

V. EXPEDITIONS AND OTHER FIELDWORK
(continued from page 25)

A directory of tropical research sites where British ecologists, incl. undergraduate students, would be positively welcomed has been prepared by Dr. A.G. MARSHALL, Department of Zoology, University of Aberdeen, Aberdeen AB9 2UD, Scotland, U.K. The aim is a) to assist ecologists to find a suitable site for research, b) to help those running ecological stations in the tropics to find suitable workers to assist in the maintenance of these stations. He has information on 30 sites in 24 countries. Information on each site is available in the form of a two A4-page questionnaire.

T h a i l a n d

Mr. M. NEWMAN (ABD) is making field collections for his Ph.D. thesis on the cytotaxonomy and reproductive behaviour of the Zingiberaceae from June 1984 on. He is based at the Department of Biology of the Prince of Songkla University working together with Dr. PUANGPEN SIRISUGA.

Mr. D.D. TIRVENGADUM (P) together with an assistant of BKF made a roundtrip in August 1984 during which general collections were made with a special interest in the Gardenieae. 194 numbers were collected.

V i e t n a m

Mr. D.D. TIRVENGADUM (P) made an exploratory trip from June 28 to July 26, 1984, under the agreement of cooperation between the CNRS of France and Vietnam. He studied the collections of the National Herbarium of Vietnam (no abbr.: 85 Trần Quốc Toản), of the University and Institute of Biology of Hà Nội (Nghĩa Đô, Tu Liêm) and of the Forest Institute of Hà Nội (Thanh Trì). Although time was limited he made some collections with Vietnamese colleagues in the North and in the South especially looking for Gardenieae. A duplicate set of the 216 numbers made is in P.

M a l a y a

On January 17th, 1984, Ms. Dr. A.E. JANSEN (WBS) collected 8 mushroom specimens in the Bukit Timah Reserve.

In February 1984 Mr. M.J.S. SANDS (K) collected on the Klang Gates Ridge (with Dr. B.C. STONE), Bt. Lagong FR, Ulu Gombak Road, Genting Highlands (with Dr. G. SMITH) looking especially for Begonia.

Collecting trips to Lumut and P. Pangkor, Perak, were undertaken by the Forest Research Institute, Kepong (KEP) in March 1984.

Several trips were made to Tanjung Selantai, Mersing, Johor, by Mr. A. BIDIN and R. JAMAN (UKMB) to look for fertile specimens of Brainea insignis. One trip was fruitful. Other collecting trips included the Cameron Highlands, Pahang (March 1984, looking especially for Blechnum fraseri and other species of that genus; and again in August searching for Botrychium daucifolium), Bt. Bendera, Penang (April 1984, going after Taenitis blechnoides var. nov.), Mawai, Johor, (July 1984 to find Lygodium borneense), G. Pantii, Johor (September 1984 for Ophioglossum simplex), Bt. Larut, Perak (January 1985: 250 numbers of ferns and 85 of mosses), Hutan Lipur Sekayu, Ulu Trengganu (January 1985: 40 ferns), Ulu Gombak (February 1985: 30 numbers),

Dr. G. HADLEY (ABD) made a short visit to G. Ulu Kali between August 5 and 10, 1984, to collect orchid mycorrhizal material.

A collecting trip to Penang was undertaken by the Forest Research Institute, Kepong (KEP) in October 1984.

A two-week expedition to the limestone in Taman Negara, Pahang, was organized in October 1984 by the Selangor Branch of the Malayan Nature Society. Dr. R. KIEW (UPM) collected about 130 species (specimens in UPM), which included 2 new Gesneriaceae (one a new Epithema, previously described by King as an Argostemma!, the other a member of the Boea minutiflora / Paraboea bettiana-group) and several rare species such as Impatiens opinata (white form) and Hoya citrina. Rhizanthus lowii was found at the base of one of the limestone hills. The account of this expedition has appeared in the Malayan Naturalist 37/3 (1985).

A party of UKMB collected 68 numbers in the Bt. Kepong / Mersing / Kluang area, Johor, in November 1984. In January 1985 another party visited Pangkor Isl. and Maxwell Hill in Perak for 45 numbers, while in February 170 numbers were gathered on Bt. Rengit, Lanchang, Pahang.

Ms. Dr. B.S. PARRIS (K) will be deputy leader of the Kew Assistants' Expedition to G. Tahan, looking especially for epiphytic ferns and their hosts to see

if the ferns have particular family, genus, or species preferences. She will look especially at Grammitidaceae, of course.

I n d o n e s i a

The data on the exploration of Indonesia have been based largely on Pewarta LBN-LIPI extracted by Dr. M.M.J. VAN BALGOOY and Dr. S. RISWAN. Only those trips that have yielded a substantial amount of herbarium specimens (deposited in BO) have here been included.

General:

The Indonesian / Dutch Snellius Expedition II. — Ms. F.M.L. HEYS (Aquatic Ecology, Nijmegen), Ms. P.Y. ZEN (Station Penelitian Ambon — Lembaga Oseanologi Nasional, SPA-LON), Messrs. Dr. E. COPPEJANS (GENT), A. KADI (LON, Jakarta) and W.F. PRUD'HOMME VAN REINE (L) participated under theme 4, Coral Reefs. Between September 3 and October 1, 1984, the first part of the theme, they collected more than 1500 samples of algae, probably representing between 200 and 300 species, each in 5 duplicates. Whenever possible mangrove and other coastal higher plants were gathered, as well.

The seagrasses were studied by Messrs. J.J.W.M. BROUNS (Aquatic Ecology, Nijmegen) and W. KISWARA (LON, Jakarta). These two also were present during the second part of the theme, October 5 to November 4, 1984, when with Messrs. J. COUSEN, H.J. LINDEBOOM and P.H. NIENHUIS (Delta Institute for Hydrobiological Research, Yerseke) a study was made of the ecosystems of these plants.

During both parts calls were repeatedly made by the expedition vessels Samudera (Indonesian) and Tyro (Dutch) at Sumba (around Melolo), Komodo (E. coast), Taka Bone Rate (Tarupa Kecil, T. Besar and Taka Garlarang), Salayar (SW. coast and around P. Bahuluang), Celebes (Ujang Pandang).

Special localities of part 1 were Ambon (mainly the outer bay), Pulau-2 Maisel (mainly Mai Isl.), Tukan Besi Isl. (Kaledupa Reef, and P. Binongko) and Sumbawa (N. coast: Bay of Sanggar).

During part 2 Sumbawa (Bima) was also visited.

W.F. Prud'homme van Reine.

S u m a t r a

A report has been published by M.J. SILVIUS, H.W. SIMONS and W.J.M. VERHEUGT (U) on their 18-months' fieldwork in the Berbak Game Reserve. (See Reviews).

Mr. Y. JAFARSIDIK (BO) with support of the World Bank did fieldwork in the forests near Padang, Pajakumbuh, in Tapanuli and in North Sumatra. He made an inventory in the Panti Nature Reserve between Medan and Padang near the equator, saw Rafflesia gadutensis in flower and collected some cytological material of Rhizanthus. He worked a few weeks with Dr. Y. LAUMONIER.

From November 22 to December 21, 1983, a team consisting of Messrs. R. JUSUF, KOMARUDIN and TARYADI (BO Bot. Gard.) and J.P. MOGEA (BO) made a floristic and faunistic collecting trip to various places in Tapanuli and Langkat. Apart from 256 herbarium numbers, 170 living plants were collected including Johannes-teysmannia altifrons and J. lanceolata.

From December 11, 1983, to January 9, 1984, Ms. M. RAHAYU and Messrs. MASKURI (BO) and M. SILUBA and M. TOHA (BO Zool. Mus.) visited Pesaman, Tanah Datau and S. Pesisir (W. Sumatra) and acquired amongst others 196 herbarium specimens.

From December 20, 1983, to January 19, 1984, Mr. A. SAIM (BO Zool. Mus.) and Mr. T. KUSWARA (BO Bot. Gard.) visited DAS Siak Kecil, Riau. They collected 126 botanic numbers.

From January 15 to February 14, 1984, Ms. D. WOWOR (BO Zool. Mus.) and Messrs. ATIK, D. GANDAWIDJAJA and KOMARUDIN (BO Bot. Gard.) made an exploration trip to Aceh. They collected about 150 living plants, half of which Orchidaceae.

At the end of March, 1984, Dr. A.J. WHITTEN (presently in Bogor) explored in Aceh and found at Lho'Nga on a pinnaled limestone hill a group of palms belonging to the genus Raphis, a genus hitherto unrecorded for Malesia. The palms were about 1 m high, but all sterile. A group of Cambridge undergraduates would explore there later in the year hoping to be able to collect fertile specimens. The generic identity was agreed to by Dr. J. DRANSFIELD (K).

J a v a

Between August 12 and 20, 1983, Dr. W.L. WERNER (South Asia Institute, Heidelberg University, Germany) visited Bogor, Cibodas and G. Gedeh. Some collections were made to be deposited in L. In preparation is a floristic comparison between the Gedeh and Mt. Pidurutalagala (Sri Lanka).

In December, 1983, Mr. J.M. COMBER and several staff members of the Purwodadi Botanic Gardens collected 44 numbers around G. Slamet, Ngebel Pasuruan and Nongkojajar.

On January 28, 1984, Ms J.J. AFRIASTINI, RUGAYAH, E.A. WIDJAJA and Mr. B. SUNARNO (BO) accompanied Dr. M.M.J. VAN BALGOOY (L) on a trip to the Lengkong area near Sukabumi. Some living plants and about 30 herbarium specimens were collected (also in L).

From February 13 to 20, 1984, Ms. J.J. AFRIASTINI, T. DJARWANINGSIH (BO) and Mr. G. SUBROTO (Purwodadi Bot. Gard.) visited G. Ijen (E. Java) and collected 75 herbarium specimens. Ms. Afriastini continued collecting in among other places Baluran and Parigi until the 28th.

Between March 12 and 17 Messrs. A. SUPRAPTO and KARYONO visited G. Pandan Madiun and collected 87 numbers.

On April 3 and 5, 1984, Dr. A.J.M. LEEUWENBERG (WAG) accompanied by Mr. T. UJI (BO) paid visits to Dungus Iwul and Cibodas for Apocynaceae. 18 numbers collected.

From July 16 to August 1 Messrs. Y. INDIARTO, R. JUSUF, N. KABINAWA, PURWANINGSIH, H. SIMBOLON, SUHARDJONO, MULYADI, MUNANDAR, WARDI and D. NARKO WUJUD (BO) surveyed the Baluran National Park collecting 43 numbers and 164 vouchers.

On July 21, 1984, Ms. M. RAHAYU and Messrs. T. UJI and RAMLANTO (BO) accompanied Dr. P.F. STEVENS and Mr. E.A. KELLOGG (A) to G. Salak, collecting 11 numbers (in A).

Between August 7 to 13 Messrs. CHAIRUL and UJI (BO) accompanied Messrs. M.H. NISHIDA, M. NISHIZAWA and M.H. TAKENAKA (Osaka Univ.) to P. Penaitan and P. Peucang to collect poisonous plants. They brought back 21 herbarium specimens.

On December 16, 1984, Dr. M.M.J. VAN BALGOOY (L), some guests of LBN, and Messrs. G. HAMBALI, TUKIRIN and H. WIRIADINATA (BO) visited the Lengkong area and Pelabuhan Ratu and obtained 12 numbers.

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

Bali. — Between December 19 and 24, 1983, Messrs. I.B.K. ARISANA and I.N. PENENG visited the Pupuan FR and collected 88 numbers.

On January 10, 1984, Messrs. I.B.K. ARISANA, I.K. NGURAH RAI, I.W. SARDITA and I.M. SUYUDI collected 47 numbers in the Gigit forest.

On February 7, 1984, Mr. I.N. SARDITA collected 40 numbers in the Candikuning area, while Messrs. I.G.M. RADHITA and I.W. WARNATA obtained 36 numbers around Abang (Karangasem).

Between April 15 and May 6, 1984, Mr. I.N. KABINAWA collected 108 medicinal plants in Tenganan.

Sumbawa. — From January 29 to February 27, 1984, Messrs. M. SILUBA (BO Zool. Mus.) and TARMUDJI collected 66 numbers and 60 living specimens.

Sumba, Flores. — From August 20 to September 19, 1984, Ms. M. RAHAYU and Messrs. SULASTIARINI and T. UJI (BO) and R. JUSUF (BO Bot. Gard.) visited Sumba and Flores. They collected 96 numbers and some living material.

Flores. — From April 14 to May 8, 1984, Ms. J.J. AFRIASTINI (BO) and Messrs. GANDAWIDJAJA (BO Bot. Gard.) and A. SAIM (BO Zool. Mus.) paid a visit to E. Flores. They obtained 69 living and some dried specimens.

P. Alor, P. Pantar. — Between March 8 to April 3, 1984, Messrs. U. MAHYAR (BO), KISWOJO and SUDARMANU (BO Zool. Mus.) collected 226 numbers and 102 living specimens.

P. Roti. — Between September 10 to 15, 1984, Ms. S. SASTRAPRADJA, Messrs. S. ADISOEMARTO, M.A.RIFAI, and SAMSOEDIN collected several plants including fungi.

B o r n e o

Sarawak. — Between February 23 and March 3, 1984, Mr. M.J.S. SANDS (K) made various trips with Messrs. JUGAH, B. LEE and A. MOCHTAR (SAR) in Division 1 (Kuching, Bau, Lundu Districts) collecting Begonia.

Studies on the Flora of Gunung Mulu National Park Sarawak, edited by A.C. JERMY (BM), the coordinator of the Gunung Mulu exploration 1977/1978, has been published. (See also Bibliography and Reviews).

Brunei. — Between March 3 and 12, 1984, Mr. M.J.S. SANDS (K) collected on Bt. Payang and at Badas (Balait Distr.).

Sabah. — Dr. J.H. BEAMAN (MSC) with the assistance of his wife, son and about 30 visitors, who stayed between 1 day and 6½ months, collected not less than 4,092 numbers of ferns and flowering plants mostly from primary forests on Mt. Kinabalu (2,243 no.) and the Crocker Range (1,112 nrs.) between June 20, 1983, and August 15, 1984. Two sets remained in Sabah (UKMS and Herbarium Kinabalu Park), the rest went to MSC to be distributed further, the most complete ones to A and L, specialistic collections to e.g. CAS, PH. A study was made of the impact of fires on the forest during the 1983 drought, seedling regeneration after fire in a primary Dipterocarp forest, forest vegetation structure and composition on ultramafic (ultrabasic) soil, pollination biology of Rafflesia pricei, and observations on kerangas vegetation. It is intended to produce an annotated checklist as a contribution to the flora of Sabah including descriptions of new taxa. A further grant proposal has been made, let's hope he gets the money! Some extracts from his report are in the chapter on Conservation.

Between February 5 and 17, 1984, Ms. Dr. A.E. JANSEN (WBS) collected 46 mushroom specimens around Ladang Mirimar, c. 60 km North of Tawau, in the State Cocoa Project and in remnants of primary and secondary forest.

Between February 20 and 24 and March 21 to 23, 1984, she collected 46 specimens in the Sepilok FR.

Between March 1 and 10 several trips were made in the Kinabalu National Park resulting in 43 specimens.

A party of UKMB visited Bt. Garam near Sandakan in May 1984 and collected 120 numbers.

From March 12 to May 10, 1984, Mr. M.J.S. SANDS (K) undertook collecting trips in various parts of the country looking for Begonia: Sunsuron Road (with Dr. G. ARGENT, E, and Dr. J. BEAMAN, UMKK), G. Trusmadi (with Dr. G. ARGENT, Mr. J. BRIGGS and 11 students, and Ms. A. PHILLIPPS, H. PETER and Mr. A. GUNSALAM, Kinabalu National Parks), Tenom, Paling-² Hills, the Crocker Range and near Nabawan (with Messrs. C.L. CHAN and A. LAMB), Telupid, Maliau River valley, Pulau Gaya National Park, Kinabalu National Park (summit, Liwagu Valley, Cascade Falls trail, E. Mesilau, Poring with Ms. F. TAN, Mr. A. GUNSALAM and others), Sepilok FR, Ulu Dusan and Gomantong (with Mr. R. YOUNG), Batu Punggul on the Sg. Sansiang (a tributary of the Sepulut River), in the Pensiangan District, (with Messrs. A. BACON and A. LAMB), Padas Gorge, Mamut, Bunda Tuan, G. Nunkok, and Dahobang River on the Marai Parai trail.

In Malaysia between February and May, 1984, a total of 564 numbers (Sands 3501—4064) were collected and more than 300 propagules were sent to K.

Kalimantan. — From November 22 to December 31, 1983, Messrs. ISMAEL, R. JUSUF, PURWANINGSIH, S. RISWAN and WARDI (BO) collected 6500 numbers for their ecological study in Wanariset and Lempake.

From November 27 to December 26, 1983, Ms. J.J. AFRIASTINI (BO) and Messrs. BOEADI, SUDARMANU (BO Zool. Mus.) and E. SULAEMAN (BO Bot. Gard.) visited W. Kalimantan. They obtained 60 numbers and 150 living orchids.

From February 27 to March 27, 1984, Messrs. GUSWARA, A. SAIM (BO Zool. Mus.) and B. SUNARNO (BO) went up Sg. Katingan (C. Kalimantan) and collected 252 numbers.

From March 26 to April 20, 1984, Ms. M. RAHAYU (BO) and Messrs. R. JUSUF,

T. KUSWARA (BO Bot. Gard.) and T. USIN paid a visit to Batu Licin, Muara Uya, and P. Laut (S. Kalimantan), bringing back 170 numbers.

P h i l i p p i n e s

Palawan. — The Palawan Botanical Expedition sponsored by the Swedish Match - Hilleshoj Philippines, Inc., was conducted from March 1 to June 3, 1984. Participants were Dr. J. DRANSFIELD (K), Dr. C.E. RIDSDALE (L), Mr. A. PODSZORSKI (Hilleshoj, Landskrona), Dr. D.A. MADULID (PNH), and Ms. M. KADOLSKY (Hannover University, B.R.D.). They explored sites of the island and came up with over 1900 botanical specimens in c. 10 duplicates whenever possible to be deposited in K, L, PNH, S, etc. (See Article XII).

Ms. D. DOMACENA-ADEFUIN (PNH) collected c. 70 spp. of ferns near Polillo, Panukulan and Burdeous, on Polillo Isl.

Mr. W. VENDEVIL (PNH) has collected some 1755 spp. of ethno-medicinal plants in Curimao, Paoay and Carasi, Ilocos Norte, the Philippines, interviewing local herbalists on vernacular names, uses and dosages.

C e l e b e s

Dr. M.M.J. VAN BALGOOY (L) prepared an article on the vegetation of the two areas visited during the 1979-expedition to the island (p. 3386) to be published in *Reinwardtia*.

From September 4 to October 2, 1983, Ms. D. SUNARYA, D. WOWOR and Messrs. MASKURI, B. SUNARNO (BO) and SUROTO visited N. Celebes and collected 240 numbers.

From February 17 to March 17, 1984, Messrs. J.P. MOGEA (BO) and M. TOHA (BO Zool. Mus.) visited the Dumoga-Bone National Park and collected 152 numbers, incl. \pm 25 living Orchidaceae.

From April 3 to 27, 1984, Messrs. I.B.K. ARISANA, RAMLANTO, (BO), M. SILUBA (BO Zool. Mus.) and E. SULAEMAN (BO Bot. Gard.) visited the Luwu and Tator areas (C. Celebes) bringing back nearly 150 living Orchidaceae.

From May 8 to June 7, 1984, Messrs. BOEADI (BO Zool. Mus.), KISWOJO and SUPARDI visited P. Selayar, P. Jampea, Danau Tempe and Mamuju (C. Celebes) coming back with 51 numbers and 69 living plants, seeds and cuttings.

From September 14 to October 4, 1984, Messrs. K. SIDIYASA, U. SUTISNA ((BZF) and T.C. WHITMORE (OXF) visited the Dumoga Bone National Park collecting 182 numbers.

M o l u c c a s

Halmaheira. — Between September 17 and November 1, 1984, Messrs. SUHARDJO-NO (BO), B. SUHERMANTO and A. WA'ID together with staff members of LON Ambon visited the mangrove forest at Teluk Kao and Jailolo. They collected 63 numbers and 176 vouchers.

P. Obi. — Between October 5 and November 4, 1984, Messrs. GANDAWIDJAJA (BO Bot. Gard.), S. SUJAHMAN and TARMUDJI carried out fieldwork and collected nearly 200 living plants, half of which Orchidaceae and 42 herbarium numbers.

Ceram. — A report on the Japanese/Indonesian Botanical Expedition to Ceram, 1983 by KATO et al. was published in the Acta Phytotax. Geobot. 35 (1984) 149—164 (Jap., Engl. summ.). See Bibliography.

Between June 3 to July 3, 1984, Messrs. DJAFAR, SUMARSONO and B. SUNARNO (BO) collected 98 numbers and 88 living specimens, incl. a tuber of Amorphophallus sp. of 11 kg.

On 20 December, 1984, the Japanese Ceram Expedition, consisting of Messrs. M. KATO, OKAMOTO and K. UEDA (now working on mosses) left BO for Ambon and Ceram, where they will remain until early March, 1985. The intention of Dr. K. IWATSUKI is to have a third expedition in 1986.

Buru. — Joint LBN/RH expedition:

A team consisting of Mr. J.P. MOGEA, Mr. SOEKENDAR and ISMAEL (BO), Mr. BOEADI (Mus. Zool. Bog.), Dr. M.M.J. van BALGOOY and Dr. H.P. NOOTEBOOM (L) made an expedition in November and December 1984. The Indonesian members were sponsored by LIPI, the Dutch ones by WOTRO and the Greshoff Rumphius Fund.

The purpose was to obtain a representative sample in two areas in the little known Northwestern part of the island. The first area visited was situated about halfway between Waelanga and Lake Kunturun (300-700 m). The soil is a mixture of shales and granites. The climax vegetation is forest dominated by Shorea, mainly S. selanica and some S. montigena. The second area (surveyed by VAN BALGOOY, MOGEA, and NOOTEBOOM) was situated South of Bara in a limestone area between 150 and 900 m. The forest there was of a mixed type in which Shorea was present but not dominant.

The expedition yielded 1350 collection numbers of herbarium specimens and about 200 living ones. The first will be deposited in at least L and BO, while duplicates will be distributed to other institutes and specialists. The living specimens went to the botanic gardens of BO and L. This is the largest collection ever made on the island, where according to the Flora Malesiana I, 4 only 1800 numbers had been collected up till now.

The forest in both places visited was found to grow mainly on very steep slopes of sandy clay mixed with stones and boulders held together by the roots of trees. The soil is extremely susceptible to erosion after removal of the forest. Logging operations are in full swing both here and elsewhere in Buru. In a preliminary report written by VAN BALGOOY it is urged to stop logging on slopes exceeding 15°. — M.M.J. van Balgooy

New Guinea

Dr. G.S. HOPE (Canberra, ANU), paid a short visit to Mt. Trikora (Wilhelmina) in early 1984 and besides recording a few ecological quadrats obtained a small number of specimens, among which Isoetes hopei, not found there by Brass. He found the subalpine vegetation to be truly different from that he has studied so intensively on Mt. Jaya (Carstensz).

Mr. M. KILMASKOSSU (Cenderawasih University, Manokwari), forest ecologist in charge of the alpine ecology program joined a party of the Cenderawasih University which went to Ok Sibil and the Mt. Mandala (Juliana) area in May 1984. G.S. HOPE, although provided with letters of recommendation from the Assistant Minis

ter of Population and Environmental Conservation, which is funding the research, was not allowed to join by the local authorities.

P a c i f i c

Solomon Islands: Isabel Isl. — Dr. M.S. PRANA (BO Bot. Gard.) sponsored by the Int. Board Plant Gen. Res. (IBGRP)-FAO visited between September 3 and 10 looking for tuber bearing plants. He collected 58 samples.

New Caledonia. — Dr. H. HEINE (P) and Dr. D.J. MABBERLEY (OXF) made a trip between August 19 and September 22, 1984, to pursue their studies in the New Caledonian flora.

Mr. M. SCHMID (P) made an exploratory trip in the South between 1 November and 14 December, 1984. He was especially interested in Phyllanthus and also tackled the problem how the original forest cover can be reconstituted.