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Nancy R. Morin and Judith M. Unger,
co-editors

FLORA OF NORTH AMERICA NEWS

VOLUME 3 IS PUBLISHED

Volume 3 contains 590 pages including the index, 100 illustrations, and 868 distribution maps covering the first 32 families of dicotyledonous angiosperms occurring in North America north of Mexico. Some important groups are: oaks, elms, plane trees, poppies, buttercups, delphiniums, magnolias, birches, and walnuts. The volume may be purchased by calling the publisher, Oxford University Press, at 800/451-7556.

Some statistics showing how research for this project makes a significant contribution to the body of botanical knowledge:

(in the past 20 years)
--13 species in volume 3 had been published as new (7 are Ranunculaceae);
--4 species in volume 3 were treated previously, as infraspecies (var./ssp.);
--10 infraspecies, recognized as such in volume 3, were described as new;
--14 additional infraspecies, recognized as such in volume 3, were reduced from specific rank to infraspecific rank;

--of the 128 genera treated, 17 are endemic, 21 are introduced, thus of the 107 native species, 16% are endemic to the FNA area;
--of 741 species treated, 436 are endemic, 92 are introduced, thus of the 649 native species, 67% are endemic to the FNA area;

--Lardizabalaceae and Casuarinaceae are not native to the FNA area.

See chart on next page for more details.

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The **Management Committee** of FNA met on 2--3 June, in St. Louis. Managing Editor Jim Zarucchi also attended. There was general agreement that this was a very good meeting, one of the best we have had. We left St. Louis feeling good about the future of the project.

Items discussed were: FNA Intranet is now being tested by Barbara Thiers and others. We received a demonstration of its capabilities, and there will be another demonstration at AIBS in Montreal. FNA is in good shape fiscally through 1998. Beyond that date, we must vigorously pursue additional funding; long-term funding strategies, staffing, satellite centers were also discussed. The FNA web site also received attention; the position of "Webmaster" is newly-occupied by Mark Spasser. We also received a tour of the impressive new research building.

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The Flora of North America (FNA) project is a cooperative program to produce a Flora of the plants of North America north of Mexico. The FNA Newsletter is published quarterly by the Flora of North America Association to communicate news about the FNA project and other topics of interest to North American floristic researchers. Readers are invited to send appropriate news items to FNA Newsletter, P.O. Box 299, St. Louis, MO 63166, U.S.A.

Transition on the MC: Alan Smith's term as Chairperson expires at the end of the EC meeting in October; the terms of George Argus and Dave Murray expire at the same time. John McNeill and Bob Kiger have consented to serve as their replacements, and they will be recommended by the Management Committee to the Editorial Committee in October. In addition to Nancy Morin as Convening Editor, other members of the MC (Ted Barkley, John Schnase, Alan Smith, and Barbara Thiers) will continue for at least another year.

The **Editorial Committee** will meet October 19th and 20th, following the Missouri Botanical Garden Annual Fall Symposium.
-- Alan Smith, Chairman, Management Committee

Table 1. Statistics for Volume 3 of Flora of North America

Family	Total Genera	Total Species	Endemic Genera	Endemic Species	Introduced Genera	Introduced Species	Species and Intraspecies of Conservation Concern
Magnoliaceae	2	9	0	9	0	0	1
Annonaceae	3	12	2	10	0	1	3
Canellaceae	1	1	0	0	0	0	0
Calycanthaceae	1	2	0	2	0	0	0
Lauraceae	9	13	0	7	1	1	3
Saururaceae	2	2	0	1	0	0	0
Piperaceae	2	9	0	0	1	4	0
Aristolochiaceae	3	28	1	22	0	2	4
Illiciaceae	1	2	0	1	0	0	1
Schisandraceae	1	1	0	1	0	0	0
Nelumbonaceae	1	2	0	0	0	1	0
Nymphaeaceae	2	17	0	8	0	2	2
Cabombaceae	2	2	0	0	0	0	0
Ceratophyllaceae	1	3	0	1	0	0	0
Ranunculaceae	22	285	1	184	5	30	50
Berberidaceae	8	33	1	23	1	5	5
Lardizabalaceae	1	1	0	0	1	1	0
Menispermaceae	4	5	1	2	0	0	0
Papaveraceae	17	63	5	28	4	12	9
Fumariaceae	4	23	0	17	1	3	3
Platanaceae	1	3	0	0	0	0	0
Hamamelidaceae	3	5	1	3	0	0	0
Ulmaceae	4	19	1	7	0	3	1
Cannabaceae	2	3	0	0	0	2	0
Moraceae	7	18	1	2	4	13	0
Urticaceae	8	21	0	2	2	7	0
Leitneriaceae	1	1	1	1	0	0	1
Juglandaceae	2	17	0	12	0	0	2
Myricaceae	2	8	1	6	0	0	0
Fagaceae	5	97	1	62	0	1	11
Betulaceae	5	33	0	25	0	1	3
Casuarinaceae	1	3	0	0	1	3	0
Totals	128	741	17	436	21	92	99

The FNA Organizational Center (OC) is now able to store and distribute all electronic documents relating to the FNA editorial process by way of the **FNA Internet Information Service** (FNA IIS) (http://www. FNA.ORG). This includes texts, spreadsheets, maps, illustrations, and anything else that exists in an electronic form. Access to this material is password protected so only those who have a need to know can see or download documents. All that is needed is a current World Wide Web browser and a connection to the Internet.

Until now, there have been two major barriers to making simultaneous progress on various taxonomic groups. First, FNA OC staff have had to give full attention to volumes as they are due to OUP for book publication. Because of the scale of FNA, the duplication and mailing of manuscripts, illustrations, etc. for review has been extremely time-consuming. (We have weeks where over 10,000 pages are copied

and mailed out!) This process has made it virtually impossible to think about future volumes. The second barrier relates to the first. Authors have reasonably been reluctant to spend time preparing treatments that may languish in a file in the FNA OC for years

Our hope is that the FNA IIS will help us break these two bottlenecks. Using the Web to distribute materials frees up human and other resources within FNA OC that can be applied to other treatments and activities. It also allows recipients of the material to view or download documents at their convenience. Some people may wish to view them directly on their computers, while others--perhaps the majority--will prefer to print them out. Both are possible from a Web browser.

The most important implication, however, is that now FNA has a community, Web-based environment to store and retrieve all the materials it needs to do its work. Now authors can submit treatments which can immediately be placed online in a controlled-access area of the FNA IIS available to editors and reviewers who can move the treatments along through the FNA process. There is no technical reason now to wait; FNA should be able to proceed full-speed ahead with materials as they are received regardless of where treatments appear in the published volumes.

This "uncoupling" of electronic treatments from paper publication and the bottlenecks that traditional publishing imposes on a project of this size is one of the most important steps that NSF has asked us to accomplish under the current grant. Our goal is to significantly improve throughput in the FNA project by allowing the parallel edit and review of treatments. We think we've made a lot of progress in the last year toward this goal.

In order to make this really function, we have had to work with OUP to develop new publication procedures. We have agreed that treatments should be moved through the process as quickly as possible regardless of their scheduled appearance in FNA volumes. As treatments are completed (edited and revised), they will be published on FNA's Web; when all the treatments that go into a particular volume are completed then that volume will be published. Thus, an author who has completed a treatment can now expect it to be reviewed, edited, and published electronically quickly regardless of its place in the sequence of printed volumes.

We have begun to test this approach with several authors, reviewers, and editors involved with treatments for Volume 22, 23, and 24. The FNA IIS will be continually refined as we gain experience. The editorial machine of FNA has most of the pieces in place and is ready to roll!

FNA participants will be hearing more about these developments in the near future. We hope everyone will be as excited as we are by the prospect of moving forward with FNA, finishing up treatments, and getting on with the rest of their lives! We expect that these steps, and enhancements to our procedures over the next year, will dramatically increase the productivity of the FNA project and make its contributions to the scientific community and others more widely available. The demand and interest is there; perhaps we can now deliver!

--Nancy R. Morin and John L. Schnase

Flora of North America project invites you to visit us at the **American Institute of Biological Sciences Annual Meeting** in Montréal from 3-7 August 1997. We will be having a table with the societies where you can see a computer demonstration and check out the latest in FNA **T-shirts** (probably a herbaceous species this time).

FNA regional reviewers meeting will be held on Monday from 11-12 in Convention Center 409C. Regional reviewers are asked to bring their comments and express their concerns. Editors and staff will be listening for ideas that help the regional review process move along more efficiently. Everyone is invited to a **reception** on Monday from 4-6 p.m. in Room 611 where you can find out more about the project and informally meet some authors, reviewers, and editors. Hors d'oeuvres will be served.

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Center for Botanical Informatics -- Collaborative Programs in Bioinformatics - Virtually all environmental and conservation efforts rely on high-quality information about life on our planet. In order to address the challenge of gathering and managing such information, in 1995 the Missouri Botanical Garden created the Center for Botanical Informatics (CBI). The term "informatics" refers to computing and communications support for information-intensive work. CBI combines research programs in computer science, botany, biodiversity, and social sciences.

John Schnase, CBI's director, lists three programmatic areas that will be developed within the Center over the next five years: (1) applied research focusing on botanical and scientific informatics, (2) formal and informal education in applied bioinformatics, and (3) technology transfer of information products and services into the private sector for commercial development and wider dissemination within the global scientific community.

A major focus of CBI's research activities is the development of collaborative relationships with institutions and projects that can provide opportunities to develop and test innovative strategies and software. Major "clients" at the Garden include the Flora of North America (FNA), the Flora of China (FOC), and Flora Mesoamericana. In the case of FNA, CBI is developing Internet-based communication and editing tools to enable that project to proceed at a much faster rate than has been achieved up until now, using traditional paper-based editing methods. Under the new scheme, manuscripts and other documents can be submitted, edited, discussed, and reviewed electronically using Internet technology without the need to mail paper copies. This is a critically important issue because FNA has nearly 800 contributors who live and work throughout North America.

Another exciting research area for CBI and the Garden is the establishment of a social informatics component. Social informatics deals with the way people and computers interact in a work setting. **Kay Tomlinson**, Assistant Director of CBI, and **Mark Spasser**, Bioinformatics Coordinator, spearhead this new effort. A collaborative relationship is being developed with researchers at the School of Library and Information Science at the University of Illinois at Urbana-Champaign.

Also, in January, the Garden and CBI initiated a cooperative research agreement with the Laboratory of Interactive and Cooperative Technologies (ICT) of the Universidad de las Américas-Puebla, México (UDLA). The partnership will allow computer specialists in both groups to explore technological solutions to current problems in managing large-scale information projects such as FNA and FOC. The group is headed by **Alfredo Sánchez**, an assistant professor at the Department of Computer Systems Engineering of UDLA.

In keeping with its mission of bioinformatics education, this year CBI has organized the first "Summer Training Program in Biological Informatics" (STPBI'97), during June and July. The program includes lectures in systematics, taxonomy, and biodiversity information management to be presented by researchers working at the Missouri Botanical Garden and other institutions. In addition to Sánchez, four other members of the ICT research team participate in STPBI'97: Maricarmen Amézquita, assistant researcher; César Flores, a master's level graduate student; and Cristina López and Jorge Cabrera, advanced undergraduate students.

STPBI'97 provides opportunities for participants to work on specific informatics problems relating to the Flora of North America (FNA) and Flora of China (FOC) projects. The students will continue research work started as theses projects at UDLA and will develop prototype software tools to address problems within the FNA and FOC initiatives.

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The **Bryology Internet Information Services** (BIIS) was demonstrated to the FNA Management Committee members when they met in early June in St. Louis. The response of Management Committee was very positive, and the BIIS will be

deployed shortly for use by project bryologists, serving as a testbed for the interface. The BIIS is an entirely Internet-based approach to producing the bryophyte volumes. The BIIS is being designed to allow bryologists to author, edit, and review their treatments exclusively via the Internet, thereby reducing the number of poorly-coordinated inter-author, inter-editor, and inter-reviewer relationships coming from the use of traditional publishing methods and hopefully improving publication rate, project management, and cost savings.

As Bioinformatics Coordinator, one of my main tasks and interests is to look closely at how people actually use information systems in real-life (natural) settings to do their actual work. I believe that it is essential to understand the needs of and tasks performed by users to develop truly usable and useful groupware technology—that is, information systems used by communities sharing a common object of work or goal. Thus, it becomes equally essential that information technology systems be studied in the context of their use in real-life work situations. Accordingly, with the help of **Barbara Thiers**, I plan to monitor the use of the BIIS by FNA bryologists to closely examine how they actually use the interface to accomplish their work.

The purposes of my work with the BIIS are, at least, twofold. First, I hope that the data I will gather will help all of us better understand the actual use of such systems as the BIIS, as opposed, for example, to how they have been designed to be used. By taking work practices seriously and studying information technology within its context of use, I hope this research can contribute to a better understanding of how information technology can better support people in their actual work. Second, and perhaps of more immediate interest, by closely looking at how the bryologists actually use the BIIS in the conduct of their work—producing the bryophyte volumes—I hope to learn how the BIIS can be improved for subsequent use by bryologists, as well as for the deployment throughout the FNA project. –Mark Spasser, Center for Botanical Informatics, MBG, 314/577-0251, <mspasser@cbi.mobot.org> --ed. Questions about Web-related matters, <www.fna.org>, go to Mark because he is also the FNA webmaster.

ONGOING FLORA PROJECTS

Flora of the San Juan Basin (Four Corners Area) is a project of the researchers at San Juan College, along with Rancho Santa Ana Botanical Garden and Fort Lewis College. This little known and undercollected area of North America contains portions of New Mexico, Arizona, Utah, and Colorado, covering an area the size of Connecticut. It includes many endemics and rare species from a variety of life zones and elevations.

Treatments and collections are still needed for many taxa. Most genera will be illustrated with line drawings. Publication costs are covered for publication by 2003. For additional information call Ken Heil or Linda Reeves at 505/ 326-0230 or write, for a contributor's packet, to Herbarium, M/S/HC, San Juan College, 4601 College Boulevard, Farmington, NM 87402.

NEWS FROM HERBARIA

South Carolina Plant Atlas is now available on the web at <http:cricket.biol.sc.edu/herb> From the first page of the web site, "the purpose of this Atlas is to show, on a county by county basis, the distribution of all native and naturalized ferns, fern allies, gymnosperms, and angiosperms of South Carolina." --John Nelson, University of South Carolina herbarium

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Wood Collection Data from U.S. National Herbarium Now Available Electronically - Label information associated with the Wood Collection of the U.S. National Herbarium (USw) is now available electronically. The Wood Collection of the Smithsonian Institution's National Museum of Natural History contains approximately 42,500 specimens representing almost 3,000 genera. In addition, approximately 5,000 microscope slides are associated with the wood collection. The label information associated with these collections has been

WAIS indexed and interested parties are encouraged to access the information electronically at <gopher:\\nmnhgoph .si.edu>, where they should first select “Botany at the Smithsonian Institution” and then “Wood Collection (U.S. National Herbarium, US)”. This will give a choice to read either more information about the collection or initiate a search of the database. The “about” file provides information regarding formal requests for material for sectioning. —Laurence Dorr (US), e-mail: mnhbo059@sivm.si.edu.

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Dr. Leigh Johnson, Rancho Santa Ana Botanic Garden, has been appointed Curator and Asst. Professor of Botany at North Carolina State University (NCSU). He replaces Dr. James W. Hardin who retired 30 June 1996 after 39 years at NCSU.

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PUBLICATIONS

The long-awaited book by Armen L. Takhtajan, **Diversity and Classification of Flowering Plants**, has been published by Columbia University Press. The 643 pages are filled with details about the flowering plants as defined by this remarkable scholar who has been exploring the higher levels of classification of the Magnoliophyta since 1942. In this version, Takhtajan recognizes within the division or phylum Magnoliophyta two classes, Magnoliopsida and Liliopsida. The former is defined to include "11 subclasses, 458 families, almost 10,500 genera and no less than 195,000 species" while the later encompasses "6 subclasses, 57 orders, 133 families, more than 3,000 genera, and about 65,000 species."

The book is a valuable resource of up-to-date information, solid ordinal descriptions, diagnostic family descriptions in the form of expanded keys, and plenty of references to members of each group. Unfortunately, there are no keys to the subclasses or superorders. While Takhtajan states that "I am well aware that I may be regarded as a 'splitter'" he notes that by more narrowly defining taxa it becomes easier to "to create a system consisting of better defined monophyletic units."

Among the major changes adopted here, as compared to earlier volumes by the author, Takhtajan begins the Liliopsida with the Liliidae as the late Rolf Dahlgren championed in 1985. This is followed by the Commelinidae (including Cronquist's Zingiberidae) and then the Arecidae. The latter taxon he properly restricts just to Arecaceae, placing the Araceae (along with Pistiaceae and Lemnaceae) in a newly established subclass Aridae. In between these two subclasses are the Alismatidae and Triuridiidae, fairly much as traditionally defined.

As for the Magnoliopsida, Takhtajan maintains the Magnoliidae, but separates from it the Nymphaeidae and the Nelumbonidae as new subclasses. He retains the newly established Piperidae within the Magnoliidae, thereby not segregating the so called "paleoherbs" from the more distantly related, woody true magnolioid families. He continues to maintain the herbaceous Ranunculidae for the more advanced members of Cronquist's broader Magnoliidae. By suppressing the Piperidae and maintaining only two classes, he continues the tradition of considering the Magnoliopsida a monophyletic group for which there is limited support.

The remaining subclasses of Magnoliopsida are much as he has defined them previously. The circumscription of the Hamamelididae (spelled correctly, unlike Cronquist) is narrowed to exclude the Urticanae which are properly placed in the Dilleniidae. Here too Takhtajan accepts the Cornidae, defining this taxon to include a series of families variously placed in the Rosidae and the Asteridae by Cronquist and even Takhtajan until recently. As he has done previously, Takhtajan restricts the Asteridae to only a few family groups - Campanulanae and Asteranae.

Thirty-three validly published innovations are presented. Seventeen additional names were proposed as new but were not validly published. Two family names are placed into "current use:" Ixerbaceae Griseb.

(Grundr. Syst. Bot.: 122. Jan-Jun 1854) and Pistiaceae Rich. ex C. Agardh (Aphor. Bot. (9): 130. 19 Jun 1822).

The book could have used some additional editing as the typographical errors are more numerous than one usually finds in books from Columbia University Press. From my point of interest, the family nomenclature is well done; some minor modifications recently noted were not possible to include at the last moment such as Griseliniaceae J.R. Forst. & G. Forst. ex A. Cunn. (1839), but this is picky!

All in all a good contribution in the Takhtajan style. By focusing attention on the smaller families he will force modern researchers to be more thorough in their surveys. While many of his families likely will not survive (e.g., Pistiaceae and Lemnaceae are well included in Araceae), the fact that he has noted their potential significance is important. --James L. Reveal, Norton-Brown Herbarium, University of Maryland

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Centers of Plant Diversity - Volume 3 The Americas, of the three volume series Centers of Plant Diversity: A Guide and Strategy for Their Conservation is now available. This three-volume work, published by WWF and IUCN, contains accounts of 234 major sites for conservation of plant diversity worldwide. The sites were selected partly on the basis of floristic studies, and especially with reference to the detailed knowledge of numerous collaborating botanists. **Volume 3** (562 pp., illustrated) dealing with the Americas, was prepared (with the exception of the Caribbean) under the coordination of the Smithsonian Institution, National Museum of Natural History, Department of Botany (Washington, D.C.), and has contributions from many of the region's leading specialists. **Volume 1** covers Europe, the Atlantic Islands, Africa and the islands of the Western Indian Ocean, South West Asia, and the Middle East; **Volume 2** is concerned with the rest of Asia, Australasia, and the Pacific Islands.

The Americas volume provides thorough regional overviews for North America (north of Mexico), with detailed accounts of 6 sites; Mexico and Central America, with 20 site; the Caribbean, with 3 sites; and South America, with 46 sites. The Data Sheet (chapter) on each site summarizes geography, vegetation, flora, useful plants, social and environmental values, economic assessment (sometimes), threats, conservation, and references, and nearly always has a detailed original map.

This work is remarkably useful orientation for biologists and visitors, and will be necessary reading for those concerned with planning land use strategies for conservation and appropriate development. The rationale for preparing these volumes is the concern about the rapid global loss and degradation of natural ecosystems and the urgent need to highlight areas of pristine botanical importance, with the hope that these will receive adequate levels of resources to ensure their conservation within integrated national and regional conservation and development strategies.

Prices: Volume 1 - US$45; Volume 2 - US$ 67.50; Volume 3 - US$67.50, plus postage. To order your copies from the U.S. or Canada, contact Island Press, Box 7, 24850 East Lane, Cavelo, CA 95428 Tel: 800/828-1302 (toll free in US); fax: 707/983-6414; email: ipwest@igc.apc.org

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Biota of North America Program (BONAP) of the North Carolina Botanical Garden, in collaboration with the Jepson Herbarium of the University of California at Berkeley, will soon make available Digital Floristic Synthesis of North America. It provides an electronic source for plant nomenclature, taxonomy, geography, morphology and other specialized information for the more than 30,000 native and naturalized plant taxa (or 8% of the world's flora) that occur north of the U.S./Mexican border. It includes a complete revision of all of the 1994 nomenclature of the *Synonymized Checklist*, and links nearly 500,000 records of plant distributions, at state or equivalent levels, to each accepted name. In addition to the approximately 1.3 million herbarium specimens assessed for this work, this effort

draws upon virtually all monographs and revisions pertaining to the North American flora, all county, state and regional floras, and all relevant conservation literature and botanical notes.

The software has been developed in collaboration with Christopher Meacham, at the Jepson Herbarium, University of California at Berkeley. These Windows software products provide the information to enable plant taxonomists, and others interested in plants and plant products to produce accurately-edited species checklists, distribution summaries, assessments of species morphology, species rarity, species endemism, species nativity etc. Four individual digital products are described below, which will be available on 3.5 inch diskettes, for use on IBM-compatible systems running either Windows 95 or 3.1.

Lexicon - The nomenclature and taxonomy of the digital Lexicon follow Kartesz's 1994, 2-volume *Synonymized Checklist* and the PLANTS database of the National Resources Conservation Service (NRCS), plus revisions. The Lexicon enables the user to show immediate relationships between taxa at various ranks, and allows the user to produce listings of all plant names in current use (synonyms or accepted names). Specific summaries of common names, in addition to accepted scientific names and/or synonymized checklists, for any plant or plant group, can be displayed and printed, along with complete author citations if desired. Price per unit US$99.00, available August 31, 1997.

Floristic Atlas - For each of the more than 30,000 accepted taxa, the Floristic Atlas displays a distribution map of each, allowing the maps to be printed in publication-quality format (in black and white, or color), or saved as Windows bitmap images, by a simple mouse-click. The Atlas also permits individual state-level summaries of taxa to be displayed for each of 70 geographic areas. Price per unit US$295.00, probably released the summer of 1998.

Biological Attributes - A fully-populated summary of 45 biological attributes, which includes morphological and other specialized data, will also be available for each accepted taxon. Price per unit US$195.00.

Taxonomic Toolbox - This product pools data from the previous three products into a unified system and offers combined capabilities, including the Boolean operations found in both Floristic Atlas and Biological Attributes. Price per unit US$495.

For additional details and product availability, please see the Internet site for Patricia Ledlie Bookseller Inc., at http://www.booknotes.com/ledlie/.

FUNDING

The **Missouri Botanical Garden** was awarded a $600,000 grant from the Andrew W. Mellon Foundation for the continuation of training and research in systematic botany. The Garden has trained Ph.D. students at Washington University in St. Louis for more than 100 years. Through the generosity of the Mellon Foundation, the Garden will continue to educate graduate students through field work in disappearing habitats around the world. The students will collect plants and bring them back to St. Louis for study in the laboratory. Mick Richardson, the Garden's Manager of Graduate Studies explains that it is possible that new species will be found and study of these specimens will accurately define and establish their relationship with other plant species. Also the funding will enable students the opportunity to attend scientific conferences and to present their research to the scientific community.

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Rancho Santa Ana Botanic Garden also received a five-year $600,000 grant from the Andrew W. Mellon Foundation in support of its graduate education program in plant systematics and evolutionary botany. The Botanic Garden offers masters and doctoral degrees in botany through an agreement with The Claremont Graduate School. The grant will fund a number of program areas, primarily focusing on student fellowships,

student research and travel funds, and stipends for eligible students. An important aspect of the award is the visiting scholar program which brings distinguished national and international researchers for intensive periods of study and lectures, including post-doctoral fellows. Further, the Garden's library collection will receive funds for additional books and journals, student research projects may benefit from modest equipment purchases, and "seed funds" will be provided for faculty research papers.

MEETINGS

Progress on World Checklist and Flora: **The International Organization for Plant Information** (IOPI) held two meetings 5—8 June 1997 at the California Academy of Sciences in San Francisco, California. The *Checklist Committee*, responsible for the IOPI Global Plant Checklist, discussed progress to date and concluded that it is now ready to move ahead with active recruitment of specialists. A preliminary dataset forms the provisional Global Plant Checklist of vascular plants and is now on-line at http://iopi.csu.edu.au/. It contains data contributed from four regions (Australia, Europe, U.S., and Peru), and one edited family dataset (Casuarinaceae). An edited dataset for Magnoliaceae and partially edited datasets for several other families are to follow shortly. The list compiled by Czerepanov covering the plants of the former USSR is currently being prepared for inclusion. Procedures will be in place soon for specialists in certain plant groups to participate in editing the existing data and including additional information. The IOPI Global Plant Checklist is a collaborative project among the botanists of the world and interested information scientists. Specialists from 27 institutions in 14 countries have contributed to get the Checklist this far. For more information or if you have comments on the website, contact Karen Wilson, Convener of the IOPI Checklist Committee, <karen@ rbgsyd. gov. au>, at the Royal Botanic Gardens, Sydney.

The **Species Plantarum Project** (SPP) Committee reviewed a draft Guide for Contributors and discussed a number of editorial issues. It also developed protocols and procedures for editing and review. SPP is a long term project aiming to record essential taxonomic information on vascular plants on a world basis—a World Flora. It will include accepted names and synonyms with places of publication and types, short descriptions of all taxa from family to infraspecific rank, keys, distributions, references to literature comments, etc., linked to the Global Plant Checklist. It too is ready to begin recruiting contributors. A more detailed report will be given in the next FNA News. For more information contact the Committee convener, Dick Brummitt, r.brummitt@rbgkew.org.uk, at the Royal Botanic Gardens, Kew.

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POSITIONS AVAILABLE

Brooklyn Botanic Garden is seeking a **taxonomist**, preferably with experience and strong interests in cultivated plants. The position calls for the person to play an active role in all aspects of the Garden's horticultural taxonomy and/or to assume leadership of and develop this department. Preference given to persons with an active research program. Ph.D. required with knowledge of nomenclature and competent database skills.

Salary commensurate with qualifications and experience. Generous benefits. Applications should include a curriculum vitae, a letter with statement of research interests and goals, and names and addresses of three references. The position remains open until filled. Please send applications to Ms. R. Cabiness, Personnel Director, Brooklyn Botanic Garden, 1000 Washington Avenue, Brooklyn, New York 11225-1099, U.S.A.

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The **Desert Botanical Garden** seeks a full-time **librarian** for its 10,000 volume collection of literature on botanical research, horticulture, and desert environments. Responsibilities include managing library operations and programs, collection development, providing information assistance to staff and other library users,

and training/supervision of volunteer staff. Qualifications for this position include a Master's degree from an accredited library school, course work in botany, experience with computer applications in libraries and use of OCLC records, 1-2 years professional library experience, and good writing and oral communication skills. Applicants for this position should send a letter of application and a resume to: Librarian Search, c/o Ms Kayla Kolar, Desert Botanical Garden, 1201 North Galvin Parkway, Phoenix, Arizona 85008-3490, U.S.A.