

## II. PROGRESS IN MALESIAN BOTANY

*(continued from p. 245)***Pteridophytes**

Dr. R.J. Johns hopes to finish his accounts for the *Dipteridaceae* and *Oleandraceae* in 2000.

Dr. H.P. Nootboom (L) has started a revision of *Osmundaceae* for the Flora Malesiana.

**Gymnosperms**

*Cycadaceae* — The treatment by Dr. D.J. de Laubenfels (Syracuse) for the Flora Malesiana is under review.

**Angiosperms**

*Annonaceae* — Dr. P.J.A. Keßler and Mr. J. Mols (L) have revised the three species (1 new) of *Monocarpia* of Borneo.

*Apocynaceae* — Dr. R.W.J.M. van der Ham (L) is involved in a multidisciplinary (macromorphology, pollen morphology, DNA analysis) study of the tribe *Alyxieae* sensu Leeuwenberg (1994), including outgroups dealing with c. 35 genera, and which is coordinated by Dr. M.E. Endress (Z).

*Araceae* — The account for the Flora Malesiana will be finished by June 2000, to be submitted for publication before the 2001 Flora Malesiana Symposium.

Mr. G.B.J. Grob (L) is working on a molecular phylogeny of the genera *Amorphophallus* and *Pseudodracontium* (*Araceae-Thomsonieae*). This PhD project occurs in close cooperation with Mr. W.L.A. Hetterscheid, who is making a phylogenetic analysis of *Amorphophallus* based on morphology. Both datasets will be combined and analysed.

*Araliaceae* — Dr. H.-J. Esser (L) and Dr. M.H.P. Jebb (DBN) continue with *Bras-saiopsis* and *Dendropanax*. Although both genera are already treated and finished for the Flora Malesiana, there is a new Malesian taxon for each, and a re-revision is useful.

*Asclepiadaceae* — Ms. J. Schneidt (Ulm, Germany) obtained her PhD at the University of Aberdeen, UK, on a revision of *Tylophora* in Malesia. Copies in ABD, L, etc. Hopefully it will be published to become more generally available.

*Caryophyllaceae* — The treatment by K. Larsen (AAU) is ready for printing.

*Cucurbitaceae* — Dr. W.J.J.O. de Wilde and Dr. B.E.E. Duyfjes (L) make good progress. In collaboration with Dr. Rugayah (Bogor) the genus *Trichosanthes* (39 species) has been published; in collaboration with Ms. C. Simmons (Guyana) a start with *Zehneria* has been made in a review of the Java species of sect. *Zehneria* (the *Z. mucronata*-group); with Mr. G. Albano (Mozambique) the treatment of the genus *Momordica* has been started with looking at the confusingly variable specimens of the *M. cochinchinensis*-complex. Recently, the new genus *Borneosicyos* (1 species) has been described, and the publication of another monotypic new genus, *Bayabusua* is expected shortly. A revision of the genus *Hodgsonia* (2 species) is ready in manuscript.

At present De Wilde & Duyfjes chiefly aim at revising the whole of *Zehneria* for the Malesian area.

*Cunoniaceae* — The treatment for the Flora Malesiana by the late R. D. Hoogland and H. C. F. Hopkins is nearly finished.

*Cymodoceaceae* — The final version for the Flora Malesiana by C. den Hartog (GRO) has been received.

*Elaeocarpaceae* — Dr. M. J. E. Coode (K) has 'finished' the species of *Elaeocarpus* for Borneo, and has now turned to the *Coilopetalum*-group from Celebes and the Moluccas.

*Euphorbiaceae* — Dr. H.-J. Esser (L), on a 6-month visitor's grant of the Netherlands Science Foundation NWO, and Dr. W. Stuppy (K) have taken up the revision of *Breynia*.

Mr. R. M. A. P. Haegens (L) has finished his world revision of *Baccaurea* (43 spp). A phylogenetic analysis, also using leaf anatomical characters, indicated the presence of two undescribed genera.

Ms. S. Sevilla (L) finished her revision of *Agrostistachys* (6 spp., 1 new) and *Chondrostylis* (2 spp.) and together with Dr. P. C. van Welzen a phylogeny of this group (subtribe *Agrostistachydeae*) was analyzed.

Mr. J. W. F. Slik (L) analyzed his East Kalimantan ecological data of *Macaranga* and *Mallotus*. Different species of these genera are good indicators for various types and levels of disturbance. Some species can also be used to estimate the time elapsed since the disturbance took place.

Dr. P. C. van Welzen (L) finished the revision of the *Chrozophoreae* [*Chrozophora* (1 sp in Malesia), *Doryxylon* (1), *Melanolepis* (2), *Sumbaviopsis* (1), *Thyrsanthera* (1)]. He made a start with the Malesian species of *Glochidion* (c. 150). A first group of c. 10 species has been revised (termed the *Glochidiopsis* group by Airy Shaw: usually long and often separate stigmas and often a reduced number of sepals).

*Gramineae* — Ms. A. G. Buitenhuis (L) finished her revision of *Eremochloa*. There are 11 species, 2 new, 1 new variety, and 1 new combination.

Ms. S. W. Tan (SINU) is studying the differences between *Imperata conferta* and *I. cylindrica*.

Ms. E. Van den Berg (GENT) finished a revision of *Hemarthria*. There are 14 species, of which 1 is new.

*Leguminosae* — *Caesalpinia pulcherrima*: Calcutta's sparrows may be taking natural remedies for malaria, say researchers from the city's Centre for Nature Conservation and Human Survival.

While studying house sparrows, *Passer domesticus*, a team led by Sudhim Senegupta discovered all their nests had been thickly lined with the quinine-rich leaves of this tree. It is uncommon at the site, indicating deliberate choice. The team say in Emu 97 (1997: 248) the sparrows also eat the leaves.

They used to line their nests with the leaves of the neem tree [*Azadirachta indica*, see Fl. Males. Bull. 9 (1985) 304]. The switch to *Caesalpinia* coincided with a malaria outbreak, and it is argued that the birds ingest the leaves to kill the parasite.

Mr. E. Kilawe (TZ, on a NUFFIC grant now temporarily in L) is revising *Uraria* (c. 6 spp) for Malesia.

*Liliaceae* — *Tulipa* spp. Universiti Putra Malaysia researchers have successfully grown tulips under local conditions using genetic engineering and biotechnological techniques. At present they are grown in a controlled environment, but the aim is to grow tulips commercially under Malaysian weather and soil conditions within two years from now (May 1999). So far there are three colours: white, yellow, red. That will be a sight to see: tulip fields in Malaysia. Now for sawahs in the Netherlands!

*Myristicaceae* — The treatment for the Flora Malesiana by W.J.J.O de Wilde (L) is now set in type for printing.

*Nepenthaceae* — The treatment for the Flora Malesiana by M. Cheek (K) and M.H.P. Jebb (DBN) is under review.

Cheek will continue his studies for the Flora of Thailand.

*Orchidaceae* — In the past 10 months Ms. B. Gravendeel (L) sequenced the MatK and ITS genes of 60 *Coelogyne* species for her PhD-project on the phylogeny of this and allied genera (Orchidaceae). Primer tests and optimisations were done during a 2-months stay in the Jodrell Laboratory of the Royal Botanic Gardens in Kew under supervision of Dr. M. Chase. The sequence data set was completed in the new molecular facilities of L. The sequence data are an addition to the RFLP data set, which was collected last year. Phylogenetic analyses with the molecular and morphological data are now being conducted to come to a total evidence analysis of the phylogeny of the *Coelogyne*inae.

*Palmae* — Dr. H. Ehara (Mie University, Japan) is a long-term visitor in K working on the genetic diversity of *Metroxylon* on a fellowship from the Japanese Academy of Sciences and the Royal Society.

Mr. A. Keim (BO) is working in K on *Orania* for his PhD.

*Potamogetonaceae* — The final version for the Flora Malesiana by G. Wiegleb (OLD) and C. den Hartog (GRO) has been received.

*Rafflesiaceae* — Ms. H. Long (K) would like to make contact with interested parties working on *Rafflesia*, both in terms of scientific research developments on the genus and in order to undertake some cultivation attempts. Currently she is looking for particular species of *Tetrastigma* to grow and eventually try some inoculation or grafting experiments. Contact her at K (or e-mail to H.Long@rbgkew.org.uk).

*Urticaceae* — Mr. H.C. den Bakker (L) has finished his revision of *Maoutia* which with *Gibbsia* has to be included in *Leucosyke*.

*Zingiberaceae* — Ms. A. Shafreena (UKM) is especially interested in the genus *Scaphochlamys*.

*Zosteraceae* — The final version for the Flora Malesiana by C. den Hartog (GRO) has been received.