## A REPORT FROM THE

## EXECUTIVE DEAN OF AGRICULTURE AND NATURAL RESOURCES

Report to the New Jersey State Board of Agriculture April 2015

Claudia Wilcke Kolster has joined the Department of Agricultural and Resource Management Agents as Program Associate II in Passaic County beginning April 13. Passaic County provided the majority of funds to Rutgers to hire this full-time position after the retirement of county employee Elaine Fogerty, agricultural assistant. Wilcke Kolster will provide leadership and support in identifying and conducting local programming to meet clientele needs in home horticulture, commercial horticulture, and agriculture. She has responsibility for the coordination and operation of the county Rutgers Master Gardener Program, will coordinate and supervise educational outreach activities for the general public, and develop evaluative methods to measure and document program impacts.



Claudia Wilcke Kolster

Extension Specialist in Farm Management **Robin Brumfield** co-authored a paper that was published in the March 2014 issue of *HortScience* and selected for the 2015 Alex Laurie award presented by the American Society for Horticultural Sciences (ASHS). The paper is titled, "Biocontainer Use in a Petunia × hybrida Greenhouse Production System: a Cradle-to-gate Carbon Footprint Assessment of Secondary Impacts" (HortScience 49:265-271). The annual award is given for manuscripts in ASHS publications and judged by industry peers to have the most significant practical impact on the floriculture industry. About the award-winning paper, a panel member noted, "Given the number of outstanding floriculture papers published last year, and the fact that this was one of only two papers that all three judges selected in common in their lists of top rated papers – the kudos are well earned."



Northeast farms are often constrained by capital labor and do not have the on-site expertise to address energy issues that are central to a farm's economic and environmental sustainability. Energy is often underrepresented in farm

outreach activities in the Northeast due to a lack of energy literacy among agricultural service providers, a lack of comprehensive, regionally-appropriate, and practical support materials, and a disjointed network of experts and stakeholders to support field service providers. To address this gap, the Farm Energy IQ program is developing a comprehensive curriculum to increase knowledge among Northeast regional agricultural educators and service providers in wide-ranging energy topics. A three-day 'train-the-trainer' Farm Energy IQ workshop was held in April at the Rutgers EcoComplex. Each day covered a specific topic: Smart Energy Buying and Use, Energy Efficiency for Farms, and On-Farm Energy Production. The workshop series is a joint project of the Farm Energy IQ Team, with members from Penn State Extension, University of Vermont Extension, and Rutgers Cooperative Extension. The workshops were also conducted in Pennsylvania and Vermont. The Rutgers Farm Energy IQ team members are Extension Specialist in Bioresource Engineering A.J. Both, Extension Specialist in Agriculture Energy Zane Helsel, and Project Engineer Tom Manning. This workshop was funded by a grant from the Northeast Sustainable Agriculture Research and Education SARE program. SARE is supported by the National Institute of Food and Agriculture, USDA.

**Thomas Gianfagna**, professor in the Department of Plant Biology and Pathology, is the principal investigator of an award totaling \$10,300. The project, titled "Innovative Packaging Technologies to Enhance the Quality of Fresh Cut Flowers," is being supported by the American Floral Endowment.



On April 15, **Nicholi Vorsa**, Director of the Philip E. Marucci Blueberry and Cranberry Research and Extension Center presented "Cranberry domestication and challenges of the changing climate" as part of The Pinelands Research Series. The Research Series is a free public event hosted by the New Jersey Pinelands Commission.

## Of Interest:

The following commercial recommendation manuals have been updated for 2015: Commercial Blueberry Pest Control Recommendations for New Jersey, 2015. Oudemans, P.; Majek, B.; Pavlis, G.; Polk, D.; Rodriguez-Saona, C.; & Ward, D. Available at <a href="http://njaes.rutgers.edu/pubs/publication.asp?pid=E265">http://njaes.rutgers.edu/pubs/publication.asp?pid=E265</a>.

Commercial Cranberry Pest Control Recommendations for New Jersey, 2015. **Oudemans, P.**; **Majek, B.**; & **Rodriguez-Saona, C.** Available at: http://njaes.rutgers.edu/pubs/publication.asp?pid=E308.

As mentioned in previous issues of this report, a two-day workshop on the current efforts in the fight against basil downy mildew was held at the New Jersey Vegetable Growers Association Annual Meeting in February in Atlantic City. The workshop included updates and reports from the project collaborators and an overview of the breeding efforts currently under way by the Rutgers Breeding Team. The first day of the workshop was recorded and the audio is now available online for free at <a href="http://primetechrepair.com/symp/basil">http://primetechrepair.com/symp/basil</a>.

Fruit Growers News recently asked its readers: "How are you adapting to the changing climate?" Retired Gloucester County Agricultural Agent Jerry Frecon provided input from New Jersey: "I think fruit growers and other farmers have been adapting to climate change for many years. The climate has always been constantly changing. The risks are enormous and more fruit growers today have crop insurance to provide a slight hedge. In the past 20 years, we have had more violent changes in weather even during the growing season. For example, in southern New Jersey we seldom would get a hailstorm after the Fourth of July. Now, hailstorms occur right up to and through harvest. I know some growers that have had hail four out of five years, an unusually high rate. Over the past 20 years we have been planting varieties of peaches, nectarines, plums, and grapes we would not have planted prior to 1994, because they could not stand our low winter temperatures. With the low temperatures we have had in 2014 and 2015 during the winter, we are seeing these varieties injured. Farming always involves adjustments due to the weather, but some have been cruel and devastating for fruit growers during this time of climate change."

New Jersey State Climatologist **Dave Robinson** (NJAES and Geography) reports his office is examining prolonged heat episodes throughout the state and has found some evidence for recent increases in these events. The study involves examining daily maximum and minimum temperatures for seven stations distributed across the state, each with 100-plus years of records. The study began last summer with an evaluation of New Brunswick heat events. It showed that New Brunswick has had an increase of daytime heat events in recent decades and nighttime heat events are becoming more commonplace. In the course of expanding the analysis to seven stations, Robinson and his team have found larger changes in warm nighttime temperatures than in hot daytime temperatures. Robinson notes that excessive heat during the nighttime can increase health risks since the nighttime is generally associated with cooler temperatures, and people may be less aware of the consequences of warm evenings. Read more at: <a href="http://www.njweather.org">http://www.njweather.org</a>.

