

XV. BOOK NOTICES
(contd from p.575)

Australia. Forestry and Timber Bureau. Illustrations of the bud and fruits of Eucalyptus species with an alphabetical index (covering 486 species and varieties). 2nd ed. pp.(ix) 31 pls. fol. Canberra. 1954.

Grasses and pastures of South Africa. Compiled by L.K.A. Chippindall, J.D.Scott, J.A.Pentz, A.W.Bayer, O.West, H. Weinmann, and others. 26 col.pls and 420 line drawings, 776 pp. 1955.

Forest Reserves in Brunei. In 1955 a report map of the State of Brunei appeared in print in which are indicated in colour the imposing forest reserves which for the major part are found far inland.

The Galathea Deep Sea Expedition 1950-1952. Described by members of the expedition. Edited by A.F.Bruun, S.Greve, H. Mielche, and R.Spärck. Translated by R.Spink. 296 pp., 1 map, text-figs. 8°. George Allen & Unwin Ltd., London. 1956.

The Natural History of Juan Fernandez and Easter Island. Edited by Prof.Dr C.Skottsberg, was finally completed in 1956, in 3 volumes, the first containing geography, geology, origin of island life, the second the botany, the third the zoology. Total 2086 pp., unfortunately very expensive, Sw.Kr. 525. Almqvist & Wiksell, Stockholm.

Study of tropical vegetation. Proceedings of the Kandy Symposium 1956. Published by Unesco. Publ.No.399. 1958. 226 pp. illustrated. US\$ 5.; sh. 30/-; Fr.1800.--The five themes chosen were "Ecological factors in the tropics", "Vegetation types and their sub-divisions including methods of study", "The concept of climax as applied to tropical vegetation", "Rejuvenation as a factor for judging the status of vegetation types", and "Mapping of vegetation types". A résumé of the introduction is given for each theme, followed by a summary of the discussion which followed the presentation of each paper.

Cahiers du Pacifique. Of this serial the first instalment was published Dec.1958, 69 pp.; it is edited by the direction of the Musée National d'Histoire Naturelle, Paris, with financial aid by the Fondation Singer-Polignac. From the introduction by Prof.Heim, who is the president of the said Foundation, it appears that the "Cahiers" will primarily be devoted to oceanography and the oceanographic expedition for the investigation of the coral reefs in New Caledonia spon-

sored by the Foundation has led to the publication of these Cahiers. It is the intention to make it a central repertorium of the research in the French possessions in S.E.Asia and the Pacific. Prof.Gaussen gave a survey of French cartographic work performed in the Pacific (p.5-13) and Mr G.Ranson contributed an original essay on the coral reefs, specially in Tuamotu Arch. (p.15-36).

Board of Trustees for National Parks (Sarawak). Annual Report for the year 1956. Govt.Printer, Kuching. 1957. pp.1-19, map, fotogr.--This contains: A description of Bako National Park (by Mr F.G.Browne), Notes on the vegetation of the Bako National Park (by Mr F.G.Browne & Mr E.F.W.O.Brünig), and Notes on the Fauna (by T.Harrison & Lord Medway). A resthouse is built on the beach and the Park can easily be reached by boat from Sarawak.

Proceedings of the Eighth Pacific Science Congress, Manila 1953. In 1957 volume 4, Botany. 587 pp., many figs & maps. Published by the National Research Council of the Philippines.--This volume is very full of interesting contributions and we congratulate Dr Quisumbing with his major effort in bringing it out. Its interest is in no minor degree derived from the inclusion of the Symposium on Vegetation Provinces of the Pacific Basin by various specialists.

Penjelidikan Laut di Indonesia (Marine Research in Indonesia) is an English-language journal appearing at irregular intervals containing scientific articles and observation results concerning marine research in Indonesian and adjacent waters, as well as problems of general interest arising out of the work of the Lembaga Penyelidikan Laut (Institute of Marine Research), Pasar Ikan, Djakarta-Kota, Indonesia. The journal is available in exchange or by purchase from the central library, Bibliotheca Bogoriense, Djalan Raya 20, Bogor, Indonesia. The price per issue is US\$ 1.00.

Issue No.3, 1957, contains: "Bathymetrical features of the Bali-Lombok Strait" (by Anton F.Bruun & A.Kiillerich); "Precipitation, evaporation and energy exchange at the surface of the southeast Asian waters" (by Klaus Wyrтки); "The coastal current south of Java" (by Rd.E.Soeriaatmadja); and "Oceanographic Station List 1957".

An alphabetical list of plant species cultivated in the Hortus Botanicus Bogoriensis. 266 pp., 20 fotogr., map. Bogor. 1957.--This is the new catalogue of the Bogor Gardens, executed in the same way as the preceding one of 1929, and brought up to date. Innovations are the beautiful full-page illustrations and an index to the genera arranged by families. It can be obtained from Bibliotheca Bogoriensis, Bogor.

Madjelis Ilmu Pengetahuan Indonesia (Council for Sciences of Indonesia). Penerbitan (Publication). The first publication has been issued April 1959; it contains a revision of the genus *Heritiera* (Sterculiaceae) to which *Argyrodendron* and *Tarrietia* have been reduced. Address: Merdeka Selatan 11, Djakarta, Indonesia.

Abstracts of Papers, Ninth Pacific Science Congress, Thailand, 1957. 265 pp., index.--A neatly printed book (2-columns) containing the abstracts, those on Botany occupying pp.40-72.

International Directory of specialists in Plant Taxonomy. Utrecht. 1958. Compiled by A.C.van Roon. *Regnum Vegetabile* vol.13. Published by the I.A.P.T. 266 pp.--A valuable list of specialists, alphabetical and with an index to taxonomic and regional specialization.

Flore du Congo Belge vol.7, 1958. We welcome another valuable volume of this great flora in which have been elaborated by various authors the following families: Balanitaceae, Burseraceae, Callitrichaceae, Dichapetalaceae, Erythroxylaceae, Geraniaceae, Irvingiaceae, Lepidobotryaceae, Linaceae, Malpighiaceae, Meliaceae, Oxalidaceae, Pandaceae, Polygalaceae, Rutaceae, Simaroubaceae, Vochysiaceae, Zygophyllaceae.

Indonesian Abstracts vol.1, no 1, has been issued by the Council for the Sciences of Indonesia (Medan Merdeka Selatan 11 Pav., Djakarta) in July 1958. In a Foreword, the President of the Council points out that scientific papers in the Indonesian language are not accessible to the outside world so the Council has decided to issue quarterly abstracts of current scientific Indonesian literature in the English language. The Abstracts are issued free of charge on an exchange basis.

The Times Atlas of the World. The Times Publishing Co., Printing House Square, London. 1958. Volume 1. The World, Australasia & East Asia. 5 Guineas. World physiography, oceanography, climatology, vegetation, mankind, geographical-bathymetrical maps of Australasia, East Asia, and West Pacific from the longitude of Tonga westwards to Tibet, China, Burma, Thailand, and Indo-China and Malaysia (not India). Exceedingly useful for the taxonomist in locating places. The complete atlas consists of 5 volumes, of which 4 are out at this moment.

Excerpta Botanica Sectio B: Phytosociologica. The Gustav Fischer Verlag Stuttgart, Germany, intends to publish a journal of this title in four issues a year. The plant-socio-

logical literature of the individual countries (or groups of countries), from the beginning of modern plant-sociological research, will be published in the form of national bibliographies. Moreover, bibliographies dealing with special subjects or problem-groups will be covered, dealing with the relationships of plant-sociology to the associated branches, and with the other plant-sociological sub-branches. These will be arranged regardless of national boundaries.

Adressbuch der Pflanzensoziologen der Erde. The secretariat of the 'Internationale Vereinigung für Vegetationskunde' (Ass.Intern.de Phytologie, Intern.Soc.for Plant Geogr.and Ecol.) is planning to compile a directory of plant sociologists all over the world. For this aim questionnaires were sent to all botanical institutes. The directory will be distributed free of charge to those entered in it and those asking to be entered. As a compensation they are requested to send yearly a list of their plant-sociological publications, which will form the base of the "Excerpta Botanica" (see above), to the publisher (Gustav Fischer). Reprints of published papers will be very welcome.

Andrews, F.W.: The flowering plants of the Sudan. vol.3, 1956, viii + 579 pp., 145 figs.--Dr J.E.Dandy has done a considerable amount of nomenclatural and taxonomical study in this work which makes it, together with the fact that it contains a good deal of widely distributed plants, a work of value. Keys to the genera and in large genera also to the species. Mr P.Taylor, Mr E.Nelmes, Dr C.E.Hubbard, and Mr V.S.Summerhayes, all of Kew, are responsible for the revisions of Utricularia, Cyperaceae, Gramineae, and Orchidaceae respectively.

Backeberg, C.: Handbook of Cactaceae. A work planned in 3 volumes, bound in linen, c. DM.250. Published by G.Fischer, Jena. It will be profusely illustrated (c. 1500 figs) and contains the descriptions of genera and species, with keys. Vol.1, 638 pp., 653 figs.

Backer, C.A.: Dutch-English Taxonomical-Botanical Vocabulary. Enlarged 2nd ed., cf. review in Fl.Mal.Bull. no 6, 1950, 160.

Barnard, R.C. & A.E.Beveridge: Exotic trees in the Federation of Malaya. Prepared for the 7th Brit.Commonwealth For.Conf. 1957, Kuala Lumpur, pp.1-39. Interesting summary on silviculture.

Bhattacharya, S.C. & S.Dutta: Classification of Citrus fruits of Assam. Scient.Monogr.Ind.Counc.Agric.Res. no 20, pp.(iv) 110, 84 pls (43 col.). 8°. Delhi. 1956.

Black, J.M.: Flora of South Australia, part IV. Oleaceae-Compositae (final part). 2nd ed., revised MS by E.L. Robertson. pp. 685-1008, fig. 965-1260. Diagnoses to new taxa by Miss C.M. Eardley & E.L. Robertson. Govt. Printer, Adelaide. March 1957. sh. 15/6.--This is the final part of the 2nd edition of the Flora of South Australia, an extremely welcome achievement on which our South Australian colleagues are to be congratulated.

Blackall, W.E. & B.J. Grieve: How to know Western Australian wild flowers. A key to the flora of the temperate regions of western Australia. 2 Pt., illustr. col. 8°. Perth, W.A. 1954, 1956.

Blakely, W.F.: A Key to the Eucalypts. With descriptions of 522 species and 150 varieties. 2nd ed. pp. (ii) 359, text-figs. 8°. Forestry and Timber Bureau, Canberra. 1955.

Bruggeman, L.: The cultivation of Tropical and Subtropical Flowering Plants. 292 col. illustr. 1957.

Camellia, The: A Monograph containing 20 original paintings, an historical introduction on the Camellia and botanical commentaries on the individual plates. The paintings by Paul Jones and Raymond Booth, reproduced in 8-colour offset litho. 36 descr. text p. 4°. 1956.

Carpenter, J. Richard: An Ecological Glossary. With maps, 314 pp. 1938 (reprint ed. 1956). Sw. Kr. 33.35.

Cobley, L.S.: An introduction to the botany of tropical crops. xv + 357 pp. Longmans, Green & Co. Ltd. 1956. 82 pl. 66 fig.--About 150 species are described and brief reference is made to another 150. Crops are grouped into 12 chapters according to their products - cereals, fibres, oil, seed, etc. The information usually includes the systematic position of the plant, its origin, distribution in cultivation, gross morphology, and notes on uses. Designed for students of agriculture.

Dandy, J.E.: The Sloane Herbarium. London. 1958. £ 7.7.--. An annotated list of the Horti Sicci comprising it; with biographical accounts of the principal contributors based on records compiled by the late James Britten, with an introduction by Sp. Savage.--An important, beautifully executed, new publication from the British Museum (Nat. Hist.).

Dansereau, P.: Biogeography. An ecological perspective. The Ronald Press Co. New York. 1957. 394 pp., 37 illustr., 40 tab.--The principal objective is to provide senior and graduate students with a synthesis of environmental conditions.

Though schemes, illustrations, and examples are mainly derived from temperate regions, the book contains a mass of concise information, readily available through a large glossary and index.

Endert, F.H.: Key to the tree genera of Indonesia (revised edition), translated into English by R.D.Hoogland, CSIRO, Land Research & Regional Survey Section, Canberra. May 1956. Folio mimeogr. 78 pp. + indexes.

Engler & Prantl: Die natürlichen Pflanzenfamilien. ed.2. vol.14d: Gramineae ii by R.Pilger. vi + 225 pp., 52 figs. 1957.--This volume deals, in accordance with Pilger's system, with subfamilies 2-5, viz Micrairoideae, Eragrostoidae, Oryzoideae, and Olyroideae.

Ditto. Nachtrag zu Band 14, endgültige Fassung von E.Potztal. Subfamilies Panicoideae, Andropogonoideae, Anomochloideae. Berlin. 1956.

Ditto. It has been announced that the following volumes are in preparation: R.Pilger: Gramineae i: Festucoideae; J.C.Th. Uphoff & R.E.Fries: Magnoliales and Ranales; J.C.Th.Uphoff & Markgraf: Pandanales, Helobiales; Burret, M. & E.Potztal: Palmae; McClure: Gramineae iv: Bambusoideae; R.Mansfeld & Jonker: Microspermae (Burmanniaceae, Thismiaceae, Corsiaceae, Apostasiaceae, Orchidaceae); Zycha, H. & W.Höhnk: Phycomyctes; T.Levering: Phaeophyta; W.Döpp, K.Mägdefrau, D.E.Meyer, W.Zimmermann, a.o.: Pteridophyta; W.Domke: Thymelaeales; C.Baehni: Sapotaceae; H.N.Moldenke: Verbenaceae, Avicenniaceae, Stilbaceae, Symphoremaceae; H.Merxmüller & Norlindh: Compositae.

Erdtmann, G.: Pollen and Spore morphology Gymnospermae, Pteridophyta, Bryophyta. Stockholm. 1957. 151 pp., 264 figs.

Erickson, Mrs Rica: Triggerplants. Publ. by Paterson Broken-sha Pty. Ltd., 65 Murray Street, Perth, West Australia. 1958. Pocket size. 104 fig. and 65 in colour. Price not known to me. Book not seen by me.--Mr J.H.Willis says that this small monograph is primarily designed for the field naturalist, but the description of each species is very full, the keys good, and there is a mine of information on pollen, pollination, distribution, irritable mechanisms, etc. of this remarkable family of Stylidiaceae (genera Stylidium and Levenhookia), triggerplants being the popular name for this fascinating largely Australian family. Out of 144 species in these two genera, 104 are depicted in detail by beautiful line-drawings of habit and floral parts, while no less than 65 of these are also portrayed in colour. According to Mr

Willis one of the best pieces of Australian botanical literature he has seen.

Exell, A.W.: Supplement to the Catalogue of the Vascular Plants of S. Tomé (with Principe and Annobon). London. 1956. 58 pp., 3 pls. Sh.12/6.--A critical, extremely well executed supplement with a discussion on various aspects of the distribution of African mountain plants and the interrelationships of the flora of the three islands with that of Fernando Po. Several new comb. and some new spp. and one new genus. Carinta W.F.Wight is replacing Geophila=Geocardia (Rub.).

Gardner, C.A. & H.W. Bennetts: The Toxic Plants of Western Australia. Perth, W.A. 1956. 8°. xxix + 253 pp., 52 col.pl., 48 line drawings. £ 2.10.--. A comprehensive, well-illustrated systematic work.

Goldschmidt, R.B.: Theoretical genetics. 8°. Univ. of California Press: Berkeley & Los Angeles. 1955. x + 653 pp., text fig.

Heekeren, H.R. van: The Stone Age of Indonesia. 1957. viii + 141 pp., 24 fig., 47 pl. (Verh. Kon. Inst. v. Taal-, Land-, en Volkenk. 21). Dfl. 18.--. This study summarizes all data concerning the knowledge of Indonesian prehistory, as derived from that which has been published by others, as well as from the author's own experiences in this field. The volume treats three consecutive stages: the Palaeolithic, Mesolithic and Neolithic.

Hu, Hsien-Hsiu: Handbook of Economic Plants. Vol. 1, pt 1, with text fig. 8°. Peking. 1955.--In Chinese, chiefly based on Bailey, Manual of Cultivated Plants.

Hu, Hsien-Hsiu & Hsing-Tung Sun: Fodder Plants of China. Peking. 1955. 8°. vi + 163 pp.--In Chinese.

Huang, C.C.: Preliminary study in Chinese Rutaceae. (Act. Phytotax. Sinica 6, 1957, 1-157).

Hyles, R.S.: A dictionary of genera and subgenera of Cactaceae ... 1753-1953 (Incorporating supplement Jan. 1, 1954-Dec. 31, 1956). 8°. Nottingham. 1957. ii + 33 pp.

Léonard, J.: Généra des Cynometreae et des Amherstieae africaines (Mém. Ac. Roy. Belg. 30, fasc. 2, 1957, pp. 1-314, 24 pl.) --This is an extremely interesting study on the importance of the mode of germination and the structure of very young seedlings of 300 leguminous African plants as an additional character for taxonomic distinction. It seldom occurs that such characters are known from field observations and they have mostly been obtained in Africa, partly by raising

plants there or in the Brussels greenhouse. Some *Sindora* seedlings from Malaysia have been described. It seems that most good genera are characterized by a fixed mode of germination and Leonard has in a considerable number of cases remodelled generic concepts on that character in combination with other differences (floral characters, wood anatomy, palynology) or transferred species to other genera. In the tropics this field is more or less neglected, though in many forest offices valuable data may be filed in reports. Though naturally the blastogeny cannot be decisive alone for generic distinction, it may add substantially to a better evaluation of other differences. It should be admitted, however, that variable genera, subgenera, or sections might show a different blastogeny.

Linnaeus, C.: Species plantarum. Vol.1. A facsimile of the first edition, 1753. With an introduction by W.T.Stearn. London, printed for the Ray Society, sold by Quaritch Ltd. £ 2.10.--. 176 pp. Added: Introduction, xiv + 176 pp. and index to genera and classes.-- The idea of bringing in an exceedingly nicely executed edition of the *Species plantarum* within reach of the purse of the average botanist has been a most welcome idea and a worthy contribution to the Linnaeus year 1957. Its greatest attraction however is the scholarly introduction by our best botanical historian William Stearn, who brings this book closer to the skilled reader than ever before has been attempted, who places it in its time, and who, in his usual lively style, confronts the reader with a mass of well-arranged, orderly, unique documentation, easily to be read. It should be in possession of all plant taxonomists.

Vol.2. A facsimile of the first edition, 1753. With an Appendix by J.H.Heller and W.T.Stearn. London. 1959. £ 3.-- The appendix includes an explanatory index of Linnean abbreviations for authors and books by Heller, notes on illustrations and supplementary Linnean works by Stearn, with facsimiles and reprints, and an index to both genera and species indicating the lectotypes of Linnean genera.

Matho, Karl: Orchideen der Tropen und Subtropen. 184 pp., 64 col.pls, 3 illustr. 1956. Sw.Kr.12.50.

Morrison, Hedda: Sarawak. London, MacGibbon & Kee. 1957. 288 pp., c. 200 photographs. £ 3.3.--. This is not a botanical book, but one which is giving a lively, and it seems expert sketch of the life of the various peoples and tribes of Sarawak, illustrated by marvellous full-page photographs on glossy paper. One comes in close contact with all aspects of daily life, religion, habits, sustenance, products, building,

crafts, arts, and clothing, with occasional glimpses of the scenery. A remarkable achievement with expert photography.

P'ei, C. & T.-Y. Chou: Atlas of Chinese Medicinal Plants
Edited by the Bot. Res. Bur. Acad. Sinica. 4 vols. 80. Peking.
1951-56. Illustr., in Chinese.

Puri, G.S.: Forest Ecology. Botanical Survey of India. A scholarly research work on Indian vegetation and its environment. It is comprehensive. It includes about 900 pages, 320 illustrations, 130 drawings, and 225 tables. It is in the press and will be ready by about March 1959. Price about Rs. 50.00.--From the Preface of Prof. Sir Harry G. Champion, F.R.S., D.Sc. we extract: It is a matter of great interest and indeed satisfaction to me that the compilation of a comprehensive survey of vegetation of the Indian sub-continent in its ecological aspects has now been undertaken. The vastness of the area to be covered, and still more, the unparalleled range of environmental conditions and associated types of vegetation, are such that very few individuals have had the opportunities for acquiring enough first-hand knowledge even to contemplate a general survey. Over the century, however, there have been many individuals with keen interest in the vegetation of the areas in which they worked or which were accessible to them and with the passage of years from Wallich, Royle and Hooker's time onwards, one region after another had come under study. Naturally in the early days, the emphasis was more on the taxonomic and floristic aspects, but the environment was always in mind and gradually began to receive increasing attention. Foresters, like myself, are proud of the leading part that their profession has played in these local studies.

Rodriguez, R.L.: Systematical anatomical studies on Myrrhodendron and other woody Umbellales (Calif. Publ. Bot. 29, 1957, 145-318, pl. 36-47, 69 fig.).--An excellent study embracing anatomical and other research from diverse angles on the problem of the relationships within the Umbellales. He comes to the conclusion that the families belonging to them represent divergent lines from a focal group and the results of the anatomical study did not support the biphyletic interpretation proposed by Hutchinson (in this case).

Santapau, H.: The Flora of Purandhar. An Enumeration of all the Phanerogamic Plants discovered in Purandhar during the years 1944-1956. 158 pp., 4 photogr., map, 2 col. pl., no date (?1958). Oxford Book & Stationary Co. Scindia House, New Delhi. Rs 15.00.--This is a local Flora of a small area c. 3 km diam. of Purandhar, a Maratha hill fort, situated c.

40 km SE of Poona, Bombay Pres., rising suddenly c. 750 m from the Deccan plains, the highest point being c. 1380 m alt. The military camp on it became a military sanatorium about the middle of last century. Dr Santapau came to explore the flora of this hill, which served as an Internment camp and Parole Centre during World War II; Dr Santapau gave some lectures on botany to internees. With the voluntary help of three of them the complete Flora was collected, including also cultivated and escaped species. Keys are given to the genera under their families. There are no descriptions and no synonymy, but several species are annotated with ecological or floristical data.

Specht, R.L. & C.P. Mountford: Records of the American-Australian Scientific Expedition to Arnhem Land. 3. Botany and Plant Ecology. Melbourne University Press. 1958. 80. xv + 522 pp., numerous figs and pls. Bound £ 6.6.-. This is an extremely interesting book giving a full taxonomic account of the cryptogamic and phanerogamic flora of the collections made at various places, mainly in the aboriginal reserves, of Arnhem Land in 1948. It is semi-arid land in the monsoon forest area; rain-forest is absent. A remarkably high number of desmids has been found. Among the phanerogams there are some new species.

Traub, H.P.: The Amaryllis manual. New York. 1958. 338 pp., with descr., keys, etc.

Versteegh, Chr.: Determinatie-tabel van veldkenmerken. Mimeoogr. 53 pp. folio. Forestry Service, Manokwari, Netherlands New Guinea.--This is a key on field characters (bark, slash, exudents, buttresses, stilt-roots, etc.) to 80 common tree species of New Guinea lowland. The characters used are chosen to serve personnel which has little botanical knowledge; most characters are derived from the structure of the bark of mature trees at least 40 cm diam. A sharp knife and handlens (10x) are sufficient tools. A worthy initiative.

Virot, R.: La végétation Canaque (Mém. Mus. Hist. Nat. Paris 7B, 1956, 1-397, 24 pls, 48 figs).

Walter, H.: Grundlagen der Vegetationsgliederung (Vol. 4 of Einführung in die Phytologie). Tl 1: Ellenberg, H., Aufgaben und Methoden der Vegetationskunde. Stuttgart. 1956. 136 pp., 19 fig., 21 pl. RM. 9.40.--A textbook for university students, this volume dealing with plant-sociology and ecological geobotany.

Wood, G.H.S. & J. Agama: Check list of the Forest Flora of North Borneo (For. Rec. no. 6). Sh. 3/9.--Contains some 250 species or groups of them.