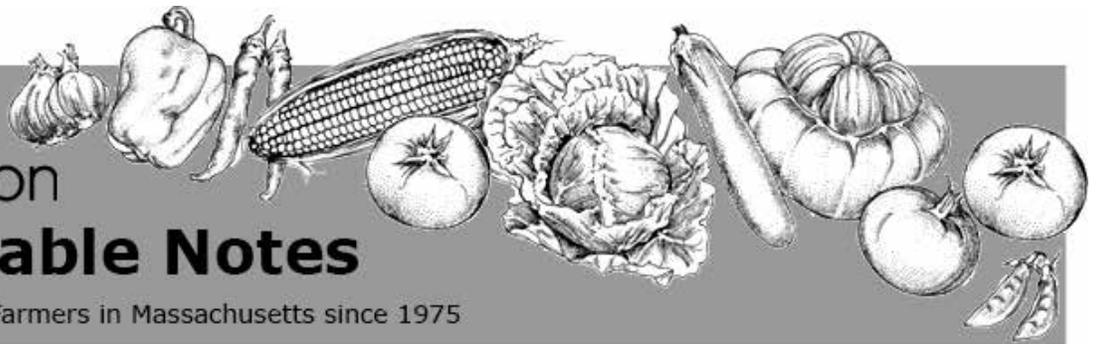




UMass  
Extension

# Vegetable Notes

For Vegetable Farmers in Massachusetts since 1975



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## **IN THIS ISSUE:**

Crop Conditions  
Veg Notes 2020 Fundraising Campaign  
Swede Midge  
Algae in Transplants  
News  
Events  
Sponsors

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2020 Sponsorship Form**

## **CROP CONDITIONS**

The season is upon us! Folks are gearing up for spring now, getting organized, pulling equipment out and tuning it up, starting the first seeds in the greenhouse, and even spreading fertilizer and prepping some early fields. Here's to a great and bountiful 2020 season!

We've been really enjoying attending educational meetings and learning alongside many of you this winter, and are looking forward to the many meetings yet to come! In addition to the Produce Safety Alliance trainings that Lisa McKeag and MDAR are offering across the state from March 18<sup>th</sup> through April 1<sup>st</sup>, we are pleased to announce a new series of Nutrient Management Workshops to be held on March 5<sup>th</sup> in Hadley, MA and March 6<sup>th</sup> in Westborough, MA. At these workshops, Becky Maden, Vegetable Nutrient Management Specialist at UVM Extension, will teach us how to make nutrient calculations, understand pH, organic matter, nitrogen, and phosphorous dynamics, and learn the latest recommendations for high tunnel fertility. Bring your recent field soil test results, field maps, amendment plans, amendment records, and get one-on-one help making nutrient plans for your farm this season and beyond! Registration info and links in the events section.

## **VEG NOTES FUNDRAISING CAMPAIGN 2020**

Thank you to those of you who have already donated to support the production of *Veg Notes* in 2020! Every year, we are amazed to see the

community support of this newsletter. We strive to give you timely and useful articles, pest alerts, and recommendations and we're glad to see that so many of you find the newsletter worth supporting! Our annual fundraising campaign is still going on and there is still time to support this publication! Your donations help us keep this newsletter free and accessible to growers and gardeners across the Northeast. Any and all donations are helpful—even a small donation of \$25 can make a difference by funding the deployment of one pest trap in our statewide sweet corn pest monitoring network. If you haven't donated yet and would like to, here is the information again.

We are also still accepting *Veg Notes* sponsors for 2020! Sponsorship affords logo placement in the newsletter and/or on the [Veg Notes website](#). Click the button below for sponsorship levels and more information.

Thank you for supporting *Vegetable Notes*!

## **SWEDE MIDGE**

Swede midge is a pest of brassica crops that is relatively new to the Northeast. It is native to Europe and southwestern Asia and was first discovered in North America in 2000 in Ontario. Since then, it has spread south into the northeastern US. It is now widespread in New York state, is established in northwestern Vermont, and has been reported in other New England states.

**Life cycle.** Swede midges are small (1.5 to 2 mm), brown flies. They overwinter as pupae in the top 1 to 5 cm of soil. Adults emerge in spring, mate, and females look for suitable brassica hosts on which to lay eggs. Adults are weak fliers and can travel only short distances on their own, but can easily be blown on even light winds. There are multiple generations per year and adults are present throughout the growing season, beginning in mid-May and continuing in some capacity through late-September or early-October. Eggs are laid in clusters of up to 50, within the growing points of brassicas. Eggs hatch within a few days and larvae feed on the growing tip of the host plant until maturity, when they fling themselves off of host leaves to pupate in the soil. Eggs are tiny—0.3 mm long—and translucent initially, becoming white over time. Larvae are also initially translucent and become yellow as they mature, with full-grown larvae 3 to 4 mm long. The full life cycle of a swede midge can take from 7 to 21 days, depending on temperature and soil moisture levels; the ideal temperature for development is between 66 and 77°F. Of all brassica crops, broccoli, cauliflower, kohlrabi, and collards are the most susceptible; cabbage and kale show moderate susceptibility, and Brussels sprouts, turnips, and non-waxy brassica greens like bok choi and mustards show low susceptibility.

**Damage.** Swede midge larvae are the only stage that cause damage to crops. Larvae feed on the growing tips of brassicas, causing distortion and scarring. Larvae secrete a substance that destroys plant cell walls, causing the cell contents to leak out. The larvae then feed on the cell contents. Feeding damage produces malformed plants with brown corky tissue, galls, no-heads (also called “blind” heads, multiple heads, and twisted leaf petioles. Damage will occur earliest in fields that had infested fall brassicas, especially if that crop was not tilled under before larvae entered the soil to pupate in late-September to early-October.

Because swede midge can be blown on winds, early spring infestations may also occur in fields downwind of fall infestations. Infestations often begin along protected edges of fields near tree lines, where the adults are sheltered from the wind.

**Monitoring and Detection.** Symptoms of swede midge can be caused by other factors, including herbicide injury or feeding damage from other pests, so confirming their presence is important. If you see the symptoms described above, use a 10x or 20x hand lens to search within the growing tip of several plants to look for swede midge larvae. A wet growing tip is a good indicator that you will find larvae; infested growing tips tend to be wet due to the burst cells. You can also remove the growing tip from a plant and submerge it in rubbing alcohol. This will cause any larvae present to emerge.

There are other larvae and insects that are easily confused with swede midge larvae, but all can be distinguished from swede midge with a few characteristics. Newly hatched caterpillars, including diamondback moth and imported cabbageworm, have legs, while swede midge larvae do not have any legs. Diamondback moth caterpillars also have a distinctive black head capsule, while swede midge larvae do not have any head capsule. Imported cabbageworm caterpillars are distinctly fuzzy, while swede midge larvae do not have any hairs. Onion thrips can also be found in growing tips of brassicas but have antennae and legs that are visible with a hand lens; swede



*Swede midge larva.*  
Photo: Swede Midge Center for the U.S.

*Swede midge adult.*  
Photo: S. Ellis, USDA APHIS, Bugwood.org



*Leaf puckering on broccoli caused by swede midge feeding when these leaves were in the growing tip.*  
Photo: Swede Midge Center for the U.S.



*Swede midge larvae on a transplant stem.* Photo: M. Chen, Cornell University, Bugwood.org



*Brown scarring on a broccoli petiole, caused by swede midge.* Photo: Swede Midge Center for the U.S.

midge larvae lack antennae and legs.

Pheromone lures are commercially available and can be used to monitor for swede midge adults in your field. Monitoring with traps can be useful because by the time you see damage to your crop the midges are probably already gone. That said, there are many different species of midge flies out there, and it is difficult to positively ID swede midge in



*From left to right, diamondback moth caterpillar, imported cabbageworm caterpillar, and onion thrip adult.*

*Photos, L-R: Swede Midge Center for the U.S.; D. Cappaert, Bugwood.org; W. Cranshaw, Colorado State Univ., Bugwood.org.*

the field. New occurrences of swede midge in locations where it has previously not been reported need to be reported and confirmed by a qualified taxonomist, so if you'd like to monitor for swede midge on your farm using pheromone traps, let Extension know and we can help you out (contact us at [umassveg@umass.edu](mailto:umassveg@umass.edu) or (413) 577-3976. Place traps on a stake within the crop canopy, check weekly, and replace when it fills up or gets covered in dirt or residue. Lures are effective for 4 weeks. Use 3-4 traps per field, at least 50 feet apart. For ordering information, see here: <http://web.entomology.cornell.edu/shelton/swede-midge/monitoringtraps.html>.

**Management.** Although it can be difficult to completely eradicate a swede midge population once it is established, it is possible to reduce pest damage considerably using cultural controls.

**Practice a 2- to 3-year crop rotation with brassicas.** It's not yet known exactly how far adult swede midges can travel, but because they can travel on wind, it's safe to say that you should rotate as far away as possible from fields that were infested the previous fall. If possible, select fields that are more protected from the wind, and put spring plantings upwind from previously infested crops.

**Start with clean transplants.** Swede midge infestations that begin earlier become more severe and are harder to manage as the season progresses. Treat infested transplants as soon as possible, but be sure to read product labels carefully to confirm that products are labeled for greenhouse use. If infested crops are nearby, cover seedlings that are outside hardening off with row cover or fine netting.

**Control cruciferous weeds.** While cruciferous weeds do not appear to be the preferred host of swede midge, they can support populations to some extent, in the absence of a crop host.

**Destroy crop residues promptly.** Swede midge will continue to feed and multiply on harvested crops left in the field, so chop, disc, or plow under crop residue promptly after harvest. This is especially important in July, August, and September when swede midge life cycles are still in full swing and populations can grow rapidly.

**Exclude adults using netting.** Although expensive, exclusion netting effectively keeps adults out of crops. For this to be effective, you need to use 25 gram netting and be sure that the ground you're planting into does not have overwintered swede midge pupae and that there are no holes in the netting. Use over plastic mulch so that netting does not have to be removed for weed management.

**Chemical control.** Larvae are difficult to target with contact pesticides as they are concentrated in the protected growing tip, so systemic products are the most effective, although few are currently labeled for swede midge. Labeled products include acetamiprid (Assail) and spirotetramat (Movento). It is recommended to use a spreader-sticker type adjuvant when spraying waxy brassicas unless the label indicates differently. Monitor crops routinely and start treatment as soon as symptoms develop or adults are captured.

A limited number of efficacy trials of OMRI-approved pesticides for swede midge control have shown that weekly applications of kaolin clay (Surround) starting immediately after transplanting and continuing until head formation is effective under moderate pest pressure. Other OMRI-approved products have shown variable efficacy in various years and at various pest pressures. Spinosad and azadirachtin products show some promise but do not provide complete or consistent control.

*--Written by G. Higgins, February 2020*

## ALGAE IN TRANSPLANTS

Onions and leeks are some of the earliest crops to be seeded in the greenhouse. Every year we get calls about poor stands and green growth or crust forming on soil in transplant trays. The green growth is algae, which can grow on any greenhouse surface and comes in on dust or irrigation water. Algae thrives in sunny, wet areas with high organic matter, e.g. an overwatered tray full of potting media, especially if the media is compost-based or contains a lot of peat. Algae do not harm plants directly, but can slow gas exchange through media, thereby slowing root growth. Algae also attracts fungus gnats and shore flies, which not only feed on algae and other fungal growth in the growing medium, but also on plant roots, creating wounds where pathogens might gain entry into plant roots. Once you have algae it is hard to get rid of, so how can you prevent algae from growing?



*Plant onions and leeks into small-celled trays to prevent algae from growing on constantly wet soil. Photo: S. Scheufele*

Pre-season cleaning and managing moisture are key in preventing algae in greenhouses. Algae doesn't need potting soil to grow in a greenhouse – it can grow on any moist surface – so thoroughly cleaning and sanitizing your greenhouse benches, floors, trays, and any other surfaces in your greenhouse can help reduce algal “inoculum”. Manage moisture and make sure that your transplants are able to quickly take up all the water you apply when irrigating. Avoid overwatering, especially on cloudy days. Leeks and onions start out so small that if they are planted in a large cell their roots can't access all the water and the soil stays wet and algae begins to grow. Leeks and onions don't need big cells—you can use as small as 288-celled trays!—and they should transplant up well since they have big root systems. You can also achieve faster drying of soil by using lighter media and/or mixing in extra perlite to improve drainage.

## NEWS

### **DEADLINE TO PURCHASE FEDERAL CROP INSURANCE/NAP COVERAGE - MARCH 16, 2020**

Recent growing seasons have seen hail, drought, excess moisture and freeze occur across Massachusetts. If you're concerned with extreme weather events and the impact they can have of your farm, you should consider purchasing some level of coverage on your insured crops. The deadline to purchase coverage for spring-seeded crops and the Whole Farm Revenue Program is March 16, 2020.

**Individual Crop Policies:** Growers can purchase Federal Crop Insurance on corn (silage/grain), fresh market sweet corn, potatoes and cigar binder tobacco. Availability to purchase coverage on potatoes is limited to Franklin and Hampshire Counties and for cigar binder tobacco in Franklin, Hampden and Hampshire Counties. These are yield-based policies and are based on a producer's historical crop yields.

**Whole Farm Revenue Program:** WFRP provides growers with revenue protection from weather related or market losses rather than yield based policies and are based on a five-year revenue history (in some instances as long as a producer has 3 years of records they may purchase a WFRP policy)

**Individual crop policies and the WFRP policy are sold through private Federal Crop Insurance Agents. Use the following link to contact an agent:** <https://www.rma.usda.gov/Information-Tools/Agent-Locator-Page>

**Noninsured Crop Disaster Assistance Program (NAP):** NAP is available on all annual crops not insured by Federal Crop Insurance. NAP offers Catastrophic (CAT) Coverage which ensures 50% of your actual production history of the crop and any losses are paid out at 55% of the approved market price for the crop. “Buy-Up” coverage is also available under NAP. Producers can cover between 50 - 65% of their actual production history and losses are paid out at 100% of the approved market price for the crop. Under CAT, producers pay an administrative fee and for “Buy-Up” coverage, producers pay an administrative fee and a premium based upon the coverage level selected. Beginning, historically underserved, and limited resource farmers receive a waiver of the NAP administrative fee and receive a 50% reduction on the “Buy- Up” premium. Check with your local USDA - Farm Service Agency (FSA) Office, which

administers NAP for more details. March 16, 2020 is the deadline to purchase NAP coverage for all 2020 Spring-seeded crops.

UMass Extension works in partnership with the USDA Risk Management Agency (RMA) to educate Massachusetts producers about Federal Crop Insurance and Risk Management Programs. For more information, please visit [www.rma.usda.gov](http://www.rma.usda.gov) or contact UMass Risk Management Specialists Paul Russell at [pmrussell@umext.umass.edu](mailto:pmrussell@umext.umass.edu) or Tom Smiarowski at [tsmiarowski@umext.umass.edu](mailto:tsmiarowski@umext.umass.edu).

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## 2020-2021 NEW ENGLAND VEGETABLE MANAGEMENT GUIDE AVAILABLE

A collaborative project of the Cooperative Extension vegetable programs in the six New England States, this guide provides both conventional and organic commercial vegetable growers, on small and large farms, with up-to-date production and pest management information.

Purchase copies of the Guide at the [UMass Extension Bookstore](#). Purchases can be made online or by printing your confirmation and mailing it in with a check. You can also order by phone: (413) 545-2717. A free online *Veg* of the Guide is available at [www.nevegetable.org](http://www.nevegetable.org).

Buy the Guide by itself, or as a package with the NE Vegetable & Strawberry Pest ID Guide. The Pest ID Guide contains over 200 full-color images of the weeds, insects, diseases, and disorders that may be affecting your crops, and beneficial insects too. The Pest ID Guide is an indispensable companion to the Veg Guide, and you save big when you buy them together!

### Guide pricing:

<a href="#">2020-2021 New England Vegetable Management Guide alone:</a>	\$25.00
<a href="#">Northeast Vegetable &amp; Strawberry Pest Identification Guide alone:</a>	\$15.00
<a href="#">Veg Guide &amp; Pest ID combo pack:</a>	\$30.00

## FEDERAL AND STATE ENERGY-RELATED GRANT PROGRAMS NOW OPEN

**MDAR's MA Farm Energy Program (MFEP) - Energy Audits:** Now is the time to have a technical assessment completed for any energy project you are considering in preparation for upcoming energy grants! You will need a technical assessment to file an energy grant application whether with MDAR or USDA. MDAR's Massachusetts Farm Energy Program (MFEP) has funds to help farms cover 75% of the cost of audits, energy efficient projects, and select renewable energy projects. Contact us now for more information through the Center for EcoTechnology (CET), our partner carrying out the MFEP. Contact 413-727-3090, [info@massfarmenergy.com](mailto:info@massfarmenergy.com), or visit [www.massfarmenergy.com](http://www.massfarmenergy.com), submit a Request Form, and then you will be contacted.

**[Rural Energy for America Program \(REAP\) Grants \(due Mar. 31\):](#)** A family of grant programs focused on supporting energy audits and providing renewable energy development assistance to agricultural producers and rural small businesses. For more information, [click here](#). To ask questions and to apply, contact your [local USDA Rural Development Energy Coordinator](#).

**Agricultural Energy Grant (due Feb. 28):** MDAR is now accepting applications from agricultural operations who wish to participate in the Department's grant program made possible by recent MA Legislation as part of the MA Supplementary Budget. Funding will be provided for agricultural energy projects that are geared toward (i) capital infrastructure improvements that promote energy efficiency; (ii) the purchase or expanded use of renewable energy technologies; (iii) tools to address barriers to economic growth, including business management technical assistance and the purchase of more efficient equipment and technology; or (iv) tools and technologies to facilitate sustainability and new product development; all in an effort to improve energy efficiency and to expand the use of renewable energy technologies. For more information, visit <https://www.mass.gov/service-details/agricultural-energy-grant-program-ener>, or contact Gerry Palano at [Gerald.Palano@mass.gov](mailto:Gerald.Palano@mass.gov).

## GRANT ANNOUNCEMENT: STEWARDSHIP ASSISTANCE AND RESTORATION ON APRs (SARA)

MDAR invites responses from Massachusetts farmers who own or operate farm land under the [Agricultural Preservation Restriction](#) (“APR”) Program who wish to participate in Round 9 of the Stewardship Assistance and Restoration on APRs Program (“Program”). The purpose of the Program is to address stewardship or restoration issues on farmland resources in order to maximize productive agricultural use of the protected resource.

Funding of up to \$25,000, with a 15% match, may be available for identified improvements that will help restore or enhance the protected land resources on an APR farm property.

Eligible uses of funds include contracted labor or equipment rental costs to clear land or reclaim inactive fields back to active cropland use such as: clearing vegetation, removing rocks or stumps, cutting back grown in field edges, or reseeded or applying soil or crop amendments to inactive cropland or pastureland to bring it back into production. Funding may be also be used to restore farm resources that have been negatively impacted by flooding, erosion, storms, tornadoes and other natural disasters.

The deadline for applications is April 3, 2020 by 4 pm, and all projects must be completed by June 30, 2021. [Click here for application.](#)

## CORNELL SURVEY ON GROWER MARKETING DECISIONS

Do you hate when you have to fill an order with specific beet size requirements? Is it a lifesaver when a customer picks up produce from your farm? Researchers at Cornell University want your help in answering these questions and others relating to how you make marketing decisions on your farm! Earn a \$20 Amazon gift card for taking this 20 minute survey and make your voice known on what factors influence you to sell or not sell to a wholesaler. [Click here to take the survey.](#)

Contact Rebecca Wasserman Olin ([rdw224@cornell.edu](mailto:rdw224@cornell.edu)) or Dr. Miguel Gomez ([mig7@cornell.edu](mailto:mig7@cornell.edu)) with questions or comments.

## EVENTS

### PUBLIC HEARINGS ON MA MINIMUM WAGE AND OVERTIME LAWS PERTAINING TO AGRICULTURAL AND FARM WORK

A March 2019 ruling by the Massachusetts Supreme Judicial Court (SJC) set new precedent regarding the definition of farm work with respect to the state’s minimum wage and overtime requirements. Massachusetts law ([M.G.L. c. 151 §1A](#)) requires that employees receive time-and-a-half pay for hours worked beyond 40 hours in a week. There is an exemption for laborers “engaged in agriculture and farming on a farm”. However, in [the SJC decision](#), the court ruled that this exemption does not include postharvest or “preparation for market” activities that might include sorting, packing, or cleaning.

The MA Department of Labor Standards has scheduled two public hearings to receive public comments and questions regarding the Department’s enforcement of MA overtime and wage laws on farms and to determine if it would be beneficial for them to issue regulatory guidance.

The two dates for the hearings are:

**Thursday, February 27, 2020 at 11:00 a.m.**

Old Chapel, UMass Amherst, MA, 144 Hicks Way, Amherst, MA

**Friday, February 28, 2020 at 10:00 a.m.**

MassDEP Central Office, 8 New Bond Street, Worcester, MA

The Department is also accepting written questions and comments by email and mail. All written testimony must be received by **Monday, March 4, 2020.**

For more information on these hearings and how to submit comments, see the Department of Labor Standards’ press release: <https://www.mass.gov/news/notice-of-public-hearings-regarding-minimum-wage-and-overtime-pertaining-to-agricultural-and?new>

## NUTRIENT MANAGEMENT FOR VEGETABLE CROPS WORKSHOPS

Need help interpreting your soil test results? Juggling nutrient recommendations for many different fields? The UMass Extension Vegetable Program, in collaboration with University of Vermont Extension, is holding 2 workshops on vegetable nutrient management this March aimed at improving crop nutrition and soil health practices. Becky Maden and Laura Johnson of UVM will present on the topics listed below and will be available for one-on-one nutrient management consultations with growers in the afternoon. Growers are encouraged to bring current soil test results to work with. **Space is limited to 20 attendees at each location, so register today!**

By the end of an intensive day, growers will:

1. Interpret soil test results, calculate nutrient requirements, and choose soil amendments
2. Learn how to improve high tunnel nutrient management
3. Hear from experienced and innovative farmers sharing their soil health strategies
4. Work one-on-one with Extension specialists to develop a nutrient management plan for the 2020 growing season

### Agenda:

9:00 - 9:15 Introductions  
9:15-9:20 Nutrient calculations review  
9:20-10:00 pH and organic matter  
10:00-10:40 Nitrogen and phosphorus  
10:40-11:00 Discussion and questions  
11:00-11:30 High tunnel nutrient management  
11:30-12:30 Farmer presentation and discussion  
LUNCH  
1:00-3:00 Technical assistance available, or continue discussion

This workshop will be held in two locations:

#### • Hadley, MA

**When:** Thursday, March 5, 2020, 9am-3pm

**Where:** UMass Equine & Livestock Farm (The Hadley Farm), 111 North Maple St., Hadley, MA 01035

**Registration:** \$25 per person, includes lunch and refreshments. Space limited to 20 attendees. [Click here to register for the Hadley Nutrient Management workshop.](#)

#### • Westborough, MA

**When:** Friday, March 6, 2020, 9am-3pm

**Where:** MA Division of Fish & Wildlife Building, 1 Rabbit Hill Rd., Westborough, MA 01581

**Registration:** \$25 per person, includes lunch and refreshments. Space limited to 20 attendees. [Click here to register for the Westborough Nutrient Management workshop.](#)

Questions? Contact Genevieve Higgins at [ghiggins@umass.edu](mailto:ghiggins@umass.edu) or (413) 577-3976.

*This work is supported, in part, by USDA-NRCS EQIP technical assistance funds.*

## PRODUCE SAFETY ALLIANCE GROWER TRAINING SERIES

**Who Should Attend:** Fruit and vegetable growers and others interested in learning about produce safety, the Food Safety Modernization Act (FSMA) Produce Safety Rule, Good Agricultural Practices (GAPs), and co-management of natural resources and food safety. This course will also cover the Massachusetts Commonwealth Quality Program (CQP), a voluntary 3rd-party audit program.

This training satisfies the FSMA Produce Safety Rule requirement for covered farms that “at least one supervisor or responsible party” completes “food safety training ... recognized as adequate” by FDA (21 C.F.R. §112.22(c)).

For more information on the Produce Safety Alliance and the Grower Training Course, see: <https://producesafety-alliance.cornell.edu/training/grower-training-courses>

**Cost is \$50 for each program** and includes the required PSA Grower Manual (\$60 value), a Certificate of Course attendance from AFDO (\$35 value), and lunch and refreshments.

**Instructors:**

- Lisa McKeag, [UMass Extension](#)
- Michael Botelho, [MDAR Produce Safety Inspection Program](#)

**This training will be held in 3 locations:**

- **When:** Wednesday, March 18, 2020, 8:30 am to 5 pm  
**Where:** Hampshire College, Franklin Patterson Hall, 893 West St, **Amherst**, MA 01002  
**TO REGISTER:** <https://umasscafe.irisregistration.com/Form/PSAAmherst20>
- **When:** Wednesday, March 25, 2020, 8:30 am to 5 pm  
**Where:** Wylie Inn & Conference Center, 295 Hale St., **Beverly**, MA 01915  
**TO REGISTER:** <https://umasscafe.irisregistration.com/Form/PSABeverly20>
- **When:** Wednesday, April 1, 2020, 8:30 am to 5 pm  
**Where:** Rosebrook Event Center, 50 Rosebrook Place, **Wareham**, MA 02571  
**TO REGISTER:** <https://umasscafe.irisregistration.com/Form/PSAWareham20>

**Questions?** Contact for all programs: Lisa McKeag, [lmckeag@umass.edu](mailto:lmckeag@umass.edu), 413- 545-1051

**WEED IPM WEBINAR SERIES - WINTER 2020**

UNH Extension's Fruit & Vegetable Team is hosting a series of lunchtime webinars in January and February. All sessions will include a presentation from an expert in weed management, followed by a Q&A session. Topics will range from intro to herbicides to detailed recommendations on non-chemical methods of weed management.

**Where:** Online or by phone

**When:** Fridays, January 24-February 21, 2020, 12-1pm

- January 24: Why Weed IPM Matters
- January 31: Introduction to Herbicides
- February 7: Non-Chemical Weed Management
- February 14: Tarping and Solarization
- February 21: Biological Control of Weeds

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

**13TH ANNUAL AGRICULTURE & FOOD CONFERENCE OF SOUTHEASTERN MASSACHUSETTS**

**When:** Sunday, February 23, 2020. Snow date March 1, 2020

**Where:** Bristol County Agricultural High School, Gilbert Hall, 135 Center St., Dighton, MA 02715

**Registration:** \$40 per person before January 31. \$45 per person after January 31. [Click here to register for this event.](#)

Whether you're a professional farmer, a backyard gardener, or just curious about locally grown food, the Ag & Food Conference is for you! Each year, the lineup includes workshops for the general public as well as info-packed sessions for farmers and gardeners of all experience levels. Registration includes a locally-sourced lunch and at the Resource Fair, you'll learn about local organizations and businesses that provide services and products to help you grow, whether you've got a hundred-acre farm or a small backyard garden. **Sue Scheufele of the UMass Extension Vegetable Program, will be presenting an overview of vegetable diseases we saw in 2019. Sonia Schloemann of the UMass Extension Fruit Program will be presenting on growing table grapes in New England.**

## **TOMATO WORKSHOP: FOR PRODUCTION IN SOILLESS MEDIA IN GREENHOUSES**

**When:** 18 March 2020 9am to 4pm

**Where:** Jones Auditorium at The Connecticut Agricultural Experiment Station, 123 Huntington St, New Haven, CT 06511

**Registration:** \$40 per person if you register by March 11, 2020. \$55 per person after March 11, 2020. Registration includes morning coffee, boxed lunch, and handouts. To register go to: <http://s.uconn.edu/workshopregistration>. To pay by check, contact Leanne Pundt at (860) 626-6855.

Agenda includes:

- An introduction to greenhouse tomatoes.
- Manage the Environment to Increase Yields
- Farm Risk Management & Crop Insurance
- Abiotic Disorders: ID and Prevention
- Biocontrol of Insects & Mites in Greenhouse Tomatoes
- Disease Identification & Control

Organized by Leanne Pundt (860-626-6855, [leanne.pundt@uconn.edu](mailto:leanne.pundt@uconn.edu)) & Rosa E. Raudales ([rosa@uconn.edu](mailto:rosa@uconn.edu)) and co-sponsored by UConn Extension and USDA-Risk Management.

**THANK YOU TO OUR SPONSORS:**



*Vegetable Notes. Genevieve Higgins, Lisa McKeag, Susan Scheufele, co-editors.*

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