Cornell Cooperative Extension | Cornell Vegetable Program

VEGEdge

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Potato Seed Treatments and In-Furrow Insecticide Applications for Colorado Potato Beetle Management and Considerations for Resistance Management

Margie Lund, CCE Cornell Vegetable Program, and Brian Nault, Cornell AgriTech

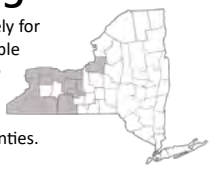
With potato planting quickly approaching, it is time to consider your seed/at-planting insecticide application options for Colorado potato beetles (CPB), and how your choices will fit into your resistance management plans. CPB is a common potato pest in NYS, with overwintering adults laying eggs on potatoes, and subsequent larvae and adults feeding on foliage. In NYS, there are generally two generations of CPB throughout the season, and can also feed on tomatoes and eggplant, as well as weed species. Adults will emerge from last-season's potato fields and make their way to new fields, so rotating potato fields as far as possible is the first step in controlling population numbers. However, it is likely chemical control will be needed as it is difficult to rotate fields far enough from one another to see sufficient control. CPB can develop resistance to many insecticides, so insecticide rotation within and across seasons is vital for long-term control of this pest.

Since their availability in 1995, neonicotinoid insecticides (IRAC group 4, e.g. Platinum, Cruiser, Admire Pro, Assail) have provided excellent control of CPB, and have been used heavily as seed treatments, in-furrow and foliar treatments to control CPB. However, neonicotinoids are starting to lose their efficacy in many areas due to resistance. Therefore, a good insecticide rotation should be used, especially in areas where beetle populations are showing signs of resistance to neonicotinoids. There are many good seed treatment and in-furrow insecticide options for CPB available for growers in

Colorado Potato Beetle larvae feeding on potato leaves. *Photo: Margie Lund, CVP*

continued on page 3

About VegEdge



VegEdge newsletter is exclusively for enrollees in the Cornell Vegetable Program, a Cornell Cooperative Extension partnership between Cornell University and CCE Associations in 14 counties.

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:
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Contents

The next issue of VegEdge will be produced on April 2, 2025.

continued from page 1

NYS (Table 1). However, all but Verimark are neonicotinoids (IRAC Group 4A). If your farm is consistently using one of the neonicotinoid products listed below and CPB control is slipping, consider using Verimark at planting or use foliar applications of insecticides to control the first generation CPB (Table 2). **Most importantly, avoid using all products that belong to IRAC Group 4A.**

Table 1. Seed Treatment and In-Furrow Insecticide Options for Colorado Potato Beetle Control in NYS

Product Name (active ingredient)	IRAC Group	Product Rate	REI	Comments
*Admire Pro Systemic Protectant (*imidacloprid*)	4A	5.7 - 8.7 fl oz/acre	12	Soil application only
*Admire Pro Systemic Protectant (*imidacloprid*)	4A	0.17 - 0.35 fl oz/cwt seed	12	
† Cruiser 5FS (*thiamethoxam*)	4A	0.11 - 0.16 oz/cwt seed	12	
† CruiserMaxx Potato (*thiamethoxam + fludioxonil*)	4A	0.19 - 0.27 oz/cwt seed	12	Fludioxonil is a fungicide that aids in control of some diseases
† Platinum 75 SG (*thiamethoxam*)	4A	1.66 - 2.67 oz/acre	12	Soil application only
*† Verimark (*cyantraniliprole*)	28	6.75 - 13.5 fl oz/acre	4	Soil application only

*Restricted-use pesticide, † not for use in Nassau and Suffolk Counties

Table 2. Foliar Insecticide Options for Colorado Potato Beetle Control in NYS

Product Name (active ingredient)	IRAC Group	Product Rate	PHI	REI	Comments
*Agri-Mek SC (*abamectin*)	6	1.75-3.5 fl oz/acre	14	12	
Assail 30SG (*acetamiprid*)	4A	1.5-4.0 fl oz/acre	7	12	Avoid using after an at-plant application of another IRAC Group 4A product
Avaunt eVo (*indoxacarb*)	22A	3.5-6 fl oz/acre	7	12	May be slow-acting in controlling larvae; weak against adults
*Baythroid XL (*beta-cyfluthrin*)	3A	1.6-2.8 fl oz/acre	0	12	Avoid use on pyrethroid-resistant populations
Blackhawk (*spinosad*)	5	1.7-3.3 oz/acre	7	4	No more than 2 max applications
*† Elevest (*chlorantraniliprole + bifenthrin*)	28 + 3A	5.6-9.6 f100l oz/ acre	21	12	
† Endigo ZC (*thiamethoxam + lambda-cyhalothrin*)	4A + 3A	2.5-4.5 fl oz/acre	14	24	Foliar application only. Systemic activity.
Entrust SC (*spinosad*)	5	3-10 fl oz/acre	7	4	Very good control of larval stages but no control of adults or eggs. No more than 2 consecutive applications. Approved for organic production.
Kryocide (*cryolite*) or OLP	8C	10-12 lb/acre	0	12	For use against small to medium-size larvae. Ineffective against adults.
*Leverage 360 (*imidacloprid + beta-cyfluthrin*)	4A + 3A	2.8 fl oz/acre	7	12	Excellent broad spectrum control
*† Minecto Pro (*abamectin + cyantraniliprole*)	28	5.5-10 fl oz/acre	14	4	
Radiant SC (*spinetoram*)	5	6-8 fl oz/acre	7	4	No more than 2 consecutive applications
*Rimon 0.83EC (*novaluron*)	15	6-12 fl oz/acre	14	12	No aerial application in NY. For use against 1st and 2nd instar larvae. Ineffective against large larvae and adults. No more than 3 max applications.
*† Sivanto HL (*flupyradifurone*)	4D	5.5-7 fl oz/acre	7	12	
*† Sivanto Prime (*flupyradifurone*)	4D	10.5-14 fl oz/acre	7	4	
*Tombstone (*cyfluthrin*)	3A	1.6-2.8 fl oz/acre	0	12	Avoid on pyrethroid-resistant populations
*† Trigard (*cryomazine*)	17	2.66 oz or 5.32 oz/ acre	17	12	For use against 1st and 2nd instar larvae. Ineffective against large larvae and adults.
*† Vantacor (*chlorantraniliprole*)	28	1.2-2.5 fl oz/acre	14	4	Do not apply by air and do not apply within 100ft of water; two applications only
*Warrior II (*lambda-cyhalothrin*)	3A	1.3-1.9 fl oz/acre	7	24	Avoid use on pyrethroid-resistant populations

*Restricted-use pesticide, † not for use in Nassau and Suffolk Counties

continued on page 4

continued from page 3

Good insecticide rotation programs are vital to combating resistance in local populations of CPB, and will be an important strategy if neonicotinoids become unavailable in NYS in the future. Tips to create a good rotation program:

1. Never rely exclusively on neonicotinoids for CPB control
2. Do not use foliar neonicotinoid products in a field that was treated with neonicotinoids at planting
3. Avoid using neonicotinoids on CPB populations late in the season just prior to adults dispersing to overwinter
4. Do not use neonicotinoids for control of leafhoppers or aphids
5. In fields that have not been rotated from potato, do not use neonicotinoids more than once every two years.

A good insecticide rotation program will help ensure that all insecticide modes of action continue to effectively control CPB populations on your farm. See examples of insecticide resistance programs you can adopt for your farm (Table 3). If neonicotinoids are not providing control of CPB on your farm, consider adopting strategies, A, C or D. If neonicotinoids are still somewhat effective, consider strategy B. **Because some products will only control CPB and not aphids or leafhoppers (e.g., Vantacor, Verimark, Radiant, Rimon and Agri-Mek, another product will be needed (e.g., pyrethroid or another product).**

Table 3. Examples of insecticide rotations for CPB control, showing options for in-furrow + foliar applications (A and B), as well as only foliar applications (C and D)

In-furrow (IF) + Foliar					
	Year 1		Year 2		
Example	Early	Late	Early	Late	Notes
A.	*† Verimark (IF)	Radiant SC	*† Verimark (IF)	*Agri-mek SC	For use where neonicotinoid control no longer effective, rotate away from neonicotinoid use for two years.
B.	*† Verimark (IF)	*Agri-mek SC	*† Platinum (IF)	Radiant SC	For use where neonicotinoid control is weakening, rotate away from neonicotinoid use for one year.
Foliar Only					
	Year 1		Year 2		
Example	Early	Late	Early	Late	Notes
C.	*† Vantacor	Radiant SC	*Rimon 0.83EC	*Agri-mek SC	For use where populations are now difficult to manage with neonicotinoids and adoption of a foliar program is considered, stop using neonicotinoids.
D.	Radiant SC	*† Elevest	*Agri-mek SC	*†Sivanto HL	

*Restricted use pesticide, † Not for use in Nassau and Suffolk Counties

Planning Your Spring Herbicide Program

Elizabeth Buck, Cornell Cooperative Extension, Cornell Vegetable Program

The following are soil-applied herbicides that are commonly used in vegetable production. Most have registrations for a variety of vegetables. See the 2025 Vegetable Guidelines (available in late March) for additional crop-specific options for soil-applied herbicides and pay attention to the rotational restrictions. You can use this table to help you select the best herbicide to address your expected weed populations. Herbicide labels list many weed species as control targets. This table focuses on common weeds in NY and those species for which the herbicide yields good or excellent control in research testing. Always check the product label for crop listings, use directions, and efficacy. Labels change frequently; the label is the law.

Herbicide active ingredient	Mode of Action	Annual Grasses Controlled	Annual Broadleafs/Sedges Controlled	Species *not* controlled
Pendimethalin (ie Prowl)	3	Large crabgrass	Prostrate pigweed	Goosegrass
Trifluralin (ie Treflan)	3	Barnyardgrass	Pigweeds, common chickweed	Nightshades
S-metolachlor (ie Dual)	15	Green foxtail, volunteer oats	Yellow nutsedge, hairy galinsoga, redroot pigweed	Lambsquarters, common ragweed, mustards, velvetleaf
Dimethenamid (ie Outlook)	15	Annual grasses	Hairy galinsoga, hairy nighshade	Most annual broadleafs
EPTC (ie EPTAM)	8	Annual grasses		Annual broadleafs
Clomazone (ie Command)	13	Barnyardgrass, giant foxtail, goosegrass, large crabgrass	Velvetleaf, field bindweed (from seed), lambsquarters, hairy galinsoga, common ragweed, shepherd's-purse, ladysthumb	Hairy nightshade, pigweeds, common cocklebur
Halosulfuron (ie Sandea)	2	n/a	Yellow nutsedge, velvetleaf, common & giant ragweed, pigweeds	Lambsquarters, nightshades, annual grasses
Imazethapyr (ie Pursuit)	2	Foxtails	Nightshades, pigweeds, mustards	Common ragweed, lambsquarters, velvetleaf
Metribuzin	5	Foxtails, fall panicum	Lambsquarters, common ragweed, hairy galinsoga, pigweed, mustards, smartweed, purslane	Nightshade, barnyardgrass, crabgrass
Napropamide (ie Devrinol)	15	Fall panicum, crabgrass, barnyardgrass, foxtails	Pigweed, purslane	Common ragweed, nightshades, velvetleaf, mustards, smartweed

Is Your Sprayer Ready to Deliver Maximum Performance?

Erdal Ozkan, Professor Extension State Specialist, The Ohio State University; reprinted in OSU Specialty Crops Newsletter, 2/25/2025; edited by R. Hadad, CCE Cornell Vegetable Program

Calibrate Your Sprayer

A sprayer can only be effective, efficient, and safe if it's properly checked and calibrated before it's taken to the field, and if it's periodically checked and calibrated during the spraying season. The primary goal with calibration is to determine the actual rate of application, and then to make the necessary adjustments if there is a difference between the actual application rate and the "expected" application rate. Under some specific circumstances the expected application rate could be the rate chosen by you, the applicator. However, usually, the "expected" application rate is what is mentioned on the chemical label and sprayer operators must follow what is recommended on the label. This required rate is most often given in "gallons per acre". Your job as the applicator is to make sure your actual application rate matches the recommended rate on the label. You can find out how close your application rate to the label rate only by calibrating the sprayer. Although your goal should be to achieve a perfect match between the actual and the expected application rates, an error margin of less than 5% between the two rates is acceptable.

How to Calibrate a Sprayer

Regardless of the sprayer used, calibration requires measuring the nozzle flow rate (gal/min) and the travel speed (miles/hour), and only three things are needed: a watch or smart phone to record the time when measuring the nozzle flow rate or the travel speed, a measuring tape, and a jar graduated in ounces.

Collecting nozzle flow rate from a boom sprayer is relatively easy because spray is directed vertically towards the ground. However, when using sprayers used in orchards and vineyards have nozzles discharging spray in a wide range of directions from close to ground vertically to horizontal and upward directed toward the crop canopy. Using milk liners to connect nozzles to the hoses inserted in collection cups is a practical way to check flow rates of nozzles without getting wet.

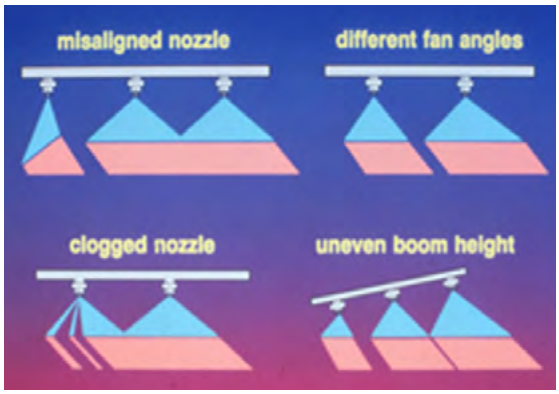

Photo and graphic provided by Erdal Ozkan, OSU

Things to do Prior to Calibration

Before calibration, run the sprayer, inspect it for leaks, and make sure all vital parts function properly and that the sprayer has a good set of nozzles. Some nozzles or screens may become clogged causing under-application. Clean all clogged nozzles and screens before calibrating the sprayer and after each application (especially when powder sulfur or copper are applied in vineyards). Observe the spray pattern before calibration, and often during spraying to make sure there is no clogging. Nozzle wear from extended use causes over-application and/or non-uniform application. Check the flow rate of each nozzle for at least 30 seconds. Check the nozzle company catalog (website) to see what the flow rate of a new nozzle at the same pressure setting is. Compare the flow rates of nozzles you measured with the flow rate of the new nozzles Replacing a nozzle is recommended if its measured flow rate is 10% greater than that of the new nozzle at the same spray pressure.

Follow Safety Rules When Calibrating Sprayers

For safety reasons, calibration should be done using water in the sprayer tank. A mixture containing pesticides may have a slightly higher density or viscosity than water, which may slightly reduce the flow rates of nozzles. However, usually, the difference in flow rates between water alone and a mixture containing pesticides is not significant unless a high volume of high-dense or viscous adjuvants is mixed in the spray mixture. Conversions for spray solutions with different densities are provided by the nozzle manufacturers in their catalogs or websites. Even when calibrating the sprayer using water, always wear the personal protective equipment used for spraying pesticides, such as gloves and goggles.

Other Adjustments Needed for Effective Spraying

Knowing that the actual spray application rate (gal/acre) determined through calibration matches the expected application rate (what is on the chemical label) is the first step to achieve maximum accuracy from a sprayer. However, this is only one aspect of achieving effective pest control. How much of the spray reaches the target canopy, and how uniformly it is distributed within the target canopy are two other factors that play important roles in achieving maximum protection against pests.

continued on page 6

continued from page 5

The goal in spraying pesticides should be landing as many droplets on the target and as uniformly throughout the canopy as possible. This is especially important when spraying fungicides and insecticides. With boom sprayers used for spraying on vegetables, there are several reasons why the deposition on the target is not uniform across the boom. Some major reasons include having different size and types of nozzles mixed on the boom, clogged nozzles and uneven boom height over the target sprayed. Please look at the Ohio State University Extension publication FABE-520 for an easy method to calibrate a boom-type sprayer: http://ohioline.osu.edu/factsheet/fabe-520.

If you are calibrating a high pressure airblast sprayer used to apply pesticides on trees in fruit orchards, please look at the Ohio State University Extension publication FABE-537: http://ohioline.osu.edu/factsheet/fabe-537.

For other factsheets on sprayers, check the website for OSUE publications: https://ohioline.osu.edu. Once you are on this site, do a search using my last name ("ozkan") as the key word for your search. You will see a listing of publications on sprayer calibration, selecting the right size of nozzle for the intended application rate, how to achieve efficient penetration and uniform deposition of droplets inside the canopy, and how to assess the quality of spray deposition and coverage on the target. ●

New Insecticide for Maggot Control in Transplanted Onion: Verimark Labeled as Tray Drench in Plug Transplants

Leonardo Salgado, Cornell Entomology, Ethan Grundberg, CCE ENY Commerical Horticulture Program, Christy Hoepting, CCE Cornell Vegetable Program, and Brian Nault, Cornell Entomology

As the season quickly approaches, now is the time to think about how to protect onion transplants from maggots. Onion maggot and seedcorn maggot are significant pests of onions, and if not controlled, they can reduce plant stands (Fig. 1). Since Lorsban (chlorpyrifos, IRAC Group 1B) was banned for use in onions across the USA, no effective insecticide options have been available to protect transplanted onions from maggots. This changed on March 4, 2025, when FMC expanded the **Verimark label** (Link to FIFRA 2(ee) label: https://bit.ly/Verimark-2ee-Onions) to suppress onion maggot and seedcorn maggot in transplanted onions in New York. This FIFRA 2(ee) label indicates that Verimark must be applied at a rate of **13.5 fl oz per acre** (0.176 lb a.i. per acre) as a **transplant tray drench**, and plants must be transplanted in the field within 72 hours after treatment.

Figure 1. (A) maggots actively feeding on an onion seedling and (B) comparison of onion plants not treated with insecticides (left side of photo) and plants protected from maggots using insecticides (right side of photo). *Photo: L.D. Salgado and B.A. Nault, Cornell*

Verimark Effective in Cornell Trials as a Transplant Tray Drench

Over the past two years (2023–2024) in Oswego and Orange counties, we evaluated Verimark (cyantraniliprole, IRAC Group 28) and Radiant SC (spinetoram, IRAC Group 5; not registered as an at-plant treatment) as transplant tray drenches for maggot control. In both locations, there were more plants infested with onion maggot than seedcorn maggot. Verimark 13.5 fl oz/A and Radiant SC 10 fl oz/A were applied to plug trays with a CO_2 backpack sprayer 24 hours before transplanting (see details below). In the three trials, Verimark reduced the percentage of onion plants killed by maggots by 45 to 81%, which was numerically better than Radiant SC, which reduced the percentage of plants killed by 32 to 77% (Fig. 2A-C). Efficacy of Verimark increased as maggot pressure decreased (25–64% stand loss due to maggots in the untreated = moderate to high). In situations where maggot pressure is lower, we expect control to be even better.

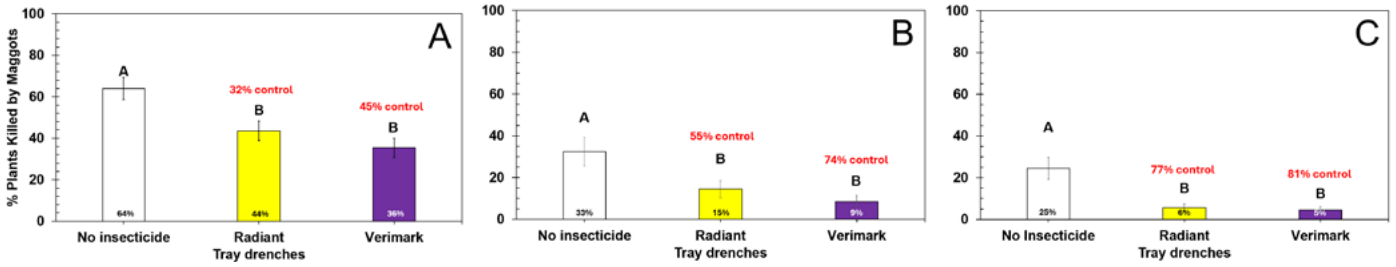

Figure 2. Evaluation of insecticide tray drenches for maggot control in three commercial onion fields in (A) Oswego Co. in 2023, and Orange Co. in 2023 (C) and 2024 (B). Bars in the same trial followed by the same letter are not significantly different, $P > 0.05$, Tukey's HSD Test.

continued on page 7

continued from page 6

How to Apply Verimark to Transplant Trays

First, the amount of Verimark needed per onion plant must be calculated. The rate of Verimark registered on onion transplants is 13.5 fl oz (398.25 ml) per acre. Given a plant density of 184,464 onion plants per acre, this equates to **0.00216 ml of Verimark per plant**. This amount can be easily adjusted if planting density differs from this example.

Second, the amount of Verimark needed per transplant tray must be determined. For a **288-cell tray that contains 576 plants** (two plants per cell), multiply **0.00216 ml of Verimark per plant by 576 plants per tray** resulting in **1.24 ml (0.042 oz) of Verimark per tray**.

Third, the amount of solution needed to drench each tray should be determined. Allow soil in the tray to dry out, but not too much because plants should not wilt. Next, as much water as possible should be added to the tray without it leaking from the bottom of the tray. In our trials, the amount was **1 liter (0.26 gallons) of water per 288 cell tray**.

Finally, it is time to apply Verimark to each transplant tray. Before doing so, very lightly water each tray to moisten the plants and soil surface in the plugs. Based on our example above, mix **1.24 ml (0.042 oz) of Verimark in 1 liter of water** and then spray the 288 cell tray (576 plants) as evenly as possible (Fig. 3). After the application has been completed, apply a small amount of water to rinse any Verimark residue from the leaves and soil surface, directing it toward the root zone for optimal uptake (Fig. 3). Be sure to not use so much water that it runs out the bottom of the tray, or else the insecticide will also run out the bottom of the tray. This method enhances early-season insect protection while ensuring efficient product use. Note: Commercial transplant producers may also treat the plug trays, except for those in Canada where this product is not labeled for use on onions.

Figure 3. Application of Verimark as tray drench. *Photo: B. A. Nault, Cornell*

Other Benefits of Verimark for Maggot Control

In addition to Verimark (IRAC Group 28) reducing maggot damage in transplanted onions, it will also provide a benefit for managing insecticide resistance in onion maggot populations. Currently, there are no insecticides registered (including seed treatments) for maggot control in onions that belong to IRAC Group 28. Rotating insecticides belonging to different classes has been a long-standing recommendation for reducing the ability of onion maggot populations to develop resistance. Therefore, rotating fields of direct-seeded and transplanted onions could be an advantage to reduce the probability of resistance. It is never a good idea to use the same insecticide for maggot control in the same field year after year, regardless if the crop is direct-seeded or transplanted.

Only two apps of Exirel 16 fl oz/A for onion thrips when using Verimark

Verimark was already labeled for use on onion as an in-furrow spray at-planting to suppress onion thrips in New York. However, there has not been a need to suppress onion thrips soon after planting, especially for direct-seeded onions. Rather, Exirel, which has the same active ingredient as Verimark, has been an excellent product for managing onion thrips later in the season. The maximum amount of cyantraniliprole that can be applied to onion in one season is 0.4 lb a.i. per acre. Therefore, when Verimark is used as a transplant tray drench at planting (0.176 lb a.i. per acre), there is still enough a.i. left for two applications of Exirel at 16 fl oz/A (0.104 lb a.i. per acre per application) for onion thrips control.

Guidelines for the 2025 Season

Verimark should be applied at a rate of 13.5 fl oz per acre as a transplant tray drench for onion maggot and seedcorn maggot control. Onion plants must be transplanted in the field within 72 hours after treatment. ●

Upcoming Events – *See Cornell Vegetable Program events at CVP.CCE.CORNELL.EDU/EVENTS.PHP*

Growing Rhubarb Webinar

March 14, 2025 (Friday) | 12:00 noon - 1:00 PM
via Zoom

Farmers and backyard gardeners are invited to learn about the essentials of growing rhubarb. This one-hour webinar hosted by Cornell AgriTech and CCE Ontario County will provide valuable insights into soil conditions, plant selection, care, and maintenance, ensuring attendees are well-prepared for the upcoming growing season. Participants will hear from leading experts Chris Smart, Director of AgriTech, Libby Indermaure, PhD Candidate in Plant Pathology, and Robert Hadad, Cornell Vegetable Program. To register or for more information, contact Jacob at 585-394-3977 x402, jlm563@cornell.edu.

Chainsaw Safety Workshop

March 15, 2025 (Saturday) | 9:00 AM - 11:00 AM
CCE Cattaraugus, 28 Parkside Drive, Ellicottville, NY

Brought to you by CCE Cattaraugus and New York Center for Agricultural Medicine and Health (NYCAHM), this FREE class is ideal for beginner chainsaw users or as a refresher for seasoned users. People are welcome to bring their own chainsaw to learn about maintenance and upkeep for their own equipment. It is roughly 2 hours in length and the course covers basic saw maintenance, best ergonomics practices, kickback prevention, safety elements of a modern saw, and proper PPE (personal Protective equipment) use. Each participant will be able to try on different PPE and will safely start up, throttle up, and turn off a chainsaw. This class uses demonstration, discussion and hands-on activities (There is no cutting in this class or PowerPoint presentation.) Registration is strongly encouraged so we can provide sufficient space! Walk-ins are welcome. To register, call NYCAMH at 800-343-7527 or email chainsawsafety@bassett.org.

Greenhouse Grower Meeting

March 18, 2025 (Tuesday) | 1:00 PM - 3:00 PM
4541 Old State Rd, Wood Hull, NY 14898

This hands-on, in-greenhouse class will cover scouting techniques for pests and diseases, using beneficials and biological controls for aphids, pythium, and other common production issues, and fertility management.

Cost: Free! Pre-register to Susan Walker (CCE Steuben) at 607-664-2574.

2025 NYS Dry Bean Meeting and Cutting Event

March 19, 2025 (Wednesday) | 9:00 AM - 12:00 PM (meeting); 1:00 PM (cutting)
Cornell AgriTech, Jordan Hall, 630 W North St, Geneva, NY

The NYS Dry Bean Meeting will be paired with the annual Dry Bean Cutting Event again this year! The morning meeting will include market updates and presentations on the latest dry bean research in New York: dry bean variety breeding and trial updates, white mold control, Western bean cutworm management, and identifying management tactics for major pests in dry beans. 2.0 DEC and CCA credits will be available. COST: $10 per person.

This meeting is sponsored by New York Bean and Genesee Valley Bean Company. We appreciate their support!

The Dry Bean Cutting will follow the meeting and showcase the canned dry beans from the 2024 Dry Bean Variety Trial.

Meeting details and registration at CVP.CCE.CORNELL.EDU

Food Safety Updates: Pre-Harvest Agricultural Water (Subpart E) Update Webinar with Q&A

March 21, 2025 (Friday) | 12:00 noon - 1:30 PM
via Zoom

Join CCE Cornell Vegetable Program's Robert Hadad and CCE Lake Ontario Fruit Program's Craig Kahlke as they give you the critical updates on The FSMA Produce Safety Rule's (PSR) new Pre-Harvest Agricultural Water (subpart E) requirements. This section of the PSR was updated in July 2024 and there are new requirements for growers to be in compliance when they receive a FSMA inspection during this season's harvest. In this free Zoom webinar, Craig and Robert will cover the requirements and pertinent background to make sure you understand and are able to implement the new section of the rule. A summary "cheat sheet" and template will be provided. In addition, there will be ample time for Q&A both pertaining to the new rule and for any other food safety questions you may have.

Register to receive the meeting Zoom link: https://cornell.zoom.us/meeting/register/3S8fXhGfToy0FX-i53F8fA. Registration accepted in advance and the day of the meeting.2025 Pesticide Training and Recertification Series

continued on page 9

continued from page 8

Upcoming Events

Farm Food Safety Training with GAPs

April 1, 2025 (Tuesday) | 9:15 AM registration & refreshments, 9:30 AM - 3:30 PM training
Farmersville Center Community Church, 9038 Rt 98, Farmersville, NY

All produce farms want to grow safe food, right? Are your markets asking for food safety plans or audit certification? Do you want to understand produce safety issues? A way to do this is to learn and follow produce safety practices with Good Agricultural Practices (GAPs).

Join Robert Hadad, Regional Vegetable Specialist with the Cornell Vegetable Program, and Lynn Bliven, Ag & Natural Resources Issue Leader from CCE Allegany County for this full day workshop on Good Agricultural Practices (GAPs) and leave with information to start a food safety plan for YOUR farm!

Topics to be covered:

- What are Good Agricultural Practices?
- How can I implement GAPs?
- What does it mean for my farming operations?
- Information about third-party audits.
- How to get started with writing a food safety plan for your farm.

Registration fee is $20 per person, fee covers educational materials, refreshments, and lunch. Add $15 each for an additional attendee from the same farm. Pre-registration requested by Friday, March 21, 2025: contact Lynn Bliven 585-268-7644 ext. 18 or lao3@cornell.edu.

Expanding Your Horticultural or Produce Operation

April 11, 2025 (Friday) | 12:30 PM - 4:00 PM
Willing Town Hall, 1431 State Rt 19 S, Wellsville, NY 14895

Topics include blueberry production, high tunnel siting, marketing considerations, extending the raspberry, blackberry and strawberry seasons, soil testing, managing soil pH and fertility, and local farmers market opportunities.

Cost: Free! Pre-register to to Lynn Bliven (CCE Allegany) at 716-244-0290 by April 9.

Cornell Cooperative Extension
Cornell Vegetable Program

480 North Main Street
Canandaigua, NY 14424

VEGEdge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

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

Contact Us

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onions, cabbage, broccoli, garlic, pesticide management

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processing crops (table beets, carrots, peas, snap beans, sweet corn)

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potatoes, dry beans, post-harvest handling and storage

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greenhouses/high tunnels, small farming operations, fresh market vegs

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Cornell Cooperative Extension
Cornell Vegetable Program

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