The New Jersey tomato and potato industry has been on high alert this summer due to the outbreak of late blight in the greater Northeast region of the U.S. Late blight is a serious disease that affects tomato and potato crops around the world and is caused by Phytophthora infestans, the pathogen largely responsible for the Irish Potato Famine in the mid-1800s. While late blight occurs sporadically in the Northeast, the relatively cool summer and the frequent rainfall have led to ideal conditions for the development of the disease. Late blight has the potential to become a major problem because it can quickly kill affected plants and its spores are easily carried in wind currents to infect other susceptible plants.

Rutgers Cooperative Extension (RCE) faculty and staff have responded robustly to the outbreak, with a series of recommendations and training sessions delivering timely information for growers and the average kitchen gardener in the state and the Northeast. “Andy Wyenandt (extension specialist in Vegetable Pathology) in particular, with assistance from NJAES colleagues, has done a superb job for the whole Northeast region, responding on the many fronts to the late blight outbreak. While the problems are not entirely behind us, Andy deserves kudos for the comprehensive response we were able to mount to this threat to the New Jersey farm community,” said Jack Rabin (associate director, Farm Programs) at Rutgers New Jersey Agricultural Extension Station and Rutgers Cooperative Extension. Steps taken by NJAES include:

- Dissemination of control recommendations for commercial farms and home owner vegetable gardens
- Providing timely updates on late blight outbreaks for commercial and retail growers utilizing the NJAES Pest Alert System.
- Weekly disease forecasting reports for Late blight development in tomato and potato.
- Offering diagnostic services to New Jersey residents at Rutgers Plant Diagnostic Lab
- Providing up-to-date technical content on the web.
- Development of a regional training webinar titled “Late blight and other important diseases of tomato in the home garden,” which attracted over 100 participants
- Help in establishing the epidemiological trail of the disease outbreak via consumer plants brought in by big-box retail stores.
- Providing news, radio and media outlets with important information on late blight for home gardeners and consumers.
Royalties Support Programs at Turfgrass Center

Rutgers turfgrass research program is highly regarded nationwide and around the world. In fact, Rutgers-bred turfgrass can be found everywhere from New York’s Central Park to Lambeau Field, home of the Green Bay Packers. And most of the best turf seed commercially available has Rutgers’ stamp on it, thanks to the Center for Turfgrass Science, a unit of Rutgers New Jersey Agricultural Experiment Station. The center recently received a sizeable royalty from LebanonTurf, a division of Lebanon Seaboard Corp., with whom the center has partnered since the early 1990s. The check for $280,000 was presented to the center for its leadership in developing several of the company’s top turfgrass varieties. Royalties from its partnership with LebanonTurf and other private sector firms go to support the center’s grass seed breeding program. The center’s reputation has also led to research and education partnerships with universities in countries as far flung as Norway and China. Expanding its global reach, the center in 2006 partnered with the Norwegian Institute for Agricultural and Environmental Research to bring Norwegian graduate students in turfgrass science to Rutgers for research and study. In China, the center has developed extensive ties with several premiere universities, including Shanghai Jiao Tong University, Beijing Forestry University, and the Agricultural University of Hebei. Read more on the center’s global turfgrass collaborations and its recent royalty news.

Retirement Planning Web Site for Farm Families

A new website, Later Life Farming: Creating a Retirement Paycheck, was launched in early August to help farm families achieve financial security in later life, whether they choose to stop working or not. Later Life Farming was created by a team of four Rutgers Cooperative Extension faculty members: Barbara O’Neill (specialist in Financial Resource Management), Steve Komar (Sussex County agricultural and resource management agent), Robin Brumfield (farm management specialist), and Robert Mickel (Hunterdon County agricultural agent and regional livestock agent). This web resource was based on input from two focus groups of New Jersey farm families, assessing their financial concerns, their thoughts about retirement, and their learning preferences. The website consists of 10 modules and lists of action steps and references. It contains both original content and links to retirement planning materials for farmers from Rutgers Cooperative Extension and other land-grant universities. Each of the ten modules contains several sections with short content summaries and links to activities that enable learners to personally apply course information. Topics covered in the modules include How Much Do I Need to Save?, Sources of Retirement Income, and Farm Transfer Decisions, among other topics. Later Life Farming is available on the Rutgers Cooperative Extension website.
Project Strengthens International Agricultural Collaborations

Three Rutgers students are participating in an international agricultural collaborative project in Nigeria and Kenya under an International Science and Education (ISE) project titled "Agricultural competitiveness in New Jersey and the United States: New crop options." The project is funded by the USDA’s Cooperative State Research, Education, and Extension Service (CSREES) with matching funding from Rutgers’ NJAES and introduces students to agricultural systems in Asia, Africa, and the Americas. The students, Andrew Glaser (Junior), Nicholas Greene (Sophomore), and Syed Abbas (Junior), traveled to Africa on July 18 to start the first leg of their project internship at the University of Ibadan (UI), Ibadan, Nigeria and the Kenya Agricultural Research Institute, Thika (KARI-Thika), Kenya. Abbas and Greene, who are visiting the UI, and Glaser, who is visiting KARI-Thika, will spend four weeks this summer as part of the ISE project learning about the Nigerian and Kenyan agricultural systems. The overall goals of the project are to advance (i) food crop diversification in the Mid-Atlantic to respond to changing demographics, (ii) research on new crops for biofuels to enhance alternate energy source development for the US economy, and (iii) curriculum internationalization at the School of Environmental and Biological Sciences.

Faculty and Staff Activities and Accomplishments

An article by Rachel Winfree (Entomology) and colleagues R. Aguilar, D. P. Vázquez, G. LeBuhn, and M. A. Aizen, was the featured cover of Ecology. The article, “A meta-analysis of bees’ responses to anthropogenic disturbance,” pp. 2068–2076, appears in the August 2009 issue of the magazine.

Ellen Williams (Monmouth County 4-H agent) received $5,400 of Summer Workforce Investment Act Hire-A-Youth Program funding for implementation of a Youth Farmstand in Asbury Park. This award is part of the $31,019 grant to Interfaith Neighbors, Inc. presented by the Monmouth County Division of Employment and Training in June 2009.

Stacy Bonos (Plant Biology and Pathology) was selected as the first recipient of the Early Career Plant Breeding Achievement Award from the U.S. Plant Breeding Coordinating Committee (PBCC) for her “remarkable record of achievement in germplasm releases, publications, teaching and mentoring students, awards and recognition, and attraction of grant funds.” Bonos, who was nominated by Brad Hillman (director for Cooperative Research at NJAES and professor of Plant Biology and Pathology), was selected for this inaugural award at the annual PBCC meeting on August 4.

The collaborative team of Jack Rabin (associate director of Farm Programs, NJAES), Tom Orton (extension specialist in Horticulture), Michelle Infante-Casella (Gloucester County agricultural agent), Wes Kline, (Warren County agricultural agent), Peter Nitzsche (Morris County agricultural agent), and Beverly Tepper (Food Science) received a grant of $33,692 from Seminis Seeds for "Assessing market tomato genotypes for flavor components and culinary preference," 2009–2010.
Outreach Efforts: Public/Community Service

Rutgers Cooperative Extension (RCE) of Bergen County completed its pilot program of a brand new Horticultural Therapy and Life Skills Training Program for the Garfield Middle School. This new $53 million school includes a greenhouse and craft classroom and several life skills labs. Joel Flagler (Bergen County agricultural agent) designed and delivered the horticulture program for the school’s developmentally disabled students. Tamara Pellien (Bergen 4-H program associate) designed and delivered the life skills training for non-disabled students.

As part of RCE’s continued collaboration with the NJ Environmental Federation, NJ Department of Environmental Protection, and others, to develop and conduct IPM trainings focusing on the landscape and turf component for school district IPM programs, William Hlubik (Middlesex County agricultural and resource management agent) and Richard Weidman (Middlesex County agriculture associate) presented two sessions in Jackson and Piscataway, NJ.

RCE conducts a robust milk quality program in support of the state’s dairy industry and close to half of New Jersey’s 100 dairies have benefitted from milk quality outreach over the past year. Dave Lee (Salem County agricultural and resource management agent) and his RCE colleagues conducted somatic cell count tests to help dairy producers identify cows with sub-clinical mastitis and recommended proper treatment to lower somatic cell counts in order to increase milk production. In addition, their outreach activities included rigorous monitoring of bulk tank milk temperatures to increase the efficiency of milk cooling systems, plus extensive evaluation of environmental conditions on 10 farms to assess the quality of animal housing units and recommending modifications to promote the comfort of the animals.

Mark Your Calendars!

Introduction to Issues in Watershed Management
WHEN: Wednesday, August 26, 10 a.m. to 12 p.m.
WHERE: Garibaldi Hall, Essex County Environmental Center, Roseland, New Jersey
WHAT: Storm water management seminar, including agricultural management practices for nonpoint source pollution and ecological restoration for water resources protection
MORE INFO: Sponsored by Rutgers Cooperative Extension of Essex County and Essex County Department of Parks. Contact Jan Zientak at 973-228-2210, zientek@njaes.rutgers.edu.

Annual Great Tomato Tasting
WHEN: Wednesday, August 26 at 3:00 p.m.
WHERE: Snyder Farm, 140 Locust Grove Road, Pittstown, NJ
WHAT: The annual Snyder Farm Open House and Great Tomato Tasting
MORE INFO: Contact Pat Lobb at 908-713-8980, lobb@njaes.rutgers.edu or visit the event page.

This report is produced by the Office of Communications. For information or to provide comments, please contact Paula Walcott-Quintin at quintin@aesop.rutgers.edu or 732-932-7000, ext. 4204.