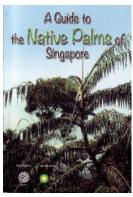
PALM LITERATURE

A GUIDE TO THE NATIVE PALMS OF SINGAPORE – A.H.B. Loo, A.W. Foong, W.J. Baker and H.T.W. Tan. Science Centre Singapore, Singapore. 2014. ISBN 978-981-07-8878-0. Price: Unknown. Softcover. 176 pages. Color illustrations throughout.



Among palm lovers, Singapore is perhaps best known for the spectacular horticultural achievements of the Singapore Botanic Gardens and Gardens by the Bay. Not so well known (even among Singaporeans) are the island's native palms, which still persist in pockets of native forest in stalwart defiance of rampant urbanization. A few species have lost the battle – a dozen are no longer found on the island – but 42 taxa remain. This splendid little guide provides a useful account of the extant palm species.

In this compact (only 10.5×15 cm) guide, Loo and coauthors begin with a brief but lucid introduction to the unique morphology of palms in general and some of the specialized terminology. The text paints a clear and colorful picture of palms, such as the description of Royal Palms (Roystonea regia) that "reach for the sky in a most uncompromising way." The introduction discusses economically important palms in the region. The authors give equal time to the economic boon and environmental devastation brought by African oil palms to Southeast Asia. The introduction goes on to describe the growth habits of palms, including rattans, the leaf diversity (pinnate, palmate, bipinnate), the crownshaft, climbing organs (cirrus, flagellum), flowers and fruits.

The bulk of the book is made up of the individual portraits of the extant species, starting with the non-rattans (both feather and fan palms) and ending with the rattans. Each species treatment begins with a full-page portrait, which may be followed by additional photos of interesting or diagnostic features. The accompanying text, organized in the same way for each species, includes Common Names, World Distribution, Local Distribution,

Characteristics, Conservation Status and Notes of Interest. In addition, the authors include Horticultural Value, Propagation, Availability [in the nursery trade] and Drawbacks/ Advantages. This additional horticultural information is not generally found in local guides of this sort and makes this book all the more useful.

I very much enjoyed reading the Notes of Interest for the species. Here, the authors included local uses of the palm, ecological observations, etymology or even (in the case of *Caryota mitis*) that it is the food host for the larvae of the Tufted Jungle King butterfly (*Thauria aliris*). Very often, the species is contrasted with similar or related species from the flora, highlighting key differences. In only one case (that of *Iguanura geonomiformis*) was the species compared to a species (*I. wallichiana*) that does not occur in the flora, although perhaps the latter species is familiar in Singaporean horticulture.

As is customary, the book includes a plea for the conservation of palms. The table on p. 54-56 lists all 42 extant taxa and their conservation assessments, along with the dozen species presumed extinct on the island. Shockingly, only one species (Caryota mitis) is considered common enough not to warrant some level of conservation concern. Some species, listed as Critically Endangered, are teetering on the edge and may disappear from the island without continued protection, but even then, climate change may trump legal protection or forest conservation efforts. On a happier note, the authors mention several cases of palms once thought to be extinct but recently rediscovered on the island. Perhaps additional exploration will bring to light a few more of the "extinct" palms.

This guide is an excellent introduction to Singapore's native palms and is enthusiastically recommended for anyone interested in the island's natural history. It is the latest in a long list of handy guides to the flora and fauna of the island published by Science Centre Singapore. Attendees of the 2016 IPS Biennial, which will include Singapore on the itinerary, will surely want to have this book in their carry-ons when they arrive on the island.

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