Report to the New Jersey State Board of Agriculture
September 2019

Michelle Infante-Casella (l), Virginia and Matt Jacovelli with record-breaking corn plant.

All in a day's work for a county agricultural agent. While judging contests at county fairs is standard practice for agents, verification for entry into the Guinness Book of World Records is rather unusual. Such was the case when Gloucester County agricultural agent **Michelle Infante-Casella** was contacted by the Jacovelli family of Deptford, NJ, to certify the number of ears on a cornstalk growing in their yard. It had an astounding 29 ears! Generated from a rogue corn kernel from the family's squirrel feeder and undoubtedly planted by an ambitious squirrel, the plant qualified the family as Guinness world record- holders for most corn cobs on a single plant. The story was covered by various New Jersey and Philadelphia media outlets.

Led by Rutgers, a consortium of 14 shellfish geneticists from 12 East Coast universities and government agencies has won a five-year, $4.4 million grant funded by NOAA Fisheries through the Atlantic States Marine Fisheries Commission to develop new tools to accelerate selective breeding to support oyster aquaculture. **Ximing Guo**, distinguished professor and renowned shellfish geneticist at Rutgers Haskin Shellfish Research Laboratory, is the lead principal investigator for the project, which will advance the pace of genetic improvement by identifying genes responsible for desirable traits, such as disease tolerance. Improved broodstock will then be made available to commercial hatcheries, thereby sustaining the rapidly expanding $90 million enterprise of farming eastern oysters along the East Coast.

Ripe goldenberries in husk.

Goldenberries (*Physalis peruviana*) are a South American *Solanaceous* fruit gaining attention in North America for their unique tropical flavor and high nutrient content. It has several common names, including Cape gooseberry, and is closely related to tomatillos (*P. ixocarpa*) and ground cherries (*P. pruinosa*). Even though they are native to tropical South America, goldenberries can be grown as an annual in temperate regions. They have a very long growing season and are started in the greenhouse and transplanted outdoors much like tomatoes, peppers, or eggplants as soon as the threat of frost is over. A $102,122, two-year Northeast Region SARE project, "Goldenberries (*Physalis peruviana*): A New Fruit for CSA Farms and Farmers Markets," led by professor **Ed Durner**, Department of Plant Biology, is underway to identify germplasm suitable for growing goldenberries in the Northeast region. Over 200 growers in the Northeast participated in this study in 2018 and 136 returned in 2019.

The National Future Farmers of America (FFA) Organization announced that **Joe Clark**, research farm supervisor at Horticulture Farm II–the turfgrass research farm on the New Brunswick campus–has been selected to receive an Honorary American FFA Degree at the 2019 National FFA Convention & Expo in November in Indianapolis, IN. This award is given to those who advance agricultural education and FFA through outstanding personal commitment. The Honorary American FFA Degree is an opportunity to

recognize those who have gone beyond valuable daily contributions to make an extraordinary long-term difference in the lives of students, inspiring confidence in a new generation of agriculturists. Members of the National FFA Organization's board of directors approved the nomination.

In the News

An August *Washington Post* article on the fastest warming places in the U.S. recalled an era when Lake Hopatacong, NJ, hosted wintertime carnivals with skating, ice hockey, ice fishing, and iceboats, and even automobiles taking to the ice. Those days are long gone and New Jersey is now among the fastest-warming states in the nation, with the average temperature climbing by close to 2°C (3.6°F) since 1895, double the average for the lower 48 states. In the article, **David Robinson**, New Jersey state climatologist, commented that January temperatures in Sussex County need to average around 25 - 26°F for ice fishing. Instead, average winter temperatures are moving closer to the freezing point, with some winters now exceeding 32°F. The article also quoted professor **Anthony Broccoli**, Department of Environmental Sciences, who defined an unusually warm or cold month as ranking among the five most extreme in the record going back to the late 1800s. In the case of New Jersey, he noted, "since 2000, we've had 39 months that were unusually warm and zero that were unusually cold."

In the U.S., spotted lanternfly is an invasive species that could be devastating to some New Jersey crops and hardwood trees. First spotted in New Jersey in 2018, the lanternfly has since been detected in parts of Burlington, Camden, Gloucester, Hunterdon, Mercer, Salem, Somerset, and Warren counties. Associate extension specialist in entomology **Anne Nielsen**, who was interviewed by *NJ101.5*, indicated that with respect to agriculture, grapevines are the most at risk of damage. Nielsen said, "Based off what we've seen in previous years, we should start seeing eggs in October. Eggs typically hatch in April or May, and the nymphs reach adult stage in July, when they're most conspicuous." *News12NJ* interviewed extension specialist in pest management **George Hamilton**, chair of the Department of Entomology, who reported that in some Pennsylvania vineyards the insect has already caused a 50 percent loss of yield. Hamilton advised, "One of the things people can do in New Jersey to help us is to report this insect when they find it." Anyone who comes across a lanternfly bug is asked to take a picture with their phone GPS turned on and should call 1-833-BAD-BUG-0 to make an official report.

Of Interest:

The following fact sheet on NJAES Publications has been updated: FS620 Farm Machinery and Equipment Safety Part II: Preventing Machinery Accidents During Operation. **Margentino**, **M.**, and **Malinowski**, **K.** https://njaes.rutgers.edu/fs620.

Events:

The first New Jersey Organics Waste Management Summit will be held on October 1, 2019, at the Rutgers EcoComplex in Bordentown, NJ, co-hosted by the New Jersey Composting Council (NJCC) and the EcoComplex. Go to: https://www.eventbrite.com/e/organic-waste-management-summit-tickets-59546283537.