

A REPORT FROM THE EXECUTIVE DEAN OF AGRICULTURE AND NATURAL RESOURCES

Report to the New Jersey State Board of Agriculture
June 2019



Tour of hazelnut plots: (l-r) Bob Goodman, associate director Peggy Brennan-Tonetta, Brad Hillman, Rutgers–New Brunswick Chancellor Christopher Molloy, Brian Schilling, associate director Joe Florentine, Senator Steve Sweeney, and Tom Molnar.

New Jersey Senate President Steve Sweeney was given a tour of Hort Farm III on the G.H. Cook campus in New Brunswick on June 12, in time to see the Scarlet Fire® dogwood in bloom. The tour was an opportunity to show Sweeney firsthand some of the plant breeding research that supports established and new industries in New Jersey and worldwide. Associate professor **Tom Molnar** and extension specialist in turfgrass pathology **Bruce Clarke**, from the Department of Plant Biology, spoke about NJAES breeding efforts on hazelnuts and dogwoods, and turfgrass respectively. NJAES executive director **Bob Goodman**, research director **Brad Hillman**, and extension director **Brian Schilling** spoke about the long-term investment in breeding research, which delivers knowledge and innovations to the ag industry and other beneficiaries in the state. Senator Sweeney has

been a strong advocate for agriculture, and has provided continuing support for programs at Rutgers NJAES.



Phillip Vines

Phillip Vines has accepted a position as assistant professor (non-tenure track) in turfgrass breeding at Rutgers NJAES and the School of Environmental and Biological Sciences as of June 1. His job duties include developing superior turfgrass cultivars for home lawn, athletic field, golf course, and recreational turf. Vines' research program will focus on exploring advanced breeding methods than can be integrated with traditional breeding methods to increase efficiency of cultivar development. Vines received his doctoral degree in turfgrass breeding from Rutgers in May and was the winner of the 2019 Award of Excellence from the Musser International

Turfgrass Foundation. The award is given to outstanding doctoral candidates who, in the final phase of their graduate studies, demonstrate overall excellence throughout their doctoral program in turfgrass research.

Rutgers Climate Institute is collaborating with Duke Farms in Somerset County to conduct research on natural solutions to climate change. The Duke Farms property is the site of a range of wetlands, grasslands, stream corridor, and lakeshore restorations; afforestation and reforestation projects; and sustainable farming practices. Rutgers scientists will conduct on-site research and monitoring at Duke Farms, starting with baseline data to understand carbon stocks associated with various land types and land management strategies. They will work on developing a "carbon sink," using strategies to remove significant amounts of carbon from the atmosphere and store it in soils and vegetation. The partnership aims to demonstrate techniques in mitigating climate change through minimizing carbon emissions and maximizing the 2,742-acre property as a carbon sink. Ideally, these practices can be replicated by private and public landowners.

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With the goal of forming a regional Sustainable Agriculture/Agritourism Coalition for New Jersey, a meeting was sponsored by the Rutgers EcoComplex on June 13 to highlight this growing industry. With increasing demand from tourists, local businesses also benefit from agricultural attractions. The event provided an opportunity for growers to learn about the industry and network with local sustainable agritourism operators, Rutgers faculty, and representatives from local hospitality businesses, NJFB, NJDA, and Visit NJ. EcoComplex director, **Serpil Guran**, and assistant director, **David Specca**, hosted the event which covered various aspects of sustainable agritourism, including a look at what has been done in other regions and ways to obtain grants and loans to help pay for marketing costs.

In the News:

In May, *Fruit Grower News* featured **Nicholi Vorsa**, director of the Philip E. Marucci Center for Blueberry & Cranberry Research & Extension, and his decades-long work breeding cranberries. His research has helped sustain a thriving New Jersey industry that has seen consumer products evolve from cranberry sauce to juices, and now sweetened-and-dried cranberries. The needs of growers have also changed, from producing higher yields to finding a firmer berry for mechanical harvesting. Vorsa's current emphasis on breeding for fruit rot resistance and less acidic berries will drive future varieties.

Global Aquaculture Advocate reported in June on a multi-institutional study co-authored by former post-doctoral student **Tal Ben-Horin** and Haskin Shellfish Research Laboratory director **David Bushek**, in the article titled, "Can oyster farms protect wild oysters from disease?" The study showed frequently harvested filter feeders can keep wild populations healthy. High numbers of farmed oysters, which tend to be relatively disease-resistant, filter parasites out of the water column. When oysters are held on farms long enough, but not too long as to allow parasites to spread, oyster aquaculture can alleviate disease impacts to wild oyster populations nearby. The original research was published in *Aquaculture Environment Interactions*.

Of Interest:

The 2019 FRAC - *Fungicide Resistance Management Guidelines for Vegetable Crops - Mid-Atlantic Region* to complement the 2019 *Mid-Atlantic Commercial Vegetable Production Guide* is now available at njaes.rutgers.edu/pubs/publication.php?pid=E001-F. The guide promotes the importance and understanding of FRAC codes in fungicide resistance management, to prevent the misuse of specific fungicides with a high-risk for resistance development and, to provide the tools and knowledge that allow growers to develop vegetable disease control programs with an emphasis towards fungicide resistance management. The publication is a collaboration between lead author **Andy Wyenandt**, extension specialist in vegetable pathology, and other plant pathologists in the mid-Atlantic.

The following fact sheets have been updated:

FS607 Horse Trailer Maintenance and Trailing Safety. Margentino, M., Malinowski, K., Malone, S. and Williams, C. njaes.rutgers.edu/FS607

FS608 Fire Prevention and Safety Measures Around the Farm. Margentino, M., Malinowski, K. and Malone, S. njaes.rutgers.edu/FS608

