A REPORT FROM THE

EXECUTIVE DEAN OF AGRICULTURE AND NATURAL RESOURCES

Report to the New Jersey State Board of Agriculture May 2016



Three of the six cisterns at Cerbo's nursery in Parsippany, NJ.

A large rainwater harvesting system consisting of six 2,500-gallon cisterns was installed at Cerbo's Nursery in Parsippany. Cerbo's is a family-owned/operated, certified nursery participating in the Rutgers River Friendly Business Program. The system was installed with funding from an NJDEP grant received by **Chris Obropta**, extension specialist in water resources and **Pat Rector**, environmental resource management agent in Morris County. Rainwater harvesting is the active collection, storage, and reuse of rainwater and is part of the continuing implementation of green infrastructure practices in New Jersey. The system uses gravity and water pressure to move water from the

greenhouse roof to the cisterns. The collected rainwater will be used to supplement the nursery's city-supplied water for plant irrigation. Approximately 5,000–6,000 gallons of rainwater can be collected during a one-inch rainstorm. This water otherwise would become runoff destined for Troy Brook, contributing to the increased frequency of small flooding events.



Habaneros are among the exotic hot peppers with growing market potential.

Hort Americas, a company that links global manufacturers and providers of hort goods, services, and technologies with North American greenhouse grower/distributors, created a post on their internet news site profiling Rutgers research that looks at the potential market for ethnic specialty crops along the U.S. East Coast. The researchers are now looking at those crops which have the potential to be adapted to greenhouse and hoop house production, based on the results of their findings. Ethnic crop specialist **Albert Ayeni** was quoted mentioning the NJAES specialty crop research group that has been funded for about \$2 million by the USDA. The group, led by **Ramu Govindasamy**, marketing specialist in the

Department of Agricultural, Food and Resource Economics, has documented the rapidly increasing population of Asians (Chinese and Asian Indians) and Hispanics (Mexicans and Puerto Ricans) on the U.S. East Coast. Some of the crops that the Rutgers researchers have studied include: exotic peppers, roselle, tiger nuts, amaranth, African eggplant, and okra.

Researchers at Michigan State, along with Rutgers, the University of Florida, Oregon State University, Cornell University, California State University, and North Carolina State University as well as the USDA Agricultural Research Service have been awarded a \$2.3 million USDA grant to help fight downy mildew in a number of highly valuable crops. This multistate research group unites plant pathologists, plant breeders, social scientists, and economists in efforts to develop advanced tactics for growers to confront downy mildew, including work to enhance and refine early detection methods that allow growers to identify the pathogen's presence in the air, before it infects fields. Extension specialist in vegetable



pathology **Andy Wyenandt**, in the Department of Plant Biology and Pathology, will be conducting the Rutgers research. For the past six years, Rutgers has led efforts in the breeding of sweet basil for resistance to downy mildew led by distinguished professor of plant biology **Jim Simon**.

Anne Nielsen, assistant extension specialist in fruit entomology, Department of Entomology, is the principal investigator of an award totaling \$299,953. The project, titled *IPM-CPR: A Systems-Level Approach to Manage Brown Marmorated Stink Bug and Conserve Beneficial Insects in Tree Fruit, is being supported by the USDA.*

William Meyer, professor in the Department of Plant Biology and Pathology and director of the Rutgers Turfgrass Breeding Project received the first C. Reed Funk Endowed Faculty Scholar in Plant Biology and Genetics at Rutgers, named in memory of the late distinguished professor and plant breeder C. Reed Funk. During his 42-year tenure at Rutgers, Funk led one of the world's most productive turfgrass breeding programs. Since Funk's retirement in 1996, Meyer has led the Rutgers turfgrass breeding program, which has released more than 400 turfgrass cultivars.

Of Interest:

NJAES faculty have left a lasting impression on the outgoing editor of the *Journal of the National Association of County Agricultural Agents* (NACAA), who is stepping down after six years of service. Stephen Brown, chair of the Cooperative Extension Service at University of Alaska Fairbanks, wrote to NJAES director of extension Larry Katz, "As I reflect back on my tenure, I can't help but recognize the very large role that Rutgers Extension faculty have played in the success of this journal. No other Land-Grant University in the country has more NACAA national peer reviewers serving our journal than Rutgers University (or published authors for that matter). I am deeply indebted to their service and I thought you should know the very significant contributions they have made to the careers of their Extension colleagues across the nation... To a person, the Rutgers faculty are the elite of the elite among our reviewers." Brown also expressed gratitude to agricultural and environmental resource management agents Richard VanVranken (Atlantic), Bill Sciarappa (Monmouth), Salvatore Mangiafico (Cumberland/Salem), Stephen Komar (Sussex), and William Bamka (Burlington).

Events:

Environmental Stewardship on New Jersey Horse Farms

Thursday, May 26, 2016, 5:30–8 p.m., Mortonhouse Farms, 28 Black River Road, Long Valley, NJ (Morris County). June 2 meeting will be held in Salem County. Free event includes wine tasting and rain simulator demonstration. Participants will hear about the latest in environmental research for equine farms and USDA's NRCS funding programs. Registration required. Contact Department of Animal Sciences extension specialist **Mike Westendorf** at westendorf@njaes.rutgers.edu or associate extension specialist **Carey Williams** at carey.williams@rutgers.edu.

