VII. RESEARCH AND PUBLICATIONS

(continued from page 282)

The botany of mangroves by P.B. Tomlinson has been published in the Cambridge Tropical Biology Series, Cambridge University Press.

Checklist of the generic names used for Spermatophytes in Malesian botany. During their last years Dr. R.C. BAKHUIZEN VAN DEN BRINK f. and Dr. C.G.G.J VAN STEENIS have revised the Nomina generum Malesianorum, a most useful manual. The manuscript was nearly finished at their deaths and has now been made ready for publication by Ms. M.J. VAN STEENIS-KRUSEMAN and Ms. E.E. VAN NIEUWKOOP. We hope to have it published in 1987.

Flora of Australia. Volume 46 has appeared, the 7th in sequence in a series of ca. 50 volumes to be published within 25 years. This installment contains the Iridaceae to Dioscoreaceae. It may be ordered from AGPS Mail Order Sales, GPO Box 84, Canberra (A.C.T.) - 2601, Australia. The soft-cover edition (no. 85.1775.2) is A$ 26.00, the hard-cover (85.1774.0) A$ 30.00. As usual the execution of text and plates is excellent and the volume is a worthwhile addition to the series, The various families are mentioned in Chapter IV, the authors in the Bibliography.

Flora of the endangered plants of the Philippines. A proposal to the International Programs Division of NSF (U.S.A) was submitted in 1986 to bring Dr. D.A. MADULID for 3 months to BISH from 1 November 1987 on.

The situation in the Philippines is poignant due the very rapid destruction over the past 20, 30 years of the archipelago's native vegetation. It is estimated that perhaps as little as 5-10% of relatively undisturbed forest ecosystems remains of what there was when Merrill wrote up his Enumeration (1923-1926), still the last overall view of the Philippine flora. The collections on which this work was based were lost in the Second World War with the destruction of PNH, and although much was collected afterwards, there has been little support within the country for active floristic, descriptive work for the past decennia. There are now plans to initiate work leading to a usable, practical manuscript to be produced in about 10 years time based on knowledge gleaned from herbarium collections and field work. This proposed Flora will not be exhaustive, of course, but will serve as an important tool. It is not intended to displace the Flora Malesiana Project, with its much more exhaustive aims. Instead, the proposed work may serve as a base for future treatments, and give additions to past ones.

At present the very tentative plans call for 2 working centres, BISH, where the logistics and support for writing the Flora are available, and PNH, where the logistics for field work have been in place for several decades. Collaborators in specialized groups will be invited to participate, working in their own institute: loans will be sent directly from PNH. These and other plans will be discussed at a proposed workshop in Honolulu in January 1988, when Dr. D. MADULID (PNH) is in residence there, to be attended by individuals with a recent experience in and knowledge of the Philippine flora. The final draft of the proposal can then be finished.

FLora Malesiana. The various tasks performed by the late Dr. C.G.G.J. VAN STEENIS have been distributed as follows: Dr. W.J.J.O. DE WILDE has become Editor of the Flora Malesiana, Dr. M.M.J. VAN BALGOOY will be the liaison officer between the collaborators of the Flora Malesiana Project and assist them in their studies, Dr.J.F. VELDKAMP now also takes care of the bibliographical part of the Flora Malesiana Bulletin. Pre-identifying incoming material, the crucial job

performed by Van Steenis and Bakhuizen van den Brink f., has been distributed over the various staff members in Leiden. It is to be hoped that their combined efforts will be a match to that of the previous team!

It had been hoped that Flora Malesiana 10/3 would appear this year, but this has turned out to be too optimistic a prognosis, and we now hope to have it out in 1988. The contents will be slightly different, too. It is now planned to have treatments of the Chrysobalanaceae (G.T. PRANCE), Coniferae (D.J. DE LAUBENFELS), Cruciferae (B. JONSELL), Mimosaceae 9I. NIELSEN), Polygalaceae (R. VAN DER MEIJDEN, with Epiryxanthes together with T. WENDT), Sabiaceae (C.F. VAN BEUSEKOM and Th.P.M. VAN DE WATER). The finished manuscripts of the Ctenolophonaceae and Linaceae (A.M.N. VAN HOOREN & H.P. NOOTEBOOM), Ixonanthaceae (R. KOOL), Magnoliaceae (H.P. NOOTEBOOM) are held over for the first issue of volume 11, hoped to appear in 1989.

In September 1986 a discussion was held in Leiden between the Staff and Dr. A. SOEGIARTO, vice-chairman of LIPI. The subject was how a greater collaboration in the Flora Malesiana Project by Indonesian scientists could be achieved. Parts of the result are that instructional courses in Angiosperm taxonomy similar to the one given in Bogor in 1985 (see p. 287) will be given on a regular basis, and that a more structured exchange of staff members of Leiden and Bogor will be attempted. At the printing of this issue plans were in a far stage that as a start a course was to be given in Bogor by Dr. R. GEESINK, Dr. J.F. VELDKAMP (L), Dr. M. RIFAI, Ms. E. WIDJAJA, and Mr. H. WIRIADINATA (BO) to an international group of about 15 young scientists from various SE. Asian countries. An emendated version of the manual used during the previous course will be published by UNESCO, Jakarta. It was written by the Leiden scientists Drs. M.M.J. VAN BALGOOY, R. GEESINK, C. KALKMAN, J.F. VELDKAMP, and E.F. DE VOGEL. How it can be obtained is not yet clear.

Further discussions were had by Dr. E.F. DE VOGEL (L) and representatives of the Herbarium Bogoriense and the Puslitbang Biologi, the new organization for part of the former LBN (see p. 283).

Flora of Vietnam. Dr. J.E. VIDAL (P) has written an article on the history of Indochinese floras (see Bibliography). Among other things it is noted that Dr. PHAM HOANG HÔ, now also in P, is editing a concise Flora of Vietnam, to appear in 3 volumes.

A score of Vietnamese botanists for a score of years have collaborated in a research program coordinated by Dr. A. TAKHTAJAN (LE) to write a more extensive flora. Publications have appeared on various families, either in Russian in Russian botanical journals, or in Vietnamese in the Revue de Biologie (Tap Chi Sinh Vât Hoc), provided with French or English summaries. Although extensive new collections seem to be made in Vietnam at present, the Herbarium in P will of course remain indispensable. It would be a very sagacious and scholarly move if this Russian / Vietnamese project would collaborate more intensively with the French Flore du Cambodge, du Laos, et du Viet Nam.

In the Forest Institut, Hanoi, (HNF?) a Forest Flora of Viet Nam (in Vietnamese) is on its way. This is an illustrated card system for use in the field. So far 4 parts have appeared.

Hoya's in Index Kewensis. The Dutch Hoya Nieuwsbrief ('Newsletter') edited by Mssrs. H. & R. van Donkelaar, has started to publish this list in instalments. After Hova a similar list will be published for Dischidia. Address: Institute for Protection and Propagation of Succulent plants, Postbox 15, 4250 DA Werkendam, the Netherlands. The irregularly appearing newsletter is Hfl. 25.00 for 4 issues.

Mangifera Project. This project to collect as many races and species of mangos is financed by I.B.P.G.R., Rome, and the W.W.F. of Switzerland and the Malay Peninsula. Mr. J.-M. BOMPARD (MPU) is exploring the field in East, and later West Kalimantan, and if sufficient funds can be obtained, also in Sumatra and the Malay Peninsula. Dr. A.G.J.H. KOSTERMANS (BO), the leader of the project, next to moral support will provide the necessary knowhow of literature and herbarium research. For this he has visited various institutes in Europe and Asia during the past few years. Other collaborators in Sabah are Mr. A. LAMB (Tenom Agriculture Station), Mr. W. WONG (Ulu Dusun Horticultural Station), and Ms. L. ABAN-PIERCE (Agriculture University, Kuching). In this state there are at least 25 species, 10 more then so far known, and several undescribed. It is obvious that due to the extensive logging these species even though they have such delicious fruits are rapidly becoming extinct. A good collection is being built up at the Ulu Dusun Station.

Much remains to be done, e.g. a study of the Moluccan species already described by Rumphius in 1741, yet up to this day several have never been seen again and their identity is a mystery.

Orchids of Borneo Project. The orchid flora of Borneo is among the richest in the world - and one of the least known. It is estimated that about 2,000 species occur on this large island. Some of them are well known because of their beauty and, as a consequence, their potential value for breeding, but many are only very superficially known, and many are species which are completely new for science.

The Project aims to publish over a period of several decennia about 20 volumes together describing all the wild orchids of the island. Each will be illustrated with a full page drawing depicting a portion of the plant as well as the relevant details of the flower. Moreover, colour photographs when available will also be included to complete the information.

Thus a valuable document will be created which will be on the short run extremely useful to pinpoint areas which are of crucial importance for orchid conservation in Borneo. On the long run its value may well be historical, describing a botanical wealth which is now on the verge of disappearing forever due to forest destruction for all kinds of undoubtedly profitable purposes.

To prevent some of this loss an orchid garden has been established at the Agricultural Research Station, Tenom, Sabah. Here a large collection of wild orchids is grown, mainly from the lowlands which are the most threatened. The collection, meticulously taken care of by one of the Senior Research Officers, Mr. A. LAMB, produces flowering plants continuously, a selection of which is drawn by a number of able draughtsmen.

Identification of the voucher specimens of the drawings cannot be done in Sabah. Specialized libraries and large collections of herbarium specimens for

comparison, only found in major botanical institutes, are needed for that part of the job. The specialists in K and L provide the necessary scientific backup.

The first volume is in the process of being completed now and is expected in 1988. It has become evident already that some very large genera will cause many problems which can only be solved by specialists on them.

One of these is the pantropical Bulbophyllum with an estimated 2,000 species, of which 10% in Borneo. Mr. J.J. VERMEULEN (L) who recently revised the African species was invited with grants of the Dutch Government and the 'Stiftung zum Schutze und zu Erhaltung wildwachsender Orchideen' (Switzerland) spent a year in the area (See Expeditions). He collected no less than 165 species, of which for 135 a complete plate could be drawn. Some 80 non-flowering specimens were sent to the Leiden Botanical Garden in the hope that they would flower there and then could be drawn.

Plant collecting program: Southeast Asia. The National Cancer Institute, U.S.A., has made an award to the College of Pharmacy, University of Illinois, Chicago, and the Arnold Arboretum. The program was written by Dr. D.J. SOEJARTO of the University and Dr. P.S. ASHTON (A). The Cancer Institute wants selective collecting of all those flowering plant species, especially of tropical rainforests, which have never been extensively screened for potential anti-cancer drugs. Specimens will be collected for an average of 500 samples per year of 0.3—1 kg dry weight. These will be processed in Chicago. Next to these herbarium vouchers will of course be made. One set will remain in Chicago, the others will be disposed of variously, with one set in the country of origin.

Dr. W. MEIJER (KY) will work in Sabah together with the FRI, Sepilok, between September and November 1987.

Dr. B.C. STONE (PH) intends with the assistance of local collectors to undertake collections in Malaysia and the Philippines between March and June 1987. Organized programs for collecting undertaken by Dr. E. SOEPADMO, Dr. F.S.P. NG, Dr. A. MADULID, and Dr. J.P. ROJO will assist in this large-scale effort to secure promising new sources of potential anti-cancer drugs.

A part has also been granted to BISH for expeditions to Papua New Guinea during the next 3 years from 1988 on. A staff member, probably Mr. W. TAKEUCHI, will be in the field for 6 months each year, collaborating with LAE and the Wau Ecology Institute. Duplicates will remain in A, BISH, LAE. Collections from other areas, e.g. Malaysia, Indonesia, and the Philippines will also be placed in A, BISH, and the local National Herbarium.

PNH Herbarium News. is a newsletter that began in December 1986. In the first issue (the only one sofar seen) articles deal with current research, short feature articles, biographies, expeditions, and various miscellaneous notes. An article by D.A. MADULID stresses the need for an immediate regulation against indiscriminate collecting.

The Proceedings of the 7th Aberdeen-Hull Symposium held at Aberdeen in September 1984 on 'The dynamics of tree populations in tropical forest' will be published in November 1987 a a special issue of the J. Trop. Ecol. 3/4, and will be available for purchase separately. Please write to Ms. P. Ireland, Cambridge

University Press, Shaftesbury Road, Cambridge CB2 2RU, United Kingdom, for details.

The issue contains among others the paper by N. MANOKARAN & K.M. KOCHUMMEN, 'Recruitment, growth, and mortality of tree species in a lowland dipterocarp forest in Peninsula Malaysia.

The Proceedings of the International Symposium on South East Asian Plant Genetic Resources held in Jakarta from 20 to 24 August 1985 has appeared. To be ordered from the Pusat Penelitian dan Pengembangan Biologi – LIPI, Bogor.

A new 3 year project on rain forest regeneration processes started in October 1986 under a NERC research grant awarded to Dr. M,.D. SWAINE (ABD) and Dr. T.C. WHITMORE (Oxford). Two students, Mssrs. N. BROWN (Oxford) and D. KENNEDY (ABD), have started work. They will spend 1987 and 1988 at the Danum Valley Research Forest of Yayasan Sabah under joint supervision of Mr. T.H. TANG, sylviculturist of Yayasan Sabah. The aim of the project is to create artificial canopy gaps of different size and study the response of the seedlings of different species to them. This is similar to the experiment of Kramer on G. Pangerango / G. Gedeh in W. Java in 1926, and has apparently never been repeated.

Mr. D. CHIEW of Yayasan Sabah will have a third project, also jointly supervised, working on the behaviour of seedlings in logged forests.

A historical survey of the systematic botany in the Philippines, has been published by J.V. SANTOS (1984) (See Bibliography).

Tropical Rainforests of the Far East, ed. 2 (1984) by T.C. Whitmore has been published as a cheap subsidized edition by the English Language Book Society and is available in developing countries only. Price £ 7.50 (or its local equivalent). Scientists who want to get the book at a price cheaper than a photocopy should pester their local book seller, or write to Oxford University Press, Singapore Office.

Vegetation mapping of Sumatra conducted by Dr. Y. LAUMONIER. The map of Central Sumatra has appeared. (see also Fl. Mal. Bull. 37 (1984) 32), and the third is expected by the end of 1987.

There is good hope that the French Government will provide additional funds for the next five years. The new program will cover East Kalimantan and Thailand at the 1:1.000.000 scale. For parts of Southern Sumatra additional large scale maps (1:100.000 or 1:250.000, which is not yet certain) are in the making, while this will also be done for regions in East Kalimantan, Celebes

Wayside trees of Malaya by E.J.H. CORNER. The Malayan Nature Society is publishing a new edition of this botanical classic. It has been substantially revised by the author who has extended the contents to nearly 1000 pages. Again it will be in 2 volumes. It was intended to be appear by mid-1987 and we hope to review it in the next issue. It can be ordered from the Executive Officer, Malayan Nature Society, POB 10750, 50724 Kuala Lumpur, Malaysia. The pre-publication price for members of the Malayan Nature Society was M$ 90.00, for non-members M$ 125.00, which does not seem unreasonable for such an important work

that so long has been unavailable. Anybody somehow interested in the vegetation of Malaya and adjacent areas should have it within hand reach on his desk.

Wild Citrus project. Mr. D.T. JONES was contracted by the International Board for Plant Genetic Resources (IBPGR) of the FAO to carry out an herbarium study of the Rutaceae - Aurantioideae of SE. Asia in 1986. This study constitutes the first phase of the IBPGR's systematic and ecogeographic study of the wild citrus relatives, aimed at providing geographical, ecological, phenological, and morphological information necessary for the implementation of appropriate conservation and resource utilization programmes. A total of 22 herbaria in 11 countries in the U.S.A., Europe, Australia, and SE. Asia were visited; the survey took 12 weeks to complete. Label data from over 2,500 herbarium sheets were recorded and then computerized using dBaseIII-Plus. For the analysis of these data a plan-of-action will be formulated for the survey and collection of wild citrus relatives in SE. Asia. The IBPGR has tentatively planned to commence field work in Sumatra in mid-1988.

The University of Malaya has been designated as the site for the establishment of a field genebank for the conservation of wild citrus species and their relatives (citroids) in SE. Asia. The University agreed to this invitation in late 1986. The Botanic garden, or Rimba Ilmu, will accept the responsibility for maintaining this collection as part of the IBPGR's global network of germplasm conservation centres for crop genepools. It will be the Garden's duty to propagate and identify plant material, characterize and carry out primary evaluation of the materials, and make these available to individuals and Institutions who request it. (Jones is the Director / Curator of the Garden).

The Garden has produced a colour brochure and an annual Newsletter for distribution to other Botanic Gardens, interested individuals, and Institutions. It would be happy to send the latest issue (June 1987) and the brochure to anyone interested in them: Mr. D.T. Jones, Rimba Ilmu Universiti Malaya, Department of Botany, University of Malaya, 59100 Kuala Lumpur, Malaysia.