Report to the New Jersey State Board of Agriculture
November 2015

During a visit to the United States, a group of 20 representatives from the State Office of Agricultural Development, Ministry of Finance, Xicheng District, Beijing, made a stop at Rutgers Cooperative Extension of Morris County. The group inquired about ways that NJAES accomplished agriculture technology transfer to improve economic outcomes for clients and for examples of how this was done in New Jersey. **Kris Holmstrom**, Vegetable Integrated Pest Management (IPM) research project coordinator II, Department of Entomology, was on hand to talk about Extension activities with the group. After providing a brief history of NJAES, **Holmstrom** discussed examples of technology transfer under the categories of research, extension, and education. For research, **Holmstrom** cited examples of product development including the 'Rutgers Scarlet'™ strawberry, 'SunCrisp' apples, 'Jersey' asparagus varieties, development of the new 'Rutgers' tomato, and re-introducing the 'Ramapo' tomato. **Holmstrom** used the Vegetable IPM Program as an example of extension outreach where NJAES personnel work directly with growers to improve economic outcomes. For grower education, **Holmstrom** described the education sessions conducted by the Vegetable IPM Program and Extension Specialist in Vegetable Pathology **Andy Wyenandt**, Department of Plant Biology and Pathology, as it relates to the biology, epidemiology, and management of seed-borne diseases of major vegetable crops. **Holmstrom** also cited pesticide applicator training as an example of education, where applicators are required to maintain certification through the accumulation of credits obtained by attending NJAES meetings. The visiting delegation asked questions about the various funding sources for NJAES, the nature of Rutgers research institutes on energy, climate, etc., and the extent of the federal government's regulatory reporting requirements with regard to research. The group was presented with fresh 'SunCrisp' apples from Rutgers Snyder Research Farm, courtesy of **Win Cowgill**, agricultural agent of Hunterdon County.

Rutgers NJAES in the News:

Atlantic County Agricultural Agent **Rick VanVranken's** work on ethnic vegetable production with African immigrant farmer Morris Gbolo was featured on the new USDA Beginner Farmer YouTube channel & blog (https://youtu.be/PPzuXyBPClk). In partnership with the Farm Service Agency and Rutgers Cooperative Extension, Gbolo has been able to purchase a piece of land to grow ethnic vegetables and fruits from his home country of Liberia for specialty markets here in the U.S. Gbolo's farm was also featured in the Reuters article, "Reinventing New Jersey as 'Garden State' with ethnic crops, tourism." Referring to New Jersey officially being nicknamed "The Garden State" in 1954, **VanVranken** stated, "It was about everything in New Jersey being ripe for the picking for New York and Philadelphia. That drives a lot of what we do, being able to serve the huge markets that we're right in the middle of." **Brian Schilling**, assistant extension specialist in agricultural policy in the Department of Agricultural, Food, and Resource Economics, was also quoted in the article, stating, "With roughly one-tenth of the U.S. population living within 100 miles of central New Jersey - much of it affluent - the state is in a geographic sweet spot for agritourism."

In an October issue of *Growing Produce*, a report on the effects of a late October freeze on apples quoted **Win Cowgill**, Hunterdon County agricultural agent. **Cowgill** stated that apples begin to freeze at 28°F and the fruit will sustain cell death and damage once temperatures dip below 22 or 23°F. At about 22°F, fruit cell death and damage occurs causing internal browning and breakdown soon after thawing. **Cowgill** recommended that prior to harvesting, following such cold temperatures, that the fruit be completely thawed out on the tree or it will bruise; and frozen fruit will have a shorter storage life.

Of Interest:

November 10, 1766, marked the signing of the charter establishing Queen's College, which is now Rutgers, The State University of New Jersey. Over the next two months and throughout 2016, Rutgers will be celebrating this 250th anniversary with the theme, "Revolutionary for 250 Years." Rutgers NJAES will participate in this event by highlighting its own revolutionary contributions through the work of its plant and shellfish breeding programs. Continuing through November 2016, each month will feature a breeding release from NJAES, commemorating the contributions to New Jersey agriculture and beyond. The celebration in November 2015 begins with highlighting Rutgers NJAES' cranberry breeding.

Scarlet Knight® cranberries have large, round, deeply pigmented fruit, with lower acidity than standard cranberries.

The Philip E. Marucci Center for Blueberry and Cranberry Research and Extension was first established as a Rutgers cranberry research field station at Whitesbog, NJ, in 1918 and has been in its permanent location in Chatsworth since 1962. Today, this modern research facility, located in the midst of New Jersey's cranberry industry in the Pinelands, is recognized by the federal government as the national center for vaccinium (berry-bearing shrub genus) research. In addition to providing information on the cultural needs of cranberries, the facility supports an extensive cranberry breeding program in cooperation with scientists from Massachusetts and Wisconsin. Marucci Center Director and Research Professor **Nick Vorsa**, Department of Plant Biology and Pathology, initiated a program in 1985 to improve yield, fruit quality, and genetic diversity of cranberries. After thirty years of breeding cranberries, hundreds of crosses, and evaluation of thousands of plant progenies, **Vorsa** released several improved varieties for use by cranberry growers. The result of **Vorsa's** breeding efforts has been the commercial release of the Rutgers varieties Scarlet Knight®, Crimson Queen®, Demoranville®, and Mullica Queen®. All of these unique and improved cranberry varieties are gaining acceptance by growers for their improved qualities and performance. Prior to the release of the Rutgers cranberries the cranberry industry relied on only a few widely used varieties with a narrow genetic base.

The following new Rutgers NJAES publications are now available through county extension offices or the NJAES website (http://njaes.rutgers.edu/pubs): "Guidance for Directors and Leaders of Agricultural Organizations in New Jersey" (FS1250) by **Michelle Infante-Casella**, Gloucester County agricultural agent and **Brian Schilling,** assistant extension specialist in agricultural policy in the Department of Agricultural, Food, and Resource Economics, advises agricultural leaders on their duties, responsibilities, and leadership role as directors of associations or boards of agriculture.

Post-Doctoral Associate **Elvira de Lange** and Extension Specialist in Blueberry/Cranberry Entomology **Cesar Rodriguez-Saona** authored three new fact sheets on cranberry pests: "Spotted Fireworm: A Pest of Cranberry in New Jersey" (FS1247); "Blunt-Nosed Leafhopper: A Vector of Cranberry False Blossom Disease" (FS1248); and "Sparganothis Fruitworm: A Pest of Cranberry in New Jersey" (FS1249).