A REPORT FROM THE

EXECUTIVE DEAN OF AGRICULTURE AND NATURAL RESOURCES

Report to the New Jersey State Board of Agriculture March 2016



George Hamilton, extension specialist in pest management, prepping bed for grant-funded field trial on Brown Marmorated Stink Bug control on peppers.

Since 1985, the Vegetable Growers Association of New Jersey (VGA) Research Fund has supported Rutgers NJAES researchers who serve the industry. NJAES director of farm programs Jack Rabin reports that in 32 growing seasons (1985-2016) and via the VGA, New Jersey's vegetable growers have made awards totaling \$173,275 in support of 72 vegetable research projects. Awards range from about \$20,000 to \$400, with larger amounts granted in recent years as the fund grew along with the increasing complexity and cost of various research problems. Gift giving to support these kinds of projects have grown and the principal balance now stands at \$147,378, thanks to the original gift of \$60,000 from grower Charlie Maier; an additional grower gift of \$50,000 in 2008; many additional smaller gifts made to the Rutgers Foundation; and growth of the principal in the ensuing years. Rabin states, "That's \$320,653 in lasting value from the Vegetable Growers Association partnership with Rutgers Foundation from a modest start of \$60,000. The fund generates about \$8,000 annually. The long-term goal should be to build principal to

\$750,000, so larger projects can be addressed through a Graduate Assistantship in Veg Crops. Graduate students, with their high motivation, get a lot of work completed for every dollar of support."

A Greenhouse Production Short Course was held at the Rutgers EcoComplex in Bordentown on March 7 and 8. In addition to a tour of the EcoComplex greenhouse and a small trade show featuring greenhouse structures and supplies, classes covered many essential topics, including greenhouse structures, heating, ventilation, cooling, supplemental lighting, shading, control systems, high tunnel production, crop production, hydroponics, irrigation, nutrient management, pests and diseases, aquaponics, specialty crop production, business plan basics, and marketing and sales. Instructors included **Dave Specca**, assistant director for bioenergy technologies & controlled environment ag at the EcoComplex, and **A.J. Both**, associate extension specialist in bioresource engineering, Department of Environmental Sciences, plus other NJAES faculty and staff, and representatives from external agencies.

Mercer County agricultural agent **Meredith Melendez** hosted an annual organic farmers' advisory group meeting on March 17 in Mercer County. Fifteen organic growers attended out of a total of 27 agriculturists. All attendees were existing growers and practitioners, with needs that differ from beginning farmers. The group urged Rutgers NJAES to increase availability of pest control study results and reporting on trustworthy efficacy studies of OMRI-approved products for pest control and fertility, including studies not conducted at Rutgers. The organic growers value this vibrant annual event as an opportunity to communicate their need for research and information.



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Of Interest:





George H. Cook

Rutgers rich history of tradition and innovation is captured in the tagline for its 250th anniversary: "Rutgers – Revolutionary for 250 Years." The agricultural college and experiment station were developed in the 19th century; many of the revolutionary contributions from the university came from these sectors, starting in 1853 when George H. Cook was hired. Cook was considered by far the most important single figure at 19th-century Rutgers. The seeds of

Rutgers' ascent as a major public research university can be traced to Cook's appointment as professor of chemistry and natural sciences. A geologist, chemist, engineer, and agriculturalist, Cook promulgated scientific rigor at Rutgers. According to William Demarest's *A History of Rutgers College,* "He organized the weather service of the state ... His discoveries or disclosures of the natural resources of the state led to the development of clays and soils, of iron and zinc, and of water supply." Cook's survey of New Jersey's geology was conducted in 1863 and published in 1864. Among Cook's first research projects was chemical analysis of New Jersey's greensand marl, an organic fertilizer "of incalculable value [that] raised the region from the lowest state of exhaustion to a high state of improvement." This led to his appointment as assistant state geologist and his assignment to update the state's woefully

out-of-date geological survey. His work would become the model for the U.S. Geological Survey. That same year, Cook successfully lobbied the state legislature to have Rutgers College named the land-grant institution of New Jersey, with departments in agriculture, engineering, and chemistry, following the passage of the Morrill Act of 1862 that provided grants of federal lands to states and territories agreeing to establish a public institution for teaching of agriculture and mechanical arts. More on Cook's legacy at Rutgers can be found at: http://discovery.rutgers.edu/pubs/Explorations-Spring-2015.pdf#page=8.

Have you signed up for the Plant & Pest Advisory? It is a free, online resource that contains all the latest information on plant diseases, insects, and weeds. Also included are updates on meetings, research results, on-farm food safety, and the latest information from the Plant Diagnostic Laboratory. Specific editions include vegetable crops; fruit crops; and landscape, ornamentals, nursery and turf. To sign up, go to http://plant-pest-advisory.rutgers.edu and select the edition(s) you want. Once you sign up, the advisory will be emailed to you on a regular basis.

Visit our Rutgers NJAES online resources:

Vegetable Crops Online Resources: <u>http://nj-vegetable-crops-online-resources.rutgers.edu</u> Plant & Pest Advisory: <u>http://plant-pest-advisory.rutgers.edu</u> Sustaining Farming on the Urban Fringe: <u>http://sustainable-farming.rutgers.edu</u> What's in Season from the Garden State: <u>http://www.njfarmfresh.rutgers.edu/archive.html</u> Rutgers 250 celebrates NJAES plant breeding: <u>http://breeding.rutgers.edu</u>



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