

A REPORT FROM THE  
EXECUTIVE DEAN  
OF AGRICULTURE AND NATURAL RESOURCES

Report to the New Jersey State Board of Agriculture  
November 2020



*Nick Vorsa at Marucci Center greenhouse.*

**Nicholi Vorsa**, director of the [Marucci Center for Blueberry & Cranberry Research & Extension](#) in Chatsworth, NJ, has been breeding cranberries at Rutgers since 1985. His work has addressed the changing needs of the industry with consumer applications ranging from Thanksgiving cranberry sauce to juice and dried cranberries. Growers' needs have also changed and Vorsa's breeding has focused on fruit rot resistance, high yields, and fruit acids and flavonoid content. His work has also involved mapping the cranberry genome and identifying genes with beneficial traits. Rutgers cranberry varieties have been planted in more than 5,000 acres worldwide and Vorsa's work through the Rutgers NJAES breeding program has resulted in the release of seven different varieties: Crimson Queen<sup>®</sup>, Demoranville<sup>®</sup>, Mullica Queen<sup>®</sup>, Scarlet Knight<sup>®</sup>, Welker<sup>™</sup>, and Haines<sup>™</sup>, with the [newest release 'Vasanna<sup>™</sup>'](#), named in memory of his parents, Vas and Anna, immigrants from Belarus.




*NJAES/Steward Green deer survey drone launch from Franklin Township cornfield, March 2020.*

The recently released [Rutgers White-Tailed Deer Population Density Survey using sUAS Infrared](#) describes the deer density of the Hutcheson Memorial Forest in Somerset County and the surrounding areas of Franklin and Hillsborough Townships before and after the initiation of a deer management program in 2019. These areas represent a microcosm of the New Jersey landscape consisting of residential neighborhoods, forested and agricultural lands, and open spaces. The area is also a hotspot for white-tailed deer-vehicle collisions and deer-related crop damage. The program will study changes over time in white-tailed deer densities and associated damage to forest ecosystems, agricultural crops, residential areas, and deer-vehicle collisions as well as implement a doe-focused deer management program utilizing bowhunters to mitigate deer damage. A key component of the program is helping those in need. In 2020, more than 500 pounds of venison were donated to the Franklin Food Bank. [Steward Green](#) conducted the deer density surveys and data analysis.

'Weed Insect and Disease Control for Turfgrass Producers' won the Excellence in Extension Award (in the long publications category) from the American Society of Agronomy. This 110-page guide is the first guide developed specifically for sod production and was distributed to over 900 producers in 41 countries. **Matt Elmore**, assistant extension specialist in weed science, led the development of the weed management section in collaboration with Purdue extension weed specialist Aaron Patton. Elmore also collaborates as co-editor on [Turfgrass Weed Control for Professionals](#), a multi-state guide designed for municipal, lawn, golf, and sports turf weed control sold to approximately 2000 professionals annually.





Department of Entomology extension specialist **Cesar Rodriguez-Saona** is senior author of “[Plant guttation provides nutrient-rich food for insects](#),” a study published in the journal *Proceedings of the Royal Society B: Biological Sciences*, which found that small watery droplets on the edges of blueberry leaves are loaded with nutrients for many insects, including bees, wasps, and flies. This under-explored feature in plants could have profound implications for insects in agricultural and natural ecosystems.

### Of Interest

Business closures during the COVID-19 pandemic have severely impacted New Jersey’s seafood industry and supply chain. The state and federal government agencies are working to support seafood businesses which sell seafood products that have been landed, grown, or harvested in New Jersey. “[Support NJ Seafood](#)” was created through a collaboration among the NJ Division of Fish & Wildlife, NJ Department of Agriculture, and Rutgers NJAES, which allows the public to quickly locate restaurants, retailers, and distributors near them.

In the U.S., approximately 30-40% of the food grown is wasted. However, on Thanksgiving Day alone, approximately 172 million pounds of turkey, 40 million pounds of mashed potatoes, and 38 million pounds of stuffing are thrown out. Food waste has social, economic, and environmental impacts. **Sara Elnakib**, Family & Community Health Sciences educator, Rutgers Cooperative Extension of Passaic County, presented a virtual education session on November 5, “Let’s Talk Turkey: The Impact of Food Waste During Thanksgiving. Elnakib discussed impacts and ways to reduce food waste on Thanksgiving and beyond.

The Department of Animal Sciences and cooperating faculty members are working on a project to better understand how equine operations managers in New Jersey make decisions about practices that affect the environment, such as managing animal waste and maintaining pastures. As part of this project, a survey of equine managers and equine experts in New Jersey is being conducted. The goal of this survey is to determine what people involved with equine operations think about a range of environmental practices. New Jersey equine farm owners and managers are requested to participate in the [Equine Best Management Practices Survey](#).

### In the News

It’s deer breeding season—or “rutting” season, in New Jersey, which generally lasts from October through December, with the peak of vehicle incidents occurring in November. **Kathleen Kerwin**, a program associate in wildlife conservation and management, has been quoted in various media outlets [providing recommendations for the road](#). Deer often move in herds, so if one deer is in view, there are probably more nearby. Drivers should be most attentive at dawn and dusk when deer are most active.

### Events

The USDA Northeast Climate Hub is hosting a webinar “[Helping Farmers Help the Land Through Climate Smart Farming](#)” on December 10. The changing climate affects how we farm. Join this webinar to learn about how farmers can adapt to those changes by improving natural resources.

