Report to the New Jersey State Board of Agriculture
May 2021

Nicholi Vorsa, professor in the Department of Plant Biology and director of the Philip E. Marucci Center for Blueberry and Cranberry Research and Extension since 1988, has stepped down from his role as director, effective May 1. Nick has had a distinguished tenure as director of the center for more than 30 years and remains a valued member of the faculty. **Peter Oudemans**, professor of plant biology, who has been stationed at the center since 1993, is serving as the new director. Under Vorsa's leadership, the center grew to house Rutgers faculty members and research scientists who conduct research in entomology, pathology, weed science, and the health-related benefits of blueberries and cranberries. The USDA-ARS blueberry breeding program moved to the center in the early 1990s from Beltsville, Maryland, resulting in several USDA scientists and staff being permanently based there. Oudemans currently leads the small fruit pathology program, which is focused on the development of methodologies to reduce the impact of plant disease and improve fruit quality. He also works with growers to develop and implement economically sound and environmentally rational crop management methods.

In an effort to extend the local strawberry season, professor **Thomas Gianfagna**, Department of Plant Biology, studied advanced packaging technologies through a project funded by a Northeast SARE Research for Novel Approaches Grant. Gianfagna examined the use of modified atmospheric packaging (MAP) and essential oils to prolong fruit freshness and storage life as compared to conventional storage strategies. MAP is widely used in today's food packaging where typically, levels of oxygen inside food containers are lowered to reduce oxidation or carbon dioxide levels are increased to inhibit ripening. In this project, Gianfagna experimented with MAP bags outfitted with carbon dioxide emitters to reduce water loss in the berries. Fruit was evaluated in bags used with and without essential oil treatments. Results indicated that MAP, with or without essential oils, was most effective in maintaining postharvest quality. Overall, the project showed promise that the use of MAP, especially in combination with essential oil sachets, can reduce disease incidence and maintain fruit quality. Further, off-flavors and aromas should not be of concern to growers. Gianfagna is hopeful that farmers may use MAP and essential oil sachets, when commercially available, to extend the postharvest quality of fruits, vegetables, and even cut flowers on their farms. The project summary is available at 2020annualreportFINALweb.pdf (sare.org).

Of Interest

Rutgers Cooperative Extension (RCE) is resuming in-person programming this month. Extension professionals across all program areas may offer in-person programming, limited at this time to outdoor events with no more than 25 people in attendance. This includes farm and field visits, twilight meetings, and 4-H clubs and programs. Resuming in-person events will not affect the continuation of online or hybrid events as both are essential tools for successful RCE programming. Contact your county extension office for further details.

Rutgers Cooperative Extension is working with extension professionals in the northeastern states to deliver weekly, one-hour webinar programming for agritourism and on-farm direct market operators. The May 18 session covered what to do in the event of a confrontation, accident, or injury, and how to communicate with the media in a crisis. The session was presented by RCE agricultural agents **Bill Bamka** (Burlington), **Stephen Komar** (Sussex), and **Bill Hlubik** (Middlesex). For upcoming sessions and recorded past sessions, visit: www.uvm.edu/extension/vtagritourism/safety-and-liability-farms-during-covid-19

The following updated and new publications are now available on NJAES Publications:

E002 New Jersey Commercial Tree Fruit Production Guide 2021/2022. **Polk**, **D.**, **van Vuuren**, **M.**, **Besançon**, **T.**, **Hamilton**, **G.**, **Hastings**, **P.**, **Lalancette**, **N.**, **Muehlbauer**, **M.**, **Heckman**, **J.**, **Gohil**, **H.**, **Ward**, **D.**, **Nielsen**, **A.**, and **Schmitt**, **D.**

E308 Commercial Cranberry Pest Control Recommendations for New Jersey, 2021. **Besançon**, **T.**, **Oudemans**, **P.**, and **Rodriguez-Saona**, **C.**

FS1330 Monitoring and Management of Pepper Weevil in New Jersey. **Ingerson-Mahar**, **J.**

E368 Choosing Plants for a Hazelnut Orchard in New Jersey. **Muehlbauer**, **M.**, **Capik**, **J.**, and **Molnar**, **T.**

E360 Indoor Cultivation Instruction at Rutgers School of Environmental and Biological Sciences. **Ayeni**, **A.**; Dmitruck, J.; **Sciarappa**, **W.**; **Both, A.**; **McNamara**, **D.**; and Lotfi, A.

In the News

NJ.com interviewed extension specialist in pest management **George Hamilton** and associate extension specialist in entomology **Anne Nielsen** in 2021 cicadas: When are the Brood X cicadas coming to N.J.? Latest predictions. Hamilton predicted that the cicadas will be emerging in large numbers in New Jersey in late May. Nielsen explained that the soil temperatures need to reach 64 degrees before the swarms of cicadas emerge.

Events

NOAA's Northeast Regional Climate Center, University of Delaware, NOFA-NJ, and the Rutgers Climate Institute are presenting two sessions on climate adaptation for growers. The first event of the two-part series was held May 17: "Climate Adaptation Using Growing Degree Days," which covered heat tolerant vegetable varieties and strategies for managing the heat, including the use of shade cloths. The recording of that session is available on NOFA-NJ's YouTube channel. The second part will be held **September 20: "Climate Adaptation Using Growing Degree,"** which will cover practical application of growing degree days to New Jersey lettuce cultivation and reporting of results from University of Delaware summer trials on vegetable heat tolerance. Monthly Grower & Farmer Speaker Series – Climate Adaption (Two Parts) | NOFA-NJ. These sessions are a result of the Climate Adaptation Fellowship, which provides farmers, foresters, and advisors with the information they need to adapt to climate change.