

## II. PROGRESS IN MALESIAN BOTANY

*(continued from p. 261)***Bryophytes**

Ms. F.I. Windadri (BO) is making a general survey of the mosses of Kalimantan.

Note that for bryologists there is BRYONET-L: bryonet-l@mtu.edu

The International Association of Bryologists (IAB) has decided to begin a compilation of bryological theses from around the world in the New York Botanical Garden Library. Complete catalog on line: [www.nybg.org/bsci/libr/catalog.html](http://www.nybg.org/bsci/libr/catalog.html)

Theses for any degree, in any language, on any aspect of bryology are to be included. Both students and their advisors are encouraged to send a single bound copy of each thesis for inclusion to Dr. W.R. Buck, Institute of Systematic Botany, New York Botanical Garden, Bronx NY 10458-5126, USA. E-mail: [bbuck@nybg.org](mailto:bbuck@nybg.org)

Copies of older theses, especially those never published, will be very welcome.

If binding and/or sending is a financial hardship, financial assistance can be asked from Dr. D. Vitt ([dale.vitt@ualberta.ca](mailto:dale.vitt@ualberta.ca)): include information on title, degree for which the thesis was written, number of pages, language of thesis, amount of money needed for a single (1) copy.

Theses received will be abstracted in the Bryological Times.

**Pteridophytes**

Mr. A.A.P. Leonardia (temporarily in L) is currently working on the paleotropical *Arthropteris* including a phylogenetic analysis. It appears 16 taxa are present with 5 or 6 in Malasia.

Dr. H.P. Nooteboom (L) revised *Ceratopteris* and *Monachosorum*. He cooperated in a CD-ROM project by ETI, Amsterdam, of the *Davalliaceae* with interactive keys, descriptions, and figures.

**Angiosperms**

*Annonaceae* — Ms. D. Akbarini (IPB, Bogor) is revising *Polyalthia* of the Berau region, Kalimantan.

Mr. C.B. Chuah (UKMB) is doing molecular studies on selected species of *Goniothalamus*.

Ms T. Handayani (Kebun Raya, Bogor) is revising *Dasymaschalon*.

Dr. P.J.A. Keßler and Mr. J.B. Mols (L) finished the revision of *Monocarpia* in Borneo. There are 3 species, of which 1 was undescribed.

Mr. S.W. Lee (UKMB) is studying DNA of 14 species of *Polyalthia*.

Mr. A.A.P. Leonardia (temporarily in L) finished the revision of *Mezzettiopsis* which has to be reduced to *Orophea*. Three new species and 1 new combination resulted.

Ms. Priyanti (IPB, Bogor) is revising *Goniothalamus* and related genera for the Berau area, Kalimantan.

Dr. Rugayah (BO) is studying the species of *Artabotrys* in Java.

The L collections are slowly being digitised for future easy reference (about 11% done).

*Apocynaceae* — The multidisciplinary study of the *Alyxieae* (see Fl. Males. Bull. 12: 259), to which Dr. R.W.J.M. van der Ham (L) is contributing pollen data, suggests that this tribe is polyphyletic. The two largest clades, which seem to be not closely related, are *Kopsia*, *Rauvolfia*, and allies at the one hand, and *Alyxia* and relatives at the other. The peculiar barrel-shaped *Alyxia* pollen type is probably highly derived.

Mr. Hendrian (Kebun Raya, Bogor, temporarily in L) revises *Ochrosia*.

Dr. A.J.M. Leeuwenberg (WAG) is revising *Chilocarpus* (30–50 species), *Leuconotis* (c. 13 species), and *Melodinus* (5 species).

*Asclepiadaceae* — Mr. D. Kleijn (WAG & Université de Fribourg, Switzerland) is studying the *Hoya coronaria* and *H. imbricata* complex.

*Balanophoraceae* — Dr. A. Weber and Dr. R.K. Eberwein (WU) are studying the *Helosidoideae*.

*Balsaminaceae* — Dr. N. Utami (BO) is studying the taxonomy of *Impatiens* using seed coat morphology.

*Compositae* — Ms. S. Tjitrosoedirdjo (SEAMO-BIOT) has nearly finished her account of the family for Sumatra. Now that *Vernonia* has been reduced to a few N American species, the generic position of the Malesian representatives is a problem. Some species have been placed in *Cyanthillium* and *Gymnanthemum* [cf. H. Robinson, Smithson. Contr. Bot. 89 (1999) 1].

*Cucurbitaceae* — Dr. W.J.J.O. de Wilde and Dr. B.E.E. Duyfjes (L) continued their studies on *Hodgsonia*, *Momordica*, *Trichosanthes* and *Zehneria*. Contrary to the remark in Flora of Java 1 (p. 299) that the Java record of *Momordica subangulata* would be erroneous, the species has been found in great number along the slopes of the Gedeh above Rawa Danau (Bantam).

*Ebenaceae* — Dr. F.S.P. Ng (Kuala Lumpur) has revised *Diospyros* for the Tree Flora of Sabah and Sarawak. See his reports in Chapters XII and XIII.

*Euphorbiaceae* — Mr. W. Harris (BRI) is studying *Euphorbia*–*Chamaesyce* for Australasia (incl. New Guinea).

Mr. V. Sagun (temporarily in L) is studying *Micrococca* under the guidance of Dr. P.C. van Welzen.

Mr. J.W.F. Slik and Ms. S. Sevilla (L) studied the indicator role of *Macaranga* and *Mallotus* species for forest disturbance in Kalimantan. Slik continued his PhD studies on the biodiversity of *Mallotus* sect. *Hancea*, *Polyadenia*, and *Stylanthus*.

*Fagaceae* — Between 1–14 February 2000, Dr. E.A. Widjaja (BO) as exchange scientist visited the Wood Research Institute, Kyoto University funded by JSPS. In collaboration with Dr. T. Itoh and M. Ohyamu a preliminary study using rbcL was made of the species of *Quercus* available in the Kebun Raya, Bogor. This will be continued with the species growing in Cibodas. The sequencing will be done both in Kyoto and Indonesia.

*Gramineae* — Dr. E.A. Widjaja (BO) is studying the genetic variation of *Schizostachyum* species in Java using molecular methods. She also explored the *S. lengquanii-gracile* complex.

Two books on bamboos written in Indonesian are in preparation: *Identifikasi jenis-jenis bambu di Jawa* and *Identifikasi jenis-jenis bambu di Kep. Sunda Kecil*.

Dr. J.F. Veldkamp finalised several student revisions for publication.

The genera *Avenella* and *Deschampsia*, each with 1 species in Malesia, appear to be distinct.

*Eragrostis tenuifolia* (A. Rich.) Steud. from Africa and Asia, a common weed in New Guinea, has recently been brought in from Mindanao and Padang. Being an aggressive weed, it can be expected elsewhere. Note the hairy axils of the inflorescence with solitary branches, dark spikelets, persistent rachilla and paleas, and the very flat fruit.

*Guttiferae* — Dr. K.H. Hussin (UKMB) is studying the palynology of various taxa.

*Labiatae* — The *Lamiales Newsletter* has changed its name to *Vitex* now that the *Labiatae* (*Lamiaceae*) and most of the *Verbenaceae* (restricted to *Verbenoideae*) are regarded as a single family with *Vitex* as one of the basal genera. Contributions and comments to y.harvey@rbgkew.org.uk

*Lauraceae* — Dr. F.S.P. Ng (Kuala Lumpur) intends to revise *Litsea* for the Tree Flora of Sabah and Sarawak.

*Leguminosae* — Dr. F.A.C.B. Adema (L) solved the problems with the generic delimitation in the *Derris* group. Cladistic work indicates that in Malesia *Aganope*, *Derris* (incl. *Brachypterum*), and *Paraderris* can be distinguished. *Austrostenisia* has a single species in Malesia.

A new look at *Callerya* (revised by Schot in 1994) gave a small surprise when *Callerya vasta* proved to include two more species bringing the total number of tree species in *Callerya* to four. A data matrix is under construction for *Callerya*, *Millettia japonica*, *Wisteria*, and some other taxa to find out their relationships and the place of the *Callerya* group in the tribal system.

Dr. Ding Hou (L) finished a revision of the complicated genus *Vigna*.

Mr. E. Kilawe (Tanzania, temporarily in L) started on *Uraria*.

Dr. J.W.A. Ridder-Numan and Dr. I. de Kort (L) have finished the *Mimosoideae* for the project 'Leguminosae of Flora Malesiana on CD-ROM'. Work continues on the *Caesalpinioideae*.

*Melastomataceae* — Mr. M. Demise (UKMB) has written a thesis on *Memecylon* of Sabah and Sarawak.

*Moraceae* — Dr. C.C. Berg (BG) during visits to L is preparing a treatment for Flora Malesiana making use of manuscripts submitted by Dr. Corner (*Ficus* and several smaller genera) and Jarrett (*Artocarpus* and allies) about 30 years ago. About 75% of the c. 450 species have now been done, those of *Artocarpus* and *Ficus* sect. *Urostigma* not yet.

*Musaceae* — Dr. R.E. Nasution (BO) is continuing his work on the wild bananas of Indonesia.

*Myrsinaceae* — Ms. R. Sakineh (UKMB) is studying *Ardisia*.

*Myrtaceae* — Ms. S. Sunarti is studying the species of *Syzygium* of Java.

*Orchidaceae* — Ms. M. Agoo (PNH) and Dr. D.D. Huyen (Institute for Ecology and Natural Resources, Hanoi), sponsored by the Dutch Embassies in Manila and Hanoi, attended a training course in CD-ROM work and orchid taxonomy at L. The aim is to produce a CD-ROM with all genera and a checklist of all species of the Philippines and Vietnam, to be done by April 2001.

Ms. M.W.K. Goh (SINU) is studying the molecular systematics of *Phalaenopsis*.

Ms. B. Gravendeel finished sequencing the chloroplast *matK* gene and ITS1 and ITS2 spacers for the molecular phylogeny of *Coelogyne* which again suggested polyphyly of the genus. Phylogenetic analyses with molecular data collected from all species of sect. *Speciosae* and *Moniliformes* were performed. Part of the sequence work was conducted in the Jodrell Laboratory, Kew, in cooperation with Dr. M. Chase.

Ms. L.S. Juswara (BO, temporarily at CANB) is studying *Goodyera* section *Otosepalum* and related taxa under supervision of Dr. M. Clements, Dr. M. Crisp and Dr. J. West. A phenetic analysis of *G. grandis* has been made, followed by molecular and cladistic analyses.

Mr. P.B. Pelser (L) has revised *Coelogyne* sect. *Fuliginosae*, incl. pollen study, principal component and cluster analysis with morphological characters. Only 2 species could be maintained.

Ms. S. Sierra Daza (Colombia, temporarily at L) has revised *Coelogyne* sect. *Verrucosae* including phylogenetic analyses with chloroplast and nuclear sequence data. Eight species are recognised, of which 2 are new.

Ms. D. Sulistiarini (BO) is studying the terrestrial orchids of Sulawesi.

For the project *Orchids of New Guinea on CD-ROM*, carried out by Mr. A. Schuiteman and Dr. E.F. de Vogel (L) descriptions of all 133 genera of New Guinea orchids have been made. All c. 2000 original pencil drawings by J.J. Smith and 320 illustrations published by Schlechter have been digitised, coded, and entered in a database. Messrs. M. Nieuwenhuijsen and P.M. Hartog volunteered to assist. About 2500 photo slides have been edited for colour quality and format and are ready for inclusion in the programme.

De Vogel has completed imagining the c. 5000 type sheets of L and can soon be consulted at the L website: <http://nhncml.leidenuniv.nl/rhb/#types>

Updating the database ASORCH (25,000 records), a specific and infraspecific reference system to orchid names for Southeast Asia, Australia and the Pacific, the framework of the CD-ROM projects is still continuing. For New Guinea it is complete. For other areas a few hundred mainly infraspecific names have been added.

Try [www.orchidspecies.com](http://www.orchidspecies.com) for the Internet orchid species encyclopedia by J. Pfahl, Key West, USA.

*Palmae* — Mr. A.H.B. Loo (SINU) is studying the infraspecific variation in *Licuala glabra* in Peninsular Malaysia.

Dr. L.G. Saw (KEP) is revising *Licuala* of Borneo. Under the British Chevening Scholarships/Royal Society Malaysian Fellowship he was able to visit Kew between 15 January and 15 June, 2000.

*Piperaceae* — There is a *Peperomia* discussion group: <http://www.egroups.com/group/peperomia>

*Restionaceae* — See Bibliography, sub Meney & Pate.

*Rubiaceae* — Ms. T. Mulyaningsih (IPB, Bogor) is revising *Hypobathrum* under the supervision of Dr. C.E. Ridsdale (L).

Dr. C.E. Ridsdale (L) has completed a revision of non-Bornean *Rothmannia* in which he recognises 16 species, 3 undescribed. *Oxyceros* is now under revision. He has prepared a family synopsis and provisional keys to tribes and genera of Malesia.

*Rutaceae* — Mr. T. Uji is revising *Micromelum* for Malesia.

*Sapotaceae* — Dr. W. Vink (L) revised and described a number of *Pouteria* species, mainly of section *Pierrisideroxylon*.

*Scrophulariaceae* — Ms. S. ter Huurne (L) has revised *Brookea*. There are 4 species.

*Theaceae* — Mr. J.B. Sugau (SAN) is in the final stages of a revision for his PhD of *Adinandra* for Borneo.

*Urticaceae* — Mr. R.S. Beaman (FLAS) has completed a monograph of *Elatostema* for his PhD.

Dr. N. Utami (BO) is revising *Elatostema* of Kalimantan.

*Verbenaceae* — Dr. R. Go (UKMB) is preparing manuscripts on *Teijsmanniodendron*. Ms. G. Oanes (UKMB) is writing a thesis on *Callicarpa*.

Mr. C. Phoungodome (Laos) has written a thesis on *Vitex* in Sabah and Sarawak. Next to morphology and anatomy he included pollen morphology and distinguished 12 species, 1 needing a new combination.

*Winteraceae* — The Annals of the Missouri Botanical Garden 87, 3 (2000) 297–432 contain a number of papers on the position of *Takhtajania* in the family, relationships of the genera, and with the *Canellaceae*.

*Zingiberaceae* — Ms. T. Jenjittikul (Kasetsart University, Bangkok) is studying *Kaempferia*.

Ms. A. Safreena (UKMB) is still studying *Scaphochlamys*.