



Rutgers Cooperative Extension 2014 Annual Conference Celebrates 100th Anniversary of Smith-Lever Act



The **2014 Rutgers Cooperative Extension (RCE)** Annual Conference convened on October 20 in the Cook Student Center. With **223 in attendance**, this has been one of the largest RCE conferences to date, with SNAP-Ed/EFNEP members in attendance and the Office of Continuing Professional Education (OCPE) joining the fold.

For 2014, the conference incorporated special activities to mark the **100th anniversary of the signing of the Smith-Lever Act** of 1914, which officially created the national Cooperative Extension System. Rachel Lyons, interim chair of the Department of 4-H Youth Development, served as presenter for the conference.

Executive Dean Bob Goodman opened the session with welcoming remarks, reflecting that for the past 100 years, while RCE has held up its end of the bargain, what has been built has been taken for granted in this era of decreased funding for Cooperative Extension. The traditional model of public funding has changed and today there is more reliance on entrepreneurship, grant funding, and philanthropy. Goodman cited online education and fees for service as examples of reconfiguring what we do and how it is paid for. From Goodman's observations of Extension programs throughout the U.S., he contends that Rutgers Cooperative Extension represents one of the most robust programs in the country.

A special demonstration of instant feedback for pro-

grams was conducted by **Bill Sciarappa, agricultural agent for Monmouth County**. Using clickers with number buttons, attendees were able to register their responses to a series of questions on demographics that Sciarappa posed to the group. The results were immediately registered and projected on the screen as graphs. The results showed that most attendees represented SNAP-Ed and worked between 1 – 5 years at Extension. The majority of people worked in New Brunswick and were between 50 – 59 years old. Most had a Master's level of education and had teaching experience with adult clients. For the skill area most needing self-improvement, the majority cited time management. The primary means that attendees reported for digital communications was e-mail, with a website coming in second.

The **keynote speaker** for the conference was **Denise Dennis, Professor at Bloomfield College**. Dennis spoke on "**Managing Four Generations**" with regards to workplaces like Extension that employ a wide age-range of workers. Dennis defined the four generations as "Mature," born 1927-1945 (respects authority); "Baby Boomer," born 1946 – 1964 (workaholic mentality); "Generation X," born 1965 – 1979 (adapts well to change); and "Millennial," who were born after 1980 (technological gurus). Each of these generations brings varied perspectives in the workplace.

Fending Off Disease with a Fork: Rutgers Scarlet Lettuce

Modern science is catching up with ancient wisdom. The expression “*Let food be thy medicine and medicine be thy food*” has been attributed to Hippocrates, father of medicine, around 431 B.C. Hippocrates’ adage is aptly illustrated by a glance down a supermarket produce aisle with its colorful display of deep red strawberries, fiery orange carrots, bright green broccoli and brilliant blueberries. The vibrant hues found in plant pigments that create these distinct colors have aroused the interest of the scientific community as vast amounts of research uncovers beneficial effects these “**phytonutrients**” have on preventing disease and maintaining health.

While blueberry is the current King Superfood, its availability is limited by growing season, or they are priced at a premium, and blueberries are high in sugar, requiring limited consumption for people on restrictive diets.

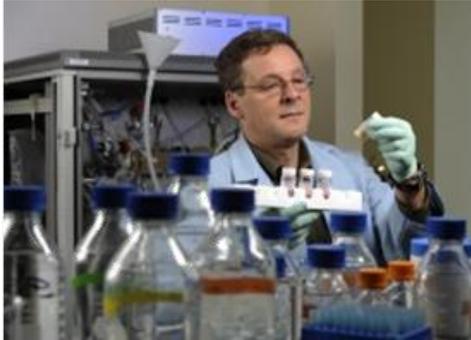
Is it possible for another commonly available fruit or vegetable to rival the high polyphenol content of blueberries? **Rutgers Distinguished Professor** in Plant Biology **Ilya Raskin** has selected lettuce, one of the most widely consumed and affordable vegetables and readily available year round in the U.S. to boost its polyphenol content. Using red leaf lettuce, Raskin’s laboratory selected samples with the highest polyphenols. From there, using a non-transgenic process of **tissue culture**, Raskin developed a deep burgundy red lettuce that has elevated levels of polyphenols – two to three times of blueberries.

The high polyphenol lettuce has been named **Rutgers Scarlet Lettuce (RSL)** – a tribute to Rutgers’ school mascot and color, the Rutgers Scarlet Knights. RSL also has a low glycemic index, preventing spikes in blood sugar that foods high in carbohydrates or sugars, such as fruits and berries, can cause.

With its exceptionally high profile of phytonutrients in addition to the regular benefits of lettuce of vitamins, minerals, low calorie and high fiber, RSL is the first lettuce worthy of superfood status. “Lettuce is one of the

most widely consumed vegetables after potatoes,” said Raskin. “**This adds functionality to something that is not known for being good or bad.**”

To introduce RSL to the market, Rutgers has patented and licensed RSL to **Nutrasorb LLC, a Rutgers spin-off** company that specializes in enhancing phytoactive compounds in foods. Nutrasorb has granted a license to [Shamrock Seeds](#) as the exclusive seed dealer for RSL. Shamrock specializes in vegetable seed for commercial growers in the major salad growing regions in the U.S. and anticipates interest from growers throughout the U.S. **RSL seed is available** to large and



medium size farms — there is a minimum purchase requirement — which must sign an agreement to use the licensed product. Commercial growers can obtain the RSL seed for growing as loose leaf lettuce or baby greens.

The first company to launch this product will be **Coastline Family Farms**, a major produce shipping company based in Salinas, CA. Coastline has selected and **trademarked the name Nutraleaf™** for the brand and will be the exclusive grower/shipper of **whole head and artisan-pack Nutraleaf™** Burgundy Leaf Lettuce and Nutraleaf™ Burgundy Romaine for distribution throughout North and South America.

Despite it being packed with nutrients, consumers will want to know – does the lettuce taste good? Registered dietician Sharon Palmer, author of *The Plant-Powered Diet*, sampled Coastline’s Nutraleaf™ product. Palmer comments in a post on NutraLeaf™ in her blog, “It’s not only packed in antioxidants, vitamins and minerals, but this lettuce is tender and delicious, too. In fact, lettuce is one of America’s favorite vegetables, so I love the idea of getting more nutrients into your daily salad.” Palmer adds, “Maybe the best thing about NutraLeaf is just how beautiful it looks in salads, serving as a deep purple color contrast for a number of your favorite salad ingredients.”



Happy Birthday Double Poly !

In the early 1960's, **Rutgers University Professor William J. Roberts** fastened two polyethylene sheets together, mounted them on a simple wooden frame and proceeded to inflate the space between the sheets with a low-pressure fan. His simple structure was the first **air-inflated double layer polyethylene greenhouse**, known simply and universally today as **double poly**. It would start a **revolution in greenhouse engineering**.

Robert's idea spread quickly, across the United States and then throughout the world. Commercially, low-cost, easy to install, energy efficient system was readily accepted. The first air inflated double – poly concept would also spur further research that would eventually lead to the invention of other milestone greenhouse products. This year, 2014, marks the **50th anniversary of Roberts monumental achievement**.

A Solution Created Out of Necessity

Early on, Roberts recognized the importance of a double-layer covering to reduce the condensation drip that plagued growers using single - layer greenhouses. He was also cognizant of growers' early struggles to install double layers, an unwieldy procedure that involved attaching one layer to a rafter, adding a 2 x 2 spacer and then attaching another layer. The process was costly, time-consuming and not always effective.

The double-poly system significantly reduced the labor and materials required for installation, thus bringing down costs. Additionally, the inflation of the two layers reduced the pressure on the film, which in turn minimized tearing and strengthened the entire structure. The insulated air space also reduced heating requirements.

David Mears, also a professor at Rutgers University, worked closely with Roberts on some of the early research associated with film stress and structural loads. Other research efforts at Rutgers University led to the development of movable insulation/shade curtains and various in-floor heating systems.

The first commercial greenhouse to use the double poly was located at **Kube-Pak Inc. in Allentown, N.J.** Co-Owner, Aart Van Wingerden, was one of the early leaders in the development of frame structures for multi-

span and single-span structures, along with **Kenneth Bryfogle**, owner of **Power Plants Inc.** **Frank Stuppy**, owner of **Stuppy Floral Inc.** was also a major player with his contribution of the first extruded aluminum film fastener.

Lasting Impact Still today

Roberts' original air-inflated double-layer poly greenhouse still stands today , relatively unchanged except for a few minor upgrades, on the Rutgers University Cook College campus in New Brunswick, N.J. In 2004, the **Society for Engineering in Agricultural, Food and Biological Systems (ASAE)** dedicated the site as a historical landmark in recognition of Roberts' achievement and the impact these structures have had on the plant industry.

The original double poly system not only led to the development of ground-breaking greenhouse products, it also paved the way for new growth in the industry. Small businesses, farms and garden centers suddenly found it more affordable to expand their operations with the addition of new greenhouses. In developing countries, these structures have allowed growers to support their families and produce affordable food for their communities year-round. Today, Roberts' accomplishment still has a lasting impact on the industry - more than half of the plastic greenhouses in use worldwide utilize the air-inflated double-poly system.

Thanks to National Greenhouse Manufacturers Assoc. For use of this article. Source: ASAE Historic Landmark Dedication.



www.ngma.com
800-792-NGMA
2207 Forest Hills Drive
Harrisburg, PA 17112



ASAE President Robert Gustafson (l) and Bill Roberts in front of the first air-inflated double-layer polyethylene greenhouse. Photograph by Alan Goldsmith.

Agent's Overview

After a wonderful **American Holiday of Thanksgiving**, we are especially thankful for the rich and nutritious produce from our farms provided by the farmers who work so hard in production. In this celebratory issue, we can also see examples of both past and present contributions of our Rutgers Land Grant institution for commercial agriculture. We are also grateful for two recent **American Government policy decisions** which very positively affect agriculture.

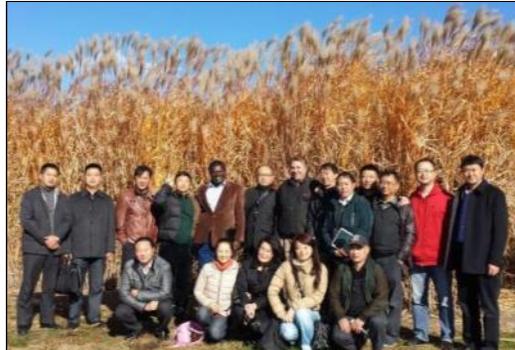
- 1 **The Immigration Bill** that will allow 5 million Hispanic workers to remain working in the U.S. along with their American born families. We all know their long-term and essential service to food production throughout our country. This will help sustain our farm productivity over the years.
- 2 **The USA-China Agreement** to reduce fossil fuel burning and CO2 emissions. Diplomat John Kerry successfully negotiated what everyone believed was impossible - getting the world's two worst air polluters to dramatically reduce emissions from fossil fuels. This legal contract calls for a 28% petrochemical reduction from America and 20% from China within 16 years. Bear in mind that the Chinese promise of 20% reduction is equivalent to the entire pollution problem in America. The Presidents of both countries realize this important effect on climate change and human health. They have committed to substitute alternative energy sources like solar, wind, geothermal and bio-energy crops. Yes, let's move forward with more switchgrass, miscanthus, jatropha and algal production.

Coincidentally, our Monmouth County office hosted an influential group of Chinese administrators and scientists for agriculture. See the article below and how we were able to demonstrate to the group how bioenergy crops like miscanthus could substitute for their dependence on coal burning technologies that have seriously affected their human and environmental health

So we have even more to be grateful for as our world changes.

Bill Sciarappa

Chinese Delegation Tours Rutgers



RU-SEBS-NJAES hosted a Chinese delegation of 15 high-level agricultural administrators and scientists. The group led by **Dr. Albert Ayeni** toured the main New Brunswick campus, **RAREC** in Deerfield, **RCE Earth Center** in Middlesex and the **Rutgers Eco-complex** in Bordentown. RCE educators **Hlubik, Sciarappa, and Specca** explained the roles of NJAES and Cooperative Extension and outreaching applied University research. Monmouth County Extension gave overviews of 4-H Youth Development, Family and Community Health Sciences and the Master Gardener / Horticultural program. Agent Sciarappa provided

results of Chinese Ethnic Crop Studies from the Rutgers NRI and SCRI-USDA Programs. The Staff provided local foods as cranberries, blueberries, apple cider, and vegetables with an emphasis on nutrition and health. The visitors were impressed with the field tour of community and school gardens. This was followed by a tour of the **Plant Science farm in Adelphia** demonstrating tree-nut culture and bio-energy crop production. The 15 foot tall **Miscanthus grass** plots coincided perfectly with the historic signing of an energy policy between China and the USA to reduce fossil fuels by replacement with solar, wind, geothermal and bio-energy crops.

FFA 2014 CAREER DEVELOPMENT EVENT - Vivian Quinn & Sabrina Brown



School	Fruit-Veg	Dairy	Turf	Combined Land/Homesite
Allentown HS	1 st	1 st	2 nd	1 st
N. Burlington HS	3 rd	13 th	3 rd	4 th
Mon. County Voc	4 th		1 st	
Freehold Twp HS	5 th	6 th	5 th	5 th
N. Burlington Middle	12 th			

The 2014 FFA Career Development Event was held at Douglas Campus Center, Trays Hall, which was a new location this year. This was the **14th year that Rutgers Cooperative Extension of Monmouth County** coordinated the Fruit and Vegetable ID and Judging event, which had **40 high schools** and middle schools in attendance with 84 students competing. Delicious Orchards once again graciously donated the produce necessary for the competition. Their generosity year after year is commendable.

This year a written multiple choice exam was piloted with the hope that it will be adopted as part of the event in 2015. Topics included consumer awareness, food safety, proper storage, plant production and harvest, nutrition, etc. The students seemed to enjoy the extra challenge of the exam. **Allentown High School was awarded 1st place** in a tie-breaker against Warren Hills Region High School because they won the judging portion over Warren.

Congratulations to Central Jersey FFA's for top placement in all Career Development Events for 2014.

Results from the event can be found at <https://www.judgingcard.com/Results/Events.aspx?ID=4067>

Entrepreneurship Agriculture Day 2014 – Another Success!

On October 18, Rutgers School of Environmental and Biological Sciences (SEBS) celebrated its second **Entrepreneurship Agriculture (EA) Day on Cook Campus**. This event was part of the Entrepreneurship Ag Program initiated at SEBS in Spring 2013 and comprised the teaching of a Jr/Sr Colloquium on Entrepreneurial Agriculture, a competitive student internship on Entrepreneurship Agriculture.



EA Day interns and faculty team members (l-r): Serpil Guran and Dave Specca from Rutgers EcoComplex; Roslyn Dvorin; Ian R. MacCloud; Tatiana Gladney; Kasturi Pryanka Shanker; Donna Schaffner, Rutgers Food Innovation Center – South; Sabedo Argueta; Albert Ayeni; Christopher Satch; Xenia Morin, SEBS Office of Grants Facilitation; Tung Ching Lee, Department of Food Science; and Bill Sciarappa

The key events included **poster and oral presentations** by EA interns Sabedo Argueta (Environmental and Business Economics 2014), Roslyn Dvorin (Ecology, Evolution & Natural Resources 2015), Tatiana Gladney (Agriculture and Food Systems 2016), Ian R. MacCloud (Plant Science 2015), Christopher Satch

(Grad Student, Plant Pathology) and Kasturi Pryanka Shanker (Biotechnology 2014); and a **keynote speech by Theresa Viggiano and Patrick Leger, founders and chief executives, First-Field, Inc.**

Master Gardeners graduates 27 new members

Twenty-seven men and women became certified Rutgers Master Gardeners at a graduation ceremony on November 20, at **Jumping Brook Country Club**. The Master Gardeners are now certified gardening experts because they have completed a course of classroom and hands-on training in plant biology, propagation, soil science and disease and pest control. The trainees then began sharing their knowledge with others by conducting garden lectures, demonstrations, school and community gardening projects, and answering calls on the County's "**Horticulture Helpline.**"

"This year's Master Gardeners group has proven to be an exceptional class," **Freeholder Director Lillian Burry** said. "Half of the graduates have logged 100 hours of service, showing dedication to passion for the program."

"**This Master Gardener class worked with the best in the horticultural field** – faculty from Rutgers University and Brookdale Community College and professional staff at the Monmouth County Park System and Cooperative Extension while completing their training," **said Bill Sciarappa, Agricultural and Resource Management Agent** for Monmouth County's Rutgers Extension Office.

Diane Larson, County Horticulturist and the Rutgers Master Gardener Coordinator, also gave out awards for certified Master Gardeners who have volunteered 100, 250, 500, 1000, 1500, 2000, 3000, 5000, and 8000 hours to the program. She spoke about the 'Plant a Row for the Hungry' garden that the new class worked in, located



L to R: Gwendolyn Wisely, Diane Larson, Freeholder Lillian Burry, Judy Lipman, Veronica Gallagher, Linda Lichardi, Beth Hutter

behind the Agriculture Building. Over 900 hours were spent in the garden, which yielded **2500 pounds of food** that was **donated to five different** county food pantries .

The Master Gardener program, conducted throughout the United States and Canada, is a two-part educational effort in which avid gardeners are provided many hours of intense home horticulture training. In return, they "**pay back**" local extension through volunteerism.

In New Jersey, the program is a cooperative effort of Rutgers University, the U.S. Department of Agriculture and the county Boards of Chosen Freeholders. Monmouth County's program involves the county office of Rutgers Cooperative Extension, **Brookdale Community College and the county Park System.**

Diane Larson

Happy Holidays from RCE Monmouth County



CALENDAR

January 2015

5, 6, 7 - Northeast American Society of Horticultural Scientists, University of Delaware, Nick Polanin
908-526-6293 X 4.

13, 14 & 15 - Integrated Pest Management - Rutgers Cont. Ed. 9 am—4 pm. Info 732-932-9271 or visit; www.cpe.rutgers.edu

24-25 NOFA-NJ 25th Anniversary Winter Conf. Brookdale Community College. www.nofa.org

22 Pepper Advisory Council - RAREC - 856-455-3100.

20-22 - Empire State Fruit & Vegetable Expo - Syracuse, NY. J. Marvin nysvga@twcny.rr.com

17 - Pesticide Calibration - Rutgers Cont Ed. 8 am - noon. Info 732-932-9271 or visit; www.cpe.rutgers.edu

27-29 - Mid-Atlantic Fruit & Veg Conv. - Hershey, PA visit: www.mafvc.org

February 2015

3-5 - NJ Agricultural Convention & Trade Show - Tropicana, Atlantic City, NJ - 800-345-8767 Code HAGR115.

27 - Central Jersey Vegetable Association Meeting - RCE Monmouth County - Joanne or Dorey 732-431-7260 X7280

March 2015

4 - Introduction to Food Safety & Third Party Audits for Beginners - Monmouth County Coop. Ext. 4000 Kozloski Road, Freehold, NJ. 856-451-2800 x1

*Changing Times is produced and edited by Bill Sciarappa and Vivian Quinn
sciarappa@njaes.rutgers.edu
<http://www.visitmonmouth.com/page.aspx?id=3078>*

*Newsletter printed courtesy of the
Monmouth County Board of Chosen Freeholders*



2015 New Jersey Agricultural Convention & Trade Show

February 3, 4, 5, 2015

Tropicana Casino & Resort

S. Brighton Ave & Boardwalk. Atlantic City

Reservations—Please call 800-345-8767 and ask for code **HAGR115**

Basil Downy Mildew Workshop - Pagent Suite A, B, & C

Thursday, Feb. 5

Andy Wyenandt - Ext. Specialist -Vegetable Pathology, Rutgers

8:30 AM - Strategies for Improving the U.S. Responses to Fusarium, Downy Mildew and Chilling Injury in Production of Sweet Basil (*Ocimum basilicum*): An Overview of the National Basil Consortium—**Jim Simon, Prof. Rutgers Univ.**

9:00 AM—Downy Mildew and its Occurrence Across the USA. **Meg McGrath, Cornell University.**

9:20 AM—Fungicides for Managing Basil Downy Mildew, NJ, Andy Wyenandt, Rutgers 9:40 AM - Efficacy of Conventional & Organic Fungicides for Managing Basil Downy Mildew. Long Isl. **Meg McGrath, Cornell Univ.**

10:00 AM—Importance of Drench or Soil Fungicide Treatments for Successful Downy Mildew Control. **Rick Raid, Univ. of Florida**

10:30 AM Economics and Costs of Basil Downy Mildew Control. **Ramu Govindasmy & Bill Sciarappa, Rutgers Univ.**

11:00 AM—Panel Discussion with Basil Growers

12:00—Group Lunch Survey Completion as to Impact and Injury of Basil Downy Mildew

1:00 PM—Moving into Genetics & Breeding for Resistance: A Rapid Screening Approach to Identify Resistance to Basil Downy Mildew. **Robert Pyne, Rutgers Univ.**

2:00 PM—Breeding Basil for Resistance to Downy Mildew & Fusarium: Where We are Now? **Jim Simon, Rutgers Univ.**

MONMOUTH COUNTY BOA

12-16, 1-20, 2-17, 3-17, 4-21, 5-19

BASIC PESTICIDE TRAINING

CORE 9 am - 1 pm— 2/10, 3/10, 3/24, 4/14, 5/15, 6/9

3A—9 AM—3 PM - 4/7, 6/16

3B - 9 AM—3 PM - 2/17, 3/3/, 5/19

To register call 800-524-9942

Held at Rutgers Cooperative Extension Ag Bldg.

4000 Kozloski Rd. Freehold, NJ

732-431-7260

RUTGERS COOPERATIVE EXTENSION MONMOUTH COUNTY

New Jersey Agricultural Experiment Station

PO Box 5033, 4000 Kozloski Rd., Freehold, NJ 07728

Rutgers Cooperative Extension—Agriculture, Family and Community Health Sciences, 4-H Youth Development, Resource Management, and Marine Studies—welcomes this opportunity to send you the enclosed materials for your information and use. Educational programs and information are provided to all people without regard to sex, race, color, national origin, gender, religion, age, disability, political beliefs sexual orientation, or marital or family status.

Bill Sciarappa, County Agricultural Agent
Extension Department Head

Photos: NJ Dept. of Agriculture, Jeff Heckman, Rutgers Univ., B. Sciarappa, V. Quinn, S. Brown

New Jersey Agricultural
Experiment Station

RUTGERS

Cooperative Extension of Monmouth County
4000 Kozloski Road
PO Box 5033
Freehold, NJ 07728-5033

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Agent's Overview

What a wild and weird summer season we've had with relatively cool days and very cool nights through August.



No 100 degree or even 90 degree days compared to the previous five years of scorchers. I'm not complaining but this off-season really slowed early crop growth and quality (except for the leafy greens, herbs and cole crops which prospered).

Hopefully, an "Indian Summer" will allow a longer harvest of late planted sweet corn, tomato, peppers and squash which are finally coming into excellent quality and quantity. Even Mobile, Alabama was historically cool with very pleasant weather when we held our National Association of County Ag Agents conference in late July!

Our Rutgers climatologists continue to generate data that shows an even greater acceleration of climate change and sea level rise related to carbon dioxide emissions from human activity which causes global warming. Apparently this trapped heat in the atmosphere has greatly increased melting of the polar ice caps and the glaciers are "calving" into the arctic waters. These disturbing events have cooled the northern seas while the southern oceans are warmer than ever. Only recently did

deep diving probes reveal that this heat effect was even greater at 5,000 feet down than the typical measurements at only 50 and 500 feet depth. Apparently, surface heat is transferred to the ocean floor by warmer and heavier fresh water sinking below the salt water.

It's not just about polar bears. The resultant clash between cold and warm water systems creates turbulent winds which have destabilized the Jet stream current that has produced our recent abnormal weather and more severe storms. For example, our northeastern region has recently received incredible deluges (13" in Long Island, 6" in Belmar and 8" rainfall in southern Jersey in half a day). On the left coast, California is in a severe long-term drought. Their desert-like conditions are making agriculture quite difficult and making our recent dry spells look tolerable. As a whole, the ramifications of climate change for agriculture are immense in this very century. There are new and numerous southern pests invading, new crops to consider cultivating and new market opportunities. Changing Times.

Bill Sciarappa

The North American Blueberry Researchers Workshop



Born Again: Rebirth of the Jersey Tomato

Everyone pays lip service to the juicy Jersey tomato. Now three Rutgers scientists are close to recreating the greatest Jersey tomato of them all.

Posted July 28, 2014 by [Paula Span](#)



On a sunny afternoon in May, the contenders, each plant about 4 inches tall, were growing in a greenhouse in a rural stretch of Cumberland County. A hanging thermometer said the temperature indoors had reached 85 degrees. “This is about as warm as you want it to get,” said Tom Orton, the plant

breeder here at the [Rutgers Agricultural Research and Extension Center](#) farm in Upper Deerfield, looking protectively over his seedlings. Orton has a PhD. in plant genetics and tends to talk like a scientist, but he can speak tenderly, almost anthropomorphically, about tomatoes.

It’s not yet clear which of these 250 little plants in their plastic trays, now starting to branch into the familiar serrated leaves, will triumph in this genetic competition to recreate the Rutgers tomato, touted as the greatest Jersey tomato of all. Orton and his two compadres on this quest have been diligently hybridizing and selecting for four years. These are F-6’s, the sixth generation selected from the two parents Orton began cross-pollinating in 2011.

“We’ll start harvesting in mid-July and then evaluate the heck out of them,” Orton went on. Which meant that he and Jack Rabin, who would deserve the title State Tomato Guru if there were one, and Pete Nitzsche, the Morris County extension agent, will look at every aspect of their recreated classic tomato: the size and shape of the fruit; the smoothness of its skin and whether it develops scars or cracks; the leaves and whether they provide enough shade to prevent unappetizing white patches called sunscald; the tomato’s resistance to insects and diseases; and most crucially, its flavor.

They’ll fold in the opinions of the tomato-loving public, too, which is invited to the Open House and Great Tomato Tasting at Snyder Farm on August 27. It’s the public, after all, that has complained for years that Jersey tomatoes don’t taste the way they used to, and Nitzsche

hopes at least a hundred visitors will join in the blind taste test.

Then Orton will grow another generation of the plants deemed most desirable. Finally, in 2016, when Rutgers University celebrates its 250th anniversary, the triumvirate plans to unveil the, um, fruit of their long labor. They might call the hybrid the Rutgers250 or Rutgers Rediscovered or maybe the RetroRutgers—because while other tomatoes bearing the name Rutgers are still sold, they probably bear little resemblance to the 1934 original.

Whatever they name it, this tomato will be the latest and potentially greatest in an ongoing effort to allow home gardeners and farmers-market shoppers—and who knows, maybe locavore-minded foodies in neighboring states—to revisit the golden age of Jersey tomatoes.

When these guys talk about the golden age, they’re referring to a period from the early 1950s through the mid-1980s. Before then, Jersey tomatoes were what we now call heirlooms, a category that plant scientists view with disdain. “They had all kinds of horticultural defects,” Rabin sniffs. Early tomatoes cracked, turned to mush in heavy rain, fell prey to fungus and other diseases. “Farmers had to throw a quarter to a half of them into the woods because they were crap.”

But after World War II, modern plant genetics, promoted by scientists at Rutgers and elsewhere, led to hybrid tomato plants that resisted blight and bugs and produced lots of big, round, red fruit that ripened on the vine and could be trucked to nearby processing plants. Those tomatoes had the moderate sugar and high acid content (plus a complex brew of volatiles, chemical compounds that add to the allure) prized for juice, ketchup and soup. Some also sold at farm-stands and supermarkets. Tart, sweet and tender, they are the Jersey tomatoes that induce nostalgia.

What happened to them? Blame interstate highways, which enabled produce to be trucked longer distances more quickly, but also encouraged plant scientists to produce firmer hybrids with thicker skins and interior walls (and less taste) for improved “shippability.” “That’s when produce ceased to be local,” Orton says glumly.

It didn’t help that Gardner bred tomatoes for growing conditions in North Carolina, not New Jersey. Or

that production largely shifted to Florida, California and Mexico, where supermarket tomatoes are picked green and gassed into ruddiness with ethylene, then refrigerated for shipping.

Their first resurrected classic was the Ramapo. Developed at Rutgers in 1968 and known for its succulence and shapeliness, the Ramapo disappeared from commercial production in only about a decade. But the agriculture professor who'd bred it had retained some seeds after he retired, so the team only had to tinker for a year or so before reintroducing the Ramapo, to much media fanfare, in 2008. In a survey of 1,200 gardeners who grew it that first year, nearly three-quarters said the Ramapo met or exceeded their expectations of "what a Jersey tomato should taste like."

But the Ramapo, frustratingly, doesn't ripen until August. So the following year, the team reintroduced the Moreton, a 1953 variety that matures in July. "A tomato of moderate sweetness and a discernible acidity," Rabin calls it. "You get this tingly-ness on your gums." Last year brought the KC-146, which dates to 1956 and was developed by and grown for Campbell Soup. Together, those new-old varieties have established a beachhead among home gardeners. More than 10,000 customers have bought mail-order seeds from Rutgers, and greenhouses across the state sell seedlings. Some farmers sell the tomatoes themselves in season. [Alstede Farms](#), for instance, will harvest about 2,500 pounds of Ramapos this year for sale at its Chester market and at 11 weekly farmers' markets from Morristown to Elizabeth. "It's a great-tasting tomato," says Kurt Alstede.

But the Rutgers tomato is different—not merely a local favorite, but an international superstar. Rutgers professor Lyman Schermerhorn spent six years crossbreeding and field testing before releasing it in 1934, when about 36,000 New Jersey acres were planted with tomatoes. (Today's total: around 4,100.) "Through the 1940s and early '50s, it grew to become the number one tomato in the world," Rabin says.



It reigned for about two decades. Then, on top of interstates and Randy Gardner, came farm-labor shortages in California. Growers there turned instead to the newfangled mechanical harvester, and "that pretty much drove the Rutgers out of the market," Orton says. "It couldn't be mechanically harvested. It was too soft."

Growing successive generations in fields and greenhouses and selecting for desirable characteristics, Orton winnowed the contenders from several hundred plants in the second generation (called F-2, as in "filial") to 16 selections in the fourth generation to five now. One will become—ta-da!—the

real Rutgers tomato reborn. It will have many of the qualities contemporary farmers and gardeners value, but it will taste like summer. I think they're terrific," says Orton. "We've got something here."

And what if the Rutgers or the Ramapo begins to catch on in food circles? If some influential chef—a Thomas Keller, a Bobby Flay, a Scott Anderson—starts ballyhooing them on his menu: salad of sliced Rutgers tomato with burrata, drizzled with extra virgin olive oil and aged balsamic vinegar, garnished with organic basil? Might that not create a small but intense wave of demand? These varieties are still too soft to travel long distances, but you could truck them, carefully, within a reasonable radius: New York, Philadelphia, Baltimore, maybe Boston or D.C.

"They'd have to be bubble-wrapped on the bottom, and people would have to spend a fair amount more for them, but it could be done," says Greg Donaldson, who grows Ramapos for sale at [Donaldson Farms in Hackettstown](#) and the farmers market in Westfield. "Maybe the Rutgers will be the one that takes off."

Maybe. Meanwhile, consider this: By 2016, New Jersey gardeners and farmers will be able to grow the Rutgers, the ultimate in nostalgic tangy tomato-ness. But the team's work may not yet be done.

"Paula Span writes [The New Old Age blog for the New York Times](#) and teaches journalism at Columbia University.

Rutgers Cooperative Extension Welcomes Back Retirees to Celebrate 100th Anniversary—July 16, 2014 by Office of Communications



Former & current RCE directors John Gerwiz (L) and Larry Katz

This year, as Rutgers Cooperative Extension (RCE) celebrates the 100th anniversary of the signing of the **Smith-Lever Act of 1914** that created the Cooperative Extension Service, what better way to commemorate its history than to invite back those who were part of its past? A luncheon for RCE retirees was held on the Cook campus on June 20.

The retirees were former faculty and staff that represented all

facets of RCE administration, its extension specialists and the ARMA, FCHS and 4-H departments. Current RCE department heads were on hand to provide updates on institutional activities while **Executive Dean Bob Goodman** and **RCE Director Larry Katz** discussed extension's

anniversary and the current state of affairs. While the retirees appeared to enjoy active and fulfilling retirements, a few never strayed far from Rutgers, continuing work in their respective fields. Retired **Extension Specialist in Vegetable Crops Mel Henninger** coordinates the educational program for the annual NJ Vegetable Meeting in Atlantic City and is also working with Agricultural **Agent Dave Lee** on corn and soybean trials at Rutgers Snyder Farm. Recently retired **Agricultural Agent Rich Obal** (GSNB '77) teaches courses for the Rutgers Office of Continuing Professional Education and continues the Rutgers Master Gardeners.

Monmouth County will host its own celebration on **Tuesday, September 16 at 6:30 PM**, at the Monmouth County Ag Building on Kozloski Rd., just before the 7:30 BOA meeting. **Freeholder Director Lillian Burry** will be attending the ceremony and will present a Proclamation recognizing the success of the Rutgers Extension. We will be planting a **Red Beauty Holly**—a hybrid holly that is also an excellent deer resistant selection.

Light refreshments will be served. Please RSVP to Dorey or Joanne at 732-431-7260 X7261.

NEW MEMBERS TAKE SEATS ON STATE BOARD OF AGRICULTURE

Jones, Wagner Sworn in to 4-year terms, Kumpel Fills Vacant Seat

(TRENTON) - The New Jersey State Board of Agriculture installed three new members on July 23 during its reorganization meeting held in Ewing - **Mitchell Jones** of Harmony Township, representing the hay and grain industry, **Steven B. Wagner** of Franklinville representing the horticulture industry, and **Roger Kumpel** of Southampton, filling an unexpired term.

"Mitchell Jones, Steve Wagner and Roger Kumpel are well-respected and already have long resumes of accomplishment in serving the state's agricultural industry," said New Jersey **Secretary of Agriculture Douglas H. Fisher**. "Now, they bring their vast knowledge and experience to the State Board of Agriculture, which sets policy for the industry throughout the entire state. We look forward to working with them on important issues."



Also during the reorganization meeting, **Richard Norz**, a Somerset County hay, grain and vegetable grower, was selected to serve as Board President and **Robert Swanekamp**, the immediate Board past-president and a Monmouth County flower and plant grower, as Vice President.

The State Board of Agriculture comprises eight members who serve for four years, with two members being replaced each year. By law, at least four of its members must represent the top commodity groups in the state. Members serve without salary. For more information, visit www.nj.gov/agriculture/about/sba

40th Monmouth County Fair - 2014

July 23, 2014 at 5 P.M. marked the opening of the 40th Monmouth County Fair at East Freehold Showgrounds. The Fair actually dates back more than 150 years, probably even earlier. You can read about the history of the Fair in the *Monmouth County Park System Green Heritage—Summer 2014*. http://co.monmouth.nj.us/documents/132%5Cgreen_heritage_summer_2014.pdf The Monmouth County Freeholders and Administration were present for the official opening (photo top right). The Monmouth County Board of Agriculture's display consisted of vegetable plants and if they were correctly identified, a strawberry plant was the prize (bottom left and center). The Monmouth County Vocational School's FFA organization once again had the very popular farmer's market (bottom left). V. Quinn



North American Blueberry Research & Extension Workers Conference

An International Blueberry Workshop was hosted by Rutgers Cooperative Extension & USDA on June 23-26, 2014 at the Sheraton Atlantic City Convention Center Hotel, Atlantic City, NJ. Every 4 years, research and extension workers from throughout North America and abroad meet to exchange ideas and research results on current blueberry issues. Representatives from Mexico, Chile, Canada, China, New Zealand and more are seen on page 1.

New Jersey is "Where it all began" – as highbush blueberries were first bred and cultivated. In addition to updates on current extension and research activities, there were tours of a winery, blueberry production areas and packing facilities. Our group traveled to Whitesbog where farmer Elizabeth White and USDA's Dr. Fred Coville began our Garden State industry. The program highlighted new varieties, the management of diseases and invasive pests like spotted wing drosophila (SWD). Program information <http://www.group-res.com/NABREW/default.aspx>

AGENCY UPDATES

Rutgers Cooperative Extension supports
Open Space & Agriculture

Congratulations
Dr. Karyn Malinowski, Grand Marshall
Director Rutgers Equine Science Center



COOPERATIVE
1916-2016
100
ANNIVERSARY
EXTENSION

RUTGERS
COOPERATIVE
100
ANNIVERSARY
EXTENSION

RUTGERS
New Jersey Agricultural
Experiment Station
"Extending Knowledge & Changing Lives"



Rutgers, The State University of New Jersey

Rutgers is Revolutionary

The university's new 30-second television spot marks a big moment for Rutgers: joining the Big Ten, with new opportunities for academic collaboration and athletic competition, as we head into a major milestone -- the university's 250th anniversary.

View the spot and learn about the people and stories behind "[Revolutionary](http://revolutionary.rutgers.edu)," which celebrates the university's past, present, and future.

RUTGERS Revolutionary for 250 Years

Home | Videos | About | Feedback

Rutgers Television Spot: "Revolutionary"

<http://revolutionary.rutgers.edu/2014tvspot.php>



Equine Scholarship Offered

Lynne Richmond

The New Jersey Equine Advisory Board is offering a \$1,000 scholarship to help 4H and FFA members pursue their equine activities. Members of organizations represented on the New Jersey Equine Advisory Board also are eligible. Applicants must be New Jersey residents between the ages of 13 and

Ilex x 'Red Beauty'

This Red Beauty Holly was planted in commemoration of the 100th Anniversary of Cooperative Extension

Legendary plant breeder and Rutgers professor Dr. Elwin Orton took 22 years to develop this hybrid, known for its compact, pyramidal habit, low maintenance, dense dark green foliage, and bright red berries. Also known to be deer proof, 'Red Beauty' has become a standout among hollies.



www.rutgers.edu/extension/100years

Rutgers Cooperative Extension of Monmouth County
100th Anniversary of Extension Tree Planting. 9/16

RUTGERS
New Jersey Agricultural
Experiment Station

**Horticultural and FIELD CROP
Research Twilight Meeting**

WHERE: Rutgers Snyder Research Farm
140 Locust Grove Rd, Pittstown, NJ 08867
Hosted by The Garden State Crop Insurance
Education Initiative

This years meeting will focus on:

- Crop insurance
- Tour of corn & soybean plots
- Control of White Mold
- Soybean weed/fungal control
- Farm pond algae control
- Pesticide safety update

***Pre-Registration is required for dinner - by calling Jennifer at (908) 788-1338, RCE of Hunterdon County

**Save The Date!!!
September 9th
5:00-8:45PM**



Questions?
Call 856-769-0090 or visit:
<http://saalem.rutgers.edu/cropinsurance>

NEW JERSEY **RMA**
Rutgers, The State University of New Jersey

CALENDAR

September 2014

9 - Horticultural & Field Crop Research Twilight Mtg.
Crop Insurance Updates and Fruit Variety Showcase, Snyder Farm, Pittstown, NJ. (See p. 6). Call Jennifer 908-788-1338 or Dave Lee 856-769-0090 for more info.

16 - Rutgers Cooperative Extension of Monmouth County 100th Anniversary of Extension Tree Planting.
Ag Building, Freehold, 6 PM. Light refreshments. RSVP Dorey or Joanne 732-431-7260 X7261.

20 - Open Space Pace - Freehold Raceway. County Fair & Parade of Horses. www.OpenSpacePace.org

October 2014

13 - Emergency Pesticide Recertification Seminar - Rutgers Continuing Ed; Pesticide credits 5 in 3B; 2 in 3A and PP2; 4 in CORE & 6B. More info 732-932-9271 or www.cpe.rutgers.edu

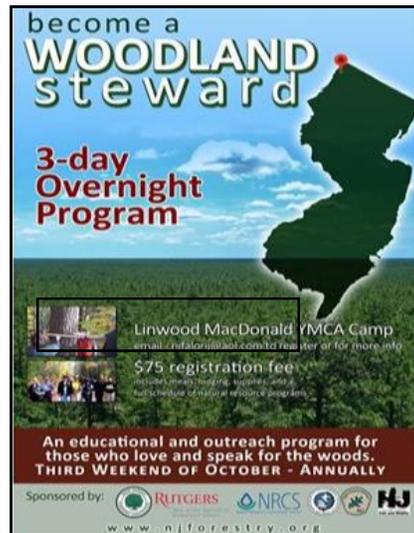
20 - Pesticide Calibration - 9 am-1pm; Rutgers Continuing Ed. Pesticide credits 8 CORE (see info above).

20 - RCE Annual Conference - Cook College—9:30 - 4:00

21 - Emergency Pesticide 1/2 day classes in 3A & 3B - 10/21
9 am-noon (3A with 6 credits) and 10/21 1 pm-4 pm (3B with 6 credits) Rutgers Continuing Ed. (see info above).

November 2014

17-18 - NJ Farm Bureau Annual Conf. Westin Hotel, Forestal Village, Princeton. Contact Liz or Lisa at Farmhouse 609-393-7163.



http://www.state.nj.us/dep/parksandforests/forest/woodland_steward.html

Rutgers Crops on line Vegetable Resources Center
<http://njveg.rutgers.edu/>

*Newsletter printed courtesy of the
Monmouth County Board of
Chosen Freeholders*

*Changing Times is produced and edited by Bill Sciarappa and Vivian Quinn
sciarappa@njaes.rutgers.edu
Past Issues on the web <http://www.visitmonmouth.com/page.aspx?id=3078>*

MONMOUTH COUNTY BOA
9-16, 10-21, 11-18, 12-16
BASIC PESTICIDE TRAINING
CORE 9 am - 1 pm— 9-16, 10-7, 11-18, 12-16
3B - 9-23, 10-14—9 AM—3 PM
7B—10-8, 10-9—9 AM—3 PM
To register call 800-524-9942
Held at Rutgers Cooperative Extension Ag Bldg.
4000 Kozloski Rd. Freehold, NJ
732-431-7260

RUTGERS COOPERATIVE EXTENSION MONMOUTH COUNTY
New Jersey Agricultural Experiment Station
PO Box 5033, 4000 Kozloski Rd., Freehold, NJ 07728

Rutgers Cooperative Extension—Agriculture, Family and Community Health Sciences, 4-H Youth Development, Resource Management, and Marine Studies—welcomes this opportunity to send you the enclosed materials for your information and use. Educational programs and information are provided to all people without regard to sex, race, color, national origin, gender, religion, age, disability, political beliefs sexual orientation, or marital or family status.



Bill Sciarappa, County Agricultural Agent
Extension Department Head

Photos: NJ Dept. of Agriculture, Rutgers Univ. B. Sciarappa, , V. Quinn

New Jersey Agricultural
Experiment Station

RUTGERS

Cooperative Extension of Monmouth County
4000 Kozloski Road
PO Box 5033
Freehold, NJ 07728-5033

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Tree Planting Ceremony marks Rutgers Cooperative Extension 100th Anniversary



Left: T. Molnar, E. Orton & L. Katz, Center: 100th anniversary committee D. Minch, J. Rea-Keywood, C. Rovins, S. Murphy, Z. Hesel & N. Polanin; Right: E. Orton and photo poster

To commemorate 100 years since the signing of the **Smith-Lever Act** and the creation of Cooperative Extension in 1914, a **Red Pygmy® dogwood** was planted in the Foran Conservation Garden. The highlight of the ceremony was the presence of **Rutgers Professor Emeritus** of Plant Biology and Pathology **Elwin Orton**. Professor Orton developed new strains of hardy, disease- and pest-resistant hybrid dogwoods and introduced the Red Pygmy® as a rare dwarf red dogwood tree. A poster with photos of the beautiful deep pink-red flowers of Red Pygmy® was on display.

A large crowd observed as Larry Katz, **Director of Rutgers Cooperative Extension**, Elwin Orton and Tom Molnar, breeder and assistant professor in the Department of Plant Biology and Pathology, performed the ceremonial tree planting. A plaque reading “**Celebrating 100 years of Rutgers Cooperative Extension**” and the name of the dogwood variety marked the spot alongside Foran Hall on Cook Campus. Refreshments were served and then everyone proceeded to continue their work toward the next 100 years of Cooperate Extension.

Vivian Quinn

June - New Jersey Month of the Horse

It's equine time again. The month of June is dedicated to honoring **our state animal – the horse** (Equus cuballew), as designated in 1977 by Governor Brendan Byrne. This very appropriate selection is highlighted with NJ housing the USA Equestrian Team, having a dedicated Horse Park, several race tracks, a University Equine Science Center, thousands of recreational rides and hundreds of equine operations. To celebrate, a horse panel round table is scheduled at the Manalapan library on June 30th (see schedule pg. 2). Also the Open Space Pace Committee has planned the 3rd Annual Parade of Horses in downtown Freehold on September 20th. As always, our farmers are busy harvesting quality hay and forage to sustain our Jersey grown horses.

So, come and join in the activities and tip your hat to a horse, congratulate the owner and support the farm industry that simultaneously serves equestrian, agricultural, economic and open space needs.



Making Hay in Monmouth County—*Bill Sciarappa*



JUNE IS HORSE MONTH!



**Monday
June 30, 2014
7:00 pm**

Panel Discussion

**Please join us for a panel discussion on Horses in New Jersey
Learn about open space initiatives & the care and feeding of horses**

Moderator **Dr. Bill Sciarappa** of Rutgers' NJ Agricultural Experiment Station will be joined by panelists including:



Harriet Honigfeld, Administrator, Farmland Preservation Program, Monmouth County Planning Board

Dr. Carey Williams, Rutgers Equine Center

Elden V. Klayman, DVM, CVA, Colts Neck Veterinary Services, P.C.

At 6:00 pm, before the panel, say "hello!" to **Independent Act**, affectionately known as **Indy**, a retired Standardbred, who was a champion harness racer and winner of several show ribbons.

Monmouth County Library - HEADQUARTERS

125 Symmes Drive, Manalapan, NJ 07726-3249 Telephone: 732-431-7220

FREE OF CHARGE

www.monmouthcountylib.org

GOVERNOR APPOINTS THREE NEW MEMBERS TO SIRE STAKES BOARD

TRENTON) – New Jersey **Secretary of Agriculture Douglas H. Fisher** today announced **Governor Chris Christie** has appointed **Michael Gulotta, Dr. Richard S. Meirs** and **Mark Mullen** to the New Jersey Sire Stakes Board of Trustees. "All three new members of the Sire Stakes Board currently serve as directors of the **Standardbred Breeders and Owners Association of New Jersey** and bring extensive knowledge of the **harness racing industry** to the Board," said Secretary Fisher.

Michael Gulotta is the chief executive officer of Deo Volente Farms, LLC of Flemington, which was named "Farm of the Future" by the United States Trotting Association in 2009. Among the world champions he has raced are Worldly Beauty, Lis Mara, Holiday Road, and Crys Dream.

Dr. Meirs has served as the general manager of **Walnridge Farm, Inc.** with operations in Cream Ridge and Elizabethtown, PA. He is also a principal in the Walnridge Equine Clinic veterinary practice and has served as a past president of the NJ Association of Equine Practitioners.

Mark Mullen is the President and co-owner of Fair Winds Farm, Inc. of Cream Ridge. He was named co-breeder of the year in 2009 by the United States Trotting Association and was the breeder of 2011 Hambletonian winner Broad Bahn.

The **Sire Stakes Board** is responsible for the administration of the Department of Agriculture's stakes racing program for two- and three-year-old pacers and trotters sired by registered stallions at New Jersey breeding farms as well as the Standardbred Development Fund, which provides a stakes program for the progeny of mares who spend a minimum of 150 days in New Jersey and foal in New Jersey.

For more information on the Sire Stakes Program, visit www.jerseyequine.nj.gov/sirestakes.htm.

News from the

NEW JERSEY DEPARTMENT
OF AGRICULTURE



Lynne Richmond (609)633-2954 Lynne.richmond@ag.state.nj.us

CHRISTIE ADMINISTRATION CELEBRATES JUNE AS MONTH OF THE HORSE—*Ag Secretary Highlights 4-H Equine Clubs*



(MULLICA HILL) – New Jersey Secretary of Agriculture Douglas H. Fisher kicked off June as the Month of the Horse in New Jersey on Friday, June 6 by highlighting the state 4-H equine clubs. He

observed a demonstration by the Gloucester County Equine Science Team at the Gloucester County 4-H Fairgrounds in Mullica Hill, organized by New Jersey Equestrian of the Year Angela Howard, a student at Kingsway Regional High School in Woolwich Township.

“New Jersey’s equine industry is extremely diverse, providing residents with many ways to interact with our state animal, the horse,” said Secretary Fisher. “I encourage people to venture out this month and enjoy a horse show or a race at one of our harness racing or thoroughbred tracks, take a trail ride, or drive through the countryside of our state and visit farms and equine operations.”

Angela Howard of Mullica Hill joined 4-H and started riding when she was 6 years old. In January, she won the Equestrian of the Year competition run by the New Jersey Equine Advisory Board. As Equestrian of the Year, Howard attends functions hosted by the Equine Advisory Board and represents the Board at functions. During the presentation for Secretary Fisher, Howard’s equine science team traced the skeletal system of a horse on a live horse and then gave a presentation on horse judging.

“The Equine Science Program develops skills that will last a lifetime, in and out of the ring,” said Howard. “Through this program I have become an accomplished scholar with communication and presentation skills that will no doubt help me in my future goals. I want to share this opportunity with younger riders.” Gloucester County 4-H offers 21 different clubs for youth interested in horses. Other New Jersey counties as Monmouth also offer 4-H equine clubs, all of which are open to all children whether or not they own a horse.

News from the

NEW JERSEY DEPARTMENT
OF AGRICULTURE



Lynne Richmond (609)633-2954 Lynne.richmond@ag.state.nj.us



New Jersey is home to almost 28,000 pleasure horses, show horses, race horses and ponies. In 1977, to honor the important place horses play in New Jersey’s economy and quality of life, the horse was named the official State Animal. This is the fifth year Governor Chris Christie has proclaimed June the Month of the Horse in New Jersey. New Jersey has many top equine centers, facilities, and events. **The Equine Science Center at Rutgers University**, a valuable resource for everything equine in the Garden State, is dedicated to better horse care through research and education. **The United States Equestrian Foundation** headquartered in Gladstone funds programs that train and support top athletes and horses to compete at the Olympics, World Championships, Pan American Games and other top international competitions. **The Horse Park of New Jersey at Stone Tavern in Allentown** hosts the Jersey Fresh Three-Day Event, which has become one of the world’s top eventing competitions. And, the Gloucester County Dream Park is a state-of-the-art equestrian complex created to provide opportunities for horse owners to participate in shows and competitions and for the public to experience horse events firsthand.

“In New Jersey, we are lucky to have so many beautiful horses, horse farms and horse organizations you can participate in and benefit from,” said Howard. “Take time to appreciate and explore the best of what horses have to offer in our state. After all, our state animal is the horse.” Here a list of equine events planned during the Month of the Horse:

<http://www.jerseyequine.nj.gov/equinecal.htm>

What's in Season from the Garden State: Celebrating Over 100 Years of Ag Innovation and the NJ Farmers that Helped

June 3, 2014 by [Office of Communications](#)

For a university that has been around for almost 250 years, big anniversaries are a good time to gauge progress and reflect on past accomplishments. While Rutgers University still has another two years to go before its actual 250th anniversary (it was established in 1766), the year 2014 marks two milestones that reflect the university's mission of supporting New Jersey agriculture and disseminating practical knowledge to promote the well being of the residents it serves.

First, this year marks the 150th anniversary of Rutgers being designated New Jersey's land-grant institution, leading to the establishment of the Rutgers Scientific School (now School of Environmental and Biological Sciences) in 1864. This was enabled by the passage of the federal Morrill Act in 1862, which created at least one institution in each state that received a land-grant to fund education in the liberal arts, agriculture and the mechanic arts. When the New Jersey legislature designated Rutgers the state's land grant institution, Rutgers' connection to the state's agriculture and its role in scientific research was greatly enhanced.

The other noteworthy event this year is the 100th anniversary of the signing of the federal Smith-Lever Act in May 1914, leading to the creation of the national Cooperative Extension service. Essentially, this Act paved the way for the research and expertise of the land-grant institutions to be disseminated to state residents through county Cooperative Extension offices.

Rutgers tagline, "Jersey Roots, Global Reach," aptly describes the impact of agricultural innovations at the university. The development of new methods, equipment and plant varieties coming from Rutgers NJ Agricultural Experiment Station (NJAES) has been robust. Few may realize that some of the ag products and technologies in use worldwide today were developed at Rutgers NJAES. Even less well known is the fact that while university agricultural researchers toiled in their labs or research fields on their developments, NJ farmers were working closely with the scientists to test these advances on their own farms, providing essential data to the researchers. These growers took the financial risks to test these innovations on the good faith that they would lead to improvements in their commercial production. Some of these farmer-university connections developed into more than just on-farm trials; they became enduring relationships.



The first calf born via artificial insemination in the U.S. in February 1939 was at the Schomp Farm in Stanton, NJ. At the time it was considered the most photographed and publicized bovine in history. Courtesy of Rutgers Department of Animal Sciences

One of the early ag innovations from Rutgers was the introduction of artificial insemination (AI) of dairy cows in the U.S. in 1938 by Rutgers dairy specialist Enos Perry. Prior to that, dairy farms dealt with the hazards of handling dangerous bulls, and injury or death was common on farms. When Enos Perry introduced to North Jersey dairy farmers a procedure from Denmark to artificially inseminate dairy cows, the concept was readily accepted and a farmer co-op was formed. These North Jersey farmers would be the first to test artificial insemination in the U.S. According to the publication *Pennsylvania and New Jersey AI Cooperatives: The First Forty Years*, "The dairymen who entrusted their cows to artificial insemination, using semen from a test tube, were truly pioneers, and they were the first to use cooperative artificial breeding in this country. Therefore they deserve to be listed for posterity. (Veterinarian) Dr. Henderson inseminated cows that day (in November 1938) for Fred Mayer in Somerset County, Kingman Brothers at Three Bridges, and Clifford Snyder at Pittstown in Hunterdon County, and for Hans Schanzlin at Montana in Warren County. The first page of AI history in the USA was recorded."

The involvement of one of these farmers serves an example of a farmer relationship that developed into a further connection with the university. After the passing of Clifford Snyder, his widow Melda bequeathed the Snyder farm to Rutgers. [The Clifford E. & Melda C. Snyder Research and Extension Farm](#) in Pittstown serves as the Rutgers Center for Sustainable Agriculture and carries on the Snyders' legacy of facilitating advances in agriculture.

Another frontier of Rutgers ag innovation was in farm technology. Some modern agricultural applications in use today resulted from Rutgers NJAES innovations and the NJ farmers who tested them.



Clifford E. Snyder



Melda C. Snyder

In the early 1960s, as an extension agricultural engineer at Rutgers, Bill Roberts was working with some NJ growers who were using low-cost polyethylene film on simple wooden frames to construct greenhouses used primarily for spring transplant production and bedding plants. Using two layers of plastic on the greenhouses improved function and efficiency, but was still cumbersome. When Roberts had an innovation in 1964 to use a small air pump to introduce air pressure between the two layers, the first Air-Inflated, Double-Layer Polyethylene Greenhouse (AIDLPG) was developed and eventually revolutionized the greenhouse industry throughout the world. In the early stages of the development, after applying the concept to a test structure on campus, this model was next tested on a portion of a large commercial greenhouse in Allentown NJ at Kube-Pak, Inc., which was then owned by growers Fred and Bernie Swanekamp. Roberts' cautious approach for application to a commercial greenhouse was overruled by Fred Swanekamp's unbridled enthusiasm for the new technology. Roberts recalls, "I asked Fred if he wanted to try it on one bay and he said that he wanted to do one half the greenhouse, which was a greenhouse of six acres. I told him I wanted to sleep at night but he was so excited about the idea that he proceeded to cover one half of the structure with the air inflated system."

Roberts' fears were quickly put to the test. "I distinctly remember in the spring of that year on a very windy Saturday staying away from the telephone because we were having hurricane force winds. I didn't want to hear about the damage to the greenhouse. I heard on the radio that the roof blew off the Polestra, a large basketball arena in Philadelphia and I still received no call from Fred. Finally when I could stand it no longer I called him on Monday morning. He said 'It was no problem'. The original method of covering on one half of the roof blew off during the storm but the new section was not damaged, so

he covered the remaining 500 feet of the entire 1,000-foot long greenhouse with the air inflation system. The Kube-Pak greenhouses today are covered in the same system developed almost 50 years ago." Kube-Pak is yet another example of New Jersey growers who pioneered an agricultural innovation.



Also in the 1960s, Rutgers Cooperative Extension of Cumberland County Agricultural Agent Norm Smith was nationally and internationally recognized for his research, particularly on the use of plastic mulch and drip-irrigation systems for vegetable crops. Prior to that work, farmers were using either no irrigation or overhead irrigation, which was not efficient. Today, Smith's irrigation-and-mulch growing system is used worldwide. He pioneered work with plastic film mulch and drip irrigation in the U.S. and extended those benefits to agriculturists in South Africa, Canada, Japan and Northern Europe. Many farms have adopted the highly productive and efficient plant production techniques of intensive food production systems promoted by Smith.



Again, the testing ground for developing these technologies was New Jersey farms. Jack Rabin, director for farm programs at NJAES, said, "Norm Smith did immense numbers of NJ on-farm trials annually, likely more than any other Rutgers extension agent before or since. He trialed with drip irrigation plastic mulch at many dozens of Jersey farms, with inflated double poly greenhouses, with lettuce, and fumigation at many farms on crops like eggplant. Norm was indefatigable."

This integral relationship with Cooperative Extension, the Experiment Station and New Jersey farmers continues today. The 2014 spring season unveils yet another Rutgers innovation from New Jersey farms. Several test varieties of strawberries developed by Rutgers retired plant breeder Gojko Jelenkovic are being tested by Extension agents Bill Hlubik and Pete Nitzsche on several NJ farms .

<http://sebsnjAESnews.rutgers.edu/2013/06/whats-in-season-from-the-garden-state-jersey-strawberries-the-breed-goes-on/>

AGENCY UPDATES

USDA FARM SERVICE AGENCY NEWS

July 15, 2014 is the deadline for reporting your acreage for most crops. Crops planted after July 15th must be reported within 15 calendar days. Most Farm Service Agency (FSA) programs require an acreage report to be filed in order to participate. Crop Insurance Programs as well as the Non-insured crop disaster Assistance Program (NAP) require acreage reports in order to verify a crop's existence, or to establish Actual Production Histories (APHs). Conservation Programs use acreage reports to determine cropping history on specific tracts of land to establish practice eligibility. Other programs use acreage totals to establish expected crop yields or to determine your own actual yields

While August 15th is the deadline for providing last year's production for APH purposes and a requirement for NAP participants, we encourage producers to supply this information prior to the deadline so that the office has sufficient time to process your APHs. Production should be totaled to show pounds of product.

Participants who fail to provide the production by this deadline will be assigned a yield, either 75% of your prior year's approved yield (for an initial failure) or a zero yield (for subsequent failures). Producers, who have

failed to provide production in prior years can replace those assigned yields by providing production data or certifications for those years, now prior to this year's deadline. **Please note: August 1, 2014** is the sales closing date to acquire NAP coverage for 2015 strawberries.

County Committee elections are also upon us. We will be accepting nominations from June 15th to August 1st, for Local Administrative (LAA) 3, which encompasses all of Mercer County and portions of western Monmouth County (see link below). Ballots will be mailed out starting November 3rd and will be due in our office no later than December 1, 2014. Ballots will be counted December 5, 2014 at 9:30 AM.

For more information go to http://www.fsa.usda.gov/Internet/FSA_File/2014_025.pdf To receive our newsletters and bulletins you must sign up for GovDelivery by either calling our office or going to <https://public.govdelivery.com/accounts/USFSA/subscriber/new/>

USDA/FSA Freehold Service Center – Serving Monmouth, Mercer and Middlesex Counties
 4000 Kozloski Rd. PO Box 5033, Freehold, NJ 07728 | Tel: 732-462-0075 | Fax: 885-305-6498
 County Executive Director: Gabi Grunstein
 Program Technician: Beth Pine



New Jersey Secretary of Agriculture Douglas H. Fisher joined other Northeast Association of State Departments of Agriculture members earlier this week to discuss issues facing the Northeast states, such as dairy, food safety, GMOs, and water quality during the NEASDA annual conference in Boston. Pictured left to right are: Commissioner Walt Whitcomb (ME), Secretary Doug Fisher (NJ), Deputy Secretary Jay Howes (PA), Secretary Chuck Ross (VT), Secretary Ed Kee (DE), Chief Kenneth Ayars (RI), Commissioner Steven Reviczky (CT), Commissioner Lorraine Merrill (NH), Commissioner Richard Ball (NY), Commissioner Greg Watson (MA)

OPEN HOUSE

FAIR WINDS FARM

74 RED VALLEY RD. CREAM RIDGE, NJ

JUNE

29

1-4 PM





COME SEE
the MARES AND FOALS

RAIN or SHINE

EQUINE SCIENCE
FOR KIDS

FARRIER DEMO

MEET & GREET
with **INDY**
the Retired Racehorse

JUNE

is THE MONTH OF THE HORSE

Demonstrations by Dr. Patty Hogan
in her Equine Hospital

Educational Stations for Children and Adults

Appropriate Footwear Required
Please no open toed shoes or high heels



Scan Here

CALENDAR

June 2014

June 23-27 - North American Blueberry Research & Extension Meeting - Atlantic City. <http://group-res.com/NABREW/default.aspx> - G. Pavlis 609-625-0056
June 30 - Equine Issues Panel, Manalapan Library, 7 PM.

July 2014

20-24 - NACAA National Conference, Abilene, Louisiana
23-27 Monmouth County Fair - East Freehold Park.
<http://www.monmouthcountyparks.com/page.aspx?ID=2492>

August 2014

27— Great Tomato Tasting - Snyder Research & Extension Farm, Pittstown, NJ. Joanne Stevely 908-730-9419 X3501



http://www.njagfairs.com/fair_listings.html



<http://njveg.rutgers.edu/>

Welcome to the 40th Annual

July 23—27, 2014

Presented by the Monmouth County Park System in cooperation with the Monmouth County 4-H Association

<http://www.monmouthcountyparks.com/page.aspx?ID=2492>



Newsletter printed courtesy of the Monmouth County Board of Chosen Freeholders

*Changing Times is produced and edited by Bill Sciarappa and Vivian Quinn
 sciarappa@njaes.rutgers.edu
 Past Issues on the web <http://www.visitmonmouth.com/page.aspx?id=3078>*

MONMOUTH COUNTY BOA
 9-16, 10-21, 11-18, 12-16
BASIC PESTICIDE TRAINING
CORE 9 am - 1 pm— 7-15, 8-12, 9-16, 10-7, 11-18, 12-16
3B - 9-23, 10-14—9 AM—3 PM
7B—10-8, 10-9—9 AM—3 PM
 To register call 800-524-9942
 Held at Rutgers Cooperative Extension Ag Bldg.
4000 Kozloski Rd. Freehold, NJ
732-431-7260

RUTGERS COOPERATIVE EXTENSION MONMOUTH COUNTY
New Jersey Agricultural Experiment Station
PO Box 5033, 4000 Kozloski Rd., Freehold, NJ 07728

Rutgers Cooperative Extension— Agriculture, Family and Community Health Sciences, 4-H Youth Development, Resource Management, and Marine Studies— welcomes this opportunity to send you the enclosed materials for your information and use. Educational programs and information are provided to all people without regard to sex, race, color, national origin, gender, religion, age, disability, political beliefs sexual orientation, or marital or family status.

Bill Sciarappa, County Agricultural Agent
Extension Department Head

Photos: NJ Dept. of Agriculture, Rutgers Univ. B. Sciarappa, , V. Quinn

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Extending Knowledge - Changing Lives in New Jersey & Beyond

In 2014, we celebrate the 100th anniversary of the signing of the Smith-Lever Act of 1914, which officially created the national Cooperative Extension System. This national celebration will highlight Extension's past and focus on the contemporary application of Extension's transformational, educational programming into the future.

The national celebration will be complemented by state and county activities throughout the year. May 8, 2014 will be the primary day of [the national celebration](#) to signify the actual day the Smith-Lever Act was signed in 1914.

In 1862, Rutgers College accepted the commitment as a land-grant institution with the passage of [the Morrill Act](#). This act specified that the annual income derived from the sale of



public lands which had been allotted on the basis of 30,000 acres for each senator and representative in Congress, should be paid to the Trustees of Rutgers College. This money, a little more than \$5,000 in annual payments, was a "nest egg" and with supplemental state and federal appropriations for faculty, equipment, buildings, and land...

Besides making provisions for resident instruction and research, the Morrill Act charged the Board of Trustees to provide at least one free lecture about agriculture in each county every year.

Willing as they were to comply, the trustees found that taking the college to the people put some severe strains on the resident teaching staff. As the lectures sharpened farmers' appetites for more knowledge, they were supplemented with bulletins, reports, and new articles.

(Continued on page 3)



NJ FARMS GETTING BIGGER, INCREASING INCOME

2012 Census of Agriculture Preliminary Data Released

(TRENTON) – The U.S. Department of Agriculture 2012 Census of Agriculture released in February shows the average New Jersey farm is larger and more productive than it was in 2007.

Preliminary data from the census show the average size of a New Jersey farm increased from 71 to 79 acres from 2007 to 2012. The market value of products sold on those farms went up from \$95,564 to \$111,030 per farm. In total, the market value of products sold on all New Jersey farms increased from \$986.9 million to \$1.01 billion.

"We are seeing consolidation in every industry," said New Jersey Secretary of Agriculture Douglas H. Fisher. "Farms are expanding, becoming more diverse in operations and increasing their production."

Between 2007 and 2012 there was a decrease in the number of the state's smallest farms, those between one and nine acres. That number dropped 24 percent from 2,950 to 2,237. However, the number of farms between 50 and 179 acres increased 7 percent from 1,675 to 1,790 during that time period. The census also

showed farmers in the U.S. are getting older. The average age of a New Jersey farmer went up from 57 in 2007 to 59 in 2012.

Conducted since 1840, the Census of Agriculture accounts for all U.S. farms and ranches and the people who operate them. When available in May, the final report will provide even more detailed information for New Jersey providing data on all farm operators and data down to the county level. The publication also will provide new insights into the agriculture industry reporting new or expanded data on Internet access, regional food systems, biomass production, agro-forestry and equine.

To be counted in the federal census, a farm must have sold or had the potential to sell at least \$1,000 worth of agricultural products.

News from the

**NEW JERSEY DEPARTMENT
OF AGRICULTURE**



SECRETARY OF AGRICULTURE HONORS THE LANDY FAMILY AS NEW JERSEY HORSEPERSONS OF THE YEAR

(TRENTON) -- The 2013 Governor's Award for Horseperson of the Year was awarded to the Landy family January 26 at the annual Breeders Luncheon by New Jersey Assistant Secretary of Agriculture Alfred Murray.

The Landy's, who own the 200-acre Congress Hill Farm in Monroe Township, have bred and trained horses from childhood and in past years have produced champion horses such as The Porter Grey who was the New Jersey Sire Stakes Champion at 3 and 4 years old.

"The Landy family has a commitment to their surrounding community, bringing horses and people together for their mutual benefit," said Secretary Fisher. "They have many accomplishments through their lifetime of hard work and dedication to the equine industry."

A committee of past horsepersons of the year awarded the honor to the Landy Family for their many achievements, including the creation of the Open Space Pace, the newest agricultural fair in New Jersey which has been



Gloria, Eugene & Harry Landy accept award from Dr. Karyn Malinowski, Director of Rutgers Equine Science Center, and Assistant Secretary of Agriculture Al Murray.

running for two years. Its inaugural event was held in September of 2012.

In addition to the Open Space Pace, the Landy family also created the 4-H "Bits and Bridles" and "Share a Horse" programs, which offer children in the area different opportunities to ride and show horses beginning at a young age. They also started the internationally-known program, "Special Strides," which provides therapy to 140 children in the New Jersey area.

The annual Breeder's Luncheon celebrated the state's best in the equine field in 2013. Other awards presented at this event were:

New Jersey Equestrian of the Year: Angela Howard, Mullica Hill, is a Junior at Kingsway Regional High School, received a \$250 scholarship and was chosen based on her ability to communicate and her knowledge of horses, as well her essay about how horse owners prepare for disasters.

Lynne Richmond (609)633-2954 Lynne.richmond@ag.state.nj.us

Monmouth County FFA Chapters Shine Brightly at NJ 2014 Spring C.D.E's

Future Farmers of America, or the F.F.A., is a national youth organization invested in promoting youth involvement in agriculture. On April 10th the New Jersey State Spring Career Development Events were held at Rutgers University. The Spring CDEs included Agricultural Technology & Mechanical Systems, Agricultural Sales, Environmental & Natural Resources, Floriculture, Nursery/ Landscape, and Veterinary Science. Out of the numerous chapters that attended, four were Monmouth County representatives. These included the Monmouth County Vocational School, Allentown High School, Freehold Township High School, and the Biotechnology High School.



All of our chapters did exceedingly well, both individually and as teams! In Agricultural Sales Freehold Township High School placed first in the state as a team, and will be traveling to next year's National F.F.A. Convention to represent New Jersey. Allentown High School placed first in Agricultural Technology & Mechanical Systems. They will also represent New Jersey in the upcoming National competition. Monmouth County Vocational School will do the same, due to their first place ranking in Nursery/ Landscape. Biotechnology also placed first in a C.D.E., Veterinary Science.

Claire Brown, FFA Allentown Chapter Member

100th Anniversary of Cooperative Extension

(Continued from page 1)

Those early professors with the Extension vision channeled their information through meetings of county boards of agriculture, farmers' institutes, and later by agricultural trains bearing exhibits and lectures that went from town to town.

These statewide activities proved a serious drain on the time of resident professors. The volume of knowledge kept expanding and so did the requests for help from farmers.

About two years before the passage of the New Jersey Farm Demonstration Act, the farmers of Sussex County got together with the Lackawanna Railroad and the local chamber of commerce, to form the first formal Cooperative Extension program in this state in 1912.

Excerpted from the 2000 Policy Handbook and RCE Website

Establishment of Cooperative Extension Work in NJ Counties

1912	1914	1915
Sussex Mercer	Monmouth Bergen Atlantic	Cape May Middlesex Burlington Cumberland

The Christie Administration has declared this month of May as Cooperative Extension Month in New Jersey. Many counties and Rutgers University have planned several celebrations in regards to this 100th Year Anniversary. In Monmouth County at the end of May, our Extension Department will be inviting Stakeholders to attend our celebration at the Ag Building of Rutgers Cooperative Extension of Monmouth County in Freehold. The Master Gardeners have selected the planting of an American Holly, developed at Rutgers, named Red Beauty.

Did You Know ?

100 years ago...

Some history as we start the 100th Year of Cooperative Extension:

Milk—\$ 0.32 a gallon
Eggs—\$ 0.35 a dozen
Bacon—\$ 0.28 per lb.
Potatoes—\$ 0.18 per lb.
Sirloin Steak—\$ 0.26 per lb.

Union Hourly Wages:

Bricklayer \$ 0.75
Carpenter \$ 0.65
Painter \$ 0.50
Plumber \$ 0.69
Monthly farm wage *with Board* - \$ 21.05 - *without Board* \$ 29.88

Voices of RCE

As part of the celebration, RCE is are working on a [Voices of RCE History Project](#) and collecting statements, stories, photos and videos from past and present Extension personnel to share the scope of our work and its impact on New Jersey residents. Visit the voices below for some stories from past and present RCE employees at the RCE coordinated website coordinated by Smith-Lever Celebration Committee Chair Jeanette Kea-Keywood.

<http://njaes.rutgers.edu/extension100years>



L to R: William Roberts, Extension Specialist; Brevort Conover, 4-H Youth Development Agent; Enos J. Perry, Rutgers Extension Specialist

Our Stories RCE History Project:

<http://njaes.rutgers.edu/extension100years/voices.html>

Charles M. Holmes **Morris S. Fabian**
Calvin G. Wettstein



Rutgers Cooperative Extension 1947

Roller Crimper Tips for NJ Growers — Jack Rabin

Roller Crimpers offer superior benefits to vegetable growers who use them along with herbicides, producing better quality main season crops such as, pumpkin, winter squash, and processing tomato with reduced inputs. The dense cover crop mat acts as a contact barrier between fruit and soil, minimizing fruit defects and splash disseminated diseases that affect marketing. We share lessons learned during our four years of experience using the roller crimper. Armed with this knowledge, decide if Roller Crimper use fits into your operation.

Key Points on Roller Crimper Use—Imagine growing pumpkins with longer retail sales life, good handles, fewer scars, scabs or scuffing, in fields cleaner for u-pick patrons harvest. Imagine seeing these benefits while simultaneously building soil quality, lowering fungicide inputs, and covering soils resulting in weed suppression and soil moisture conservation.

Success Depends on a Dense Mat Treat the cover crop as you would a cash crop to produce a dense stand for best outcomes. On main season vegetables, a dense residue mat does more than help suppress weeds. It reduces ground contact for crops like pumpkin, winter squash, processing tomato, and u-pick. The physical barrier can result in cleaner, more attractive marketable crops that are more likely to be freer from ground contact defects, and aid in suppression of diseases spread by soil contact and water splashing. Therefore, pay attention to production details such as: fall seedbed preparation free of ruts, high (2+ bu/a) rye seeding rate, ideal fall seeding date, adequate fertility, and cover crop termination at the correct time.



Reliable When Used Together with Burndown Herbicide—In four years of field experiences, we found roller crimper no-till most reliably suppressed weeds when used in combination with herbicides, not as a complete alternative. Burndown herbicide at rolling suppresses perennials, germinated annuals, and terminates cover crops much more uniformly and efficiently. View videos documenting an Indiana grower's experience in 2013: <http://www.youtube.com/playlist?list=PLMAP-dB0LIKnAse6mVU3LoOAK9jYnF3h>

NOT for Use with Early Crops - Roller crimper practices are adaptable for producing main-season crops whose marketing success doesn't depend on early maturity (later sweet corn, snap beans, pumpkin, no-till field crops, no-till livestock grains and forages). Growing the mature cover crop biomass to ideal period in May for rolling and crimping sets later planting dates. Roller crimper practices work best when cover crops are terminated 1-3 weeks before crop planting. To read more information on the Roller crimper:

<http://sustainable-farming.rutgers.edu/roller-crimper-tips-for-nj-growers/>



The NRCS has Roller crimpers available to NJ Growers on a Loan-out basis. Contact them for details @609-267-7410 EMAIL:

admin@bscd.org

[Click to View Roller Crimper Resources on the Blog](#)

The Food Safety Modernization Act is in affect so I'm not going to farm - Wes Kline

That is what I keep hearing from some growers! Well, it is wrong! The final rules still have not been published for FSMA. The Food and Drug Administration (FDA) will not release the rules until sometime in 2015. When the rules apply to your operation depends on the size and what you grow. Under the present proposal farms are exempt from the rule if they meet the following criteria:

1. Average annual food sold in the previous three years is less than \$500,000.
2. Sell is direct to the end user (consumer, restaurant, supermarket, etc.).
3. The sold produce is within the same state or 275 miles where it is grown.

In reality most wholesale growers will not qualify for this exemption and retail growers who also sell hay, grain, etc. will not qualify since those commodities are included in the total food sold.

For those that do not qualify for the exemption there is a phase in period for the rules:

1. Very small farms (\$25,000-\$250,000) have four years from the time the final rules are published for most parts and additional two years to implement the water provisions. That means 2019 for every-thing except water and 2021 for the water provisions.

2. Small farms (\$250,000-\$500,000) 3 years for most parts plus 2 additional years for water (2018 & 2020).
3. Large farms (over \$500,000) two years for everything except water and two more years for water (2017 and 2019).

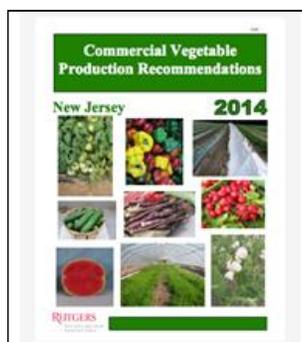
You have one more opportunity to propose changes to the rules. FDA will be requesting comments for certain parts of the rules sometime in May. We will notify the industry when the comment period opens. This will be your last opportunity to make suggestions. Once the final rule is written it will be very difficult to make changes. It would need to go through the whole rule making process which means public hearings, comment periods, etc.

There will be several training sessions once the final rules are published so everyone knows what is included. These training sessions will cover all aspects of production and post-harvest handling to help bring everyone to the same level of food safety understanding. The FDA considers FSMA as the basis where everyone should be in food safety. This does not replace third party audits. Most third party audits will require more information and have stricter requirements than FSMA. Audits are not government regula-tions, but required by your customers. If you do not like doing third party audits consider other customers who do not require them. However, audits are not going away and more customers will be asking that you complete one.

First fact sheet in the food safety series available

Worker Health and Hygiene - Fact Sheet 1230 is now available online at njaes.rutgers.edu/pubs/fs1230. The fact sheet authored by Meredith Melendez and Wesley Kline from the Rutgers Food Safety Team covers all aspects of worker health and hygiene. This can be used as part of training materials for workers.

Commercial Vegetable Recommendations 2014 Available Online



The Rutgers Commercial Vegetable Production Recommendations for NJ, newly updated for 2014, is available for free download. Each section, crop, and topic is available separately. <http://plant-pest-advisory.rutgers.edu/?p=8384>

Having printed copies in your pesticide building or in pickup truck is also desirable. Contact <http://njaes.rutgers.edu/county/> to purchase printed editions.

Jack Rabin & Andy Wyenandt

AGENCY UPDATES

Jersey Fresh Availability & Forecast Report for April 28, 2014 <http://www.jerseyfresh.nj.gov/>



Hello New Jersey produce industry. Here is our second 2014 "Jersey Fresh Availability & Forecast Report" of the season. Please be forewarned though that radical weather changes will have an influence on the ripening of produce and harvest date of availability. Hopefully, this information can help you with some of your purchasing and marketing decisions.

According to NJ State Climatologist David Robinson of Rutgers University, temperatures were much below normal for the first three months of this year. The enduring winter chill resulted in a December through March average statewide temperature of 31.9° (3.5° below the 1981-2010 normal 2.3°, below the 1895-2014 normal). It was the coldest Winter in 36 years. The 12 months ending with March was also the coolest such interval (52.2°) since February 2003 – January 2004. Our long and cold Winter should have produced sufficient “chilling units” for peaches and other fruits that need some Winter chill to develop. This same Winter chill should also cause less insect pressure this season due to the below average temperatures and extensive Winter kill.

Winter precipitation was near normal but very erratic in timing and location around the State. Last month for instance, the southeast part of the State came in as much as 2” above the monthly average while the northwest about 1.5” below average. Since most of the commercial volume of produce in NJ tends to come from the southern part of the State, our cold and wet recent weather has resulted in much of our produce production being

several weeks behind recent years earlier than normal starts. Over-wintered produce such as cilantro, spinach, leeks, parsley, and kale have had a bit of a rough time over-wintering this year with variable quality and lower volumes than normal starting to become available. Some over-wintered products such as leeks & parsley have been particularly hurt this Winter as our long, cold, and wet Winter has severely hurt them.

Most farmers first field work didn't get started until about a month ago when the planting of spring greens, lettuces and other cool season crops started in between cold snaps around Vineland. Warming temperatures and drier weather since then have also alternated with cold and/or rainy weather. Most transplanted crops are under protective cover. Blueberry bud break was near normal, pushed a bit by some warmer temperatures, but then stopped by near freezing temps several weeks ago. Growers are anticipating a slightly later than normal start this season, but won't know until full blossom occurs.

Warmer weather is here but temperatures are still fluctuating daily with cooler temperatures. Temperatures are in the low-60's now and will fall into the mid-50's as rains will bring in slightly cooler weather. Cool overnights still prevail at this time of year but are starting to warm. . It will continue to take some time to slowly increase our current soil temperatures to encourage germination.

Bill Walker, NJDA

RCE ACTION

Professor Win Cowgill and crew prune and plant new apple cultivars in slender spindle system with feathered branching.



CALENDAR

May 2014

13-14 - ARMA Dept. Retreat. Stokes State Forest

16 & 17 - Master Gardener Plant Sale. Rain or Shine...cash or check. Plants, Helpline, free gardening talks. Ag Building, 4000 Kozloski Rd., Freehold.

<http://www.visitmonmouth.com/page.aspx?id=173>

21 Vegetable Working Group Meeting—RCE Burlington/NJACTS Planning. Rick vanVranken 609-625-0056

30 - ESP Meeting - Smith-Lever Celebration. Roebling Museum, Burlington. Jeannette Rea-Keywood - 856-459-1900 x4522
reakeywood@njaes.rutgers.edu

June 2014

June 23-27 - North American Blueberry Research & Extension Meeting - Atlantic City. <http://group-res.com/NEBREW/default.aspx> - G. Pavlis 609-625-0056

June 30 - Equine Issues Panel, Library Manalapan.

July 2014

20-24 - NACAA, Abilene, Louisiana

23-27 Monmouth County Fair - East Freehold Park.

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