter is further complicated

by the fact that the pods (photo 37) are not of this species. Furthermore, the preceding species, *A. catechu* (L. f.) Willd. is an Indo-Burmese species and, therefore, not native to Thailand. The applicability of the description to this species as well as the photo of the resin (photo 35) is, therefore, quite dubious. *Lithocarpus pattaniensis* Barn. and its accompanying photo (102), which is of the nuts only, is a suspicious entry since the species is only known from peninsular Thailand while the photo was taken at Sisaket, which is in an entirely different vegetational area. *Ficus lacor* B.-H. is not found in Thailand and I suspect that the photo (107) of the figs is perhaps *F. semicordata* B.-H. ex J.E. Sm. *Eugenia cymosa* Lmk. is not found in northern Thailand and judging from the photo (111) the correct identification is *E. albiflora* Duth. ex Kurz

Azadirachta indica A. Juss. is a vegetatively variable species from Burma and, therefore, should not have distinct varieties recognized, viz. var. *siamensis* Val. Photos 173 and 174 are of the same species, viz. *Spilanthus paniculata* Wall. ex DC. while the correct identity of *S. acmella* auct. non (L.) Murr. is *S. iabadicensis* A.H. Moore which, among other differences, has paniculate inflorescences. *Ipomoea* cf. *congesta* R. Br. is probably *I. nil* (L.) Roth. The correct name for Chinese chives (p. 102) is *Allium tuberosum* Rottl. ex Spreng. (Liliaceae, not Alliaceae), while the next species is not *A. tuberosum* but *A. schoenoprasum* L. ("chive"). The betel nut palm is *Areca catechu*, not "catechu" and the actual betel leaf is *Piper betle* L. (not "betel"). The species of *Trapa* is *T. bicornis* Osb. var. *bicornis* which is obvious from the photo (114). The correct name for the species of *Ervatamia* is *Tabernaemontana pandacaqui* Poir. Without leaves I cannot be certain of what *Plumeria* is being discussed. Most, if not all, Asian individuals of this genus are of hybrid or cultivar origin and, therefore, often without proper botanical species names. I do not believe in any way that *P. obtusa* L. is the real name for this.

Terms such as "shrubby tree", "undershrub", "herbaceous perennial shrub", "ramose climber", etc. are not only unclear, but lack botanical credibility and should have been referred to properly. There are also 18 unidentified species of which I have been able to identify only half. The descriptions for *Bauhinia*, *Madhuca*, *Colocasia*, etc. are generic and do not elucidate the specific identities of photos of a tuber, processed leaf, bamboo shoot, etc.

The author correctly notes that not all species of market plants could be included. I feel that several other species could have been included to replace the numerous pictures of banana and coconut products, that of a fish vendor, or uncommon market species. *Selaginella ostenfeldii* Hieron. (Selaginellaceae), *Vigna radiata* (L.) Wilcz. var. *sublobata* (Roxb.) Verdc. (Leguminosae, Papilionoideae; bean sprouts), *Cymbopogon citratus* (DC.) Stapf (Gramineae, lemon grass), *Imperata cylindrica* (L.) P. Beauv. (Gramineae, lalang), *Thysanolaena latifolia* (Roxb. ex Horn.) Honda (Gramineae, broom grass), *Camellia sinensis* (L.) O.K. var. *assamica* (Mast.) Kita. (Theaceae, miang/tea), and others could have been used.

The photos are included in a separate section and include only a number which must be referred to in the text. The actual list of photos which have the botanical name, location, and date are at the end of the book. It certainly would be easier to use if all of this information were combined with the photos.

In the references it would have been more proper to cite the authors of the family revisions rather than the editors of the flora. A number of other important references that

should have been consulted (e.g. Flora Malesiana and Flore Du Cambodge, Du Laos et Du Viêtnam) were, apparently, not used.

Among the unidentified species listed I have been able to identify the following entries:

Cratoxylum sp. = *C. formosum* (Jack) Dyer ssp. *pruniflorum* (Kurz) Gog.
(Hypericaceae, not Guttiferae),

Polyscias sp. = *P. fruticosa* (L.) Harms (from Polynesia),

Smilax sp. = *S. perfoliata* Lour.,

Caryota sp. = *C. mitis* Lour.,

Amorphophallus sp. = *A. yunnanensis* Engl.,

Homalomena sp. = *H. pendula* (Bl.) Bakh. f.,

Nicolaia sp. = *Etingera maingayi* (Bak.) R.M. Sm. or *E. venusta* (Ridl.) R.M. Sm., and

Orthosiphon sp. = probably *O. aristatus* (Bl.) Miq.

My overall opinion of this book, as with so many other botanical works written by non-botanists, is that the effort would have had much more value if more time were spent on basic botanical research. An authoritative work on market plants would be of great interest to laymen, social scientists, and geographers as well as to botanists. The illustrations are generally of high quality and it is unfortunate that the botanical standard is lower since this mars the overall usefulness and credibility of the book. I certainly hope that a revision will be in the making and that the author will consider spending more time to improve the botanical accuracy of the book.

J.F. Maxwell

Herbarium

Biology Department

Faculty of Science

Chiang Mai University

Chiang Mai 50002 Thailand

