# IV. PROGRESS IN MALESIAN BOTANY (continued from page 19)

#### FUNGI

The research on the <u>Clavariaceae</u> of the Philippines aims to establish a taxonomic account and the <u>distribution</u>, seasonality and economic importance of the indigenous species. A total of 85 specimens belonging to 7 genera have so far been collected by Mr. L.T. EVANGELISTA. Among his interesting collections 3 are suspected to represent new species and 10 are new records for the Philippines.

Dr. W.F.B. JÜLICH (L) continued his studies in the Southeast Asian Coriolopsis and Pyrofomes.

### BRYOPHYTES

Mr. A. EDDY (BM) has begun work on a Student's Moss Flora of Malaysia to appear in 4 fascicles.

Ms. E.W. VAN DEN HAAK (L) finished her revision of Thuidium for Australia, Tasmania and New Zealand.

Dr. R.M. DEL ROSARIO (PNH) and Ms. Dr. F.B. BELOY (Medical Science Division, National Institute of Science and Technology) are making a survey of Philippine bryophytes as potential sources of antibiotics in addition to another research project, entitled 'Hepaticae of Cordillera Central Luzon, Philippines'. Both research projects are getting partial financial support from the National Research Council of the Philippines.

#### PIERIDOPHYTES

Ms. M.T.M. BOSMAN (L) started working on a monograph of the polypodioid genus <u>Microsorium</u> for her Ph.D. Her research will also include some smaller, related genera, e.g. <u>Colysis</u>, <u>Leptochilus</u>). See also Requests for material, p. 184.

Ms. J.M. CAMUS and Dr. C.R. HILL (BM) have submitted to the British Museum (Nat. Hist.) Bulletin a paper on the evolutionary cladistics of Marattialean ferns. The first is continuing her studies of this group with a revision of Archangiopteris.

Ms. Dr. M. DAHLEN (Univ. Hongkong) is cooperating with Dr. A.C. JERMY (BM) in a study of the spores of Malesian Selaginella.

Ms. Dr. D. DOMACENA-ADEFUIN (PNH) revised the species and cultivars of <a href="Nephrolepis">Nephrolepis</a> in Metro Manila, the Philippines. See Bibliography.

Mr. N. FARRINGTON (London; working from HAMU, K, PNG Univ. Techn.) intends to study the distribution, ecology and speciation of New Guinea tree ferns.

Mr. W.L.A. HETTERSCHEID (U) continuing a M.Sc. study started his Ph.D. thesis on the venation pattern of all <u>Polypodiaceae</u> including cultivated heteroblastic fronds.

Dr. R.E. HOLTTUM (K) continued his studies of <u>Tectaria</u> and allied genera. His introductory paper dealing with recent classifications of this group of genera and a second one distinguishing two new genera were published in 1984. A monograph covering all known species of <u>Ctenitis</u> in Asia, Malesia, and the Western Pacific was completed for publication in Blumea. Though Christensen made a full comparative study of the American species in 1913 and 1920, no one had made a comparable one in the Old World, nor defined the genus adequately. Copeland's account of the genus in his Fern Flora of the Philippines included species belonging to at least <u>six</u> other genera! In defining the genus more clearly, Dr. Holttum discovered that species referred by R.C. Ching to the subgenus <u>Dryopsis</u> (mainly mainland Asia, but including three in Malesia) belong to a quite different genus which is regarded as being more nearly allied to <u>Dryopteris</u> than to <u>Ctenitis</u>. With the assistance of P.J. Edwards a monograph of <u>Dryopsis</u> has been completed for publication in the Kew Bulletin.

Mr. P. HOVENKAMP (L) has finished the revision of <a href="Pyrrosia">Pyrrosia</a> for his Ph.D. thesis.

Dr. K. IWATSUKI (TI) has published in the Acta Phytotax. Geobot. 35 (1984) 165—179 a new scheme for the classification of Hymenophyllaceae. An enumeration of the continental Asiatic species is now in press. He has started on a MS for the Flora Malesiana and for this purpose spent some time in E and K in August, in IBSC, KUN and PE in August and September and a fortnight in BO in December 1984.

Dr. A.C. JERMY (BM) is continuing his studies on <u>Selaginella</u> in S.E. Asia and is completing an account of the Bornean species. He is also preparing an inventory of the Pteridophytes or the Kinabalu National Park and other protected areas in Borneo. Together with Dr. J.A.R. ANDERSON (E) and Dr. P.P.K. CHAI (SAR) a checklist of the vascular plants of G. Mulu, Sarawak, is under preparation.

Mr. G.J. DE JONCHEERE (L) is preparing for publication a revision of <u>Belvisia</u> made by N.A.P. FRANKEN (formerly of L).

Ms. Dr. B.S. PARRIS (K) continues to study the Grammitidaceae.

Mr. M.C. ROOS (U) will finish the manuscript of a monograph on the drynarioid ferns in 1985.

Ms. G. VAN UFFELEN (L) finished a manuscript on the spore morphology of Pyrrosia. In collaboration with Mr. R.J. JOHNS (UNITECH, Lae) she made an electron microscopical study of the spores of some New Guinea species of Asplenium. She has received a grant from the Dutch Organization for the Advancement of Pure Research (Z.W.O.) which enables her to work for three years on a Ph.D. thesis dealing with the sporogenesis of selected spore types in Polypodiaceae.

#### **GYMNOSPERMS**

Coniferae. Dr. D.J. DE LAUBENFELS, Dept. Geography Syracuse University, Syracuse, U.S.A., has submitted a precursor for the Flora Malesiana treatment to Blumea.

## **ANGIOSPERMS**

Alangiaceae have been revised by Ms. Dr. H.J. HEWSON (Bureau of Flora and Fauna, Canberra) in the Flora of Australia 22 (1984).

Alismataceae. Mr. G. LEACH (formerly of UPNG, now NT) studies the New Guinea fresh water representatives.

Amaranthaceae will be revised for the Flore du Cambodge, Laos et Viêt Nam by Dr. K. LARSEN (AAU).

Anacardiaceae will be revised for the Flore de la Nouvelle Calédonie et Dépendances by M. HOFF (ORSTOM) and for the Flora of Australia by L.W. JESSUP (BRI).

Annonaceae. Mr. S.H. ROGSTAD (formerly of Pasoh Forest Station, now in MO) has completed his field studies on the Polyalthia glauca-complex and is now conducting chromosomal studies on it.

Mr. K.M. SALLEH (UKMS) at ABD under the guidance of Dr. C. WILCOCK is preparing a comparative chemotaxonomic study of Malaysian tribes. He presented a discussion paper at the Annonaceae Work Shop in U (11—12 December, 1984) and visited L for a week. He also has been at E and K.

Apocynaceae. The genus Alstonia in Malaya was revised by Mr. K.M. KOCHUMMEN and K.M. WONG (KEP). There are 7 species, one of which is undescribed. Growth architecture appears to be of a sectional value in the genus.

Aquifoliaceae. Unfortunately the project of a revision of <u>Ilex</u> by Dr. R. VAN DER MEIJDEN (L) had to be abandoned because of his transfer to the Dutch Department of the Rijksherbarium.

L. PEDLEY (BRI) revised the family in the Flora of Australia 22 (1984), including Sphenostemon.

Araliaceae. Dr. D.G. FRODIN (UPNG) has now firmly decided to dedicate his free time to work on his revision of <u>Schefflera</u> of the Asiatic-Malesian tropics, later to be followed by a revision of the neotropical species.

The New Caledonian taxa are being studied by Dr. P. LOWRY (MO) for the Flore de la Nouvelle Calédonie et Dépendances.

Atherospermataceae. See Monimiaceae.

<u>Balanophoraceae</u> of Australia were published in the Flora of Australia 22 (1984) by Ms. Dr. H.J. HEWSON (Bureau of Flora and Fauna, Canberra).

<u>Basellaceae</u> will be revised for the Flore du Cambodge, Laos et Viêt Nam by Dr. K. LARSEN (AAU).

Begoniaceae. Mr. M.J.S. SANDS (K) is preparing an account of the Mulu National Park species and a book on the Begonias of Sabah in the Flora of Kinabalu series (published by Sabah National Parks). In October 1983 and from February to May 1984 he studied collections in B, M, SING, and the major Malaysian herbaria.

Bignoniaceae will be revised for the Flore du Cambodge, Laos et Viêt Nam by T. SANTISUK (BKF) (in press: vol. 22).

Boraginaceae. Dr. F.S.P. NG (KEP) is working up the family for the Tree Flora of Malaya vol. 4.

Ehretia microphylla has been found for the first time in Australia in the Barrow Range, SW of Cooktown, Queensland, by M. GODWIN in June 1983.

<u>Cardiopteridaceae</u> were revised in the Flora of Australia 22 (1984) by Ms. Dr. H.J. HEWSON (Bureau of Flora and Fauna, Canberra).

Caryophyllaceae will be revised for the Flore du Cambodge, Laos et Viêt Nam by Dr. K. LARSEN (AAU).

<u>Celastraceae</u> of Australia were published in the Flora of Australia 22 (1984) by L.W. JESSUP (BRI).

For wood anatomical studies see under Research sub Ms. ZHANG XINYING.

Ceratophyllaceae. Ms. M. WILMOT-DEAR (K) has a paper in press in the Kew Bulletin which consists of a world revision of the family.

<u>Chenopodiaceae</u> will be revised for the Flore du Cambodge, Laos et Viêt Nam by Dr. K. LARSEN (AAU).

Chrysobalanaceae. Dr. G.T. PRANCE will spend several weeks in 1985 at L to prepare a revision for the Flora Malesiana.

<u>Clethraceae</u> were studied for the Flore du Cambodge, Laos et Viêt Nam by Dr. T. SMITINAND (BKF) during a visit to P in 1984.

Combretaceae. An account for the Flora of Australia by N. BYRNES (BRI) has been submitted to the editors in 1984.

Compositae. Mr. R.O. BELCHER (MICH) is studying the Australasian species of Senecio.

Mr. L.A. KREFFER (L) has made a revision of <u>Chrysanthellum</u> in Malesia: there are four species, two of which from the Lesser Sunda Islands are new. An interesting distribution pattern: the genus 'jumps' from India to Java, Madura, Sumba and Alor, where teach the species is known from a single locality only.

Corynocarpaceae. A revision for Australia by Dr. G.P. GUYMER (BRI) appeared in the Flora of Australia 22 (1984).

Ctenolophonaceae are being finished for the Flora Malesiana by Dr. H.P. NOOTEBOOM (L) based on the account of Mr. A.M.N. VAN HOOREN, a former student at L.

<u>Cunoniaceae</u> are being revised for the Flore de la Nouvelle Calédonie et Dépendances by Dr. R.D. HOOGLAND (presently in P). His work for the Malesian area therefore had to be temporized.

Cyperaceae. The Queensland Bot. Bull. 5 will contain keys to the genera and species of Queensland, by P.R. SHARPE (formerly of BRI).

<u>Dichapetalaceae</u> of Australia were published by Ms. Dr. H.J. HEWSON (Bureau of Flora and Fauna, Canberra) in the Flora of Australia 22 (1984).

<u>Dilleniaceae</u> are revised for the Flore de la Nouvelle Calédonie et Dépendances by J.M. VEILLON (ORSTOM), publication is expected in 1986.

<u>Dipterocarpaceae</u> will be revised for the Flore du Cambodge, Laos et Viêt Nam by Dr. T. SMITINAND (BKF).

Elaeocarpaceae. Mr. M.J.E. COODE (K) has managed to finish off two current projects on Vallea/Aristotelia and on the complex Dubouzetia/Peripentadenia/Crinodendron. The large genus Elaeocarpus is being revised by Mr. R. WEIBEL (G) for the Malesian species assisted by Dr. M.M.J. VAN BALGOOY (L) and Mr. M.J.E. COODE.

Ericaceae will be revised for the Flore du Cambodge, Laos et Viêt Nam by Dr. T. SMITINAND (BKF).

Euphorbiaceae will be revised for the Flore de la Nouvelle Calédonie et Dépendances by M. SCHMID (P) (Phyllanthus) and Dr. G. McPHERSON (MO).

A few new species of <u>Fontainea</u> have been discovered by L.W. JESSUP and Dr. G. P. GUYMER (BRI) in Queensland and New South Wales. They will be published in Austrobaileya.

Eupomatiaceae. Dr. P.K. ENDRESS (Z) has agreed to revise the family for the Flora Malesiana in 1986.

Fagaceae. A new species of Nothofagus has been discovered on Mt. Trikora (Wilhelmina), Irian Jaya, and will be described by Dr. C.G.G.J. VAN STEENIS.

<u>Flacourtiaceae</u>. L.W. JESSUP (BRI) will publish a revision of <u>Xylosma</u> in Australia in the next issue of Austrobaileya.

Gramineae. Ms. L. DUISTERMAAT (L) finished a revision of the species of Oryza in Malesia and Australia. There are no new species. Contrary to expectations it turned out to be possible indeed to distinguish between O. rufipogon, the putative progenitor of O. sativa and that species even in the herbarium.

Messrs, R. DE KONING and M.S.M. SOSEF (L) have revised <u>Paspalum</u> for Malesia (15 spp.). Thanks to an ingenious computer program they were able to disentangle the infamous <u>P. scrobiculatum</u>-complex and were able to distinguish 4 varieties in it. Hopefully this will be the last word. They have continued their generic study in the <u>Rottboelliinae</u>-complex with some surprising results to be published elsewhere.

Messrs. A.W.M. EIJS and R.B. ZOETEMEYER (L) confirmed that Panicum psilopodium and P. sumatrense cannot be distinguished at any level, while P. suishaense is a subspecies of P. trypheron. It is possible that P. curviflorum Hornemann is the correct name for the last species, but as no type seems to be existent, it

was deemed more prudent to consider that name as dubious, whereby stability can be maintained.

Mr. M.A. VAN DER LAND (L) continued a research on <u>Deschampsia</u> in Malesia. There appear to be three forms of <u>D. klossii</u> in New Guinea, while it remains uncertain whether this species belongs to the boreal <u>D. cespitosa</u> or not.

Dr. Ph. MORAT (ORSTOM) is writing up a revision for the Flore de la Nouvelle Calédonie et Dépendances.

Ms. Dr. E.A. WIDJAJA (BO) completed her Ph.D. dissertation on Gigantochloa.

Mr. M. WINIA (student at L) studied <u>Thysanolaena maxima</u> in Malesia. It seems that in at least Java and Flores two forms may be distinguished, but the differences break down in other areas.

Mr. K.M. WONG (KEP) is studying the variations of flowering habit and branching morphology in the Malesian genera of the Bambusoideae.

Hernandiaceae will be revised for the Flore de la Nouvelle Calédonie et Dépendances by J. JÉRÉMIE (P).

Himantandraceae. Dr. P.K. ENDRESS (Z) has agreed to revise this family for the Flora Malesiana in 1986.

<u>Hippocrateaceae.</u> A revision of the Australian taxa was published in the Flora of Australia 22 (1984) by L.W. JESSUP (BRI).

<u>Icacinaceae</u> have been published in the Flora of Australia 22 (1984) by Dr. G.P. GUYMER (BRI).

<u>Ixonanthaceae</u> are being finished for the Flora Malesiana by Dr. H.P. NOOTE-BOOM (L) based on the account of Mr. R. KOOL, a former student at L.

<u>Juncaceae</u>. The Queensland Bot. Bull. 5 will contain keys to the genera and species of Queensland, by P.R. SHARPE (formerly of BRI).

Lauraceae. K.M. KOCHUMMEN (KEP) is working up the family for the Tree Flora of Malaya vol. 4.

Lecythidaceae: Barringtonia. Two accounts of the Australian species by R. HENDERSON (BRI) will be published simultaneously in the Flora of Australia 8, the scientific version, and in Australian Plants, more aimed at amateurs. A very good idea!

<u>Leguminosae.</u> Messrs. T.J. BLONK and P.J.M. BRUIJN (L) made a brief survey of <u>Rhynchosia</u> in Malesia: 7 taxa could be discerned one of which they could not identify.

Ms. B.C. BOONSTRA and Mr. W. BROER (L) made a brief survey of <u>Aeschynomene</u> in Malesia: 7 species.

Ms. A. BUIJSEN (L) has started a revision of Fordia for her M.Sc.

Dr. DING HOU (L) is revising Endertia, Intsia and Leucostegane. A precursory

paper of the genera Acrocarpus, Afzelia, Amherstia, Kalappia and Pterolobium was prepared for Blumea.

- Ms P. DY PHON is nearly finished with her revision of Uraria.
- Dr. R. GEESINK (L) finished his generic revision of the <u>Tephrosieae</u>, which name turned out to be antedated by <u>Millettieae</u> (see Bibliography). In the summer of 1985 he will revise the family for the new Flora of Hawaii.
- Mr. L. W. JESSUP (BRI) has reported the presence of an undescribed species of <u>Kunstleria</u> from Lamington National Park, Queensland. It seems more likely that a third species of Austrosteenisia is concerned.
- Dr. I. NIELSEN (AAU) is revising the Caesalpinioideae for the Flore de la Nouvelle Calédonie et Dépendances. He has nearly finished the <u>Mimosoideae</u> for the Flora Malesiana.
- Mr. C. NIYOMDHAM (BKF) will finish his revision of <u>Dalbergia</u> for the Flore du Cambodge, Laos et Viêt Nam in the summer of 1985.
- Dr. H. OHASHI (TUS) has in principle agreed to revise <u>Desmodium</u> for Flore du Cambodge, Laos et Viêt Nam in the summer of 1985. He also intends to revise the family for the second edition of the Flora of Taiwan.
  - Ms. S. REYNOLDS (BRI) intends to revise Zornia for Australia.
- Ms. D. VAN VLIET-KORNET (L) has finished her revision of <u>Kunstleria</u> which needs to be extended further as a relatively large amount of material has traditionally been misidentified and is hidden under <u>Derris</u>, <u>Millettia</u>, etc. The search for them continues.
  - Ms. M. WILMOT-DEAR (K) published a revision of Mucuna for China and Japan.
- Mr. H. WIRIADINATA (BO) made a revision of <u>Mucuna</u> for Malesia during a year's stay at AAU.

With the collaboration of Dr. R. GEESINK (L) for the <u>Millettieae</u> N.V. THUAN and Ms. P. DY PHON (P) expect to publish a volume for the Flore du Cambodge, Laos et Viêt Nam in 1987.

<u>Linaceae</u> are being finished for the Flora Malesiana by Dr. H.P. NOOTEBOOM (L) based on the account of Mr. A.M.N. VAN HOOREN, a former student at L.

Loranthaceae and <u>Viscaceae</u> of Australia were revised in the Flora of Australia 22 (1984) by Dr. B.A. BARLOW (CANB).

Lythraceae. See below under Anatomy.

Magnoliaceae. The family has been revised for Sri Lanka by Dr. H.P. NOOTE-BOOM (L), who also finished a preliminary account of the generic and infrageneric delimitation of the family for Malesia. Revisions of the Malesian species of Elmerrillia and Michelia (together forming the tribe Micheliaee) and Manglietia have been finished.

Meliaceae. Dr. D.J. MABBERLEY (OXF) will spend several weeks at L to finish his account, partly together with Ms. C. PANNELL (OXF), who will study Aglaia for 3 months there.

The first will also revise the family for New Caledonia, where he spent some time in the summer of 1984, and for the Tree Flora of Malaya vol. 4.

Monimiaceae. Dr. W.R. PHILIPSON (CHR) has finished a revision for the Flora Malesiana, which will include the Trimeniaceae and Atherospermataceae.

Moraceae. Ms. C.J. MOHAMED (UKMB) has started with a systematic anatomical study of Peninsular Malaysian Ficus.

Myristicaceae. Dr. W.J.J.O. DE WILDE continued to study Myristica. He has separated a new genus from Horsfieldia: Endocomia with 4 species.

Under his guidance Mr. R. SCHOUTEN is preparing a revision of Gymnacranthera for his M.Sc. There are at least 2 new species.

Myrsinaceae. Mr. I. M. SAID (UKMB) is completing his revision of the Peninsular Malaysian taxa for a Ph.D.

Dr. H.O. SLEUMER (L) is revising Rapanea for New Guinea and adjacent islands.

Dr. B.C. STONE (PH) is working up the family for the Tree Flora of Malaya vol. 4.

Myrtaceae will be revised for the Flore de la Nouvelle Calédonie et Dépendances by Dr. J.W. DAWSON (WELT).

Dr. R. SCHMID (Berkeley, U.S.A.) spent some time in L to work with Dr. P. BAAS on xylem vessel characters (perforation plate type and wall thickenings). It appeared that scalariform perforations are largely restricted to mesic temperate or tropical high mountain species of a small group of the <u>Myrtoideae</u>. This primitive feature is absent from all <u>Myrtaceae</u> in Malesia, but persists in some species from New Caledonia, New Zealand and the New World. The results were published in the IAWA Bull. n.s. 5 (1984) 197—215.

Nepenthaceae. Ms. R.M. SOM (UKMB) is completing her study on the infraspecific variation and systematics of Nepenthes.

Nyctaginaceae will be revised for the Flore du Cambodge, Laos et Viêt Nam by Dr. K. LARSEN (AAU).

Olacaceae have been revised in the Flora of Australia 22 (1984) by A.S. GEORGE (Bureau of Flora and Fauna, Canberra).

See also under Anatomy, below.

Oleaceae. See below under Anatomy.

Dr. R. KIEW (UPM) is deeply involved in the taxonomy of the large genus Chionanthus, and also revising the family for the Tree Flora of Malaya vol. 4.

Oncothecaceae are being revised for the Flore de la Nouvelle Calédonie et Dépendances by J.M. VEILLON and P. MORAT (ORSTOM). Publication is expected in 1986.

Opiliaceae were revised by Dr. P. HIEPKO (B) in the Flora of Australia 22 (1984).

Orchidaceae. Ms. W. VAN DER BURG (L) for her M.Sc. made world revisions of Chrysoglossum (4 spp., 1 new), Collabium (11 spp., 1 new), Diglyphosa (2 spp.), Nephelaphyllum (± 12 spp.) and Pilophyllum (1 sp.)

Mr. C.A. CHRISTENSON (CONN) has finished his revision of Aerides. Papers in press include an article on the systematics of Saccolabium, the reduction of Kerigomnia to Chitonanthera, a new record of Aerides for New Guinea and a series of review articles on Sarcanthine genera. He intends to continue with Vanda.

Ms. J.J.M. VAN DER GRIJN and Ms. H.J. HAAGSMAN (L) made a brief survey of Dilochia: 5 species.

Ms. E.W. VAN DEN HAAK (L) is revising Thecopus and Thecostele.

Dr. E.F. DE VOGEL (L) has nearly finished his revision of <u>Pholidota</u>, which after many reductions now has 10 sections with 29 species (2 new) and 7 varieties. He only has to do <u>Ph. imbricata</u> yet, for which about 500 collections must be checked. Under his guidance Ms. B. TÜMER prepared a file of c. 2800 literature references to Malesian Orchidaceae.

Because a new journal for the family is contemplated which will contain complete revisions with colour plates aimed not only at taxonomists but also at the much wider public of amateurs, the publications of revisions of Chelonistele, Entomophobia, Geesinkorchis and Nabaluia have been temporized. An article with the descriptions of new genera, species and combinations has appeared in Blumea (See Bibliography).

<u>Palmae</u>. Dr. D.A. MADULID (PNH) is studying the taxonomy of Philippine rattans using fresh material from various localities in the country. The study has partial financial support from the National Research Council of the Philippines. He presented a paper on trial cultivation of rattans in the Philippines (see also under Symposia).

Mr. J.P. MOGEA (BO) will extend his studies of <u>Arenga</u> for a Ph.D. at the Universitas Indonesia under the guidance of Dr. A.J.G.H. KOSTERMANS (BIOTROP).

A stand of sterile <u>Raphis</u>, a genus new for Malesia was discovered at Lho 'Nga, Aceh, by Dr. A.J. WHITTEN (See sub Expeditions).

<u>Pandaceae</u> will be revised for the Flore de la Nouvelle Calédonie et Dépendances by Dr. B.C. STONE (PH).

Phytolaccaceae will be revised for the Flore du Cambodge, Laos et Viêt Nam by Dr. K. LARSEN (AAU).

<u>Polygalaceae</u>. Dr. R. VAN DER MEIJDEN (L) is steadily proceeding with his account for the Flora Malesiana. Especially the nomenclature and typification in <u>Polygala</u> has turned out to be most complex and a study of Continental Asian, Ceylonese and Australian taxa had to be undertaken as well. A new species in both Solomonia and Xanthophyllum were discovered.

Portulaccaceae will be revised for the Flore du Cambodge, Laos et Viêt Nam by Dr. K. LARSEN (AAU).

<u>Potamogetonaceae.</u> Mr. G. LEACH (formerly of UPNG, now NT) studies the New Guinea fresh water representatives.

Rafflesiaceae of Australia were revised by Dr. B. DELL (Murdoch University, W. Australia) in the Flora of Australia 22 (1984).

Dr. W. MEIJER (KY) has published a precursor in Blumea in which 5 new species have been described.

Restionaceae. The Queensland Bot. Bull. 5 will contain keys to the genera and species of Queensland, by P.R. SHARPE (formerly of BRI).

Rhamnaceae: Dr. A. LATIFF (UKMB) is working up the family for the Tree Flora of Malaya vol. 4.

Rhizophoraceae have been written up in the Flora of Australia 22 (1984) by Dr. A. McCUSKER (Bureau of Flora and Fauna, Canberra).

Rubiaceae. Messrs. M.H. EDELMAN and M.L. VERNOOIJ (L) made a brief survey of Galium in Malesia. There seem to be about a dozen species, of which several appear to be undescribed.

Mr. M.E. JANSEN (L) for his Ph.D. thesis is studying the distribution and significance of heterostyly in the family.

Dr. S. SOHMER (BISH) spent some months in the summer of 1984 at the Rijksherbarium, Leiden, in his research on <u>Psychotria</u> for the Philippines, Indonesia and Malaysia.

Dr. D.D. TIRVENGADUM (P) continued his research on the Asiatic <u>Gardenieae</u> for the Flore du Cambodge, Laos et Viêt Nam, the Flora of Thailand, the Flora of Ceylon and the Flora Malesiana.

K.M. WONG (KEP) is working up the family for the Tree Flora of Malaya vol. 4. The various genera previously confused with <u>Randia</u> have been revised. <u>Morinda</u> and <u>Rennellia</u> have also been done. Research is continuing on <u>Psychotria</u> and the <u>Timonius</u>-complex.

Rutaceae are being revised for the Flore de la Nouvelle Calédonie et Dépendances by Dr. T.G. HARTLEY (CANB). A number of articles have already been published.

Mr. D.T. JONES (formerly of UKMB, now KLU) continues his research on the Aurantioideae. (See also Personal News).

<u>Santalaceae</u> of Australia were published in the Flora of Australia 22 (1984) by Ms. Dr. H.J. HEWSON and Mr. A.S. GEORGE (Bureau of Flora and Fauna, Canberra).

Sapindaceae. J. VAN DIJK (L) revised <u>Dictyoneura</u>, 8 of the 9 spp. distinguished by Radlkofer were reduced to 2, one with 2 ssp., the ninth appeared to have been placed in the wrong genus. A third species, possibly new, must remain unnamed by lack of sufficient material.

Dr. P.W. LEENHOUTS (L) completed the revisions of Nephelium and Harpullia. For the latter a manuscript was prepared but its publication had to be delayed because of the untimely death of Dr. J. MULLER, who had written a palynological account of the genus. This will be finished by Ms. M. PACQUÉ (L). It has turned out that his attempt to disentangle the generic structure of the Dodonaeoideae

was going to be so time-consuming with such an uncertain perspective, that it was decided that it would be more prudent to abort this project. Any takers?

Ms. S.T. REYNOLDS (BRI) has submitted an account of the family for Australia, excl. <u>Diplopeltis</u>, <u>Distichostemon</u> and <u>Dodonaea</u> to the editors of the Flora of Australia. A number of notes on various genera have appeared in Austrobaileya (See Bibliography).

Ms. J.G. WEST (CANB) published her Ph.D. thesis on Australian <u>Dodonaea</u>. S.K. YAP (KEP) is working up the family for the Tree Flora of Malaya vol. 4.

Simaroubaceae will be revised for the Flore de la Nouvelle Calédonie et Dépendances by T. JAFFRÉ (ORSTOM).

Stackhousiaceae of Australia were revised by Dr. W.R. BARKER (AD) in the Flora of Australia 22 (1984).

Sterculiaceae. A revision of Leptonychia in S.E. Asia prepared by Mr. R.C.H. FLIPPHI under the guidance of Dr. J.F. VELDKAMP (L) is nearing completion.

The family will be revised for the Flore de la Nouvelle Calédonie et Dépendances by Dr. P. MORAT (ORSTOM).

Thymelaeaceae. A first record for Australia was made of Linostoma in Cape York, Queensland. The species, also new, has a very odd germination behaviour, which will be reported on by J.R. CLARKSON (Mareeba) and Dr. T. CLIFFORD (St. Lucia).

Trimeniaceae. See Monimiaceae.

Vacciniaceae. See Ericaceae.

Viscaceae. See Loranthaceae.

<u>Vitaceae.</u> Dr. A. LATIFF (UKMB) is continuing his revision of the Malesian taxa of <u>Cayratia</u>, <u>Cissus</u> and <u>Tetrastigma</u>.

<u>Winteraceae</u>. In his revision of the New Caledonian representatives (which has been stopped temporarily) Dr. W. VINK (L) merged the genera <u>Belliolum</u>, <u>Bubbia</u> and <u>Exospermum</u> with <u>Zygogynum</u> because of new evidence discovered. An article explaining this has been prepared. A review of the family for the 'Kubitzki-project', Families and genera of vascular plants, has been submitted.

Zingiberaceae. Mr. M. NEWMAN (ABD) is studying the cytotaxonomy and reproductive biology of various taxa in Thailand at the Prince of Songkla University.

Ms. R.M. SMITH (E) has completed the first part of her treatment of Bornean Alpinieae: Alpinia, Amomum, Burbidgea, Hornstedtia and Plagiostachys.

<u>Progress in the publication of Flora Malesiana</u>. Early this year (1985) the second instalment of vol. 10 is in the stage of processing for the printer's. It will contain the treatments of the Chloranthaceae (Dr. B. VERDCOURT, K), Ctenolo-

phonaceae (Mr. A.M.N. VAN HOOREN, formerly of L, & Dr. H.P. NOOTEBOOM, L), Elaeagnaceae (Dr. J.F. VELDKAMP, L), Ixonanthaceae (Mr. R. Kool, formerly of L), Linaceae, s.s. (Mr. A.M.N. VAN HOOREN, formerly of L, & Dr. H.P. NOOTEBOOM, L), Menispermaceae (Mr. L.L. FORMAN, K), Sabiaceae (Dr. C.F. VAN BEUSEKOM & Th.P.M. VAN DE WATER, both formerly of L) and Sphenostemonaceae (Dr. C.G.G.J. VAN STEENIS, L).

Further prospects are promising but all large works are suffering delay in finishing of the MSS. It is expected that the revisions of the Magnoliaceae, s.s. (Dr. H.P. NOOTEBOOM, L) and the Polygalaceae (Dr. R. VAN DER MEIJDEN, L) will be finished by the end of 1985. The Mimosaceae (Dr. I. NIELSEN, AAU) will hopefully be available in 1986.

Several other medium- to large-sized family revisions are like buds, waiting to burst and to expose their treasures: <a href="Conifers">Conifers</a> (Dr. D.J. DE LAUBENFELS, Dept. Geography Syracuse University, Syracuse, U.S.A.), <a href="Cunoniaceae">Cunoniaceae</a> (Dr. R.D. HOOGLAND, presently in P), <a href="Meliaceae">Meliaceae</a> (Dr. D.J. MABBERLEY & Ms. Dr. C. PANNELL, OXF), <a href="Monimiaceae">Monimiaceae</a>, s.l. (Dr. W.R. PHILIPSON, CHR), <a href="Rafflesiaceae">Rafflesiaceae</a> (Dr. W. MEIJER, KY) and the <a href="Rosaceae">Rosaceae</a>, s.s. (Dr. C. KALKMAN, L).

#### POLLEN

An analysis of atmospheric pollen grains in some selected regions of the Philippines is being worked out by Ms. Dr. L.J. BULALACAO. Sampling stations have been established in Baguio City, Iloilo City and Los Banos, Laguna, to identify allergenic pollen grains and to show seasonal variations so that allergists can classify the suitability of communities for bronchial asthma sufferers. This project is financed both by the National Research Council of the Philippines and the National Museum.

A basic reference pollen slide collection has been established at the Palynology section, Botany Division, National Museum, the Philippines. Over 700 slides of tropical pollen are present.

A preliminary survey of the pollen of some Malesian species of <u>Oleaceae</u> by Ms. Dr. R. KIEW (UPM) showed that the grains are small compared to those of temperate species. Also, unfortunately, pollen morphology is not helpful at the generic level.

### ANATOMY

Lythraceae. Dr. P. BAAS (L) is studying the wood anatomy of five genera which were not included in the earlier wood anatomical survey of the family published in the Acta Bot. Neerl. 28 (1979) 117—155.

Olacaceae Mr. L. VAN DEN OEVER (L) continues his wood anatomical studies of the family and is also including materials from the related <u>Santalaceae</u> and <u>Loranthaceae</u> for comparison.

Oleaceae. Ms. P.M. ESSER and M.E.T. VAN DER WESTEN working under the guidance of Dr. P. BAAS (L) have nearly finished a wood anatomical world survey of the genera. Preliminary results have been published in the Proceedings of the Pacific

Regional Wood Anatomy Conference held at Tsukuba, Japan (available from IAWA at Utrecht or Leiden).

Ms. ZHANG XINYING (Peking University, Beijing) will spend 1985 at L for a study of the wood anatomy of the <u>Celastraceae</u> and <u>Oleaceae</u> native in China. Ultimately an anatomical study of all woody families of China is envisaged provided that funds for future exchange between the Peking University and Leiden remain available.

From a point of view of ecological and systematic wood anatomy the data collected for this project will also be of great interest for studies at Leiden mainly focusing on Malesian taxa. This has already become evident in the study of the Oleaceae by Ms. P.M. ESSER and Ms. M.E.T. VAN DER WESTEN. The information on Chinese species constitutes a crucial extension for interpreting variation patterns in such genera as Olea and Chionanthus (incl. Linociera).

## PHYTOGEOGRAPHY

Messrs. R. DE KONING & M.S.M. SOSEF under the guidance of Dr. M.M.J. VAN BALGOOY (L) have started a phytogeographical analysis of the flora of Celebes. They extended their research by a 6-week's visit to BO, where numerous recently collected unicates could be incorporated.

Dr. C.G.G.J VAN STEENIS (L) drew up a list of all the Australasian genera also occurring in Malesia which will be published in Brunonia. He also made a survey of the botanical altitudinal zones in Malesia.