## IV. RESEARCH AND PUBLICATIONS

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ARTEMIS — An identification guide of especially tropical woody plants (trees, shrubs, lianas) has been provided by R. Keller (botanist) and B. Carpentier (programmer) at the Lausanne University (Switzerland). See http://www.tropicalbotany.net

It includes illustrations for the explanation of concepts and taxonomic characters, especially non-reproductive ones.

Information on the backgrounds for conservation and rejection of botanical names is difficult to find. The indefatigable Dr. D.H. Nicolson (US) has scanned the literature since 1892 and has amassed data on 4,432 proposals. These can be searched at http://persoon.si.edu/codes/props/index.cfm. Especially in the case of a non-acceptance of a proposal this may prevent, or at least save a lot of time in the event of another attempt. See also D.H. Nicolson, Taxon 49 (2000) 549-554, where the site is given as http://persoon.si.edu/codes/props/

The Flora of Cebu Checklist by D. & L. Bicknell has been finished. Bicknell's flora checklist holds 1467 species (165 families) of Spermatophyta and 129 species (24 families) of Pteridophyta. The checklist is placed on the web page of the USC Botany research Group: http://www.geocities.com/tokyo/springs/6295/david.html

The USC-Botany Research Group, Cebu came up with a web page on the Biodiversity of Cebu: http://www.geocities.com/tokyo/springs/6295/index.html

It contains the following fields:

- A:1. Checklists, e.g.:
  - a. The above mentioned checklist of Bicknell & Bicknell on vascular plants of Cebu.
- b. Endemic plant and animal species of Cebu. This list of endemic species is being prepared. The status as of now: 5 plant species endemic to Cebu, and 8 animal species, plus 16 subspecies endemic to Cebu.
- 2. Information about our habitat restoration projects, biology data on indigenous species, forestry concepts regarding indigenous tree species.
  - 3. Remote sensing research updates and aerial surveys.
  - 4. Research opportunities, cooperation opportunities.

**B**: A two-year flora and fauna survey of protected areas on Cebu will be accomplished in May 2000. The project was commissioned by the Department of Environment and Natural Resources of Region 7 of the Philippines.

C: Habitat restoration project.

A large habitat restoration project was launched in April 2000.

A 70 ha area in the Kotkot watershed was provided by the AYALA foundation. The project aims to rebuild the habitats of all endangered species of the island. For each species a habitat concept was developed. Rare plant species will be collected, propagated, and planted according to the habitat design.

D: Multi-species, multi-location reforestation project with indigenous tree species:

Twenty plantations with mixtures of indigenous trees were set up and are monitored on a regular basis. The aim is to find more data on their biology.

General findings so far are: Many indigenous species showed remarkably good performances regarding germination rates, growth rates, and field survival. The biggest obstacles to the regrowth are farm animals and careless humans. Species that are already endangered in nature, however, showed mostly poor performance, i.e. highest mortality rates and lowest growth rates. Very few pest infestations were observed. One project had low growth rates due to permanent wind exposure.

Trees planted in existing forest or shrub vegetation showed extremely low growth. The results of the study make certain forestry concepts questionable (reforestation of rain forest, improvement planting concepts).

Plant Systematics and Biodiversity Malaysia is a quarterly in-house newsletter dedicated and devoted to the plant systematics and biodiversity in Malaysia. Its mission is to disseminate news from the Plant Systematics and Biodiversity Research Group Malaysia (PSM 2010). Editor-in-Chief is Dr. A. Latiff, latiff@pkrisc.cc.ukm.my

In the second issue of 8 pages (April 2000) news is given on recent publications, new taxa, research notes (which show the Group is a bee-hive of activity), and three articles: structure of logged lowland dipterocarp forest in the Langat Basin, Selangor (B.E. Elbushari), relations between *Tetrastigma* and *Rafflesia* (A. Latiff), and systematic and ecological studies in *Garcinia* (N. Saleh).

The Revised handbook to the flora of Ceylon XIV contains 35 small families by several authors: Agavaceae (D. Philcox), Alismataceae (D.M. Dassanayake & A. Weerasooriya), Alliaceae (D.M. Dassanayake), Anaryllidaceae (D.M. Dassanayake), Anthericaceae (D.M. Dassanayake), Arecaceae (N. de Zoysa), Asparagaceae (D.M. Dassanayake), Berberidaceae (D. Philcox), Bromeliaceae (A.S. Seneviratne), Cannaceae (R.W. Read), Colchicaceae (D.M. Dassanayake), Commelinaceae (R.B. Faden), Convallariaceae (D.M. Dassanayake), Cymodoceaceae (B.M. Wadhwa), Dracaenaceae (D.M. Dassanayake), Hanguanaceae (D.M. Dassanayake), Hyacinthaceae (D.M. Dassanayake), Hypoxidaceae (D.M. Dassanayake), Iridaceae (D.M. Dassanayake), Limnocharitaceae (D.M. Dassanayake), Maranthaceae (D.M. Dassanayake & A. Weerasooriya), Musaceae (T. Silva), Najadaceae (A. Weerasooriya),

Phormidaceae (D.M. Dassanayake), Pontederiaceae (D.M. Dassanayake), Potamogetonaceae (B.M. Wadhwa), Smilacaceae (D.M. Dassanayake), Taccaceae (A. Weerasooriya), Trichopodaceae (A.H.M. Jayasuriya), Triuridaceae (A. Weerasooriya), Typhaceae (A. Weerasooriya), Xyridaceae (D.S.A. Wijesundara), Cycadaceae (B.M. Wadhwa), Pinaceae (B.M. Wadhwa).

The Garden's Bulletin Singapore (51, 1999: 127–139) has published a speech by the late Dr. R.E. Holttum, **Tropical botanic gardens**, past, present and future that was delivered at the International Symposium on Botanic Gardens of the tropics in Penang, December 1984, and is still very much worth reading.

It also contains a brief history of the Singapore Botanic Gardens Herbarium, now 125 years old, with some interesting background on the present building that usually does not enter official accounts. It is now, however, filled to the roofs with the cupboards nearly bursting their seams. A new building is urgently needed, as anyone can observe who has spent some time working inside. Plans are in the offing for a new one, but bureaucratic machinery is just as slow as anywhere else.