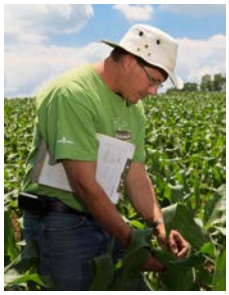
Report to the New Jersey State Board of Agriculture
March 2018



Kris Holmstrom monitors a sweet corn field for ECB and corn earworm.

A Mid-Atlantic multi-state study compared the rate of European corn borer and corn earworm damage before and after introduction of Bt-field corn usage on other non-Bt crop fields. The study was published on March 12 in the *Proceedings of the National Academy of Sciences*. **Kris Holmstrom**, research project coordinator in the Vegetable Integrated Pest Management Program, is a co-author of the study and provided the New Jersey data. Holmstrom manages information from a network of blacklight insect survey traps on farms throughout New Jersey that catch the European corn borer and corn earworm. As the acreage of genetically engineered corn increased in the Mid-Atlantic region, other crops that hadn't been modified but were vulnerable to that pest became less threatened – particularly, bell peppers and green beans. Moth populations of both species significantly declined in association with widespread Bt field corn adoption, even as increased temperatures buffered the population reduction. The study showed marked decreases in the number of recommended insecticidal applications, insecticides applied, and ECB damage in vegetable crops in association with widespread Bt field corn adoption. ECB is a major pest of green beans and peppers, and both insects are major pests of sweet corn.

The USDA Northeast Climate Hub held its "Building Agricultural Resiliency through Adaptation" event at Rutgers in March. The two-day meeting was hosted by Delaware State University and Rutgers, and examined climate adaptation and actions to support agriculture in the northeast. The Hub and partners invited participants from universities and federal and state agencies, researchers, and farmers to provide perspectives on climate adaptation and resilience. Participants presented solutions by sharing adaptation experiences and discussing their feasibility, cost-effectiveness, and tradeoffs. Representatives from New Jersey included Rutgers–New Brunswick Chancellor **Deba Dutta**; NJAES executive director **Bob Goodman**; associate director, Rutgers Climate Institute **Marjorie Kaplan**; extension specialist in pomology **Dan Ward**, Department of Plant Biology; Cape May County agricultural agent **Jenny Carleo**; program coordinator **Jenny Paterno Shinn**, Haskin Shellfish Research Laboratory; and Pam Mount from Terhune Orchards.

Spotted lanternfly

The spotted lanternfly (SLF) is a new invasive pest from Asia. The leafhopper was first found in the U.S. in 2014, in Berks County, PA, and has since spread to 13 counties in Pennsylvania, but has not yet been detected in New Jersey. The SLF has no known predators in the U.S., and can be devastating to grapevines, fruit trees, nursery plants, and other crops. A March 12 article in the *Press of Atlantic City* quoted specialist in entomology **Cesar Rodriguez-Saona**, Philip E. Marucci Center for Blueberry and Cranberry Research, who said the spotted lanternfly can pose a threat to the grape industry in particular, and it needs to be watched through surveillance and crowdsource reports. The article quoted **Jenny Carleo** who advises farmers what to look for and whom to call if they see a

spotted lanternfly. The Department of Entomology website (njaes.rutgers.edu/spotted-lanternfly) has images of different life stages of the insect and requests those who have seen or collected a spotted lanternfly to report it to NJDA or Department of Entomology at slanternfly@njaes.rutgers.edu.

In the spring of 2017, vegetable and field crop entomologists of the Northeast States were surveyed for a current snapshot of what they considered to be 'hot-topic', or, critical insect (and slug) pests in their state or region. The responding states included New Hampshire, Connecticut, New York, Pennsylvania, New Jersey, Maryland, Virginia, and West Virginia. The results of the survey, including both native and invasive pests, are listed in the table, "Survey of the Current or Hot Topic Pests," linked here: go.rutgers.edu/fhapv0qj. The purpose of the survey was to help the ag community become more aware of the current pest situation in the Northeast; to provide a reference for grant writers; and to help researchers develop collaborative management efforts. Vegetable IPM coordinator **Joe Ingerson-Mahar** and **Kris Holmstrom** contributed the data from New Jersey.

The *Delmarva Farmer* reports that the Rutgers Agribusiness Scholars Program, set to launch in Fall 2018, will combine extension outreach, education and research to introduce students to the real world aspects of agriculture. The first round of student applications closed on Feb. 26 and the initial class will gain an enhanced understanding of agricultural issues, beyond the field. Funded by a grant from The Clearing Corporation Charitable Foundation (CCCF), the scholars program will be a two-year, 18-credit program available to qualified students entering their junior year at the School of Environmental and Biological Sciences. The Agribusiness Scholars Program is seeking additional funding to fully support its mission of preparing students for vital careers in this industry sector. The CCCF is matching donations received through March 31 on a dollar--for-dollar basis, up to $250,000. For more information, visit clearingagscholars.rutgers.edu or email schilling@njaes.rutgers.edu or komar@njaes.rutgers.edu.

Of Interest:

Visit the new Rutgers On-Farm Food Safety website for information on Good Agricultural Practices, the Food Safety Modernization Act Produce Safety Rule, and USDA Third Party Audits. Also posted are on-farm food safety workshops, publications, and resources to help growers understand and implement on-farm food safety practices. An "Ask the Expert" feature provides direct feedback from site hosts **Wes Kline**, on-farm food safety coordinator, and **Meredith Melendez**, Mercer County agricultural agent. onfarmfoodsafety.rutgers.edu.

Growers are invited to participate in an organic production system weed research study that is being conducted by **Meredith Melendez** and **Thierry Besançon**, weed specialist, Department of Plant Biology. The purpose of the study is to determine the most problematic weeds in production areas and the control methods currently being used. Anyone who is certified organic, transitioning to certified organic, or uses organic production practices is eligible to complete the survey. The anonymous 23-question online survey is available at rutgers.ca1.qualtrics.com/jfe/form/SV_b2RNgxjrQnpEI05. Results will be used to assess programmatic impacts and develop future outreach efforts. This survey is open from March 2018 to April 2018.