A REPORT FROM THE

EXECUTIVE DEAN OF AGRICULTURE AND NATURAL RESOURCES

Report to the New Jersey State Board of Agriculture June 2016



Graduate student Jonathan T. Torlon conducting research using wollastonite.

Members of the Department of Plant Biology and Pathology: extension specialist in soil fertility **Joseph Heckman**, distinguished professor of plant biology **Jim Simon**, and extension specialist in vegetable pathology **Andy Wyenandt**, and graduate student **Jonathan T. Torlon**, recently published the results of their study, "Silicon Soil Amendments for Suppressing Powdery Mildew on Pumpkin," in *Sustainability*, an open-access journal. The study identified wollastonite as the most effective source of silicon fertilizer for pumpkin. Wollastonite is a naturally-occurring, mined calcium silicate material that can be used in organic farming. This finding provides a new tool for organic and conventional growers to manage powdery mildew disease on pumpkin and other vine crops.



L-R: Jenny Carleo, RCE agricultural agent of Cape May County; Chris Miller, manager/plant specialist, USDA Plant Material Center, Natural Resources Conservation Service; and Jennifer Matthews, NJALDP director.

On June 8, Rutgers Cooperative Extension and the New Jersey Agricultural Society (NJAS) teamed up to offer a tour for 14 participants in the New Jersey Agricultural Leadership Development Program (NJALDP) in Cape May County. The goal was to teach the class first-hand about the issues faced by New Jersey farmers. Jenny Carleo, agricultural and resource management agent with Rutgers Cooperative Extension of Cape May County, was invited by Jennifer Matthews, director of NJALDP, to lead the tour. The day began with an insider's view of the oyster industry and included a visit to Rutgers' New Jersey Aquaculture Innovation Center. David Bushek, director of the Haskin Shellfish Research Lab, and Mike Acquafredda, a graduate student studying the potential for surf clam farming in New Jersey, gave participants an overview of initiatives at the center and a facility tour to see how oyster seed is developed and how Rutgers supports the industry by growing disease-resistant oysters.

The NJALDP tour included stops at a commercial oyster farm, a winery, and the USDA-NRCS Plant Materials Center. The tour guides and site hosts gave participants an in-depth perspective of the challenges faced by the farming and oyster industries in Cape May County, some of which are due to state regulations and others are unique to this remote county that is significantly affected by tourism, the economy, and its rich but delicate coastal/bayshore environment. The NJALDP is a two-year professional development opportunity offered by the New Jersey Agricultural Society and is designed for individuals in farming and agribusiness to become informed, articulate leaders.



A June 16 article in *The Intelligencer*, "Insects that attack onions and garlic come to Pennsylvania and New Jersey," quoted RCE agricultural agents **Ray Samulis** (Burlington County) and **Rick VanVranken** (Atlantic County). Tiny, yellow-headed flies called allium leafminers are infesting onion, garlic, shallot, and other allium crops in both states. Alliums are part of a family of bulbous plants that also include chives and leeks. **VanVranken** said an infestation was found in Mercer County and he's concerned about the parts of Atlantic, Cumberland, and Salem counties surrounding Vineland, where more than 25 farmers grow between 10 and 50 acres of leeks and scallions.

Atlantic County agricultural agent **Rick VanVranken** was interviewed for the article "Cash in on Ethnic Crops" in the June 10 issue of *Growing Produce*. In the past few years, ethnic specialty crops are being grown by an increasing number of farmers. While there are many opportunities in the sector, **VanVranken** cautions growers to resist the temptation to dive head first into the category without doing their homework and they appear to be following suit. **VanVranken** said, "[Growers] aren't going out and overdoing it, sight unseen. They are doing a lot of homework in researching what the plants are, how they grow, and putting out a few rows and beds to play with for a couple of years so they really know how to grow and package it." **VanVranken** is the co-founder of the Ethnic Produce Production and Marketing Working Group, a multi-state group of extension faculty that conducts research and programming on the marketing and production of ethnic specialty crops for growers on the East Coast.

The publication, *Golf Course Industry*, interviewed extension specialist in turf management **Jim Murphy** in its June 2 article, "Hot and (potentially) heavy," which focused on the risk factors and management of anthracnose on golf turf. Heat and humidity are major factors in determining the severity of an anthracnose outbreak. **Murphy** said, "We almost always have the potential for anthracnose. The summers are usually warm enough to get some level of diseases activity...If you haven't, you need to soon get started with your topdressing programs, your fertility programs, because those can have a big impact on keeping the disease at bay. If you don't do these things, your chemical inputs have to go way up to manage this disease versus if you don't do the proper fertilization, proper topdressing, and proper mowing management." Anthracnose does develop chemical resistances, so **Murphy** emphasized is the importance of superintendents rotating chemicals and tank mixes.

Of Interest:

The following new bulletin is now available on NJAES Publications (http://njaes.rutgers.edu/pubs): E355 The Economic Importance of New Jersey's Food System in 2012. Schilling, B. and Sullivan, K. http://njaes.rutgers.edu/pubs/publication.asp?pid=E355. Note: This installment is an update to an existing bulletin: E332 The Economic Impact of New Jersey's Food System: A 2010 Update (http://njaes.rutgers.edu/pubs/publication.asp?pid=E332).

