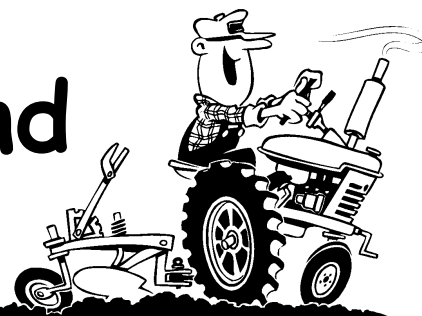


# Cultivating Cumberland

September - 2015 VOL. 20, ISSUE 9



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## Attachments:

## AGRICULTURE DEPARTMENT PROVIDES ANIMAL EMERGENCY ASSISTANCE RESOURCES

*New Animal Emergency Response Website Launched*

New Jersey Secretary of Agriculture Douglas H. Fisher announced the launching of a new website at [www.animalemergency.nj.gov](http://www.animalemergency.nj.gov) that will provide the public with up-to-the minute information they would need to protect their pets and livestock in times of emergency.

The NJ Department of Agriculture's Animal Emergency Response website and its companion mobile and tablet sites provide resources for animal owners to prepare for disasters of all kinds. It gives them resources on what they can do prior to, during and after emergencies.

"New Jersey has faced many emergencies, both large and small, in the last several years and we know that people feel very strongly about protecting their animals in those situations," said Secretary Fisher. "Our new website gives folks the resources they need to care for their animals in those trying times and also keep themselves safe in the process."

The website is provided in various formats to ensure access to its vital information whether at home or on-the-go. The site is interactive, allowing people to simply type in their location to find the nearest help available, including animal shelter, veterinary hospitals, offices of emergency management, feed stores, county fairgrounds and Rutgers Cooperative Extension offices.

In the event of an emergency, a "ticker" will be visible on the home page displaying real-time messages.

The site has species-specific information for preparing for, during and after emergencies, describes County Animal Response Teams, and has information about disaster assistance.

"We learned a lot from past disasters, such as Superstorm Sandy, and we know that preparing ahead of time for such events will make things easier not only for animal owners but also first-responders," said Dr. Manoel Tamassia, New Jersey State Veterinarian.

"We ask that everyone spread the word and bookmark this site on your home computers, tablets and smart phones."

The creation of the website was made possible by a grant to NJDA by the New Jersey Office of Homeland Security and Preparedness.

"This is a great example of how multiple state agencies can work together to help protect New Jersey residents and their animals in times of disaster," Fisher said.

## Sulfur, Calcium, and Boron for Cole Crops

*Gordon Johnson, Extension Vegetable & Fruit Specialist, University of Delaware*

Apart from recommended NPK fertility programs, growers of cabbage, broccoli, cauliflower, Brussels sprouts, kale, and collards need to pay attention to sulfur, calcium, and boron in their cole crop fertility programs.

In vegetable crops, sulfur removal is generally in the 10-20 lb/A range. Mustard family crops (cole crops, mustards, turnips and radishes) remove between 30 and 40 lbs/A of sulfur.

Most of the sulfur in the upper part of the soil is held in organic matter. Upon mineralization, sulfur is found in the soil as the sulfate ion ( $\text{SO}_4^{2-}$ ) which has two negative charges. The sulfate ion is subject to leaching, especially in sandy textured soils (loamy sands, sandy loams). It does accumulate in the sub-soil but may not be available for shallow rooted vegetables.

Sulfur can be added by using sulfate containing fertilizers such as ammonium sulfate, potassium sulfate, and K-mag (sulfate of potassium and magnesium). It is also a component of gypsum (calcium sulfate). In liquid solutions, ammonium thiosulfate is often used as the sulfur source. Sulfur is also found in manures and composts. For example, broiler litter has about 12-15 lbs of sulfur per ton.

Calcium deficiency is most commonly seen as tipburn of cauliflower, cabbage, and Brussels sprouts. This problem can cause severe economic losses. Tipburn is a breakdown of plant tissue inside the head of cabbage, individual sprouts in Brussels sprouts, and on the inner wrapper leaves of cauliflower. It is a physiological disorder which is associated with an inadequate supply of calcium in the affected leaves, causing a collapse of the tissue and death of the cells. Calcium deficiency may occur where the soil calcium is low or where there is an imbalance of nutrients in the soil along with certain weather and soil nutrient conditions, such as high humidity, low soil moisture, high potash or high nitrogen, all of which can reduce calcium availability. Secondary rot caused by bacteria can follow tipburn and heads of cauliflower can be severely affected. Some cabbage and cauliflower cultivars are relatively free of tipburn problems.

Cabbage varieties with good resistance to tipburn include Artost, Blue Vantage, Bobcat, Cecile, Emblem, Green Cup, Megaton, Padok, Platinum Dynasty, Quick Start, Royal Vantage, Solid Blue 780, Superstar, Thunderhead, and Vantage Point. Check with your seed supplier for tipburn ratings for other varieties.

Controlling tipburn starts with managing liming so that soil pH is above 6.0. Avoid using only ammonium forms of nitrogen, and ensure an adequate and even supply of water. Adjust planting date so that head maturation occurs during cooler temperatures. Plant a cultivar that is less susceptible to the disorder. In general, calcium foliar sprays have not been shown to be effective for controlling tipburn incidence.

Cole crops have a high boron requirement. Symptoms of boron deficiency vary with the cole crop. Cabbage heads may simply be small and yellow. Most cole crops develop cracked and corky stems, petioles and midribs. The stems of broccoli, cabbage and cauliflower can be hollow and are sometimes discolored. Cauliflower curds become brown and leaves may roll and curl. It is important to note that cole crops are also sensitive to boron toxicity if boron is over-applied. Toxicity symptoms appear as scorching on the margins of older leaves.

It is recommended in broccoli and kale to apply 1.5-3 pounds of boron (B) per acre in mixed fertilizer prior to planting. In Brussels sprouts, cabbage, collards and cauliflower, boron and molybdenum are recommended. Apply 1.5-3 pounds of boron (B) per acre and 0.2 pound molybdenum (Mo) applied as 0.5 pound sodium molybdate per acre with broadcast fertilizer. Boron may also be applied as a foliar treatment to cole crops if soil applications were not made. The recommended rate is 0.2-0.3 lb/acre of actual boron (1.0 to 1.5 lbs of Solubor 20.5%) in sufficient water (30 or more gallons) for coverage. Apply foliar boron prior to heading of cole crops.

## Excerpts from the Secretary of the New Jersey Department of Agriculture monthly report

**Emerald Ash Borer** – Emerald ash borer continues to spread in Burlington, Mercer and Somerset counties. Trapping in August has discovered the ash tree-killing beetles in Edgewater Park and Westampton Township, Burlington County; Hamilton Township, Hopewell Borough, Princeton Township and West Windsor Township, Mercer County; Bridgewater Township, Hillsborough Township and Franklin Township, Somerset County.

**First On-Farm Brewery** -- Secretary Fisher toured Screamin' Hill Brewery in Cream Ridge, the state's first on-farm brewery on August 25. The brewery is part of Bullock Farms, a 100-acre permanently preserved farm in western Monmouth County. The brewery, owned by Brett Bullock, a sixth-generation farmer, and his friends Ryan Cole and Patrick Jones, is currently producing five varieties of beer using ingredients grown on the farm. New Jersey had been home to many breweries before Prohibition and the Great Depression and now, New Jersey's beer industry is growing steadily, with many unique beer varieties. A limited brewery, also known by some as a craft brewery, is allowed to brew up to 300,000 barrels of beer a year. Screamin' Hill is one of 33 limited breweries operating in New Jersey. Brett Bullock said he, Jones and Cole had been home brewing for 10 years when they got the idea of opening the brewery on his family's farm. They are currently growing their own hop, a key beer ingredient, wheat for their wheat beer and pumpkins and habanero peppers as flavorings for their beers. They produce five varieties of beer.

**Gleaning Grants** -- The Department of Agriculture is accepting applications for the Gleaning Support Program Grant. A total of \$100,000, subject to availability of funds, is anticipated to be accessible to eligible non-profit organizations. Eligibility requirements include being a non-profit entity operating in New Jersey with evidence of a gleaning program for a minimum of 2 years within the past three calendar years. Gleaning Support Program funds should be used to support "gleaning activities." This means gleaning the local New Jersey farm fields, collecting such gleaned locally grown products and distributing such gleaned locally grown products to New Jersey organizations to help feed our state's hungry. The Public Notice, Eligibility Requirements and Application are posted here [www.nj.gov/agriculture/grants/gleaninggrants.html](http://www.nj.gov/agriculture/grants/gleaninggrants.html). The funding for the grants comes from the State Food Purchase Program, for which Governor Christie and the Legislature allocated \$6.8 million dollar this year to be distributed quarterly to the state's six food banks to purchase healthy food, with a high priority on buying locally grown produce from New Jersey farmers.

**Equine Scholarship Available** -- The New Jersey Equine Advisory Board is offering a \$1,000 scholarship to help 4-H 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 15-19. The Sara Dubinin Scholarship, in memory of Sara Dubinin who loved horses, will be presented at the New Jersey Bred Equine Breeder Awards Luncheon on January 24, 2016 at O'Connors Restaurant (formally Charleys Other Brother) in Eastampton. Sara, a Sayreville resident, graduated from Cardinal McCarrick High School in South Amboy in 2006. The 19-year-old was attending Middlesex County College when she succumbed to injuries suffered in a motor vehicle accident in September of 2007. Those interested in receiving the scholarship must submit an application form including an essay on, "How horses have affected my life and how horses figure into my future." The application can be found at [www.jerseyequine.nj.gov/dubininapplicationform.pdf](http://www.jerseyequine.nj.gov/dubininapplicationform.pdf). Consideration of applications will be weighted upon the candidate's financial need. The deadline to submit the essay is January 2, 2016. It can be submitted to Lynn Mathews, 609-292-2888 or [lynn.mathews@ag.state.nj.us](mailto:lynn.mathews@ag.state.nj.us).

## **Additional comments required on Local Grown Proposal**

An additional comment period for the **New Jersey Local Grown Proposal** will soon be published in the New Jersey State Registry. They will be looking for specific comments so look for information when it is published. There were many comments received during the first comment period both pro and con. If you are for or against the proposal make constructive comments and suggestions!

## **Food Safety Modernization Act - Preventive Controls for Human Food Rule**

The final Preventive Controls Rule will be published August 30th by the Food and Drug Administration. It is anticipated that this rule will have little impact on growers unless you do processing or just run a packing operation. After reviewing the document, we will provide growers with a summary.

Also, check out the FSMA website for the complete document when it is released.

## **Growing High Density Broccoli**

*Gordon Johnson, Extension Vegetable & Fruit Specialist, University of Delaware*

Broccoli production in the East has gained more interest in recent years. There has been a multi-state research and breeding effort underway to develop and evaluate broccoli varieties for adaptation to high density production systems for the Eastern US in an effort to compete with West Coast broccoli.

Broccoli has been grown commercially in our region for many years for large single head harvest that goes to regional and local sales. High density broccoli production is different in that it is geared for medium sized uniform short stem crowns 4.5-5.5" in diameter for the wholesale shipping market. Bunching broccoli is another option and is planted at even higher densities.

On Delmarva, the summer planted, fall harvested crop is more reliably grown than a spring planted crop in that temperatures are cooler during head formation reducing the potential for premature flowering that can be problematic in spring planted crops.

Broccoli varieties selected should have tight (dense) domed heads, small bead, and uniform maturity. Color depends on the market, as there are green types and blue-green types. For September-harvested broccoli crowns the varieties should also have some heat tolerance. Avoid varieties that

produce hollow stems and that are susceptible to brown bead.

For wholesale production it is most economical to have minimal trips across the field to harvest the crop for any one planting. This is managed by choosing uniform maturing varieties and optimizing populations.

To have a steady supply of broccoli over the fall period, it will be necessary to plant varieties of different maturities, plant at different dates, or do a combination of both.

Direct seeding is possible but can lead to more variable stands. When direct seeding, overseeding and then hand thinning will achieve the most uniform stands. When direct seeding make successive plantings June 20 to July 20.

Most broccoli will be transplanted. Start transplants 4-5 weeks ahead of transplanting. Seed in 72 to 128 cell plug trays or sow in transplant production field beds at 10 seeds per foot of row in rows 12 to 18 inches apart to be lifted as bare root plants.

For high density plantings, for crowns or bunching, highest yields are obtained with narrow rows, 18 to 20 inches apart, plants 6 to 10 inches in the row, for a final population of 27,000 to 34,000 plants per acre. Seed June 20 to July 10 for transplants ready to plant in the field July 20 to August 15. Variety selection is important for the different planting periods. As you get into later plantings in August, switch to shorter maturing varieties.

Broccoli has a high nitrogen requirement: 200 lbs N/A recommended split into three applications – prior to transplanting and 2 additional applications as a sidedressing at 2-3 week intervals. This is critical for high density production. Phosphorus and potassium should be applied according to soil tests. Broccoli also needs additional sulfur and requires 1.5-3 lbs. of boron/A.

Steady, even, irrigation is critical for broccoli production. Soils should not be allowed to dry out more than 30% of the water holding capacity. This is particularly important during warmer periods during the growing season.

High density broccoli can also be grown on raised beds with white plastic mulch and drip irrigation. A number of herbicides are labelled for broccoli production including Trifluralin, Bensulide, Oxlyfluorfen, DCPA, and Napropamide.

Common insect pests include Imported Cabbageworm, Cabbage Looper, Diamondback Moth, and other caterpillars as well as Harlequin Bugs.

Common diseases include Alternaria, Downy Mildew, and Bacterial Head Rot. Common disorders include hollow stem and brown bead.

Broccoli should be harvested when heads have reached the desired diameter (4.5-5.5" for crown harvest) and flower buds (beads) are still tight. Bunched broccoli heads are tied together in groups of 3-4 with a rubber band. Store broccoli at 32°F and relative humidity of 95 to 100 %. Broccoli should be hydrocooled or packed in ice immediately after harvest and kept at 32°F to maintain salable condition.

While average yields for broccoli in our region have been 400-500 boxes (20-23 lb) per acre, high density broccoli has the potential for yields of greater than 600 boxes per acre.

### **4th National Vegetable Grafting Symposium**

The 4<sup>th</sup> National Vegetable Grafting Symposium will be held on December 7, 2015 in Grand Rapids, MI. The Symposium will precede the Great Lakes Fruit, Vegetable, and Farm Market Expo (<http://www.glexpo.com/>), a premier educational event in the region.

We encourage you to book hotel accommodations for the Symposium and, possibly, Expo, as soon as possible. Please use the Expo link above. A limited number of rooms are available at a discount under the block name of "Great Lakes Expo." Rooms at the Amway Grand Plaza and Courtyard by Marriott Downtown (two hotels closest to the Symposium and Expo site) fill months in advance.

Details on the 4<sup>th</sup> National Vegetable Grafting Symposium program will be available soon. The program will resemble the previous three Symposia in format, length, and topic and speaker diversity. The three previous Symposia are described at:  
<http://www.vegetablegrafting.org/resources/grafting-symposia/>.

### **Fruit Set Problems and Pollination Disorders in Fruiting Disorders in Fruiting Vegetables**

Gordon Johnson, Extension Vegetable & Fruit Specialist, University of Delaware

Vegetable harvest is peaking on Delmarva. Unfortunately, we often see pollination problems in fruiting vegetables when weather conditions are unfavorable and 2015 is no exception.

Signs of incomplete pollination in cucurbits include bottlenecked fruit or fruit with a pinched end, crooked or lopsided fruit, fruit small in size or nub-like; and fruits with prominent lobes or that are triangular in shape. Causes of incomplete pollination may be inadequate pollen transfer by pollinating insects; inadequate pollen sources (pollenizers); or hot, dry weather that reduces pollen viability or that desiccates flower parts during pollination. Research has shown that a minimum of 1,000 grains of pollen are required to be distributed over the three lobes of the stigma of the female flower of a watermelon to produce a uniformly shaped fruit.

Hollow cavities in fruit and vacant seed cavities are related to lack of seed formation, again traced back to poor pollination. Fruit tissue separation, such as hollow heart in watermelon, has also been linked to inadequate pollination and may be worsened by rapid fluctuation in environmental conditions affecting fruit development.

Each year we see pumpkin fields with poor fruit set or fruit carry. Remember that in larger pumpkin sizes, each plant will only carry 1-2 fruits. The large vining plants also need considerable space – 25 to 50 square feet per plant. While planting Jack-o-lantern types at higher densities might at first seem to be a way to achieve higher yields, interplant competition will increase and you can decrease fruit carry because of this competition.

Too much available nitrogen can also delay pumpkin fruit set so that many of pumpkins that are produced do not reach maturity in time. Pumpkins do not normally need more than 80 lbs/acre N to grow a crop. Anything above 100 lbs/acre N will cause the pumpkins to put on excessive vine growth and limit fruiting.

A major reason for poor fruit set in some years is high temperatures during flowering in July. Day temperatures in the 90s or night temperatures in the high 70s will cause flower and small fruit abortion. For pumpkin growers that do wholesale and start shipping right after Labor Day, this will limit early pumpkin availability. Varieties vary considerably in their ability to tolerate heat and to set under hot conditions. Inadequate irrigation and excessive water stress can also reduce fruit set, increase abortions, and reduce fruit carry. High temperatures and water stress reduce photosynthesis and the ability of the plant to carry fruits. Drought can also cause a higher than normal male/female flower ratio, thus affecting the number of fruits per plant.

Sweet corn growers often see quality problems related to poor pollination as a result of high temperatures. This problem is more severe in less stress tolerant varieties and where irrigation is inadequate.

In corn silk elongation begins 7 to 10 days prior to silk emergence from the husk. Every potential kernel (ovule) on an ear develops its own silk that must be pollinated in order for the ovary to be fertilized and develop into a kernel. The silks from near the base of the ear emerge first and those from the tip appear last. Under good conditions, all silks for an ear will emerge and be ready for pollination within a span of 3 to 5 days and this usually provides adequate time for all silks to be pollinated before pollen shed ceases.

Pollen grains are borne in anthers, each of which contains a large number of pollen grains. The anthers open and the pollen grains pour out after dew has dried off the tassels. Pollen is light and can be carried considerable distances (up to 600 feet) by the wind. However, most of it settles within 20 to 50 feet. Pollen shed is not a continuous process. It stops when the tassel is too wet or too dry and begins again when temperature conditions are favorable.

Under favorable conditions, a pollen grain upon landing on a receptive silk will develop a pollen tube containing the male genetic material, develop and grow inside the silk, and fertilize the female ovary within 24 hours. The amount of pollen is rarely a cause of poor kernel set. Each tassel contains from 2 to 5 million pollen grains, which translates to 2,000 to 5,000 pollen grains produced for each silk of the ear shoot.

Poor seed set is often associated with poor timing of pollen shed with silk emergence (silks emerging after pollen shed). Shortages of pollen are usually only a problem under conditions of extreme heat and drought. Extreme heat and desiccating winds can affect pollen germination on silks or pollen tube development leading to poor seed set. Insects that clip silks during pollination can cause similar problems.

In tomatoes, day temperatures over 95°F and/or night temperatures in excess of 80°F can cause pollination problems due to reduced pollen production, reduced pollen viability, or reduced pollen germination or pollen tube production. This can lead to flower drop, smaller fruit, misshapen fruit, or reduced gel formation inside the fruit producing hollow areas. To manage these pollination related problems in tomatoes use "hot-set" type tomatoes bred for better production under heat conditions. Use hot-set varieties for plantings where high temperatures are expected during pollination.

In snap beans and lima beans, plantings that flower and set pods during summer conditions when day and night temperatures are high will be susceptible to reduced sets and yields, split sets, small pods, and misshapen pods. Most of our currently grown lima bean varieties and many commercial snap bean varieties are susceptible to heat stress related yield losses due to reduced pollen production when nighttime temperatures are high before and during flowering. This is why bean crops are planted in certain periods to avoid pollination related losses (snap beans planted for spring and fall crops but avoiding summer crops, lima beans planted in June and early July for fall harvest).





**United States  
Department of  
Agriculture**

Natural Resources Conservation Service

## FY2014 Activities in New Jersey

[www.nj.nrcs.usda.gov](http://www.nj.nrcs.usda.gov)

### Technical Soil Survey Service



NRCS-NJ provides a variety of technical soil services. NRCS soil scientists have conducted trace metal investigations of soils in several urban communities. They have worked with community gardens in New Jersey and the New York City area,

including Newark, Camden, Brooklyn, New Brunswick, and Cherry Hill. In addition, the soils staff is helping with the ongoing assessment of soil conditions for growers enrolled in the NRCS-NJ Soil Health Initiative.

### NRCS-NJ Soil Health Initiative

NRCS-NJ developed the NJ Soil Health Initiative as part of the Environmental Quality Incentives Program. Initiative participants agree to implement multi-species cover crop on the same fields for a three-year period and receive soils analyses during that time period to evaluate results and benefits.

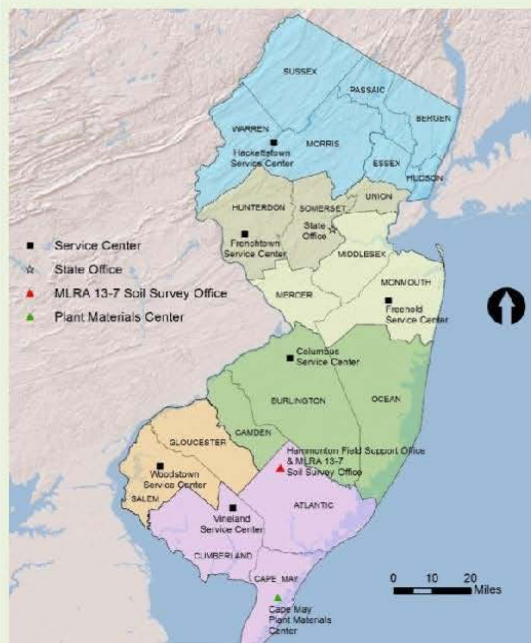
NRCS allocated \$400,000 for this initiative in FY14 and obligated \$353,296. Seventeen contracts supported cover crop seeding of 1,526 acres. Additional funding from NRCS partners increased the payments in some watersheds and facilitated aerial seeding. NRCS-NJ is offering this initiative again in 2015.



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The NRCS State Office is located in Somerset, NJ. NRCS service centers are located in Hackettstown, Frenchtown, Freehold, Columbus, Woodstown and Vineland, the Cape May Plant Materials Center and the MLRA Soil Survey Office in Hammonton.

### Sandy Recovery Work Continues

After Super Storm Sandy devastated the NJ coast in October 2012, NRCS was able to assist coastal communities through the Emergency Watershed Protection (EWP) and the Emergency Watershed Protection-Floodplain Easement Programs (EWP-FPE).

Monmouth  
County  
Restoration



- **EWP:** 17 agreements totaling over \$5M will provide up to 90% reimbursement of construction costs, plus cover a portion of the engineering costs for restorations. Through this funding, storm debris has been removed from over 13 miles of streams and channels resulting in a net economic benefit of over \$8.5 M.
- **EWP-FPE:** NRCS was able to assist with 20 parcels, including 18 residential lots in Cumberland and Monmouth Counties (40 acres) and 2 agricultural lots in Hunterdon and Cumberland Counties (462 acres). Funds provided included \$4.8M for easements acquisitions and \$1.4M for restoration.

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## 2014 Farm Bill

The Agricultural Act of 2014, commonly known as the Farm Bill, was enacted on February 7, 2014.

The new Farm Bill streamlines conservation programs that enable farmers and forest landowners to get technical and financial assistance from NRCS.

- The Regional Conservation Partnership Program (RCPP) will allow NRCS to partner with grassroots organizations to address regional issues.
- Easements on grassland, wetlands and farm land formerly offered in three separate programs are now offered through the Agricultural Conservation Easement Program (ACEP).
- Wildlife resource concerns are now addressed through the Environmental Quality Incentives Program (EQIP).

Source: [Comparison of 2008 and 2014 Farm Bills](#), national NRCS website ([www.nrcs.usda.gov](http://www.nrcs.usda.gov))

## Conservation Compliance

The 2014 Farm Bill restored "Conservation Compliance" requirements for producers who receive crop insurance subsidies on their premium. Producers who do not already work with NRCS will need to certify compliance with Highly Erodible Land Conservation (HELC) and Wetland Conservation (WC). Otherwise they will risk losing their premium subsidy for crop insurance. Producers should contact their local Farm Service Agency to be sure they are in compliance before the June 15, 2015, deadline.



*Cover crop is emerging in this corn field after the aerial seeding.*

### Top 10 conservation practices contracted in New Jersey in FY14

1. Cover Crop
2. Irrigation Water Management
3. Forest Stand Improvement
4. Forest Management Plan
5. Mulching
6. Early Successional Habitat Development and Management
7. Critical Area Planting
8. Irrigation System (Sprinkler)
9. Residue and Tillage Management (No-till)
10. Conservation Cover

## Farm Bill Programs - FY14

### Number of Contracts and Funds Obligated

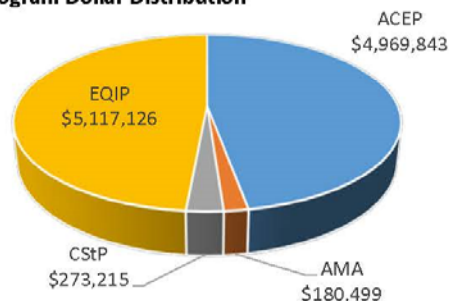
Environmental Quality Incentives Program (EQIP)	203	\$5,117,126
Agricultural Management Assistance (AMA)	11	\$180,499
Conservation Stewardship Program (CStP)	7	\$273,215
Agricultural Conservation Easement Program (ACEP)		\$4,969,843
• Agricultural Land Easement (ALE)	11	
• Wetlands Reserve Easement (WRE)	5	

**Total FY14 Financial Assistance \*\$10,669,207**

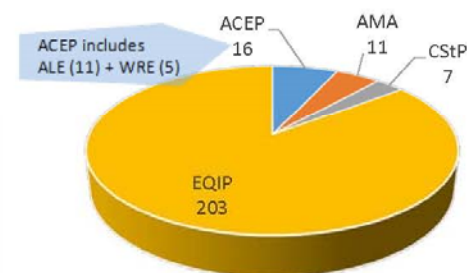
\*This total includes \$128,524 provided to address prior year obligations. New Jersey also received the benefit of \$2,797,946 in discretionary funds allocated to NRCS in FY14 through the Conservation Technical Assistance Program.

Data from NRCS Resource Economics Analysis and Policy Division,  
Source: USDA, NRCS, FMMI (9/30/2014)

## FY14 Program Dollar Distribution



■ ACEP ■ AMA ■ CStP ■ EQIP



**Individuals and Entities Served in FY14**

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## **Calendar of Important Events**

📌 Indicates the newly added event since last calendar

### **September 2015**

#### **September 23-24**

**Sensory Evaluation**, Rutgers Continuing Education, 102 Ryders Lane, New Brunswick; \$845 by 9/9; \$895 after. For more information visit: [www.cpe.rutgers.edu/food](http://www.cpe.rutgers.edu/food) or call 732-932-9271

#### **September 25**

**Statistics for Food Scientists**, Rutgers Continuing Education, 102 Ryders Lane, New Brunswick; \$395 by 9/11; \$425 after. For more information visit: [www.cpe.rutgers.edu](http://www.cpe.rutgers.edu) or call 732-932-9271.

### **October 2015**

#### **📌 October 13**

**Structural & Food Pest Problems**, Wingate, 2196 W. Landis Avenue, Vineland, NJ; 8am-4pm; \$145. Pesticide credits: 12 each for categories 13, 7A, 7D & 8A. For more info call 315-288-4954 or visit: [www.pesticidettraining.com](http://www.pesticidettraining.com)

#### **📌 October 14**

**Termites & Other Wood Destroying Organisms**, Wingate, 2196 W. Landis Ave., Vineland, NJ; 8am-4pm; \$145. Pesticide credits: 12 for category 7B. For more info call 315-288-4954 or visit: [www.pesticidettraining.com](http://www.pesticidettraining.com)

#### **📌 October 15**

**Ornamental & Turf Pest Problems**, Clarion Hotel, 815 State Tr. 37 W, Toms River, NJ; 8am-4pm; \$145.00. Pesticide credits: 12 each for categories 2, 3A, 3B, 6B & PP2. For more info call 315-288-4954 or visit: [www.pesticidettraining.com](http://www.pesticidettraining.com)

#### **October 16-17**

**Fall Flower & Garden Fest**, Truck Crops Experiment Station, Crystal Springs, Mississippi. Free, open to the public 9am - 2pm. For more information call 601-892-3731 or visit: [www.msucare.com/fallfest/](http://www.msucare.com/fallfest/)

#### **October 23-25**

**Produce Marketing Association Fresh Summit 2015**, Atlanta, Georgia, World Congress Center. For more info visit: [www.pma.com](http://www.pma.com)

### **November 2015**

#### **November 4-6**

**HACCP Plan Development for Food Processors**, Rutgers Cont. Ed, 102 Ryders Lane, New Brunswick; \$945 by 10/21; \$995 after. For more information visit: [www.cpe.rutgers.edu/food](http://www.cpe.rutgers.edu/food) or call 732-932-9271

#### **📌 November 5**

**Sports Field Managers Association of NJ Fall Field Day**, Drum Point Sports Complex, Brick Twp., NJ; Free Admission. For more information call 856-514-3179 or email: [mail@sfmanj.org](mailto:mail@sfmanj.org). Pesticide credits are available.

**November 5-7**

**2015 American Agri-Women Convention**, Double Tree by Hilton, Portland, Maine. For more info email: [pam@countysuperspuds.com](mailto:pam@countysuperspuds.com)

**November 9-13**

**2015 Irrigation Show & Education Conference**, Long Beach, California. For more information visit: [www.irrigation.org](http://www.irrigation.org)

**November 11-13**

**Better Process Control School**, Rutgers Continuing Education, 102 Ryders Lane, New Brunswick; \$995 by 10/28; \$1,095 after. For more information visit: [www.cpe.rutgers.edu/food](http://www.cpe.rutgers.edu/food) or call 732-932-9271

**November 16-18**

**Southeast Strawberry Expo**, Charlotte, N.C. For more information visit: [www.ncstrawberry.com](http://www.ncstrawberry.com)

**November 18-19**

**Pacific Northwest Vegetable Association Conference & Trade Show**, Three Rivers Convention Center, Kennewick, Wash. For more information call 509-585-5460 or visit: [www.pnva.org](http://www.pnva.org)

**December 2015****December 1-2**

**30th Annual Southeast Vegetable & Fruit Expo**, Myrtle Beach, South Carolina. For more information visit: [www.ncvga.com](http://www.ncvga.com)

**December 3-4**

**Practical Food Microbiology**, Rutgers Cont. Ed, 102 Ryders Lane, New Brunswick; \$795 by 11/19; \$825 after. For more information visit: [www.cpe.rutgers.edu/food](http://www.cpe.rutgers.edu/food) or call 732-932-9271

**December 7-9**

**Washington State Tree Fruit Association Annual Meeting**, Yakima, Washington. For more information visit: [www.wahort.org](http://www.wahort.org)

**December 8-10**

**Great Lakes Fruit, Vegetable and Farm Market EXPO**, Grand Rapids, Mich. For more information visit: [www.glexpo.com](http://www.glexpo.com)

**January 2016****January 4-5**

**Kentucky Fruit and Vegetable Conference**, Embassy Suites Hotel, Lexington, Ky. For more information call John Strang 859-257-5685 or email: [jstrang@uky.edu](mailto:jstrang@uky.edu)

**January 6-8**

**Illinois Specialty Crops, Agritourism and Organic Conference**, Crowne Plaza Hotel, Springfield, Ill. For more information call 309-557-2107 or email: [cblary@ilfb.org](mailto:cblary@ilfb.org)

**January 18-20**

**2016 OPGMA Congress**, Kalahari Resort & Convention Center, Sandusky, Ohio. For more information visit: [www.opgma.org](http://www.opgma.org)

**January 19-21**

**Indiana Hort Congress**, Wyndham Indianapolis West, Indianapolis. For more information visit: [www.inhortcongress.org](http://www.inhortcongress.org)

**January 19-21**

**Empire State Producers Expo**, Syracuse, N.Y. For more information visit: [www.hort.cornell.edu/expo](http://www.hort.cornell.edu/expo)

**January 24-26**

**Wisconsin Fresh Fruit & Vegetable Conference**, Wisconsin Dells, Wisconsin. For more information visit: [www.wiberries.org](http://www.wiberries.org)

**January 27-30**

**Practical Tools and Solutions for Sustaining Family Farms Conference**, Lexington, Ky. Southern Sustainable Agriculture Working Group. For more information visit: [www.ssawg.org](http://www.ssawg.org)

**January 28-29**

**Iowa Fruit and Vegetable Growers Annual Conference**, Ankeny, Iowa. For more information call Adam Hohl 319-316-2650 or email: [info@ifvga.org](mailto:info@ifvga.org)

**February 2016****February 2-4**

**Mid-Atlantic Fruit & Vegetable Convention**, Hershey, PA. For more information visit: [www.mafvc.org](http://www.mafvc.org)

**February 6-12**

**IFTA 59th Annual Conference**, Michigan. For more information visit: [www.ifruittree.org](http://www.ifruittree.org)

**February 9-11**

**New Jersey Agricultural Convention & Trade Show**, Harrah's Convention Center, Atlantic City, NJ. For more information visit: [www.njveggies.org](http://www.njveggies.org)

**February 25-27**

**MOSES Organic Farming Conference**, La Crosse, Wis. For more info visit: [www.mosesorganic.org](http://www.mosesorganic.org)

## REGULARLY SCHEDULED MEETINGS

✓ Indicates meeting will be held at RCE of Cumberland County

<p>✓</p> <p><b>Pesticide Certification Exam Schedule—Cumberland County</b> 291 Morton Avenue Millville, NJ 08332 (Between Rosenhayn &amp; Carmel)</p> <p><u>2015</u></p> <p>Oct 1</p> <p>To Register call 609-984-6614 For directions call 856-451-2800</p> <p>*****</p>	<p>✓</p> <p><b>Cumberland County Agriculture Development Board</b> Soil Conservation Office 1516 Highway 77 Deerfield Street, NJ 08332</p> <p><u>2015</u></p> <p>Sep 9 Oct 7    Nov 18    Dec 9</p> <p>Reg. Meetings start at 7 p.m. Call DeAnn at 856-453-2211</p> <p>*****</p>	<p>✓</p> <p><b>Cumberland County Board Of Agriculture</b> 291 Morton Avenue Millville, NJ 08332 (Between Rosenhayn &amp; Carmel) 7 pm meetings</p> <p><u>2015</u></p> <p>Sep 17 Oct 15    Nov 19    Dec 17</p> <p>For info call Hillary Barile, President 856-453-1192</p> <p>*****</p>
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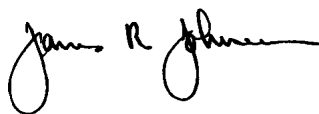
**Cumberland County Improvement Authority (CCIA)  
Pesticide Container Recycling  
9:00 a.m. to 12 Noon**

Cumberland County Solid Waste Complex  
169 Jesse's Bridge Rd. (located off Route 55 Exit 29)  
Deerfield Township, New Jersey

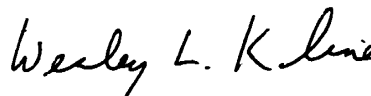
Questions? Call Division of Ag & Natural Resources, NJ Dept. of Ag 609-292-5532

Sep 18    Oct 16    Nov 20

Sincerely,



James R. Johnson  
Agricultural Agent  
Nursery Management Commercial  
Internet: jjohnson@njaes.rutgers.edu



Wesley L. Kline, Ph.D.  
Agricultural Agent  
Vegetable & Herb Production  
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**Pesticide User Responsibility:** Use pesticides safely and follow instructions on labels. The user is responsible for the proper use of pesticides, residues on crops, storage and disposal, as well as damages caused by drift.

**Use of Trade Names:** Trade names are used in this publication with the understanding that no discrimination is intended and no endorsement is implied. In some instances the compound may be sold under different trade names, which may vary as to label.

Have you visited the Cumberland County website for the  
Present and/or past issues of "Cultivating Cumberland"? It's a great  
resource for information and dates.....

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

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**RUTGERS**  
New Jersey Agricultural  
Experiment Station