

Include clover in your living mulch to reduce weed pressure and increase vield. Read

more about our living mulch project findings.

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Don't miss the 2015 Empire State Producers Expo! Read about several of the vegetable

related sessions that will be held

at this annual, statewide event.

Healthy seed is the first step towards growing a healthy potato crop. Learn what to check for to

make sure you're seed is good to use.

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There has been changes in the strains of the potato/tomato late blight pathogen in NYS. What are

we watching for and what does this mean to you?

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## YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE Volume 10 **Cornell University Cooperative Extension Cornell Vegetable Program**

## Living Mulch Project Update

Judson Reid, CCE Cornell Vegetable Program

For several years the Cornell Vegetable Program has worked with winter grains such as rye between rows of plastic beds as a living mulch. However, rye seemed to decrease crop yield, as well as break down too early to control late season weeds. A number of studies and colleagues suggested the inclusion of clover into the system. The benefits include:

- Late season weed control.
- Grains provide adequate shade to allow the clover to establish and early season weed control (on its own clover will not provide early season weed control).
- Clover as a legume can provide some of the nitrogen the grains require, potentially decreasing nutrient competition with the vege-



Issue 24

November 1, 2014

Living mulch clover planted in between rows of vegetables. Photo: Judson Reid, Cornell Vegetable Program



VegEdge newsletter is exclusively for enrollees in the Cornell Vegetable Program, a Cornell Cooperative Extension regional agriculture team, serving 11 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

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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 enrolling in our program. visit about 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. Total readership varies but averages 750 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* or write to us at Cornell Vegetable Program, 480 North Main Street, Canandaigua, NY 14424.



Cornell University Cooperative Extension Cornell Vegetable Program

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#### New Video Helps to Promote the Work of the Cornell Vegetable Program

Many people in our community are not aware of the size or the impact of the Western New York vegetable industry on the state's economy. We decided to do something about that! The Cornell Vegetable Program is proud to release a video that highlights vegetable production in our region – from fresh market to processing, from farms that are several thousand acres to just a few, from biodynamic growers to conventional – and provides an introduction to our team of Vegetable Specialists and how we assist growers in this area. We greatly appreciate that several WNY vegetable growers shared their thoughts on what the Cornell Vegetable Program means to them: Paul Fenton, Batavia; Mark Zittel, Eden; and Matt Mortellaro, Elba. The video was produced by Cornell videographer, James Monahan. Check it out and leave us a comment!

Find the video on the Cornell Vegetable Program YouTube channel: <u>www.youtube.com/ccecvp</u>.

table crop.

• Clover may attract less lepidoteran pests than grains.

With funding from NESARE in 2014 we established 4 living mulch treatments between rows of peppers on a cooperating farm in Penn Yan, NY. Our observations to date support the inclusion of clover in the living mulch. For example when included with both barley and rye, the clover plots had much less weed growth than the grains alone (Figure 1). Rye+Clover has given the best weed control, although we are noticing a trend of increased weeds in all plots as the season progresses.

Yield differences also support the inclusion of clover, which when combined with rye yielded nearly twice as much as rye alone (Table 1). There are however no significant differences in number of fruit per plot, indicating the living mulch may influence fruit size.

At this point we believe living mulch can provide very good weed control in plasticulture vegetables. Among the combinations we've examined so far this year rye+clover seems to emerge as our top choice.

Figure 1. Percent ground cover divided between weeds and 4 living mulches.



Table 1. Weight and number of peppers per plot in 4 different living mulch treatments.

Mulch	Wt./Plot	No./Plot
Barley	22.1 AB	44
Barley/Clover	23.9 AB	50
Rye	15.1 B	32
Rye Clover	29.0 A	56.7
p value .05	0.0457	NS (.0748)

The Cornell Vegetable Program thanks NESARE and the cooperating farmers for their support of this project. **O** 

## Don't Miss the 2015 Empire State Producers Expo

Steve Reiners, Cornell

You will not want to miss the 2015 Empire State Producers Expo, which takes place in Syracuse, NY from January 19 through the 22. It kicks off with the Becker Forum on Monday, January 19 at the Holiday Inn in Liverpool. This year, the focus is on institutional buying and how growers can take advantage of recent changes in legislation that are now encouraging local purchases. Growers, State agencies and Distributors will be networking and you do not want to be left out of this potential lucrative market.

The Expo officially starts at 9 AM on Tuesday, January 20 at the OnCenter in Syracuse. We'll have two full days of sessions focused on all aspects of tree fruit, from variety selection and orchard establishment to the latest on managing the newest invasive species. Sessions on the first day will also focus on processing vegetables, potatoes, tomatoes, tunnels, root vegetables and cut flowers. Had a problem with Late Blight this year? Don't miss our session dedicated to this disease on Tuesday afternoon.

Wednesday kicks off with our Keynote Speaker, Dr. Margaret Smith, Professor of Plant Breeding and Genetics at Cornell University. She will focus on the revolution that is occurring in genetic engineering of crops and what you as growers need to know to answer your customers questions. Learn to separate fact from fiction on this controversial issue. The Keynote will be followed by additional sessions on tree fruit, vine crops, sweet corn, soil health, food and farm safety. And if marketing is your passion, don't miss the two days of sessions that start on Wednesday, organized by the Farmers Market Federation of New York.

The last day will include sessions on berries, onions, and marketing along with sessions on hard cider, hops and the crop everyone wants to know about, malted barley. Expo organizers are bringing in more experts from outside of New York than ever before, and you will want to hear the latest innovations from around the world.

Our 140 Exhibitor Trade Show promises to be our biggest ever, with vendors and equipment from around the country. It's open from 9 AM Tuesday through Thursday at 1. There will be special prize giveaways along with social events each afternoon.

The 2015 Producers Expo is where you will want to be this January. Don't miss it!

## Take Steps Now to Plant the Highest Quality Potato Seed in 2015!

Carol MacNeil, CCE Cornell Vegetable Program

Healthy seed is the first step towards growing a healthy potato crop. Potato seed cer-<u>tification</u> ensures that any diseases allowed on seed will not be present above a set, low tolerance. A seed certification tag (on bags) or certificate (on bulk loads) should be included with every lot of certified seed, to ensure that it is certified seed. For most states, including NYS, in order for seed to be sold as certified the minimum requirements for seed potato certification must be met (in NYS see 1NYCRR Parts 106 and 107), which include:

- Use of pretested and approved seed stocks.
- A minimum of 2 field inspections.
- A bin inspection of tubers after harvest.
- A winter test.
- A Federal-State shipping point inspection to ensure conformity with certified seed grades (see below).

Only seed meeting all of the requirements above <u>and bearing official tags (bags and</u> <u>totes) or certificates (bulk loads)</u> issued by the certification agency may be sold as "Certified" seed.

It is becoming more common for susceptible, yellow fleshed varieties like Yukon Gold to show slightly pink, raised ring spots on tubers at grading, resulting in a high percent unmarketable. This symptom is caused by the tuber necrotic strain of Potato Virus Y (PVYntn). Many potato varieties carry this virus but show no tuber symptoms. In addition, it's very difficult to see foliar symptoms of this PVY strain on any varieties during normal field inspections for certification. In order to avoid potato seed with PVYntn you must ask your seed grower for a copy of the winter test results, or a North American Certified Seed Potato Health Certificate (NACSPHC) for seed lots of yellow-fleshed varieties, especially. Study the winter or lab test results for % Total Virus or % PVY. PVYntn cannot be easily distinguished from other PVY strains in the lab, but it is increasingly becoming the prevalent strain. Total Virus allowed is 0.5% for Foundation seed; 5.0% for Certified seed. Unfortunately, 5% PVY infection in the seed can result in 25-50% infection in plants and tubers. While aphids can bring PVY infections into fields the greatest risk is from seed-borne PVY. Choose seed lots with the lowest percentage of PVY. (The NACSPHC also indicates whether late blight was found in any field on the seed potato farm during normal field inspections.)

To ensure the <u>best quality potato seed</u>, in addition to limited disease risk, also request that your seed grower send you a copy of the Federal-State shipping point inspection done right before the lot you purchased was sent to you, to determine if the lot meets U.S. Grade Standards for Seed Potatoes. For example, no more than 2% of tubers may show significant Fusarium decay, 0.5% soft rot, or 1% late blight, to receive the No. 1 U.S. Seed Potato Grade.

If you choose to purchase seed which is not certified it is critical that you inspect the delivery very carefully, for surface defects and diseases, and for internal problems by cutting into tubers. Buyer beware! For a fee a NYS Ag and Markets inspector can be hired to inspect seed loads upon delivery.

NYS Dept. of Ag & Markets Inspectors: Albany – 518-457-2090 Rochester or Syracuse – 585-427-0200

<u>New York 2014 Certified Seed Potato Crop</u> <u>Directory</u>: The 2014 NYS Certified Seed Potato Directory, for seed lots proposed for certification, is now available. There is info on NYS potato seed certification, as well as on the 73 varieties grown for certification in 2014. The varieties include standards for processing and tablestock, newer varieties and numbered lines, and specialty/ heirloom varieties. Brief summaries of the varieties' maturity, appearance, yield potential, and major disease susceptibility are included. Contact info for the seed growers is included. The 2014 Directory is online at: http://rvpadmin.cce.cornell.edu/uploads/ doc 49.pdf or contact the NYS Certified Seed Potato Program. The NYS Certified Seed Potato Program is part of the New York Seed Improvement Project at Cornell, managed by Phil Atkins at: pma3@cornell.edu or 607-255-9869.

Maine 2014 Certified Seed Potato Crop Directory will be available soon at: http://www.maine.gov/dacf/php/ seed\_potato/index.shtml

## **U.S. Standards for Grades of Seed Potatoes**

USDA Agricultural Marketing Service, Reprinted - January 1997

#### §51.3001 Grade.

"U.S. No. 1 Seed Potatoes" consist of unwashed potatoes identified as certified seed by the state of origin by blue tags fixed to the containers or official State or Federal State certificates accompanying bulk loads, which identify the variety, size, class, crop year, and grower or shipper of the potatoes, and the State certification agency. These potatoes must meet the following requirements:

- (a) Fairly well shaped.
- (b) Free from: Freezing injury; Blackheart; Late Blight Tuber Rot; Nematode or Tuber Moth injury; Bacterial Ring Rot; Soft rot or wet breakdown; and, Fresh cuts or fresh broken-off second growth.
- (c) Free from serious damage caused by: Hollow Heart; and, Vascular ring discoloration.
- (d) Free from damage by soil and any other cause.

#### §51.3002 Tolerances.

In order to allow for variations incident to proper grading and handling, the following tolerances, by weight, are provided as specified.

- (a) For defects:
- (1) 10% for potatoes in any lot which are seriously damaged by hollow heart;
- (2) 10% for potatoes in any lot which are damaged by soil;
- (3) 5% for potatoes in any lot which are seriously damaged by vascular ring discoloration;
- (4) 11% for potatoes which fail to meet the remaining requirements of the grade including not more than 6% for external defects and not more than 5% for internal defects: Provided, that included in these tolerances not more than the following percentages shall be allowed: Percent

Bacterial Ring Rot	0.00
Serious damage by dry/moist Fusarium Tuber Rot	2.00
Late Blight Tuber Rot	1.00
Nematode or Tuber Moth injury	0.00
Varietal mixture	0.25
Frozen, soft rot or wet breakdown	0.50
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 For the complete grade standard go to: <a href="http://www.ams.usda.gov/AMSv1.0/getfile?">http://www.ams.usda.gov/AMSv1.0/getfile?</a>

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## The Changing Situation with the Potato/Tomato Late Blight Pathogen – 2014 Update

Bill Fry, Kevin Myers and Giovanna Danies, Plant Pathology & Plant-Microbe Biology, Cornell University

Over the past several years there have been changes (Figure 1) in the strains of the potato/tomato <u>late blight (LB)</u> pathogen, *Phytophthora infestans*, which have been dominant in NYS and nationally. Our lab has been involved in the monitoring of these strains and in characterizing them. Previously, the dominant strains have been US8, US11, US22, and US23. Recently, US23 has been dominant in NYS and nationally. US24 has appeared sporadically both in NYS and nationally.

The situation in 2014 is similar to that in 2013. As of mid-September 2014, we had analyzed more than 150 samples, and the overwhelming majority of samples (from NYS and nationally) have yielded US23. However, in 2014 in New York, we have also detected US24, and three "new" strains, with current interim designations as A, B and C. A is A1 Mating type; B is A2 Mating type; we were unable to obtain the Mating type of C. US23, an A1 Mating type, and the new "B" strain have come from the same general area, which, unfortunately, means that we have had A1 and A2 Mating types in close proximity. If they come into physical contact they could mate and produce oospores. Oospores of P. infestans are long-lived spores that can survive for several years in soil. Oospores in soil could be a source of inoculum to start epidemics and they would also be a source of new strains of P. infestans. There is not yet any evidence that this has occurred in NYS, but the possibility exists. We do not yet have much information on the three new strains; the phenotypic



(observable characteristics) assessment of strains (still in progress) is very much more time consuming and difficult than the genotypic (molecular) assessment.

We've learned from genetic analysis that the rare and diverse isolates (GDT) in Figure 1 represent a recombinant population, from the crossing of different Mating types. These isolates were collected in central and western NY in 2010 and 2011. We have no definite evidence of the location of the recombination event, or if the oospore population still exists there. The fact that these strains of *P. infestans* have not been detected since 2011 is excellent news. They may have all died out. However, the fact that this population existed indicates that sexual recombination in the USA is a distinct possibility, and may happen again. Hopefully that occurrence is a long time in the future. Thus, to date, our population of *P. infestans* is still asexual, and as such, *P. infestans* is essentially an obligate parasite, requiring a living host (tubers, green tissue) for survival from one season to the next.

Figure 1 contains information on the strains of *Phytophthora infestans* that have been identified by our Lab from 2009 to 2013. These strains were identified in samples of diseased plants that were sent to our lab from all over the U.S., but mainly from the western part of the country. The most common strains are given a "US" number. US7 and US8 have been present in the US since the early 1990s, and US11 has been present since the late 1990s. US22, US23 and US24 have all appeared within the past 5-7 years. US7, US8 and US22 are all A2 mating type and US11, US23 and US24 are A1 mating type. US7, US8 and US11 are resistant to mefenoxam (the active ingredient in Ridomil formulations, etc.) and US22, US23, and US24 are largely sensitive to mefenoxam. The number at the top of each column identifies the number of samples that we processed in each year. US23 has been predominant in NY and generally in the eastern half of the USA. US8 and US24 have been predominant primarily in the upper Midwest and Pacific Northwest. **O** 

## Discontinuation of Ro-Neet<sup>™</sup> Herbicide Registration in New York

Julie Kikkert, CCE Cornell Vegetable Program, Robin Bellinder, Cornell, and Mike Helms, Cornell Pesticide Management Education Program

Beet and spinach growers in New York should take note that Ro-Neet herbicide is in "Registered-discontinued" status. This means that the registrant is not planning to renew the NY registration after the current cycle expires on 9/30/15. Growers who might have this product on hand can continue to use it until the registration expires.

While Ro-Neet will no longer be listed as an option for beet and spinach growers in the Cornell Vegetable Guidelines, a listing of other currently available products will appear. Each year we also post a chart of the relative effectiveness of registered herbicides for table beets on the Cornell Vegetable Program Website <a href="http://cvp.cce.cornell.edu/">http://cvp.cce.cornell.edu/</a>

## Expo Potato Sessions Feature Varieties, Storage, Pest Management and Sweet Potatoes

Carol MacNeil, CCE Cornell Vegetable Program

#### 2015 Expo Potato Sessions Tuesday, January 20, 2015 9:00 - 11:00 AM and 1:00 - 2:30 PM

Varieties, pest management and storage management, will all be topics at the January 20th Expo Potato & Sweet Potato sessions. Plant breeder Craig Yencho, North Carolina State University, is focused on disease and insect resistance as well as fresh market and processing quality in potatoes and sweet potatoes. He'll report on "Potato variety development for the Eastern Seaboard," including a description of a few new specialty varieties. In the afternoon he'll share his "Stories from the sweet potato field."

Steve Johnson, University of Maine Extension, well-respected plant pathologist and potato specialist, will describe "Potato storage management in a wet year." NYS potato growers in much of the state faced wet conditions for at least part of the season, and potential storage problems are a concern. Steve's talk will give guidance on temperature, relative humidity and air flow/ventilation management to reduce the development of storage diseases.

Bill Fry, Cornell, will report on the results of his lab's testing of late blight samples in 2014. A record 274 samples from across the U.S. were tested, with 54 samples from the 18 CVP and adjacent counties in Western NY alone. Three new strains appeared in NYS in 2014, a troubling development. Information on their origin and characteristics will give an indication of the threat they pose. A special Late Blight session will follow the Potato session.

Robin Bellinder, Cornell, will review the "Potential for bindweed control with Matrix, and [how to use the] Newly registered herbicide Reflex in potatoes," to ensure potato growers of a weed-free crop. Finally, Potato growers will report on NYS grower-funded research, on the National Potato Council, and on the U.S. Potato Board. The Potato and Sweet Potato sessions are part of the 2015 Empire State Producers Expo, held January 20-22, at the Oncenter Convention Center, Syracuse, NY. Details will soon be available at: <a href="http://nysvga.org/expo/information/">http://nysvga.org/expo/information/</a> For information on the Potato and Sweet Potato sessions contact Carol MacNeil at <a href="http://crm6@cornell.edu">crm6@cornell.edu</a> or 585-394-3977 x406.

## Late Blight Management Session at the Expo

Zach Hansen, Plant Pathology and Plant Microbe Biology, Cornell

#### 2015 Expo Late Blight Management Session Tuesday, January 20, 2015 3:30 - 5:30 PM

Late blight has been a major disease problem for potato and tomato growers since it contributed to the Irish potato famine of the mid-19<sup>th</sup> century. Lately, outbreaks of this devastating disease have been seen annually, especially in the Northeast, which has sparked a renewed interest in its biology and management. The Late Blight Session at the 2015 Empire State Producers Expo is your opportunity to learn more about the biology and best approaches to managing this disease. Come hear Beth Gugino, from Penn State University, discuss the recent widespread outbreaks of late blight in Pennsylvania. Gary Mahany and Tony Emmi will be discussing their extensive on-farm experiences with managing potato and tomato late blight. The session will also include an update on the Cornell Late Blight Decision Support System. The session will be held at 3:30 on Tuesday, January 20, following the tomato and potato sessions.

## Herbicide Resistance: Current Status and Weed Management Options

Darcy Telenko, CCE Cornell Vegetable Program

2015 Expo Herbicide Resistance Session Tuesday, January 20, 2015 3:30 - 5:30 PM

Herbicide resistant weeds –What is all the hype? And what can we do to reduce future impacts?

If you are interested in learning more, please join the session on *Herbicide Resistance: Current Status and Weed Management Options*, January 20, 2015 at 3:30 pm. The afternoon session will look at current impacts and required changes in weed and crop management practices. It will open with weed scientist, Mike Owen, from Iowa State. He will describe the current situation in Iowa and effective changes that they are implementing in their weed management practices to mitigate herbicide resistant weeds. Mark VanGessel, weed scientist from the University of Delaware will then continue by describing resistance issues in Delaware and weed management options for vegetable production. And we will round out the afternoon with Russell Hahn, weed scientist, Cornell University who will talk about the current status of resistance in New York and viable management options. If weeds are a problem on your farm you won't want to miss this session to hear how herbicide resistance is an issue for the whole agricultural community and changes that will need to occur to lengthen the efficacy of current herbicides and lessen the loss of yield potential and income.

## Best Management Practices for High Tunnels Session at 2015 Expo

Judson Reid, CCE Cornell Vegetable Program

2015 Expo High Tunnel Session Tuesday, January 20, 2015 3:30 - 5:00 PM

High tunnels, unheated greenhouses used to extend the season of fruits and vegetables, have been increasingly adopted by NY farmers. In this session we will hear from one of the pioneers in high tunnel growing, Steve Groff from Cedar Meadow Farm of Holtwood, PA. Steve and his family farm 225 acres of cash grain crops, 25 acres of pumpkins, and 2 acres of high tunnel tomatoes. An early adopter of the technology, Steve will share how his farm manages for consistent high yields over the long term. In addition, Judson Reid of the Cornell Vegetable Program sharing the latest research updates, and Mike Rutzke of the CU Nutrienal Analysis Lab will discuss the benefits of sap testing for precision fertilization in high tunnels.

## Expo Soil Health Session Features Benefits of Good Soil Health & Assistance to Growers

Carol MacNeil, CCE Cornell Vegetable Program

2015 Expo Soil Health Session Wednesday, January 21, 2015 1:00 - 2:30 PM and 3:30 - 5:30 PM

Innovative Pennsylvania vegetable grower, Steve Groff, Cedar Meadow Farm/Cover Crop Solutions, will kick off the 2015 Expo Soil Health Session January 21st with his presentation of "Strategic cover crop/reduced tillage options for vegetables," with discussion to follow. Prompted by his very hilly farm fields, Steve has been no/strip-tilling for 30 years, adding intensive cover cropping not long after. His improved crop yields demonstrate one of the valuable benefits of his good soil management.

More than 70 vegetable fields in Western NY were sampled for the Cornell Soil Health Test (CSHT) a few years ago. The costs of intensive vegetable production, and poor soil management, were clear to the growers when they saw the results: low water-holding capacity, poor water-stable aggregate stability, low

organic matter, high compaction, etc. It was a wake-up call, and just in time, with increasingly frequent extreme weather events. Many of those growers are now using reduced tillage methods and/or regular cover cropping. Hear about updates to the CSHT, and about the new national, publicprivate collaboration—The Soil Renaissance, from Bob Schindelbeck, Cornell.

How much difference does good soil management make? Paul Salon, NRCS, will show the startling difference between well and poorly managed soils, with his live soil-water demonstrations: Run-off of muddy water over bare soil, percolation of clear water through a cover crop. See water ponding over soil with a low percentage of water-stable soil aggregates, and rapid percolation through a healthy soil.

Finally, learn about the increased financial assistance available through USDA-NRCS and NYS Soil & Water Conservation District programs for growers who want to try a new or intensified reduced tillage or cover cropping program on their farm. Contact your local office to sign up and to begin making plans.

The Soil Health session is part of the 2015 Empire State Producers Expo, held January 20-22, at the Oncenter Convention Center, Syracuse, NY. If you have questions about the Soil Health session contact Carol MacNeil, CCE Cornell Vegetable Program, at <a href="mailto:crm6@cornell.edu">crm6@cornell.edu</a> or 585-394-3977 x406.

## Sweet Corn Session at 2015 Expo

Marion Zuefle, NYS IPM Program, Cornell

2015 Expo Sweet Corn Session Wednesday, January 21, 2015 3:30 - 5:30 PM

This year's sweet corn session at the 2015 Empire State Producers Expo will cover a wide variety of topics. It was a very bad year for bird damage, so Paul Curtis Associate Professor and wildlife specialist will discuss management options for birds, raccoons and deer in sweet corn. In 2013 corn earworm trap counts were low but the 2014 season showed resurgence with four times the number of corn ear worm compared to 2013. It is important to time your sprays correctly to effectively manage CEW. Cornell researcher Dan Olmstead has been researching this topic for several years and will discuss proper timing of sprays for best CEW control. We will also have a speaker discuss why European corn borer numbers seem to be decreasing from year to year and finally efficacy trials from colleagues further south where the insect pressure is always high. The sweet corn session will be held on Wednesday, January 21, at 3:30. You won't want to miss it!



**JANUARY 19-22, 2015** 

Oncenter Convention Center 800 South State Street Syracuse, NY 13202-3017

For more information and to register, visit <u>nysvga.org/expo</u>

## UPCOMING EVENTS view all Cornell Vegetable Program upcoming events at cvp.cce.cornell.edu

### 2014 Cornell Agribusiness Strategic Marketing Conference

November 11-12, 2014

The Inn on the Lake, 770 S Main St, Canandaigua, NY 14424

See the agenda and register at: <u>http://aem.cornell.edu/outreach/strategic\_marketing\_conference.php</u>. Questions? Bob Weybright at 845-797-8878 or <u>rw74@cornell.edu</u> or Carol Thomson at 607-255-5464 or <u>cmt8@cornell.edu</u>

### **Cover Crop Workshop and Field Tour**

November 14, 2014 | 9:15 AM – 3:30 PM USDA NRCS Big Flats Plant Materials Center (PMC)\*, 3266 Rte 352, Big Flats, NY 14814



View 250 plots of different cover crops, combinations and planting dates, as well as cover crop seeding equipment in the field, then hear the latest on cover crops from growers, and university/agency specialists. 1 DEC pesticide credits; 4 CCA credits. Cost: \$12. Pre-registration and agenda at <a href="http://tinyurl.com/covercrop-fieldtour">http://tinyurl.com/covercrop-fieldtour</a> or call Paul Salon at 607-562-8404. \*Take Route 17 (I 86) to Exit 48 (East Corning/ Route 352). Follow Route 352 east for 1.5 miles. PMC entrance is on the left.

## Genesee Valley Farmers' Market Info-Forum 2014: Farmers' Markets are a Serious Business November 17, 2014 | 12:30 PM - 7:00 PM

#### CCE Ontario County, 480 N Main St, Canandaigua, NY 14424

Marketing management for optimizing sales is crucial both from the market manager and farmer standpoint. This one-day forum for regional farmers, vendors and managers will focus on improvement of market management in order to develop strong, profitable and long -lasting farmers' markets. \$15 includes dinner. Contact Jarmila Haseler to pre-register at 585-719-6521 or jh954@cornell.edu; pay at the door. *Sponsored by the Cornell Vegetable Program, The Farmers' Market of NY, and CCE Wayne County.* 

#### High Tunnel School (Bath, NY)

December 2, 2014 | 9:30 AM registration; 10:00 AM - 3:00 PM Civil Defense Center, 7220 State Route 54, Bath, NY 14510



This beginner level school is for new high tunnel growers and will focus on best management practices, with an emphasis on tomato production. The school is strongly encouraged for growers with 2 or fewer seasons of tunnel growing experience, those considering getting a tunnel in the next few seasons, or NRCS EQIP recipients. Topics will include site selection and structural considerations, crop and variety selection, cultural management, disease management, and an experienced grower panel. \$25 per person includes lunch if pre-registered by 11/25 to be included in lunch count. <u>Register online on the CVP website</u> or contact Stephanie Mehlenbacher at 607-583-3240.

## **Cornell Potato Variety/Line Show & Tell**

December 3, 2014 | 11:30 free lunch; 12:00 PM - 3:00 PM H. H. Love Fieldhouse, Caldwell Dr, off Rt 366/Dryden Rd (east side of campus), Cornell University, Ithaca, NY 14853

See lines from the Cornell breeding program and discuss performance. Ask for a parking permit when you arrive at meeting. There will be NO separate Upstate NY Potato Advisory Meeting this year, but topics of interest will be discussed at the Show & Tell. To register, or to suggest topics for discussion, contact Walter De Jong at <u>wsd2@cornell.edu</u> or 607-254-5384, or Carol MacNeil at <u>crm6@cornell.edu</u> or 585-313-8796, **by Wednesday, November 26**.

#### Processing Pea, Beet and Carrot Advisory Meeting

December 8, 2014 10:00 AM - 12:00 PM Pea | 12:30 PM - 2:30 PM Beet & Carrot First United Methodist Church, 8221 Lewiston Rd, Batavia, NY 14020



All are invited to discuss the 2014 processing pea, beet and carrot season in New York. Hear ideas and concerns from fellow growers and industry members. Your input is needed to set future research prioritites. FREE and includes lunch. DEC and CCA recertification credits will be available. No need to preregister. The full agendas are available on the <u>Cornell Vegetable Program website</u>. Contact Julie Kikkert at <u>jrk2@cornell.edu</u> with questions.

### 2014 Agribusiness Economic Outlook Conference December 9, 2014

#### Cornell University, Warren Hall, Ithaca, NY 14853

New York agricultural leaders (industry leaders, agribusiness professionals, policymakers, educators, and farm managers) learn about the short-and long-term outlook for agriculture and agricultural products in New York and the Northeast. Breakout sessions will provide the near-term outlook for major New York commodities including dairy, grains and feed, and horticultural products. For more information, contact Gretchen Gilbert at 607-254-1281 or gcg4@cornell.edu. Registration and agenda online at <a href="http://dyson.cornell.edu/outreach/ag\_outlook\_conference.php">http://dyson.cornell.edu/outreach/ag\_outlook\_conference.php</a>

## Onion Program to Feature Bacterial Disease Symposium at 2015 Empire State Expo

Christy Hoepting, CCE Cornell Vegetable Program

#### 2015 Expo Onion Sessions Thursday, January 22, 2015 9:00 - 11:00 AM and 1:00 - 2:40 PM

Increased losses of onions caused by bacterial diseases over the past decade have not only occurred in New York, but appear to be a national phenomenon. Consequently, plant pathologists across the country have been trying to find solutions to the nation's onion rot problem. At the 2015 Empire Expo, the onion session will feature a bacterial disease symposium with guest speakers from the University of Georgia and Penn State to share their recent breakthroughs in understanding and managing bacterial diseases of onions.

For her Ph. D thesis, Emily Pfeufer, under the direction of Dr. Beth Gugino at Penn State, immersed herself in a quest to identify the most important factors driving bacterial bulb rot of onion in Pennsylvania and New York. She studied the relationships between onion bulb rot and soil fertility, soil temperature, weeds and onion thrips, as well as conducted a thorough investigation into the most important sources of bacterial pathogens in onion. She will also report on foliar bacterial disease severity and its use as a threshold to time onion harvest.

Dr. Bhabesh Dutta has worked as a post-doc for renowned bacteriologist, Dr. Ron Gitaitis at the University of Georgia in Tifton. At the Empire Expo, he will report on their latest discoveries regarding the relationships between bacterial diseases of onions and, onion thrips and micronutrients, and implications for management.

Cornell's own bacteriologist, Dr. Steven Beer, will also report on his team's progress made in New York towards understanding and managing onion bacterial diseases with a special report on the use of Oxidate. The symposium will conclude with an expert panel discussion. Onion growers will be privileged to experience such collective expertise in bacterial diseases of onions at one time.

Following the bacterial disease symposium will be the latest updates on managing onion thrips, leek moth, Stemphylium leaf blight and downy mildew, and the new and improved sweet onions bred for New York.





Cornell University Cooperative Extension Cornell Vegetable Program

480 North Main Street Canandaigua, NY 14424





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

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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)

Carol MacNeil | 585-313-8796 cell | 585-394-3977 x406 office | crm6@cornell.edu potatoes, dry beans, and soil health

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

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Cornell University Cooperative Extension Cornell Vegetable Program

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.