Book Reviews

Trees of Nigeria by R. W. J. Keay. Published by Clarendon Press, Oxford. 1989. 476 pp. £50. Hardback. ISBN 0 19 854560 6

The book presents 86 Plant Families, 417 genera and 935 species of trees found in Nigeria. Savanna trees greater than five metres height, rainforest trees limited to eight metres and greater, and a selection of introduced trees known to regenerate freely in Nigeria, such as the genera Pinus, Casuarina, and Eucalyptus, are included. Trees of Nigeria is a revised and shortened version of Nigerian Trees (2 vols. 1960, 1964), also compiled by Dr. Keay with co-authors C. F. A. Onochie and D. F. Stanfield. In the present version, the author drew on the extensive data base of the former volumes whilst paying careful attention to recent taxonomic developments. It is interesting to note that since the 1960-64 period, 8 Plant Families, 24 Genera and 34 Species of trees can be added to the Nigerian Flora listing.

Identification keys, systematic descriptions and a broad range of up-dated information contribute to the quality and value of this book. Easily observable features based on the morphological features of leaf, flower and fruit, form the basis of the keys for Family, Genus and Species identification. They are maintained constantly except where special features are more appropriate e.g. latex present with a fleshy stem as in the Family Euphorbiaceae. There are only limited requirements for the use of a magnifying lens during the identification procedure, although careful measurements of leaf, stalk and fruit parts are essential when following the generic key. Illustrations

(165) assist in species identification; 32 of these help to describe members of the large and often confusing Leguminosae Family. Flowering shoots, flowers, fruit and leaf parts are highlighted in these figures, with longitudinal and cross-sections of reproductive parts included for certain species. Fruits are often the most reliable means of identification for certain species and some genera. Of particular interest are the 8 species of the Genus Terminalia and a range of the Family Caesalpinaceae, distinguished graphically through a comparison of their seed-pods. The reliance on leaf, flower and fruit for identification places some limits on the application of this key however, as the absence of some or all of these parts at certain times of the year clearly inhibits identification or verification. This is particularly true perhaps in the case of the savanna group which can contain species of a deciduous or semi-deciduous nature.

Although this book refers specifically to trees in Nigeria, the information is readily applicable in other parts of Tropical West, Central and East Africa. A reference guide to eight other Tropical African Floras is incorporated into the text which facilitates further investigation for the less common trees. Family and generic name derivations are explained in a very interesting way. Authorities, early nomenclature and distinguishing traits of each genus are presented followed by a key to the most common species. Each species is similarly assigned to its authority and relevant Flora. A special feature of this work has been the inclusion of species vernacular names. This greatly enhances the value of the book particularly for in-country research and field application. Igbo, Ido, Hausa, and Yoruba are the most commonly used throughout, although twenty-nine other vernacular languages are also used, including Arabic. All are found with botanical names in vocabulary listings at the end of the text. Useful information regarding habitat and range of distribution is provided for each species, with comments on farm regeneration for some trees.

There is a lack of information provided relating to the timber characteristics of most trees. The uses of these trees and the range of products to be derived from them are without doubt immense. Unfortunately it is beyond the scope of this book, and perhaps understandably, as the subject is so diverse and variable within regions. Some comment regard-

ing the deciduous or evergreen tendencies of the trees dealt with, could have been valuable. Because of the height limit (5m), imposed on savanna trees, suffrutix species are excluded, and as already mentioned, so are most of the understorey and shrub components of rainforest groups.

This book however succeeds in assembling and presenting descriptions and information relating to complex and diverse tropical ecosystems. It has a wide application area, both as a key and also as an excellent up-dated reference for workers not only in Nigeria, but also in many regions of sub-Saharan Africa.

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