## V. HERBARIA, GARDENS, ORGANIZATIONS (continued from Volume 10, page 323)

Demand for space have necessitated the closure of the Herbarium associated with the **Botany Department**, University of Queensland, Saint Lucia (BRIU, formerly listed under BRISBANE). The collections went to BRI.

The Forest Research Institute Malaysia (FRIM) together with the Forest Departments of Sabah and Sarawak recently initiated the Tree Flora of Sabah and Sarawak Project. This aims to document all tree species occurring in these states following the format of the Tree Flora of Malaya.

A workshop on the Principles and Practice of Flora Writing was held from 18–23 November, 1991, as part of the initial activities of the Project. It aimed at the upgrading of local botanists, ecologists, and forest scientists in plant taxonomy as well as fostering closer relationships and cooperation among them. A total of 23 participants were present.

FRIM is presently undertaking a project on the conservation of wild fruit trees in Peninsular Malaysia. Fruit resources survey and germplasm collecting activities are being done particularly in Kelantan and Trengganu. Over 40 seedlings of edible wild fruit species e.g. of Aglaia, Baccaurea, Garcinia, Lansium, Lepisanthes, Mangifera, Nephelium, and Sandaricum have been established. Some of these have been transplanted to the Fruit Arboretum of FRIM.

News of the Foundation Flora Malesiana.

The Board of the Foundation Flora Malesiana now consists of:

Dr. APRILANI SOEGIARTO (LIPI; Chairman), Dr. P. BAAS (L; Vice-chairman), Dr. M.C. ROOS (L; Secretary/Treasurer), and the following members: Dr. B.A. BARLOW (CSIRO),

Dr. K. IWATSUKI (TI), Dr. K. LARSEN (AAU), Dr. A. LATIFF MOHAMAD (UKMB), Dr. G.Ll. LUCAS (K), Dr. D.A. MADULID (PNH), Dr. P. MORAT (P), Dr. F.S.P. NG (FAO-Rome), Dr. D.H. NICOLSON (US), Dr. P.H. RAVEN (MO), Dr. M.A. RIFAI (BO), Dr. S.H. SOHMER (BISH), Dr. P.F. STEVENS (A).

There are still vacancies for representatives for Brunei, Papua New Guinea, and Singapore.

The Editorial Committee for the Flora Malesiana consists of Dr. C. KALKMAN, Dr. H.P. NOOTEBOOM, Dr. W.J.J.O. DE WILDE.

Participating institutes are:

Arnold Arboretum/Gray Herbarium (A), Botanical Garden, Singapore (SING), Botanical Gardens Bogor, CSIRO – Division of Plant Industry (CANB), Forest Research Institute Lae (LAE), Forest Research Institute of Malaysia (FRIM), Herbarium Bogoriense (BO), National Museum of Natural History, Washington (US), Philippine National Herbarium (PNH), Rijksherbarium / Hortus Botanicus Leiden (L), Royal Botanic Gardens, Kew (K), University of Aarhus (AAU), University of Tokyo (TI).

Flora Malesiana Action Plan — During the meeting of the founding members of the Foundation Flora Malesiana in Leiden in June, 1991, it was decided to develop an Action Plan for the completion of Flora Malesiana in 20 years. A draft version of the Action Plan has been made which will be discussed during the next Board meeting in September, 1992. It is meant to provide an overall framework to develop projects and to approach potential funding organizations.

The requirements for a timely completion of Flora Malesiana are two-fold:

- acceleration of the revision work of each participating taxonohhmist (by adopting a simplified format and aiming at greater efficiency)
- additional funding to increase the work force (taxonomists, editorial and secretarial support)

In order to get an insight in the work still to be done, collaborators have been consulted about the species numbers per genus of their family. It appeared that instead of the traditional estimation of 28,000, in Malesia we have to deal with over 40,000 species of flowering plants and ferns. The Board regards an acceleration towards the production of 50 species per **fulltime equivalent** (fte) feasible (now c. 20). As about 6000 species are already published, this means that the completion of the Flora requires still some 700 fte. The input of the participating institutes and other collaborators for the next 20 years is estimated to be 350 fte. As a consequence, additional funding is required to double the input of manpower by contracting experienced botanists.

A training programme for young taxonomists, particularly in the Malesian area, forms an integral part of the Action Plan. New generations of taxonomists have to be trained, not only to contribute to the Flora, but especially to ensure its optimal use in all fields of botanical enquiry.

Two urgent collateral projects are also included, i.e., a key to the Malesian families and a species checklist. The latter will provide a starting point for future taxonomic work, and as such will speed up the revisions of the remaining taxa.

In the Action Plan, the next 20 years are divided into three phases. In the period 1992– 1997 the publication of at least 6 Volumes is envisaged. It is imperative to establish working teams for the remaining large families and to enlarge a number of existing teams. As soon as possible the checklist has to be compiled and a family key constructed. For the period 1998–2002 the publication of some 35 families is foreseen. The progress will be substantially dependent on external funding. The last period, 2003–2012, will be planned in more detail in due time.

The Action Plan requires additional funding amounting to US\$ 1.5 million on average per year. Its aims are ambitious but very urgent in view of the alarming decline of ecosystems and species diversity in Malesia, and the need to make informed decisions in matters of conservation and sustainable use. — M.C. ROOS.

Dr. APRILANI SOEGIARTO and his wife, Ms. K.A. SOEGIARTO visited the Rijksherbarium on 13 May, 1992. Dr. SOEGIARTO, in his capacities of vice-chairman of LIPI, chairman of the Foundation Flora Malesiana, and chairman of Prosea discussed with Drs. BAAS, VAN BALGOOY, and ROOS a strategy for the further acceleration of the Flora Malesiana Project, the Action Plan, and, especially, the problems of fund raising.

A Flora Malesiana Checklist Project — BO, L, and MO are preparing a proposal for a Checklist Project of Malesia, which will be ready for submission to external funding agencies by August, 1992. MO will make a quick start and appoint a post-doc by September.

Even in the most ambitious plans, the Flora Malesiana will not be completed before 2010 [for a schedule see Kalkman, Flora Malesiana Bulletin 10 (1991) 327–330]. Until then, a complete overview of the Malesian flora is lacking. However, there is an urgent need for such a survey. Pending the completion of the Flora Malesiana, a preliminary version can be obtained in a relatively short period by compiling a checklist based on existing information. A computerized checklist database will also function as a starting point for future revisions and speed up the production of Flora treatments. Furthermore, a checklist of Malesia will be part of the worldwide checklist envisaged by the International Organization of Plant Information (IOPI). Therefore, the format will be compatible with the format determined by IOPI, but including a coding for the distribution that allows for abstracting regional/island by island/nation by nation checklists.

Hopefully other major institutions in the area and participants of the Foundation Flora Malesiana will also take part. During the 2nd Flora Malesiana Symposium, 1992, there will be ample opportunity for interested parties to meet and several items concerning this project will be discussed. At this stage it seems realistic that with three post-docs and three data entry persons (in BO, L, and MO), the checklist can be finished within a 5-year period. — M.C. ROOS.

The Herbarium of the Cebu State College of Science and Technology, Cebu City, Philippines, was described by I.E. BUOT JR. (see Bibliography and Chapter 7).

Resurrection of the Honiara Herbarium (BSIP), Solomon Islands. — We were glad to read a report by P. FORSTER (see Bibliography) that the Honiara Herbarium which had been closed for nearly 20 years, has been opened again, at least for the time being. Mr. D. GLENNY, now back at WELT, has been employed for two years between February 1990 and 19 February 1992. He is working on checklists of the bryophytes and ferns of the Solomon Islands of which he made extensive collections, also of some spermatophytes. He has trained a local forest graduate, Mr. M.Q. SIROKOLO, who will continue to maintain and expand the herbarium. The 20,000-30,000 sheets in BSIP are in remarkably good condition despite the neglect of decennia. Quite a few isotypes are present. The flowers of many species have been destroyed by bugs, but many fruiting specimens are still in a good condition.

Botanists interested in visiting the Solomon Islands for research purposes should note that a 9 to 10 month wait is necessary before the required research permit can be obtained from the Ministry of Natural Resources. Please contact the Herbarium as well: Mr. M.Q. SIROKOLO, Forestry Herbarium, P.O. Box G24, Honiara, Solomon Islands.

The King Leopold III Biological Station, Papua New Guinea, has a small collection of plants consisting of large-size photocopies of specimens in GENT and LG (!) representing local species. There is a small library with some important literature, and of course quite a few zoological collections and books.

Monocotyledons, classification & evolution. — An International Symposium is to be held at the Royal Botanic Gardens, Kew, Great Britain from 19 to 23 July 1993. The purposes are to analyze critical characters in monocotyledon systematics, and to review and revise the existing classification by Dahlgren and his co-worker. By bringing together experts from around the world and combining their studies into an integrated framework, it is hoped to produce a relatively complete classification based on modern principles. Key topics will include the origin and relationships and those of palms, aroids, orchids, lilies, gingers, and grasses. There will be workshop sessions, using a comprehensive range of currently available software for phylogenetic analysis. All the lectures will be by invited speakers; however, contributions are invited for poster presentations on supra-familial systematics or aspects of character analysis. For more information write to Dr. PAULA RUDALL, Jodrell Laboratory, Royal Botanic Gardens, Kew TW9 3DS, Great Britain.

The Papua New Guinea Botanical Society holds annual meetings also attended by zoologists. The 1991 meeting was held at the Christensen Research Institute, Madang, between 2–4 September and was attended by 35 people, among which 4 from the Cenderawasih University, Manokwari and Jayapura, Irian Jaya. There was much optimism that the scientific exploration of New Guinea would no longer be divided in two, and it was generally felt that a period of cooperation and collaboration would develop between scientists of both halves of the island. A brief summary of the talks and poster displays is given in Science in New Guinea 18. Next year's meeting will be held in Irian Jaya.

Starting in the Academic year 1990–1991 the Postgraduate School of the Bogor Agricultural University has offered an M.Sc. course in plant taxonomy in cooperation with the Herbarium Bogoriense. Dr. M.A. RIFAI has been in charge of this course which has enrolled 8 students from all over Indonesia.

The Rafflesia Conservation Centre, Tambunan, Sabah, was opened on 20 April, 1991.

The holdings of SAN at the end of 1991 stood at 131,135.

A Training Course on techniques in plant identification and herbarium preparation and curation was given by Dr. A.A. WIDJAJA (BO) at the University Cendrawasih, Mano-

## MISCELLANEOUS

kwari, between 15 and 27 July, 1991. The course was attended by 13 junior staff members and technicians of the faculty of Agriculture, and financed by a grant from the Canadian SFU-CIDA.

The herbarium in Wanariset, Balikpapan, under the vigorous leadership of Dr. P.J.A. KEßLER and Ir. K. SIDIYASA now has a collection of more than 2500 mounted and labeled specimens to be used as a base for a local tree flora.