REVIEWS

Madeiras da Amazônia. Descrição do lenho de 40 espécies ocorrentes na Floresta Nacional do Tapajós. Lourdes Cobra Fedalto, Irene da Costa Alvarenga Mendes and Vera Teresinha Rauber Coradin. 156 pp., illus., 1989. Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis – IBAMA, Brasília. Price: US\$ 10 (paperback). Available from: Laboratório de Produtos Florestais, Sain L/4 Lote 04, C.P. 152874, CEP. 70770 – Brasília-DF, Brazil.

This survey describes the wood anatomy of 40 species from the Amazon region. The material studied was collected in the Tapajós National Forest Reserve, located south of Santarém, the State of Pará, an area only to be used for timber extraction based on sustainable yield. After a brief introduction, a list of materials analysed is provided, followed by the methodologies used. The chapter 'Results' consists of 40 descriptions which include data on general characters as well as macro- and microscopic features. Each species description is completed by a 'biometric card' and illustrated with examples of the macro-anatomy ($\times 10$) of the end grain and transverse and tangential sections ($\times 50$).

The 'biometric card' does not include any physical and/or mechanical properties, but provides very detailed quantitative information of the wood anatomical characters.

Although this book deals with 40 important timber species from the Tapajós area, the species selected can also be found in a much larger area of the Amazon Basin. Consequently, it is of value for everybody interested in the Amazon forests. The authors presented a tremendous amount of data based on material collected especially for this study. The botanical identifications are based on herbarium vouchers verified at various Botanical Institutes in Brazil. Thus, proper and up-to-date botanical names and detailed and precise wood anatomical descriptions are combined. The illustrations are of a high quality.

In conclusion, this book can be warmly recommended to all wood anatomists dealing with tropical timbers, be it in systematics or in technology.

Ben J.H. ter Welle

Indonesian Wood Atlas, Volume I. Abdurahamin Martawijaya, Iding Kartasujana, Kosasi Kadir, and Sowanda Among Prawira, vi + 166 pp., illus., 1986.

Atlas Kayu Indonesia, Jilid II (Indonesian Wood Atlas, Volume II). Abdurahamin Martawijaya, Iding Kartasujana, Y.I. Mandang, Sowanda Among Prawira, and Kosasi Kadir, vi + 167 pp., illus., 1987.

Department of Forestry, Agency for Forestry Research and Development and Forest Products Research and Development Centre, Bogor, P.O. Box 84, Indonesia. Price: unknown (paper).

These two atlases of Indonesian woods provide a wealth of information on 30 major commercial species (volume I, in English) and 32 lesser known species (volume II, in Bahasa Indonesia). For each species there is information on botanical, local and other names, geographical distribution, habit, general wood characters (colour, texture, etc.), wood anatomy, physical, mechanical, and chemical properties, durability and treatability, applications as veneer and plywood, working properties, uses, and silviculture. Each species or species group is illustrated with a colour plate with a macroscopic picture of the timber, a figure of a fruiting and/or flowering shoot, and a close-up of the outer bark, as well as with a half-tone plate with micrographs of cross ($\times 26$) and radial and tangential longitudinal ($\times 75$) sections. In volume I there is an extensive explanation of the descriptive terms and quantitative standards used. For the wood anatomical descriptions the classification of vessel, ray and parenchyma features follows Den Berger's classical study of 1926. Although the text of volume II will be inaccessible to most wood scientists outside Indonesia, the plates and much of the quantitative information are self explanatory, since the same layout as in volume I is used.

The books can be ordered from the Agency for Forestry Research and Development, Bogor, Indonesia at a very modest price. They should not be missed in any forest products library.

[P. B.]