## IV. PROGRESS IN MALESIAN BOTANY (addition to pages 3191-3195)

Institutes are abbreviated according to the Index Herbariorum list

Araliaceae. In January 1979, Dr. D. G. Frodin (UPNG) visited Kew to continue work on Schefflera.

Aristolochiaceae. At L Dr. D i n g H o u is continuing his FM-revision, for Aristolochia. A shortage of material from New Guinea makes itself felt. Whenever he can lay hands on seeds, he grows them and counts the chromosomes; for 2 species of the genus he succeeded.

Asclepiadaceae. Dr. R. E. R i n t z prepared revision of Malayan Dischidia (23 sp.) and of Sarcolobus (4 sp.), for Blumea, well-illustrated by his own hand.

Balsaminaceae. Dr. C. Grey-Wilson (K) has taken up the family for Malesia. He expects to end up with some 60-80 species, centered in Sumatra and Malaya. His article with instructions for collecting is found in this same issue.

Compositae. Dr. Josephine Th. K o s t e r (L) concluded her revision work on the New Guinea species. The 7th paper in the series is in the press with Blumea.

Cornaceae. Dr. A. J. K o s t e r m a n s at Peradeniya prepared a 23-page MS on Mastixia in Ceylon (deposited in L). Five species are recorded, 2 of them new, with 1 former variety elevated.

Cyperaceae. Professor T. K o y a m a (NY) has agreed to write up the family for the Flore du Cambodge, Laos et Viêt-Nam.

Dipterocarpaceae. Dr. A. J. K o s t e r m a n s at Peradeniya prepared a MS (preserved at L) on Vatica in Ceylon. It deals with 4 sp., of which 3 are endemic, while V. chinensis also occurs in S. India. One sp., V. obscura, is riverine in the dry zone, the others are in the wet zone. He also completed a MS on Stemonoporus, endemic in Ceylon, 25 species.
Of the 15 known in 1854, 5 have so far not been again collected.

Epacridaceae. Mr. L. P e d l e y (BRI) will publish several new Leucopogon species from Cape York, N. Queensland.

Ferns. Dr. R. E. H o 1 t t u m (K) is to be congratulated with having completed the FM-text on Thelypteridaceae, which has occupied him for 12 years. The total number of species is 440, the largest genus is Sphaerostephanos with 150, many new, which is almost entirely Malesian and was not previously revised.

In answer to my sentence on page 3175 bottom, about confining oneself to the bare essentials as a condition for progress, Dr. Holttum gave the following explanation: "You may think I have spent an unnecessarily long time on this work and that I am indulging in too much 'splitting'. But the significant thing in my work has been that in Thelypteridaceae nobody had adequately understood what are 'the bare essentials' for understanding a good classification. Almost everything was in confusion, and few species had been so described that one could distinguish them with any certainty. So I started to try to find new facts, and to make more careful observation of details never previously dealt with. One cannot tell in advance what is important. I have gradually learnt, and often I have had to go back and take another look to record details not previously noted. The problem is a very complex one, and to deal with it adequately would need a life-time and much more field work by collectors who had learned what to look for - so many species which are distinct have a similar superficial appearance. But I have not got another life-time and I cannot do any new significant field work (though I did make some observations in Malaya last year). So what I produce will not be anywhere near final, but I do think it includes important basic information and a new classification on lines not previously thought of."

A last remark in addition to Dr. Holttum's welcome words. The controversy between lumpers and splitters can mostly be resolved by looking at the state of knowledge about a group. Since it is easier afterwards to combine than to disentangle, discrete entities should always be kept separate in case of doubt or difficulty. As long as data are incomplete, it seems advisable not to combine things untimely, yet always to keep in mind the wish to determine "how few, not how many species". Whether an accomplished taxonomist is inclined to 'lump' or to 'split' is therefore determined by the taxon at hand. Dr. Holttum, with his predilection for

difficult groups where materials are often scarce, naturally may end up with more taxa than a botanist like C.A. Backer who, living in Java, could avail himself of much more material. — M.J.

At L, Dr. E. H e n n i p m a n continued work on generic delimitation in the Polypodiaceae s.l. based on ultra-structure of the spore walls. Dr. U. S e n (husband of Mrs. T.), from Kalyani, India, arrived on a ZWO fellowship in October 1979 to work on the anatomy of these ferns.

Species of <u>Lecanopteris</u> were grown under artificial conditions, including the <u>gametophyte</u>; the latter part of the life cycle may be another source of characters. Work on <u>Belvisia</u> and <u>Platycerium</u> is in good progress, and <u>Lemmaphyllum</u> was taken up.

<u>Fungi</u>. At L, Dr. W. F. B. J ü l i c h (who participated in the G. Mulu expedition to Sarawak) is working on resupinate <u>Aphyllophorales</u>, in which he found a new family: <u>Corneromycetaceae</u>, from Borneo, described, together with other novelties, in Persoonia 10 (1979) 325-336.

He and J.A. Stalpers compiled a book on the group for the northern hemisphere: 130 genera, 800 species. It is the first such treatise, and has a bearing on Malesia, especially the regions above 800 m altitude. It is in the press as a Verhandeling, Kon. Akad. Wetensch. Amsterdam.

Gramineae. Dr. J. F. V e l d k a m p (L), while studying taxa for P. van Royen's Mountain Flora of New Guinea, found several novelties, e.g. in Poa.

Inquiries in Malesian <u>Setaria</u> revealed that the subdivision of this genus must be overhauled, and delimitation against <u>Paspalidium</u> may turn out to be impossible.

Dr. J.F. Veldkamp's student Mr. P. C. v a n W e l z e n embarked on a revision of Arthraxon, and L. P. M. W i l l e m s e on Microlaena. There may be delimitation problems against African Ehrhartia and Australian Petriella.

Short-time students worked on delimitation of <u>Hymenachne</u> vs. Sacciolepis, and on Trisetum in Malesia.

Mrs. M. H. J. v a n E c k - B o r s b o o m, at L, revised <u>Eriachne</u>: 4 species, for Blumea. Anatomy and embryology may justify a new tribe for it.

Mr. P. G o u d s w a a r d revised <u>Zoysia</u> for Malesia: 1 species with 2 varieties, one of them commonly cultivated yet undescribed. The MS will go to Blumea.

Gramineae-bamboos. At Kew, Dr. S o e j a t m i Soenarko, now Mrs. Dransfield, is working voluntarily on chiefly Dinochloa, Racemobambos, and Schizostachyum, with the aim of writing a manual for the bamboos of Sabah (N. Borneo). On a trip with her husband there from 14.viii to 10. xi.1979 she collected c. 80 numbers. More bamboo material from the whole Indo-Malesian region would be welcome!

At LAE, Mr. E. E. H e n t y is engaged on the study of New Guinean bamboos.

Leguminosae. At L, Mr. R. G e e s i n k delved further into generic delimitations of the tribe Tephrosieae. He prepared a MS for the Legume

Conference in 1978, and is elaborating the subject for a thesis. Under his supervision, several students working on suitable problems, mentioned on page 3192, have finished their work or are about to do so. New students are grinding their teeth on problems in Antheroporum, Derris, Millettia, Padbruggea/Whitfordia. Under Dr. J. M u l l e r 's supervision they also gnash on pollen.

- N. V. Thuân (P) is completing the Papilionaceae-Phaseoleae for the Flora of Thailand, after publishing an account in the Flore du Cambodge &c. (fasc. 17. 1979).
- I. N i e l s e n (AAU) completed the Mimosaceae for the Flore du Cambodge &c., and the Caesalpiniaceae was written up by K. & S. S. L a r s e n (AAU) & J. E. V i d a l (P).
- Mr. L. P e d l e y (BRI) is engaged on <u>Tephrosia</u>, and hopes to complete a revision of the Australian species about 1982. Late in 1980 he will spend time at Kew.

Linaceae. Mr. R. K o o 1, student (L), completed his revision of Ixonanthes: 3 species, for Blumea.

Melastomataceae. At S, Dr. Kåre B r e m e r is working on Memecylon of western Malesia. He intends to shift eastwards later. A revision of the Ceylon species was published.

Mr. J. F. M a x w e l l (SING) continues work on <u>Dissochaeta</u> and allied genera, for which he visited Kew and Leiden.

Meliaceae. Dr. A. J. K o s t e r m a n s, at Peradeniya, prepared a MS (preserved at L) on the family in Ceylon. In Aglaia 2 sp. are discussed; in Dysoxylum 3 endemics are distinguished, partly new; in Pseudocarapa, a description is supplemented; in Amoora, one description is amplified and one sp. recognized as new; in Walsura, one sp. is discussed.

Myristicaceae. Dr. W. J. J. O. d e W i l d e (L) published an account of Knema in Blumea 25: 83 species. He is now engaged on Horsfieldia, with probably fewer species.

Olacaceae. Dr. H. S l e u m e r (L) concluded his Flora Malesiana revision of the family, together with a precursory paper, submitted to Blumea. Dr. P. B a a s lead work on the leaf anatomy.

Oleaceae. At Serdang, Malaya, Dr. Ruth Kiew is progressing well on Chionanthus.

Opiliaceae. Professor Paul H i e p k o in Berlin expects to finish his Flora Malesiana MS at the end of 1980.

Orchidaceae. Dr. E. F. de Vogel (L), who during his seedlings work (now finished) never lost interest in the family, has now embarked on revision work, in the Coelogyninae. The first genus to attack is Pholidota, with c. 40 species.

Palmae. Professor H. E. M o o r e (BH) visited the Kew Herbarium in January 1979 to study type material of Mascarene and New Caledonian palms.

Polygonaceae. Mrs. Kit Tan (E) has agreed to revise this family for Flora Malesiana.

Rhamnaceae. Students at L found in Rhamnus 6 Malesian species.

Rubiaceae. At S, Mrs. Birgitta Bremer is studying Argostemma and related genera.

At LAE, Dr. S. H. S o h m e r of La Crosse Campus, University of Wisconsin, U.S.A., has spent the year 1979 on a revision of Psychotria for New Guinea, about 200 species. Publication is planned in the Botany Bulletin series.

At L, Krukoff-Botanist Dr. C. E. R i d s d a l e is now engaged on Cinchoneae and Rondeletieae, and generic delimitation in Gardenieae, particularly Randia s.l. In preparation is an account of a new genus from Queensland near Wendlandia, a short reappraisal of Spathichlamys, and a note on Badusa from Palawan. Interesting find of the year was H a s s - k a r l 's bark collection of Cinchona, assumed to be from mother plants of seeds introduced into Java.

Mr. M. E. J a n s e n (L), student, revised <u>Dolicholobium</u>; he ended up with many more species than were expected.

Sapindaceae. Dr. P. W. Leenhouts (L) hopes to resume work on the family; by finishing Harpullia.

Dr. J. M u l l e r 's work on the pollen is going well; together with a student, species of Madagascar were investigated.

Miss S. T. R e y n o l d s (BRI) is writing up the Australian genera (excl. Dodonaea) for publication in Austrobaileya.

Symplocaceae. Directed by Dr. P. B a a s, student L. v a n d e n O e v e r (L) investigated the wood anatomy. He found a correlation between characters and latitude and, less distinctly, with altitude. No support for an infrageneric subdivision was detected.