



Cultivating Cumberland

February - 2019 VOL. 24, ISSUE 2

Inside this issue:

Town Hall Meeting	1
Food Safety Recall Procedures	2-4
X10R Bell Pepper Update	5-7
Central Jersey Vegetable Grower Meeting	8
2019 Vegetable Recommendations	8
Farm Services Deadline Extensions	9
Spotted Lanternfly Webinar Series	10
New Rutgers Fact Sheets	10
Calendar of Events	11-12
Regularly Scheduled Meetings	13
Website Information	14
<u>Attachments</u>	
Fire Code Inspection Outreach Meeting	
FSMA Training Schedule	
2019 NJ Ag Convention Schedule	
2019 NJ State Ag Convention Schedule	
2019 South Jersey Nursery Meeting	

Town Hall Meeting

Romaine: What happened and where do we go from here?

You are invited to attend a Town Hall Meeting to learn the roles of the Food and Drug Administration, New Jersey Department of Agriculture and the New Jersey Department of Health in the 2018 Romaine food-borne illness outbreaks and what the plans are for the future.

Friday, February 15, 2019

9:00 am to noon

Rutgers Cooperative Extension of Cumberland County

291 Morton Ave. in Millville, NJ 08332.

Douglas H. Fisher, NJ Secretary of Agriculture; Tom Beaver, Director of NJDA Division of Marketing and Development; Chris Kleinguenther, Bureau Chief of NJDA Division of Marketing and Development; and Wesley Kline, Rutgers Cooperative Extension will be in attendance to discuss the steps that were taken for past outbreaks and what can be done for future outbreaks.

This event is free, and lunch will be served. Please **RSVP** to Charlotte at Charlotte.Muetter@ag.nj.gov or 856-839-3377 on or before February 13 if you are planning to attend.

Food Safety Recall Procedures

Wesley Kline and Meredith Melendez

What is a recall? “A voluntary or mandatory action taken by growers, packers, or produce distributors to remove potentially contaminated produce from the marketplace and consumers’ homes.” In other words, if you needed to remove all your product from the market place how would you do it. This is different than traceability which is “The ability to track a food product through the food production and distribution system. In the case of fruits and vegetables, this includes back to the field where it was grown and any subsequent handling, storage, and sale.” With traceability, it is the ability to identify each package, carton, master, or individual container from the field to where it was delivered. These both are part of a food safety plan a grower develops for a third-party audit.

What would you do if the Food and Drug Administration showed up and said your produce must be recalled? Who do you contact? How do you let all your buyers know? Can you trace all your product if necessary? These are just a few questions that should be answered prior to any recall. Also, all audits require a recall system to be in place and tested at least once a year.

Growers should maintain a contact list of buyers and develop list of individuals inside/outside their organization that can be contacted (see attached list) at short notice. Identify the lead person in the organization who can be contacted seven days a week 24 hours a day. The number of team members will depend on the size of the operation, but at a minimum the team should include the person who can make decisions; the person who will coordinate the recall; the point person to contact regulatory agencies; a media person to deal with any contacts with media and the public and a person to handle legal questions and insurance. Some of these can be the same individuals, but their responsibilities need to be clearly defined.

Recall Classifications:

Recalls are classified by the Food and Drug Administration by the likelihood of harm to humans or animals from the product.

Class I – There is a reasonable probability that the use of or exposure to the product will cause serious adverse health consequences or death. Examples include contamination from *E coli 0157:H7*, *Salmonella* or *Listeria monocytogenes*. The regulatory agency may issue a public alert prior to any traceback.

Class II – There is a reasonable likelihood that use of or exposure to may cause temporary or medically reversible adverse health affect. An example is food adulterated with wood fragments. A public alert may be issued.

Class III – Use of or exposure to the product is not likely to cause adverse health consequences. An example is mouse hairs in a food, above allowable regulatory levels, but does not present health concerns. A public alert is usually not issued.

If a farm is going to voluntarily recall a product, make sure the right people are contacted prior to the recall including regulators. There may be steps which must be followed to not cause additional problems for the operation later. Delaying a recall when a foodborne illness outbreak is involved may lead to criminal consequences and/or increased civil damages. Do not ignore a recall notice of a foodborne illness outbreak or it may be considered intentional and open the operation for even more penalties and civil damages.

Steps in a recall plan

Before a recall:

- Create a customer/buyer contact list
- Create a recall team contact list

- Create an effective produce traceability plan and mock recall exercise

When a problem is identified:

- Collect information and consider the health hazard evaluation factors
 - ◊ Document consumer complaints using a consumer complaint form
 - ◊ Consider the health hazard evaluation factors using a standard checklist
- Consult with the county health department if more than one consumer complaint about adverse health effects caused by a product were received.
- Consult with the New Jersey Department of Agriculture
- Consult with legal counsel
- Determine actionable items: Is this a recall? Market withdrawal or handled internally by correction (repairing, relabeling, or other adjustments to product)?

Recall decision:

- Activate the recall team
- Contact the regulatory agencies and provide information
- Perform traceback procedures to determine the product(s), number of units, units of measure, farm, harvest date and lot numbers involved (one commodity, one day or all commodities).
- Collect pertinent documentation regarding the affected product.
 - ◊ Inputs & outputs of affected field associated with the lot number such as harvesting notes, methods, wildlife activity, ill employees, manure applications, pesticide applications, water sources, etc.
- Work with regulatory agencies to initiate necessary recall notice, customer notifications and press releases.
- Record all communications related to the recall.
- Track, remove and dispose of recalled products.
- Determine the percent effectiveness of the recall.
- Determine if the recall is over/terminate.
- Update the recall plan if necessary.
- Restore operations.

Testing the recall plan

How do you test your recall plan? During the production season contact your buyers or receiving point and tell them you are doing a recall exercise. Ask them how much product they still have on hand and what has been moved to another receiver. They should be able to tell you that information over the telephone or at least be able to provide the information within two hours. If each carton has a tracing code make sure they provide you with that information.

References:

Ducharme, Diane 2016. Draft Recall Plan Workbook. North Carolina State University. Adapted for University of Vermont by Ginger Nickerson.

Ellixson, Ashley and Sarah Everhart. 2017. A Guide to Drafting a Recall Plan for Maryland Produce Growers EB-430. University of Maryland Agriculture Law Education Initiative.

Ellixson, Ashley and Sarah Everhart. 2017. Model Recall Plan EB-429. University of Maryland Agriculture Law Education Initiative.

Krasny, Leslie. 2012. Recall Manual. Western Growers. San Francisco, CA

New Jersey Recall Team Contact List

Role	Name	Business Phone	After Hours Phone	Responsibilities During Recall
On-Farm Recall Team Leader				<ul style="list-style-type: none"> Serves as recall team leader Makes final decisions on recovery of products Reassigns team members
Recall Team Coordinator				<ul style="list-style-type: none"> Oversees complaint investigation Coordinates the recall team actions
Government liaison				<ul style="list-style-type: none"> Communicates with regulatory agencies and works with legal counsel and provides information to regulatory agencies
Media/Customer Spokesperson				<ul style="list-style-type: none"> Handles all media and customer communication Works with regulatory agencies on press releases and customer letters
Legal Counsel				<ul style="list-style-type: none"> Handles liability questions Advises government liaison on regulatory responses
Insurance Agent				<ul style="list-style-type: none"> Addresses insurance coverage issues
NJ Dept. of Ag.	Chris Kleinguenther Jeff Beach	856-839-3388 609-292-5531	609-439-2203 609-439-2038	<ul style="list-style-type: none"> Oversees recalls for food distributed intrastate
Rutgers Extension (South of I-195)	Dr. Wesley Kline	856-451-2800 Ext1	732-354-9128	Provides technical assistance/guidance
Rutgers Extension (North of I-195)	Meredith Melendez	609-989-6830	732-354-9135	Provides technical assistance/guidance
NJ Dept. of Health	Loel Muetter Alan Talarsky	609-826-4935 609-826-4935	609-947-8571 609-947-8595	<ul style="list-style-type: none"> Oversees recalls for food distributed intrastate
FDA Voorhees District Office	Recall Coordinator	856-290-4020 856-290-4007	732-666-2592 973-452-8481	<ul style="list-style-type: none"> Oversees all product recalls for FDA-regulated product within New Jersey
FDA Emergency		1-866-300-4374		Connects producer to appropriate assistance
NJ Farm Bureau	Ben Casella	609-393-7163 609-320-6701		Provides assistance to NJFB members
FDA Produce Safety Network	Cullen Wilson	207-221-0053 240-234-0879		Provides technical assistance/outreach assistance

UPDATE ON X10R BELL PEPPER VARIETIES FOR USE IN NEW JERSEY

Wesley Kline, PhD and Andy Wyenandt, PhD

Bacterial leaf spot (BLS) caused by the pathogens *Xanthomonas euvesicatoria* and *Xanthomonas campestris* pv. *Vesicatoria* is the second most important disease on peppers in New Jersey. Phytophthora blight caused by *Phytophthora capsici* is the number one disease. Phytophthora continues to be a concern among growers, but with proper management and tolerance varieties growers are learning to live with the disease.

BLS on the other hand has become more of a concern over the last ten years. The pathogen is favored by high humidity, hard driving rains, vigorous plant growth, infected stakes and working in the field when plants are wet. There are eleven (0-10) races of BLS identified in the United States. Most commercial bell pepper varieties grown in the Mid-Atlantic region are resistant to races 1-3 which have been the main races found in the Northern United States. Until recently growers in New Jersey have managed BLS with a combination of resistant varieties and chemical control. In 2004, growers reported that resistant varieties were being infected with BLS. A series of screening trials were carried out to determine if other races may be present in the state. It was determined that race four was found in Southern New Jersey, but not in the Northern part of the state. Since 2004 varieties e.g. 'Turnpike', 'PS0994-1819', 'Vanguard' and 'Tomcat' have been released with resistance to race 4. There are no recommended cherry, sweet frying, hot or banana type peppers resistant to race 4. Bell pepper growers should continue to use a combination of resistant varieties and chemical control while specialty pepper growers only have management and chemical control.

In 2013, growers again noticed BLS showing up on varieties which were resistant to races 0-5. Differential studies were established to determine if additional races were present in New Jersey. Plots were set-up in the Southern and Northern parts of the state with a series of varieties with resistance to different races from no resistance to resistances to all known races. As in previous differential studies, it was determined that other races were prevalent in South Jersey, but not North Jersey. The only varieties that did not express any symptoms were those resistant to all races. Races 6 and 10 could not be distinguished from one another since they are closely related and if there is resistance to race 6 there is resistance to race 10. This screening trial has been repeated twice with similar results.

In 2016 we started screening varieties and advanced breeding line for resistance to all races of bacterial leaf spot. In 2018 the trial was carried out at the Rutgers Agricultural Research and Extension Center (RAREC) in Upper Deerfield. Plots were established on black plastic mulch with one drip line between double rows with distance between plants at 18 inches in double rows and 5 ft. between beds center to center. The plots were transplanted June 27. All cultural practices such as staking/tying, fertilization and pest management using recommended practices.

Based on seed company information, the entries '9325', 'Tracer', 'Raven', 'Antebellum', and 'Green Machine' had resistance or intermediate resistance to all known races; 'Paladin' no resistance; 'Turnpike' resistant to 0-5 and 7-9; 'Declaration' resistant to 1-3 and 5; 'Archimedes' resistance to 1-3, 7 and 8. The plots were rated on a weekly basis for BLS by counting plants. The results of the weekly counts will be discussed during the presentation.

The entries were harvested 3 times starting 62 days after transplanting from August 23 to September 26. Peppers were graded based on weight (extra-large >0.49 lbs., large 0.33 – 0.49 lbs., medium 0.25 – 0.32 lbs. culls >0.25 lbs.). Data is summarized in table 1 for all three harvests.

Table 1. Percent Marketable & Marketable Yield (28 lb. boxes) per Acre - 2018 - Upper Deerfield, NJ

Variety/Lines	X large	Large	Medium	% marketable	Total Marketable
Turnpike	608 a	295 ab	82 ab	99 ab	984 a
Archimedes	512 ab	282 a-c	106 a	99 ab	900 ab
Antebellum	358 bc	317 a	113 a	99 ab	788 a-c
Paladin	361 bc	321 a	83 ab	99 ab	765 a-c
Green Machine	370 bc	277 a-c	70 ab	99 ab	717 a-d
Declaration	345 bc	285 a-c	66 ab	99 ab	696 a-e
Raven	308 bc	233 a-d	41 b	98 b	581 b-e
Aristotle	277 c	105 d	34 b	100 a	415 c-e
9325	155 c	141 b-d	33 b	100 a	329 de
Tracer	151 c	132 cd	28 b	100 a	311 e
LSD	221.8	158.0	62.3	1.7	400.7

Note: The same letters in the same column are not statistically different from one another.

Yields were approximately 50% of a normal harvest. This is the results of a growth regulator inadvertently being applied during transplant production. 'Turnpike' had statistically more boxes of extra-large peppers and had the greatest number of total boxes per acre. This was the same result as the 2017 trial. However, for total boxes it was not statistically different from 'Archimedes', 'Antebellum', 'Paladin', 'Green Machine' or 'Declaration'. "Tracer" had the lowest marketable yield, but was not statistically different from '9325', 'Aristotle', 'Raven' or 'Declaration'.

In 2018, a differential study was carried out in Northern New Jersey looking at eleven varieties. All the following varieties showed symptoms of BLS in at least two replications: 'Antebellum', 'Green Machine', 'Playmaker', 'Aristotle', '9325', 'Paladin', 'Tracer', 'Raven', 'Turnpike', 'Declaration' and '1819'. There were no fruit symptoms and most leaf symptoms were slight.

There are several varieties available that have resistance to BLS that could be evaluated by growers (see table 2). However, a grower can not rely on just a resistant variety but must have a complete management package including clean seed; disinfected stakes; not working in the field when wet and chemical applications. We have seen over the last ten years BLS strains involve thus a complete disease management program is needed to produce a quality pepper. If Phytophthora is a concern and last year's varieties showed symptoms of BLS select varieties with BLS resistance and Phytophthora tolerance.

Hot Water Seed Treatment

Seed hot water heat treatment is a good management tool for growers who save their own seed or purchase non treated seed. Most seed that is purchased is treated with chlorine which will control BLS if it is on the seed coat, but does not if the BLS is in the seed coat. Seed companies normally do not hot water treat pepper seed.

If a grower plans to treat their own seed care is needed or the germination could be affected. Two water baths are required with one for preheating (100°F for 10 minutes) and the second (125°F for 30 minutes) to the effective temperature to kill the bacteria. Immediately after removing the seed from the second bath

it needs to be rinsed in cool water and dry dried. The seed can then be treated with a fungicide if desired. It is not recommended to treat pelleted seed since the pellet will dissolve. If primed seed is purchased do not heat it or the germination will be lowered. Any hot water treated seed should be planted that year. There are good factsheets available that will explain the procedure for treating seed. Do not treat seed on a stove but infest in the right equipment! There are several locations in New Jersey where a grower can bring their seed to a Cooperative Extension office to have the seed treated.

Table 2. Commercially Available Varieties with Resistance or Tolerance to Bacterial Leaf Spot or Phytophthora

Seed Company	Variety	BLS Race Resistance	Phytophthora Resist/Tolerant
Enza Zaden	Placepack	1-10	----
	Provider	1-10	----
Harris Moran	Skyhawk	1-10	----
	Raven	1-10	----
	Tracer	1-10	----
	Prowler	1-10	----
	Declaration	1-3, 5	Tolerant
	Revolution	1-3, 5	Tolerant
Sakata	Samurai	1-10	----
	Ninja	1-10	----
	Mercer	1-3, 7, 8	Tolerant
Seedway	Boca	1-10	----
Seminis	Autry	1-10	----
	Antebellum	1-10	----
	Green Machine	1-10	----
	Playmaker	1-10	Tolerant
	Archimedes	1-3, 7, 8	Tolerant
	Aristotle	1-3	Tolerant
	Turnpike	1-5, 7, 9	Tolerant
	1819	1-5	Tolerant
	9325	1-10	----
3255	1-10	----	
Syngenta	Standout	1-10	----
	Paladin	----	R/T
	Intruder	1-3	Tolerant
	Tomcat	1-5, 7, 9	----
United Genetics USA	Green Flash	1-10	----
	Galleon	1-10	----
	Mariner	1-10	----

The Central Jersey Vegetable Grower Meeting open for registration

Date: February 22, 2019

NOTE NEW LOCATION

**Rutgers Cooperative Extension of Mercer County
1440 Parkside Ave.
Ewing Township, NJ 08638**

Registrations are being taken Online, pay by cash or check

Fee- \$25, includes lunch, materials and pesticide credits

Register online and for more details: <https://tinyurl.com/CNJV2019>

Speakers will include information on:

Weed Control Updates
FSMA Produce Rule Impacts on NJ Farms
Summer and Winter Cover Crops
Creative Marketing Considerations for Direct Marketers
NJDA Update
Greenhouse Cultivation of Ethnic Crops
Corn Earworm Resistance to Insecticidal Toxins
What's Next for the NJ Tomato
And more!

2019 Mid-Atlantic Commercial Vegetable Production Recommendations

The 2019 Mid-Atlantic Commercial Vegetable Production Recommendations are now available at the Extension Center, 291 Morton Avenue, Rosenhayn.

The recommendations cover Delaware, Maryland, New Jersey, Pennsylvania, Virginia and West Virginia.

The cost is \$25.00

USDA Farm Service Agency Announces Program Deadline Extensions

USDA's Farm Service Agency extended deadlines on many of its programs because of the government shutdown and the emergency nature of many of the programs. Below are the updated deadlines:

Farm Programs:

- ◆ Market Facilitation Program
 - ◇ *Deadline to apply extended to Feb. 14, 2019*
- Marketing Assistance Loans
 - ◇ *If loan matured in December 2018, settlement date extended to Feb. 14, 2019*
 - ◇ *Peanut loans or Loan Deficiency Payments - loan availability date now Feb. 28, 2019*
- Emergency Conservation Program
 - ◇ *Performance reporting due Feb. 14, 2019*
- Livestock Forage Disaster
 - ◇ *2018 application for payment due Feb. 28, 2019*
- Emergency Assistance Livestock, Honey Bees, and Farm-raised Fish Program
 - ◇ *Notice of loss due Feb. 14, 2019*
- Livestock Indemnity Program
 - ◇ *Notice of loss due Feb. 14, 2019*
- Non-insured Crop Disaster Assistance Program
 - ◇ *Submitting 2019 application for coverage due Feb. 14, 2019*
 - ◇ *Notice of loss for 72-hour harvest and grazing (as applicable) due Feb. 14, 2019*
 - ◇ *Notice of loss for prevented planting and failed acres due Feb. 14, 2019*
 - ◇ *Applications for payment for 2018 covered losses due Feb. 14, 2019*
- Tree Assistance Program
 - ◇ *Notice of loss due Feb. 14, 2019*
- Acreage Reporting
 - ◇ *January reporting deadlines extended to Feb. 14, 2019*
 - * *Honeybees/Honey*
 - * *Apples*
 - * *Blueberries*
 - * *Cranberries*
 - * *Peaches*
 - * *Grapes,*
 - * *Strawberries*

For inquiries related to these programs or any not listed above, please contact the USDA Service Center at 856-205-1225. The office is located at 1318 S. Main Rd., Bldg. 5, Suite A, Vineland.

“Spotted Lanternfly Basics” Webinar Series

In conjunction with the New York State IPM Program and the Department of Agriculture and Markets, the Northeastern IPM Center will host a collection of webinars, titled “Spotted Lanternfly Basics”.

Each webinar will focus on, and be tailored to, a specific commodity group:

- Spotted Lanternfly Basics for Hops, Berry and Vegetable Growers (February 26, 2019, 10:00 a.m.)
- Spotted Lanternfly Basics for Grape and Apple Industries (February 26, 2019, 1:00 p.m.)
- Spotted Lanternfly Basics for Christmas Tree Growers (March 4, 2019, 10:00 a.m.)
- Spotted Lanternfly Basics for Nursery, Greenhouse and Landscape Industries (March 4, 2019, 1:00 p.m.)

All webinars will follow a similar format that covers spotted lanternfly biology, identification and hosts, monitoring and management strategies and a regulatory update. While the content may be relevant to audiences throughout the Northeast, management practices covered will be specific to New York. Participants will be encouraged to ask questions.

For more information and registration links, go to:

<http://neipmc.org/go/mYey>

New Rutgers Fact Sheet

The following fact sheet is now available from Rutgers:

FS1293 Voles in the Orchard

Polk, D. and Gohil, H.

Go to: <https://njaes.rutgers.edu/fs1293> to view this fact sheet.

Calendar of Important Events

* Indicates a newly added event since the last calendar

February 2019

February 5-7

NJ Ag Convention and Trade Show; Harrahs Resort & Waterfront Conf. Center, 777 Harrah's Blvd, Atlantic City, NJ; \$75/day non-members or free for VGA members; For info, to become a member of the VGANJ or to register online go to www.njveggies.org

***February 6-26**

GAPs Online Produce Safety Course, For info contact Don Stoeckel: dstoeckel@cornell.edu To register for any session of the GAPs Online Produce Safety Course, visit: <https://portal.ecornell.com/corporate/landingPage.do?method=load&corporateGroupId=15606>

February 7

FSMA Produce Safety Rule Training; Harrah's Resort, 777 Harrah's Blvd, Atlantic City, NJ, \$35. 9am-4pm; Must be registered for the Vegetable Growers Conf.; The training meets FDA requirements for FSMA Produce Safety Rule Training; Register online at <https://www.eventbrite.com/o/rutgers-cooperative-extension-14509694831>

February 7, 14, 21 & 28

Introduction to Organic Land Care; Rutgers Coop. Ext. of Somerset County, 310 Milltown Rd, Bridgewater, NJ; One Day \$125 or \$475 Full Course; Pesticide Credits Available; For info or to register go to <https://njaes.rutgers.edu/organiclandcare/>

February 14-16

Organicology; 921 SW Sixth Avenue, Portland, Oregon; Four organizations work together to create a unique conference that drives our food system toward a healthier, sustainable future. For info or to register visit <https://www.organicology.org/welcome/>

February 19

CORE Basic Pesticide Training Programs; Rutgers Cooperative Extension of Cumberland County, Klem Building, 291 Morton Ave, Millville, NJ; Free; 8 am-noon; Registration begins at 7:45 am; Credits requested; This course satisfies NJ requirement of attending basic pesticide training course for new applicants; Register by calling Tammy at 856-451-2800 ext 1; Must register with the DEP by going to <http://www.nj.gov/dep/> in order to take the CORE exam the same day at 12 or 2 p.m.

February 19-20

FSMA Produce Safety Rule Training and Third Party Audits; Snyder Research Farm, 140 Locust Grove Road, Pittstown, NJ; Day 1 \$50 and day 2 (optional) \$25; 9:00 a.m.-4:00 p.m.; Lunch included; The training meets FDA requirements for FSMA Produce Safety Rule Training; Register online at <https://www.eventbrite.com/o/rutgers-cooperative-extension-14509694831>

February 21

CORE Basic Pesticide Training Programs; Extension Conf. Center, 18 Ag Extension Way, New Brunswick, NJ; \$145; 12:30 pm-4:30 pm; The course satisfies NJ's requirement of a basic pesticide training course; 6 CORE credits. Register online at <http://www.cpe.rutgers.edu/courses/current/ae0801cf.html>

***February 26**

Spotted Lanternfly Basics Webinars - "For Grape and Apple Industries". 1 pm-Registration link: https://cornell.zoom.us/join/register/WN_d_3KfxQ9SuKHyhk6pM7NCA

*February 26

Spotted Lanternfly Basics Webinars - "For Hops, Berry and Vegetable Growers". 10 a.m. - Registration link: https://cornell.zoom.us/webinar/register/WN_ONViZLocSBCOKlv-sjoZVg

February 27-28

Harvest New England Agricultural Marketing Conference and Trade Show; Sturbridge Host Hotel, 366 Main St., Sturbridge, MA; Full conference registration \$105 or \$75/single day; For information or to register go to www.harvestnewengland.org

March 2019

*March 4

Spotted Lanternfly Basics Webinar - "For Christmas Tree Growers". 10 a.m. - Registration link: https://cornell.zoom.us/webinar/register/WN_7eehVeBvSBOgM3aTXOtaew

*March 4

Spotted Lanternfly Basics Webinar- "For Nursery, Greenhouse, & Landscape Industries". 1 pm- Registration link: https://cornell.zoom.us/webinar/register/WN_u5mYQOHMSESWFcNofT2Nw

*March 5-6

2019 NYS Farmers Market Manager's Conference, Queensbury Hotel, Glens Falls, NY. For more information call 315-400-1447.

March 12-13

FSMA Produce Safety Rule Training and Third Party Audits; Cooperative Extension of Cumberland County, 291 Morton Avenue, Millville, NJ; Day 1 \$50 and day 2 (optional) \$25; 9:00 am-4 pm; Lunch included; This training meets the FDA requirements for FSMA Produce Rule Training; Register online at <https://www.eventbrite.com/o/rutgers-cooperative-extension-14509694831>

March 14-15

Practical Food Microbiology Course: University Inn & Conference Center, 178 Ryders Lane, New Brunswick, NJ. 9 am—8:30 pm; Check in at 8:30 am; \$875 ; For information or to register go to <https://ce-catalog.rutgers.edu/coursedisplay.cfm?schID=68869>

*March 26-28

HACCP Plan Development for Food Processors, University Inn & Conference Center, 178 Ryders Lane, New Brunswick, NJ; 9am—4:30 pm; \$795 by 3/12; \$895 after. Go to <http://www.cpe.rutgers.edu/courses/current/lf0403cb.html> to register or call Maureen O'Connell 848-932-7703 with additional questions.

March 28

CORE Basic Pesticide Training Programs; Extension Conf. Center, 18 Ag Extension Way, New Brunswick, NJ 08901; \$145; 12:30 p.m.-4:30 p.m.; Bilingual; This course satisfies New Jersey's requirement of attending a basic pesticide training course for new applicants; 6 CORE units toward recertification; Register online at <http://www.cpe.rutgers.edu/courses/current/ae0801cg.html>

April 2019

*April 3-23

GAPs Online Produce Safety Course, This course will not result in your farm being "GAPs Certified". For more information contact Don Stoeckel: dstoeckel@cornell.edu

*April 17

Sports Field Mgrs Assoc. of New Jersey Spring Field Day, Save the date! 7:30 am-2:30 pm

REGULARLY SCHEDULED MEETINGS

✓ Indicates meeting will be held at RCE of Cumberland County

<p>✓</p> <p>Pesticide Certification Exam Schedule—Cumberland County 291 Morton Avenue Millville, NJ 08332 (Between Rosenhayn & Carmel)</p> <p style="text-align: center;"><u>2019</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Feb 19</td> <td style="width: 33%;">Mar 19</td> <td style="width: 33%;">Apr 17</td> </tr> <tr> <td>May 15</td> <td>Sept 18</td> <td>Oct 16</td> </tr> </table> <p>To Register call 609-984-6614 For directions call 856-451-2800 *****</p>	Feb 19	Mar 19	Apr 17	May 15	Sept 18	Oct 16	<p>Cumberland County Agriculture Development Board County Administration Bldg. Freeholder Room 164 W. Broad Street Bridgeton, NJ 08332</p> <p style="text-align: center;"><u>2019</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Apr 9</td> <td style="width: 33%;">Feb 12</td> <td style="width: 33%;">Mar 12</td> </tr> <tr> <td>July 9</td> <td>May 14</td> <td>June 11</td> </tr> <tr> <td>Oct 8</td> <td>Aug 13</td> <td>Sept 10</td> </tr> <tr> <td></td> <td>Nov 12</td> <td>Dec 10</td> </tr> </table> <p>Reg. Meetings start at 7 p.m. Information call 856-453-2211 *****</p>	Apr 9	Feb 12	Mar 12	July 9	May 14	June 11	Oct 8	Aug 13	Sept 10		Nov 12	Dec 10	<p>✓</p> <p>Cumberland County Board Of Agriculture 291 Morton Avenue Millville, NJ 08332 (Between Rosenhayn & Carmel) 7 pm meetings</p> <p style="text-align: center;"><u>2019</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Feb 21</td> <td style="width: 33%;">Mar 21</td> <td style="width: 33%;">Apr 18</td> </tr> <tr> <td>May 16</td> <td>Sept 19</td> <td>Oct 17</td> </tr> <tr> <td></td> <td>Nov 21</td> <td>Dec 19</td> </tr> </table> <p>For info call Lew DePietro, President at 856-981-9843 *****</p>	Feb 21	Mar 21	Apr 18	May 16	Sept 19	Oct 17		Nov 21	Dec 19
Feb 19	Mar 19	Apr 17																											
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Oct 8	Aug 13	Sept 10																											
	Nov 12	Dec 10																											
Feb 21	Mar 21	Apr 18																											
May 16	Sept 19	Oct 17																											
	Nov 21	Dec 19																											

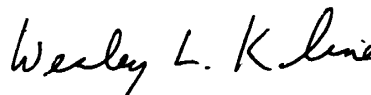
**Cumberland County Improvement Authority (CCIA)
Pesticide Container Recycling**
9:00 a.m. to 12 Noon
Cumberland County Solid Waste Complex
169 Jesse's Bridge Rd. (located off Route 55 Exit 29)
Deerfield Township, New Jersey
Questions? Call Division of Ag & Natural Resources, NJ Dept. of Ag 609-292-2242

Program in Cumberland County suspended until further notice.

Sincerely,



Salvatore S. Mangiafico, Ph.D.
County Agent II/Associate Professor
Environmental & Resource Management
Internet: Mangiafico@njaes.rutgers.edu



Wesley L. Kline, Ph.D.
County Agent II/Associate Professor
Vegetable & Herb Production
Internet: wkline@njaes.rutgers.edu

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 un-

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/>

Public Notification and Non-discrimination Statement

Rutgers Cooperative Extension is an equal opportunity program provider and employer. Contact your local Extension Office for information regarding special needs or accommodations. Contact the State Extension Director's Office if you have concerns related to discrimination, 848-932-3584.

Cooperative Extension of Cumberland County



1915-2019

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Cooperative Extension of Cumberland County
Extension Education Center
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Millville, NJ 08332-9791

RUTGERS
New Jersey Agricultural
Experiment Station

Fire Code Inspection Outreach Meeting

Owners of Farms or Agricultural Properties in
Alloway Township



Wednesday, February 20th, 2019

7pm

Alloway Township Fire Station

17 East Main Street, Alloway, NJ 08001

The City of Bridgeton Fire Department, Bureau of Fire Prevention is the agency responsible for fire code inspections in Alloway Township through a shared service agreement. We would like to make our staff available for introductions, as well as provide information specific to the inspection of agricultural operations in response to recent changes by the NJ State Division of Fire Safety.

Do you own or operate a farm in Alloway Township that qualifies with any of the following:

1. **Has 5 or more acres producing agricultural or horticultural products worth \$2,500 or more annually, and satisfying the eligible criteria for the Farmland Assessment Act.**
2. **Has less than 5 acres, producing agricultural or horticultural products worth \$50,000 or more annually, and otherwise satisfy the eligibility criteria for the Farmland Assessment Act.**
3. **Has a beekeeping operation that produces honey or apiary related products, or provides crop pollination services, worth \$10,000 or more annually.**

If the answer is yes, then please plan to attend this meeting. It will be an informal question and answer session where we will be able to provide information on what, when, and who will be inspected, as well as answer any questions and concerns you might have.

To RSVP or any questions/concerns contact our office at 856-451-4250

or email: Todd Bowen, Fire Marshal

bowent@cityofbridgeton.com

Michael Hitchner, Deputy Fire Marshal

hitchnerm@cityofbridgeton.com



New Jersey Agricultural
Experiment Station

**Food Safety Modernization Act (FSMA):
Produce Safety Alliance
Grower Training and
Third Party Audits**

When and Where:

February 7, 2019: FSMA Produce Rule Training, NJ Ag Convention, Atlantic City, NJ

February 19 and 20, 2019: FSMA Produce Rule Training and Third Party Audits, Pittstown, NJ

March 12 and 13, 2019: FSMA Produce Rule Training and Third Party Audits, Millville, NJ

March 19: Food Safety for Blueberry Growers, Chatsworth, NJ

Who should attend:

- Fruit and Vegetable Growers who must comply with FSMA or need a third-party audit
- Others interested in produce safety, good agricultural practices/third party audits and the Food Safety Modernization Act.

Sponsored by The New Jersey Department of Agriculture (#5U18FD005877-020) and The National Association of State Departments of Agriculture (#5U01FD005334-04)

To register or for more information please visit:
<https://rutgersonfarmfoodsafety.eventbrite.com>

If you are unable to register online call **(856) 451-2800, ext. 1**
or email: commander@njaes.rutgers.edu

Funding for this advertisement was made possible, in part, by the Food and Drug Administration through grant PAR-16-137. The views expressed in written materials do not necessarily reflect the official policies of the Department of Health and Human Services; nor does any mention of trade names, commercial practices, or organization imply endorsement by the United States Government."

Tuesday Morning, February 5, 2019

<p>Regulations/Risk Management Wildwood 1</p> <p>Michelle Infante-Casella/ Gloucester County Ag Agent, RCE</p> <p>9:30 – NJDEP Ag Water Certification Program -- Michelle Infante-Casella, Gloucester County Ag Agent, RCE</p> <p>10:00 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>10:15 - Hemp, Regulations and Questions -- William Bamka, Burlington County Ag Agent, RCE</p> <p>10:45 - Updates on Agricultural Regulations from NJFB -- Benjamin Casella, NJ Farm Bureau Specialist</p> <p>11:15 - Rutgers Farm Safety and Health Program -- Michelle Infante-Casella, Gloucester County Ag Agent, RCE</p> <p>11:45 - Questions, Comments and Re-Certification Credits: Core – 1 1A – 1, PP2- 1, 10-1 CCA Credits: PD=2.0</p>	<p>Specialty Crops Wildwood 2 & 3</p> <p>Bill Sciarappa Agriculture & Natural Resource Agent, RCE</p> <p>9:30 - Fall Strawberries and Golden Berries -- Ed Durner, Research Professor, Rutgers University NJAES</p> <p>10:00 - Choosing a Leek Variety -- Tim Elkner, Extension Educator, Penn State Extension</p> <p>10:30 - Specialty Crop Pesticide Labels: Field/Greenhouse/High Tunnels -- Pat Hastings, Pesticide Safety Education Program Coordinator, RCE</p> <p>11:00 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>11:15 - Connecting New Jersey Farmers with a Not-for-Profit Culinary School to Develop New Value-Added Products -- Lauren Errickson, Senior Program Coordinator, RCE and -- Ethan Schoolman, Professor, RU Dept. of Human Ecology -- Virginia Quick, Didactic Program in Dietetics, Director Rutgers -- Anthony Capece, Associate Director, Elijah's Promise</p> <p>11:45 – Questions, Comments and Re-Certification Credits: Core – 1 1A – 1, PP2- 1 CCA Credits: IPM=0.5,CM=1.0,PD=0.5</p>	<p>Sweet Corn Wildwood 4 & 5</p> <p>Thierry Besancon Extension Weed Science Specialist, RCE</p> <p>9:30 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>9:45 - Bird Damage: Risk Factors and Management Strategies -- Catherine Lindell, Professor, Michigan State University</p> <p>10:15 – Corn Earworm Infestations in Non-Bt, Bt, and Stacked Bt Sweet Corn Types -- Kristian Holmstrom, IPM Program Associate, RCE</p> <p>10:45 - Two Years of Sweet Corn Cultivar Evaluation -- Elsa Sanchez, Professor of Horticultural Systems Management, Penn State University</p> <p>11:15 - Weed Management in Sweet Corn -- Thierry Besancon, Extension Specialist, RCE</p> <p>11:45 – Questions, Comments and Re-Certification Credits: PP2-4, 1A – 4, 10-2 CCA Credits: CM=2.0</p>	<p>Field Crops/Forages Wildwood 6 & 7</p> <p>Bill Bamka Burlington County Ag Agent, RCE</p> <p>9:30 – Problems and Challenges – 2018 Field Crop Year in Review -- Bill Bamka, Burlington County Agricultural Agent, RCE</p> <p>10:00 – Beyond Rye – Alternative Cover Crops and Their Management -- Steve Komar, Sussex County Agricultural Agent, RCE</p> <p>10:30 - Soil Fertility for Hay Production, -- Joseph Heckman, Extension Specialist in Soil Fertility, RCE</p> <p>11:00 - Dicamba Soybeans: Considerations for Use and Management -- Mark VanGessel, Extension Weed Specialist University of Delaware</p> <p>11:30 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>11:45 – Questions, Comments and Re-Certification Credits: PP2-4, 1A- 4, 10-2, CORE-1 CCA Credits: NM=0.5, CM=1.5</p>	<p>Wine Grapes 301/401 Not Beginning Growers Wildwood 8 & 9</p> <p>Hemant Gohil Gloucester County Ag Agent, RCE</p> <p>-- Dominic Rivald, A Fruit Wine Expert, Canada Wine Planet. He will present the following topics.</p> <p>9:30 - History, Styles of Wine, Trends</p> <p>9:50 – Sweetening and Chaptalization</p> <p>10:10 - Fruit Wine Production Process</p> <p>10:30 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>10:45 - Specific Fruit Winemaking Procedures</p> <p>11:15 – Flaws, Faults & Fixes</p> <p>11:30 – Recipe Formulation</p> <p>11:45 – Questions and Comments CCA Credits: CM=2.5</p>
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12:00 to 1:30 **Farmers Market Nutrition Program Mandatory Vendor Training**, Dorothy Ngumezi & Jose Quann, NJDOH and Bill Walker, NJDA **Wildwood 12 & 13**

Tuesday Afternoon, February 5, 2019

Tomato Wildwood 2 & 3	Greenhouses and Hydroponics Wildwood 4 & 5	Organic Wildwood 6 & 7	Gazing into the Crystal Ball -- New Technologies for New Jersey AG Wildwood 8 & 9
Tom Orton Specialist in Vegetables and Breeding, RCE	A.J. Both Extension Specialist in Ag Engineering, RCE	Joe Heckman Extension Specialist in Soil Fertility, RCE	Rick VanVranken Atlantic County Ag Agent, RCE
2:15 – Weed Management Strategies for Grafted vs. Non-Grafted Tomatoes -- Sushila Chaudh , North Carolina State University 2:45 - What's New in Managing Tomato Diseases -- Meg McGrath , Extension Specialist in Vegetable Pathology, Cornell University 3:15 - Direct Marketing of Tomatoes and Other Vegetable Products in New York City -- Ron Binaghi , Stokes Farm, NJ 3:45 - Pruning Tomato Vines for Higher Productivity in High Tunnels -- Amy Ivy , Cornell University 4:15 – Information from Our Exhibitors -- Wayne Knerr , Helena Chemical 4:30 – Questions, Comments and Re-Certification Credits: PP2-3, 1A-3, 10-2 CCA Credits: CM=1.5, PD=0.5	2:15 – Trends in Commercial Hydroponic Vegetable Production -- Chris Higgins , General Manager Hort Americas 2:45 Information from Our Exhibitors -- Wayne Knerr , Helena Chemical 3:00 - Crop Nutrient Management -- Rosa Raudales , Extension Specialist, University of Connecticut 3:30 - Energy in Greenhouses, -- Tom Manning , NJAES Project Engineer, RU 4:00 - Light in Greenhouses -- A.J. Both , Extension Specialist in Ag Engineering, RCE 4:30 – Questions, Comments and Re-Certification Credits: PP2-2, 1A-2 CCA Credits: CM=1.5	2:15 - A Chronological History of Organic Agriculture -- Joseph Heckman , Extension Soil Fertility Specialist, RCE 2:45 - Organic Seed Selection and the Commercial Availability Standard -- Mark Keating , Organic Inspector 3:15 - Using Bio-controls to Manage Aphids in High Tunnels -- Elsa Sanchez , Professor of Horticultural Systems, Penn State University 3:45 – Information from Our Exhibitors -- Wayne Knerr , Helena Chemical 4:00 - Introduction to Organic Certification & Record Keeping -- Erich Bremer , Supervisor, Organic Certification Program, NJDA 4:30 – Questions, Comments and Re-Certification Credits: PP2-2, 1A-2, 10-2, CORE-1 CCA Credits: IPM=0.5, CM=0.5, S=1.0	2:15 – Information from Our Exhibitors -- Wayne Knerr , Helena Chemical 2:30 – A Vision for Rutgers Cooperative Extension -- Brian Schilling , Director, RCE/Senior Associate Director, NJAES 2:55 - How We Might Trick Weeds to Starve Themselves Without Herbicides -- James White , Professor of Plant Pathology, Rutgers 3:15 - What the Heck is CRISPR anyway? New Directions in Plant Breeding. -- Tom Orton , Vegetable Extension Specialist and Plant Breeder, RCE 3:35 - TerraBite: A Modular Weeding Robot for Small Farms -- Jorge Reyes , Founder/CEO of TerraBite 4:05 - Can Blockchain Prevent the Next Romaine Lettuce Scare? -- Ed Treacy , VP, Supply Chain Efficiencies PMA 4:35 - Questions, Comments and Re-Certification Credits: PP2-2, 1A-2, 10-2 CCA Credits: CM=1.5, PD=0.5
5:00 pm - Trade Show Area – Cocktail Hour			

Wednesday Morning, February 6, 2019

<p>Small Fruit/Strawberry Wildwood 2 & 3</p>	<p>Niche Crops Wildwood 4 & 5</p>	<p>Vine Crops Wildwood 6 & 7</p>	<p>Soil Health Wildwood 8 & 9</p>
<p>Peter Nitzsche Morris County Ag Agent RCE</p> <p>9:30 - Post-Harvest Handling of Small Fruit -- Thomas Gianfagna, Professor Rutgers University</p> <p>10:00 - Biology and Management of Freeze and Frost Events in Strawberries -- Mark Hoffman, Small Fruits Extension Specialist, North Carolina State Extension</p> <p>10:30 - Using Red Sticky Traps for Spotted Wing Drosophila -- Cesar Rodriguez-Saona, Extension Specialist in Blueberry/Cranberry Entomology, RCE</p> <p>11:00 - Growing and Marketing Small Fruit at Wegmeyer Farms -- Tyler Wegmeyer, Wegmeyer Farms</p> <p>11:30 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>11:45 – Questions, Comments and Re-Certification Credits: PP2-3, 1A-3, 10-3 CCA Credits: IPM=0.5, CM=1.5</p>	<p>Jenny Carleo Cape May County Ag Agent, RCE</p> <p>9:30 - Caring of Figs -- Bill Muzychko, Farmer/Owner of Bill's Figs</p> <p>10:00 - How to Establish a Successful Hazelnut Orchard in New Jersey -- Megan Muehlbauer, Hunterdon County Ag Agent, RCE</p> <p>10:30 - Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>10:45 - Elderflower and Elderberry Production -- Michael Brown, Farmer/Owner of Pitspone Farm</p> <p>11:15 - Yacon, a New Niche Crop for New Jersey -- Peter Nitzsche, Morris County Ag Agent, RCE</p> <p>11:45 – Questions, Comments and Re-Certification Credits: PP2-4, 1A-4, 10-4 CCA Credits: CM=2.0</p>	<p>Michelle Casella Gloucester County Ag Agent, RCE</p> <p>9:30 - Fertility Management for Pumpkin and Winter Squash -- Michelle Infante-Casella, Gloucester County Ag Agent, RCE</p> <p>10:00 - Cucurbit Diseases and Fungicide Controls -- Meg McGrath, Extension Specialist in Vegetable Pathology, Cornell University</p> <p>10:30 - Insect Pest Identification and Management in Pumpkins -- Kris Holmstrom, Vegetable IPM Program Associate, RCE</p> <p>11:00 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>11:15 - Pollinators of Cucurbit Crops and How to Conserve Them -- Kelly Gill, USDA NRCS and Xerces Society</p> <p>11:45 – Questions, Comments and Re-Certification Credits: PP2-4, 1A-4, 10-3, CORE-1 CCA Credits: NM=0.5, IPM=0.5, CM=1.0</p>	<p>Steve Komar Sussex County Ag Agent, RCE</p> <p>9:30 – Soil Health Survey in New Jersey Crops with the Solvita System -- William Sciarappa, Monmouth County Ag Agent, RCE</p> <p>10:00 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>10:15 - Principles of Soil Testing, Interpretation, and Recommendations for Healthy Soil -- Stephanie Murphy, Director NJAES Soil Testing Laboratory, Rutgers</p> <p>11:00 - Use of Cover Crops to Improve Soil Health -- Michelle Infante-Casella, Gloucester County Ag Agent, RCE</p> <p>11:30 - Soil Health Overview -- Bill Bamka, Burlington County Ag Agent, RCE</p> <p>12:00 – Questions, Comments and Re-Certification Credits: PP2-2, 1A-2 CCA Credits: SWM=2.0</p>
<p>12:00 to 1:30 Farmers Market Nutrition Program Mandatory Vendor Training, Dorothy Ngumezi & Jose Quann, NJDOH and Bill Walker, NJDA Wildwood 12&13</p>			

Wednesday Afternoon, February 6, 2019

NJDA/VGA Joint Session on Farm Fire Safety Inspections 1:30-2:30 in Wildwood Ballroom 28 (Enter though Wildwood 11)

Direct Marketing Wildwood 2 & 3	Peppers Wildwood 4 & 5	IPM/Pest Control Updates Wildwood 6 & 7	Blueberries Wildwood 8 & 9
<p style="text-align: center;">Bill Hlubik Middlesex County Ag Agent, RCE</p> <p>2:45 - The Art of Direct Marketing- Catching the Customers Eye -- Rose Robson, Robson Farms Wrightstown, NJ</p> <p>3:15 - "Fernbrook Farm- The Evolution of a Diverse Farm Business" -- Larry and Brian Kuser, Fernbrook Farms, Chesterfield, NJ</p> <p>4:00 - The Art of Positive Communication with Customers-Panel -- Bill Hlubik, Middlesex County Ag Agent, RCE -- Wendy Byar, Marketing and Retail Associate for Specca Farms -- Lisa Specca of Specca Farms in Jacksonville, NJ</p> <p>4:45 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>5:00 - Creative Marketing Ideas Q & A by All Growers and Participants -- Moderator Bill Hlubik, Middlesex County Ag Agent, RCE</p> <p>5:35 – Questions and Comments: CCA Credits: PD=1.0</p>	<p style="text-align: center;">Andy Wyenandt Extension Specialist in Vegetable. Pathology, RCE</p> <p>2:45 - Hot Water Seed Treatment for Reducing Bacterial Disease in pepper -- Michelle Infante-Casella, Gloucester County Agricultural Agent, RCE</p> <p>3:15 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>3:30 - Crop Insurance for Fresh Market Peppers -- Robert Cerda, President Crop Insurance Systems -- Clifton Parker, V President Crop Insurance Systems</p> <p>4:00 - Update on X10R and Phytophthora Tolerant Bell Pepper Varieties for Use in New Jersey -- Wesley Kline, Cumberland County Agricultural Agent, RCE</p> <p>4:30 - Update on Disease Control in Pepper -- Andy Wyenandt, Extension Specialist in Vegetable Pathology, RCE</p> <p>5:00 – Questions, Comments and Re- Certification Credits: PP2-3, 1A-3, CORE-1 CCA Credits: CM=1.5</p>	<p style="text-align: center;">Joe Mahar/Kris Holmstrom Rutgers Extension Vegetable IPM</p> <p>2:45 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>3:00 - Integrated Weed Management, Overview of Principles and Practical Applications -- Thierry Besancon, Extension Weed Science Specialist, RCE</p> <p>3:30 - Alternaria Diseases of Brassicas - an Emerging Problem in the Mid-Atlantic -- Steve Rideout, Extension Specialist in Plant Pathology, Virginia Tech University</p> <p>4:00 - Allium Leaf Miner Update and 2018 Bt Sentinel Sweet Corn Results -- Kris Holmstrom, IPM Program Associate, RCE</p> <p>– 4:35 - Corn Earworm Thru the Roof in Sweet Corn, Tomatoes, and Peppers in 2018 -- Joe Ingerson-Mahar, IPM Program Associate, RCE</p> <p>5:00 – Questions, Comments and Re-Certification Credits: PP2-4, 1A- 4, CORE-1, 10-2 CCA Credits: IPM=2.0</p>	<p style="text-align: center;">Gary Pavlis Atlantic County Ag Agent, RCE</p> <p>2:45 - Blueberry Weed Control & Weed Problems in Georgia -- Mark Czarnota, Extension Specialist in Weed Control, University of Georgia</p> <p>3:15 - Newer Blueberry Cultivars and Selections -- Mark Ehlenfeldt, Plant Breeder USDA-ARS</p> <p>3:35 - Self Fertility of Recently Released Blueberry Cultivars, -- Nick Vorsa, Spec. in Plant Breeding, RCE</p> <p>3:55 – Information from Our Exhibitors -- Wayne Knerr, Helena Chemical</p> <p>4:10 - Efficacy of Traps for Monitoring Spotted Wing Drosophila -- Cesar Rodriguez-Saona, Specialist in Entomology, RCE</p> <p>4:30 - Using Drones to Detect and Map Blueberry Yield Loss -- Peter Oudemans, Specialist in Pathology, RCE</p> <p>4:50 - Species Shift in the Stem Blight Pathogen Complex -- James Polashock, Plant Pathologist, USDA- ARS</p> <p>5:10 - Pollination Issues Survey -- Dean Polk, Fruit IPM Agent, RCE</p> <p>5:20 – Questions, Comments and Re- Certification Credits: PP2-4, 1A-4,10-4 CCA Credits: IPM=1.0, CM=2.0</p>
5:30 – Agricultural Ambassadors Reception		Avalon Ballroom Pre-Function Area	
7:00 – Joint Agricultural Convention Dinner Banquet		Avalon Ballroom	

Thursday, February 7, 2019

<p>Farmers and Schools- Making the Connection Workshop</p> <p>Wildwood 1</p> <p>Rick VanVranken Atlantic County Ag Agent, RCE and Beth Feehan Farm to School Program Coordinator, NJDA</p> <p>9:00 – The New Jersey Department of Agriculture, Division of Food and Nutrition, Farm to School Program Coordinator, along with representatives from the USDA Office of Community Food Systems and USDA Agricultural Marketing Services, will share essential resources about how producers can sell to schools and engage with students in all grade levels. Listen to a panel of farmers share their success stories of building relationships and selling produce to schools around the State.</p> <p>5:00 – Questions and Comments</p> <p>Workshop Speakers</p> <p>-- Rose Tricario, Director, NJDA Division of Food and Nutrition</p> <p>-- Erin Healy, Director, USDA Office of Community Food Systems</p>	<p>Recall Readiness Workshop for Wholesale and Retail Growers</p> <p>Wildwood 2 & 3</p> <p>Wes Kline Cumberland County Ag Agent, RCE Meredith Melendez Mercer County Ag Agent, RCE</p> <p>9 am to 4.30 pm What do you do if your product needs to be recalled? What if the Food and Drug Administration shows up at your door and says you have a food safety problem and everything you produced in the last month must be recalled? This workshop is designed to provide the tools and contacts necessary to help smooth the process.</p> <p>Note: This workshop is part of the registration for the vegetable growers meeting and trade show, but preregistration is required so sufficient materials are available. Register online at: https://rutgersonfarmfoodsafety.eventbrite.com. Or email Tammy Commander at commander@njaes.rutgers.edu for more information.</p> <p>Lunch is on Your Own</p>	<p>Food Safety Modernization Act (FSMA) Produce Safety Rule Training</p> <p>Wildwood 4 & 5</p> <p>Wes Kline Cumberland County Ag Agent, RCE Meredith Melendez Mercer County Ag Agent, RCE</p> <p>9 am to 4.30 pm This training fulfills the requirements of the Food and Drug Administration (FDA) that at least one person from each farm needs to comply with FSMA and receive a standardized curriculum recognized by the FDA. Topics include: Introduction to Produce Safety Worker Health and Hygiene Soil Amendments Wildlife, Domesticated Animals Production Water Postharvest Water Postharvest Handling and Sanitation How to Develop a Farm Food Safety Plan?</p> <p>Each attendee will receive a grower manual and be eligible for a certificate from the Association of Food and Drug Officials of the United States (AFDO). Note: Each participant must stay for the whole training to be eligible for a certificate of training.</p>	<p>RU Ready to Farm Beginning Farmer Workshop</p> <p>Wildwood 6 & 7 Bill Hlubik Middlesex County Ag Agent, RCE Ray Samulis Burlington County Ag Agent, Emeritus Megan Muehlbauer Hunterdon County Ag Agent, RCE</p> <p>8:00-8:30 Registration</p> <p>8:30 – Welcome/Overview and Considerations for Beginner Farmers -- Bill Hlubik- Middlesex County Ag Agent, RCE</p> <p>8:45 - Crop Choices for Beginner Farmers -- Megan Muehlbauer, Hunterdon County Ag Agent, RCE -- Bill Hlubik, Middlesex County Ag Agent, RCE</p> <p>9:45 - Tips for Securing Capital -- Keith Dickinson- Business Consultant, Farm Credit East</p> <p>10:30 - USDA Funding & Programs for Beginner Farmers Aly Dyson- Program Specialist, FSA Shannon Barton- Farm Loan Specialist, FSA Christine Hall– State Resource Conservationist, NRCS</p> <p>11:15 - Connecting Farmers to land, Labor, and Capital: SADC'S Farm Viability Programs -- Jeffrey Everett, Deputy Executive Director, SADC -- Dave Kimmel, Ag Resource Specialist, SADC -- Gillian Armstrong, Ag Resource Specialist, SADC</p>	<p>Basil Workshop</p> <p>Wildwood 8 & 9</p> <p>Jim Simon Professor, Department of Plant Biology, Rutgers and Andy Wyenandt Extension Specialist in Vegetable Pathology, RCE</p> <p>9:00 – Progress Gained in Developing Genetic Resistance – New Basil Varieties and What's Coming Down the Road -- Jim Simon, Rutgers</p> <p>10:30 - Field Studies on Managing Basil Downy Mildew in New York -- Meg McGrath, Extension Specialist in Vegetable Pathology, Cornell University</p> <p>11:00 - Field Studies on Managing Basil Downy Mildew in New Jersey -- Andy Wyenandt and -- AJ Noto, Rutgers</p> <p>11:30 - Basic Approaches to Understanding Downy Mildew the Pathogen -- Li Jun Ma, Univ. of Massachusetts</p> <p>12:00 - Lunch</p> <p>1:00 - Upcoming Research on Basil Downy Mildew and Fusarium- Goals of New USDA/SCRI Project -- Jim Simon, Rutgers</p>
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Farmers and Schools- Making the Connection Workshop	Recall Readiness Workshop for Wholesale and Retail Growers	Food Safety Modernization Act (FSMA) Produce Safety Rule Training	RU Ready to Farm Beginning Farmer Workshop	Basil Workshop
<p>-- Ken Keck, Director, USDA-AMS Local Food Research & Development</p> <p>-- Larry and Brian Kuser, Fernbrook Farms</p> <p>-- Eric Buzby, A.T. Buzby Farm</p> <p>-- Elaine Madagin & Stacey Moore, Terhune Orchards</p> <p>-- Mikey Azzara & Regan Pickard, Fresh from Zone 7</p>	<p>Workshop Leaders</p> <p>-- Deanna Baldwin, Program Manager, Food Quality Assurance Maryland Department of Agriculture</p> <p>-- Sarah Everhart, Esq., Legal Specialist, University of Maryland, Agriculture Law Education Initiative</p> <p>-- Billy Mitchell, National Farmers Union</p> <p>-- Ed Treacy, VP, Supply Chain Efficiencies, PMA</p> <p>4:30 – Q&A and Comments</p> <p>This training is partly funded through grants from The NJDA and The FDA.</p>	<p>The cost is \$35.00/person, separate from the registration to the Vegetable Growers Convention. For more information, contact Tammy Commander at commander@njjaes.rutgers.edu or phone (856) 451-2800 ext. 1. (lunch is on your own)</p> <p>To register go to Eventbrite: https://rutgersonfarmfoodsafety. eventbrite.com.</p> <p>4:30 – Questions and Comments</p> <p>This training is partly funded through grants from The NJDA and the FDA</p>	<p>12:15 LUNCH on your own</p> <p>1:15 - Voices of Farmers Panel– Challenges and Tips for New Farmers -- Jeff Tober, Farm Manager, Fernbrook Farms -- Jess Brandeisky, Asst. Farm Manager, Fernbrook Farms -- Rose Robson, Farm Manager, Purple Farm Stand -- Jess Neiderer, Farm Manager, Chickadee Farms -- Stephen Specca, Co-Farm Manager Specca Farms</p> <p>2:45 - Important Considerations and Resources: Top Ten Things Every Farmer Should Know -- Bill Hlubik, Middlesex County Ag Agent, RCE</p> <p>3:15 - Achieving Organic Certification -- Bill Hlubik, Middlesex County Ag Agent, RCE</p> <p>3:30 – “Staying Alive” – Farm Safety Basic -- Ray Samulis– Burlington County Ag Agent, RCE Emeritus</p> <p>4:00 – Questions and Comments</p>	<p>1:30 - Approaches to Improving Management of Basil Disease including Disease Monitoring, A Panel Discussion -- Rick Raid, Meg McGrath, Andy Wyenandt</p> <p>2:30 - Approaches to Genetics and Breeding -- Rob Mattera and Jim Simon, Rutgers</p> <p>3:30 - Treatments for Eradicating Pathogens from Basil Seed: Views, News and Perspectives from Industry</p> <p>4:00 - New Developments by Industry and Growers: Open Forum for Discussion</p> <p>4:30 - Discussion and Plans for 2019 Growing Season Relative to the USDA/SCRI Program</p> <p>5:00 - Questions, Comments and Re-Certification Credits: PP2- 7, 1A-7,10-7, CORE-1 CCA Credit: 7.0</p>

2019

SCHEDULE

NEW JERSEY STATE AGRICULTURAL CONVENTION

February 6 & 7, 2019

Harrah's Resort and
Waterfront Conference Center

Atlantic City, NJ



Wednesday, February 6

9:00 Open Convention

Wildwood Ballroom 28 – Entrance 11

- President's Welcome
- Flag Salute
- Introduction of State Board of Agriculture
- President's Remarks

9:30 Agriculture Address

Honorable Douglas H. Fisher
Secretary of Agriculture

10:00 Convention Business Session

- Roll Call of Delegates
- Description of Consent Calendar

10:15 Remarks

Honorable Catherine R. McCabe
*Commissioner, New Jersey Department of
Environmental Protection*

10:45 Fish & Wildlife

Tony McBride *Supervising Biologist, NJDEP*

10:50 Voting Session: Resolutions 1-8

12:00 New Jersey Agricultural Society Luncheon

Avalon Ballroom 30 – Entrance Avalon 3

1:30 NJDA-VGANJ Joint Session

On-Farm Fire Safety Inspections

Louis Kilmer, *Chief, Bureau of Fire Code
Enforcement, NJ Department of Community Affairs*

2:30 Legislators' Remarks

3:00 Report from New Jersey Farm Bureau

Ryck Suydam, President

3:15 Award Presentations

- Patrick Mullen Quality Grading
- Gold Medal Equine Stewardship Award

3:30 Voting Session: Resolutions 9-10

3:45 Youth Speaker – NJ FFA

Josh Loew, President

4:00 Remarks

Honorable Robert Asaro-Angelo
*Commissioner, New Jersey Department of Labor &
Workforce Development*

4:30 Voting Session: Resolutions 11-12

4:45 Committee Meetings

- Nominations Committee *Wildwood 10*
- Resolutions Committee *Wildwood 28*

5:30 Agricultural Ambassadors Reception

Avalon Ballroom Prefunction Area

7:00 Joint Agricultural Convention

Dinner Banquet *Avalon Ballroom 30*

Keynote Speaker: *Honorable Stephen M. Sweeney*

- Distinguished Service to Agriculture Awards
- Outstanding Young Farmer of the Year Award
- Vegetable Grower of the Year Award
- 2019 Charles and Lena Maier Research Awards

Thursday, February 7

9:00 Convention Session

Wildwood Ballroom 28 – Entrance 11

- Call to Order
- Introduction of State Board of Agriculture
- Roll Call of Delegates

9:15 Youth Speaker – NJ 4-H

Grayson Link, Gloucester County

9:30 New Jersey's Evolving Climate

Dr. David A. Robinson, *New Jersey State Climatologist, NJ Agricultural Experiment Station, Rutgers University*

10:30 Voting Session: Resolutions 13-15

11:00 NASDA Policy Activities

Nathan Bowen, *Executive Director, Public Policy, National Association of State Departments of Agriculture (NASDA)*

11:30 Voting Session: Resolutions 16-18

12:00 Farm Credit East Luncheon

Avalon Ballroom 30 – Entrance Avalon 3

1:30 Report from Rutgers School of Environmental & Biological Sciences & NJ Experiment Station

Dr. Robert M. Goodman, *Executive Dean*

1:45 Voting Session: Resolutions 19-22

Vote on Consent Calendar – Resolutions 23-40

2:30 Elections

- State Board of Agriculture
- Fish and Game Council

2:50 Closing Remarks

Honorable Douglas H. Fisher
Secretary of Agriculture

Wednesday, February 6

New Jersey Agricultural Education Advisory Council

1:30 PM

Wildwood Ballroom 10

The State Agricultural Convention is presented by the:



The New Jersey State Board of Agriculture:

Shirley Todd Kline, President
Angelo Trapani, Vice President
Daniel O. Farrand
August V. Wuillermin
Erick K. Doyle
Dr. Alfred Natali
Ed Overdevest
Mitchell D. Jones

Registration Form

2019 South Jersey Nursery Meeting Wednesday, March 11, 2019

Meeting Registration: \$25 per person
(Registration fee covers morning
coffee/tea, donuts and lunch)

Names of individuals attending (please print)

1) _____

2) _____

3) _____

4) _____

5) _____

Business Name: _____

Address: _____

Telephone: _____

Amount Enclosed: \$20 X _____ = \$ _____

Make check payable to:

Board of Agriculture Research Account

Please cut off registration form and mail with payment to:

Nursery Meeting
Extension Education Center
291 Morton Avenue
Millville, NJ 08332

We cannot accept purchase orders or vouchers.

DIRECTIONS TO

Rutgers Cooperative Extension of Cumberland County
Extension Education Center
291 Morton Avenue (County Road #634)
(between Rosenhayn & Carmel)
856/451-2800

From the North:

1. Take the NJ Turnpike to Exit 4
2. Drive West on Route 73 to Route 295 South
3. Take 295 South to Exit 26 (Route 42 South)
4. Proceed South on Route 42 to Route 55 South
5. Proceed South on Route 55 for approximately 29 miles
6. Take Exit 29 to Route 552 West (left turn)
7. At the second traffic light (approximately 3 miles from the overpass), turn right onto Morton Avenue
8. Drive 1 to 1 ½ miles North on Morton Avenue
9. The Extension Education Center is on the left (brownstone & cedar-shingled building). There are two roadway entrances and a sign on the road in front of the building

From the Northeast:

1. Take Garden State Parkway South to Exit 44
2. Go South on Route 575 to Route 322
3. Turn right (North) onto Route 322 and proceed about 1/4 mile to the Route 40 jug handle at the shopping center (Hamilton Mall)
4. Proceed West on Route 40 approximately 7 miles to Route 552 (left turn)
5. Proceed West on Route 552. After approximately 12 miles, you must take a right turn onto Sherman Avenue. It is still Route 552 West
6. After driving through a Vineland residential area, cross Route 47 (Delsea Drive), and across the overpass of Route 55
7. At the second traffic light (about 3 miles from the overpass), turn right onto Morton Avenue
8. Drive 1 to 1 ½ miles North on Morton Avenue
9. The Extension Education Center is on the left (brownstone & cedar-shingled building). There are two roadway entrances and a sign on the road in front of the building

From the South:

1. Take Route 55 North to Exit 29
2. Turn left onto Route 552 West (Sherman Avenue)
3. At the second traffic light (about 3 miles from the overpass), turn right onto Morton Avenue
4. Drive 1 to 1 ½ miles North on Morton Avenue
5. The Extension Education Center is on the left (brownstone & cedar-shingled building). There are two roadway entrances and a sign on the road in front of the building

Handicapped parking and a ramp are located at the front of the building.

Please do not use the lot directly behind the Extension Education Center. It is for employee and maintenance parking.

Ample parking is located to the side of the building and the lot directly behind the employee parking lot.

RUTGERS

New Jersey Agricultural
Experiment Station

2019 South Jersey Nursery Meeting

Wednesday, March 11, 2019

Rutgers Cooperative Extension of Cumberland County

Extension Education Center
291 Morton Avenue
Millville, NJ 08302
(between Rosenhayn & Carmel)

Tel: 856/451-2800

FAX 856/451-4206



**Registration Deadline:
Monday, March 4, 2019**

Program Details

Morning Session:

- 8:30 Registration**
- 8:55 Welcome and Faculty Update**
Sal Mangiafico, Extension Agent,
Cumberland County
- 9:00 Basic Principles and Considerations for Substrate Management in Container Crops**
Raul Cabrera, Extension Specialist in Nursery Production and Management
- 9:30 Integrating Water, Nutrients, and Media Management in Container Crops**
Sal Mangiafico, Extension Agent,
Cumberland County
- 10:00 Mechanization for Potting Spacing and Pruning: Grower Perspectives**
Hemant Gohil, Agriculture Agent,
Gloucester County
- 10:30 Break**
- 10:45 Management of Aphid Pests**
Steve Rettke, Integrated Pest Management Program Associate in Nursery Crops
- 11:30 Weed Identification and Management in the Nursery**
Steve Kristoph, Owner Steven Kristoph Nursery and Adjunct Instructor Rutgers Continuing Professional Education

Lunch:

12:15 Lunch

Afternoon Session:

- 1:00 Nursery Disease Updates**
Ann Gould, Extension Specialist in Ornamental Pathology
- 1:45 Worker Protection Standards and Regulation Updates**
Patricia Hastings, Rutgers, Pest Management Program Associate
- 2:30 Mites: Magnificent Marvels of Miniature Malevolence**
Steve Rettke, Integrated Pest Management Program Associate in Nursery Crops
- 3:15 Open forum for questions and input**
- 3:45 Pesticide re-certification credits:**
- 4:15 Adjourn**

The following pesticide credits have been requested: CORE, 1A, 3A, PP2 and 10



Register by Monday, March 4, 2019