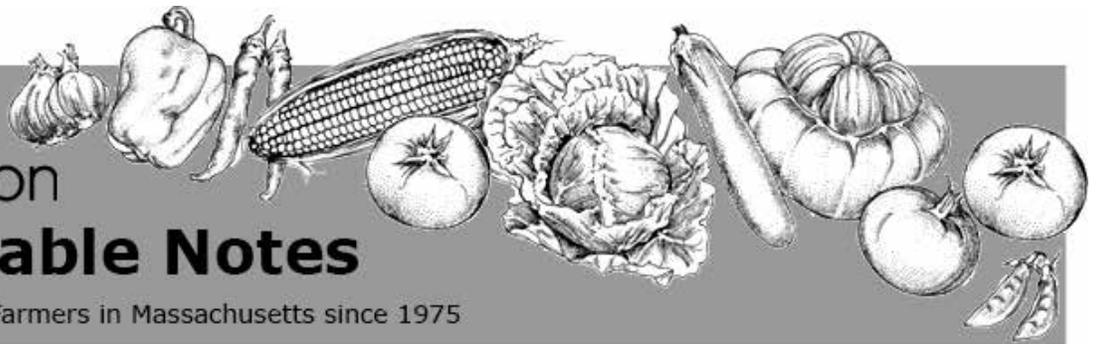




UMass
Extension

Vegetable Notes

For Vegetable Farmers in Massachusetts since 1975



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CROP CONDITIONS

Warmer weather has us feeling like summer is here this week and is giving crops a needed push. Cucurbits and field tomatoes are being planted out into fields this week, potatoes are coming up, and the earliest corn at one farm in Hampshire Co. is a foot high. Early crops like asparagus, bunched carrots and radishes, and greens like bok choy and broccoli raab are being harvested, and seasonal farmstands are opening up now. Last week's rain alleviated the drought status in the state but growers are reporting dry soils in some locations, with heavy wind drying out the soil even faster. With last year's drought fresh on everyone's mind and some areas of New England already in a moderate drought, more growers than normal are stocking up on irrigation equipment. One of our colleagues from NH reported that this, in combination with COVID-related border closures and shifts in factory production, is leading to some irrigation equipment shortages.

PEST ALERTS

Alliums

Damage from [allium leafminer](#) is visible now in overwintered onion fields in MA. Maggots hatch from eggs laid in the leaf tissue and tunnel down through the leaves to the bulb where they pupate, or tunnel out through the side of the bulb to pupate in the soil. This pest is new to New England, so please report any outbreaks to us at umassveg@umass.edu or 413-577-3976 so that we can get a better sense of where the pest currently is.

We've had several reports this season of garlic plants with yellow tips and some with stunting. One sample sent in to the UMass Diagnostic Lab was found to have [bulb mites](#) (*Rhizoglyphus* spp.), although this species seems to be a secondary issue on roots that are already damaged or dying. Another sample, with mottled-looking yellow tips, tested positive for a **potyvirus**. There is no good treatment for either of these issues other than avoiding planting infested or infected seed, or in the case of mites, avoiding planting garlic into a field that was just in brassicas, which can also be a host. Growing on black plastic with drip irrigation can also help reduce damage from bulb mites. It is not clear if either of these issues is the cause of any of the other yellowing we've seen. Some yellowing of garlic leaf tips is normal, but if you're an experienced garlic grower and have seen more than usual tip yellowing this spring, please let us know!

[Onion thrips](#) were observed, below threshold, in Franklin Co. this week and Hampshire Co. last week. Overwintered onions in Norfolk Co. were above threshold for thrips last week. Thrips feed on onion foliage, and



Farmstand shelves are beginning to fill up!
Photo: S. B. Scheufele



Allium leafminer tunneling and pupa.
Photos: E. Grundberg (L) & T. Rusinek (R)

CONTACT US:

Contact the UMass Extension Vegetable Program with your farm-related questions, any time of the year. We always do our best to respond to all inquiries. **Office phone:** (413) 577-3976 *We are currently working remotely but checking these messages daily, so please leave us a message!* **Email:** umassveg@umass.edu

Home Gardeners: Please contact the UMass GreenInfo Help Line with home gardening and homesteading questions, at greeninfo@umext.umass.edu.

high populations can decrease yield and cause leaf deformation; feeding damage also allows for entry of bacterial pathogens, which can lead to bacterial bulb rots later on. Thrips thrive in hot, dry weather, so populations may increase quickly with this week's warmer temperatures. Scout onion fields weekly for thrips, gently pulling leaves apart from each other to check within the plant for the tiny yellow or brown-black insects. An insecticide application is warranted if 1-3 thrips/leaf are found (organic growers should use the lower threshold). There are [many effective conventional products available](#), including neonicotinoids, pyrethroids, and cyantraniliprole. The most effective material for organic growers is spinosad (e.g. Entrust).

Asparagus

[Common asparagus beetle](#) adults were reported by one grower in Norfolk Co. this week. This pest overwinters in field edges and moves into crops in mid-May to feed and lay eggs on spears. The resulting larvae feed on ferns. Many growers choose not to spray for asparagus beetle during harvest because most labeled insecticides have a pre-harvest interval that prevents daily harvest. During harvest, snap or cut spears close to the soil surface daily and eliminate volunteer plants or treat them with an insecticide to use them as a trap crop. Disk old ferns lightly in the fall and clean areas around planting of debris to reduce overwintering populations. Spotted asparagus beetle is a similar pest, the larvae of which feed only on the berries produced by female asparagus plants, so eliminating female plants can eliminate spotted asparagus beetle populations.



Asparagus beetle adult and eggs.

Brassicas

[Cabbage aphids](#) were observed on brassicas recently transplanted to the field. Cabbage aphids can overwinter in high tunnel brassica crops and on infested crop residues in last year's brassica fields, spreading from there to new plantings. Scout regularly to catch and treat infestations early to prevent populations from getting out of control. Treat if >10% of the plants are infested with aphids, especially after heads or sprouts have begun to form. Effective conventional materials include Fulfill, Beleaf (both selective for aphids), Movento, Assail, and Admire Pro. Include a surfactant. Organic growers can use M-Pede or an azadirachtin product, or a combination of the two.



Purple and/or yellow foliar discoloration can be a sign of cabbage root maggot infestation in transplanted brassicas.

Damage from [cabbage root maggot](#) is now being seen, as eggs are beginning to hatch and larvae are feeding on plant roots and stems. On transplanted crops, symptoms of CRM infestation usually manifest as stunting, wilting, and purple and/or yellow discoloration before plants succumb to the damage and die. Larvae can be found feeding on roots and buried stems, if a plant is dug up. We are nearing the end of the first flight of CRM in MA but brassica crops being transplanted or direct-seeded now may still be at risk. Row cover or insect netting provides the best control, provided the crop is not planted in an area that was previously planted to brassicas and may have cabbage root maggot flies overwintering in the soil and emerging from under the cover. There are now several insecticide options that can be applied before planting (e.g. Verimark, Entrust, and Radiant. Chlorpyrifos products are also labeled but registration is currently being evaluated by the EPA for this active ingredient and could possibly be cancelled in the near future) and after planting (e.g. Entrust, Radiant).

Flea beetles are very active now, feeding on brassica foliage. Protect young transplants with row cover, kaolin clay (e.g. Surround), or an insecticide. Non-waxy brassica crops like bok choy or mustard greens, which are preferred by flea beetles, can be planted alongside less-preferred waxy brassicas and sprayed regularly to function as a trap crop. See the [brassica insect management section of the New England Vegetable Management Guide](#) for a complete list of labeled products. Spinosad (e.g. Entrust) is the most effective OMRI-listed product. Use a spreader-sticker to help sprays stick onto waxy brassica leaves.



Imported cabbageworm eggs are laid singly, on-end on the undersides of brassica leaves.

Imported cabbageworm butterflies are flying now and eggs are being laid. This is a native butterfly and is usually the first of four caterpillar species to begin feeding on brassica foliage. Time to start your regular scouting for this pest. Treat heading crops if 35% of the plants are infested with caterpillars before head formation, or treat leafy greens or heading crops after head formation if 15% are infested. Bt products are effective and selective for caterpillar pests, protecting beneficial insects in the field. Use a spreader-sticker to prevent sprays from beading up and rolling off of waxy brassica leaves.

Chenopods

Leafminer eggs and maggots were observed in Franklin Co. this week. Eggs were observed last week in southeastern MA, where temperatures have been slightly warmer than in the rest of the state so far this season. Look for the bright white eggs laid side-by-side on the underside of the leaf and if present, an insecticide spray may be warranted—preventive sprays before the eggs hatch and larvae tunnel between leaf layers are most effective. For organic growers, it is recommended to use Entrust plus a spreader-sticker to aid in penetration of the leaf. For conventional growers, group 5 (Radiant) and group 28 (Corgaen, Exirel) materials are labeled and would be very effective. See the article on leafminers in this issue for more information.

Solanaceous

Colorado potato beetle (CPB) adults were seen flying in RI this week, so prepare for the arrival of this pest in your fields as eggplants are planted out and potatoes emerge. CPB adults overwinter in and around last year's eggplant and potato fields. They are poor fliers, so crop rotation is an important tool in CPB management. Physical barriers including trench traps or thick mulch surrounding fields can also delay and reduce infestation. For more information on all of these management methods, see the [potato insect section of the New England Vegetable Management Guide](#).

Sweet Corn

European corn borer pheromone traps were set up this week, and 1 NY strain moth was captured at 1 site in Bristol Co. Moths are expected to begin emerging around 375 GDDs base 50°F; most locations in the state have accumulated 150-250 GDDs so far. See the article in this issue for more information on pheromone trapping for corn caterpillar moths.

Various

Pythium root rot has been observed widely across the region where it is taking down a variety of crops (peppers, tomatoes, cucumbers) recently transplanted to high tunnels. Pythium is a weak oomycete pathogen that is present in most soils and usually only attacks weakened or slow-growing plants, including those planted into cool, wet spring soils. Replanting once conditions have improved (warmer, sunnier weather) may be enough to help plants survive the shock of being transplanted to the tunnel environment.

Yellow nutsedge leaves are emerging now. This perennial weed can be very difficult to control since it produces nutlets that can survive in the soil for 10-15 years. Management should be aimed at preventing production of new nutlets, and wearing the sedge down over time. At this time of year, tubers are sprouting and producing young plants. Regular, shallow cultivation is the best non-chemical management strategy, along with taking measures to prevent the nutlets from spreading within a field and between fields. Consider leaving fields with nutsedge fallow and tilling at 21-day intervals. If you must plant into a field with nutsedge, it can be effective to plant a high-density crop like corn that can shade out the nutsedge. Flaming may be another effective strategy, although timing is important. Mother tubers may re-sprout if very young plants (1-3 inches tall) are flamed, but flaming 4-6 inch plants should kill the plant and prevent re-sprouting. See [Postemergence Yellow Nutsedge Control](#) for chemical control recommendations.

LEAFMINERS ON SPINACH, SWISS CHARD, AND BEETS

Spinach and beet leafminers are two closely related species of early-season pests that cause damage to early greens. As of last week, leafminer eggs were seen by scouts in both Eastern and Western Massachusetts. These pests attack crops and weeds in the plant family Chenopodiaceae, which includes chard, beets, and spinach as well as several weed species including lamb's quarters. The two fly species are very similar and have overlapping hosts. However, beet leafminers prefer laying eggs on beet leaves and spinach leafminer may also cause damage in Solanaceous crops such as peppers.

Crop damage is caused by the fly larva that burrows and feeds between the upper and lower epidermis of the leaf. Early damage is a slender, winding 'mine' or tunnel, but as the larva feeds and grows these expand and become blotches on the leaves. The fly overwinters as a pupa in the soil and emerges in late-April and May. The adult—a small, gray fly 5-7 mm long—lays eggs on the undersides of host leaves. The small (<1mm), oblong, white eggs, are laid in neat clusters on the underside of the leaves and hatch in 3-6 days. They are easy to spot if you look under the leaves. If you find tunnels, pulling the epidermis off will reveal one or several pale, white maggots. When fully grown, maggots usually drop into the soil to pupate, though they may also pupate inside the leaf. The entire life cycle is 30-40 days and there are three to four generations per season. Typically mid- to late-May, late-June and mid-August are peak activity periods. These generations overlap and can cause continuous season-long damage to succession-planted spinach, beets, and chard. After August, pupae enter the overwintering phase and won't emerge until next spring.

If the plants are infested early and populations are high, losses from this pest may be great. This may be especially true when eggs on transplants in the greenhouse go unnoticed until planting in the field, resulting in infestations in row-covered crops. Treat when eggs or first tiny tunnels are noticed—see product information below. Scout again 7-10 days after treatment to determine if follow-up treatment is needed. There are both conventional and organic products available and in both cases an adjuvant is recommended to improve efficacy. Ensure good coverage of the lower leaf surface. See the [Beet & Swiss Chard](#) and [Spinach](#) sections of the New England Vegetable Management Guide for lists of labeled products. Note that several products that are labeled for spinach and Swiss chard are not allowed for beets. Always check the label for use rates and restrictions.

Some systemic insecticides are registered and may be applied to transplants or to the soil, including the diamides (e.g. Coragen, Verimark) and neonicotinoids (e.g. Venom, Platinum)—be sure to observe the longer days to harvest restrictions. Most of the products labeled are for foliar applications. Among the organic products available, spinosad has demonstrated efficacy when applied before egg hatch. Spinosad (Entrust) and the synthetic spinetoram (Radiant) both also have some translaminar activity, particularly when combined with a penetrating adjuvant, and may be effective against larvae in leaf mines. Both of these may be used on all affected crops—spinach, Swiss chard, and beet greens.

Because leafminer feeds mostly on one crop family and also on many weeds including chickweed, lamb's quarters and nightshades, weed control and crop rotation are the first line of defense. Rotate beet, chard and spinach to new fields in the spring and during the growing season. Avoid spring plantings near tunnels where winter greens were grown. Row covers can be used to exclude flies if placed over the crop before flies are active or immediately after planting, though be sure not to cover crops in fields where susceptible crops were grown previously and where adult flies may be emerging, as they will get trapped under the row cover.

--Adapted by UMass Vegetable Program from an article by Eric Sideman, Maine Organic Farmers and Gardeners Association, and the New England Vegetable Management Guide



Top to bottom: Leafminer fly, eggs, tunneling, and larva.

HOW TO DISINFECT STAKES BEFORE REUSE

--Written by Gordon Johnson, Extension Vegetable & Fruit Specialist, University of Delaware. Originally published in Univ. of DE Cooperative Extension's [Weekly Crop Update, Volume 29, Issue 7, May 7, 2021](#)

Many growers reuse stakes used in supporting crops such as tomatoes and peppers. Bacterial and fungal diseases have been shown to survive on wooden stakes and can be a source of new infections. Plant diseases survive on plant debris and soil on the surface of stakes and can also survive on the interior of stakes due to the porous nature of the wood. Therefore, where wooden stakes are reused, it is recommended that they be disinfected.

Before disinfecting, all crop debris and soil should be removed from stakes by brushing or washing or a combination. Dirt and debris can protect pathogens and de-activate disinfectants.

Disinfecting Options

1. Soak stakes in a disinfectant solution for a minimum of 20 minutes (30 minutes preferred). Stakes should be completely submersed so solution surrounds each stake. Use weights to hold stakes under water. Options include:
 - a. Chlorine bleach (5.25% sodium hypochlorite or higher) is commonly used as a disinfectant. Use bleach at a rate of 0.5% (=1 part bleach + 9 parts water). For more concentrated bleach products, reduce rates accordingly. Use in a well-ventilated area. Soak stakes for 30 minutes. Chlorine bleach is effective; however, it is short-lived after mixing in water, with a half-life of only 2 hours, and it is inactivated by organic matter so additional bleach will need to be added or new solutions made up frequently. It is crucial to maintain the pH of the bleach solution within the 6.0 to 6.5 range, as effectiveness decreases at lower and higher pH levels.
 - b. Quarternary ammonium disinfectants like Green-Shield are more stable than bleach after diluting with water. Use at a rate of 0.5 fluid ounce of Green-Shield in 1 gallon water.
 - c. Hydrogen dioxide, hydrogen peroxide and peroxyacetic acid products such as OxiDate or SaniDate can also be used to disinfect stakes (some are organic certified). Check the labeled rate for the formulation you choose.
2. Apply heat to stakes to kill pathogens present. This can be done with a commercial kiln, seed dryer, or pasteurizer. Heat should reach a minimum of 140°F for at least 30 minutes. Pathogens are eliminated from wooden stakes with exposure to $\geq 220^{\circ}\text{F}$ for ≥ 15 minutes.



Stakes soaking in a disinfectant solution.
Photo: UConn



A steam pasteurizer that is used for soils can also be used to disinfect stakes. Photo: McGill University

PHEROMONE TRAPPING FOR SWEET CORN CATERPILLAR PESTS

Sweet corn is coming up around the region, with the earliest corn nearing 1 foot tall by now. One of the biggest challenges in sweet corn production is caterpillar damage and the presence of caterpillars in ears. There are 3 major caterpillar pests of sweet corn in New England – European corn borer, corn earworm, and fall armyworm. The earliest of these to show up in the Northeast, ECB, has not yet emerged, but usually does by mid-to-late July, all three can be present in a corn field at once. The best tactic for managing the caterpillar pests of sweet corn involves trapping using pheromone lures and scouting to determine the optimal times to spray your crop.



ECB larva and adults. Photos: Clemson Univ., USDA Cooperative Extension, Bugwood.org

A brief overview of the 3 major corn caterpillar pests:

European corn borer (ECB) is the first corn caterpillar pest to show up in sweet corn, as they overwinter in the Northeast. They emerge in May (at 375 GDD base 50°F. Most of the state is at 100-200 GDDs now). ECB eggs are laid on undersides of leaves and caterpillars bore into the corn tassel, stalk, directly into the ear, or enter through the silk channel. There are 2 generations of caterpillars per year. There are 2 strains of ECB – ECB-NY and ECB-IA – which are trapped using lures specific to each strain.



CEW larvae and adults. Photos: Richard Clark II (L) and E. Burkness, Bugwood.org (R)

Corn earworm (CEW) has not historically overwintered in the Northeast, although early arrivals hint that there may be pockets of overwintering CEW in the region. They largely blow in on storms coming from the South or from western NY, where they overwinter, arriving in mid-July. Eggs are laid in fresh silks and caterpillars enter the ear through the silk channel. There are 2 generations of CEW per year.



Fall armyworm (FAW) is also blown northward on storms, usually arriving in the Northeast in mid-July. Eggs are laid preferentially in whorl-stage corn, and caterpillars create large, ragged holes in the leaves and drop big clumps of frass.

FAW larva and adult. Photos: F. Peairs, Colorado State Univ. (L) and C. D. Barrentine (R), Bugwood.org

See our [Identifying Caterpillars in Sweet Corn](#) article for more information on each of these pests.

What is pheromone trapping?

Pheromones are volatile chemicals used by organisms to communicate with one another. Pheromones from one species can usually only be detected by that species. There are many different types of pheromones that insects use, but the most common type is the sex pheromone. Usually, females will emit a tiny amount of a chemical that attracts the male to them and increases the likelihood of mating. These sex pheromones are volatile, meaning they easily evaporate into gaseous form at daytime summer air temperatures, so they are carried on air currents and intercepted by receptors on the males’

Table 1. Trapping information for various pests				
Pest	Trap # and type	Trap setup	Trapping Dates	Lure replacement interval
ECB	2 white heliothis traps (1 for NY, 1 for IA)	Place traps at least 50 ft apart, in weedy border of field. Opening should be level with top of weeds.	May 15 (even if corn isn’t up yet) – September 15	4 weeks
CEW	2 white heliothis traps	Trap in silking corn. Move one trap into a block with fresh silk each week.	July 15, or as soon as you have silking corn – September 15	2 weeks
FAW	1 yellow & white bucket trap	Hang trap at plant height on metal stake. Place at edge of field in whorl-stage corn. Place lure in cage and VaporTape in bucket.	July 15 -September 15	4 weeks. Vaportape will last the entire season.
SVB	1 white heliothis trap	Place trap in-row with squash. Opening should be directly above the plant canopy.	June 1 – October 1	4 weeks

antennae. The males then flies upwind to find the source of the pheromone, a prospective mate.

The chemical compositions of pheromones for a number of pest species have been identified and can be synthesized in the laboratory. These synthetic pheromones can be used in conjunction with traps to catch male insects. Extension networks throughout the Northeast use pheromone-baited traps to monitor ECB, CEW, and FAW, as well as squash vine borer, a pest of cucurbits. Traps are set up in active sweet corn fields, and are checked weekly for moths. The pheromone lures are changed regularly.

For all three corn caterpillar pests, pheromone trap captures tell us when each pest has emerged or arrived in that field. For ECB and FAW, the trap captures tell us when to begin scouting a corn crop for eggs and caterpillars, and the decision of whether or not to spray is made from scouting results. For more information on scouting for corn caterpillar pests, see our [Managing Sweet Corn Pests Through Scouting & Pheromone Trapping](#) article and the [UMass Sweetcorn Insect Management Field Scouting Guide](#). We publish trap counts from sites across the state weekly in the Pest Alerts section of Veg Notes, so if you aren't trapping on your farm, you can use trap counts from the location nearest to you to tell you when to begin scouting your corn. Once CEW arrives in the region, spray schedules are usually determined by CEW trap counts.

There are two types of traps commonly used for corn pest pheromone trapping:

Scentry Heliiothis net traps can be used to monitor European corn borer, corn earworm, and squash vine borer. (*Heliiothis* is a genus of moths that CEW used to belong to, although it has now been reclassified as part of the genus *Helicoverpa*). Heliiothis traps are tied to a pole, with the bottom of the trap drawn wide. The pheromone lure is clipped to a string at the bottom mouth of the trap. Moths are attracted to the lure then fly up into the top portion of the trap, a behavior which would help them find their prospective mate in the field, and are trapped.



Yellow and white bucket trap for FAW (above) and a heliiothis trap for ECB, CEW, and SVB (right). Photos: R. Meagher, USDA-ARS and UMass Vegetable Program



Universal Moth Traps, or bucket traps are used for monitoring fall armyworm, among many other insects. The pheromone lures are placed in a compartment beneath the trap lid, and VaporTape (a small PVC strip containing the insecticide dichlorvos) is placed in the bucket. Don't forget to use gloves with the VaporTape! Bucket traps come in green or yellow and white – yellow and white traps are used for fall armyworm.

To get the most from your pheromone traps, they must be used properly:

- Place the traps and the pheromones out before you would normally expect the adult insect to be active. That way you can be sure to catch the first adult flight and get an early warning that adults are present in your field, laying eggs that will soon hatch into larvae that cause crop damage. *See table 1. for information about when you should set up traps for different pests.*
- Keep lures frozen or at least refrigerated until ready for use. If you keep them on the dashboard of your truck, they won't work well when you place them in the trap.
- When handling pheromone lures or vaportape, do not touch them with your hands. Use a pair of forceps or wear latex gloves. This is especially important when you are using pheromones for more than one pest. Contamination of a lure with another pheromone will likely reduce the effectiveness. VaporTape is insecticidal tape and shouldn't be touched with bare skin.
- Make a schedule of when to change lures. *See table 1. for information about how often to replace lures for different pests.*
- Check traps weekly, on the same day every week.

Here are some, but certainly not all, suppliers of pheromone trapping materials. Different brands of lures are available for each pest – use the same brand over the course of a season to get consistent trap counts.

- [Alpha Scents, Inc.](#) 503-342-8611
- [Gempler's](#) 800-382-8473
- [Great Lakes IPM](#) 517-268-5693
- [Insects Limited Inc.](#) 317-896-9300
- [Pacific Biocontrol Corporation](#) 800-999-8805
- [Scentry Biologicals Inc.](#) 800-735-5323
- [Trece Incorporated](#) 866-785-1313

For management recommendations, see the [Corn](#) section of the New England Vegetable Management Guide or this article on [Corn Earworm Management](#).

--UMass Vegetable Program

NEWS

CORN EARWORM MANAGEMENT IN SWEET CORN NEEDS ASSESSMENT SURVEY

Represent New England pest management needs by filling out this survey: https://ume.qualtrics.com/jfe/form/SV_9vRh1xHnDp4KEaa

Dr. Kelly Hamby, Associate Professor/Extension Specialist with the Department of Entomology at University of Maryland, is leading a team of researchers who have developed a survey to prioritize research and extension efforts for improving corn earworm management in sweet corn throughout the Northeast. We appreciate your participation in this survey and will use results to develop a grant proposal to try to get federal funding to address these needs.

MASSACHUSETTS COLLABORATIVE SOIL HEALTH PRODUCERS SURVEY

American Farmland Trust, MDAR, NOFA/Mass, and UMass Amherst are working together to build a network of soil health resources in the Commonwealth. The following survey will provide us with valuable data on what kinds of education, technical support, and financial support would be most helpful to producers and will include questions about your tillage, cover crops, residue management, and other practices. We also want to know what kinds of field days, case studies and grants might help you increase those practices on your farms.

Your input will directly inform the shaping of financial, educational, and technical support programs for healthy soils practices adoption for farmers in MA.

The survey should take approximately 15 minutes. Participants who complete the survey before 5/31 will be entered for a chance to win one of five \$50 gift cards.

For questions about the Massachusetts Coordinated Soil Health Program, contact newenglandsoilhealth@farmland.org or visit farmland.org/ma-soil-health-program

CORONAVIRUS FOOD ASSISTANCE PROGRAM 2 (CFAP 2) STILL ACCEPTING APPLICATIONS

Signup reopened on April 5 and no deadline has been determined yet for the second round of Coronavirus Food Assistance Program payments (CFAP 2) at the USDA Farm Service Agency (FSA). The purpose of CFAP 2 is to provide financial assistance to producers who faced market disruptions and incurred increased costs because of COVID-19.

CFAP 2 uses 2019 calendar year sales of eligible vegetable and fruit crops as the basis for payments. Crops purchased for resale are ineligible for CFAP 2. Value-added or processed crops (such as apple cider) are eligible but applicants will have to determine the value of the commodity prior to processing and use that figure rather than the sales of the value-added or processed commodity. Eligible crops sold through CSAs may be eligible provided they meet the FSA requirements for eligible CSAs.

More detailed information can be found at: <https://www.farmers.gov/cfap>

Producers are encouraged to contact the [FSA Office](#) that serves their farming operation with questions they have along

with procedures to file an application and related paperwork. Sales records are not required at the time of signup but producers will have to provide evidence of total sales if the application is selected for a later spot-check.

Bottom Line: If you grew and marketed an eligible crop, you likely are eligible for a CFAP 2 payment!

CITY OF BOSTON FOOD ACCESS RECOVERY INITIATIVE

The Boston Office of Food Access (OFA) has announced the availability of grants to support businesses to provide consumers at small farmers markets a wider variety of products.

The OFA works to improve the accessibility and affordability of healthy food in Boston. This year, OFA is focusing on supporting the recovery of Boston residents and small business by ensuring that they have the resources they want and need to thrive.

Grant opportunities are available to vendors/businesses who would like to join small farmers markets by bringing a variety of produce and products across the City's neighborhoods. Funding is only available to vendors offering fruits & vegetables, dairy, meats, fish, eggs, and baked goods. Grant funding can be used to pay for personnel, travel expenses, marketing costs, and market fees. The purpose of the funding is to connect vendors with Farmers Markets to promote an equitable economic recovery.

Chosen vendors/businesses will be issued up to \$500 grant depending on participation in small Farmer Markets. The application **deadline is May 25, 2021**.

Details and application [here](#).

UCONN SURVEY ABOUT TESTING FOR PLANT PATHOGENS IN IRRIGATION WATER

The Greenhouse Research & Extension team at the University of Connecticut would like to hear from growers about their perceptions on testing water or nutrient solutions for plant pathogens. The results of the survey will be used to determine if there is a need to develop protocols to test for plant pathogens in water or nutrient solutions. Please share your feedback with the team at UConn by completing this two-minute survey. Your support is appreciated.

Link to the survey: https://uconn.co1.qualtrics.com/jfe/form/SV_6AmNUshjxaC0Vy6

Please contact Rosa Raudales (rosa@uconn.edu) for questions or comments.

FY2022 MASSACHUSETTS URBAN AGRICULTURE PROGRAM RFR POSTED

The Massachusetts Department of Agricultural Resources seeks proposals for funding projects that will advance commercial urban food production in the Commonwealth. MDAR's [Urban Agriculture Program](#) is seeking to award grants statewide to promote strategies addressing food insecurity, to expand and create new economic opportunities and to increase access to fresh, local produce in urban neighborhoods.

Application deadline: June 15, 2021, 4:00pm

For questions regarding the RFR, applicants can email Rose.Arruda@state.ma.us.

Applicants are responsible to refer to the COMMBUYS link for any changes or updates to the RFR.

Direct link: www.commbuys.com/bs0/external/bidDetail.sdo?bidId=BD-21-1002-1003-001-62446&parentUrl=activeBid

FY2022 MASSACHUSETTS FOOD VENTURES PROGRAM REQUEST FOR RESPONSE (RFR) POSTED

The Massachusetts Department of Agricultural Resources seeks proposals for funding projects that will advance the Massachusetts [Food Ventures Program](#), to increase access to fresh, local produce in urban and rural communities and provide economic opportunities that promote job creation enterprises or new businesses. MDAR is seeking to award grants statewide, primarily in communities of low or moderate income, to individuals or entities with experience developing and supporting food businesses.

Application deadline: June 18, 2021, 4:00pm

For questions regarding the RFR, applicants can email Rose.Arruda@state.ma.us.

Applicants are responsible to refer to the COMMBUYS link for any changes or updates to the RFR.

Direct link with instructions: www.commbuys.com/bsa/external/bidDetail.sdo?bidId=BD-21-1002-1003-001-62450&parentUrl=activeBids

EVENTS

UNH NORTH COUNTRY LUNCH AND LEARN

UNH Extension is offering this online series, open to all but focused on growing vegetables commercially. So, grab your lunch and let's learn!

This event is Free, but registration is required. Register once for all days.

- **June 2, 12-1pm:** Non-Chemical IPM
- **July 7, 12-1pm:** Onions: Over Wintering and Direct Seeded
- **August 4, 12-1pm:** Brussels Sprouts: Growing and Storage

Registration: [Click here to register for these workshops.](#)

Questions? Contact nicholas.rowley@unh.edu or heather.bryant@unh.edu or call 603-788-4961 ext. 207

MEASURING HEALTHY SOILS AND ECOLOGICAL OUTCOMES IN THE NORTHEAST

When: Friday, June 4, 13 pm

Where: online

This is the third event in the webinar series Northeast Healthy Soil Network Symposium hosted by the Gund Institute for Environment at UVM. Equitable access to reliable measurement and evaluation tools is essential to creating financing mechanisms, informing policy-making, and identifying the limits of soil health practices. Practitioners from across the region will provide insight into a diversity of approaches and perspectives on measuring healthy soils and associated outcomes on farms in the Northeast. We'll explore the gaps in our collective understandings of soil health, learn about important opportunities behind farmer-driven inquiry, and discuss new research projects to link soil health, ecosystem services, and farm viability.

Welcome and opening remarks:

- Taylor Ricketts, Director, Gund Institute for Environment, University of Vermont (UVM)

Moderator:

- Heather Darby, Extension Professor, Agronomy Specialist, Gund Fellow, UVM

Panelists:

- Briana Alfaro, Soil Carbon Field Researcher, Soul Fire Farm; Farmer & Owner, Sun Heart Farm
- Julie Davenson, Executive Director, Stonewall Farm
- Joshua Faulkner, Research Assistant Professor, Gund Affiliate, UVM Extension
- Ellen Griswold, Policy and Research Director, Maine Farmland Trust
- Sarah Bay Nawa, Research Coordinator, Pennsylvania Association of Sustainable Agriculture
- Eric Roy, Assistant Professor of Environmental Science, Gund Fellow, UVM
- Brandon Smith, Northeast Regional Team Leader, Soil Health Division, NRCS

Registration: [Click here to register for this event.](#)

WPS TRAIN-THE-TRAINER – SAVE THE DATE!

When: Wednesday, June 30, 4-7:30 pm

Where: Online

All farmworkers must receive annual training under the EPA Worker Protection Standard (WPS) if the farm where they work uses any pesticides in their crop production, **including those approved for organic production and other general use pesticides**. The agricultural worker employer is responsible for complying with all components of WPS including the training of farmworkers. This training can only be provided by an individual who has a pesticide certification license or has attended **an approved EPA WPS Train-the-Trainer workshop**, such as this one.

This training is appropriate for farmers and supervisors who want to be able to train farm employees on WPS without having to have a pesticide license. For farmers who do already have a license, 3 pesticide contact hours are available for this training.

Cost: \$60

Registration information coming soon!

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