

XIV. BOOK NOTICES
(contnd from p.758)

The Natural History of Rennell Island, British Solomon Islands. Scientific Result of the Danish Rennell Expedition, 1951, and the British Museum (Natural History) Expedition, 1959. Vol.3 (Botany and Geology), ed. by Torben Wolff. Danish Science Press, Copenhagen, 1960, 7-132 pp., many figs and photogr. This volume was issued in 3 instalments. The first (1957) contains a paper by N.Foged: Diatoms from Rennell Island. The second (1958) contains papers by E.B.Bartram: Musci, by T.Wolff: Vascular Plants from Rennell and Bellona Islands (a list of 31 spp. identified by F.R.Fosberg, and a few names of seeds), and by J.C.Grover: The Geology of Rennell and Bellona. The third instalment (1960) contains papers by T.Levring: A List of Marine Algae from Rennell Island, and by Lise Hansen: Some Macromycetes from Rennell and Alcester Islands. For the botanist may also be of interest T.Wolff's general introduction in vol.1 of the series (1955) 9-31.

Proceedings of the Symposium on Humid Tropics Vegetation, Tjiawi (Indonesia) December 1958. Publication of Unesco Science Cooperation Office for Southeast Asia. Printed at New Delhi, no date; received March 1961; xv + 312 pp., map of Brunei, vegetation maps, photogr. Biographical notes of authors; discussions. Sponsored by the Council for Sciences in Indonesia and Unesco; Chairman Prof.Kusnoto Setyodiwiryo.

This book, well-printed, with many tables and references, gives much factual information of value, and many fruitful points of view. Several botanists of great repute were among the participants. Progress reports by several delegates cover most of Malaysia, also India, Pakistan, Ceylon, Pacific. The other addresses are grouped to 4 sections: Classification of vegetation types, Methods, Ecology, Silviculture. Of the many addresses we mention the following. By R.G.Robbins & H.A.Haantjes and the big study by R.A.de Rosayro on aerial vegetation photography. By J.A.R.Anderson a small important paper on the peat swamp forest in Sarawak and Brunei. By P.S. Ashton a sketch of the primary vegetation and soils of Brunei. By Y.Satyanarayan a review of vegetations in the Western Ghats, Deccan. By J.S.Womersley on vegetations of Eastern New Guinea and on Araucaria forests. From the Resolutions we have selected the following points:

Preservation and study of whatever established biotic communities is highly recommended.

Post-graduate students should be enabled to study ecology abroad.

Efforts be made to bring scientists to Bogor, Singapore, Peradenya, Calcutta etc. in order to draw more scientists of

promise and ability into research of humid tropical problems. Herbarium or living collections should be used in relation to ecological work.

It is recommended to extend studies and compare results in the tropics in other parts of the world.

In recognition that the material published in the *Flora Malesiana Bulletin* is of great importance and of interest much broader than the immediate circle of contributors to the *Flora*, sufficient additional funds be found to enlarge the edition sufficiently to place it in all taxonomic libraries and in the hands of individuals interested in the botany of the tropical Indo-Pacific region.

The authorities who are preparing the revision of the *Flore Générale de l'Indo-Chine* are recommended to adopt the same form and scope as the *Flora Malesiana*, put it on a wider regional basis, and have a common boundary with the *Flora Malesiana*.

A useful appendix contains equivalents in British and decimal systems of measurements regarding area, length, height, girth, and diameter classes of trees. In the bibliography of this *Bulletin* the separate papers are quoted under the respective authors.--M.Jacobs.

Tropical Soils and Vegetation/Sols et végétation des régions tropicales. Paris, 1961, 115 pp. A bilingual account of the Abidjan Symposium jointly organized by Unesco and the Commission for Technical Co-operation in Africa South of the Sahara 20-24 October 1959. Relating to SE.Asian botany are the lectures by P.W.Richards: The types of vegetation of the humid tropics in relation to the soil; by B.A.Abeywickrama: The vegetation of the lowlands of Ceylon in relation to the soil; by G.S.Puri: Vegetation and soil in tropical and subtropical India.

Cain, S.A. & G.M. de Oliviera Castro: Manual of Vegetation analysis. New York, 1959. 325 pp., fig.

Concklin, H.C.: Hanunoo Agriculture in the Philippines. Tao series on shifting cultivation 2. 1957. xii + 209 pp., 42 pl. Study in Mindoro.

Dawson, W.R.: The Banks Letters. British Museum, London, 1958. 40. xlii + 965 pp. £12.12/- net. The Calendar of the Manuscript Correspondence of Sir Joseph Banks comprises approximately 7,500 entries containing résumés of each letter, and provides the first printed catalogue of these manuscripts in the British Museum, the British Museum (Natural History), and other collections in Great Britain.

Fosberg, F.R.: The Vegetation of Micronesia. I. General descriptions, the vegetation of the Marianas Islands, and a de-

tailed consideration of the vegetation of Guam. Bull.Amer. Mus.Nat.Hist. vol.119, art.1 (1960) 1-75, pl.1-45, 2 maps as text figs. Short bibliography. The photographs are beautiful.

Frey-wyssling, A.: Über den Ursprung des Lebens auf die Erde. Polygraphischer Verlag A.G. Zürich, 1960. 20 S. Broschiert. Rectoral address of the E.T.H., which is a succinct, admirably complete, critical survey of the situation. A biochemical evolution might be not impossible but for the present the author does not share the Oparin satisfaction.

Gaussen, H.: Les Gymnospermes, actuelles et fossiles. Fasc.6, chap.11. Généralités, Genre Pinus. Toulouse, 1960. 272 pp. Revision, key.

Hattori, S. & A. Noguchi: Index speciminum typicorum in herbariis Japonensibus. Pars I. Bryophyta. Tokyo, 1960, 169 pp. A laudible, much welcomed undertaking.

Hendry, R.S.: Atlas of the Philippines. viii + 229 pp. with coloured maps and illustrated text.

Ho, Pham-Hoang & Nguyen-van-Duong: Flore du Vietnam (ou Sud du 17e parallel). Saigon, 1960. 803 pp., 275 tab. (each with 6 fig.). Flora with keys; text in Vietnamese.

Jonker, F.P.: Heyerdahls Kon-Tiki theorie en de ethnobotanie. Amsterdam, 1960. 24 pp. In Dutch. Inaug.address as professor of systematic botany at Utrecht with review and discussion of arguments relating to Ipomoea, Lagenaria, Cocos, Gossypium, Carica, Argemone, Heliconia, Zea. Agreement with Merrill's work.

Keast, A., R.L.Crocker & C.S.Christian: Biogeography and Ecology of Australia. Junk (The Hague), 1959. 8°. iv + 640 pp., 56 fig., 58 pl. Dfl.65.--. The present volume is dedicated to two essential problems of Australian Biology: biogeography and ecology.

Whereas at first similarity of the fauna and flora of Australia with those of S.America and S.Africa led to theories like a common origin from Antarctica, from Gondwana-Land etc. recently especially ornithologists and mammalogists stress an Eastern Asiatic origin. It is now realized that recent species groups have a different history from older ones and that it is a mistake to treat all groups of Australian life arrived there in various geological periods according to one theory. Almost every possible theory has found protagonists amongst the contributors: Antarctica, Gondwana-Land, old established "autochthonous" groups of once world-wide distribution, the East Asian theory. In addition, many of the freshwater organisms are certainly of marine origin. Each of these biogeographical studies is fully penetrated by ecological

spirit, centering e.g. around the problems of species radiation into empty eco-niches, the adaptation to arid land etc. Human ecology from the aboriginal to modern man is discussed as well as the ecology of soil (including erosion), of plants, frogs, marsupials; the first results of organized bird-banding, opening a most promising field, are included.

In a really grand scale the C.S.I.R.O. (Commonwealth Scientific and Industrial Research Organisation) has opened an ecological attack on planning, conserving, preparing the continent for its future agricultural development. Included in this book are chapters on the organisation of teams of scientists for surveying and planning in unknown regions, on high mountain vegetation with the problem of water preservation, on biological control of Prickley Pear, on the discovery of wild stages, of Ornithosis, on the ecology of Sheep Blowflies, on sheep pasture and sheep production. Many other problems of soil science and botany are treated also. There are 37 contributors. This book forms vol.VIII in the series *Monographiae Biologicae*.

Kitamura, S.: Flora of Afghanistan. Res. Kyoto Univ. Sci. Exp. Karakorum & Hindukush 1955, vol.2, 1960. ix + 486 pp., 2 maps, 105 fotogr. and figs. The Japanese expedition under Prof. Dr. H. Kihara collected plants in Afghanistan between May 24 and Sept. 8, 1955. Here are given a short history of former botanical researches, the itinerary of the expedition, a chapter on phytogeography, and an enumeration of the whole Afghanistan flora, amounting to 2680 spp. with reference to the expedition's collections; several new taxa are described.

Linnaeus, C.: Mantissa plantarum 1767 & 1771. With an introduction by William T. Stearn. Printed 1961 facsimile by J. Cramer, Weinheim, Nat. Hist. Class. VII. Sold by Wheldon & Wesley and Hafner. xxv + 588 pp. The words in praise of the Species Plantarum edition, uttered on p. 663 of this Bulletin, equally hold good for this edition. The introduction gives a full scholarly commentary, with English translation of Linnaeus's preface, and an explanatory list of references used by Linnaeus, which contains several newly found items. An amusing reference to Linnaeus's dedication to Frederick Calvert gives a touch of frivolity.

Massal, E. & J. Barrau: Food Plants of the South Sea Islands. South Pacific comm. techn. paper no 94, 1956. iv + 51 pp., fotogr., figs. A popular useful account of staple and supplemental food plants. A pictorial key to the leaves of edible aroids and to the habit of edible yams; vernacular names; bibliography.

Natho, G. & I.: Herbarttechnik. A. Ziemsen Verlag, Wittenberg-Lutherstadt. 96 pp., 37 fig. DM 4.60. Collecting methods, drying, preparation of specimens, with special chapters on techniques for Algae, Fungi, Lichenes, and Musci.

Pantin, C.F.A. (chairman): A Discussion on the biology of the southern cold temperate zone. Proc. Royal Soc. ser. B, no 949, vol. 152 (1960) 431-676, pl. 35-39. Discussions, references. Published by the Royal Society, London. Sh. 18/- net.

This symposium was held in London on Dec. 10-11, 1959, to discuss, amongst others, the results of the Royal Society Expedition to Southern Chile. The contents are important for anyone studying the Pacific and its biogeography. Three introductory papers by C.F.A. Pantin, M.W. Holdgate, G.E.R. Deacon. Section Botany: C. Skottsberg on the plant geography of the zone; E.J. Godley on the botany of S. Chile in relation to New Zealand and the Subantarctic; N.M. Wace on the botany of the southern oceanic islands; R.A. Couper on fossil Podocarpaceae and Fagaceae; G.E. Du Rietz, Remarks on the botany of the zone; V. Auer on the Quaternary history of Fuego-Patagonia; U. Hafstein on the Quaternary hist. of vegetation in S. Atlantic islands; C. Troll on relationships between the zone and tropical mountains. Discussion on the biology of Nothofagus. Section Terrestrial Zoology, 3 papers. Section Marine Biology, 5 papers. Section Ornithology and General Zoogeography, 3 papers.

A few of the Concluding Remarks: Our problem of the origin of the southern biological relationships is part of the problem of biological relationships in the world generally. Some faunistic and floristic relations cannot be explained by wind, water, and birds, but require some more solid continental connections to explain them, or in some cases prolonged isolation of both the terrestrial and the littoral marine fauna. Distribution by the southern ocean currents is contained within the prevailing westerly winds. The antarctic climatological and oceanographic system is sharply defined. Zonation of plant life seems to have remained substantially unchanged at least during the Tertiary.

Singh, L.B.: The Mango Botany, cultivation and utilization. World Crop Books. Leonard Hill Ltd. London, 1960. xiii + 438 pp., 75 fig., 21 tables, 54 tab.

Steinmetz, E.F.: Piper methysticum (kava). Amsterdam, 1960. 46 pp., illustr. A survey of uses and therapeutics.

Vayssière, P.: Agronomie malaise. Notes de Mission. 176 pp., 57 fig., 31 pl. + 1958. Edition du J.A.T.B.A., 57 Rue Cuvier, Paris Ve.