

PAGE 1

Thirty-five commercially available cabbage varieties were tested for



PAGE 4

impact, and management.

There are new pathogens causing blackleg of potato. The pathogens differ in important ways that affect disease occurrence,



PAGE 5

weeds in dry, loose soil.

Cultivation may be used to improve weed management in small-seeded crops and is



Beginning 1/1/18, NYS farmers may claim a new refundable tax credit for gualified food donations

made to a food pantry, food bank, or other emergency food program.

PAGE 6





Cornell Cooperative Extension Cornell Vegetable Program

Level of Susceptibility to the Black Rot Pathogen of Commercially **Available Cabbage Varieties**

Chris Smart and Holly Lange, Plant Pathology and Plant-Microbe Biology Section, Cornell University, Geneva; from 2018 Empire State Producers Expo proceedings

Caused by the bacterium Xanthomonas campestris pv. campestris (Xcc), black rot is a significant disease of cabbage, and other crucifer crops world-wide and is an annual problem here in NY. Currently the options for controlling the bacterial pathogen that causes black rot remain limited primarily to copper-based products. The goal of this project was to test cabbage varieties in a replicated and inoculated trial, for susceptibility to Xcc. This data will enable growers to evaluate the risk of using extremely susceptible varieties, and determine if there is a horticulturally similar variety available with some black rot tolerance.

Thirty-five commercially available cabbage varieties were seeded in 72 cell flats in a greenhouse at Cornell's NY State Ag Experiment Station. At 6 weeks of age plants were moved to a cold frame and hardened off for a week. They were then be planted into a research plot with 5 plants per



Black rot on cabbage. Photo: Chris Smart, Cornell

pathogen that causes black rot.

susceptibility to the bacterial



VegEdge newsletter is exclusively for enrollees in the Cornell Vegetable Program, a Cornell Cooperative Extension regional agriculture team, serving 13 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

Web address: 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 enrolling in our about program, visit 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 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* or write to us at Cornell Vegetable Program, 480 North Main Street, Canandaigua, NY 14424.



Contents

Contact Us

Cornell Vegetable Program	10
Crops	
Level of Susceptibility of Commercial Cabbage Varieties to Black Rot .	01
New Pathogens = New Blackleg of Potato	04
General	
Controlling Weeds in Small-Seeded Crops Using Cultivation	05
Introducing the NYS Soil Health Initiative	05
Farm Donations to Food Pantries Credit	06
Upcoming Events	
2018 Pesticide Training and Recertification Series	07
Vegetable Fertility Considerations for Season Extension	07
2018 Genesee Valley Produce Auction Grower Meeting	07
2018 Chautauqua Produce Auction Growers Meeting	07
Greater WNY Vegetable Farming Collaborative Teach-In	08
NYS Potato School	
2018 NYS Dry Bean Meeting	08
Season Extension with High Tunnels: Know Before You Grow	08
Pre-Season Onion Weed Management Meetings	09
2018 Special Permit Training	09

The next issue of VegEdge will be March 1, 2018.

continued from cover - Level of Susceptibility to the Black Rot Pathogen of Commercially Available Cabbage Varieties

plot and 4 replicate plots per treatment, in a randomized complete block design. Plants were fertilized and maintained according to standard grower practices, and the entire field was inoculated with a NY isolate of Xcc 2 weeks after transplanting. Plots were rated weekly for both disease incidence and severity beginning July 6, 2017. Two cabbage heads were harvested per plot for early, mid and late season cabbage (a total of 8 heads per variety). Each head was cut at the stump and visually rated for blackening of the veins on the core, and then each head was cut in half to check for ingress of the pathogen into the cabbage head.

Results

All 35 cabbage varieties included in the study showed black rot symptoms following inoculation with the bacterial pathogen Xcc. Typical V-shaped lesions were seen on all plants, and no varieties were completely resistant to the pathogen. Following disease progress over time (Table 1) varieties Thunderhead, Excalibur, Viceroy and Capture had the least disease at the end of the study, while Korsuma and Surprise were most susceptible. These results are similar to those observed in 2016.

Results from harvesting mature heads show that mid and late season varieties have a greater chance of black rot inside the head than early season varieties (Table 2). This is not surprising as all plants were inoculated at the same time and varieties with a longer date to harvest would enable the pathogen more time to move into the head. Additional results from cabbage harvest (Table 2):

- Three cultivars showed black rot inside every head (all mid or late season varieties)
- Five cultivars had 50%-87.5% infected heads (all mid or late season)
- 15 cultivars had 12.5%-33% infected heads
- 12 cultivars had no black rot inside the head even though they all had black rot symptoms on the leaves.



Cabbage showing typical symptoms of black rot, with V-shaped lesions moving into the leaf from the leaf margin. Photo: C. Smart, Cornell

Table 1.







By identifying the most black rot tolerant cabbage varieties available growers will have a guide as to the level of susceptibility of commonly grown cabbage varieties. This could be an economic benefit by either reducing copper sprays if a variety is known to be less susceptible, or starting copper sprays earlier if a variety is known to be highly susceptible. Of course, we would recommend that growers not plant those varieties that are highly susceptible.

New Pathogens = New Blackleg of Potato

Margaret Tuttle McGrath, Plant Pathology and Plant-Microbe Biology Section, SIPS, Cornell University, Long Island

Blackleg is an old disease of potato that has emerged as a major problem due to recent appearance of new pathogens. *Dickeya dianthicola* was first evident in the northeast around 2013. The disease it causes is frequently called Dickeya. *Pectobacterium parmentieri* (first named *P. wasabiae*) was detected more recently. These bacteria have been associated with storage loss and yield loss greater than with *Pectobacterium atrosepticum* or other *Pectobacterium* species that cause the 'old' blackleg, especially in the warmer areas of the northeast, including Long Island and New Jersey, where conditions are especially favorable for the new pathogens. Of 36 symptomatic samples from LI potato crops submitted for testing in 2017, 17 tested positive for *Dickeya* spp. (Beacon Chipper, Marcy, Norwis, Superior, and Vivaldi), 14 tested positive for *Pectobacterium* spp. (Andover, Marcy, Norwis, NY140, Reba, Superior, Vivaldi, and Waneta), and 2 tested positive for both (Marcy and Vivaldi). *P. parmentieri* was associated with extensive occurrence of aerial stem rot in affected crops and stem end rot at harvest (see photos) in a crop of Vivaldi. *D. dianthicola* and *P. parmentieri* also were confirmed in 2016 on LI and in upstate NY.



A wealth of practical and scientific information was presented last November at the Dickeya and Pectobacterium Summit. The presentations are available at https://extension.umaine.edu/ agriculture/programs-by-topic/dickeyaand-pectobacterium-summit/. Dickeya dianthicola differs from Pectobacterium atrosepticum in important ways that affect disease occurrence, impact, and management. Dickeya dianthicola can initiate disease from lower inoculum levels, has a greater ability to spread through the plant's vascular tissue, is considerably more aggressive, and has higher optimal temperature for disease development (> 77 F; 85+ is ideal). Both pathogens are seed-borne, but only P. atrosepticum is spread during seed cutting, is dispersed by splashing water, causes aerial stem rot, can be partially managed with copper fungicide, and survives between crops in soil outside tubers. Both pathogens have been detected in irrigation ponds, but no evidence that this is a source of D. dianthicola for potato crops. Both can infect other crops, but these alternative hosts only appear to have a role in the life cycle of *P. atrosepticum*. Both pathogens can be spread during harvest, especially when tubers are handled roughly, their skin is not fully mature, and soil is wet. Fortunately *D. dianthicola* does not continue developing and rotting tubers in storage, but that also means contaminated seed is harder to detect. However, the other new pathogen, *Pectobacterium parmentieri*, has been associated with extensive losses in storage. It is also seedborne.

Pathogen-free seed is the only effective management practice for Dickeya dianthicola. Infested and infected potato seed is the only confirmed source. Scotland has a zero tolerance policy for D. solani. Confirming seed is pathogenfree is challenging because infected plants can be asymptomatic when cool (<77) as is typical in potato seed production areas and infected seed often is symptomless. Additionally, while seed testing procedure has improved, there is potential for false negative result and appearance of another new pathogen will not be revealed. Dickeya has developed in fields planted with seed that tested negative. Two PCR methods are used now: first PelADE to detect Dickeya and when positive Dia-C for D. dianthicola. This pathogen has been more readily detectable in stem than tuber tissue. It is now known that Dickeya is primarily in peel and sprouts

of tubers, and to a lower degree in the stem end. Disinfecting seed is not a viable pre-plant management practice because efficacy was found to decline after seed harvest most likely because bacteria moved into lenticels.

There remains important information not known about these new pathogens. What was the initial source(s)? How did these pathogens enter the seed production system? Are there other soft rot bacteria? Do they interact when they co-infect? Is there an amount (percent) of contaminated seed that will not significantly impact yield and thus can be tolerated? Is it 1% or 2% as suggested for a tolerance? What seed sample size is needed for testing to be able to state a lot of seed is at an identified tolerable contamination level? Current procedure testing four samples of 50 tubers is not adequate. What is the relationship between seed test results and occurrence of symptoms in a crop grown under disease favorable conditions? What varieties are most and least susceptible?

Additional information about *Dickeya* and management at <u>http://</u><u>vegetablemdonline.ppath.cornell.edu/</u><u>NewsArticles/Potato-Dickeya.html</u>

Controlling Weeds in Small-Seeded Crops Using Cultivation

Bryan Brown, NYS IPM Program, Cornell, and Daniel Brainard and Sam Hitchcock Tilton, Michigan State University; from 2018 Empire State Producers Expo proceedings

Cultivation may be used to improve weed management in small-seeded crops. It is typically most effective on small weeds in dry, loose soil. Aggressive cultivators used between crop rows can be very effective. However, it remains a challenge to use cultivation to control weeds in the crop row without damaging the crop. In-row cultivation tools rely on a size difference between the weeds and the crop – meaning they are designed to cause just enough soil disturbance to kill small weeds while allowing the larger crop plants to survive. A new generation of cultivators allow for several different tools to target the in-row zone at once. Such "stacking" of tools has been used to greatly increase the percent weed control in corn (Gallandt et al. 2017), but few studies have been conducted in small-seeded crops. Therefore in 2017, in-row cultivation tools used singly and in stacked combinations were evaluated in carrot crops in Michigan. Carrots were managed with a pre-emergence flame weeding, a hand weeding at around 40 days after planting, and one or two between-row cultivations. An in-row cultivation was conducted on 1" tall weeds at around 25 days after planting using the tools listed in Table 1. Weeds and crop plants were counted before and after cultivation to determine effectiveness. Overall, the "stacked" tool combinations killed a greater percentage of the weeds, but also killed a greater percentage of the crop. While the finger weeders killed the lowest percentage of the crop, the disc hillers had the highest ratio of weeds killed to crop plants killed. Considering the crop loss, yield was somewhat minimally affected, possibly due to increased size of carrots in plots where density was reduced. The effectiveness of the inrow tools varied greatly with conditions, which suggests that further work is needed to determine the optimal adjustment for different soils, crops, and weeds. The torsion weeders appeared to be the most sensitive to variable conditions while the finger weeders seemed to be the least affected.

Table 1. Averaged results of the three in-row cultivation trials in carrots. Note that the in-row cultivation treatments were implemented in addition to pre-emergence flaming, between-row cultivation(s), and a late-season hand weeding.

In-row cultivation tool	Weeds killed (%)	Crop plants killed (%)	Yield (1,000 lb/ac)
harrow	20	17	26
finger	39	16	25
torsion	46	33	22
disc hillers	57	20	28
finger / disc hillers	79	38	22
finger / harrow	48	32	19
torsion / finger / harrow	55	31	23
none	-30*	0	26

 * When no tool was used, 30% more weeds had emerged in the time between counts.

References

Gallandt ER, Brainard DC & Brown B (2017) Developments in physical weed control. In: *Integrated Weed Management for Sustainable Agriculture*, (ed RL Zimdahl) 261-283. Burleigh Dodds Science Publishing. Sawston, UK.

Acknowledgements

This work was supported by the USDA National Institute of Food and Agriculture, Organic Agriculture Research and Extension Initiative Competitive Grant, "Farmer designed systems to reduce tillage in organic vegetables." Accession Number 1004267; A. Rangarajan, Project Director.

Introducing the NYS Soil Health Initiative

David Wolfe, School of Integrative Plant Science (Horticulture Section), Cornell University; from 2018 Empire State Producers Expo proceedings

Soil health constraints, primarily associated with loss of soil organic matter and soil compaction, significantly limit farm productivity and sustainability in New York. Soils with low organic matter have lower water holding capacity and poorer drainage, and thus have less resilience to drought and flooding impacts on yield. They also are more prone to soil erosion and chemical runoff into surface waters during heavy rainfall events. Organic matter is also essential to supporting a robust population of beneficial soil organisms crucial to cycling and availability of nitrogen and other plant nutrients.

Maintaining high organic matter stores carbon in soils (organic matter is mostly carbon) that otherwise would be in the air as the greenhouse gas, carbon dioxide. In this way, soil health is a strategy for slowing the pace of climate change, while also adapting to some of the uncertainties of a changing climate, such as increased risk of drought or flooding.

Interest in soil health has expanded

greatly in recent years, and today many farmers, government and nongovernment organizations, and researchers are evaluating winter cover crops, cropping system strategies, reducing tillage, and composts, biochar, and other amendments for improving soil health.

The NYS Department of Agriculture & Markets has funded a new Soil Health Initiative that is providing funding for new field research and outreach, and also is aimed at building on the mo-

continued on page 6

mentum of the Soil Health Working Group, Cornell's Soil Health program, and similar efforts across the state. We are interested in expanding the list of stakeholders involved, including more fruit and vegetable growers, and looking for opportunities for collaboration and synergy with various government agencies, non-government organizations, and agriculture service providers involved with supporting good soil health practices.

One specific objective of the project is to develop a vision for the future in a "Soil Health Roadmap" document for policy-makers as well as the agriculture industry, with input from this wide range of stakeholders, and also hold a "Soil Health Summit" in Albany by end of year 1 (tentatively May 2018).

We are providing support for trainings and educational efforts, developing new resources, and have established a new website to facilitate communication and access to information and educational materials (<u>https://</u> <u>blogs.cornell.edu/soilhealthinitiative/</u>).

We are currently conducting a farmer survey on benefits, costs, and constraints of adopting soil health practices such as winter cover cropping, re-

Farm Donations to Food Pantries Credit

New York State Department of Taxation and Finance

Beginning January 1, 2018, New York State farmers may claim a new refundable tax credit for qualified food donations made to a food pantry, food bank, or other emergency food program. The credit is equal to 25 percent of the fair market value of qualified donations, with a maximum benefit of \$5,000 per year. Please refer to the following FAQs to see if you qualify for this tax benefit.

Q: Who is eligible for the credit?

A: The credit is available to farmers whose income is primarily attributed to farming activity in the State and are subject to the corporate franchise tax or personal income tax. A farmer who is a partner in a partnership or a shareholder of a New York S corporation may also qualify.

Q: What is a qualifying food donation?

A: Eligible donations include fresh fruits, vegetables, eggs, and meat products grown or produced in New York State. Donations of apparently wholesome food that meets all quality and labeling standards, even though the food may not be readily marketable due to appearance, age, freshness, grade, size, surplus, or other conditions, will qualify.

Q: Who is eligible to receive food donations?

A: To qualify for the credit, eligible food donations must be made to food banks, food pantries, or other emergency food programs operating in New York State that qualify for tax exempt status under IRC § 501(c)(3).

Q: How much is the credit worth? A: The tax credit is a refundable credit equal to 25% of the fair market value of qualified donations. Taxpayers are limited to maximum credit of \$5,000 per year.

Example: An eligible farmer makes qualified donations during tax year 2018 that have a fair market value of \$12,000. The eligible farmer would be allowed a credit of \$3,000 calculated as follows:

\$12,000 (fair market value of qualified donations) X 25% = \$3,000.

The fair market value of qualified donations is generally the market price of the donated crop, determined in accordance with current federal standards. The fair market value using these standards is determined:

- without regard to internal standards, lack of market or similar circumstances, or by reason of being produced by the taxpayer exclusively for the purposes of transferring the food to an eligible food pantry; and
- by taking into account the price at which the same or substantially the same food items (as to both type and quality) are sold by the taxpayer at the time of the contribution or in the recent past.

Q: What is needed to claim the credit?

A: In order to claim the credit, the taxpayer must receive and keep a receipt (letter or other written communication) from the eligible food pantry showing the following:

- the name of the eligible food pantry,
- the EIN of the eligible food pantry,
- the date and location of the qualified donation, and

ducing tillage, and use of composts, manures, biochars, and other soil amendments. Our survey is associated with a more comprehensive study on economic (and environmental) benefits of improving soil health and strategies for overcoming constraints.

Please join us! Stay tuned to our activities and other soil health events at our website. Watch for new resources, short informative videos, and upcoming webinars. Please fill out the soil health survey available as hard copy and also available as a url link at our website: <u>https://blogs.cornell.edu/</u> soilhealthinitiative/farmer-survey/

• a reasonably detailed description of the qualified donation.

Q: When does the tax credit program start?

A: The credit is effective for taxable years beginning on or after January 1, 2018. Donations made during the tax year may be claimed on the return for that tax year.

Example: A qualified donation is made on February 1, 2018. The farmer will claim a credit against that donation when he files his 2018 tax return.

Donations made prior to January 1, 2018 will not be eligible for the credit.

Q: Can a farm deliver donations through a third party, such as a not-for-profit food aggregator or an agricultural cooperative? A: Donations made to a food pantry through a third-party IRC § 501(c)(3) entity may qualify for the credit so long as the third-party nonprofit can provide the eligible farmer with a reasonable accounting of the donation and a receipt from the food pantry.

Food donated by a third-party for which the eligible farmer has already received compensation will not qualify.

Q: Can farmers donating dairy products receive the tax credit?

A: If a dairy farm processes, bottles and delivers its own milk, this will qualify as an eligible donation as long as the farmer making the donation meets the definition of an eligible farmer.

UPCOMING EVENTS

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

2018 Pesticide Training and Recertification Series

Mondays, February 5, 12, 19, 26, 2018 | 7:00 PM - 9:30 PM Exam: Monday, March 5, 2018 | 6:30 PM - 11:00 PM CCE Ontario County, 480 N Main St, Canandaigua, NY 14424

Anyone interested in obtaining a pesticide certification and meets the DEC experience / education requirements **OR** current applicators seeking pesticide recertification credits should attend. 2.5 recertification core credits will be available for each class.

Class 1 - Pesticide Laws & Regulations:

Certification Regulations Pesticide registration FIFRA, OSHA Hazard Communications Standard Safety Transportation Act Sara Title III Endangered Species Act Worker Protection Standards NYS Reporting Law Pesticide Record Keeping

Class 2 - Pesticides & the Environment

Toxicity of pesticides, pesticide residue & tolerance Environmental considerations Pesticides and ground water Pesticides and wildlife Types & formulations of pesticides

Class 3 - Pesticide Safety

Personal & environmental safety Selection & use of personal protective equipment Symptoms of pesticide poisoning Pesticide storage & disposal. Understanding the pesticide label

Class 4 - Pesticide Mixing & Equipment Calibrations Procedure for mixing and filling

Calculations for mixing pesticides Equipment calibration Types of pumps, nozzles, sprayers

COST: \$175.00 for certification which includes the training manuals and all 4 classes. Does not include the \$100.00 exam fee. Recertification is \$25.00 per class. To register, contact CCE Ontario County at 585-394-3977 x427 or x436 or email <u>nea8@cornell.edu</u> or <u>rw43@cornell.edu</u> Registration form will be available on the website <u>www.cceontario.org</u>

Vegetable Fertility Considerations for Season Extension

February 8, 2018 | 6:00 PM - 8:00 PM Frank W. Bratt Agricultural Center, 3542 Turner Rd, Jamestown, NY 14701



Interested in pushing your fruits and vegetables further with season extension techniques? Mulch, low tunnels, high tunnels and greenhouses all can increase yield and harvest window, but require a different fertility approach. In this L.E.A.F session hosted by CCE Chautauqua County, we will discuss how to provide adequate nutrients to your crops without overloading the soil. By taking a balanced approach we can assure long-term, high yielding soils. Nitrogen, phosphorus, potassium and much more! Judson Reid, Cornell Vegetable Program Specialist, will be the leader of this interactive workshop. Pre-registration required. More information available at http://chautauqua.cce.cornell.edu/agriculture/2017-2018-l-e-a-f-workshop-series

2018 Genesee Valley Produce Auction Growers Meeting

February 12, 2018 | 9:30 AM - 2:30 PM Centerville Fire Hall, 8936 County Rt 3, Centerville, NY 14065



This year's program will included information on growing vegetables and plants. Hear disease and pest management in vegetables, soil nutrient management, grading and packing information, and experience shared by fellow growers. A panel from Finger Lakes Produce Auction and a buyers panel will be featured. <u>See the agenda</u> at cvp.cce.cornell.edu or contact Lynn Bliven at 585-268-7644 x18. There is no charge for the program but donations are appreciated to help defray the cost of the hall and speaker travel.

2018 Chautauqua Produce Auction Growers Meeting February 13, 2018 | 9:45 AM - 2:00 PM Dutch Village, 8729 East Main St, Clymer, NY 14724



This course will educate growers on disease and pest management, food safety regulations and soil health for vegetables. <u>See the agenda</u> at cvp.cce.cornell.edu. Register by calling 716-664-9502 x209 and sending payment (\$20 per person, payable to CCE) to: Cornell Cooperative Extension, Attn: Growers Meeting, 3542 Turner Road, Jamestown, NY 14701. If you plan to pay at the door, remember to call and register so we have an accurate count for lunch.

UPCOMING EVENTS

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

Greater WNY Vegetable Farming Collaborative Teach-In

February 15, 2018 | 10:00 AM - 3:00 PM NYS Ag Experiment Station, Jordan Hall 2nd floor lounge, 630 W North St, Geneva, NY 14456

To launch this inaugural Teach-In program (discussion group), we will be discussing necessary equipment and how to come up with a plan for solving our seasonal labor issues.

Equipment

- What are the most useful and necessary pieces of equipment to get started with based on scale?
- What are the priorities for acquiring equipment based on the experiences of the group?
- Tractors, cultivators, wash lines, oh my...
- Sharing equipment possibilities
- Using tarps the good, the bad, and the ugly

• Other equipment/tools

Labor

- What type of jobs needed?
- Full-time, part-time
- Salary rates
- Where to look?
- Sharing workers among farms to increase hours to full time for the workers while meeting farmer needs

Attendees are welcome to bring up other topics, as well. Subject contributors: Bryan Brown, NYS IPM Weed Specialist; Chaw Chang, Stick and Stone Farm; Ryan Maher and Brian Caldwell, Cornell; and yourselves!

Cost: FREE to attend but please bring a dish to contribute to the pot-luck luncheon. For more information, contact Robert Hadad <u>rgh26@cornell.edu</u> 595-739-4065

New York State Potato School

February 21, 2018 | 9:00 AM - 4:15 PM Del Lago Resort & Casino, 1133 State Route 414, Waterloo, NY 13165

Robert E. Thornton of Washington State University will be the keynote speaker as an expert on Potato Bruising. Other speakers include John Jemison from the University of Maine speaking about soil health, Yi Wang from University of Wisconsin-Madison presenting information on managing wound healing and its impact on potato quality, and of course our local experts, Brian Nault, Frank Hey, John Wallace, and Sandra Menasha all from Cornell University and Cornell Cooperative Extension presenting information on control of Colorado Potato Beetle and other insect pests of potatoes, control of root lesion nematodes and soilborne pathogens of potato, macro- and micronutrient management, and weed control.

Pre-register by February 16 for the best price: \$50/person for Empire State Potato Growers (ESPG) members; \$75/person non-members. Pricing after February 16 is \$65/\$80. Registration fee includes educational program, continental breakfast, refreshments, lunch, and hospitality event. Register online at <u>https://adstrategies.wufoo.com/forms/empire-state-potato-growers-potato-school/</u>. For more information, contact Melanie Wickham at mwickham@nypotatoes.org or 585-526-5356.

2018 NYS Dry Bean Meeting

March 6, 2018 | 9:30 AM - 2:30 PM First United Methodist Church, 8221 Lewiston Rd (Rte 63), Batavia, NY 14020

Join us for research and production updates on dry bean varieties and bean breeding, weed management, Western bean cutworm, and white mold disease. A market analysis will be provided as well. We will review research priorities and gather suggestions for future educational programs. See the agenda at cvp.cce.cornell.edu. DEC recertification credits and CCA credits will be available.

Cost: \$25 for Cornell Vegetable Program enrollees; \$35 for non-enrollees. **Register online at <u>https://cvp.cce.cornell.edu/event.php?id=895</u>** A lunch featuring tasty dry beans will be provided if you pre-register by March 1. If you prefer to mail in your registration and check, a registration form will be mailed to CVP enrollees that marked an interest in dry beans in mid-February. Watch for it in your mailbox!

Sponsorship opportunities are available: \$100 Meeting Sponsor includes recognition, company rep registration, table space, and 2 minutes to speak during the event. Pay for your sponsorship online or email Angela Parr at aep63@cornell.edu to be invoiced.

For more info about this event or in case of bad weather, contact Julie Kikkert at 585-394-3977 x404 or jrk2@cornell.edu

Season Extension with High Tunnels: Know Before You Grow March 6 - April 10, 2018 | Every Tuesday webinars from 6:30-8:00 PM



Offered as an online course through the Cornell Small Farms Program, this course (BF220) is meant for farmers who already have some experience successfully growing vegetables outdoors and are exploring high tunnels as a way to expand the season or improve plant quality. Information will be focused on using high tunnels in colder climates (US Climate Zones 4-6), but can be adapted to other growing regions. **Cost and Registration:** Fee for this course is \$250. Sign up a month or more in advance of the start date and receive \$25 off. Sign up for three or more courses and received \$50 off your total. <u>Register online through the Cornell Small Farms Program</u>.





UPCOMING EVENTS

view all Cornell Vegetable Program upcoming events at

Pre-Season Onion Weed Management Meetings (Wayne Co, Oswego Co, and Elba Muck)



March 13, 2018 | 10:00 AM - 12:00 Noon Johnson Potato Farms - Stone Farm, 5919 Austin Rd, Newark, NY

March 16, 2018 | 10:00 AM - 12:00 Noon Canale's Restaurant, 156 W Utica St, Oswego, NY

March 20, 2018 | 10:00 AM - 12:00 Noon CY Farms, 6465 Transit Rd, Elba, NY

CVP Onion Specialist Christy Hoepting will provide an informal review of the 2017 Cornell onion herbicide research trials followed by a casual roundtable discussion of weed control in 2018.

10:00 am to 10:45 am

Review of 2017 Cornell onion herbicide research trial results:

- · Pre- and post-emergent control of ragweed, smartweed and marsh vellowcress
- · Improved pre-emergence control of yellow nutsedge
- Comparison of Prowl EC to Prowl H2O
- Incorporating Chateau into pre-emergent onion herbicide program

10:45 am to 12:00 noon

Roundtable discussion of:

- Weed control in 2018; successes, failures and needs improvement
- Improved control of problem weeds
- Threshold for crop injury
- Identify research questions/treatments for 2018 herbicide trials

Contact Christy Hoepting with questions at 585-798-4265 x38.

2018 Special Permit Training

April 4, 2018 | English 8:30 AM registration, 9:00 AM - 12:30 PM; Spanish 1:00 PM registration, 1:30 PM - 5:00 PM CCE Wayne Co, 1581 Route 88N, Newark, NY 14513

April 5, 2018 | English and Spanish 8:00 AM registration, 8:30 AM - 12:00 Noon Orleans Co. Cooperative Extension Fairgrounds Trolley Bldg, 12690 Rt 31, Albion, NY 14411

Same program format as in 2016 and 2017. Special Permits (SP) will only be issued for 11 specific pesticide labels and SP trainees will have to pass a test. This will relieve the certified pesticide applicator from "onsite within voice contact" supervision of non-certified pesticide applicators when they are handling federally-restricted-use pesticides for which they hold a Special Permit. The labels that will be covered include Lorsban Advanced, Endigo ZC, Warrior II with Zeon Technology, Agri-Mek SC, Beseige, Gramoxone SL 2.0, Leverage 360, Danitol 2.4EC, Mustang Maxx, Asana XL, and Lannate LV.

New York DEC notes that the Special Permit process is intended for farm workers with English language skills that are not adequate to pass the **DEC private applicators exam.** All others are encouraged to apply for their private applicators license via taking the certification exam.

Workers requiring general pesticide training/Agricultural Worker Protection Standard Handler training who do not need special permits are welcome to take the class; they will not be tested and will receive a course participation certificate.

\$20 per DEC Special Permit / General Pesticide Training. Preregistration required by March 30, 2018. Call Kim Hazel, 585-798-4265 x26 to register. Download a registration form at cvp.cce.cornell.edu

/EGEdge sponsors



American Takii, Inc. 831-443-4901 | www.takii.com Creating Tomorrow Today



Vegetable Seeds for Professionals 315-789-4155 www.bejoseeds.com



Crop Production Services 585-589-6330 | 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



Pest control products for fruit, vegetable and field crops. Dave Pieczarka, 315-447-0560



Call 800-544-7938 for sales or visit www.harrisseeds.com EST SEEDS 1879 A Grower Friendly Company



Medina, NY...(585) 798-6215 Geneva, NY...(315) 789-4450 Genoa, NY...(315) 497-2713



SEEDWAY Vegetable Seeds 800-952-7333 | www.seedway.com We are focused on quality seed and service!



Blake Myers, 585-303-3252 **ED CO.** vegetableseeds@aol.com www.siegers.com



Our Vision ... "To be the first choice for growers in all of our marketplaces." www.StokeSeeds.com

Cornell Cooperative Extension Cornell Vegetable Program

480 North Main Street Canandaigua, NY 14424



VEGEdge

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, potatoes 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, carrots) and dry beans

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

For more information about our program, email cce-cvp@cornell.edu or visit us at CVP.CCE.CORNELL.EDU

PROGRAM ASSISTANTS

Amy Celentano | ac2642@cornell.edu

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

Audrey Klein | ak2459@cornell.edu

Cordelia Machanoff | ch776@cornell.edu

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

ADMINISTRATION

Peter Landre | ptl2@cornell.edu
Steve Reiners | sr43@cornell.edu

Cornell Cooperative Extension Cornell Vegetable Program

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.