

EXECUTIVE DEAN
OF AGRICULTURE AND NATURAL RESOURCES

December 2008

Spotlight on... Rutgers Against Hunger



Eating a healthy and nutritious diet is a common challenge for many Americans who struggle with obesity and diet-related illnesses like type-2 diabetes and heart disease. However, that challenge is being made even more difficult in the wake of a greatly weakened economy.

In New Jersey alone, food banks have experienced a 25 percent increase in clients, just as food supplies and donations have declined by 20 percent in the last year. Those numbers are only expected to worsen as unemployment rates and the number of individuals and families seeking state assistance increase.

Rutgers, The State University of New Jersey, is dedicated to increasing hunger awareness and encouraging outreach to help those in need. Through Rutgers Against Hunger (RAH), students, faculty, and staff are joining together to seek solutions and strategies to combat hunger. Representatives from departments, programs, clubs, and centers throughout the university are being asked to develop programs in teaching, research, and outreach that address the issue of food security, as well as the related issues of food systems, nutrition, and health.

Within the New Jersey Agricultural Experiment Station (NJAES), a number of programs are already in place to help New Jersey residents of all ages to access and recognize nutritious foods. For example,

- The New Jersey Supplemental Nutrition Assistance Program (SNAP)-Ed program supports nutrition education for SNAP (formerly food stamp) recipients.
- Faculty at the Food Policy Institute are investigating food security, farm markets, and ethnic crops. This research could inform policy decisions and help meet the needs of a changing population.
- The Get Moving-Get Healthy program is focused on improving the health of individuals, families, and communities through healthful eating, physical activity, educational programs, publications, and targeted marketing campaigns. A coordinated program with Rutgers 4-H Youth Development brings the Get Moving-Get Healthy model to youth throughout the state.

Rutgers Against Hunger is already seeing results. Recently, faculty, students and staff from NJAES and the School of Environmental and Biological Sciences joined with Farmers Against Hunger, a program of the New Jersey Agricultural Society, on two gleanings at Giamarese Farm in East Brunswick (photo above). The volunteers gathered approximately 2,000 pounds of collard and turnip greens. Gleanings help to get fresh produce to the hungry, who often have only processed or pre-packaged choices available to them.

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Spotlight on...Cranberry Production



A new cranberry hybrid is helping growers to increase production and improve fruit quality. It is also helping them to meet the increasing year-round demand for cranberry juices, fruit drinks, and "craisins" from health-conscious consumers.

"Ten years ago, the cranberry industry suffered a severe economic crisis," said **Nicholi Vorsa**, research professor in the Department of Plant Biology and Pathology at Rutgers University and inventor of the new hybrid.

"Increasing labor, fuel and material costs coupled with stringent environmental regulations have placed considerable economic pressure on cranberry growers. Without productivity improvements, many would have to abandon growing this uniquely American fruit, a livelihood that is often a multigenerational family endeavor."

Working at the university's Marucci Blueberry-Cranberry Research Center in Chatsworth, Vorsa led an effort to develop a cranberry plant that delivered higher yields, ripened earlier in the season, and had vines that grew faster and resisted weeds and disease better than previous varieties. Until now, growers cultivated selections from wild bogs or relied on first-generation hybrids from the 1940s and 1950s that provided little genetic improvement.

The higher yields from Vorsa's new hybrid, named Crimson Queen, mean that fewer new acres of environmentally sensitive wetlands have to be developed to meet increased demand. The earlier ripening helps growers get their product to market in time for the annual Thanksgiving feast.

The faster growing plants help growers by producing fruit in newly planted or renovated fields a full year earlier. Cranberry beds planted with Crimson Queen hybrids come into full production in three to four years, versus the four to five years of traditional varieties. The hybrid's hardiness reduces the need for herbicides and pesticides, cutting costs and reducing environmental harm.

Rutgers received a patent for the Crimson Queen hybrid in 2007, and licensed the hybrid and two companion varieties to more than 40 grower-members of the Ocean Spray cooperative. Rutgers began receiving royalties on its patent this year.

Earlier this month, the Research and Development Council of New Jersey awarded Vorsa a 2008 Thomas Alva Edison patent award. The Council issues these awards annually to recognize New Jersey inventions in business categories that benefit the state's economy, including agriculture.

Crimson Queen is only the second cranberry in the history of the United States to be patented.

"The earlier patented hybrid improved the fruit's red color but didn't improve yield and proved to be susceptible to early rot," Vorsa said. "So until Crimson Queen came along, growers had to rely on traditional unpatented varieties."

Crimson Queen plants are now grown in Wisconsin, Massachusetts and New Jersey – the first, second and third leading cranberry producing states in the U.S. They are also grown in the Canadian provinces of British Columbia, Nova Scotia and Quebec.

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Faculty and Staff Activities and Accomplishments



Rutgers EcoComplex, the environmental research and extension center of Rutgers, The State University of New Jersey, is the 2008 recipient of the Governor's Environmental Excellence Award in the innovative technology category. New Jersey Governor Jon Corzine presented the center with the award at a ceremony and press event on Wednesday, Nov. 29 at Drumthwacket, the official residence of the governor.

Photo l. to r.: **Paul Falkowski** (Institute of Marine and Coastal Sciences and director of Rutgers Energy Institute), **Margaret Brennan-Tonetta** (NJAES), and **David Specca** (EcoComplex).

Jerome Frecon (Gloucester County Agricultural and Resource Management agent) was the recipient of the Northeast Regional Award for Excellence in Extension from the National Association of State Universities and Land Grant Colleges. The award was presented at NASULGC's Annual Meeting on November 8 in Chicago. Frecon is internationally recognized for his work in tree fruit production systems, cultivar evaluation, and applied horticultural research.

William Tietjen (Warren County Agricultural and Resource Management agent) was awarded a \$1,000 scholarship from the National Association of County Agricultural Agents to attend the British High Tunnel Study Tour sponsored by Michigan State University, October 5–8. Tour attendees learned about tunnel crop production of strawberries, raspberries, cherries, lilies, and asparagus.

Grants


Rutgers, The State University of New Jersey, has received a four-year, \$10 million grant from the Robert Wood Johnson Foundation to establish the Institute for Food, Nutrition, and Health, on its George H. Cook Campus. The facility will be a four-story, 88,000-square-foot building located near the Food Science Building at the corner of Dudley Road and College Farm Road. It will contain laboratories, computing facilities, "smart" lecture halls and classrooms, and flexible spaces to accommodate the changing needs of the institute. The \$10 million is a first step toward the completion of the building, and will be supplemented by \$55 million from the university and gifts from donors.

Outreach Efforts: Public/Community Service

Rutgers Cooperative Extension personnel continue to collaborate with the NJ Environmental Federation, NJ DEP, and others to develop and conduct IPM training focusing on the landscape and turf component for School IPM programs. One session attended by 120 people was held on October 1 in Sewell. Another session, held on October 22 in Montclair, was attended by 96

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participants, 80% of whom were school principals. Principals are now urged by their superintendents and NJDEP to attend IPM training to learn about their responsibilities under the law. An additional session was held on November 6 in Bordentown and was attended by 54 participants. **William Hlubik** (Middlesex County Agricultural and Resource Management agent) presented at all three sessions. Since March 2005, 3,638 people have completed the School IPM coordinator training.

The **Family and Community Health Sciences Department** of Ocean County, in cooperation with the Ocean County Health Department hosted Children's Health Summit—Fighting Back Against Childhood Obesity on Dec. 12 in Toms River. This event focused on understanding, prevention and treatment of childhood weight and obesity issues.

Mark Your Calendars!

North Jersey Ornamental Horticultural Symposium

WHEN: January 6–8

WHERE: County College of Morris, Randolph, NJ

WHAT: These educational programs are aimed at professionals in the green industry and feature speakers who are leading experts from Rutgers NJAES Cooperative Extension, state government, and private industry.

MORE INFO: 973-285-8300, option 2.

18th Annual Rutgers Turfgrass Research Symposium

WHEN: January 12

WHERE: Foran Hall on Rutgers G.H. Cook Campus

WHAT: This year's symposium will focus on current turf research accomplishments from a wide range of basic and applied projects at Rutgers University and other institutions on the East Coast and in the desert Southwest.

MORE INFO: Register online at www.turf.rutgers.edu or call 732-932-9400.

Atlantic Coast Agricultural Convention and Trade Show

WHEN: January 13–15

WHERE: Trump Taj Mahal, Atlantic City, NJ

MORE INFO: Mel Henninger at 732-932-9711, ext 120.

Mid-Atlantic Nursery and Trade Show

WHEN: January 7–9

WHERE: Baltimore Convention Center, One Pratt Street, Baltimore, MD

MORE INFO: www.mants.com/ or MANTS2009@MANTS.com.

Regional Women in Agriculture Conference 2009

WHEN: January 22–23

WHERE: Dover Downs Hotel and Conference Center, Dover, DE

MORE INFO: Jenny Carleo at 609-465-5115.

