United States Botanic Garden

PRESS RELEASE

EMBARGOED UNTIL 11:00 AM EDT JUNE 1, 2015

June 1, 2015

Contacts:
Devin Dotson, U.S. Botanic Garden – ddotson@aoc.gov, (202) 306-743
Jeanette Grider, Saint Louis University – jgrider1@slu.edu, (314) 977-2538
Melanie Bernds, Donald Danforth Plant Science Center – mbernds@danforthcenter.org, (314) 587-1647
Katie O'Sullivan, Missouri Botanical Garden – katie.osullivan@mobot.org, (314) 577-0254
Tara WeaverMissick, Agricultural Research Service – tara.weavermissick@ars.usda.gov, (301) 504-1663

Botanical gardens uniquely positioned to meet need for food and agricultural education

Washington, DC – Consistent with their historical focus on the functional utility of plants, botanical gardens can contribute to global food and ecosystem security by expanding their living collections, research, and education programs to emphasize agriculture and its impacts, reports a paper published this week in *Nature Plants*.

Continued world population growth will require robust and sustainable agricultural systems. Efforts to educate society about agriculture, to ensure well-informed decision making, must meet people in the urban locations where most now live. The paper shows that botanical gardens are uniquely positioned to meet this need.

"There are thousands of botanical gardens around the world, most in urban environments, devoted to plant knowledge, research and public education. Botanical gardens are well placed to play a critical role in advancing knowledge and understanding about food plants and the relationship between plants, agriculture, and the environment," said Ari Novy, Executive Director of the U.S. Botanic Garden.

"With a third of the world's land surface cultivated or grazed, a rapidly rising human population and expectations for increased consumption, and widespread hunger, it is imperative that those botanical gardens in a position to do so use their special standing to help educate their visitors about agriculture and contribute to its improvement in the future," said Peter H. Raven, President Emeritus of Missouri Botanical Garden.

"Botanical gardens are impressive centers of information and plant diversity, distributions, and uses. In addition to maintaining living collections of more than 1/3 of the known plant species, many gardens support extensive research programs focused on cataloging plant diversity and distributions, documenting plant uses in different cultures, and conserving plant species in nature and in seed banks. These invaluable resources can be leveraged to develop new crops and improve existing ones for future climates, and to better understand the impacts of agricultural systems on

natural plant biodiversity," said Allison Miller, Associate Professor at Saint Louis University and Research Associate at the Missouri Botanical Garden.

Throughout history, many botanical gardens were founded with plants based on utility, rather than aesthetic value, but in the past century, focus has shifted more to horticultural displays and conservation. Given that botanical gardens primary focus is plants, and that the majority of botanical gardens are in close proximity to highly populated urban centers, they are well positioned to serve as critical conduits for information about food plants and agriculture, adding this important element to their already well developed programs in conservation and horticulture.

"Botanical gardens are uniquely placed to present and educate the public about all the plant sciences, not just diversity and conservation, but also all the many disparate kinds of research related to plant breeding and crop production," Elizabeth Kellogg, member of the Donald Danforth Plant Science Center. "The role of botanical gardens in promoting the study of plants is increasingly important as we face challenges of feeding the growing population of the world."

The paper's authors represent a diversity of plant expertise from botany, agriculture and biology in university and research centers to internationally known botanic gardens, museums, federal agencies, and international development.

- "Expanding role of botanical gardens in the future of food." *Nature Plants* 1 (2015). http://nature.com/articles/doi:10.1038/nplants.2015.78
- **Online resource center for journalists** (photos, map of network of world's botanical gardens and human population density, logos)

###

About the U.S. Botanic Garden
United States Botanic Garden (USBG) is one of the oldest botanic gardens in North America. The Garden informs visitors about the importance and fundamental value and diversity of plants, as well as their aesthetic, cultural, economic, therapeutic and ecological significance. With over a million visitors annually, the USBG strives to demonstrate and promote sustainable practices. The U.S. Botanic Garden is a living plant museum and accredited by the American Association of Museums. The U.S. Botanic Garden Conservatory is open to the public, free of charge, every day of the year from 10 a.m. to 5 p.m. www.USBG.gov

About Saint Louis University
Saint Louis University is a Catholic, Jesuit Institution that values academic excellence, life-changing research, compassionate health care and a strong commitment to faith and service. Founded in 1818, the University fosters the intellectual and character development of more than 13,000 students on two campuses in St. Louis and Madrid, Spain. Building on a legacy of nearly 200 years, Saint Louis University continues to move forward with an unwavering commitment to a higher purpose, a greater good.

About The Donald Danforth Plant Science Center

Founded in 1998, the Donald Danforth Plant Science Center is a not-for-profit research institute with a mission to improve the human condition through plant science. Research aims to feed the hungry and improve human health, preserve and renew the environment and position the St. Louis region as a world center for plant science. The Center's work is funded through competitive grants and contract revenue from many sources, including the National Institutes of Health, U.S. Department of Energy, National Science Foundation, U.S. Department of Agriculture, U.S. Agency for International Development, the Bill & Melinda Gates and Howard G. Buffett Foundations. Follow us on Twitter at @DanforthCenter.

About Missouri Botanical Garden

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, 156 years after opening, it is a National Historic Landmark and a center for science, conservation, education and horticultural display. The Garden focuses its science work on areas that are rich in biodiversity yet threatened by habitat destruction. The Missouri Botanical Garden is striving for a world that can sustain us without sacrificing prosperity for future generations, a world where people share a commitment to managing biological diversity for the common benefit. Learn more at www.mobot.org.

About the Agricultural Research Service

The Agricultural Research Service (ARS) is the U.S. Department of Agriculture's chief scientific in-house research agency. The Agency's job is finding solutions to agricultural problems that affect Americans every day from field to table. ARS conducts research to develop and transfer solutions to agricultural problems of high national priority and provide information access and dissemination to ensure high-quality, safe food, and other agricultural products; assess the nutritional needs of Americans; sustain a competitive agricultural economy; enhance the natural resource base and the environment and provide economic opportunities for rural citizens, communities, and society as a whole.