LCONN EXTENSION

Vegetable Pest Alert

Updates and Scouting Reports from the Field

May 16, 2025

What to be on the lookout for...

Colorado Potato Beetle





Pictured left: Adult Colorado potato beetle. Photo: Tom Murray. Pictured right: Colorado potato beetle larvae in the final instar. Photo: J. Boucher, UConn Extension.

Earlier this week a farm in Stonington, CT reported early sightings of Colorado potato beetles (CPB). CPB adults are starting to emerge from their overwintering sites, as well as last year's eggplant and potato fields. Start scouting and looking for clusters of yellow eggs on the undersides of leaves to be ready to treat when larvae begin to hatch. CPB eggs look similar to lady beetle eggs, although lady beetle eggs tend to be lighter yellow and slightly smaller (~1mm), compared to CPB eggs that are orange and slightly larger (~1.8mm). If you see lady beetles around your potato or eggplant crop while scouting for CPB eggs, keep this distinction in mind. Natural enemies of the CPB include the twelve-spotted lady beetle which feeds on CPB eggs and larvae, so it is important to preserve those eggs.

Increasing temperatures result in faster development and feeding rates. The recent cold, rainy weather slows both crop and insect growth, so eggs that are laid can pile up and then all hatch at once when it warms up. They feed on the plant vegetation of potato, eggplant, and tomato crops. The climate in southern New England also allows for a second generation of CPB every growing season. Knowing what to look for and getting out into the field to scout is key in determining when to use appropriate controls to protect vulnerable crops throughout the season. It is also a great tool to reduce the number of beetles that will survive to overwinter and feed on next year's crops.

Integrated pest management strategies offer numerous options to reducing the threat of CPB populations as CPB adults are poor flyers and primarily walk from their overwintering sites into new host crops. Because they disperse themselves so poorly, cultural controls like crop rotation and physical barriers including trench traps surrounding fields, early-planted trap crops, and mulching with straw can significantly delay and reduce infestation.



Image: IPM triangle from Teagasc

CPB has developed resistance to multiple classes of insecticides. This beetle can become resistant to any chemical it is exposed to continuously for six generations. Understanding the life cycle of CPB and aligning treatments accordingly can help with treatment efficacy.

See the New England Vegetable Management Guide on Insect Control for Potatoes.

Additional Resources Include:

Colorado Potato Beetle - UMass Extension

Organic Management Recommendations for CPB - University of Minnesota Extension*
*This article references the Midwest Vegetable Production Guide for Commercial Growers.
For an up to date resource relevant to our region, we recommend consulting our local New England Vegetable Management Guide.

Solanaceous Flea Beetles

Solanaceous flea beetles include both the potato flea beetle *epitrix cucumeris*, and the eggplant flea beetle *epitirix fuscula*. Different from brassica flea beetles, as indicated by their name, solanaceous flea beetles feed on solanaceous crops such as tomato, eggplant, pepper, and potato, and some weeds including black knight. Potato flea beetles are the most common in CT, whereas eggplant flea beetles tend to be spotted in more southern regions.

Photo left: An adult potato flea beetle, which is all black, short, and broad, and has a hairy body surface. Photo: Kansas Department of Agriculture, Bugwood.org.

Photo right: Two adult potato flea beetles leaving feeding "shot holes" on a tomato leaf. Photo: S. Ghimire, UConn Extension.





Solanaceous flea beetles leave a characteristic small shot hole injury to the leaves. Potatoes, once well established, can withstand considerable feeding damage. Eggplants are vulnerable even at later stages. Treat newly set transplants if they have 2 flea beetles per plant, seedlings 3" to 6" tall if they have greater than 4 beetles per plant, and plants over 6" tall if they have 8 beetles per plant.

Row cover or exclusion netting can be used to exclude flea beetles early in production, before flowers develop. Spinosad (e.g. Entrust) is an effective material for organic growers but cannot be applied more than 2x consecutively; pyrethrin (e.g. Pyganic) will provide a quick knockdown of flea beetle as well. See the NEVMG for more spray options.

Edema on Tomatoes

Due to recent weather patterns, with many cloudy consecutive days, humid conditions in the greenhouse, and cool temperatures, have lead to an increased potential for overwatering tomatoes and potentially setting the stage for edema. Edema is a physiological condition that occurs when plants absorb water at a faster rate than they can utilize and release it through transpiration.

The elevated water pressure from excess moisture causes cells on the underside of the leaves to rupture, resulting in the formation of brown, corky, scab-like blisters. These blemishes can be observed from both the upper and lower leaf surfaces. Although edema ceases to progress when the weather conditions change, the existing spots persist on the leaves. To prevent edema, it is advisable to allow the top 2 inches of soil to dry between watering and provide ample spacing between plants to ensure sufficient air circulation.





Photo left: Edema blisters on a tomato leaf from a tomato plant growing in a greenhouse. Photo: S. Ghimire, UConn Extension.

Photo right: Edema showing up on greenhouse tomato stems after a stretch of cloudy and rainy weather. Photo: Nate Drummond.

For more information, view the fact sheet on <u>Intumescences (Edema) on Greenhouse Tomatoes</u> by Leanne Pundt, UConn Extension.

Newly Recorded Presentation: Early Season Vegetable Pest Management

As we head into the growing season, it's important for vegetable producers to stay ahead of early-season pest pressures. In this presentation, Matt DeBacco sits down with Shuresh Ghimire to discuss key early-season insect pests and practical tips for scouting and cultural management. They explore common signs growers often overlook, effective strategies for rotating insecticides, and biological control options that work well early in the season. The conversation also covers critical decisions after transplanting and highlights go-to scouting guides to support timely, informed pest management.

Topics for Today's Discussion

- 1. Early-season pests should tomato and cucurbit growers be keeping an eye out for this year?
- 2. New Changes to Pesticide Labels for 2025
- 3. Plant Scouting Tips
- 4. Key Signs Gowers Often Miss
- 5. Cultural Practices to Help Keep Early-Season Pests in Check?
- 6. Advice When it Comes to Rotating Insecticides?
- 7. Biological Control Options that Work Well Early in the Season?
- 8. Key Decisions After Transplanting to Stay Ahead of Pests?
- 9. Go-to Tools, Scouting Guides, or Threshold Charts that you Recommend?



Useful links:

- Click here to watch the video on the UConn Extension YouTube page.
- Click here to download the slides to the presentation

Continue to be on the lookout for the following pests

- Aphids on <u>Veggies</u> and <u>Tomatoes</u> in the greenhouse
- · Asparagus Beetles
- Brassica Flea Beetles
- Cabbage Root Maggot
- White Grubs
- Onion Thrips
- Corn Earworm
- European Corn Borer

Support for Monitoring Sweet Corn and Squash Pests

The UConn Extension Vegetable IPM Team has have funds available to purchase traps and lures. If you are interested in working with us for more robust pest monitoring, please send us an email with the acres of sweet corn and/or squash you plan to grow this year and your town.

Email Shuresh Ghimire, shuresh.ghimire@uconn.edu

Date: May 27th, 4 to 6 pm (optional pizza dinner, 6-7 pm)

Location: Stone Acres Farm, 393 North Main St, Stonington, CT 06378

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. Stone Acres Farm is a 63-acre working vegetable and flower farm that celebrates natural farming, sustainable food, culinary education and the preservation of open space, cultural landscapes, and historic structures.

Farm Manager Pete Higgins will walk us through the farm's transition to reduced tillage strategies, including tarping and strip tillage into cover crops. We will look at peas which were planted without tillage and also compare a side-by-side trial of tomatoes and cucumbers planted into strip-tilled cover crops versus the same crops planted onto bare ground. Pete will show us the equipment they have used for these experiments and the challenges they've faced.

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 ifine@farmland.org or 413-531-0425

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

New England Soil Health Survey

Get free soil health testing on your farm by participating in AFT's New England Soil Health Survey! Free soil testing is available through this new program from AFT New England and the <u>USDA ARS Food Systems Research Unit</u>. Farms in Vermont, New Hampshire, Connecticut and Massachusetts are eligible to receive free soil health testing on up to three fiels after completing a short survey.

Learn more at: https://farmland.org/new-england-soil-health-survey/

Stay in touch with us!

- Share what you see: If you've identified a pest or disease in your field, we're interested to hear from you. We track information from vegetable farmers throughout the state all season long. We're also 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: Is there something in your vegetable fields or high tunnels
 that is giving you reason for pause? Would you benefit from meeting with an Extension
 Specialist 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. You can email him at shuresh.ghimire@uconn.edu or call the
 office at 860-870-6933.

The Vegetable IPM Pest Alert Phoneline: 860-870-6954

The Vegetable IPM Pest Alert Phoneline offers a convenient alternative for folks who prefer an audio version of our weekly message, updated every Friday. Please save and share this number with local growers that would benefit from listening to phone recordings of our pest alert messages. Listen in at 860-870-6954.

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

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