



UMass
Extension

Vegetable Notes

For Vegetable Farmers in Massachusetts since 1975



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CROP CONDITIONS

Folks are busy flipping tunnels, pulling out tomatoes to make room for fall and winter greens. Big harvests of winter squash, leeks, and sweet potatoes and fall root crops including celeriac, turnips, radishes, carrots, beets, and on some farms, ginger are underway! Fall is a busy time on farms that have pick-your-own pumpkins and apples, fall festivals, corn mazes, and other agritourism activities. We had a great trip out to the Southeast last week, meeting some new farmers and seeing some familiar faces at our fall pest walk at Heart Beets Farm. We heard about their sweet potato production and discussed allium leafminer, basil downy mildew, and deer—a pest that many farms in the Southeast struggle with. Every farm has their problems with deer, but in the Southeast the situation is a major challenge, with most towns at 10-20 times the carrying capacity and limited options for hunting in thickly settled areas and on leased land. Steve at Heart Beets described losing thousands of pounds of sweet potatoes to deer last year. This year, he doubled down on fencing and netted his tunnels to keep the deer out.

The deadline to apply for MDAR’s Natural Disaster Recovery Program is **TOMORROW at 4pm**. This is the financial assistance program for farmers who suffered crop losses from the frost and freeze events this winter and spring and the July flooding events. The application is relatively simple, and mixed vegetables is considered a single crop, so diversified vegetable farms don’t need to tally losses crop by crop. [Details and application information here.](#)



*Sure is looking like fall at White Barn Farm in Wrentham!
Photo: S. B. Scheufele*

PEST ALERTS

Alliums

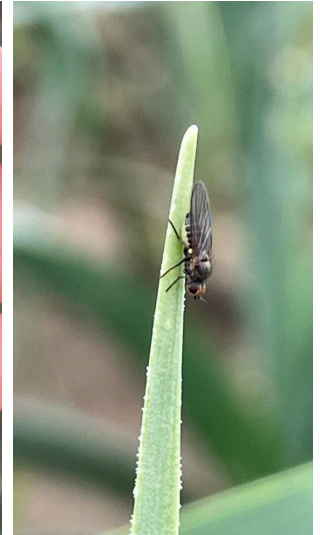
Allium leafminer: The fall flight of ALM is happening now and adults will continue to be active through the end of October or first week of November. Fall leeks are primarily the crop of concern for ALM at this point in the season. Research from Cornell Cooperative Extension in 2018 and 2019 found that Entrust (spinosad) at the 6 oz/acre rate and M-Pede (potassium salts of fatty acids, an insecticidal soap product) at the 1%-1.5% v/v solution rate effectively controlled ALM in organic production systems if applied 2 times, 2-4 weeks after first detecting ALM emergence. Emergence can be monitored using yellow sticky cards to trap adults or by scouting routinely for the first oviposi-

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 **Email:** umassveg@umass.edu

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

tion marks. We will also note the spring and fall emergences when possible in Veg Notes. Synthetic control options include foliar applications of dinotefuran, cyantraniliprole, spinetoram, and lambda-cyhalothrin. Cyantraniliprole and spinetoram are also commonly used in leeks for control of onion thrips; growers using these materials to control thrips should check maximum annual application rates before using to control allium leafminer. In a review conducted by researchers in Pennsylvania and New York in 2018 and 2019, these three insecticides reduced damage by 89% and eradicated up to 95% of ALM. For more information on ALM, see the article in the [August 24, 2023 issue of Veg Notes](#).



Allium leafminer oviposition marks and adult fly. Note: Photos are not the same scale. Oviposition marks are about the size of a 12-pt period on a page. Flies are about 1/4" long. Photos: G. Higgins, S. B. Scheufele

Basil

Basil downy mildew is widespread at this point, even on resistant varieties including Prospera. The resistant varieties, including Thunderstruck, Obsession, Devotion, and Passion, as well as the Prospera line, do develop downy mildew eventually but usually offer several weeks of uninfected production beyond fully susceptible varieties. Excitingly, the company that bred Prospera announced a new line of the basil variety, called Prospera Active, coming soon. Prospera Active will have a 2nd DM resistance gene in addition to the single gene that Prospera carries.

Chenopods

Winter cutworms are beginning to feed now in spinach crops. This pest is common in fall field crops and winter high tunnel greens. It's lifecycle is not well-known; adult moths seem to fly in the spring and again in late summer, and we see a wide range of sizes and color of caterpillars feeding in crops throughout the winter. Caterpillars feed at night and hide beneath leaves or under the soil during the day, leaving mysterious holes in foliage. Young larvae are bright green, then slowly change to brown as they grow larger. Mature caterpillars have two black, dashed lines running down their back. Their head capsules have dark, angular stripes that give the characteristic appearance of an upside-down "Y" shape. Little research has been done on winter cutworm management. Contact insecticides should be applied at night to effectively reach the feeding caterpillars. Systemic materials or materials that work by ingestion can be applied at any time of day. If treating high tunnel crops, double check labels to ensure that greenhouse/high tunnel use is not prohibited (if the label says nothing about greenhouse/high tunnel use, it is allowed). There is a handy spreadsheet from Michigan State University to check this [here](#), and labels can be searched for at <https://www.cdms.net/Label-Database> to double-check.



Winter cutworms. Photo: G. Higgins

Beet webworms are widespread in southeastern MA and were also reported in Worcester and Franklin Cos. last week. The light-green, almost translucent caterpillars feed on foliage, and the small tan moths will fly up conspicuously behind you as you walk through a heavily infested field. They primarily feed in chenopod crops (beets, spinach, Swiss chard) but can also feed on other crop groups including brassicas. Beet webworm is generally a mid-Atlantic and southern pest that we see sometimes in the Northeast in warmer seasons or in years with many storms coming

up from the South, although farms in southeastern MA report that they see it regularly. It is not known to overwinter in the Northeast. Bt products will effectively control beet webworm when the caterpillars are small. Radiant, Proclaim, Avaunt, Intrepid and diamides like Coragen, Exirel and Harvanta are all labeled for the worm complex. Intrepid is a growth regulator and should target small worms. Diamides will cause rapid feeding cessation.



Beet webworm caterpillar (above) and adults (right). Photos: A. N. Sparks, Jr. Univ. of GA, Bugwood.org and Rutgers Univ.



Cucurbits

Fruit rots on squash are becoming apparent as fields are being harvested now. We saw [Fusarium dry rot](#) and [black rot](#) on butternut squash this week. See the article in this issue for more information on both diseases as well as other fruit rots of pumpkins and squash. Practice 2-year minimum crop rotations out of cucurbits.

Nightshades

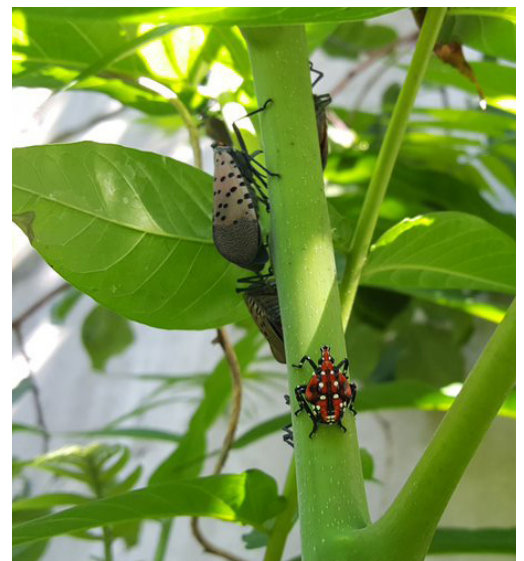
[Tobacco mosaic virus](#) (TMV) was confirmed on tomato this week, as the crop winds down. TMV causes leaves to become stunted or elongated, with a mottled dark and light green coloring. Young leaves may be curled. Symptoms on fruit include blotchiness, discoloration, and ringspots. TMV is readily spread by tools and workers moving through plants, and can be carried on clothing for several years. The virus can also be carried on tobacco products, so avoiding the use of tobacco products near tomato crops or ensuring that workers wash their hands well with soap before contacting tomato plants can help eliminate the risk of disease. There are many resistant varieties available. Many ornamental crops are also hosts of TMV, so take extra care if you grow ornamentals on your farm as well as tomatoes. Some weed species can also be hosts for the disease and these may be sources of initial inoculum in subsequent years.



Symptoms of Tobacco mosaic virus on tomato.

Miscellaneous

[Spotted lanternfly](#) (SLF) was confirmed for the first time in Holyoke, Agawam, and Southborough, MA last week. These finds represent three new established populations of this insect, which are in addition to those known previously in Fitchburg, Shrewsbury, Worcester, and Springfield, MA. [Click here](#) for an updated map of these locations from MDAR. SLFs feed on many plant species, including grapes and tree-of-heaven. Both the adult and immature life stages of the spotted lanternfly use piercing-sucking mouthparts to feed on their host plants. They remove massive quantities of host plant fluid and excrete it as a liquid excrement known as honeydew. SLF is considered to be a plant stressor, which when combined with other biotic or abiotic plant stresses, may contribute to significant damage to their host plants. However, some hosts (grapes, tree-of-heaven, maple, black walnut) may be at more risk than others. Feeding damage can also result in yield loss or quality reduction of agricultural crops. [Click here](#) for more information about SLF management for professionals from UMass Extension. [Click here](#) for more information about SLF for homeowners. It remains important to report SLF to MDAR if you see it in MA: [CLICK HERE to report suspected spotted lanternfly finds.](#)



Spotted lanternfly adult and nymph.
Photo: T. Simisky

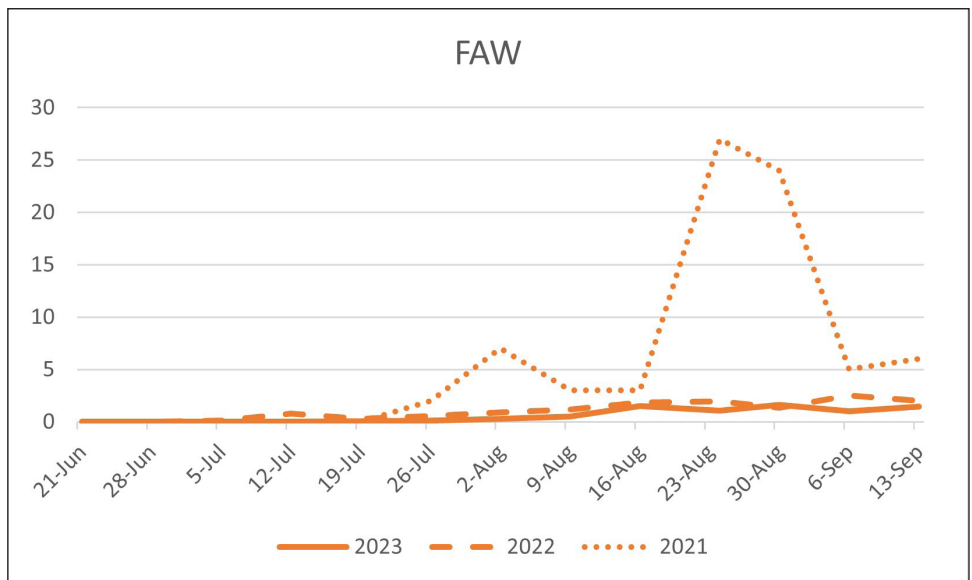
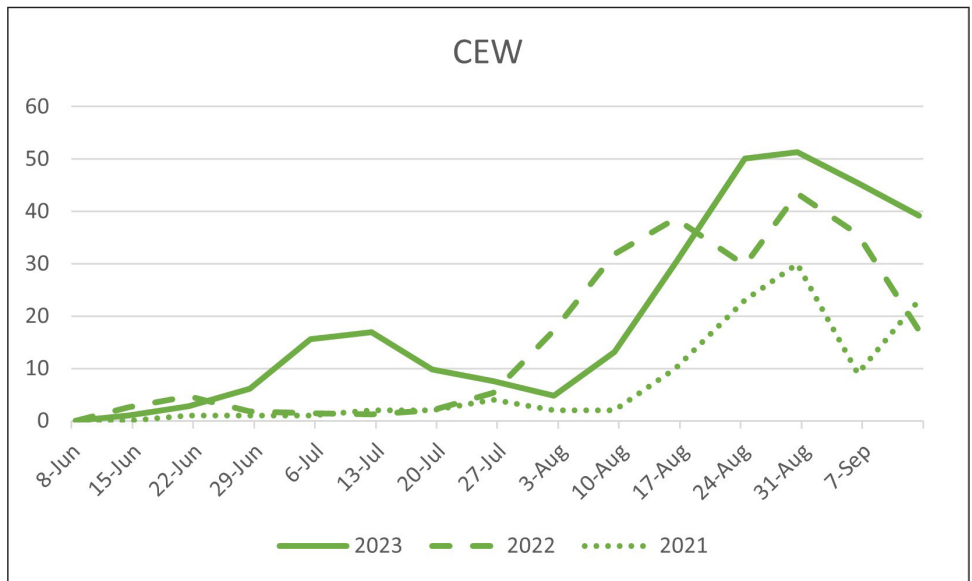
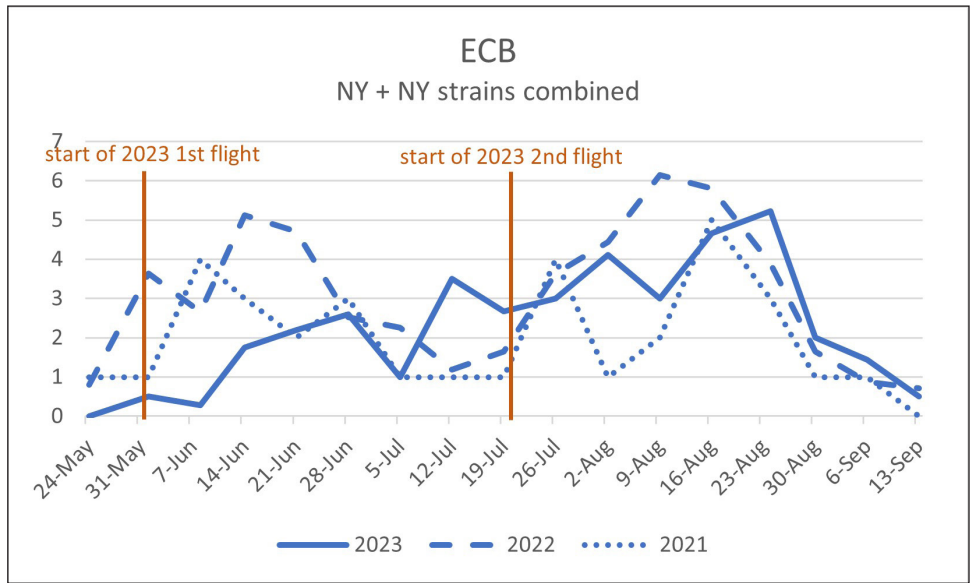
2023 SWEET CORN PEST TRAPPING SUMMARY

Pheromone trap captures for the 2023 season are shown in the graphs to the right.

European corn borer: Some years we see two clear peaks in ECB trap counts—one around 630 GDDs and another around 1400 GDDs (base 50F). You can see these peaks in last year’s ECB data (the dashed line in Figure 1). This year, we saw less distinct peaks and more of a constant, low-level presence of ECB moths in traps. Some specific farms saw distinct peaks in flights but generally ECB trap captures were low, which is what we’ve seen over the last several years. Very few of the Iowa strain of ECB were caught this year: only 60 moths caught among 17 farms, compared to 646 of the New York strain. The first ECB were caught on June 1 this year, and last week when most farms stopped trapping, trap counts had mostly dropped back to 0.

Corn earworm: This year, several farms started trapping for CEW earlier than in previous years, in order to determine if there were overwintering populations at any of our trapping sites. We historically began trapping for CEW on June 15 because this pest did not historically overwinter in the Northeast and instead was blown northward on storms from the South. However, there are sites in New York where it now is known to overwinter. In Massachusetts, we caught CEW right on schedule, though, with the first moths arriving June 14. We saw a small peak of CEW in July, and a larger peak in August, as more moths were blown northward with summer storms and a 2nd generation of moths also emerged..

Fall armyworm: The first FAW was captured the week ending July 19 this year, and numbers remained low all season, with the average across 16 farms never rising above 1.6 moths/week. This is similar to what we saw



last year, and a stark difference to 2023 when we saw lots of moths blowing up with the summer's hurricanes. We heard reports from several farms of fall armyworm damage in whorl corn despite low trap counts, and so growers were encouraged to scout whorl corn even if trap counts were low so that treatments could be made if necessary.

MANAGING WIREWORMS IN VEGETABLE CROPS USING BIOCONTROL NEMATODES

--Written by Teresa Rusinek, Cornell Cooperative Extension, Eastern NY Commercial Horticulture Program. Originally published in Cornell Veg Edge, Volume 19, Issue 22, September 6, 2023.

Wireworms are an increasing problem in root crop vegetable production. The adult stage of the wireworm, known as click beetles, prefers grassy fields for egg laying June through August. High levels of damage are often observed in subsequent years after a field is taken out of a grass-based cover crop when susceptible crops are grown. While wireworms primarily enjoy feeding on grasses, they will feed on many vegetable crops. Early season feeding on seeds or roots can result in reduced or uneven stands. In root crop such as sweet potatoes, wireworm feeding occurs later in the season so damage may go unnoticed until harvest time. Damage can occur for several years in the same field, as it can take up to five years for the wireworm to complete its lifecycle in the soil and emerge as an adult click beetle.

In conventional vegetable production there are a few insecticides that can be applied prior to, or at planting on select vegetable crops to reduce wireworm damage. In organic production however, growers must rely on cultural tactics to reduce damage. The lack of "rescue" options in organic production spurred the investigation of entomopathogenic nematodes (EPNs) as a potential biocontrol agent in the suppression of wireworm infestations. Retired Cornell entomologist Elson Shields and research assistant Tony Testa isolated a complex of New York native EPNs that are cold tolerant, persist in the field for many years following application and have proven successful for limiting other highly destructive insects. Over the past seven years, results from trials testing these persistent EPNs at multiple farm locations in eastern NY growing sweet potatoes have shown significant reduction, between 36% and 80%, in wireworm damage in EPN treated plots when compared to untreated plots.

An advantage of using NY persistent EPN strains is that they are applied a single time and can be applied anytime during the growing season when soil temperatures are above 50°F. Ideally, nematodes should be applied when there are hosts in the soil so they can immediately go to work and reproduce. However, the NY persistent strains can sit and wait for months before needing to attack hosts and reproduce. Other commercial strains may persist in the soil for only 7-30 days and require application timing to be closely matched with the presence of their target host and an annual reapplication is required.

One of the most practical ways to manage wireworms is to keep grasses out of fields, especially June through August. However, this tactic does not necessarily work with growers' soil health goals using grass-based cover crop and small grain rotations. Treating soils with EPNs can provide a reasonable level of wireworm suppression and can be combined with cultural and chemical control strategies to produce marketable crops in fields with known wireworm pressure.



Damaged sweet potatoes from wireworm feeding. Photo: T. Rusinek



Persistent biocontrol nematodes arrive in wax worm hosts and need to be rinsed out through a strainer into tank water.

Photo T. Rusinek



Biocontrol nematodes can be applied with a wide array of equipment such as backpack sprayers for small areas or boom sprayers for larger areas. Several farmers have used a water tank mounted on an ATV or tractor and made a gravity flow boom from PVC pipe.

Photo: T. Rusinek

For more specific information on obtaining and applying persistent biocontrol nematodes, see “[Are Persistent Biocontrol Nematodes \(Entomopathogenic\) a Fit for Your Organic Farm?](#)”

FRUIT ROTS OF PUMPKINS & WINTER SQUASH

Winter squash harvests are underway across the state, and growers are evaluating squash crop quality and deciding which squash crops might hold well and which need to be moved quickly. After this wet summer, there is a lot of disease in many squash fields—Phytophthora blight is always a top concern, but the other diseases in this article can lead to significant losses also. Take note of what diseases are present in your squash and pumpkin crops this fall to inform crop rotations and management for next year.

Many types of pathogens—fungi, bacteria, and viruses—can cause fruit rots, spots, and other abnormalities in pumpkins and winter squash that render them unmarketable. The most common rots, which happen to be caused by fungi, will be discussed below. Most of these fruit rotting pathogens also affect the foliage, so controlling the disease on the leaves can reduce the amount of inoculum present to infect fruit later in the season. For descriptions of foliar symptoms and tips for managing these diseases on the foliage see the [July 27, 2023 issue of Veg Notes](#) and for chemical recommendations, please see the [pumpkin and squash disease section of the New England Vegetable Management Guide](#).

Phytophthora Blight (*Phytophthora capsici*, an oomycete pathogen): Perhaps the most serious fruit rot in wet years, infection with *Phytophthora* begins as a water-soaked or sunken spot, most often occurring at the site of fruit contact with the soil, since that is where the pathogen is spreading from. As the rot develops, a mass of powdery white sporangia will develop in the water-soaked spot and will continue to spread, eventually covering the entire fruit. The pathogen survives in the soil for many years—the exact duration is not known, but a reasonable estimate is 8-10 years. Disease can develop and spread rapidly when soil moisture is high and temperatures are between 80-90°F. Entire fields may be destroyed very quickly.



Above: Advanced *Phytophthora* rot, showing sporulation. Photo: T.A. Zitter.
Right: Early *Phytophthora* lesion. Photo: M.T. McGrath



Tips for managing Phytophthora blight: Manage soil moisture by sub-soiling, avoiding over-irrigating, selecting well-drained fields, and avoiding areas of fields that do not drain well. Destroying diseased areas at the start of an outbreak can be effective in slowing the spread of disease. Planting pumpkins into cover crop mulch (e.g. no-till) or following the biofumigant cover crop ‘Caliente’ mustard has been shown to reduce severity of outbreaks in research trials. There are no squash or pumpkin varieties that are resistant to *Phytophthora* blight; pumpkins with hard, gourd-like rinds may hold up better in the field in general but are not resistant to the disease. Oomycete-specific fungicides can be effective in reducing severity of *Phytophthora* blight in squash and other hosts such as peppers and tomatoes, if applied early and regularly. For full recommendations on managing *Phytophthora* blight, see the article in the [July 13, 2023 issue of Veg Notes](#).

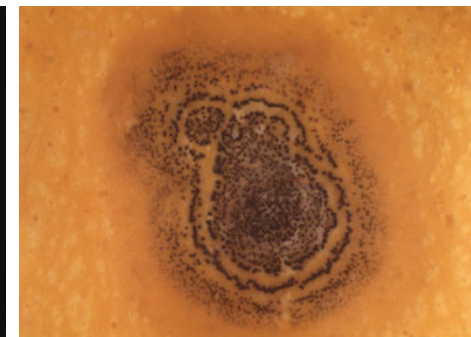
Fusarium Fruit Rot (*Fusarium solani* f. sp. *cucurbitae*): *Fusarium* is another soil-borne pathogen that attacks squash and pumpkin fruits at the soil line. Surfaces of fruit that are in contact with the soil develop tan to brown, firm, dry, sunken lesions which may occur in concentric rings and remain firm unless invaded by secondary organisms. Severity of infection varies with soil moisture and the age of the rind when infection occurs—younger fruit is more susceptible to severe rot. *Fusarium* can survive in seed but does not affect the germination or viability of the seed. This pathogen produces abundant overwintering structures (chlamydospores), but these only survive in the soil for 2-3 years. Cultivars vary in their resistance, with larger pumpkins generally being more susceptible.

Black Rot (*Didymella bryoniae*):

This disease produces a distinctive black decay on squash and pumpkin fruit. Initially, a brown to pink, water-soaked area develops, in which numerous, black fruiting bodies (pycnidia) are embedded. Black rot on butternut may look very different than on other squashes; on butternut it may appear as a superficial, hardened, tan to white area which can develop concentric rings. Large Halloween pumpkins are more susceptible to black rot than smaller pie types. The pathogen is soil- and seed-borne and can overwinter in infected crop debris as dormant mycelium or chlamydozoospores. Wounding is not required for disease initiation, but wounding by striped cucumber beetle or aphid feeding, and powdery mildew infection all lead to increased susceptibility. This disease is called gummy stem blight when it infects cucurbit leaves and stems. Controlling powdery mildew can significantly reduce black rot infection of pumpkins. For recommendations for chemical control of powdery mildew, see the [June 22, 2023 issue of Veg Notes](#).



Fusarium on pumpkin. Photos: W. Elmer, T.A. Zitter



Clockwise from top left: Black rot symptoms on pumpkin. Black rot fruiting bodies (pycnidia) within a lesion. Black rot symptoms on butternut squash. Photos: T. A. Zitter



Anthracnose (*Colletotrichum orbiculare*):

Cucurbit anthracnose is common on the fruit and foliage of watermelons, squash, melons, and cucumbers in humid regions. Young fruit may turn black and die if their pedicels are infected, while older fruit develop circular, noticeably sunken, dark-green to black lesions which may produce a salmon colored exudate under moist conditions. In addition to the lesions, infected fruit may have a bitter or off-taste. Infected fruits can deteriorate quickly due to the invasion of secondary rot organisms. *C. orbiculare* can be seed-borne and also survives between crops in infected crop debris, volunteer plants, and weeds in the cucurbit family. It is spread by splashing water, workers, and tools in warm, humid weather.

Scab (*Cladosporium cucumerinum*): Scab can affect all parts of cucurbit plants, but is a concern primarily because of the disfiguring scabby lesions that develop on fruit. The disease is favored by heavy fog, heavy dews, or light rains, and temperatures at or below 70°F. The spores are produced in long chains and are easily dislodged and spread long distances by wind. On foliage, the first sign of the disease is pale-green, water-soaked lesions which turn gray and become angular as they are contained by leaf veins. On fruit, spots first appear as small sunken areas which can be mistaken for insect injury. The spots may ooze a sticky liquid and become



Sunken lesions on kabocha squash caused by anthracnose. Photo: K. Campbell-Nelson



Scab on pumpkin. Photo: T.A. Zitter

crater-like as they darken with age. Dark green, velvety layers of spores may appear in the cavities and secondary soft-rotting bacteria can invade. Severity of symptoms varies with the age of the fruit when it becomes infected. *C. cucumerinum* overwinters in infected crop debris and soil, and may also be seed-borne. Spores produced in the spring can infect in as little as 9 hours, produce spots within 3 days, and produce a new crop of spores within 4 days.

Plectosporium Blight (*Plectosporium tabacinum*): Plectosporium blight affects many plant parts but is most damaging when it affects cucurbit fruit. Pumpkins, yellow squash, and zucchini are the most susceptible. Plectosporium lesions are white to tan; on stems and leaf veins, they are elongate and boat-shaped (imagine a bird's-eye-view of a canoe), while leaf and fruit lesions are more rounded. Severe stem and petiole infections cause leaves to become brittle and can result in death of leaves and defoliation. On fruit, the pathogen causes white, tan, or silvery russetting; individual lesions can coalesce to form a continuous scabby layer. Plectosporium blight is favored by wet weather; in wet years, crop losses in no-spray and low-spray fields can range from 50 to 100%. No resistant cultivar of pumpkins has been reported. It is not known to be seed-borne.



Raised white bumps on pumpkin fruit and stem caused by Plectosporium blight. Photo: TA Zitter

Management of Fungal Fruit Rots:

- Start with disease-free seed or use fungicide-treated seed. Cucurbit seeds cannot be hot-water treated to eliminate pathogens because the seeds are too large for the heat to penetrate quickly enough.
- Do not save your own seed if disease is present in the field.
- Select well-drained fields with good air circulation to promote rapid drying of foliage and fruit.
- Rotate out of cucurbits for 2 or more years.
- Fungicide sprays can reduce diseases which start in the foliage and then splash on the fruit e.g. Plectosporium blight, scab, and anthracnose. To effectively control disease, applications must begin before or just as symptoms begin to develop and must be made regularly.
- Destroy and plow crop residues promptly after harvest to prevent their spreading and hasten their breakdown in the soil.
- Avoid chilling injury to winter squash and pumpkins in storage, as this can allow for spread of some diseases in storage. Store fruit at 50-55°F and ~60% relative humidity. For information on curing and storage conditions for pumpkins and winter squash, see [last week's issue of Veg Notes](#).

—M. Bess Dicklow, UMass Plant Diagnostic Lab (retired)

NEWS

DEADLINE FOR APPLICATIONS TO MDAR'S NATURAL DISASTER RECOVERY PROGRAM TOMORROW 4PM

MDAR has launched the Natural Disaster Recovery Program for Agriculture, a financial assistance program for farmers who have suffered crop losses from certain natural disasters that have occurred in 2023. The program is funded through a \$20 million appropriation from the Massachusetts legislature and Governor Healey. The application process is now open, and farmers are invited to apply.

An informational webinar was held for interested applicants September 8. View the recorded webinar [here](#), and webinar slides [here](#). Questions and answers document [here](#).

Applications are due by 4:00pm this Friday, September 29th - [Details and application information here.](#)

NORTHEAST SARE FARMER GRANT PROGRAM NOW OPEN

The Call for 2024 Northeast SARE Farmer Grants is [now available](#). Approximately \$800,000 has been allocated to fund projects for this grant cycle. Awards of up to \$30,000 are available, depending on the complexity of a project.

The online system for submitting proposals will open on September 15, 2023.

Proposals are due no later than 5:00 p.m. EST on November 14, 2023.

Northeast SARE Farmer Grants provide the resources farmers need to explore new concepts in sustainable agriculture conducted through experiments, surveys, prototypes, on-farm demonstrations or other research and education techniques. Projects address issues that affect farming with long-term sustainability in mind.

Farmer Grants are designed to be a strong starting point for farmers interested in pursuing grant funding for projects. Before starting their proposals, potential candidates identify a Technical Advisor who can provide non-farming expertise in areas such as research design, troubleshooting, and promotion. The Technical Advisor acts as a go-to support person throughout the grant project, making it easier on first time grantees and forging new relationships in agricultural communities across the Northeast.

Northeast SARE funds projects in a wide variety of topics, including marketing and business, crop production, raising livestock, aquaculture, social sustainability, climate-smart agriculture practices, urban and Indigenous agriculture and more. [Click here to see examples of funded Farmer Grant projects.](#)

Northeast SARE covers the Northeast and Mid-Atlantic states of Connecticut, Delaware, Maine, Massachusetts, Maryland, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, West Virginia, Vermont, and Washington, D.C

FY2024 AGRICULTURAL FOOD SAFETY IMPROVEMENT PROGRAM (AFSIP) – ROUND II

A second round of MDAR’s AFSIP Grant has been posted with a due date of **Friday, October 6, 2023**

MDAR is now accepting applications from produce and aquaculture operations who wish to participate in the Department’s Agricultural Food Safety Improvement Program (AFSIP). Interested operations are encouraged to review the Request for Response (RFR) on the AFSIP website. If interested in applying, applications must be submitted with any additional documentation by the deadline of Friday, October 6, 2023.

The purpose of the AFSIP grant is to support produce and aquaculture operations in implementing enhanced on-farm food safety measures that help reduce food safety risks and help to minimize microbial contamination and food-borne illnesses. In addition, by implementing eligible upgrades that help reduce a food safety risk, the program helps operations maintain or increase market access. AFSIP is a competitive, re-imbusement grant program that funds projects up to \$50,000 or 80% of total project costs.

This round of funding has an application deadline of **Friday, October 6, 2023** and projects must be completed by **June 30, 2024**.

NOTE: For those applicants who have already submitted their applications under the first round RFR-AGR-AFSIP-FY24 you do not need to resubmit. These applications are still under review and applicants will receive notification of their status once awards are finalized.

Applications can be found here: [Agricultural Food Safety Improvement Program](#)

EVENTS

MASSGROWN WELLNESS PRESENTATION

When: Wednesday, October 4, 2023, 6-7pm

Where: Online

Registration: To register, please email Greg.Porell@mass.gov.

MDAR invites you to an overview presentation on the peer support network MassGrown Wellness is working to create in our state to support the mental health and wellness of the Massachusetts’s agricultural community. [MassGrown Wellness](#) is a program developed by the Massachusetts Department of Agricultural Resources (MDAR) to provide information and resources on mental health and wellness for the Commonwealth’s agricultural community.

The purpose of this event is to:

- Meet and connect with other farmers in Massachusetts.

- Learn about the statewide peer support network MDAR is developing.
- Receive information about how to join farmers supporting one another in our state.
- Learn about MassGrown Wellness and the available resources.

Questions? Contact Greg Porell at Greg.Porell@mass.gov or (617) 803-7117.

EASTERN MA CRAFT MEETING: [GEOTHERMAL WATER USE AND GOOD AGRICULTURAL PRACTICES AT FARMER DAVE'S](#)

When: Saturday, October 21, 4-6pm

Where: Farmer Dave's, Dracut, MA

We will take a tour of their solar and geothermal systems and the reuse of the geothermal water for hoop house irrigation. Lisa McKeag from UMass Extension will share about a project the farm is involved in to assess pre- and post-harvest agricultural water quality for food safety. She'll talk about the results of water samples taken at the farm in 2022-23 and give an update on current food safety regulations related to agricultural water.

THANK YOU TO OUR 2023 SPONSORS!



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