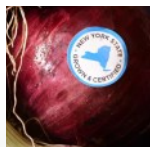


Before your memories of this past growing season fade, reflect on pest pressure to help prevent outbreaks in the coming year.

**PAGE 1**



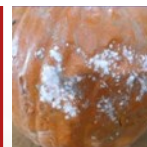
The NYS Grown & Certified program is open to NY producers who adhere to the best practices in safe food handling and environmental stewardship.

**PAGE 4**



Potato seed tubers harboring *Dickeya* are the only confirmed source of this pathogen. Read best management practices for *Dickeya* in potato production.

**PAGE 6**



During harvest *Phytophthora capsici* can pass on the hands of workers from infected pumpkins to uninfected pumpkins, causing them to rot in storage bins.

**PAGE 7**

# VEGE

Edge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

● Volume 12 | ● Issue 24 | ● November 1, 2016

 **Cornell University**  
Cooperative Extension  
Cornell Vegetable Program

*Photo: Cordelia Hall*

## 2016's Crazy Weather and Pests – What Do We Need to Think About for the Year to Come?

*Judson Reid, CCE Cornell Vegetable Program*

As cool fall weather settles in, the memories of the past growing season soon begin to fade. Yet, reflecting on pest pressure now can help us prevent outbreaks in the year to come. Looking at some of the worst culprits from 2016, we can create 3 categories of insect pests:

- Those that will overwinter and pose ongoing threat
- Pests that don't overwinter and arrive unexpectedly
- Adventitious pests, that overwinter but will not always be a problem

An example of an overwintering pest with a population that continues to grow is Brown Marmorated Stink Bug (BMSB). Not only does it overwinter in NYS, it is non-native, and thus lacks a number of natural predators. 2016 was a severe season for BMSB damage in the CVP region on a number of crops such as



Brown Marmorated Stink Bugs on tomato.  
*Photo: Judson Reid, Cornell Vegetable Program*

*continued on page 3*



**VegEdge** newsletter is exclusively for enrollees in the Cornell Vegetable Program, a Cornell Cooperative Extension regional agriculture team, serving 12 counties in Western New York.

The newsletter is a service to our enrollees and is intended for educational purposes, strengthening the relationship between our enrollees, the Cornell Vegetable Program team, and Cornell University.

We're interested in your comments. Contact us at:  
CCE Cornell Vegetable Program  
480 North Main Street, Canandaigua, NY 14224  
Email: [cce-cvp@cornell.edu](mailto:cce-cvp@cornell.edu)

Web address: [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu)

#### Contributing Writers

Robert Hadad  
Christy Hoepting  
Julie Kikkert  
Judson Reid  
Darcy Telenko

#### Publishing Specialist/Distribution/Sponsors

Angela Parr

VegEdge is published 25 times per year, parallel to the production schedule of Western New York growers. Enrollees in the Cornell Vegetable Program receive a complimentary electronic subscription to the newsletter. Print copies are available for an additional fee. You must be enrolled in the Cornell Vegetable Program to subscribe to the newsletter. For information about enrolling in our program, visit [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu). Cornell Cooperative Extension staff, Cornell faculty, and other states' Extension personnel may request to receive a complimentary electronic subscription to VegEdge by emailing Angela Parr at [aep63@cornell.edu](mailto:aep63@cornell.edu). Total readership varies but averages 700 readers.

Information provided is general and educational in nature. Employees and staff of the Cornell Vegetable Program, Cornell Cooperative Extension, and Cornell University do not endorse or recommend any specific product or service.

This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are possible. Some materials may no longer be available and some uses may no longer be legal. All pesticides distributed, sold or applied in NYS must be registered with the NYS Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide usage in NYS should be directed to the appropriate Cornell Cooperative Extension (CCE) specialist or your regional DEC office.

CCE and its employees assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsement of products or companies is made or implied. **READ THE LABEL BEFORE APPLYING ANY PESTICIDE.**

Help us serve you better by telling us what you think. Email us at [cce-cvp@cornell.edu](mailto:cce-cvp@cornell.edu) or write to us at Cornell Vegetable Program, 480 North Main Street, Canandaigua, NY 14424.



**Cornell University**  
Cooperative Extension  
Cornell Vegetable Program

# Contents

## Contact Us

Cornell Vegetable Program .....	12
---------------------------------	----

## Crops

Onion: USDA to Survey New York Onion Growers .....	05
Potato: \$1.2M Grant to Help Cornell Eradicate Potato Pest .....	05
Potato: BMPs for <i>Dickeya</i> in Potato Production Fields in the Northeast .....	06
Pumpkin Fruit Rot in the Fields and Bins: Phytophthora and Sanitation .....	07

## General

2016's Crazy Weather and Pests – What to Think About Next Year .....	01
New York State Grown & Certified Program Launched.....	04
Pesticide Produce Search Online.....	05
New Farmer Grant Fund Accepting Applications .....	07

## Upcoming Educational Events

EXPO Sessions Descriptions.....	08
Annual Cover Crop and Soil Health Workshop and Tour .....	10
Helping Agriculture Employers Stay Current on Employment Rules.....	10
Processing Snap Bean Advisory Meeting.....	10
Farm Food Safety Workshop (Broome County) .....	10
Table Beet Advisory Meeting .....	10
Processing Carrot, Sweet Corn, Pea & Lima Bean Advisory .....	10
Cornell Potato Breeding Line Show & Tell.....	11
2017 Empire State Producers Expo .....	11
Farm Food Safety Workshop (Erie County) .....	11

*The next issue of VegEdge will be produced December 1, 2016.*



tomatoes and peppers as well as fall ornamentals. Winter weather likely plays a role in population growth, and 2015/16 was milder than the previous 2 winters. Entomologist Peter Jentsch of the Hudson Valley notes that dramatic temperature swings may interfere with cold hardiness. In 2017, growers should scout vegetable fields near tree lines and structures where BMSB overwinter. Bifenthrin products are considered the most effective, with Lannate and Danitol (2ee recommendation) as rotational options.

There is exciting news on natural control of BMSB from the Jentsch Lab. A natural enemy from Asia, the parasitic wasp *Trissolcus japonicus*, has now been confirmed in NYS. Peter notes "For the grower of fruit and vegetable, it signifies a step toward the sustainable management of [BMSB]. If *T. japonicus* can overwinter and build in numbers in NY we will likely see increasing levels of biological control of BMSB. This may lead to moderate and low level populations in deciduous forests with reduced damage to fruit and vegetable crops during the growing season."

Not all pests overwinter in NYS, and those that don't can be tough to predict. For example Fall Armyworm (FAW) arrives on weather fronts and can be very damaging to corn and bell peppers. Since we don't know when damage from Fall Armyworm will occur year-to-year; scouting is not as effective as it would be with BMSB. Rather the most efficient approach to FAW is to read VegEdge weekly and watch FAW trap counts for the closest location. At this point a spray program can be deployed using worm materials with short PHI's such as Radiant, Entrust and Mustang MAXX.

Whiteflies are another pest that will not overwinter in NYS, unless we provide a warm habitat. The continued use of greenhouses to maintain stock plants provide an overwintering site for whiteflies which will then expand into vegetable plantings (particularly high tunnel tomatoes) the following season. Our primary recommendation is not a spray program, but rather allowing greenhouses to freeze when possible, as well as introduced biological controls such as *Encarsia formosa* and *Amblyseius swirskii*. 2016 was a severe year for whiteflies, posing a larger threat than normal for remnant populations to survive in heated greenhouses. Unheated high tunnels will not overwinter the pest.

2016 has been noted as the most severe drought on record for portions of the state. Entomologist Brian Nault of the NYS Ag Experiment Station in Geneva notes that "hot, dry years create all sorts of new pest problems." These can be considered occasional pests that are drawn to vegetable crops due to unusual conditions. Such a situation occurred this year with Stilt Bug feeding on tomato. Stilt Bugs are generally not a problem in NYS and represent a diverse family of insects with some predaceous, some plant feeders, and some species both. Although these insects overwinter here, they are not predictably a problem, so we don't need to develop a management plan for 2017, based on their presence in 2016. 🍅



Fall Armyworm in pepper fruit.  
Photo: J. Reid, CVP



Whitefly on tunnel cherry tomatoes.  
Photo: J. Reid, CVP



Stilt Bug on tomato (left). Stilt Bug tomato feeding injury (above).  
Photos: J. Reid, Cornell Vegetable Program



# New York State Grown & Certified Program Launched

Darcy Telenko, CCE Cornell Vegetable Program

The New York State Grown & Certified program was launched by Governor Andrew M. Cuomo on August 11, 2016. This program replaces the previous Grown-in NY label and is touted as a First-of-its-kind Food Certification Program to promote Upstate Agriculture and increase access to farm-fresh food. The New York State Grown & Certified program is designed to identify and promote New York producers who adhere to New York's food safety and environmental sustainability programs, and assures consumers that the food they are buying is local and produced at a higher-standard. To support the new certification program and increase access to farm-fresh food, the State is also building a \$20 million state-of-the-art food hub that significantly expands distribution capacity, provides new markets for farmers, and creates 95 permanent jobs and 150 construction jobs in Hunts Point.



Photo from governor.ny.gov

**Governor Andrew M. Cuomo stated,** “New York State agriculture is an essential pillar of our economy, bolstered by the modern market demands for safer and more sustainable food. The New York Grown & Certified Program strengthens the link between producers and consumers and provides new opportunities for agricultural development. By connecting Upstate farmers to new markets with a state-of-the-art food hub and promoting the consumption of healthy and environmentally conscious food, these initiatives”

**New York State Agriculture Commissioner Ball said,** “New York State Grown & Certified is a commitment to assure New Yorkers that New York State maintains a high degree of vigilance over the food supply. The Governor recognizes that we have some of the best fruit and vegetable producers in the nation who take great care in producing foods that are safely handled and who are doing so in an environmentally sound way, and it’s a message we want to communicate to our consumers.”

**Empire State Potato Growers Inc. Executive Director Melanie Wickham said,** “New York potato growers are stewards of the environment using innovative strategies to protect our land and water. They utilize sustainable crop management practices and the newest varieties. Most are GAP certified, ensuring consumers are getting potatoes that are grown using good agricultural practices and following food safety guidelines. A vehicle like the New York State Grown & Certified Program provides consumers assurances and reminds them that New York potato growers share their commitment to quality and food safety.”

The NYS Grown & Certified program is open to New York producers who adhere to the best practices in safe food handling and environmental stewardship. It is currently available to produce growers who are certified for Good Agricultural Practices (GAP) and are participating in Agricultural Environmental Management (AEM) plans. Producers can find out more information on how to become certified at <http://certified.ny.gov/producers>. Qualifying producers can expect:

- Benefit from statewide ad campaigns aimed at restaurants, institutional buyers, and retail consumers
- Use of NYS Certified logo and marketing materials
- Presence on the NYS Certified web page listing qualifying producers
- No costs to you to be part of the program
- Increased sales due to the resulting increased demand

The Department will look to work with all New York State producers to assist them in qualifying for the voluntary certification program in order to improve the quality of food for New Yorkers and help ensure long-term growth for the industry. It expects fruit and vegetable growers will be included in the initial roll-out in the first half of the year, with other commodity groups joining in the coming months.

More information about the NYS Grown & Certified program can be found at <http://certified.ny.gov/> or by contacting the Department at 1-800-554-4501 or [NYSCertified@agriculture.ny.gov](mailto:NYSCertified@agriculture.ny.gov). ●



## EXPO

**SPECIAL SESSION: NEW YORK STATE  
GROWN & CERTIFIED PROGRAM**  
January 18, 2017 | 10:30 AM

The 2017 Empire State Producers Expo will feature a Special Session on the New York State Grown & Certified Program to provide more information about this new program. The NYS Commissioner of Agriculture, Richard Ball, will introduce the new standard for New York State agriculture and provide an opportunity for dialog about this new statewide program.

The 2017 Empire State Producers Expo will take place on January 17-19 at the OnCenter Convention Center in Syracuse, NY. This annual show combines the major fruit, flower, vegetable, and direct marketing associations of New York in order to provide a comprehensive trade show and educational conference for New York producers, as well as neighboring states and Eastern Canada. The program and online preregistration will be available from the NYS Vegetable Growers Association at <https://nysvga.org/expo>

## USDA to Survey New York Onion Growers

NASS Northeastern Regional Field Office

During November 2016, the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) will conduct its biannual Onion Grower Inquiry. NASS will reach out to more than 100 New York onion growers in order to gather information for the November Onion Grower Inquiry.

The survey will collect information on acreage, production, and value of the 2016 summer dry onion crop. NASS will compile, analyze and publish the survey results in the Annual Vegetable Report, to be released in January 2017.

"Participating in this survey is a convenient and effective way for farmers to analyze and compare the different practices of production, acreage and values within their own communities, as well as at the National level. Data from the survey will benefit farmers, processors, and agribusinesses, by providing timely and accurate information to help them make crucial business decisions for the next growing and marketing season. Furthermore, policymakers use these statistical reports to update their understanding and to make decisions, I encourage farmers to take advantage of this opportunity to help by providing accurate data," said King Whetstone, USDA/NASS Northeastern Regional Director.

The November Onion Grower Inquiry will be available online for sampled respondents starting November 1st, 2016. This database and all NASS reports are available on the agency's website: [www.nass.usda.gov](http://www.nass.usda.gov). As with all NASS surveys, information provided by the respondents is confidential, as required by Federal Law. NASS safeguards the privacy of all responses and publishes only aggregate data, ensuring that no individual operation or producer can be identified.

For more information on NASS surveys and reports, call the NASS Northeastern Regional Field Office at 1-800-498-1518. ●

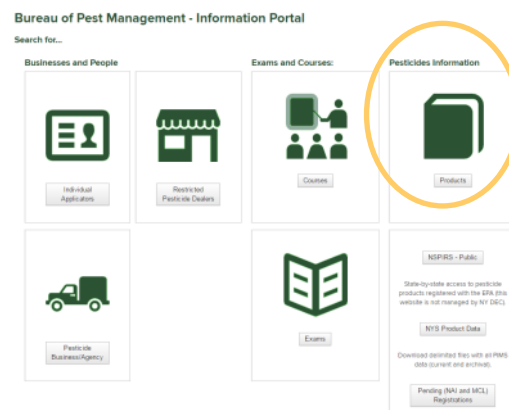
## Pesticide Product Search Online

NYS Department of Environmental Conservation Bureau of Pest Management

The NYS Department of Environmental Conservation (NYSDEC) Bureau of Pest Management is pleased to announce that the new pesticide product registration database is now "live". The web address is <http://www.dec.ny.gov/nyspad/>. When visiting the webpage, please select the Products icon on the right side of the page to perform product searches.

This pesticide search database is replacing the Product, Ingredient, and Manufacturer System (PIMS) product database that has been hosted by Cornell University since its inception.

The new search database includes many added features, including site and pest searches. Additionally, updates to the product data and labeling will be reflected instantaneously. Previously, product registration data was updated approximately every two weeks. We recommend you bookmark this site and begin using it immediately to become familiar with it as it is a little different from what you may be used to with PIMS. If you go to the PIMS site to search for a product it will simply re-direct you to the new NYSPAD site. The Products search is only one of several searches that can be performed on the NYSPAD search page. Users can also search for pesticide applicators and businesses, restricted-use pesticide dealers, and pesticide courses and exams. Please contact the Pesticide Product Registration Section at [ppr@dec.ny.gov](mailto:ppr@dec.ny.gov) or (518) 402-8768 if you have any questions or comments regarding the NYSPAD pesticide product search. For questions or comments regarding pesticide businesses, applicators, dealers, courses or exams, please contact the Reporting & Certification Section at [pestmgt@dec.ny.gov](mailto:pestmgt@dec.ny.gov) or (518) 402-8748. ●



## \$1.2M Grant to Help Cornell Eradicate Potato Pest

Matt Hayes, Cornell

Cornell's long-standing battle against a major potato pest is getting a \$1.2 million boost in new state funding.

The destructiveness of the golden nematode, currently quarantined to eight New York counties, threatens the state's annual \$73 million potato crop. For decades, a partnership between Cornell and government scientists has kept this persistent subterranean threat in check. A grant announced October 14 will update facilities at the College of Agriculture and Life Sciences (CALS) as Cornell ramps up eradication efforts and the breeding of new potato varieties resistant to the golden nematode. The Federal Golden Nematode Lab at Cornell is the only research program in North America with expertise in the biology, resistance breeding and management of potato-cyst nematodes.

Read the full story at <http://news.cornell.edu/stories/2016/10/12m-grant-help-cornell-eradicate-potato-pest> ●



# Best Management Practices for *Dickeya* in Potato Production Fields in the Northeast

Prepared by Meg McGrath and Andy Wyenandt with assistance from Steve Johnson, Kate Everts, Beth Gugino, and Nate Kleczewski

Potato seed tubers harboring *Dickeya dianthicola* are the only confirmed source of this pathogen. It does not appear to be able to survive in soil (including in crop debris) from one growing season to the next. Consequently, rotating with a non-susceptible crop is not a necessary component of the management program. Best management practices listed below are encouraged to minimize potential losses from *Dickeya*.

1. Select certified seed with negligible potential to be contaminated with *Dickeya*. This is best determined by talking with the seed grower about past occurrence on the farm and what is being done to manage it. There are growers who have not had *Dickeya* develop from their seed.
  - Select seed from farms where the pathogen has not been detected and seed marketed in previous years was not associated with *Dickeya* developing where the seed was planted. Check Certificates before purchase to determine if the seed was increased in previous years on a farm where *Dickeya* has been detected and so is at risk for being contaminated.
  - Select seed from farms where zero tolerance is being implemented.
  - Select seed with zero blackleg levels reported on the North American Seed Potato Health Certificates or the Winter Grow Out Test results for presence of *Dickeya* in ANY seed lot from ANY source. Seed lots with field readings of blackleg present should have reports that suspect plant samples were taken for testing and found to be *Dickeya* free. Check Certificates before purchase and require a copy be provided for your records.
  - Select seed that tested negative for *Dickeya*. Note that not detecting a pathogen in a sample of seed does not mean the pathogen is not present in the seed lot.
  - Ask for 'references' to contact: potato growers who purchased their seed in 2016.
  - Avoid seed lots that tested positive for *Dickeya* in previous years.
  - Avoid seed if its Certificate is unavailable. All certified seed has a Certificate.
  - Avoid seed from fields where symptoms of *Dickeya* were observed, even if affected plants were rogued out.
2. Request from supplier (directly from grower or broker) PCR testing for *Dickeya dianthicola* using an independent laboratory.
3. It is recommended that each truckload brought to a farm operation be sampled and re-tested for *Dickeya* once delivered. All results should be reported to your State Department of Agriculture or Potato Growers Association.
4. All equipment during seed piece cutting should be disinfected on a regular basis (at least daily), and also between lot numbers.
5. While it is recommended to rotate where potatoes are grown to manage most pathogens that can survive in unharvested tubers, this practice is not considered important for *Dickeya* because this pathogen does not readily spread in fields (thus a few tubers with *Dickeya* will not result in significant disease outbreak as can occur with late blight) and infected tubers are likely to rot while in soil.
6. Inspect fields for symptoms regularly, starting when skips and affected plants are readily visible. Examine the crop for unevenness (erratic growth) and plants that are unthrifty. *Dickeya* can be present in a plant affecting growth but not causing its typical blackleg symptom.
7. Avoid excess irrigation that results in standing water as *Dickeya* can move in this water. Note that surface irrigation water is not considered to be a possible source of *Dickeya*.
8. Do not apply copper or other fungicide for *Dickeya*. They are ineffective being unable to reach the pathogen, which is inside stems.
9. Growers are encouraged to submit suspect samples for testing promptly to their local extension office.
10. All growers are requested to share information about *Dickeya* occurrence and absence in their production fields. This information is needed to improve understanding about this disease. Include variety, lot number (North American Seed Certificate), field location, and testing results.
11. *Dickeya* has not been observed to continue developing in storage, which is as expected considering high temperatures are favorable, thus there are no management steps to implement after harvest for table-stock potatoes. However, it is prudent to make sure storages and pile temperatures remain cool, also reduce condensation and encourage airflow and exchange. ●

# New Farmers Grant Fund Accepting Applications

From <http://esd.ny.gov/BusinessPrograms/NewFarmersGrantFund.html>

New York State has allocated \$1 million in the 2016-2017 state budget for the third round of the New York State New Farmers Grant Fund. Its purpose is to provide grants to support beginning farmers who have chosen farming as a career and who materially and substantially participate in the production of an agricultural product on their farm. These grants will help farmers improve profitability resulting in the growth of agribusiness and the concomitant tax revenues within the state.

## Program Highlights

The New York State New Farmers Grant Fund will help farmers improve farm profitability through one or both of the following goals:

- Expanding agricultural production, diversifying agricultural production and/or extending the agricultural season;
- Advancing innovative agricultural techniques that increase sustainable practices such as organic farming, food safety, reduction of farm waste and/or water use.

Grants may provide a minimum of \$15,000 and a maximum of \$50,000 for

up to 50% of total project costs. The remaining 50% must be matched by the recipient. Eligible sources of recipient match are limited to cash, lines of credit and loans. Other grant funds may not be used as matching funds. For any award the total project cost must be at least twice the grant award request.

## Eligibility

Eligible Farmers/Farms (all criteria below must be met):

- A farm operation located wholly within New York State which produces an agricultural product as defined by the Guidelines;
- The farm operation must have a minimum of \$10,000 in farm income from sales of products grown or raised on the applicant's farm operation as reflected in either personal or business 2015 tax returns;
- All owners must be New York State Residents of at least 18 years of age;
- As of April 1, 2016, all owners must be in the first ten years of having an ownership interest in any farm operation;
- All owners must materially and sub-

stantially participate in the day-to-day production of an agricultural product grown or raised on the farm operation.

## Eligible Expenditures:

Eligible costs include the purchase of new or used machinery and equipment, supplies, and/or construction or improvement of physical structures used exclusively for agricultural purposes.

## Application Procedure

Program guidelines and application can be found at the following links. When completing an Application be sure to consult the 2016 New Farmers Grant Fund Guidelines document which contains important program requirements.

[2016 Guidelines](#)

[2016 Application](#)

## Deadline

Applications must be postmarked by January 27, 2017. Grant awards will be announced in the Spring of 2017.

## Contact Information

Questions should be sent to Bonnie Devine at [nyfarmfund@esd.ny.gov](mailto:nyfarmfund@esd.ny.gov). ●

# Pumpkin Fruit Rot in the Fields and Bins: *Phytophthora* and Sanitation

Mohammad Babadoost, University of Illinois

Phytophthora blight, caused by *Phytophthora capsici*, is one of the most serious diseases of cucurbits. *P. capsici* survives in the soil and can infect pumpkin vines and fruit at any stage of growth and in storage. Vines can be infected at any part and lesions developed on infected sites in 2-3 days. The lesions are dark brown, water-soaked, and girdle the vine, causing the vine to collapse and die. Fruit rot generally starts on the side of the fruit that is in contact with the ground. Infection of a fruit can also start at any site that contacts the pathogen. Infection results in rapid fruit rot. Fruit rot typically appears as a water-soaked lesion, expands, and becomes covered with fluffy white mold.

In 2016, extensive fruit rot of pumpkins occurred in the bins after harvest. After an investigation, I discovered that the problem was worker sanitation. The workers cut and collect the fruits and put them in the bin, which goes to the warehouse and finally to the stores. There were some pumpkin fruits in the field that were infected by *P. capsici* on the soil side. Workers picked them up and realize the pumpkins are decaying. They put the infected pumpkins down, but their hands are contaminated. When they picked up healthy pumpkins and put them in the bins, their contaminated hands transfer the pathogens to the uninfected pumpkins. After a few days, the pumpkins start rotting from the top or sides, wherever the worker touched them. Growers should be very careful. If workers touch infected pumpkins, they have to

decontaminate their hands. Use alcohol or wash hands with soap before touching uninfected pumpkins. ●



Pumpkin fruit rot in the field, caused by *Phytophthora capsici*. Photo: M. Babadoost, U of Ill.



Pumpkin fruit rot in bins in storage, caused by *Phytophthora capsici*. Photo: M. Babadoost, U of Ill.

---

## **NYS BERRY GROWERS ASSOCIATION WORKSHOP – UNCOVERING THE SECRETS OF GROWING BERRIES UNDER COVER**

**Tuesday, January 17, 2017 | 8:30 AM - 4:00 PM**

**Pre-registration is required to receive workshop materials – Free to NYS Berry Growers Association members and \$20 for non-members.**

**Session organized by Laura McDermott, Eastern NY Commercial Horticulture Program and Cara Fraver, New York State Berry Growers Association**

As dramatic weather events increase, pest pressure intensifies, and local markets vitalize, New York berry growers are looking for ways to protect their crop and lengthen their season. Growers and educators are evaluating techniques for growing berries under cover. This day-long workshop will feature multiple short presentations, hands-on or interactive activities, words from growers, and a NYS Berry Grower Association Annual meeting discussing the newest research in tunnels and exclusion netting.

Courtney Weber from Cornell University will present on cultivars of strawberries and raspberries that thrive in tunnels. We'll look at what kinds of innovative types of plastics are available, how they work differently, and how to dispose of them thoughtfully and affordably with experts Kathy Demchak and Lois Levitan. Greg Loeb and Kerik Cox from Cornell University will help us understand what sorts of pest and diseases are specific to tunnel environments and how to manage them. Greg Loeb and Stephen Hessler will present on using lures within exclusion netting systems. Juliet Carroll, NYS IPM, and Jonathan Lambert, Cornell Institute for Climate Smart Solutions, will discuss apps and tools farmers can employ to manage climate change. With Miguel Gomez, we'll look at the ways that SWD has impacted farmers' profits. Join us to learn how you can push your strawberries into November, grow blueberries without spray in the post SWD era, use apps to best predict the weather you're trying to protect against, and more!

---

## **CABBAGE**

**Tuesday, January 17, 2017 | 9:00 - 10:15 AM**

**Session organized by Christy Hoepting, CCE Cornell Vegetable Program**

The hot and dry summer and extended unseasonably warm fall of 2016 was very favorable for worm pests in cabbage. Also issues with insecticide resistance of Diamondback moth (DBM) populations in the south (e.g. Georgia) spilled over into New York when infested transplants with uncontrollable populations were imported. Whether you grow southern bare root transplants or locally produced plants, some of the newer chemical classes of insecticides are at risk for DBM to develop resistance. The cabbage session will feature an in-depth look at managing DBM in the face of insecticide resistance, which will be presented by Cornell Vegetable Entomologist, Dr. Brian Nault and will include results from an insecticide evaluation of an uncontrollable DBM population in Western NY. Also, CCE Cornell Vegetable Program Specialist, Christy Hoepting, will share the highlights from her past three years of exploring nitrogen dynamics in cabbage.

---

## **CUT FLOWER PRODUCTION**

**Tuesday, January 17, 2017 | 11:00 AM - 12:15 PM**

**Session organized by Dana Dore-Hadad, Chicory Blue Gardens**

Mike and Polly Hutchison of Robin Hollow Farm, in Saundertown, RI, will discuss how they created, and operate a successful cut flower farm. If you are interested in growing and selling flowers, or are a veteran grower, come listen and later take part in a grower discussion. There's a lot to learn from Mike and Polly Hutchison, of Robin Hollow Farm!

---

## **WEED MANAGEMENT**

**Tuesday, January 17, 2017 | 1:45 - 3:00 PM**

**Session organized by Darcy Telenko and Julie Kikkert, CCE Cornell Vegetable Program**

This afternoon session will feature Dr. Antonio DiTommaso from Soil and Crop Sciences, Cornell University as he discusses the influence of weed seed banks and what can be done to lower their impact in our cropping systems. He will discuss the importance of understanding weed biology and the roles different reproductive strategies play in persistence of weed species. If weeds are a problem on your farm, you won't want to miss this session.

---

## **KEEP YOUR COOL: PRACTICAL CONSIDERATIONS FOR BUILDING IMPROVED ON-FARM COLD STORAGE ON A BUDGET**

**Tuesday, January 17, 2017 | 1:45 - 3:00 PM**

**Session organized by Ethan Grundberg, CCE Eastern NY Commercial Horticulture Program**

Are you considering expanding production of storage crops, but aren't sure what infrastructure you'll need to maintain quality in long-term cold storage? Are you a diversified grower interested in building climate zones into your cold storage, but want to hear ideas from other farmers on how to do so without breaking the bank? Chris Callahan, Extension Assistant Professor of Agricultural Engineering at the University of Vermont, will present some of his work on low-cost outside air exchange systems for winter storage, effective environmental monitoring equipment, and efficient designs for improved cold storage to maintain quality in the cooler.

---

*The Expo program and online registration will be available from the NYS Vegetable Growers Association at <https://nysvga.org/expo>*



## SOIL HEALTH

**Tuesday, January 17, 2017 | 4:00 - 5:15 PM**

**Session organized by Justin O'Dea, CCE Ulster County**

Learning how to improve soil health is a complex, knowledge intensive process. Growers interested in improving soil health need to be well informed to understand how to best harness potential to build soil health and improve crop production. In this Empire State Producers Expo session, growers will hear how one grower, Jean-Paul Courtens, is successfully improving soil health through a several strategies, and how another farmer, Dale Gies, is going big with brassica cover crops for soil health and biofumigation strategies that combat soil-borne diseases. Each grower will share their wisdom of experience and data to illustrate how their approaches work towards soil health improvement.

## BIOPESTICIDES: WHAT ARE THEY? WILL THEY WORK? HOW TO INCORPORATE THEM ON YOUR FARM

**Tuesday, January 17, 2017 | 3:45 - 5:10 PM**

**Session organized by Darcy Telenko, CCE Cornell Vegetable Program, and Megan Burley, CCE Erie County**

Biopesticides are defined by the EPA to "... include naturally occurring substances that control pests (biochemical pesticides), microorganism that control pests (microbial pesticides), and pesticidal substances produced by plants containing added genetic material (plant-incorporated protectants) or PIPs." These include biochemical pesticides, microbial pesticides, and plant-incorporated protectants. Join Debbie Palumbo-Sanders, BioWorks Inc., who will discuss the truths and myths of biopesticides. Abby Seaman from the NYS IPM Program, Cornell University will discuss her biopesticides research -what they've tried and what has worked. In addition, Mark Zittel, Amos Zittel & Sons Farm, will give a grower perspective on using biopesticides on their farm.

## LABOR

**Wednesday, January 18, 2017 | 1:15 - 2:30 PM**

**Session organized by Megan Burley, CCE Erie County**

Without a viable labor force agriculture as we know it may cease to exist. This session has been developed to encourage conversation about the labor sources that we have and what information and services are available to farmers seeking farm labor. Mary Jo Dudley, Director of the Cornell Farmworker Program, will be giving an overview of a collaborative project between Cornell, farmers and their workers, to develop culturally appropriate training tools that can bridge differences between cultures and strengthen the workforce. In addition, Laura Cardoso and Belen Ledzema, Agriculture labor specialists for the NYS Department of Labor, will give an introduction to the NYS Department of Labor Employment Services and programs they have in place for agriculture producers. Topics will include the H-2A Program, recruiting assistance and referrals the NYS Career Centers, supplementing your labor, and time available to answer any questions related to agricultural labor in New York State.

## WILDLIFE MANAGEMENT

**Wednesday, January 18, 2017 | 1:45 - 3:00 PM**

**Session organized by Darcy Telenko, CCE Cornell Vegetable Program, and Megan Burley, CCE Erie County**

Wildlife damage is a persistent problem for vegetable and fruit producers. Many growers are attempting proactive measures, but continue to have mixed results and continued crop losses. We have invited Dr. Catherine Lindell, Associate Professor in the Integrative Biology Department, Center for Global Change and Earth Observations, Michigan State University, to present her findings in best management options of birds in cropping systems as she is the coordinator of a national project on limiting bird damage to fruit crops and leads research on estimating damage assessments, and observational and experimental field work. Dr. Paul Curtis, Extension Wildlife Specialist in the Department of Natural Resources at Cornell University, will continue the discussion and address wildlife management options in vegetable crops.

## 2017 WORKER PROTECTION STANDARD (WPS) UPDATE

**Wednesday, January 18, 2017 | 3:15 - 4:30 PM**

**Session organized by Maire Ullrich, CCE Eastern NY Commercial Horticulture Program**

EPA's Worker Protection Standard regulations have been changed for 2017. Changes to the WPS regulations include: new no-entry application-exclusion zones, new training requirements, new posting requirements and others. Come to the 2017 NYS Producers Expo on Wednesday, January 18th from 3:15 to 4:30 to learn more how to stay in compliance in the upcoming season. NYS DEC PCSII, Donald Nelson, will address the group with the new regulations and how to conform to the new regulations.



## UPCOMING EVENTS view all Cornell Vegetable Program upcoming events at [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu)

### Annual Cover Crop and Soil Health Workshop and Tour

November 4, 2016 | 9:30 AM registration

Big Flats Community Building @ Town of Big Flats Municipal Campus



Indoor presentations from Cornell, Penn State, and USDA-NRCS begin at 10:00 before traveling to the Big Flats Plant Materials Center where attendees can tour cover crop demonstration plots. Cost: \$10 to cover lunch, exact change appreciated. For more info and to register, go to <http://tinyurl.com/SoilHealthWorkshop-Tour> or contact Paul Salon, [paul.salon@ny.usda.gov](mailto:paul.salon@ny.usda.gov) or 607-562-8404, ext. 103.

### Employee Management Road Show: Helping Agriculture Employers Stay Current on Employment Rules & Best Practices

November 15, 2016 | 10:00 AM - 4:00 PM

Elba Fireman's Rec Hall, 7143 Oak Orchard Rd, Elba, NY 14058

Presentations will address 5 key areas: Basic rules and best practices for payroll, hours, hiring and termination; Workplace policies every business should have in place and follow; Housing: what is required and what is offered by your competition; Health and Safety: training and reporting rules and preventing injuries; and Documenting your policies, actions and outcomes.

\$45/person or \$40/person for 2 or more from a farm. Pre-registration requested by November 7. For more information/register contact: [registration@nedpa.org](mailto:registration@nedpa.org)

### Processing Snap Bean Advisory Meeting

December 6, 2016 | 10:00 AM - 12:00 PM

NYS Agricultural Experiment Station, Jordan Hall Auditorium, 630 W North St, Geneva, NY 14456



Reports and Discussion of 2016 Snap Bean Research Projects Funded by the Association:

- NYS processing snap bean variety evaluations – *J. Ballerstein, Cornell*
- Weed management research for snap beans – *D. Telenko, CCE Cornell Vegetable Program*
- Evaluating novel approaches for European corn borer control and corn earworm management in sweet corn and snap bean – *B. Nault and Rebecca Schmidt-Jeffris, Cornell*
- Efficacy of fungicides for the management of white mold in snap bean in New York – *S. Pethybridge, Cornell*

Discuss the 2016 growing season and management concerns. Review priorities and the role of the advisory group in applications for state and federal grants. Give your input on the format of future advisory meetings and future educational programs. Contact Julie Kikkert at 585-313-8160 for more information.

### Farm Food Safety Workshop (Broome County)

December 6 - 7, 2016 | Tues 8:30 AM - 5:00 PM; Weds 8:30 AM - 3:00 PM

CCE Broome County, 840 Front St, Binghamton, NY 13905



The training covers the basic USDA GAPs and Harmonized GAPs programs, and will help farms implement solid food safety practices that mitigate risks and open new markets with institutions such as school districts, large retailers, and any other buyers that require GAPs Certification. Cost: \$65. [Register online](#). Pre-registration is required by December 2. Questions can be directed to [Amy Willis](#), Market Readiness Educator at 607-772-8953.

### Table Beet Advisory Meeting

December 8, 2016 | 10:00 AM - 12:00 PM (complimentary lunch following the meeting)

First United Methodist Church, 8221 Lewiston Rd (Route 63), Batavia, NY 14020



All are invited to discuss table beet production in New York. Hear ideas and concerns from fellow growers and industry members. Your input is needed to set future research priorities. Contact Julie Kikkert at 585-313-8160 for more information.

### Processing Carrot, Sweet Corn, Pea & Lima Bean Advisory

December 8, 2016 | 12:45 PM - 3:45 PM (complimentary lunch at noon)

First United Methodist Church, 8221 Lewiston Rd (Rte 63), Batavia, NY 14020



Discuss the 2016 growing season and management concerns. Review priorities and the role of the advisory group in applications for state and federal grants. Give your input on the format of future advisory meetings and future educational programs. Contact Julie Kikkert at 585-313-8160 for more information.

## UPCOMING EVENTS *view all Cornell Vegetable Program upcoming events at [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu)*

### Cornell Potato Breeding Line Show & Tell

December 9, 2016 | 11:30 AM - 3:00 PM  
Love Plant Breeding Fieldhouse, Caldwell Rd,  
Cornell University, Ithaca, NY



Come see and hear the latest on the new Cornell potato breeding lines. Share your experience with Cornell breeding lines and newer varieties you've tried. To preregister for lunch (free) contact Walter DeJong at: [walter.dejong@cornell.edu](mailto:walter.dejong@cornell.edu) Park at Fieldhouse and ask for a parking permit to put in your vehicle.

### 2017 Empire State Producers Expo

January 17-19, 2017  
Oncenter Convention Center, Syracuse



This conference combines the major fruit, flower, vegetable, and direct marketing associations of New York State in order to provide a comprehensive trade show and educational conference for the fruit and vegetable growers of this state, as well as the surrounding states and Eastern Canada. The Expo program will be mailed to CVP enrollees in early December. The program and online registration will be available on the NYS Vegetable Growers Association website at <http://nysvga.org/expo/information/> by mid-November.

Many session descriptions are provided on pages 8-9 of this issue of VegEdge. More sessions will be featured in the next issue.

### Farm Food Safety Workshop (Erie County)

January 30-31, 2017 | 9:30 AM - 4:00 PM  
Roycroft Print Shop, Dard Hunter Hall (2nd floor),  
21 S Grove St, East Aurora, NY 14052



Whether you just want to learn more about what farm food safety is all about or if you are being required to have food safety training by your buyers, this training is for you!

This training will provide growers with the information needed to begin implementing food safety into their practices. Day 1 will cover all aspects of what farm food safety is and why it is important for anyone involved in growing fresh produce. Day 2 will help those who want to write a draft food safety implementation plan for their own farm. A food safety plan is required for GAPs/HGAPs audits.

Cost: \$60 per first farm member; \$15 for each additional member from the same farm. Pre-registration is required. For more info, contact Robert Hadad at 585-739-4065 or email [rgh26@cornell.edu](mailto:rgh26@cornell.edu).

## VEGEdge SPONSORS



American Takii, Inc.  
831-443-4901 | [www.takii.com](http://www.takii.com)  
180 years Creating Tomorrow Today



Vegetable Seeds for Professionals  
315-789-4155  
[www.bejoseeds.com](http://www.bejoseeds.com)



Crop Production Services  
585-589-6330 | [www.cpsagu.com](http://www.cpsagu.com)  
"Profit from our Experience"



Growmark FS - Filling Your Crop Needs  
Elba Muck 716-474-0500 | Caledonia 585-538-6836  
Knowlesville 585-798-3350 | Batavia 585-343-4622



Call 800-544-7938 for sales  
or visit [www.harrisseed.com](http://www.harrisseed.com)  
A Grower Friendly Company



People...Products...Knowledge...

Albion, NY...(585) 589-4195  
Geneva, NY...(315) 789-4450  
Genoa, NY...(315) 497-2713



SEEDWAY Vegetable Seeds  
800-952-7333 | [www.seedway.com](http://www.seedway.com)  
We are focused on quality seed and service!



Blake Myers, 585-303-3252  
[vegetableseeds@aol.com](mailto:vegetableseeds@aol.com)  
[www.siegers.com](http://www.siegers.com)



Our Vision... "To be the first choice for  
growers in all of our marketplaces."  
[www.StokeSeeds.com](http://www.StokeSeeds.com)





**Cornell University**  
**Cooperative Extension**  
**Cornell Vegetable Program**

480 North Main Street  
Canandaigua, NY 14424

# VEGEdge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

## VEGEdge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

VegEdge is the award-winning newsletter produced by the Cornell Vegetable Program in Western New York. It provides readers with information on upcoming meetings, pesticide updates, pest management strategies, cultural practices, marketing ideas and research results from Cornell and Cornell Cooperative Extension. VegEdge is produced every few weeks, with frequency increasing leading up to and during the growing season.

### VEGETABLE SPECIALISTS

**Robert Hadad** | 585-739-4065 cell | rgh26@cornell.edu  
food safety & quality, organic, business & marketing, and fresh market vegetables

**Christy Hoepting** | 585-721-6953 cell | 585-798-4265 x38 office | cah59@cornell.edu  
onions, cabbage and pesticide management

**Julie Kikkert** | 585-313-8160 cell | 585-394-3977 x404 office | jrk2@cornell.edu  
processing crops (sweet corn, snap beans, lima beans, peas, beets, and carrots)

**Judson Reid** | 585-313-8912 cell | 315-536-5123 office | jer11@cornell.edu  
greenhouse production, small farming operations, and fresh market vegetables

**Darcy Telenko** | 716-697-4965 cell | 716-652-5400 x178 office | dep10@cornell.edu  
soil health, weed management, fresh market vegetables, and plant pathology

### PROGRAM ASSISTANTS

**Amy Celentano** | ac2642@cornell.edu

**John Gibbons** | 716-474-5238 cell | jpg10@cornell.edu

**Cordelia Hall** | ch776@cornell.edu

**Mariam Taleb** | mt786@cornell.edu

### ADMINISTRATION

**Peter Landre** | ptl2@cornell.edu

**Angela Parr** | 585-394-3977 x426 office | aep63@cornell.edu

**Steve Reiners** | sr43@cornell.edu

For more information about our program, email  
[cce-cvp@cornell.edu](mailto:cce-cvp@cornell.edu) or visit us at [CVP.CCE.CORNELL.EDU](http://CVP.CCE.CORNELL.EDU)



**Cornell University**  
**Cooperative Extension**  
**Cornell Vegetable Program**