VI. MISCELLANEOUS INFORMATION (contd from p.817)

a) Research and Publications:

Flora of Java. The first volume (Gymnospermae to Buxaceae, according to Hutchinson's system; 110 families) is now in the press and will be published, in print and in English, early in 1963. The whole work is planned in three volumes of c. 800 pages each. The second volume is also in the press. The original text is largely by Dr.C.A. B a c k e r, assisted by several specialists. The editor is Dr.R.C. B a k h u i z e n v a n d e n B r i n k f.

Lauraceae. At Bogor, Dr.A.J.G.H. K ostermans has concluded a 1700-page MS-bibliography of this family, which aims at completeness for the whole world. The bibliography deals with all names (infraspecific taxa included!) ever published in the Lauraceae and with all subsequent references in literature. All cross-references have been incorporated for all binomials, as well as the pre-Linnean names. The names which in the course of time have been misinterpreted have been included, which gives the bibliography a taxonomic aspect. Negotiations about publication have started, but to attain more certainty in this respect, institutes and private persons who might be interested in this work are encouraged to contact Dr. Kostermans at the Herbarium Bogoriense, Bogor, Java, Indonesia, or the Editor of the Flora Malesiana, Rijksherbarium, Leyden, Netherlands.

Studies on the flora of Thailand. Botanical relations between Denmark and Thailand have existed since the beginning of this century; for a summary, see Nat.Hist.Bull.Siam Soc. 20 (1961) 71-80. In recent times, these relations have been renewed and extended, and under the auspices of the mutual ambassadors a committee was formed, consisting of a few high officials and three botanists.

Field work in northern Thailand was carried out at the instigation of this committee, at intervals between January 1958 and July 1960, by Prof.Th.Sørensen, Mr Kai Larsen, in close cooperation with Mr Tem Smitinand, and several other biologists. The yield was about 8,000 collections, which have gone to the Botanical Museum, University of Copenhagen; duplicates are available for institutes which render assistance in certain groups.

The material is now being worked up, and the results are published in the Dansk Botanisk Arkiv. In vol.20 (1961) an introduction is given, together with Craib's map of the provinces of Thailand as adopted in the Florae Siamensis Enumeratio and a map of northern Thailand where the collections

were made. The results are published in the form of an enumeration; the first part contains the Ferns, by R.E. Holttum, the Sphagnaceae by B.hansen, and several phanerogamic families, among which especially the Acanthaceae, by C.E.B.Bremekamp, have been enriched with many newly described species. Hansen's paper is preceded by a concise description of the peculiar sandstone formations in Thailand about 17° N 102° E.

The Prodromus Herbarium A.P.de Candolle on microfiche. After the Linnean Herbarium, now the Candollean Herbarium at Geneva, which served as the material for the Prodromus Systematis Naturae (1824-1873) is to be photographed and forthcoming in a complete microfiche edition. The International Documentation Centre AB at Tumba, Sweden, offers series for sale at US \$480.-; microfiche copies of the Prodromus (17 volumes) are offered for US \$96.-. A catalogue with a 2-page introduction by Dr.Ch.Baehni, the Director of the Geneva Herbarium, will probably be sent by the firm on request.

Flora of Victoria. The new Flora of Victoria, largely prepared by Mr J.H.W i l l i s, Melbourne, will be published in two volumes, the first of which, containing i.a. the Monocots, will probably be published in the course of 1962.

Flora of Tasmania. The second volume of Miss Winifred M. C u r t i s' s Flora (Umbelliferae to Epacridaceae) is expected to be available December 1962.

Adansonia, travaux publiées avec le concours du Centre National de la Recherche Scientifique, sous la direction de H.Humbert & A.Aubréville. This is the new name under which the journal "Notulae Systematicae" is continued. The first instalment appeared in 1961, the second in 1962.

Although in the preface it is announced that Adansonia will deal with some more aspects of tropical botany than did its predecessor, it is hard to see the advantage of the name change, especially when this is accompanied by an increase in price. Its contents, as far as important for Malaysian botany, have been included under Bibliography.

By the way, a new evaluation of Adanson's disputed works is given by Dr.w.T. S t e a r n, in his brilliant essay on Botanical Gardens and Botanical Literature in the Eighteenth Century, in the Hunt Botanical Catalogue I, 1 (Pittsburgh 1961) xcii-xcvi. Stearn rates Adanson equal to A.L.de Jussieu.

Chemotaxonomy. Dr.R. H e g n a u e r, professor of pharmacy at Leyden University, is engaged on a 5-volume work on comparative phytochemistry, covering the entire plant kingdom. The first volume, which deals with cryptogams, is in the press and will be published in 1962.

Geological Map of Asia and the Far East. This Map, prepared under the auspices of the U.N. Economic Commission for Asia and the Far East, is priced at US \$ 15,00, and can be obtained from: The Sales Section, United Nations, New York; The Sales Section, United Nations, Palais des Nations, Geneva, Switzerland; the Division of Administration, ECAFE, Sala Santitham, Bangkok, Thailand. The map, which is on a scale of 1 to 5,000,000, consists of six sheets, with a brochure and index map showing the status of geological mapping in various Asian countries. Steps are now being taken by ECAFE to prepare other regional maps, to show the distribution of known mineral resources, potential mineral-bearing areas, and oil and natural gas reserves.

b) <u>Herbaria:</u>

Sandakan Herbarium. After the disastrous night of Jan.31, 1961, when the Herbarium was destroyed by a fire (cf. p.812), attempts have been made to collect new material; by this way it is hoped that within 5 years the original amount of specimens will have been collected again. Plans for a new Herbarium were approved by the North Borneo Government at the end of 1961. The total number of specimens amounted at the end of 1961 already to 3912, of which 600 dipterocarps. In May 1962 news was received that a sum of Str.\$ 220,000 had been approved for construction of a new Herbarium and Research Office for the Forest Department, Sandakan, in addition to Str.\$ 85,000 voted July 1961 for a new District Forest Office. Also Str.\$ 25,000 has been provided extra for the collecting drive, with appointment of three tree climbers.

Kebun Raya Indonesia. From Oct.17, 1961, onwards, all institutes in Bogor which occupy themselves with scientific research (Forestry, Agriculture, Veterinary Science) have been united into one organization, the Djawatan Penelitian Departemen Pertanian, under directorship of Ir. S a d i - k i n. From April 1962 onwards, the institutes which together form the Kebun Raya Indonesia (Lembaga Pusat Penjelidikan Alam) come as the Lembaga Biologi Nasional with seven similar other institutions directly under the Prime Minister's Office.

Bogor Herbarium and Library. The building of the Bibliotheca Bogoriensis has been completely overhauled in order to protect the books more effectively from termite damage than sometimes was possible. The priceless mine of knowledge was intended to be open to the public again from about March 1962.

From the Herbarium we have news that 2000 new zinc plant tins were obtained during 1961 and that a similar amount are expected for 1962; this will definitely put an end to the

shortage of storage room for specimens with which the institute had to struggle since the War.

The Arnold Arboretum will acquire new greenhouses.

National Museum, Manila. The Philippine Congress has appropriated the necessary funds for the construction of the new Museum, but the release of the funds is suffering delay, hence the final construction has not yet been started.

Botany Department, University of Malaya in Ruala Lumpur. Mr M.E.D. Poor e, professor of Botany, reported that he has succeeded in setting up during the past two years a staff of his department consisting of five persons, viz a taxonomist, a mycologist, a cytologist, a physiologist, and an ecologist. The buildings were extended in the second half of 1961 and he hopes that by May 1962 there should be enough space to provide facilities for all the teaching and research he is likely to be able to do in the next five years.

Mr Poore's principal interests are ecological, and he will probably devote much of his time to problems of description and classification of rain-forest communities and to water relations. Although by training not a taxonomist, he found it almost impossible in his environment not to become interested in taxonomy, more particularly in the Euphorbiaceae, among which the genus Macaranga has his full attention.

Utrecht Biohistorical Institute. This was officially opened May 30, 1962; director is Prof.Dr.F. V e r d o o r n. It is housed in the old professor's house which has undergone substantial renovation, Nieuwe Gracht 187, bordering the Hortus and adjoint to the Botanical laboratories.

Fairchild Tropical Garden, Coconut Grove, Fla, U.S.A. From the First Research Report 1961, we took the following particulars. In Dec. 1960, Mr P.B. To m 1 in son arrived as a botanist to assist Mr R.W. Reid. Mr Tomlinson is to carry on the work on morphology and anatomy of palms, and important new observations on the leaf base structure have already been made. He also cooperates with Dr.C.R.Metcalfe and others on the anatomy of Monocots; recently work has been done on the Xyridaceae and Commelinaceae, and material and slides have been prepared for studies in the Pandanaceae and Cyclanthaceae.

Mr R.w.Reas is mainly occupied with work in cytology and floral morphology of certain groups of palms; he cooperates with Dr.H.E.Moore Jr of the Bailey Hortorium.

we also read that good progress has been made with the garden administration and labelling, that the laboratory facilities have been extended, and that visitors are welcome.

Bangkok Herbarium. The Herbarium of the Department of Agriculture, Bangkok, Thailand, mostly consisting of the collections of Dr.A.F.G.Kerr, is now supervised by Miss Amphai Y on g b o o n k i r d, M.Sc. (Calif.).

c) Symposia, Congresses, Societies, and Committees:

British Association for the Advancement of Science, 123rd Annual Meeting, at Norwich. At this Annual Meeting which was held from Aug. 30 to Sept. 6, 1961, 15 sections were representing many and various subjects. The section K, Botany, was presided over by Dr.R.E.Holttum, who delivered a Presidential Address on "Plant taxonomy as a scientific discipline". Much of the interest of the section was focussed on Monocotyledons. Mr J.H.Kern of the Rijksherbarium delivered a lecture entitled "New look at some Cyperaceae mainly from the tropical standpoint". A summary follows here.

In order to come to a more satisfactory system of the Cyperaceae it is necessary to pay more attention to the tropical members of the family with a spikelet—and flower—structure different from that in the sedges of the temperate regions. The view that the floral structure in Scirpeae is primitive and basic to that in other cyperaceous genera is still widely spread. Holttum's opinion that the condition in Scirpeae can be derived from that in Mapanieae is more acceptable. The most primitive structure in living Cyperaceae is probably found in Scirpodendron. The need of a better understanding of the morphology of the spikelet in other genera (Cyperus, Remirea, Scleria, etc.) and the results of some investigations were discussed.

Dr.C.E.Hubbard spoke on Some Aspects of the classification of tropical grasses, Dr.C.R.Metcalfe on Recent and current work on the systematic anatomy of the Monocotyledons, and Dr. F.A.McClure on The Bamboos from the point of view of Taxonomy.

It may be expected that all or most of the delivered lectures will appear in print in The Advancement of Science.

Tropical Ecology Group of the British Ecological Society. This working group for those interested in tropical ecology was formed in London on April 6, 1961, convened by Professor P.W.Richards. It is proposed to hold meetings and colloquia on particular aspects of tropical ecology in order to bring together the scattered workers in this subject, particularly to provide a meeting point between those in England and those in other countries. It is hoped that out of such a beginning it may prove possible to correlate the very scattered research being undertaken by people from the United kingdom visiting the tropics for short periods and by those at research centres in different parts of the tropics.

Anyone who is interested in tropical ecology is requested to contact T.C.whitmore, Esq., Secretary of the Tropical Ecology Group, Botany Department, the University, Southampton, England, who hopes to compile an index of tropical ecological studies.

International Society for Tropical Ecology. The International Society for Tropical Ecology was founded in 1960 for the promotion of the study of tropical ecology in all its aspects. The Society is managed by an Executive Committee (President: Dr.J.C.Sen Gupta; Vice-presidents: Dr.F.R.Fosberg, Dr.C.G.G.J.van Steenis; General Secretary: Dr.G.S.Puri; Zoology Secretary: Dr.M.P.Motwani; Honorary Treasurer: Mr S.K.Jain, and 12 members). Two symposia were organised under the auspices of the Society, one at Bombay and another at Allahabad. The Society is publishing a bulletin containing original research papers. It has about 200 members from different countries of the world. National Committees have been established already in some countries.

The Society has also published a proforma for the study of a Forest Ecosystem. This proforma, bulletins, membership forms and particulars are available from the General Secretary, I.S.T.E., 10 Chatham Lines, Allahabad, U.P., India.

tary, I.S.T.E., 10 Chatham Lines, Allahabad, U.P., India. Admission fee Rs 5.00 or US \$ 2.00 or sh 15/-. Annual dues: personal membership Rs 15.00 or US \$ 5.00 or £ 1/15/-, institutions Rs 20.00 or US \$ 7.00 or £ 2/10/-. Life membership Rs 200.00 or US \$ 70.00 or £ 25/-/-.

Humid Tropics Research Project. The UNESCO symposium on the vegetation of the Humid Tropics will be postponed for a year and is now to be held probably in July 1963 at Kuching, Sarawak. The participants will have the opportunity to visit Mount Kinabalu.

A National Soil Science Congress of Indonesia was held at Bogor from Dec.3-7, 1961. Some of the communications dealt with vegetation.

Evaluation of tropical habitat for production of food, fodder, fuel, and fertilizers. Under this title a symposium was organized by the International Society for Tropical Ecology, from Jan. 2-5, 1962, at Cuttack, Orissa, India.

Tenth Pacific Science Congress, Honolulu, Aug. 21 to Sept. 2, 1961. The 10th Congress was held in the place where the first was born, many decades ago. It was a huge congress, with c. 2700 participants, of whom 1700 were scientists, but it was well-planned and conducted, with good accommodation and transport facilities, manyfold possibilities of excursions, etc. The only technical flaw was the loudspeaker-system which was inadequate on some occasions, most surprising in this technocratic age.

Several important symposia were held for biogeography, geophysics, and on island ecosystems. The one on biogeography was not so well organised as desirable, as the lectures were not spaced enough to provide for ample discussion. It is most disappointing to hear a chairman announce: "there is still one minute for discussion", after a subject has been treated which requires some afterthought. This was the greater a desillusion for the proper participants of the symposium who had received stencilled copies of each other's versions in advance and who had also prepared discussions in advance which were now almost completely suppressed by lack of time. On the other hand, there was a whole day reserved for "contributed papers: this time could more efficiently have been spent on the discussions of major subjects. Apart from this, the at-mosphere and convenient life, the excellent evening lectures, and the nice receptions, made the two weeks' stay most delightful. Impressive speeches were held during the opening. and specially during the closing sessions which took place in the open air amphitheatre of the University.

The botanical post-congressional tour to the islands of Maui and hawaii was most excellent, under technical leader-ship of Mr Bianchi and scientific guidance of Dr. Fosberg; the latter had produced an ample and very accurate field guide with descriptions of the sites to be visited and a separate plant list, and contributions on other subjects of interest to all of us. well-timed, most interesting, and delightful as

to the international company we formed. Well-done!

At the Congress a thick volume of abstracts was available; a volume of Proceedings will appear in which some of the symposia will be printed in full, but most papers read will not be printed on behalf of the Congress.

The Eleventh Congress will be held in Japan, in 1965.

kirstenbosch Golden Jubilee. Dr. H.B.Rycroft has announced that the National Botanic Gardens of South Africa will celebrate their Golden Jubilee from Sept.22 to Oct.21, 1963, and are desirous too of welcoming botanists to take part in this occasion. The highlight of the proceedings will be a botanical tour lasting three weeks, preceded by a week of lectures, discussions, and symposia, on botanical and allied subjects, at Cape Town. Owing to lack of funds it is not possible to pay for individual transport costs other than perhaps the botanical tour itself. The tour will cover some 3000 miles. Additional tours for those who are able to arrive earlier could be arranged to see the amazing display of flowers in Namaqualand; they are at their best in early August.

The Cartographical Presentation of Biological Distributions. A Symposium with the Systematics Association held in London at the Royal Geographic Society on March 6, 1950. The papers were issued as a separate publication by the Royal Geographic Society, London S.W.7 (1954) 35 pp. Although it was held 12 years ago, the symposium became actual again because of its connection with the problems involved with the Pacific Plant Areas. In the introduction by W.B. Turrill a number of questions is posed concerning scale, projection, and indication; in discussing mapping for zoological purposes M.R. Hewer made a plea for standardization of outline maps; Margaret S. Anderson made a geographer's reply to most of Dr. Turrill's questions: and E.C.Willatts explained the cartographer's contribution of lettering, indication of population densities, etc. In the discussion some detailed information came up with regard to apparatus for comparing two maps on the same scale (10 miles to 1 inch = 1:633,660), to Zip-atone adhesive patterns of different hatching, stippling, etc. and to copyright matters.

Regional Conference of Southeast Asian Geographers. This was held at kuala Lumpur from April 2-23, 1962, sponsored by the International Geographical Union and the University of Malaya. The following subjects were on the programme: Meteorology and climate of East and Southeast Asia; Geomorphology, geology and mineral resources; Agricultural resources, soils and land-use; Population, migration, ethnic studies; Urban geography of Southeast Asia; and perhaps also Historical geography, Teaching of geography, and Cartography. Also exhibits, tours, and local excursions were schemed.

The papers will be published in The Journal of Tropical Geography.

Phycological Society of the Philippines. A beautifully executed quarto 8-page pamphlet on the foundation of the Society was received August 1961, including an introduction, some abstracts of papers on Philippine Algae, and bye-laws. President of the Society is Professor G.T. Velasquez.

A statue for a botanist. On Aug. 12, 1961, the Philippine Society for Plant Taxonomy organized the unveiling ceremony of the historical marker erected in honour of Vidal y Soler, at the Mehan Garden, Plaza Lawton, Manila. Dr. Quisumbing gave a biographical survey of Vidal's work; Prof. Santos presented the statue, which is life-size and stands on a high pedestal. The inscription reads: "Sebastian Vidal y Soler 1842-1889. A native of Barcelone, Spain. Inspector General of Philippine Forestry Bureau, 1871. Commissioner for the forest flora of the Philippines, 1876. Established a local botanical library and herbarium. Published important treatises on Philippine

flora. Philippine Society for Plant Taxonomy, August 12, 1961.

The Societé Botanique de la Belgique has celebrated its centenary at Brussels, June 9, 1962, followed by excursions on June 10-11 in Belgium.

From July 1-8, 1962, the Tsjechoslowakian Botanical Society celebrated its 50th anniversary, in Praha, with a jubilee Congress and excursions.

Evolution: its science and doctrine. Under this title a symposium was presented to the Royal Society of Canada in 1959; the proceedings were published by T.W.M.Cameron (ed.) at the University of Toronto Press 1960, vii + over 225 pp.

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The titles of the contributions are: The geological record of evolution; The lower Cambrian fauna; The evolution of palaeozoic life; Ordovician to Permian; Evolution of dental patterns in the lower Vertebrates; Southern intercontinental connections and the origin of southern Mammals; The cause and mode of evolution; The evolution of stability: natural selection at the level of the ecosystem; The evolutionary significance of barrier penetration; Biosystematics and the process of speciation; The evolution of Bacteria; A biochemist looks at evolution: past and future; Quelques reflexions philosophiques sur la science de l'évolution; The influence of Darwin on political and social thought; Darwin and social evolution; - Samuel Butler and evolution; Evolution and industry; Physica: heri, hodie, cras; On cosmology; The origin of elements.

d) <u>Methodology:</u>

Growing living plants from herbarium specimens. Sometimes it appears desirable to have living plants from tropical specimens in fruit only of which the systematist is eager to study the flowers, or to pursue on their anatomy, cytology, or blastogeny. In a number of cases, notably if ripe fruits are available in sicco and have not been treated with alcohol or sublimate, or dried with too much heat, and if the seed coat is sufficiently thick or unimpregnable, and the specimens not too old, it seems well possible to grow living plants from such seeds. At our advice Mr P.H. Raven, Claremont, Calif., tested this with seeds of Jussieua and succeeded well. One should of course have some patience with such seeds, even if sufficiently soaked before.

While this number was going in the press I saw a paper by Lewis and Elvin-Lewis describing a medium for growing small rubiaceous seeds from herbarium material (Castanea 26, 1961, 146-155). They found it necessary to sterilize seeds, best done with antibiotics. Germination was stimulated by use of gibberellates.