UCONN EXTENSION

Vegetable Pest Alert

Updates and Scouting Reports from the Field

August 15, 2025

What to be on the lookout for...

Phytophthora

Phytophthora (*Phytophthora capisci*) has become one of the more common diseases in solanaceous and cucurbit crops. It has been most prevalent among pumpkins and winter squash this year. Phytophthora is long-lived in the soil and driven by moisture.

- The disease can infect all parts of the plant tissue. The most apparent symptom is wilting and white, powdered sugar-like spores on infected plant tissue. It can also cause crown, root, and fruit rot.
- It requires 24 to 48 hours of soil saturation to start the disease cycle. Water management is crucial to prevent the disease cycle from starting.
- Break beds into smaller sections to allow water to leave field through lowest paths.
- Avoid bringing Phytophthora-contaminated soil into clean or fumigated fields by means of farm equipment and by working in clean fields first and cleaning equipment after working in contaminated fields.
- Do not throw rotting host crops purchased from off-farm fields into compost piles to be used on clean fields.
- Alternate between two or more soil-applied fungicides, beginning at planting and continuing throughout the season. This has been shown to be more effective than foliar applications. Several products are labeled for drench or trickle applications. See label rates and directions.



Photo: N. Davidow, UConn Extension.

For more information about management options including currently labeled fungicides, see the New England Vegetable Management Guide and Disease Control for Pumpkins, Squash and Gourds.



Photo: Cornell Cooperative Extension.

For more information about management options including currently labeled fungicides, see the New England Vegetable Management Guide and Disease Control for Peppers.



Photo: University of Georgia Extension.

For more information about management options including currently labeled fungicides, see the New England Vegetable Management Guide and Disease Control for Cucumbers and Melons.

Cucurbit Powdery Mildew

Cucurbit powdery mildew (PM) is a fungal disease that typically develops around mid-summer every year. Now that we are a little past the halfway point, it is becoming and more evident in our field walks. PM leads to extensive defoliation increasing the likelihood of sunscald on fruit and will weaken stems on pumpkins and winter squash. Early intervention is very important.

Scout fields regularly and apply fungicides early in disease development. Protective fungicides (e.g. sulfur, horticultural oils, chlorothalonil, copper, mancozeb) should be applied before the first sign of disease as powdery mildew spreads rapidly and cannot be controlled once it is well established. See the New England Vegetable Management Guide for currently labeled fungicide options.



Pumpkin leaf with powdery white mildew extensively growing on the underside of the leaf. Also apparent on the top of the leaf, although less, due to foliar fungicide application. Photo: Cornell Cooperative Extension.

Blossom End Rot on Tomatoes and Peppers

Blossom end rot is a very familiar abiotic disorder for many growers. It is commonly identified on peppers and tomatoes, but can affect squash too. Stressful growing conditions, especially dry spells, are to blame. In peppers, blossom end rot can be confused with sunscald. Water management aimed at keeping the soil moisture consistent is the best strategy to reduce BER. Removing fruit with BER can reduce further losses as even damaged fruit will continue to mature and compete for the plant's nutrients.

Additional management strategies include balancing vegetative and reproductive growth. Growth spurts with rapid expansion of young fruit often increases the likelihood of BER. Shade cloth can also be used to moderate high light and temperature in high tunnels or greenhouses and therefore further reduce plant stress. Due to the shape, plum and pear type tomatoes are more susceptible to BER than rounder fruit and cherry tomatoes. You may want to consider this when selecting which varieties to grow.



Regular, constant moisture is the best prevention of BER.

Photo: N. Davidow, UConn Extension.

Bacterial Diseases of Tomatoes and Peppers

Bacterial Spot: The most common often destructive disease of peppers in the northeast. It is present wherever these solanaceous crops are grown. Spot lesions on leaves are generally water-soaked, brown and circular and coalesce into dark long streaks. Spots can also form on stems and fruit. Scout fields weekly to look for small brown leaf spots on plants.

Bacterial Speck: Lesions on leaves are round and dark brown to black with a halo that develops over time. Spots can coalesce, killing large areas of tissue. On unripe fruit, small dark spots or specks develop with the tissue around them more intensely green. This disease is generally a minor concern.

Bacterial Canker: The most destructive bacterial disease of tomatoes in our region. Initial symptoms are leaf curling, wilting, chlorosis, and shriveling of lower leaves. In advanced stages, the pathogen spreads throughout the plant and causes poor growth, wilt and plant death. Stems break easily and cankers form. Small raised white to yellow spots with a brown center ("bird's eye spots") form on fruit.

Similar management strategies can be applied when any of these three bacterial diseases have been identified in your field:

- Work infected fields last and try to avoid working in fields when they are wet. Do not use high
 pressure, air-blast sprayers which cause increased leaf infection in rows adjacent to spray alleys
 spreading the disease across rows. Destroy crop residue after harvest to encourage rapid
 decomposition.
- Effective management requires rotating to fields where solanaceous crops and weeds in the nightshade family have not existed for at least two years.
- Use a hot water treatment on seeds. Diseases-resistant varieties can also be found.
- Chemical controls by themselves are not sufficient to control a bacterial disease once it has been established.
- Bacterial diseases can overwinter in crop debris in the field or on wooden stakes. Disinfect before reusing.



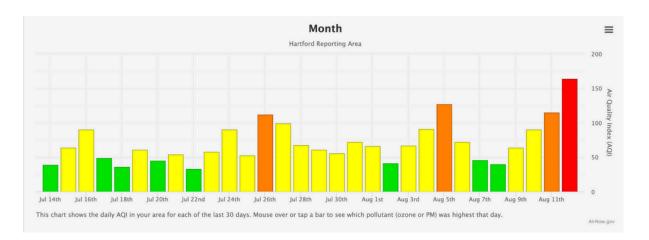
Bacterial spot on a pepper leaf. Photo: Gerald Holmes, Strawberry Center, Cal Poly San Luis Obispo, Bugwood.org.



Bacterial specks on a tomato leaf. Photo: B. Layton, Mississippi State University Extension.



Bacterial canker "bird's eye spots" on a ripe tomato. Photo: Cornell University.



Last 30 Days Have Recorded High Ozone Levels

Similar to June, July and early August have seen ozone level surges reaching toxic levels for crops in Connecticut, with severity varying depending on exact location within the state. Ozone injury in susceptible vegetable varieties develops when ozone levels are over 80 ppb for four or five consecutive hours, or 70 ppb for a day or two when vegetable foliage is at a susceptible stage of growth. Typically, the most susceptible vegetable crops include cucumber, potatoes, watermelon, cantaloupe, snap beans, pumpkins, and squash.

The best recommendation for managing susceptible crops in when ozone levels are high is to whatever extent possible, avoid additional stresses on plants. Do not apply unwarranted pesticides or nutrients during this period. Note which varieties show fewer symptoms and plan to select varieties that are less susceptible in the future.

For more information on the relationship between the Air Quality Index (AQI) and Ozone levels, visit the <u>Air Quality Guide for Ozone and Particle Pollution</u>. For example, ozone concentrations would be 71-85 ppb when AQI is 101-150. To monitor local trends, visit <u>airnow.gov</u>.



Flecking on a summer squash leaf from ozone damage.



Stippling from ozone damage can also be seen on the underside of the leaf. Photos: N. Davidow, UConn Extension.

Winter Squash Maturity, Harvest, and Storage

There is a daunting list of diseases, insects, and weather events that threaten the quality of pumpkins and winter squash as we patiently await their maturity. Ideally the plants will stay healthy and the weather will cooperate all the way until the end, but that's not always the case. Chuck Bornt, Vegetable Specialist at Cornell Cooperative Extension in Eastern New York, highlights what to keep in mind if you have winter squash and pumpkins in your field: Winter Squash and Pumpkin Maturity, Harvesting and Storage Tips.

Sweet Corn: Trap Update

Location	CEW*	ECB - NY	ECB - IA	ECB - III	FAW
Glastonbury A	-	-	-	-	-
Glastonbury B	.43	0	1	0	7
Berlin	-	-	-	-	-

^{*}CEW moth count is average per night. ECB moth count is weekly.

View our **Sweet Corn Pest ID Guide**.

Spray intervals for CEW can be found on our website.

See the New England Vegetable Management Guide for <u>management strategies for all</u> <u>sweet corn insect pests</u>.

Squash Vine Borer Trap Count (Berlin): 2

Continue to be on the lookout for the following pests:

Colorado Potato Beetles
Striped and Spotted Cucumber Beetles
Brassica and Solanaceous Flea Beetles
Squash Bugs
Squash Vine Borers
Cross-striped Cabbageworms
Tomato Hornworms
Mexican Bean Beetles

See Previous Pest Alert Messages On Our Website

Adult squash bug. Photo: N. Davidow, UConn Extension.





Cucurbit vine cut open to show a squash vine borer larva inside. Photo: Alan Eaton, UNH.

Participate in UMN/UNH High Tunnel Cover Crop Trial!

Becky Sideman at University of New Hampshire is once again putting the call out to recruit organic high tunnel growers as part of an OREI funded high tunnel cover crops project. This Fall 2025 trial will look similar to last year's: growers will get sent seed, a free soil test and help interpreting it, and will be asked to complete a couple of short surveys to let the researchers known how it went. A biomass sample from the following spring would be ideal as well, but is not required.

These on-farm trials are meant to evaluate how legume cover crops perform in active farming systems. Farmers will not be asked to plant replicated arrangements of the trial plots on their farms. Instead, researchers will plant all of the cover crop options in replicated plots on a research station, while each participating farmer plants one plot of each of the cover crop options that they select. Farmers can select between two levels of participation and compensation, depending on the amount of time and effort they are willing to commit. Read the full trial instructions, detailed species and timing menu, and farmer expectations for each level here.

There is an informational webinar about the project on August 18th at 12pm CDT.

<u>Sign up for the informational webinar here!</u>

Contact the research team at hightunnel-cc@umn.edu with any questions.

Did someone share this
Pest Alert Message with you?
Sign up for our listserv and get
messages sent directly to you!

Have feedback on how we can
improve our weekly
Pest Alert Messages?
We'd love to hear it!

Contact Information

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Vegetable IPM Cell Phone Number: 959-929-1031 (feel free to iMessage photos)

Vegetable IPM Pest Alert Audio Recording: 860-870-6954

Stay in touch with us

- Share what you see: We're here to assist with identification, management strategies, and guidance on best practices. Send us a photo/message via iMessage at 959-929-1031.
- Facebook Group: UConn Extension moderates a private Facebook group specifically
 for commercial vegetable producers. It is a space to share photos of insects and
 diseases you find in your fields, ask questions, share ideas, and stay engaged with
 growers across the state. Click here to join: "UConn Extension Vegetable IPM"
- Schedule a Consultation: Would you benefit from meeting with an Extension Specialist at your farm to provide insight on pest or disease identification, management strategies, and more? If so, please contact our Vegetable Extension Specialist, Shuresh Ghimire, to set up a farm visit. Contact him at shuresh.ghimire@uconn.edu or 860-870-6933.

Thank you for reading!

This report was prepared by Nicole Davidow, Outreach Coordinator, and Shuresh Ghimire, Commercial Vegetable Specialist, UConn Extension.

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