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A Report to the James Rennie Bequest 's Committee

Training Course: Tropical Plant Families of Southeast Asia

Rijksherbarium/Hortus Botanicus (RHHB)

University of Leiden, the Netherlands

23 March - 9 April 1998

Background Information

The Rijksherbarium/Hortus Botanicus(RHHB) combines two institutions with a long history. The Leiden Botanic Garden was founded in 1590 as the earliest scientific garden in the Western Europe. The Garden was to play an important role in botanical research and teaching, and was also instrumental in the introduction of many ornamental plants from the Mediterranean and the Far East to the Netherlands. In 1988 it was united with the Rijksherbarium to form the first "Research Institute" within the Faculty of Mathematics and Natural Sciences of Leiden University.

The Rijksherbarium was founded in 1829 by Royal Decree of King William I. Its first residence was in Brussels. C.L.Blume, an outstanding botanist and pioneer of Malesian botany, was its first director. In the early day of the separatist uprising in Belgium in 1830, the great explorer of Japan, Philipp Franz von Siebold, and the director's assistant, J.B.Fischer transferred the Rijksherbarium collections to Leiden. Here the institution was to develop into what it still is today: an active research centre focusing both on European and Indo-Malesian plants diversity, thereby facilitated by an ever-growing collection of great international importance. With its current collection of over 4 millions plant specimens and a tenured staff of 18 scientists, 20 Ph.D. students, a varying number of graduate students and numerous honorary and contract researchers, the Rijksherbarium/Hortus Botanicus is one of the foremost institutes of systematic botany in the world, and an important core institute of the National Research School 'Biodiversity'. It is fully committed to the three main tasks outlined in the Systematics Agenda 2000: 1) to discover 2) to help understand plant biodiversity, and 3) to manage and disseminate biodiversity information.

The Objective

Southeast Asia is one of the hotspots of global biodiversity. It contains more than 40,000 vascular plant species with a density ten times higher than the European flora. The region is home to many well known and important plant groups, for example, rice, ginger, rattan, banana, rambutan and timbers (Dipterocarpaceae) . The botanical wealth of Southeast Asia is being documented by the RHHB, Flora Malesiana project. To accomplish its mission, the RHHB has set up this course for the knowledge transfer of plant diversity.

The Organisation

Twenty-four economically and ecologically important flowering plant families, and eight fern families were studied in the course (please see an appendix). There were also some lectures, i.e. vegetation lecture, anatomy lecture, pollen lecture, collecting lecture, seed lecture and a demonstration of interactive keys. Two families (each with normally 3 genera) were at least examined daily.

The Evaluation

At the end of the course, there was a test in which comprised 30 different genera of herbarium specimens. They were put on a big round table for everyone observing. Its aim was that everyone should be able to identify the plant by its generic name and give some morphological data. There were also questions in the lectures given during the course.

The Achievements

I have learnt a lot of the distinguished characters of many selected plant families in Southeast Asia. For most of these characters, you would have spent a lot more time finding out that they are particularly useful and this is important for recognising their bearer. It is a much better way of learning all these characters by the guidance of specialists. It would then be easier to go into deeper details in order to confirm or deny the family or genus which you are thinking of without feeling that you do not really know what you are looking for.

In the course, the main resource of study was herbarium specimens which I have never really studied before. I was mainly taught and studied to identify plants by its living materials while I was an undergraduate student. It gave me another experience that is valuable and complementary to my previous understanding. Some might say, it is easier for one to recognise the plant by its herbarium sheet. On the other hand, many taxonomists prefer to see a living plant. I, myself, think that they are both important, however, it very much depends on the material available. Therefore, the course confirmed my belief.

Besides the actively intellectual atmosphere in the class, I felt comfortable and at ease being there. Friendship had been growing every day by a target that everyone must be able to name the plants (in the test) at the end of the course. The class was divided into pairs. My partner was an Englishman named Benedict who is currently a visitor at RBGKew. We worked together very well. I also made good friends with some of my classmates. We all enjoyed doing the course very much.

In conclusion, the course gave me two main things. Firstly the valuable knowledge itself was transferred (hopefully) to the participants. Secondly it also gave me many invaluable, warm and unforgettable memories. Finally I would like to thank the committee's support. It made it possible for me to be there.



A Photo of participants

Appendix 1 The Plants in the course

Ferns

1. Aspleniaceae
2. Cyatheaceae
3. Dryopteridaceae
4. Grammitidaceae
5. Hymenophyllaceae
6. Pteridaceae
7. Thelypteridaceae
8. Polypodiaceae

Flowering Plants

1. Anacardiaceae (*Buchanania, Campnosperma, Gluta, Mangifera*)
2. Annonaceae (*Artabotrys, Mezzettia, Uvaria*)
3. Apocynaceae (*Alstonia, Tabernaemontana, Aganosma*)
4. Araceae (*Alocasia, Amorphophallus, Pothos*)
5. Bombacaceae (*Ceiba, Durio, Neesia*)
6. Burseraceae (*Canarium, Dacryodes, Santiria, Triomma*)
7. Dipterocarpaceae (*Dipterocarpus, Hopea, Shorea, Vatica*)
8. Euphobiaceae (*Bridelia, Croton, Macaranga*)
9. Guttiferae (*Calophyllum, Cratoxylum, Garcinia*)
10. Lauraceae (*Cinnamomum, Endiandra, Litsea*)
11. Leguminosae (Papilionoideae: *Callerya, Derris, Fordia*, Caesalpinioideae: *Bauhinia, Dialium, Sindora*, Mimosoideae: *Archidendron*)
12. Meliaceae (*Aglaia, Chisocheton, Dysoxylum*)
13. Myristicaceae (*Horsfieldia, Knema, Myristica*)
14. Myrtaceae (*Melaleuca, Syzygium, Tristaniopsis*)
15. Nepenthaceae (*Nepenthes*)
16. Orchidaceae (*Coelogyne, Dendrobium, Dendrochilum, Paphiopedilum*)
17. Palmae (*Areca, Calamus, Korthasia, Pinanga*)
18. Poaceae (*Centotheca, Eleusine, Oryza*)
19. Rhizophoraceae (*Bruguiera, Pellacalyx, Rhizophora*)
20. Rubiaceae (*Ixora, Neonauclea, Uncaria*)
21. Rutaceae (*Citrus, Melicope, Acronychia*)
22. Sapindaceae (*Guioa, Nephelium, Dimocarpus*)
23. Sapotaceae (*Pouteria, Madhuca, Palaquim*)
24. Zingiberaceae (*Curcuma, Alpinia*)



Rijksherbarium/Hortus Botanicus University of Leiden, The Netherlands

On behalf of the Board of the Research school BIODIVERSITY

CERTIFICATE

Name: Chatchai Ngamriabsakul

Date of birth: 24 November 1974

has successfully completed the course: Tropical Plant Families
of Southeast-Asia

Period: 23 March - 9 April 1998

Credits: 120 hours

Date: 9 April 1998

Teacher: Dr. P.J.A. Kessler

Signature: 

