

# Cultivating Cumberland

May - 2017 VOL. 22, ISSUE 5



## Inside this issue:

Allium Leafminer Alert	1
USDA Harmonized Audit Changes	2
Third Party Audit vs. FSMA	2-3
FSMA Water Testing Requirements	4
Potato Disease Summit	5
New Rutgers Fact Sheets	6
Calendar of Important Events	7-8
Regularly Scheduled Meetings	9
Website information	10

**Attachments:**

## Allium Leafminer Alert

Plant & Pest Advisory

Joe Ingerson-Mahar, Rutgers University

As of Friday, April 21, we confirmed that Allium Leafminer (ALM) is in south Jersey and it is likely that it can be found throughout the state. Infested field chives were found in East Vineland as well as in backyard chives in Atlantic County and onion sets in the Middlesex/Monmouth County area. Feeding scars have been found in wild garlic which is abundant in New Jersey. So far, adult flies have only been trapped in chives. Given how chives are harvested, it is difficult to assess how damaging the fly will be to the chive crop. More of a problem will be protecting longer term crops like leeks and onions.

It is unlikely that ALM spread over the entire state in the past year since its discovery in Pennsylvania last spring. Probably ALM has been in the state for a while, but either the population wasn't that large and/or the damage wasn't recognized. We have a lot to learn about this pest and we will be communicating with Penn State and other researchers about its biology, impact and control measures.

## Updated USDA Harmonized Audit Standards and Checklists to be used starting May 1, 2017

USDA has made changes to the Harmonized audits. Most changes are minor. Listed below are the section numbers with major changes for each audit.

### **Field Operations and Harvesting Standard:**

Sections 2.1.3, 2.4.3.4, 2.4.3.5, 2.4.3.6 have been changed and section 5 has been added.

### **Post-harvest Operations:**

Sections 1.5.3, 1.12.1 (moved from 1.23.2 and numbers shifted down one), 1.13.12 have been changed and section 4 has been added.

To obtain the updated Harmonized Standards that are to be used with the new Harmonized checklists on May 1, 2017, please go to the United Fresh's website. Also, there is a redline version of these Standards that show the items that were changed

<http://www.unitedfresh.org/food-safety/gap-harmonization-initiative/>

For the checklists that go with the standards, go to the website below and select the version for 5/1/17

<https://www.ams.usda.gov/services/auditing/gap-ghp/harmonized>

### Difference between a Third Party Audit and the Food Safety Modernization Act (FSMA)

There is continued confusion about the difference between a third party audit and the produce rule under FSMA. The biggest difference is one is voluntary (third party audit) and one is government regulation (FSMA). Whether you need a third party audit depends on who is purchasing the produce. Some buyers will require an audit and specify the audit firm. This is mainly related to wholesale growers.

Whether you have a third party audit or not, FSMA applies to operations with produce sales over \$25,000 (adjusted for inflation) averaged annually over three years.

Farms may be eligible for a qualified exception and modified requirements (section 112.5 and 112.6). To be eligible the farm must meet two requirements:

1. The farm must have all food sales (including animal feed) averaging less than \$500,000 per year adjusted for inflation during the previous three years.

2. The farm's direct sales to qualified end-user (restaurants, CSA, farmers markets, etc.) that is located in the same state or within 275 miles must exceed sales to all buyers combined during the previous three years.

A farm with the qualified exemption must meet modified requirements, including prominently displaying the name and the complete business address of the farm where the produce was grown either on the label of the produce or at the point of purchase.

### Compliance Dates

Farm Size	Compliance Dates	Water Compliance Dates <sup>1,2</sup>	Labeling dates for Qualified Exemption <sup>3</sup>	Compliance Date for Retention of Records to Support Qualified Exemption
>\$500,000	1/26/18	1/27/20		
>\$250-500K <sup>4</sup>	1/28/19	1/26/21	1/1/20	1/26/16
>\$25-250K <sup>5</sup>	1/27/20	1/26/22	1/1/20	1/26/16

<sup>1</sup> Compliance dates for certain aspects of the agricultural water requirements allow an additional two years. Provisions with extended compliance dates include:

- The specific microbiological criteria that apply to agricultural water
- Corrective measures that must be taken if agricultural water does not meet requirements
- The frequency of testing agricultural water
- Records associated with data to support a microbial die-off rate, corrective measures, test results from a public water system, or data used to support alternative die-off rates, criteria, or sampling strategies

<sup>2</sup> Guidance published 8/24/16 indicates that a farm has the option of collecting surface water samples over two to four years. For example, a farm that is not small or very small would begin sampling in 2018 and complete the water quality profile in 2020, 2021, or 2022.

<sup>3</sup> A farm eligible for a qualified exemption must notify consumers as to the complete business address of the farm where the food is grown, harvested, packed, and held.

<sup>4</sup> A farm is a small business if, on a rolling basis, the average annual monetary value of produce sold during the previous 3-year period is greater than \$250,000 but no more than \$500,000.

<sup>5</sup> A farm is a very small business if, on a rolling basis, the average annual monetary value of produce sold during the previous 3-year period is greater than \$25,000 but no more than \$250,000.

## Water testing requirements under the Food safety Modernization Act (FSMA)

Water testing is a major component of FSMA. The Food and Drug Administration (FDA) requires that growers begin sampling agricultural water to create a microbial water quality profile when they need to start complying with FSMA. No grower needs to start sampling until January, 2018 (growers over \$500,000), small growers 2019 (growers between \$250,000 and \$500,000) and very small growers 2020 (\$25,000 to \$250,000). All growers have 2 to 4 years to complete sampling. How many samples are needed is not clear at this point. FDA is revisiting the water requirements outlined in the Produce Safety Rule (PSR). At present, the Rule states that for surface water 20 samples collected over 2 to 4 years would be needed then 5 samples every year following. For well water it would be 4 samples then 1 sample every year after. They are working to simplify the standards. We do not know when the new standard will be published.

What is needed from the water test? Water should be tested for generic E. coli. There is no need to test for any other organism. There are different methods that laboratories use to assess generic E. coli, but the one FDA has set as the standard is EPA Method 1603. This method is available in some laboratories in New Jersey and if possible ask the lab to use it. The problem with the method is some states do not have any labs that can use this method.

When thinking about water testing, growers should understand the definition of “Agricultural Water” under the PSR. Agricultural Water – “Water used in covered activities on covered produce where water is intended to or is likely to contact covered produce or food contact surfaces, including water used in growing activities (including irrigation water applied using direct water application methods, water used for preparing crop sprays and water used for growing sprouts) and in harvesting, packing and holding activities (including water used for washing or cooling harvested produce and water used for preventing dehydration of covered produce).” In other words, any water that touches the final harvestable produce including spray water is agricultural water. If the grower uses drip and it is working properly, it is not “Agricultural Water”. However, if that same water source is used for spraying or over irrigating it is “Agricultural Water.”

So what should a grower do now? Any grower who has been sampling for a third party audit should continue to sample using the same method and frequency. Any grower who has not been sampling may want to begin sampling just to get an idea of their water quality.

# International Potato Disease Summit

Steve Johnson, University of Maine

The University of Maine will hold an international Potato Disease Summit on Nov. 9, 2017.

Two bacteria threatening the potato industry worldwide will be the focus of a Potato Disease Summit Nov. 9 in Bangor, Maine.

Plant pathologists, researchers and scientists from The Netherlands, Scotland and five U.S. states will present the latest information on the bacteria — *Dickeya* and *Pectobacterium* — that cause blackleg disease, an emerging potato seed problem.

In the past three growing seasons, *Dickeya*, a bacterial pathogen of potatoes, has caused significant economic losses in seed nonemergence and crop loss nationwide. In addition, an associated pathogen, *Pectobacterium*, has caused potato crop losses in the field and in storage. The bacteria have caused losses to the potato industry in Europe for an even longer period.

"The University of Maine is responding to this situation by holding an international summit focused on the latest research and what steps are needed to help the potato industry," says University of Maine President Susan J. Hunter. "As Maine's only public research university, we are a longstanding partner with the state's potato industry in addressing its needs, including the growing threat posed by *Dickeya* and *Pectobacterium*."

The Potato Disease Summit, 8 a.m.–5 p.m., Nov. 9 at the Cross Insurance Center, 515 Main St., Bangor, Maine, is designed for scientists, consultants, regulatory officials, and potato seed growers and buyers. It will focus on such topics as current advances in detection and diagnosis of *Dickeya*; an overview of *Pectobacterium* in the U.S.; and management of Enterobacteriaceae spread and risk.

The \$80 per person fee includes materials, lunch and breaks. Registration deadline is Oct. 2 and is available online: [extension.umaine.edu/agriculture/programs/dickeya-and-pectobacterium-summit/](http://extension.umaine.edu/agriculture/programs/dickeya-and-pectobacterium-summit/).

For more information or to request a disability accommodation, contact Steve Johnson, 207.554.4373, [stevenj@maine.edu](mailto:stevenj@maine.edu).

## New Rutgers Fact Sheets

The following fact sheets are now available for download:

- E265      Commercial Blueberry Pest Control Recommendations for NJ 2017  
Authors: Oudemans, P., Besancon, T., Pavlis, G. and Rodrigues-Saona, C.  
<https://njaes.rutgers.edu/pubs/publication.asp?pid=e265>
- FS1272    Common Insect Pests in Hop Yards  
Authors: Infante-Casella, M. and Bamka, W.  
<http://njaes.rutgers.edu/pubs/fs1272>
- FS1268    Ultra-Niche Crop Series: Winter Lettuce Postharvest Handling & Food Safety  
Author: Melendez, M.  
<http://njaes.rutgers.edu/pubs/fs1268>
- E357      Organic Land Care Best Management Practices Manual  
Authors: Rowe, A. and Bakacs, M.  
<http://njaes.rutgers.edu/pubs/publication.asp?pid=E357>

## Calendar of Important Events

↗ Indicates the newly added event since last calendar

### May 2017

#### **May 4**

**Insect, Disease and Weed Control Methods in Turf**, Toms River Elks, 600 Washington Street, Toms River, NJ; \$155.00; 8:15 am. Credits: 13-3B; 12 PP2, 10 1A; 9 6B; 8 8C, 5 3A, 4 3C; and 3 CORE. For more information call Mid Atlantic Pesticide Recertification 201-874-4453.

#### **May 8-9**

**Ag Innovation Conference**, World Food Center, University of California, 550 Alumni Lane, Davis, CA. To register visit: <https://www.foodaginnovation.com> or email: [info@foodaginnovation.com](mailto:info@foodaginnovation.com)

#### **May 9**

**NJ Basic Pesticide Training and CORE Basic Topics**, Paramus VFW, 6 E. Winslow Place, Paramus, NJ. \$105; 8:00 a.m. Credits: 8 CORE For more information call Mid Atlantic Pesticide 201-874-4453

#### **May 11**

**NJ Basic Pesticide Training and CORE Basic Topics**, Country Inn Suites, 125 Village Road, Millville, NJ; \$105; 9:50 a.m. Credits: 8 CORE. For more information call Mid Atlantic Pesticide 201-874-4453

#### **May 17**

**Basic Pesticide Training**, NJDEP Public Hearing Room, 1st Floor, 401 E. State Street, Trenton, NJ; 9am-1pm. Course is Free and pesticide recertification credits are available. For more information call Stephen Bross 609-984-6953

### June 2017

#### **June 15**

**NJ Basic Pesticide Training and CORE Basic Topics**, Country Inn Suites, 125 Village Road, Millville, NJ; \$105; 9:50 a.m. Credits: 8 CORE. For more information call Mid Atlantic Pesticide 201-874-4453.

#### **June 19-30**

**39th Annual Postharvest Technology of Horticultural Crops Short Course**, University of California. New attendance options for 2017. For more information call Penny Stockdale 530-752-7672 or visit: [http://postharvest.ucdavis.edu/Workshops/Postharvest\\_Short\\_Course\\_of\\_Horticultural\\_Crops\\_980/](http://postharvest.ucdavis.edu/Workshops/Postharvest_Short_Course_of_Horticultural_Crops_980/)

#### **June 21**

**Basic Pesticide Training**, NJDEP Public Hearing Room, 1st Floor, 401 E. State St., Trenton, NJ; 9am-1pm. Course is Free and pesticide recertification credits are available. For more information call Stephen Bross 609-984-6953

**July 2017****July 12-13**

**Organic Produce Summit**, Monterey Conference Center, Monterey, CA. For more information visit: <http://www.organicproducesummit.com/> , call 831-884-5092 or email: [info@organicproducesummit.com](mailto:info@organicproducesummit.com)

**July 23-27**

**101st Annual Meeting of the Potato Association of America**, Holiday Inn, 3803 13th Ave. S, Fargo, ND. For more information call 701-231-8732 or email: [Andrew.p.robinson@ndsu.edu](mailto:Andrew.p.robinson@ndsu.edu)

**August 2017****↻ August 21-25**

**Introduction to Food Science**, Rutgers Continuing Ed., New Brunswick, Full registration by 8/7 \$1,495; lesser days available. For more information call 848-932-9271 or visit: [www.cpe.rutgers.edu/food](http://www.cpe.rutgers.edu/food)

**September 2017****September 20**

**Basic Pesticide Training Course**, NJDEP Public Hearing Room, 1st Floor, 401 E. State St., Trenton, NJ; 9am-1pm. The Course is Free and pesticide recertification credits are available. For more information call Stephen Bross 609-984-6953

**October 2017****↻ October 3-5**

**HACCP Plan Development**, Rutgers Continuing Ed, New Brunswick, \$945 by 9/19. For information call 848-932-9271 x2 or visit: [www.cpe.rutgers.edu/food](http://www.cpe.rutgers.edu/food)

**↻ October 18-19**

**Sensory Evaluation**, Rutgers Continuing Ed, New Brunswick, \$845 by 10/4. For more information call 848-932-9271 x2 or visit: [www.cpe.rutgers.edu/food](http://www.cpe.rutgers.edu/food)

**↻ October 20**

**Statistics for Food Scientists**, Rutgers Continuing Ed, New Brunswick; \$395 by 10/6. For more information call 848-932-9271 x2 or visit: [www.cpe.rutgers.edu/food](http://www.cpe.rutgers.edu/food)



## 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>2017</u></p> <p>May 18    Oct 19</p> <p><b>To Register call 609-984-6614 For directions call 856-451-2800</b></p> <p>*****</p>	<p>✓</p> <p><b>Cumberland County Agriculture Development Board</b> County Administration Bldg. Freeholder Room 164 W. Broad Street Bridgeton, NJ 08332</p> <p><u>2017</u></p> <p>May 9      Jun 13 Jul 11    Aug 8      Sept 12 Oct 10    Nov 14    Dec 12</p> <p><b>Reg. Meetings start at 7 p.m. Information call 856-453-2211</b></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>2017</u></p> <p>May 18    Sept 21 Oct 19    Nov 16    Dec 21</p> <p><b>For info call Hillary Barile, President 856-453-1192</b></p> <p>*****</p>
--	---	---

**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

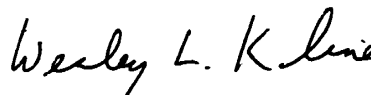
Questions? Call Division of Ag & Natural Resources, NJ Dept. of Ag 609-292-2242

May 19    Jun 16    July 21  
Aug 18    Sept 15    Oct 20    Nov 17

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 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/>

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*



1915-2016

NONPROFIT ORGANIZATION  
U.S. POSTAGE PAID  
VINELAND, NJ  
PERMIT NO. 186

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

**RUTGERS**  
New Jersey Agricultural  
Experiment Station