IV. PROGRESS IN MALESIAN BOTANY (addition to pages 2542-2546)

Apocynaceae. Professor F. M a r k g r a f at Zürich, after having sent his Alyxia revision, 57 species, for publication in Blumea, is continuing his FM work with the genera Dyera and Amblyocalyx. He then means to take up Rauvolfia. His large MS. for the Flore de Madagascar, prepared years ago, has just been published.

Miss M.-H. S a c h e t at the US-Herbarium has embarked on a monograph of Ochrosia.

Araliaceae. Revision of the Malayan members is complete and awaiting publication in the Tree Flora of Malaya, by B.C. S t o n e; Schefflera by D. G. F r o d i n; consultant, Prof. W. R. Philipson. The monotypic isolated genus Aralidium, hitherto assigned now to Araliaceae, now to Cornaceae, has been excluded from the family. It certainly does not belong to the Araliaceae and is unlikely to accord with Cornaceae. Investigations now under way by Stone, Philipson, D.E. Fairbrothers, and the Danish chemist team of Hansen and Jensen aim to establish its relationship through a combined approach utilizing a variety of evidence from phytochemistry, seed proteins and leaf compounds, esp. iridoids, from morphology, embryology, and anatomy. Papers on Araliaceae by Stone and by Philipson are now in press with the Gardens' Bulletin, Singapore, and a publication (or several) on Aralidium is planned.

Asclepiadaceae. Dr. Richard R i n t z, who was in Malaya for 3 years ending early 1977, made a study of the <u>Dischidia</u> and <u>Hoya</u> species of Malaya, growing them near his house. After having studied type material in European Herbaria, he hopes to publish an account of them (including several novelties), late in 1977. Having a long-standing liking for the family, he also hopes to continue on other parts of Malesia.

Having no permanent address as yet, he can be contacted via the editor of this Bulletin.

Begoniaceae. Mr. M. J. S. S a n d s of Kew, who is steadily working on the family, has made a collecting expedition to E. New Guinea and extended his trip to the Philippines for field study of Begonias; see under Expeditions.

Bignoniaceae. Dr. C. G. G. J. v a n S t e e n i s of the Rijksherbarium finished the family for the Flora Malesiana, also prepared a precursory paper and an Identification List. With some luck, the text can be published just in time to mark the 50th anniversary of the author's Ph.D. graduation in October 1927, his thesis being a treatise on the same subject.

Miss J. B u u r m a n studied at the Rijksherbarium the pollen of several genera. A publication about this subject will appear in the near future.

Compositae. At Leiden, Dr. Joséphine Th. K o s t e r, who during her retirement is continuing work on the New Guinea species, is now revising the tribe Heliantheae.

At Honolulu, Dr. P. v a n R o y e n publishes a note on Arrhenechthites from New Guinea. A paper on Senecio of New Guinea is now in press with Blumea.

At Kew, Dr. F. G. D a v i e s is revising Gynura.

At Berlin-Dahlem, Mr. H. W. L a c k is studying the Australian Lactuceae.

Cruciferae. At the Rijksherbarium, Dr. J. F. V e l d - k a m p let loose a team of young students on <u>Nasturtium</u> and <u>Rorippa</u>. They were rewarded by a new taxon in Timor, resembling <u>N. peekelii</u> from New Guinea.

<u>Cunoniaceae</u>. Dr. R. D. H o o g l a n d of ANU, Canberra, is working during 10 months at Leiden on a revision of this family for the Flora Malesiana, hoping to complete it in mid-1977.

Cyperaceae. At the Rijksherbarium, Dr. H. P. N o o t e - b o o m is dealing with the unfinished legacy of the late Dr. J.H. Kern. Much recent material has been identified, as a first step towards this goal: the completion of Carex.

<u>Dipterocarpaceae</u>. Dr. Tem S m i t i n a n d of the Bang-kok Forest Herbarium is finishing the family for the Flora of Thailand, + 50 species.

Ebenaceae. Mr. Chamlong P h e n g k h l a i is revising the family (Diospyros, in fact) for the Flora of Thailand. Part of the work was done during a stay at Leiden; it is continued at the Bangkok Forest Herbarium.

Notes on <u>Diospyros</u> prepared by A. J. G. H. K o s t e r - m a n s are in press with Blumea.

Elaeocarpaceae. Dr. R. W e i b e l at Geneva has completed in draft form descriptions of all species of Elaeocarpus. He has made his way through all the Leiden collections, and hopes now to tackle the subdivision of the genus, after which a key can be framed.

At Kew, Mr. M. J. E. C o o d e is identifying material and working on selected problems, following his revision of the New Guinea species which is still on an editor's desk in Australia.

At Leiden, Dr. M. M. J. v a n B a l g o o y is still revising Sericolea.

Mr. Chamlong P h e n g k h l a i of Bangkok, worked up the family for the Flora of Thailand; his manuscript will be printed.

Ferns. At Leiden, Mr. E. H e n n i p m a n's revision of Bolbitis will be published in the Leiden Botanical Series, in the course of March 1977, to serve as his Ph.D. Thesis, after a long time of preparation.

Scyphularia, Humata, and other genera of the Davalliaceae are under revision with Mr. G. J. d e J o n c h e e r e.

At Kew, Dr. R. E. H o l t t u m is working on the very difficult group called <u>Sphaerostephanos</u> ("I wish John Smith had thought of a shorter name"). His revision of <u>Amphineuron</u> (Thelypteridaceae) is being published in Blumea.

At Ann Arbor, Mr. M. G. P r i c e is working on a Ph.D. Thesis with Professor W.H. Wagner Jr.

Gramineae. At Leiden, Dr. J. F. V e l d k a m p steadily continued work towards a FM-revision of the family; he is now engaged on Poa.

Guttiferae. Dr. P. F. S t e v e n s, Arnold Arboretum, spent six months around the turn of 1975 in Malesia in an attempt to get some idea of the behaviour of Calophyllum in the field there. Visits were first made to the herbaria at Edinburgh, Kew, Paris, and Geneva, primarily to check specimens and details of nomenclature. Then visits were paid to Kepong, Kuching, Sandakan, Singapore, Bogor, and Lae, combining work in the herbaria with field trips. Much information of interest about seeds and seedlings was collected (it turns out that at least two species are sometimes polyembryonic, and one species has young plants with alternate leaves) and some surprising range extensions observed. One undescribed species, hitherto known only from southeast Sumatra, was found on the lower slopes of Mt Kinabalu, whilst another undescribed species, known only from two collections made in Johore since 1970, was collected in four places in Johore and also on Singapore. However, Calophyllum is a difficult genus and much careful collection and field observation will be needed to produce a workable account of the genus. A revision of the

Indo-Malesian species is being prepared which will hopefully pinpoint the major problems.

Lauraceae. At Leiden, Dr. A. J. Kostermans continued his revision work on this family. He has done much work on the most difficult genus Cinnamomum, reducing the number of species from 450 to 300, of which 50 are Malesian. Dr. M. Jacobs did editorial work on Alseodaphne; next comes Dehaasia, which has similar fruits, and a key can then be framed.

Leguminosae. Dr. B. V e r d c o u r t, Kew, has been seconded for two years to the Papua New Guinea Government, under the auspices of the Commonwealth Fund for Technical Cooperation, to produce a 'Handbook of the Legumes of Papua New Guinea'. He spent two weeks in Australia in December 1975, prior to a stay of one week at Port Moresby and 2-3 months in the Herbarium at Lae. Most of the work is to be done in Kew but he aims also at field work. Illustrations for this work are to be done by artists in New Guinea.

Mr. R. G e e s i n k of the Rijksherbarium is working on a thesis dealing with the SE. Asian species of <u>Millettia</u> and related genera like <u>Padbruggea</u> and <u>Pongamia</u>, which he defined against one another. Since flowering material is indistinguishable from <u>Derris</u>, the latter genus will have to be revised as well. He is also looking into <u>Fordia</u> which may give problems because of its rarity and variation.

Liliaceae. Dr. P. F. S t e v e n s of the Arnold Arboretum studied generic limits in the Lomandra group (Chamaexeros and Acanthocarpus belong here), in an attempt to place the curious L. papuana of which good material had been collected in New Britain in 1972.

Linaceae. At the Rijksherbarium, Dr. J. F. V e 1 d k a m p led 3 young students to the climbing species of Malesia. They established <u>Hugonia</u> as a new genus for Borneo, with a new species, and found <u>Durandea</u> congeneric with the New Caledonian genus Penicillanthemum.

Loganiaceae. At Bulolo Forestry College, PNG, Mr. Barry J. C o n n hopes to complete his work on Geniostoma, indeed beyond Papua New Guinea, in September 1977. He is also working on Neuburgia.

Melastomataceae. At Stockholm, Dr. Kare Bremer will be engaged for the coming 6 years to revise the genus Memecylon, the sole genus left in the subfamily Memecyloideae.

At Singapore University, Mr. J. F. M a x w e l l is studying the woody species for the Tree Flora of Malaya.

At the Rijksherbarium, Dr. J. F. Veldkamp led two

students to <u>Diplectria</u>. They distinguished 6 species and, sure enough, found that for two a new combination must be made.

Menispermaceae. Dr. B. C. K u n d u, Calcutta, is engaged in a revision of this family for Flora of India project and for the Flora of Ceylon. He made also a complete account of the genus Stephania with a key to all species.

Mosses. Dr. M. G. M a n u e l l, appointed as a research fellow in the Farlow Herbarium, Cambridge, Mass., has revised the Meteoriaceae and is working on Trachyloma (Pterobryaceae) and on a generic revision of the Cryphiaceae.

Dr. N. G. M i l l a r, Associate professor and curator of Arnold and Gray Herbaria, is working with Dr. Manuell on Trachyloma.

Myristicaceae. Dr. W. J. J. O. d e W i l d e of the Rijksherbarium continued his work on Knema. He finds the shape of the male flower buds and details of the leaf indumentum of greater taxonomic importance than did Sinclair, which means a revival of several species reduced by the latter, and description of novelties.

Myrtaceae. At Kew, Mr. A. J. S c o t t revised Rhodamnia, to be published in Kew Bulletin. He continues now with revisions of the genera Rhodomyrtus and Octamyrtus.

At Wellington, Mr. J. W. D a w s o n finished a paper on Tristania in New Caledonia, sent to Blumea.

Nymphaeaceae. Dr. W. A. v a n H e e 1 of the Rijksher-barium prepared a note on flower morphology of Nymphaea lotus.

<u>Palmae</u>. Dr. W. A. v a n H e e l of the Rijksherbarium made an anatomical study of the ovules in <u>Salacca</u>, the genus recently worked up by Mr. J.P. Mogea. It is due in Blumea.

<u>Pandanaceae</u>. Dr. B. C. S to n e at Kuala Lumpur continues to work toward a FM-treatment and to collaborate with Dr. K.L. Huynh (Neuchatel) who is analyzing the leaf anatomy of <u>Pandanus</u> in relation to taxonomy. Dr. Stone also is working toward treatments of the family for the Flore du Vietnam, Laos & Cambodge, and the Flore de Nouvelle-Calédonie et Dépendances.

Paracryphiaceae. Paracryphia, a genus-errant from New Caledonia, was studied by Professor W. C. D i c k i s o n of North Carolina University, U.S.A., during a fellowship at the Rijksherbarium. He and Dr. P. B a a s conducted an extensive anatomical and morphological investigation. The paper is in the press with Blumea.

Polygalaceae. Mr. R. v a n d e r M e ij d e n of the Rijksherbarium, when he is not engaged on local floristic work, is continuing his <u>Xanthophyllum</u> revision. The number of species is far greater than originally was expected, which also caused a delay in the completion.

Rosaceae. As far as time permits, Dr. C. K a l k m a n, the director of the Rijksherbarium, is working his way through the family for the Flora Malesiana. The polymorphic Rubus moluccanus complex is almost finished.

Rubiaceae. Dr. R. C. Bakhuizen van den Brink Jr, spurred by a bet with Dr. W. Vink, succeeded in finishing his MS. of Neonauclea just before his retirement on 1 October 1976.

The remainder of the difficult tribe Naucleeae has been completed by Dr. C. E. R i d s d a l e. The latter also completed Mitragyne and Uncaria. On the latter he cooperates with Messrs. Hemingway and Philipson, London, who work on the alkaloids.

At the Gray Herbarium, Harvard, Dr. P. S. D a r w i n, appointed as a research fellow, is revising <u>Mastixiodendron</u>, and is also interested in <u>Airosperma</u> and genera of the Guettardeae.

At Paris, Mr. D. T i r v e n g a d u m is preparing a revision of the Gardenieae of SE. Asia.

Rutaceae. Manuscript for the revision of Rutaceae in the Flora of Ceylon by B. C. S t o n e is nearly complete. Work continues in Glycosmis, and a revision of this genus is under way. In 1976 financial support for studies in Malesian Rutaceae subfamily Aurantioideae was provided by the International Foundation for Science, Stockholm. Work under this grant will commence in early 1977 when Dr. Stone will undertake field work in Sabah and Sarawak. It is intended to bring together in the Rimba Ilmu, University of Malaya, all genera and as many species as possible. University of Malaya graduate students will undertake projects within the plan; one is already in progress (S. Bien).

Sabiaceae. The genus Sabia, more difficult than was originally assumed, will be concluded in MS. by Mr. Th. P. M. van de Water.

Sapindaceae. Dr. P. W. Leenhouts of the Rijksherbarium completed a first version of Nephelium and Xerospermum. More collections are in fact needed. He discovered that the correct name of Delpya of Thailand is Sisyrolepis. The E. Malesian genus Euphorianthus was reduced to Diploglottis to which also a new species from Australia was added. The new species seems to provide a link with the New Caledonian Storthocalyx, which casts a new light on relationships.

Under his guidance, Mr. R. W. J. M. v a n d e r H a m wrote up Arytera and Mischocarpus, to be published in Blumea, and Miss M. H. H. V e n t e dealt with Harpullia, concentrating on New Guinea.

Comparative studies of the pollen in selected Malesian genera are made by Mr. J. M u l l e r of the Rijksherbarium. Miss Y. M. B u r g, a student, completed a palynological study of Allophylus under his guidance.

Saxifragaceae. At the Rijksherbarium, a team of young students under Dr. J. F. V e 1 d k a m p made a quick attack on Quintinia (13 spp. of which 3 probably new), Itea (1 sp.), Carpodetus (7 taxa of which 4 perhaps new), and Parnassia (on Mt Leuser one endemic variety of a continental species).

Simaroubaceae. Dr. H. P. N o o t e b o o m of the Rijks-herbarium still well-acquainted with the family after his FM-revision, has worked it up for the Flora of Thailand.

Sterculiaceae. Dr. I. G. M. T a n t r a 's revision of Sterculia (see p. 2546) has been published at Bogor, as Communication 102 of the Forest Research Institute.

Dr. C. G. G. J. v a n S t e e n i s worked up <u>Brachychi</u>ton, Leptonychiopsis, and <u>Pterygota</u> for the Flora Malesiana.

Symplocaceae. Dr. H. P. N o o t e b o o m concluded his manuscripts on the family for the Flore du Cambodge, Laos & Vietnam (together with Dr. J. E. V i d a l of Paris), for the Flore de la Nouvelle-Calédonie and for the Flora of Thailand.

Winteraceae. Dr. W. V i n k of the Rijksherbarium completed his MS. on Zygogynum for Blumea, forthcoming issue, and made a beginning with the Bubbia/Belliolum complex.

Zingiberaceae. A revision for the Flora of Ceylon by Dr. B. L. B u r t t and R. M. S m i t h of Edinburgh is projected to be completed early in 1977.