UCONN EXTENSION Vegetable Pest Alert

Updates and Scouting Reports from the Field

May 22, 2025

What to be on the lookout for...

Cold Damage On Warm Season Crops

At this time of year, farmers are hardening off warm season transplants such as tomatoes, peppers, eggplant and squash outside of the greenhouse. Since the temperatures have recently dropped to around 45°F or lower in many areas across the state, you may see cold damage symptoms on exposed plants. With nighttime lows expected to remain in the 40s in some areas throughout this weekend, farmers should bring plants back indoors for the next few nights if possible, or provide additional protection to insulate the plants and keep the temperature in their immediate area higher than 45°F at night.

The symptoms of cold damage include light-brown leaf splotches and curling, especially in frost-prone areas or where row covers touched the plant foliage. With short exposure, typically the growing points remain intact, and these plants should recover once returned to warmer conditions. You should see healthy new growth within 5 to 10 days (although the discolored leaves will stay that way). Long-term effects are usually minimal when the stress is brief, though some plants may show delayed development or uneven growth.

Continued protection until nighttime temperatures reliably stay above 50°F is critical to avoid further stress. Avoid overwatering these transplants in particular, as root uptake is often reduced. Fertilizing lightly once new growth resumes can support and expedite recovery.



Tomato seedlings with pale or lightbrown splotches on some of the leaves from cold exposure. Photos: Spencer Mariotti, Bishops Orchard, Guilford, CT.

Spinach and Beet Leafminers

Leafminers that attack crops in the Chenopodiaceae family (such as chard, beet, and spinach), overwinter as pupa in the soil and emerge as flies around mid-May. Adult spinach leafminer flies lay a series of small, white eggs in neat rows on the underside of leaves. After 3-6 days they will hatch and the larvae (also called maggots) will tunnel between the layers of a leaf eating everything but the epidermis. Early damage is identifiable by a slender, winding "mine", but later these expand and become blotches on the leaves. The larvae may migrate from leaf to leaf down a row. They become fully grown in just a few weeks and will drop in the soil to pupate, though they sometimes also do so inside a leaf. The entire life cycle is 30-40 days, amounting to three to four generations per season.

Deep plowing in early spring or fall to destroy infested weeds and plant material can reduce the severity of leafminer outbreaks. In addition to crop rotation, weed control is one of the most important ways to prevent significant leafminer pressure. These leafminers feed on common weed species such as chickweed, lambsquarters, and nightshades. Covering susceptible crops immediately after planting with floating row cover to exclude adult flies from laying eggs may also help. Be sure to scout seedlings before planting to ensure eggs are not getting included on plants under the row cover.

It is important to routinely scout the undersides of leaves of susceptible crops to look for eggs. It is most effective to apply treatment before eggs hatch and larvae enter the leaf. For organic growers, Spinoza (e.g. Entrust) plus a spreader-sticker to aid in leaf penetration is the best chemical control option. Please visit the <u>New England Vegetable Management Guide</u> for additional treatment strategies including insecticides that can be applied to transplants or to the soil.



Beet leafminer feeding damage on a spinach leaf. Photo: S. Ghimire, UConn Extension.



Beet leafminer eggs on the underside of a leaf. Female flies lay oblong white eggs (<1mm) in neat clusters on the underside of the leaves. Photo: S. Ghimire, UConn Extension



Beet leafminer maggot. Photo: UMass Extension.

Garden Springtails

Recent scouting reports from a farm in Columbia, CT indicated garden springtail activity among cucumber plants growing through landscape fabric in a greenhouse. Springtails are another spring-time pest whose presence increases during periods of high moisture and cool conditions, especially during May and June. In general, springtails are small, wingless insects that require high humidity and feed on decomposing organic matter in the soil. Typically, springtails go unnoticed and are considered beneficial as they assist with recycling soil nutrients. However, certain species such as the garden springtail will sometimes feed upon young plant leaves, targeting cotyledons and first true leaves on crops such as beans, broccoli, cabbage, cucumber, lettuce, onion, radish, spinach, tomatoes and others.



Garden springtail. Their soft body (no hard shell) helps differentiate them from aphids. Photo: Tom Murray.



Garden springtail feeding damage on young plants. Photo: OSU.



Damage from garden springtails on a cucumber leaf. Photo: Susan Mitchell, Cloverleigh Farm, Columbia, CT.

Garden springtails do not typically cause significant economic impact. However, they can make tiny holes or pits on seedling leaves, leave behind feeding damage on roots, and result in reduced germination or plant vigor. Cultural controls to manage garden springtail populations include trying to counter high humidity and moisture levels by improving airflow, allowing plants or seedlings to dry out between waterings, and avoiding overwatering. They are generally a temporary problem and die when moisture levels are reduced. *Stratiolaelaps scimitus*, a predatory mite, commonly used for controlling fungus gnats, also feeds on springtails. Additionally, as the <u>New England Vegetable Management Guide</u> states, most broad-spectrum insecticides registered for cutworms or leafhoppers will also be helpful in controlling springtails.

Continue to be on the lookout for the following pests

- Aphids on Veggies and Tomatoes in high tunnels and greenhouses
- Brassica Flea Beetles
- Solanaceous Flea Beetles
- <u>Cabbage Root Maggot</u>
- White Grubs

- Onion Thrips
- <u>Corn Earworm</u>
- European Corn Borer
- <u>Colorado Potato Beetle</u>

Field Walk at Stone Acres Farm

LAST CHANCE

Date: May 27th, 4 to 6 pm (optional pizza dinner, 6-7 pm) Location: Stone Acres Farm, 393 North Main St, Stonington, CT 06378

Trust

Join American Farmland Trust for a field walk from 4-6pm on Tuesday, May 27th to discuss reduced tillage experiments at Stone Acres Farm in Stonington, CT.

Farm Manager Pete Higgins will walk us through the farm's transition to reduced tillage strategies, including tarping and strip tillage into cover crops. This field walk will leave plenty of time for discussion and we hope other farmers will share their challenges and successes! After the field walk, there will be dinner provided that includes produce from the farm. Please register below so we have plenty of food. Questions? contact Julie Fine at jfine@farmland.org or 413-531-0425

Registration Link: Field Walk at Stone Acre Farm in Stonington, CT

Monitoring PFAS in CT Agricultural Soils: A pilot program to research soil contamination levels

The Connecticut Agricultural Experiment Station (CAES) is inviting agricultural farms in Connecticut to have soil samples analyzed as part of a program to research per- and polyfluoroalkyl substances. All data on PFAS levels will be shared directly with the farmers who submit samples to the program. Additionally, anonymized test results may be published in a scientific article and/or shared with other scientists.

Samples must be collected using a CAES sampling kit, which are available for pick up by appointment, and adhere to the sampling guidelines. Samples will only be accepted if a CAES sample collection kit has been used due to a high likelihood of sample contamination from improper materials. There is no charge for the kit, but CAES requests that you return the kit when you submit your samples. Email CAES.PFAStesting@ct.gov to set up an appointment.

For more information on this research and details on the soil sampling process, please visit the <u>CAES website</u>.

Call for Farmer Collaboration: Test Cover Crop Varieties This Fall!

The <u>Cover Crop Variety Testing Network</u> is seeking farmers to join their team as citizen scientists this fall. Partnering farmers will receive cover crop seed to grow variety trials in their own fields. The target species are cereal rye, hairy vetch, smooth vetch, crimson clover, winter pea, and canola. By monitoring their trials throughout the season, producers will help identify which varieties perform best across different regions, management practices, and farming systems.

Space is limited. Sign up to participate by June 15!

For more information, view the flyer or contact etiennesutton@missouri.edu.

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 text 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. Email him at shuresh.ghimire@uconn.edu or us at 860-870-6933.

Thank you for reading!

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

Contact Information

Shuresh Ghimire, Vegetable Extension Specialist: shuresh.ghimire@uconn.edu

Nicole Davidow, Outreach Assistant: nicole.davidow@uconn.edu

Vegetable IPM Office Phone Number: 860-870-6933 Vegetable IPM Cell Phone Number: 959-929-1031 Vegetable IPM Pest Alert Audio Recording: 860-870-6954

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