

## FAMILY NEWS

**Pteridophytes and allies**

The following site might be of interest, as it leads to keys to ferns of New Guinea:  
<http://www.rbg Syd.gov.au/RBG/Sci/Systematics/rbgfern.html>

**Angiosperms**

*Apocynaceae* — Mr. Hendrian (Kebun Raya, Bogor) is revising *Rauvolfia* for Malesia under the guidance of Dr. A. J. M. Leeuwenberg (WAG) and D. J. Middleton (L).

Dr. A. J. M. Leeuwenberg (WAG) has revised *Cerbera* and has now started with the difficult genus *Carissa*.

Dr. D. J. Middleton (L) continues to work on *Alyxia* which is proving larger and more difficult than was previously imagined.

In February 1998 Dr. K. Sidiyasa (L) obtained his PhD at Leiden University on a magnificent world revision of *Alstonia*. He will extract an account for the Flora Malesiana.

Ms. Y. Zimmerman (UPS), with an Erasmus Grant, has studied the palynology of *Alyxieae* under the supervision of Dr. M. Endress (Z) and R. W. J. M. van der Ham (L) as part of a multidisciplinary study including flower morphology and DNA analysis.

*Araceae* — Mr. G. Grob has been appointed as Research Assistant at L and Amsterdam to do molecular research on *Amorphophallus*.

Dr. R. W. J. M. van der Ham (L) has completed his study of the palynology of *Amorphophallus*. The project will now be extended with a TEM survey of the infrageneric groups.

*Araliaceae* — Dr. D.G. Frodin (K) intends to revise *Schefflera* for the Vogelkop, Irian Jaya, during the next year.

*Balsaminaceae* — Dr. T. Shimizu is now working on *Impatiens* at the Shimizu Botanical Laboratory, 211-3 Okada-matsuoka, 390-03 Matsumoto, Japan.

His e-mail is [tshimizu@bb.mbn.or.jp](mailto:tshimizu@bb.mbn.or.jp)

*Cucurbitaceae* — Ms. Rugayah (BO) has almost clarified the taxonomy of the genus *Trichosanthes*; there are c. 38 species in Malesia, of which 17 new. The revision will form a major part of her forthcoming thesis on the genus. In May–June this year she will visit L to finish the taxonomic part.

*Dipterocarpaceae* — A taxonomic database has been added to the home page of the Royal Botanic Garden Edinburgh: <http://www.rbge.org.uk>

From there you can reach the database directly by clicking on Searchable Data or indirectly by clicking on Research–Tropical botany–Dipterocarpaceae.

Almost all taxon names from Index Kewensis are covered. Records of accepted names include information on higher taxonomic position, place of publication, synonymies (some with full references), basionym where there is one, and type specimens. Data standards adopted by the International Working Group on Taxonomic Databases for Plant Sciences have been followed. For example, names of publications are abbreviated. For those people who cannot get to a good library, full names of publications can be seen at the click of a mouse.

There are specimen records of all material held at E, plus a selection of the material at K and L. These records are provided with the most recent determination, collector, collection number, herbarium of origin, date, and collection locality.

You can search for information about taxa or specimens. The data are indexed by collector name, collection number, and taxon name.

*Euphorbiaceae* — Malesian Euphorbiaceae Newsletter 7 (1997) 8 pp.: progress in Malesia and Thailand; 8 (1998) 24 pp.: key to the Thai genera.

The Kew Euphorbiaceae checklist is still in the works but should be finished in a couple of months.

Ms. S. Bodegom (L) is studying the leaf anatomy of *Baccaurea* under the guidance of Dr. P. Baas and Mr. R.M.A.P. Haegens.

Ms. S. Bollendorff (L) has finished her revision of *Mallotus* sect. *Polyadenii*. There are 8 spp., 1 new, 4 Malesian.

Ms. S. Sevilla (AH) as an Erasmus fellow studied *Agrostistachys* and *Chondrostylis* at L under the supervision of Dr. P.C. van Welzen.

For his PhD, Mr. J.W.F. Slik (L) is studying the biodiversity of *Mallotus* sect. *Hancea* and *Stylanthus* and their role as structural species in the later stages of the succession of secondary forests in SE Asia. So far three new species have been discovered, 1 in Sumatra, 2 in the Philippines. Field-work was carried out in SE Borneo, where occurrence and abundance of *Macaranga* and *Mallotus* were measured in different stages of secondary forest. He has written keys to these taxa mainly based on vegetative characters, which we hope to include in the next issue.

Dr. W. Stuppy (L) has embarked on the phylogeny of the Malesian genera of *Acalyphae* in order to verify or find generic delimitations, e.g. between *Macaranga* and *Mallotus*. He has obtained another grant from NWO (the Dutch Organization for Scientific Research) to make a revision of Malesian *Breynia* within 12 months.

Dr. P.C. van Welzen (L) has revised *Chrozophora* (1 sp.), *Doryxylon* (1), *Melanolepis* (2), and *Sumbaviopsis* (1).

*Fagaceae* — The Kew checklist was expected to appear in April 1998 (after the deadline of this issue).

*Gesneriaceae* — Mr. Q.C.B. Cronk (E) has begun accumulating material for a revision of *Cyrtandra* and would welcome specimens from anyone who is collecting in Asia.

*Gramineae* — Ms. A.G. Buitenhuis (L) started on a revision of *Eremochloa*.

Ms. R.A. Nahid (L) is revising *Mnesithea* s.l. for Malesia and Thailand.

Dr. J.F. Veldkamp (L) is preparing an annotated checklist for the Philippines (excl. the woody bambusoids).

*Leguminosae* — The illustrated legume genetic resources database contains illustrations and information on wild and cultivated taxa in the MAFF gene bank project:

In English: <http://www.gene.affrc.go.jp/image/legume.html>

In Japanese: [http://www.gene.affrc.go.jp/image/legume\\_j.html](http://www.gene.affrc.go.jp/image/legume_j.html)

*Melastomataceae* — Ms. S. Bodegom (L) has finished her revision of pseudo-stipular *Medinilla*. The group of 17 taxa with 14 new ones is restricted to Papua New Guinea, with one species occurring just over the border in Irian Jaya.

For his revision of *Medinilla* of New Guinea Dr. J.C. Regalado Jr (F) has spent a few months at L this year, also visiting K and FI.

A special issue of *Biollania* was dedicated to Dr. J.J. Wurdack on the occasion of his 75th birthday. Most contributions are Neotropical, but may be of interest to Old World students of the family as well.

*Nepenthaceae* — Dr. M. Cheek (K) & M.H.P. Jebb (DBN) are completing the Flora Malesiana account.

*Oleaceae* — The family comprises 24 genera distributed worldwide, and according to the latest review of the entire family (Johnson 1957), it is divided into two subfamilies: *Oleoideae* and *Jasminoideae*. *Oleoideae* is believed to constitute a natural, though secondarily diversified, group of 15 genera with worldwide distribution. *Jasminoideae*, on the other hand, is a heterogeneous group, chiefly distinguished by not being *Oleoideae*, and is presumed to contain some primitive genera of Asian origin. The position of the *Oleoideae* and relationships among the genera of *Jasminoideae* have remained obscure, and no molecular systematic study of the entire family has yet been published. To this end, we present a cladistic analysis based on DNA sequences of the plastid-encoded trnL intron, trnL-F spacer, and rps16 intron from at least two species (where obtainable) of

each *Oleaceae* genus. Outgroups used were four species of *Rubiaceae* and six species of *Loganiaceae* sensu lato. The consensus of most-parsimonious trees largely confirms the current taxonomy. However, one genus, *Schrebera*, clearly belongs in the *Oleoideae* instead of *Jasminoideae*, which is paraphyletic.

Relationships among the major clades of the monophyletic *Oleoideae* are resolved with the aid of ITS sequences. *Jasminum* and *Menodora* are resolved as the most basal group. *Nyctanthes*, which has been suggested to belong in *Oleaceae*, *Verbenaceae*, or elsewhere, is clearly nested within *Oleaceae*, sister to *Myxopyrum*. This research was supported by the Lewis B. and Dorothy Cullman Foundation. — E. Wallander & V.A. Albert, Botanical Institute, Systematic Botany, Gothenburg University, P.O. Box 461, SE-405 30 Gothenburg, Sweden.

*Orchidaceae* — Ms. T. Beaman (MSC) is studying the orchid flora of Sarawak. She is preparing a checklist and has added 200 new records. She hopes it will be finished by 1999, but does not know who would be publishing it.

Ms. B. Gravendeel (L) collected a set of PCR RFLP data of 10 variable chloroplast regions for her PhD project on the phylogeny of *Coelogyne*. 40 different species of 10 sections were sampled as well as representatives of 8 other genera (1 sp. each) of the *Coelogyne*inae. A morphological dataset of these 40 species was assembled. Phylogenetic analyses with the molecular and morphological data produced largely congruent cladograms. However, the resolution of the molecular data is not very high, so chloroplast and nuclear spacer regions are being sequenced to enlarge this dataset.

*Palmae* — Mr. R. Maturbongs (MAN), who has studied especially rattans of Irian Jaya, has left K.

*Podostemaceae* — A special issue of *Aquatic Botany* 57/1-4 (1997) 1–303 was dedicated to the family.

*Potamogetonaceae* — Dr. G. Wiegleb (Cottbus, Germany) and Dr. Z. Kaplan (PR) have resumed their world revision on *Potamogeton* and have nearly finished the account for the Flora Malesiana.

*Rafflesiaceae* — The type locality of *Rafflesia rochussenii* has been found again inside the Mt Gedeh-Pangrango National Park in West Java by back-packing students, members of the Nature Society Club 'Azimuth' of the Agricultural University of Bogor.

Photographs shown to me in Bengkulu have proven that there also has occurred a form of *Rafflesia arnoldii* with the 'patma' configuration as shown by *R. keithii* of eastern Borneo. This makes it likely that the latter has to be lumped with *R. arnoldii*. That species or *R. patma* may still occur in the Way Kambas National Park in Lampung, Sumatra.

Better exploration for new sites and better protection of buffer zones and existing known sites is urgently needed. Jamili Nais from the Kinabalu Park visited all known localities in Sumatra, Java, Malaya, and Kalimantan and only at a few sites could see any buds or flowers. — W. Meijer.

*Sterculiaceae* — Mr. A. Berhaman (Tropical Biology and Conservation Unit, USM) is revising the family for the Tree Flora of Sabah and Sarawak.

*Urticaceae* — For his PhD study Mr. K.A.O. Eichhorn (L) is revising the Borneo, Java, Sumatra, and New Guinea species of *Pipturus* for a better understanding of the early regeneration of tropical forests within the programme Biodiversity of Disturbed Ecosystems. Besides the systematics, population biology and ecology using selected species and localities in Borneo and Java, and their genetics (isozymes) will be looked into. Highest diversity is in New Guinea. In time the revision will be extended to cover the whole Malesian and Pacific area.

*Zingiberaceae* — Mr. J. Mood (Research Associate, Waimea Arboretum & Botanical Gardens, Hawaii) is studying Bornean (mainly Sabah) taxa. He has discovered numerous new species and several new genera including 12 or 13 new species of *Zingiber* from Sabah.

New material has been added to the Edinburgh web page on current research:  
<http://www.rbge.org.uk/gingers.html>