



MISSOURI BOTANICAL GARDEN

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What's growing on
at the Garden!

**MISSOURI BOTANICAL GARDEN ANNOUNCES NEW
CENTER FOR BIODIVERSITY INFORMATICS (CBI)**
CBI Will Work to Make Biodiversity Data Available to Scientists Around the Globe

(ST. LOUIS): As the United Nations has declared 2010 to be the International Year of Biodiversity; the Missouri Botanical Garden is introducing the newly formed **Center for Biodiversity Informatics (CBI)**. CBI will work with colleagues around the globe to provide innovative technology solutions to the global community of life science scholars in order to mobilize, integrate, and repatriate data about the world's biodiversity.

“Biodiversity Informatics” is defined as the creation, integration, analysis, and understanding of information regarding biological diversity. A relatively new field, there are hundreds of practitioners around the world, including numerous people involved with the design and construction of taxonomic databases. Currently, efforts are underway to make the vast, decentralized resources of global biodiversity information available in digital form. Imposing consistency and compatibility among the scores of searchable databases on the world's biota is an enormous challenge within the field. CBI will work with researchers around the world to mobilize biodiversity data to support the research activities of scientists around the globe; increase usability of biodiversity information by advocating the open and transparent publication of data; and encourage responsible stewardship of biodiversity information through adoption of community standards.

“By putting this core information about what plants exist on the planet, and detailed information about where they're collected and the environment around them, you give this wealth of

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data that can be inserted in other people's scholarship for studies like conservation assessments, tracking invasive species, land management practices, and many other kinds of research," said Chris Freeland, director of CBI. "This really is core science that other researchers need to have access to, and we're making those data available for that use."

One of CBI's recently funded and notable projects is "**Digitizing Engelmann's Legacy**," online at www.tropicos.org/Project/Engelmann. Dr. George Engelmann, an American botanist and St. Louis physician is the founder and long-time president of the St. Louis Academy of Sciences. He encouraged Garden founder, Henry Shaw, to develop the Missouri Botanical Garden to be of scientific, as well as, public use. The Missouri Botanical Garden has been funded to digitize and create an online public display of the Engelmann herbarium of plant specimens. The approximately 8,000 specimens gathered during pioneering expeditions into the American West following those of Lewis and Clark are the first scientific records of the plants growing in the vast wilderness west of the Mississippi River. The collection forms the earliest verifiable documentation of species occurrences in that pristine landscape, before the rapid migration west permanently altered the landscapes through human introduction of non-native invasive species.

"We have occurrence data about the plants that have been collected by our research expeditions all over the world," said Freeland. "That database, Tropicos, has 3.7 million specimen records that identify the occurrence of plants on the globe. The Engelmann specimens provide a historic complement to the specimens already accessible through Tropicos."

Other CBI projects include:

- **Tropicos**
The Missouri Botanical Garden's Tropicos dataset is the largest single repository of scholarly botanical information made freely available online. Tropicos contains more than 3.7 million records documenting the occurrence of the world's plants species, as well as their nomenclatural and taxonomic relationships. The development of Tropicos has been sponsored by the National Science Foundation, the Andrew W. Mellon Foundation, and the Institute for Museum and Library Sciences. Tropicos is online at www.tropicos.org.
- **The Biodiversity Heritage Library (BHL)**
BHL is a global community of natural history libraries and research institutions who
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have formed a partnership to digitize and make available the world's biodiversity literature. BHL is online at www.biodiversity.library.org. BHL is sponsored by the John D. and Catherine T. MacArthur Foundation and the Alfred P. Sloan Foundation through their funding of Encyclopedia of Life (www.eol.org), a project to create an online reference source and database for every one of the 1.9 million species that are named and known on this planet. Recently, BHL was awarded a \$458,000 grant from the Gordon and Betty Moore Foundation to enhance its global partnerships. BHL is an example of how biodiversity projects can collaborate and grow towards a global service.

- **Missouri Botanical Garden's Rare Books**

More than 3,000 rare and unique volumes held by the Garden's Library have been digitized and published online through open access means in the Biodiversity Heritage Library. These digitization efforts have been funded by the Trio Foundation of St. Louis and the Mellon Foundation.

To learn more about the Missouri Botanical Garden's Center for Biodiversity Informatics (CBI) or the Garden's science and conservation work around the world, visit <http://www.mobot.org/cbi/>.

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NOTE: Digital images available by request. Download media materials at www.mobot.org/press.

The Missouri Botanical Garden's mission is "to discover and share knowledge about plants and their environment, in order to preserve and enrich life." Today, 151 years after opening, the Missouri Botanical Garden is a National Historic Landmark and a center for science, conservation, education and horticultural display.