XIII. BOOK NOTICES (contd from p.845)

Balan Menon, P.K.: Taxonomic value of wood anatomy seen through Malayan woods. The Malayan Forester 24 (1961) 290-301.

Mr Menon, who is a wood technologist at the Forest Research Institute, Repong, Malaya, presented this paper at the Hawaii Congress. In it, he gives a series of classifications of Malayan woods on the basis of anatomical features which can be seen by a hand-lens. He distinguishes 18 classes, notably woods with: ring-porous structure, exclusively solitary pores, multiple vessel-perforation, vestured (vessel) pits, scalariform intervessel pits, ripple marks, broad rays, uniseriate rays, septate fibres, distinctly bordered fibre pits, tanniferous tribes, latex tribes, horizontal canals, vertical canals, included phloem, mucilage or oil cells, silica inclusion, raphides.

The classifications are based on a study of 320 genera of malayan woods hitherto collected, a study "of the full complement of woods from species to species, genus to genus, family to family, and order to order" since the author realizes the anatomical inconsistencies which often exist within one fami-

ly.

Brief notes on conflicts between wood anatomy and taxonomy and on the other hand confusing parallelism in single characters between systematically unrelated woods. Notes on variation of anatomy and notes on cases in which generic delimitation is not expressed in wood-anatomical characters. Valuable appendices of listed genera having in common single wood-anatomical characters.

Bartlett, H.H.: Fire in relation to primitive agriculture and grazing in the tropics. Vol. 3, Ann Arbor 1961, 216 pp., with

a short obituary and portrait of the author.

Brought out by Dr.k.L.Jones, Bartlett's successor; it represents only the portion completed by Bartlett at the time of his demise. The full and carefully compiled abstracts of this work are a most useful source of information on vegetation of the tropics and various other aspects.

Brooker, F.S.G. & R.C.Cooper: New Zealand medicinal plants. Auckland, 1961, 46 pp., 12 pl.
Uses; botanical notes; chemistry.

Dale, I.R. & P.J. Greenway. <u>kenya trees and shrubs</u>. 1961, 642 pp., 111 pl. (31 in col.), 110 fig.

Descriptions and keys to trees and shrubs over 2 m high.

Duthie, J.F.: Flora of the Upper Gangetic Plain, reprint (1961?) vol.1, xvii + 568 pp., vol.2, 470 pp.

This is a reprint by the Botanical Survey of India of the original 3-volumed edition (1903-1922). The price is far lower than, after the expensive facsimile editions of recent times, would be expected. It is most unfortunate, however, that the reprint from the original differs in pagination, which involves the necessity of double citation for the same work.

Faulks, P.J.: An introduction to ethnobotany. London, Moredale

rubl.Ltd. 1958, 152 pp. Sh.15/-.

Deals mostly with use of plants. Chapter XI briefly with sympathetic magic, p.51-52. Chapter XV accessoires to rites and ceremonies, p.67-68. Chapter XVI sexual intercourse and control of conception, p.69, etc.

Fosberg, F.R., c.s.: Guide to excursion III. Tenth Pac.Sc. Congr. hawaii 1961. Mimeographed, 207 pp.

Dr. Fosberg has invited half a dozen other Hawaiian specialists to write chapters on zoology, conservation, algae, etc. to add value to this mainly botanical guide for excursions on the islands of Oahu, Maui, and Hawaii. There are very full accounts of the excursions made and this work is extremely valuable both for the everwet and dry parts of the islands and gives a very good idea of the vegetation.

Gill, L.S. & F.G. hawksworth: The Mistletoes; a literature review. U.S. Dept Agric., Techn. Bull. no 1242 (1961) v + 87 pp.

A bibliography, alphabetically arranged according to the author's names, containing c. 800 selected items, preceded by a brief compilation of the major facts that are of interest and importance about the whole family of the Loranthaceae throughout the world. The subjects discussed have been grouped to the following main categories: taxonomy; growth and reproduction; physiology and parasitism; factors affecting mistletoe occurrence; mistletoes and man. Many of the references have been included in the discussion.

Gould, James w.: Americans in Sumatra. Martinus Nijhoff, The

hague, 1961, vii + 185 pp., 8vo., Dfl.14.25. Contents: Introduction; the growing interdependence of Sumatra and the United States 1873 to the present; the history of American enterprise in Indonesian oil development; the history of American enterprise in Indonesian rubber; American contributions to education, religious and secular; scholarsadventurers (including Thomas horsfield); American writings on Sumatra.

Harper, John L. (ed.): The biology of weeds. British Ecological Society, Symposium number one. Blackwell, Oxford, 1960,

xv + 256 pp.

Although specially devoted to the aspects of weeds in Great Britain, the book is interesting to the tropical botanist as well. So Tridax repens (Compos.) was found to increase the phosphate content of extremely poor soils in Tanganyika. Weeds may be turned to crops, like hibiscus esculentus and Corchorus tridens, which are in the Sudan sought for food, and Amaranthus spp., which serve as a source for starch and spinach in many tropical countries.

we list here the sections of the symposium, which was held at Oxford in 1959, and a few titles which are of special interest. General: Some reflections on the ecology of weeds (by A.H.Bunting). Problems in the taxonomy and evolution of weeds: Some taxonomic problems in weedy species (by E.F. warburg). The dormancy and dispersal of weed seeds. Population studies, interference and competition. Factors controlling plant numbers (by J.L.Harper). Special weed problems: Species of Acacia as weeds (by G.W.Ivens), The water-hyacinth in the Sudan (by P.A.Gay), The ecology and biology of parasitism of the Loranthaceae of Ceylon (by W.G. Weeraratna). Autecological studies on weed species.

Irvine, F.R.: Jibliography of food plants of Australian aborigines. 40. Roy. Bot. Gard. New, 1960?, ii + 14 pp.

Lam, H.J.: Rijksherbarium, Leiden. Verslag van de Hoogleraar-Directeur over 1960-1961 (Nov. 1961), 59 pp., in Dutch.

Annual report of the Director, containing the reports of the scientific staff in the divisions European & Netherlands flora, Tropical flora and Flora Malesiana, Mycology, Algology, Anatomical taxonomy, the technical staff and library, and data on education, students and promovendi.

Maheshwari, P. & V. Vasil: <u>Gnetum</u>. Counc. Sc. & Ind. Res. New Delhi 1961, xii + 142 pp., text illustr.

Botanical monograph no 1.

McClure, F.A.: Bamboo as a building material. Foreign Agricultural Service, U.S. Dept of Agriculture, Washington, D.C., May 1953, 52 pp., 25 figs.

A compilation of the purposes for which bamboo can be used, including reinforcement of concrete, dealing with ways of splitting, jointing, differentiation and evaluation of species, shortcomings and how to overcome them, preservation, tool requirements, collecting (see the Instructions elsewhere in this Bulletin); a selected bibliography of sixty numbers has been added. The booklet was issued as a contribution to the Point Four Program, in cooperation with the Institute of Inter-American Affairs. There is also a Spanish edition.

Meeuse, B.J.D.: The story of pollination. Ronald Science Library, 15 East 25th Street, New York 10, N.Y., 1961, 232 pp. US\$ 7.50.

A popular general account.

Ochse, J.J., J.M. Soule Jr, M.J. Dijkman & C. Wehlburg: Tropical and subtropical agriculture. 2 vol., 1472 pp., 103 tab., graphs, charts, maps, 285 figs. MacMillan, N.Y. 1960.

Penfold, A.R. & J.L. willis: The Eucalypts. London, Leonard Hill (Books) Ltd., 1961, xx + 4550 pp., 61 pl., 31 photogr., 41 drawings, 26 textfigs., 5 maps.

Petard, P.H.: Quelques plantes utiles de la Polynésie française, Ptéridophytes et Monocotylédones. Thèse. Univ. Marseille, 1960, 193 pp.

Punt, w.: Pollen morphology of the Euphorbiaceae with special reference to taxonomy. Wentia 7 (1932) 1-116, 23 pl.

Introduction; methods, pollen morphology, glossary (with reference to the origin of each term). A great number of types and subtypes are distinguished; measurements, short diagnosis, identity, reference to the collector's name and number of each specimen, and a taxonomic discussion are given for all taxa. Beautifully illustrated, well-documented.

Some of the conclusions: There is a distinct difference in pollen between the Phyllanthoideae and the Crotonoideae. The pollen in the Phyllanthoideae can be classified into 3 major groups, 1) the Antidesma configuration, 2) the Armanoa configuration, 3) the Aristogeitonia configuration, which agree with the groups distinguished by Pax in 1924. The Plukenetiinae and also Omphalea have pollen which is clearly different from other genera in the Crotonoideae. Pachystroma is related to the Hippomaneae. Pera is related to some genera in the Acalypheae. Dalechampia does not palynologically fit in the Plukenetiinae, stands actually apart. Genera of the Stenolobeae (Australian) should not be separated.

Razi, B.A.: A second list of species and genera of Indian Phanerogams not included in J.D.Hooker's Flora of British India. Rec.Bot.Survey India 18 (1), Delhi 1959, ii + 56 pp. Rs.6.75 or Sh.10/6.

The first of these lists was published by Calder c.s. in 1924; this second list means to give the new taxa and new records for India published between 1924 and 1950. Name, family, reference, and province are given. The list contains over 1500 species.

Schakels, Netherlands New Guinea. Botanical Research. Published by the Ministry of home Affairs. The Hague (no date, actu-

ally 1961), 34 pp., photogr.
A survey of the botanical explorations in western New Guinea, which enables a good quick general orientation. One paper, by H.J.L a m, gives a general sketch of aims and methods in botanical work, of attempts in the past and of our present state of knowledge. In another paper, P. v a n R o y e n deals with the results of his expedition in 1954 and 1955.

Seidenfaden, G. & T. Smitinand: The Orchids of Thailand. A preliminary list. Part II, 2. The Siam Society. Bangkok 1960, pp.185-326a, fig.151-248, 8 col.plates.

Sharp, A .: The discovery of the Pacific Islands. Oxford Univ. Press, 1960, 259 pp. Sh. 45/-.

One hundred and twenty-two sections, each devoted to one voyage of discovery.

Steiner, M.L.: Philippine ornamental plants. ed.2. 40. Manila. 1960, 233 pp., many photogr. (partly col.).

Tomlinson, P.B.: In Metcalfe & Chalk: Anat. Monocot. II. Palmae. Oxford, 1961, 453 pp., numerous figs.

welch, W.M.: A monograph of the Fontinalaceae (Musci). M.Nijhoff, The Hague, 1960, vi + 357 pp.

willis, J.H.: A new key to plants in Victoria. Vol.1. Ferns, Conifers and Monocotyledons. Melbourne, 1961, + 450 pp., cr. 8vo., cloth, $\pm 21/12/6$.

To be published shortly. Vol.2. Dicotyledons (about 1030 pp.) will complete the work. Illustrations have been purpose-

ly omitted to reduce the size and cost.

withner, Carl L. (with 15 contributing authors): The Orchids. The Ronald Press Company, New York, 1959, 648 pp. US\$ 14.--.
"As the first (!) book to stress a botanical rather than a

horticultural approach to the orchids, it carefully examines the biological bases for certain horticultural practices. In this way it provides the scientific background essential to the development of better hybrids, larger seedlings, and improved growing conditions" (from the publisher's circular).

Yakovlev, M.S.: Rastitel'nost Indii. (Putevuie ocherki). 80. Izdatel'stvo Akad. Nauk SSSR. Moskva & Leninghrad, 1960, 257 pp, text illustr.

The vegetation of India (Notes of a journey).