

XII. POCKET CHECKLISTS OF INDONESIAN TIMBER TREES

Soewanda A. Prawira, I.G.M. Tantra & T.C. Whitmore
(Forest Research Institute, Bogor, Indonesia)

Indonesia as yet does not have a comprehensive account of the forest trees which reach timber size (35 cm dbh = 14 inch or 105 cm gbh = 42 inch).

A project has been started in August 1983 by the Botany Section of the Forest Research Institute in Bogor, Indonesia, to prepare pocket checklists of the timber trees of all regions of the country. These lists will include forest-based descriptions, keys and line drawings.

The project has two stages. First checklists will be prepared for all families with at least one timber size species. For all genera with at least one such species all other species will be given, including small trees, shrubs and climbers. A second list will record all known vernacular names (except of course such obvious mistakes as 'ta-tau') and these will mainly be given at the generic level to avoid a spurious appearance of exactitude.

There will be separate checklists to be published as pocket-sized books for Sumatra, Kalimantan, Celebes, the Moluccas, Irian Jaya and the Lesser Sunda Isles.

The second stage will be to publish a series of books for the same regions with forest descriptions of families and genera and forest keys to timber size species plus descriptions.

There will be some overlap between the two stages. Particularly important timber groups, e.g. the Dipterocarpaceae, will have some descriptions and illustrations in the checklists.

These will be very similar to those produced by the Malayan Forest Department as the Malayan Forest Record 17 (initially by Wyatt-Smith, 1954) and especially to the third edition by K.M. Kochummen (1973). The Malayan checklists were written because it was realised that it was too ambitious to produce a full tree flora in one region.

Up till now the data on Indonesian timber trees have been lists of vernacular names, a project originated in the colonial days, but since then repeatedly updated (Daftar nama pohon-pohonan daerah). These have been published for each province so that Sumatra for example now has 8 such reports. Secondly, in the same FRI-series (Laporan) illustrated descriptions have been published of some 380 species of timber trees. The aim is to describe all 400 species identified by F.H. Hildebrand (1952) as the major timber trees of Indonesia.

Both these existing series have limitations. The vernacular name lists although massive are incomplete because the FRI herbarium on which they are based is much smaller than the Herbarium Bogoriense. Moreover, at present many more species are of timber importance, not just the 400 ones previously selected.

The new project will make use of these earlier publications and other ones (e.g. Forest Products Research Institute Laporan 56 on Timber trade names). But the new project will be based on herbarium material or authoritative taxonomic revisions. Thus the various errors which have oc-

curred with passage of time should be eliminated by the return to the data base.

Flora Malesiana and associated monographs are the essential sources, sine qua non. This great Flora project is often criticised as irrelevant, over-ambitious or in danger of never being completed. In fact, without the critical scientific work Flora Malesiana researchers so painstakingly provide, secondary works such as the present project for local, non-specialist audiences are almost impossible. The botanical literature on Indonesian trees is fragmented and scattered, some of it is not available in Indonesia. Some critically important old collections are not represented here. A Flora Malesiana revision takes care of all these difficulties. Some 70 of the 95-100 families with big trees are now covered. Extraction of the basic facts on size, ecology, range and main synonymy must be done with care but is in principle straight forward. For the remaining 25-30 families there are problems. Flora Malesiana provides lists of basic references. In some families certain genera have been revised (e.g. Guttiferae), for others a taxonomist is currently at work (e.g. Elaeocarpus, Lauraceae, big tree Rubiaceae, Schefflera). There remains a core for which there is no easy solution, e.g. Eugenia/Syzygium (c. 300 spp.), Garcinia (c. 200 spp.). The proposal for want of anything better is to list region by region the species described from there — based on the literature, mainly the Index Kewensis. This modest first stage will at least define the size of each genus.

The existence still of huge gaps in botanical knowledge pinpoints the urgent need to put more resources into tropical taxonomy. Both Garcinia and the Eugenia/Syzygium-complex have important economic species. Current research in cloves at Bogor is badly hampered by the absence of a taxonomic framework to know what related and hence graft compatible species might be.

The ultimate aim of the FRI is to produce tree floras for the different regions of Indonesia similar to the Tree Flora of Malaya (1972-1978). That project started in 1965 and is likely to be completed in 1984, 20 years after. There have been already many publications (King's Materials, Ridley's Flora, Corner's Wayside Trees, Foxworthy's Major Timber Trees, Symington's Dipterocarps and Wyatt-Smith's and Kochummen's Checklists). Moreover, the Malay Peninsula is a small cohesive area well-explored by botanists. A Tree Flora of Indonesia will obviously take many years to write. At least we hope to lay a solid authoritative foundation which is trustworthy and which can safely be built upon.

The project is being undertaken by the botanists of the FRI under the general direction, guidance and supervision of the authors of this note.