VI. MISCELLANEOUS INFORMATION (contd from p.725)

a) Research and Publications:

Flora of Java. In May 1961 the English translation of this great work was completed, except for the Bambusaceae which Mr Ch. Monod de Froideville is engaged in writing up. Dr.R.C. Bakhuizen van den Brink Jrhas finished the nomenclatural polishing. It is hoped that this voluminous work can be published in 1962. The main body was written by Dr.C.A.Backer, who for many families had the assistance of specialists.

Forest Botany in North Borneo. Dr.W.M e i j e r of Sanda-kan has prepared a mimeographed report under this title, April 1961, 33 pp. He describes summarily the present state of our knowledge, gives particulars about botanical work in North Borneo up till the present, a survey of dipterocarp genera, a tentative list of climbers (a much neglected group!), of palms, gymnosperms, a sketch of forest types, and notes on several related subjects.

Flore du Cambodge, du Laos, et du Vietnam, publiée sous la direction de Monsieur A.A u b r é v i l l e. The Supplement to the Flore Générale de l'Indo-Chine is continued under the above-mentioned title, as a new work. It will appear in instalments, containing one or more families, according to opportunity. Species solely occurring in Hainan or Siam will not be incorporated (as was sometimes done in the original work). Species described in the original work have no description in the present one. The general editor is Mme M.L. Tardieu-Blot; the first instalment (1960) contains an elaboration of the Sabiaceae, by M. J. Vidal. Anacardiaceae, Moringaceae, Connaraceae, and Mimosaceae are under study and will appear in the next instalments, each of which has a separate index.

Flora of the Southern Ryukyu Islands. With the financial assistance of a grant from the National Science Foundation Dr.E.H.W a 1 k e r will continue work to complete his Flora of Okinawa and the Southern Ryukyu Islands.

Catalogue of the flowering plants and ferns of Ceylon. Dr. B.A.A b e y w i c k r a m a, Lecturer at the University of Ceylon, has brought up to date Willis's 'Catalogue of the flowering plants and ferns of Ceylon' which will be published shortly (Ceylon Forester 1960, 300).

Flore du Congo Belge. Botany has been enriched with a new thick volume, the ninth, 597 pp., 1960; the following families are treated: Buxaceae, Anacardiaceae, Aquifoliaceae,

Celastraceae, Hippocrateaceae, Salvadoraceae, Icacinaceae, Sapindaceae, Melianthaceae, Balsaminaceae, Rhamnaceae, Vitaceae, and Leeaceae. As usual the illustrations are good.

Flora of New South Wales, produced under the direction of Dr.R.H.A n d e r s o n. In 1961 the first part has been is—sued of the Flora series of the Contr.New South Wales Natio—nal Herbarium, containing an introduction and conspectus of families by Dr.Anderson and an elaboration of the Zamiaceae (by Dr.L.A.S.Johnson), Podocarpaceae, Araucariaceae, Pinaceae, Cupressaceae, Typhaceae, Sparganiaceae, Pandanaceae, Potamogetonaceae, Ruppiaceae, Zannichelliaceae, Najadaceae, Zosteraceae, Aponogetonaceae, Posidoniaceae, Juncaginaceae, Alismataceae, and Hydrocharitaceae (all by Mrs Joy Thompson). The elaborations include keys, synonymy, descriptions and enumeration of specimens, with occasional notes. A map of New South Wales is added; there are no figures. This first instalment makes the impression of being a well-planned, careful work and we wish this Flora a prosperous growth. A second instalment recently followed, by Mrs J.Thompson, on the Papilionaceae (partly).

Catalogue of Burmese Plants. Dr. Mohinder Nath N a i r is engaged in compiling a card index of Burmese plants and it is intended to publish this as a catalogue; up till now it contains the names of 8700 species.

Flora of Thailand. Since the death of Dr.A.F.G.Kerr in January 1942, the Florae Siamensis Enumeratio has been with-out a regular editor. Kerr's posthumous MSS were seen through the press by occasional assistance of persons who were otherwise engaged, and after it was done. the work came to a standstill in the same period when field work was actively resumed by the Royal Forest Department. Apart from the Enumeratio, taxonomic revisions for Thailand have been made of 3 families, notably the Fagaceae, the Orchidaceae (partly published, still in progress), and the Cyperaceae (in the press). We are glad to learn that now Dr. Euphemia C.B a r n e t t, Department of Botany, St. Machar Drive, Old Aberdeen, Scotland, has undertaken the editorship of the Florae Siamensis Enumeratio. The publication will, as before, be sponsored by the Siam Society. The Gesneriaceae, which Miss Barnett recently finished, are now in the press, and Miss Barnett has now embarked on the Bignoniaceae.

b) <u>Herbaria:</u>

Sarawak Herbarium. The new herbarium at Kuching was completed at the end of Febr. 1961 and all specimens have been transferred from the temporary herbarium housed in a small building behind the Sarawak Museum. The cost of the new buil-

ding and its equipment has been entirely borne by a Colonial Development and Welfare Grant from the British Government. The new herbarium is a simple rectangular building. 60×24 ft, giving a floor space of 1440 square feet (including partitions), and is subdivided into three rooms: a preparation room (18 x 24 ft); the main storage room (30 x 24 ft); and a botanist's laboratory (12 x 24 ft). The possibility of extending the herbarium at a later date has been allowed for in the site plan. To prevent sun glare the building is orientated east west and a simple jack roof with a large overhang further eliminates direct sunlight and driving rain. Metal framed glass windows extend the whole length of the North and South sides. Varnished panels of Sarawak timbers form a 'live' exhibit beneath the windows. The central room is dehumidified and will be kept at a constant low humidity by means of a humostat control. This room will eventually contain thirty two metal cabinets, 43" x 20" x 84 ins high which is more than double the number of cabinets in the old herbarium. The botanist's laboratory is air conditioned by ¼ h.p. units. The preparation room will be occupied by the Herbarium Assistant and two mounters. A metal cupboard fitted with 24" G.E.C. cupboard heaters is to be installed for the drying of specimens. The herbarium is under the charge of the Forest Department, and the Museum collections (including the valuable Haviland and Hose, and Clemens collections) will be on permanent loan. A Herbarium Committee, composed of the Conservator of Forests, the Curator of the Sarawak Museum, the Forest Research Officer and the Forest Botanist (when appointed) will review annually the work of the Herbarium. Provision has been made in the Forestry Development Plan, 1961-1965, for the appointment in 1962 of a botanist on a three year contract. In the meantime the herbarium is administered by the Forest Research Officer. Before the arrival of a botanist the principal work will consist of the rearrangement and cataloguing of the specimens of the amalgamated herbaria of the Forest Department and the Sarawak Museum. Dr.C.X.F u r t a d o, a former member of the staff of the Botanic Gardens Singapore, is employed in Singapore examining old collections and, as far as is possible, in bringing the determinations up to date. Botanical collecting will be increased and three climbers are at present employed for this purpose.

Philippine National Museum Building. On June 26 Dr.E.Quisumbing wrote: "If plans don't miscarry, the construction of the building of the National Museum will be started in August, and we expect to transfer to this new building during the early part of next year. The budget of the Bureau Public Works include \$\mathbb{P}\$ 5,000,000 for this project. The new building will give us ample space for the expansion of the Philippine National Herbarium."

Brisbane Herbarium. The very welcome news was received that almost certainly a new Herbarium will be erected some time within the next five years. It will not be built on the old site, in the Garden, but on a new site at Indooroopilly, about 5 miles from the present Garden, and within half a mile from the University.

Forestry Herbarium Manokwari. The Subdivision of Resources Survey, Netherlands New Guinea Forest Service moved June 19, 1960, into its new building on the Western side of the Dorébay, Manokwari, which made a better storing of the herbarium collections (totalling now 13.000 numbers, of which 10.000 in the BW-series) possible.

Sandakan Herbarium. In the night of Jan.31, 1961, the mounted collections of the Sandakan Forest Department Herbarium, comprising c. 15,000 specimens, were destroyed by a fire which broke out in the neighbouring Veneer Industry Factory which was built during 1960 at only 9 metres distance from the Herbarium. Though duplicates of these specimens, largely Dipterocarpaceae and other forest trees, are preserved in the herbaria at Kew, Kepong, Singapore, Leyden, and some American herbaria, the loss for the Department is irreparable. Only recent 1960 collections of herbaceous plants and some 20 species of timber species under study were saved. The Forest Ecologist, Mr D.I.Nicholson, lost all his MSS and almost all files on sample plots etc.

Libraries and Herbaria are cordially invited to help to rebuild the Herbarium and Library.

Herbarium Christchurch. A new Herbarium building has been finished at Christchurch, New Zealand, and for this occasion an attractive Triennial Report has been issued 1957-1959 by the Botany Division of the Department of Science and Industrial Research (31 pp., portraits of various prominent botanists) which contains a short history of collections and personnel, scientific programs, etc.

c) Symposia, Congresses, Societies, and Committees:

Visiting Committee for Tropical Herbaria. In order to provide consultation and advice to tropical herbaria on problems relating to use, care, and housing of their collections, Unesco under its Humid Tropics Programme, has set up a Visiting Committee for Tropical Herbaria. This committee is made up of Prof.H.J.L a m (Leyden), Dr.George T a y 1 o r (Kew), Dr.A.C.S m i t h (washington), and Dr.F.R.F o s b e r g, chairman (Washington). Unesco has taken this step as a start toward strengthening systematic botany in tropical countries, where inadequate knowledge of the floras hinders research in all other fields of biology. Many of the most important tro-

pical botanical institutions are located in newly independent countries where adequately trained personnel and financial resources are often scarce and where the herbaria may not be fully appreciated by the political authorities. The services of the committee members, or of the committee as a whole, will be available at all times to advise and back the administrators of any tropical herbarium in any matter coming within the scope of the committee's competence. It is hoped that in the future, if funds become available, committee members may be able to visit the herbaria in all tropical countries to become better acquainted with their individual problems. Meanwhile inquiries may be made by mail, outlining problems on which advice is needed. Sufficient background information should be provided so that valid suggestions may be made. An information file is being established on facilities, staff, housing, condition of collections, techniques and methods in use, and outstanding needs, at all tropical herbaria. Information for this is earnestly solicited. The first meeting was held at the Rijksherbarium, Leyden; observers invited were Dr.F.A. Stafleu, representing I.A.P.T., and Prof.C.G.G.J. van Steenis, representing Flora Malesiana.

Third World Orchid Conference, London, May 30-June 2, 1960. The very full program contained inter alia lectures by Dr. Leslie A. Garay on the origin and age of the Orchid family, Dr.R.E. Holttum on the ecology of epiphytic orchids, Mr V.S. Summerhayes on taxonomy and the importance of Herbaria, Dr. G.H.M. Lawrence on orchid nomenclature. The Congress was opened by a Historical Session, during which Mr W.T. Stearn lectured on "Orchids and Orchidologists" and Mr D.F. Sander on "Orchids in cultivation - a century of progress". Later sessions were Amateurs' session, Botanical, Cattleya, Vanda & Phalaenopsis, Research & Technology, Cymbidium, Dendrobium, Professional, Educational, Cypripedium, Odontogiossum & Miltonia. During the Business session Prof.H.Burgeff received the Gold Medal in recognition of his 50 years experimental work on orchids. There was a very large exhibit of cut flowers of orchid hybrids produced from Malaysian species of Vanda, Arachnis, Renanthera, Phalaenopsis, Dendrobium, and other genera, staged by the Malayan Orchid Society. These flowers were brought by air from Singapore. This exhibit was awarded the gold medal by the Royal Horticultural Society.

Unesco Symposium on the Impact of Man on Humid Tropics Vegetation, Goroka. The Unesco Science Cooperation Office for Southeast Asia has convened a successful Symposium on the Impact of Man on Humid Tropics Vegetation within the framework of the Unesco programme of the Humid Tropics Research. The Government of the Commonwealth of Australia kindly agreed to

act as host nation through the Administration of Papua and New Guinea. The symposium was held at Goroka (Australian New Guinea), Sept. 15-25, 1960. The following main topics were selected by the Organizers: (1) The effect of extraction of forest products, the selection and cultivation of foods by early Man on the Vegetation of the Humid Tropics; (2) The effect of fire used by early Man on the Vegetation of Humid Tropics; (3) The effects of grazing by the domestic animals of early Man on the Vegetation of the Humid Tropics; (4) The effect of shifting cultivation on the Vegetation of the Humid Tropics; (5) The nature of the secondary communities resulting from the activities of early Man and the methods of their detection. Thirty delegates attended from Australia, India, Indonesia, Malaya, Philippines, Sarawak, Singapore, Thailand, Great Britain, the U.S.A., the Territory of Papua and New Guinea, and the South Pacific Commission. There were also 12 observers from the Territory among whom Mr H.P. Seale, District Commissioner of the Eastern Highlands, was elected president of the Symposium. Thirty six papers have been presented. Mr E.J.H.Corner wrote a report in Nature 189 (1961) 24-25. Another report was published by Unesco Science Cooperation Office for Southeast Asia, Humid Tropics Newsletter No 4, Oct.1960.

Ecological Problems in the Tropics. A symposium on this topic was organized at Allahabad, Febr. 3-5, 1961, by the National Academy of Sciences on the occasion of its annual session; convener was Dr.G.S.P u r i. The need for proper ecological study of the various plants, animals and forest types in the tropics has been keenly felt since food production, soil conservation, wild life management, flood and drought control are all ecological problems. Ecologists in India and other tropical countries have launched upon a programme of extensive ecological surveys and intensive studies on some of the important types of vegetation. It has therefore been considered necessary to obtain views of various workers in the field of forestry, plant ecology, animal ecology, human ecology, soil conservation, agriculture and flood control etc. to assess the present status of our knowledge and give statement of problems before us. Subjects for the symposium were the following: Tropics as a habitat for plant foes (fungi and insects); Autecology as a precursor to better conservation; Forest ecology; Role of Silviculture in afforestation problems; India, a suitable habitat for new plants and animals; Engineering as aid to flood control and soil conservation: Insects and forestry; Forestry and wild life; Human migration; Plant introduction studies; Afforestation studies; Forestry and soil conservation; Forestry and human ecology; Bird migration; New approaches to the problem of food production with regard to soil-fertility, soil-capacity.

Unesco Symposium Humid Tropics 1962 will probably be held at Kuching, Sarawak, July 1962. Field trips will be largely devoted to examining heath and peat swamp forests.

Symposia at the 10th Pacific Science Congress. The third session of Unesco's Advisory Committee for Humid Tropics Research will meet in Honolulu, Hawaii, immediately prior to the 10th Pacific Science Congress. The Congress includes a special symposium, being assisted by a grant from Unesco on the subject of "Man's place in the island ecosystem".

Others are "Science Museums in the Pacific Area" and "Galapagos Islands: A unique area for scientific investigations". There will also be a symposium on "Plants and migrations of Pacific Peoples", jointly by the sections of Botany

and Anthropology.

The most important item will probably be the symposium "Biogeography of the Pacific" in which geography, palaeogeography, plant and animal distribution, and dispersal of plants and animals will be discussed by various specialists.

Second National Science Congress, Jogjakarta, August 1962. This will be organized by M.I.P.I. (Council for Sciences of Indonesia) and take place in the Gadjah Mada University, Jogjakarta. The section of Biology and Agriculture is headed by Prof.Iso Reksohadiprodjo. Papers offered will be in either Indonesian or English. Address: Bagian Umum Biro MIPI, Merdeka Selatan 11 pav. Djakarta. The first Congress issued Proceedings in 6 volumes of which vol.4 deals with Biology and Agriculture, 722 pp. Rp.200.

50th Anniversary Czechoslovak Botanical Society, July 1-8, 1962. During the Jubilee Congress there will be a symposium on Experimental Taxonomy. Excursions will be held by bus to various interesting parts of Czechoslowakia. Address: Botanical Society, Benatska 2, Praha 2.

Regional Conference of Southeast Asian Geographers. This conference will be held in Malaya and Singapore, April 1962. It is being sponsored by the International Geographical Union and by the University of Malaya. The conference aims at focusing attention on geographical themes of immediate relevance to Malaya and Southeast Asia, thereby providing data for assessing past practices and future policies in the region and in the humid tropics generally. It will also bring together geographers and other specialists interested in the region to stimulate research and to promote the communication of information. In keeping with these aims, the following ac-

tivities are planned: (1) Sessions will be held in Kuala Lumpur and Singapore, at which papers will be presented and discussions held on some of the following themes: rural development; agricultural potentials; settlement patterns and planning; mineral and power resources; industrialization; population movements; economic facilities; cultural and religious backgrounds; cartography; teaching of geography; physical and regional studies. (2) Papers on these themes are invited. All papers will be reproduced in typescript for circulation at the conference if received before March 15, 1962. All papers will be published in a special number of The Journal of Tropical Geography after the conference. (3) An exhibition of Malayan and Southeast Asian maps will be held in Kuala Lumpur. There will also be a display of books and publications relating to the region. (4) Short visits will be arranged during the conference to, among others, the Federation of Malaya Departments of Agriculture, Survey, Town Planning, Drainage and Irrigation, Ministry of Rural Development, the Forest and Rubber Research Institutes. Visits to selected farms. tin mines, settlements, rubber estates, vegetation climaxes, and physical regions are also planned. (5) After the conference a ten to fourteen day tour of Malaya will show overseas delegates the regions and activities of the country. The tour will involve over 1000 miles by coach, airplane and boat. The cost per person is unlikely to exceed Malayan \$600. The Secretariat is held by Prof. Robert H o, Department of Geography, University of Malaya, Kuala Lumpur, Malaya.

Visit of Soviet Botanists to Indonesia. Two Soviet botanists, Prof.D.V.Ter-Avanesyan and Dr.V.A.Gulay e v. visited Indonesia in August 1960. They have travelled extensively in Java for the purpose of getting acquainted with Indonesian agriculture and to collect seeds of plants cultivated in this country. They have also established contacts with Indonesian botanists and with the Ministry of Agriculture of Indonesia. Prof.D.V.Ter-Avanesyan is the Deputy Director for scientific work of the All-Union Scientific Research Institute of Plant Industry and Dr.V.A.Gulayev is the Senior Scientific Officer of the Laboratory for Cytology and Embryology of the same institute. The Soviet scientists collected samples of local plants and seeds of medicinal herbs, and have as a result been able to add three hundred new species to the collection of seeds in Leningrad. The seeds brought by the Soviet scientists will be supplied to the experimental stations of the USSR Plant Breeding Institute for selection. The Soviet scientists believe, specifically, that they will be able to evolve new varieties of tangerine and lemons adapted to the climatic conditions of the Soviet Union.

National Science Foundation, U.S.A., makes grant to Darwin Foundation for the Galapagos. The National Science Foundation in Washington, D.C., has awarded a grant of \$6,500 to the Charles Darwin Foundation for the Galapagos Isles which is now developing the world's first international biological station. The Darwin Foundation was established last year just one hundred years after the publication of "The Origin of Species" - under the joint sponsorship of Unesco and the International Union for the Conservation of Nature and Natural Resources. Sir Julian Huxley is its honorary president and Prof. Victor van Straelen of Belgium is its president. At present, Mr Raymond Lévêque, a Swiss biologist, is in the Galapagos on a Unesco technical assistance mission. He is the third scientist to be sent by Unesco to these islands off the coast of Ecuador. The \$6,500 grant will be used to build laboratories at the station. Unesco has also granted \$9,000 to purchase scientific equipment for these laboratories. One purpose of the foundation, and of Unesco's aid, is to save the unique wild life on the Galapagos which have been termed a "show-window of evolution". The Government of Ecuador has offered a site and other facilities for the biological station on Indefatigable Island. A census of animals threatened with extinction is to be the first task of the station. The offices of the Charles Darwin Foundation for the Galapagos Isles are at the Palais des Académies. Brussels. Belgium.