

V. EXPEDITIONS AND OTHER FIELDWORK

(continued from page 276)

M a l a y a

Mssrs. L.G. SAW and K.M. WONG (KEP) collected further in the Endau-Rompin forests of Johore during April and June 1986.

Ms. Dr. B.S. PARRIS (K) spent August 1986 based at FRIM collecting fern material and studying fern diversity in montane forests. Together with Mr. K.M. WONG (KEP) she visited the Cameron Highlands (G. Batu Brinchang, G. Berembas, G. Jasar), Penang, the quartzite ridges around Kuala Lumpur, G. Panti (Johore), and G. Ledang (Malacca). 134 numbers were collected, the first set for K, the second for KEP.

S u m a t r a

Mr. T. UJI (BO) and Dr. B. INGRAM (IBPGR) collected living plants of Citrus in Muara Aman, Ipuh, Bengkulu and G. Kerinci, W. Sumatra, between 2-15 July 1986.

J a v a

Dr. M.M.J. VAN BALGOOY (L) and Ms. A.K. VAN SETTEN (U) visited Jampang Ujung Genteng near Bogor and collected some 60 numbers before and after their visit to Kalimantan (see below).

Mssrs. R. JUSUF (BO Bot. Gard.), U.W. MAHYAR, and H. SOEDJITO (BO) studied the ecological impact along the Ciliwung River between 7-19 July 1986. They collected 156 vouchers.

Mssrs. U.W. MAHYAR and SUKENDAR (BO) followed Dr. J.B. COMBER to search for orchids in the G. Halimun complex and collected 43 living specimens.

L e s s e r S u n d a I s l a n d s

General. — Bryologically the area is much less known than other parts of Indonesia. Lombok is supposed to be the best known island. Yet, during a short holiday visit in 1986 Dr. A. TOUW (L) could add 70 new records to the 63 previously recorded species. Among the new taxa were several large, conspicuous, and locally common species, which had not been recorded before for Malesia, but were known from the monsoon area of continental tropical Asia. Other taxa had already been recorded from Java, Bali, and/or Luzon. From a plant geographical aspect a further bryological survey of the area is obviously urgent.

Timor. — Mssrs. A. ADHIKERANA, H. SIMBOLON, and SUKENDAR (BO) collected 165 numbers on G. Mutis between 5 July and 5 August 1986.

Mssrs. J. INDIARTO, R. JUSUF (BO Bot. Gard.), and MULYADI (BO) studied the mangrove forest in the Amarasi Dist., Kupang, between 19 September and 3 October 1986.

Mssrs. U.W. MAHYAR, H. SIMBOLON, and H. WIRIADINATA (BO) made ecological studies in the Taekes forest, Timor Tengah utara, and collected 153 herbarium numbers and 594 vouchers between 19 November and 3 December 1986.

B o r n e o (s.l.)

Sabah. — In February 1986 Ms. Dr. S. DRANSFIELD, Dr. J. DRANSFIELD (K), K.M. WONG (KEP) and others collected in the Danum Valley Research Area. The latter two later went to the Kinabalu National Park until March.

Through the support of the German Science Foundation the project BRYOTROP (Geography, Ecology, Sociology, and Systematics of tropical rain forest mosses, see p. 272) a transect from Sandakan to the summit of Mt. Kinabalu was made. Members of the party were Drs. J.-P. FRAHM (DUIS), W. FREY, H. KUERSCHNER (BSB), M.A.H. MOHAMED (KLU), and Mr. M. MENZEL (B). Between 20 August and 10 September 1986 23 sites situated between 550 m alt. (Poring Hot Springs) and 4100 m (Low's peak) were studied. A smaller transect with 4 sites between 1250 m to 1965 m was made on G. Alab in the Crocker Range (15, 16 September). Bryophytes of the lowlands have been collected in the Sepilok Nature reserve near Sandakan (12 September) and on Pulau Meningau, Tungku Abdul Rahman Park near Kota Kinabalu (21 September). A complete set (c. 2,000 numbers) is deposited in B, after identification duplicate sets will be sent to BM, BSB, DUIS, G, H, KLU, NICH, NY, SAN, U.

Ms. R.M. SMITH (E) collected some 50 numbers of Zingiberaceae at Tenom and the Mt. Kinabalu Park in June 1986.

Dr. J.J. VERMEULEN (L) with grants of the Dutch Government and the 'Stiftung zum Schutze und zu Erhaltung wildwachsender Orchideen' (Switzerland) spent a year in the area from June 1986 on. He collaborated in the Orchids of Borneo Project. His contribution will deal with Bulbophyllum. Many excursions were made to the Crocker Range, Mt. Kinabalu, Pulau Banggi, Pun Batu, Batu Punggol, East Sabah, and the the Tawai plateau. A trip through Sarawak was only partly successful. Some collecting could be done around Kuching, the Bako National Park, and near Bau and Serian, but no permits could be obtained for the Mulu National Park and G. Murut. In all numerous herbarium specimens were collected and from Sabah many living specimens were introduced into the Tenom Orchid Centre, for which Vermeulen organized the administration of the living and dead collections.

Dr. E.F. DE VOGEL (L) visited Vermeulen in September and October 1986 and, among other things, collected a new species of Apostasia. Together with Mr. P.C. VAN WELZEN (L), who stayed there from 15 September to 13 December, they collected ca. 700 numbers, mainly orchids, in Mt. Kinabalu, near Keningau in the Crocker Range, G. Alab, Nabawan, the Kalang waterfall near Tenom, and Long Pa Sia.

Van Welzen's visit was especially made to study the ecology of Guioa. He collected 260 numbers, deposited in L, SAN, and the herbarium of the Kinabalu National Park.

Kalimantan. — Mr. J.-M. BOMPARD (MPU) in the framework of the Mangifera-project made a field trip to East Kalimantan in 1985. For a whole year he hopes to explore the area to get as many mangos as possible.

Dr. W.F.B. JÜLICH (L) between 1 July and 3 September 1986 collected mycorrhiza fungi of dipterocarps in East Kalimantan. About 60 species of Basidiomycetes were found and a further elaboration of the collections is on its way. Some

species form a symbiosis with different species of dipterocarps, even with trees of different genera.

Dr. M. LEIGHTON (Dept. of Anthropology, Harvard) at the Gunung Palung Nature Reserve, c. 100 km South of Pontianak, is carrying out a long-term study on various aspects of the dispersal of seeds and fruits by animals. Dr. M.M.J. VAN BALGOOY (L) and Ms. A.K. VAN SETTEN (see also p. 273) in June 1986 helped to build up his herbarium by adding some 400 numbers to the 400 previously collected by the harvard team. Several new records for West Kalimantan have already turned up among the specimens collected so far.

Project Barito Ulu. The University of Cambridge, the Ministry of Forestry and the former LBN of Indonesia, and the Smithsonian Institution propose a research project in the centre of Borneo on the watershed of the Barito and Kapuas. Administrative and field reconnaissances have been completed, and it is hoped that field research will start in 1988, continue until 1990, and, if funds are available, even until 1991. European, American, and Indonesian scientists will work association with the Royal Society's South-East Asian Rain Forest Research program (working mainly in the Danum Valley, Sabah). The subject of the project will be the study of plant-animal relationships, e.g. of fruit-eating animals, such as primates, bats, birds, and some invertebrates, in pollination and seed dispersal, the key processes of the natural regeneration of primary forests. In this way it is hoped that a contribution can be made towards the conservation of forested areas and the regeneration of adjacent logged areas. Principal botanical investigator is Ms. Dr. C.M. PANNELL (FHO). Further information can be obtained from Dr. D.J. CHIVERS, Dept. of Anatomy, Cambridge University, Cambridge CB2 1QS, U.K. (or while the expedition is in progress: POB 1152, Jakarta 11001, Indonesia, or Mr. R. RIDGEWAY, 75 Orbain Road, London SW6, U.K.

C e l e b e s (= Sulawesi)

The report on the Dutch - Indonesian Expedition (1979) was published, see Literature sub Balgooy & Tantra.

Some exploration teams have visited several parts between January and February 1986:

In the Southeast Mssrs M. AMIR, A.T. SUNARTO, and S. SUYAHMAN (BO) collected 252 numbers of herbarium specimens and 348 living plants.

In the South (Mamasa, Selayar) Mssrs. R. JUSUF (BO Bot. Gard.), KISWOYO, and S. WAHONO (BO) collected 170 numbers of herbarium specimens and 136 living plants.

In the same period Ms. T. DJAWARNINGSIH and Mssrs. BOEADI, D. NARKO, and A. SULAEMAN (BO) visited the Morowali Nature Reserve and the Lore-Kalamata National Park, collecting 310 numbers of herbarium specimens and 270 living plants.

The North was explored by Mssrs S. HARTINI, A. PURYANAH, E. MULYANA, and H. SIMBOLON (BO) between 12 February and 15 March 1986. They gathered 300 herbarium specimens and 110 living plants.

In June during 2 weeks Mr. S.C. CHIN (KLU) visited limestone areas in the South. A total of 325 numbers were obtained. A full set will be in BO, duplicates will go to KLU, L, and other institutes.

P h i l i p p i n e s

General. — Dr. D.A. MADULID, Mr. E.J. REYNOSO (PNH), and Dr. S.H. SOHMER (BISH) explored the National Botanic garden in Real Quezon, the forests in San Teodoro, Oriental Mindoro, and Mt. Masaraga, Albay, S. Luzon, in December 1984 to collect Psychotria.

Luzon. — Dr. C.E. RIDSDALE (L) visited an ultra basic area in Zambales Prov. in May 1986.

Mindoro. — Dr. M.J.E. COODE (K), Ms. D. DOMACENA-ADEFUIN, Dr. D.A. MADULID, Mr. E.J. REYNOSO (PNH), and Dr. C.E. RIDSDALE (L) made an expedition in April and May 1986 to Mt. Halcon. The only previous substantial collecting there had been done by Merrill in 1903. Ridsdale and Coode concentrated on the forest trees, collecting ca. 450 numbers and 200 woodsamples, and 525 and 170, respectively. Madulid and Reynoso worked on shrubs and trees, while Adefuin did the ferns.

M o l u c c a s

J. TANAKA (TNS), assistant curator of cryptogamic botany, collected macroalgae in the mangrove forests of Ambon, Halmaheira, and Tanimbar as a member of a Japanese expedition headed by Dr. K. HAGINO (Ehime University, Japan) which studies ecosystems of the mangroves.

The report of the Japanese expeditions of 1983 and 1984/85 was published, see under Spermatophytes sub M. Kato.

Bacan. — Mssrs. T. PARTOMIHARDJO, RAMLANTO, and S. SUNARTI (BO) visited the Sibela Natural Reserve and collected 108 herbarium specimens, 1050 vouchers and 10 living plants.

Ceram. — Mssrs. T. DARAJAT, E. MIRMANTO, A. RUSKANDI, and A. SUYANTO (BO) explored the Eastern part and collected 2114 herbarium specimens.

Between 2 July and 25 September 1986 Dr. M. KATO (TI), Dr. K. UEDA (Osaka Prefectural University), Mr. H. AKIYAMA (KYO), and Mr. Z. FANANI (BO) carried out the third joint expedition. The main areas visited were the Murkele Mountain Ridge in the centre of the island: G. Sinaunia (2250 m), G. Hoale Besar (1850 m), and G. Museleina (1250 m). About 3,400 numbers of Spermatophytes, 2,000 Pteridophytes, and 2,300 lichens and mosses were collected. The total of the three expeditions (1983, 1984, 1986) is about 15,000 numbers. Copies of the report of the 2nd one, 'Taxonomic studies of the plants of Seram island' (158 pp.) are available on request from Dr. Kato: Botanical Gardens, Nikko, University of Tokyo, Nikko 321-14, Japan.

N e w G u i n e a

Irian Jaya. — A visit was made by Mssrs. B. SUNARNO, T. RACHMAT, L.P. SOEWILO, and SUDARMANU (BO) between 5 February and 5 March 1986 to Paniai and Jayapura. Next to 363 living specimens they collected 320 herbarium numbers.

Papua New Guinea. — In the framework of a contract from the Belgian FRFC (Fonds National de la Recherche Fondamentale et Collective) for a four year study of the flora and vegetation a team from the University of Liège has visited between 12 April and 4 June, 1986. It was composed of Dr. D. Bay (ecology of seagrasses), Dr. V. Demoulin (general floristics, seagrass taxonomy, mycology), Mr. L. Hoffmann (blue green algal floristics), and Mr. L. Smeets (technician).

They were based in the King Leopold III Research Station (see p. 275). Most of their collecting has been done in the coastal area between Madang and the Ramu River and the Western part of the Adelbert Range. Short trips aimed principally at sampling blue green algae for which Hoffmann plans a major revision for New Guinea took them to the Watam River and lower Sepik River, Manam Island, Lae, Bulolo, Wau, Goroka and Mt. Wilhelm. Those trips also allowed to maintain the contact with the botanists in the National Herbarium (LAE), the Lae Technical University and the Bulolo Forestry School, whose cooperation is gratefully acknowledged. A short stay in Port Moresby at the University of Papua New Guinea (UPNG) and one at its Research Station on Motupore Island also allowed interesting observations on sea grasses and blue green algae.

Seagrasses were especially studied. Those of the Hansa Bay have been mapped and quantitatively analyzed by Bay and Demoulin. The taxonomic observations made by the latter in 1979-80 followed by with studies of herbarium material were continued and very interesting preliminary results in *Halophila* were obtained.

The major collection consisted of 80 phanerogams, 10 ferns (in at least 6-fold), 120 fungi, 1250 samples of blue green algae. More than 50 strains of the latter, especially of *Scytonema*, were isolated in culture.

Between 4 and 11 April Demoulin and Hoffmann collected fungi and blue green algae in Singapore.

Errata: In the previous report on the King Leopold III Research Station some changes ought to be made. Demoulin has in the meanwhile studied the type of *Halophila ovalis* ssp. *bullosa* and it has turned out to be a form of *H. minor* (= *H. ovata*). What was called 'ssp. *bullosa*' is in fact *H. decipiens*.

A mistake in translation made the polypores rare, while they were abundant, instead. Demoulin did not study the Gasteromycetes of New Guinea in BKF, BO, SING. Read for Mt. Ritchie in Singapore the McRitchie Reservoir Park.

Mssrs. J.R. CROFT, K. DAMAS, O.G. GIDEON, and P. KATIK (LAE) made a 2-week trip to Mt. Bosavi in August 1986. Ms. H. GRAY (OXF) joined the party for the first 4 days collecting Pteridophytes, especially Lecanopteris. She collected c. 100 numbers. Croft made general collections of ferns and allies, while the others concentrated on flowering plants. Gideon was especially looking for Mussaenda, of which 4 species were collected. 632 herbarium numbers were made.

Mr. O.G. GIDEON (LAE) attached to a team of zoologists from BISH later spent 2 weeks in the Eastern part of the Bewani Mts. (West Sepik Dist.). He collected about 80 numbers.