Spotlight on...Steve Garrison

Steve Garrison officially retired in 2002, but you’d never know it from the hours he keeps at Rutgers Agricultural Research & Extension Center (RAREC) in Upper Deerfield, New Jersey.

Garrison is an expert in asparagus breeding, so spring is his busiest time of the year. From March through May, and sometimes even into June, he’s usually in the fields, checking and harvesting his plants, seven days a week. Post harvest, he cuts back to four or five days a week, and in the winter, his visits drop down to a “mere” three days a week.

“I enjoy my time here and doing what I do and the people that I work with,” Garrison explained.

Luckily for him, his commute is short. Garrison grew up on a farm just two miles from RAREC, and today, he and his wife live in the house his grandfather built in 1897.

Garrison’s experiences from growing up in a small farming community and his desire to stay close to the family’s agricultural roots led him to Rutgers’ College of Agriculture, where he received his bachelor’s and master’s degrees. He earned his doctorate in plant biology from the University of Illinois at Urbana-Champaign and then headed back to New Brunswick, where he started his academic career at Rutgers. In 1966, Garrison joined the faculty as a horticulturist, with teaching and research responsibilities. In 1985, he jumped on the opportunity to transfer to RAREC, where he’s been ever since.

Garrison is part of a team, along with Chee-Kok Chin, professor in the Department of Plant Biology and Pathology, and John Kinelski, field technician, that has been in charge of the asparagus breeding program at Rutgers for the last two decades.

In 1953, Howard Ellison, regarded as one of the most influential asparagus breeders in history, was hired to head the asparagus breeding program. During his tenure, he produced several hybrids that are considered to be among the most productive and widely adaptable ever developed. Garrison started out by assisting Ellison with his breeding work and later took over the program when Ellison retired. In 1988, Garrison handed over the reigns to Chin, who serves as the current director of the program.

The asparagus breeding team looks at ways to improve plant quality, yield, and disease resistance. A good variety boasts tight spear tips and strong stalks, produces consistently high yields, and is resistant to disease.
In order to develop these new varieties, Garrison selects the plants and Kinelski makes the crosses in the greenhouse. Later, Chin does the tissue culture work and checks the plants for disease resistance.

When a promising new variety is produced, small quantities of seed are sent to 20 locations throughout the world for trial testing as part of the International Asparagus Cultivar Trial.

In recent years, Rutgers has released two all-male hybrids—Jersey Supreme and Jersey Deluxe—that consistently outperformed industry standards in trials at multiple sites. Rutgers focuses on producing only all-male hybrids as female plants use a good deal of energy to produce fruit—energy that could otherwise be used to strengthen stalks or produce higher yields.

The asparagus team has also been working on an all-purple asparagus and an asparagus with no purple pigment.

“Our goal is to produce unique types of asparagus,” Garrison said. “Right now, we’re working on an all-purple variety based on a variety we got from Europe. There’s a lot of interest in this from home gardeners.”

A bonus for lovers of asparagus is that the all-purple variety has a higher sugar content than conventional hybrids. The no-purple variety is light green in color, but so far, there’s no indication as to the effect on flavor.

Regardless of the variety, asparagus is a true passion for Steve Garrison, and Rutgers has been lucky to benefit from his passion and expertise for more than four decades.

Donald W. Schaffner, extension specialist and professor of food science, has accepted the position of director of the Center for Advanced Food Technology (CAFT). Don will lead CAFT as it works in partnership with industry, government, and university researchers to conduct basic research, as well product and process development for clients ranging from major food companies to small entrepreneurs.

Faculty and Staff Activities and Accomplishments'

The President’s Award for Research in Service to New Jersey was presented to Rutgers NJAES Food Innovation Center for outstanding research contributions of direct and demonstrable service to New Jersey. The award was presented at a reception at the President’s House earlier this month. (Photo l. to r.: Lou Cooperhouse, director of the Food Innovation Center; Margaret Brennan, NJAES director of economic growth and development; and President McCormick.)
Gef Flimlin (Ocean County marine agent) has been selected to receive the Jersey Shore Partnership’s Seafood Industry Award. Flimlin will receive the award at the Partnership’s 12th Annual Summer Celebration on June 9. Gef was selected for his leadership and outstanding commitment to the growth and revitalization of the seafood industry in New Jersey.

Grants


George Hamilton (Entomology) received $5,000 for “New Jersey Information Network for Pesticide and Alternative Strategies" from the Northeast IPM Center Partnership.

Sharon Kinsey (Camden County 4-H agent) and Kelly Duffy (Camden County 4-H parent and volunteer) received a $2,000 grant from the Campbell Soup Foundation from the Dollars for Doers program for use in educational programming for equine interests through camps, clinics, and educational workshops.

Gladis Zinati (specialist in nursery management) Ed Overdevest, Don Blew, Ann Gould (specialist in ornamental pathology), John Dighton (Marine and Coastal Sciences), and James Johnson (Cumberland County agricultural agent) received $9,985 (second award) for “Low-input Management Practices for Container Ericaceous Nursery Crops from Sustainable Agriculture Research and Education.”

Stacy Bonos (Plant Biology and Pathology) received a $79,261 award from the Northeast Sun Grant for her project “Breeding switchgrass with improved biomass productivity on marginal land for the Northeast US.”

Bingru Huang, Stacy Bonos, and Faith Belanger (Plant Biology and Pathology) received a $30,000 award from the USDA for their project “Improving Selection for Heat Tolerance in Bentgrass.”

Conference, Seminars, and Other Events

Joel Flagler (Bergen County agricultural agent) completed a successful pilot program with Transitions School in Wood-Ridge, serving youth with developmental disabilities. The youth have worked in a greenhouse for over four months, learning propagation, plant culture, and other valuable skills. Evaluations indicate the pilot program has had strong positive impacts on these young people. All 25 students have expressed great pride in their plant projects and nature craft activities. Several have expressed the desire to work in a greenhouse and learn more about horticulture. Based on these results, the principal of Transitions School has secured additional funding in excess of $15,000 to extend the program through July 2008.
Nicholas Polanin (Somerset County agricultural agent) and Jason Grabosky (Ecology, Evolution, and Natural Resources) facilitated the 2008 Garden State Tree Conference held March 6–7 at the Cook Campus Center. Attended by over 140 arborists and landscape professionals from across the state and region, the conference featured speakers from Massachusetts, Virginia, and Pennsylvania, while also featuring graduate students, researchers, and professionals from Rutgers and NJ DEP.

Madeline Flahive DiNardo (Union County agricultural agent) developed an “Introduction to Horticultural Therapy (HT)” program to promote the practice of horticultural therapy in schools, senior centers, nursing and rehabilitation care facilities, and hospitals. The program consists of eight one-hour sessions in which volunteer Master Gardeners work directly with special needs client groups to complete selected “hands-on” horticulture or nature craft projects. The objectives of the program are to:

• introduce administrators of facilities that serve special needs populations to horticultural therapy;
• provide information on resources and advisory support so administrators can continue to offer HT to their clientele; and
• teach youth and adults basic horticultural skills.

Since its inception in 1991, the “Introduction to Horticultural Therapy” program has been offered at 68 hospitals, nursing care centers, senior day care centers, and schools in Union County that serve 1,825 adults and children with disabilities. The program is offered at five sites a year. Two-hundred sixty-six administrators and their staff have been trained to facilitate future HT programs.

FYI

Sustainable Winegrape Viticulture Twilight Meeting
WHEN: May 28, from 6:15–9:00 p.m.
WHERE: Plagido’s Winery, 570 North 1st Road, Hammonton, NJ
CONTACT: Jerry Frecon (frecon@njaes.rutgers.edu), 856 307-6450, ext 1

Twilight Blueberry Growers Meeting
WHEN: June 5, at dusk
WHERE: Atlantic Blueberry Co., 7201 Weymouth Road, Hammonton, NJ
*For commercial blueberry and allied industry only.
CONTACT: Gary Pavlis (pavlis@njaes.rutgers.edu), 609-625-0056

Future Trends in Nursery Production: Using Natural Mycorrhizae—A Hands-On Experience
WHEN: 6/25/2008 5:00 PM - 8:15 PM
WHERE: Rutgers NJAES, Cooperative Extension of Cumberland County Office, 291 Morton Avenue, Millville, NJ
WHAT: Dr. Gladis Zinati and Dr. John Dighton, speakers. No cost but pre-registration is required.
CONTACT: Carl Nordstrom (njnla1@aol.com), 609-291-7070

4-H County Fairs
For information on NJ 4-H County Fairs, please visit http://nj4h.rutgers.edu/fairs/default.asp.