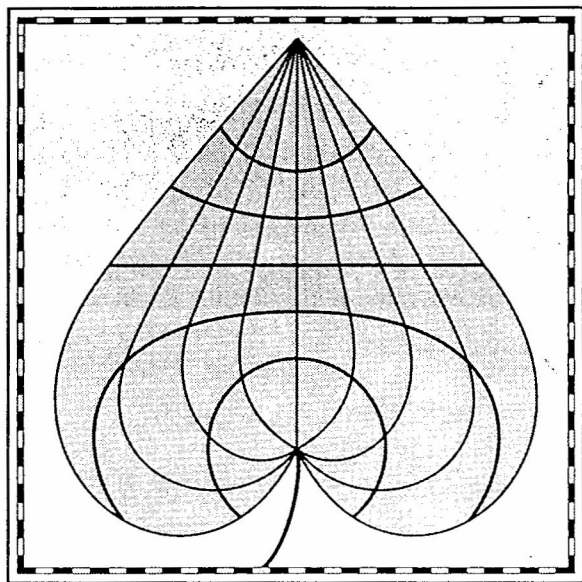


XVI INTERNATIONAL BOTANICAL CONGRESS

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ABSTRACTS

1117 THE INTERNATIONAL PLANT NAMES INDEX, A DISTRIBUTED DATABASE OF SEED PLANT NAMES. E. Nic Lughadha, Royal Botanic Gardens, Kew.
The International Plant Names Index (IPNI), a distributed database of names and basic bibliographical data of seed plants, will go online at the end of 1999. Based on three databases, Index Kewensis, the Gray Card Index, and the Australian Plant Names Index, merging is underway and will be accompanied by preliminary standardisation and editing using TL2, BPH/2, etc. IPNI includes names at all hierarchical levels and information on the types of many names. Errors of either commission or omission can be sent directly to IPNI; changes submitted will appear in real time, after checking by editors will, whether accepted or not, become part of the permanent record of IPNI. IPNI, freely available on the web, queryable in a variety of ways, and kept current, will be an essential resource for all using names and will obviate the need to recheck basic bibliographic information.

1118 A BRIEF INTRODUCTION OF CHINESE BIODIVERSITY INFORMATION SYSTEM Keping Ma and Liqiang Ji (Biodiversity Committee, the Chinese Academy of Sciences, Beijing, 100093)
Biodiversity information management is a key issue for biodiversity conservation. Chinese Biodiversity Information System (CBIS) is a nation-wide distributed information system that collects, arranges, stores and disseminates data/information related to biodiversity in China. It consists of a center system, 5 disciplinary divisions and dozens of data sources. The data sources cover 15 institutes in CAS and include botanical gardens, field research stations, museums, cell banks, seed banks and culture collections. The content of CBIS consists of databases, model bases and expert systems.



1119 THE INTERNATIONAL PLANT NAMES INDEX A BASIC RESOURCE FOR PLANT TAXONOMY J.R. Croft, N Cross
The documentation of plant names and their correct application is basic to the understanding and management of global biodiversity. Several major international programs need such lists, but the scale of the enterprise - the number of names, the complexity of contemporary and historical taxonomic and nomenclatural practice, and a general lack of resources in this area - prevents any one organization from completing the task. Using the Internet and replicated distributed database technology, IPNI, combining the data of Index Kewensis, the Harvard Gray Card Index and the Australian Plant Name Index, demonstrates the collaborative maintenance of a publically accessible global list of plant names between three institutions on three continents. This technology, architecture and management model can be scaled to a truly globally owned and maintained index to plant life on earth.

1120 PalDat—A PALYNOLOGICAL DATABASE Weber, Martina & Buchner, Ralf, Dept. Ultrastruct. Res. & Electron Microscopy, Inst. Bot., University Vienna, Austria
PalDat is a palynological database, developed in MS Access 97. The database includes a detailed description of the pollen grain (34 different criteria), images (LM, SEM, TEM), literature on each genus, and an illustrated terminology with photographs. Throughout the database standardized descriptive terms are used. Search forms allow to query the database in any combination of pollen grain characters, including images and literature. Moreover, a number of printouts are available, e.g., standardized pollen grain description, literature and images for each genus, family-key, herbarium labels etc. There is no limitation in database size, since picture files are not part of the database itself, but can be called up from any hard disk, CD-ROM or network drive.

1121 MIAMI UNIVERSITY DENDROLOGY EXPERT SYSTEM Roger D. Meicenheimer, Botany Dept. Miami Univ. Oxford OH 45056
The Miami University Dendrology Expert System (MUDES) consisting of six multiple entry interactive keys to Angiosperm and Gymnosperm tree species, wood genera, and tree diseases common to southwestern Ohio was developed using XID random access expert system authoring software. Results of comparison tests between students using alpha versions of MUDES and students using paper dichotomous keys (DKs) indicate that MUDES is as accurate with regard to student identification of unknowns as DKs, and that students using the MUDES identify a given specimen on average 113 seconds faster than their colleagues using DKs. Primary pedagogic advantages of the MUDES include the ease with which undergraduates can become engaged in expanding the data bases and enrichment of the students' understanding of species characteristics. Details at <http://www.cas.muohio.edu/~meicend/mudes/lttep.htm>

1122 DATABASE OF PLANT BIODIVERSITY FROM BRAZILIAN AMAZONIA. Regina Martins-Da-Silva (IAN Herbarium, Brazil); Ricardo Secco; Denis Filer; Gracilda Ferreira
A database documenting Amazonian plant biodiversity is being developed by assembling botanical collection data from regional Herbaria. Two of the most important Herbaria in the Region are MG and IAN together holding some 320.000 samples collected from Amazonia. The database is being build using BRAHMS (Botanical Research And Herbarium Management System). Each data entry workstation is using a standard data entry format with access to shared collector, taxonomic and geographic dictionaries. After entry to simple spreadsheet-like files, the data are validated and imported to the core BRAHMS database. Here, the data can be processed to prepare curatorial, monographic and floristic outputs including loan forms, taxonomic treatments and distribution maps respectively. The database, currently holding c.60.000 collections. (SUDAM, DFID).