

Mexican bean beetles

Be on the lookout for Mexican bean beetles. Mexican bean beetles most often build up to damaging levels where snap beans are grown in the same or adjacent fields over successive years. Lima beans and dry beans are also susceptible, and MBB may feed in dry and edible-pod soybeans but are less likely to thrive on this host. Adults and larvae feed primarily on leaves, but when numbers are high, they will also damage pods. Feeding damage over 10-20% can cause yield loss. Plants are most sensitive in the pod fill stage. Scout for MBB by searching plants for adults, eggs and larvae, and assessing damage. Prompt destruction of crop residue after harvest helps lower overwintering populations. Avoid continuous production of beans in the same or adjacent fields year after year. Annual releases of the larval parasitoid *Pediobius foveolatus*, timed to coincide with egg hatch, can help control beetle larvae.

Field experiments at Virginia Tech have shown that MBB are less likely to colonize and deposit eggs on beans planted on metalized and white plastic mulches, compared to bare ground and black plastic. Beans planted on metalized and white plastic mulches also had less foliar damage, less pod damage, and significantly greater yields than beans grown on black plastic and bare ground.

Azera (combination of azadirachtin and pyganic) or Suffoil X (petroleum oil) are labeled, and are more effective at larval stage. See [New England Vegetable Management Guide](#) for more spray options.



Mexican bean beetle adult, eggs, and larvae
(Photo: UMass Extension)

Edema on vegetable crops

Edema occurs when plants absorb water at a faster rate than they can utilize and release it through transpiration. This physiological condition arises due to a combination of factors such as excessive soil moisture, low temperatures, cloudy weather, and inadequate air movement, leading to an accumulation of water pressure within the leaves. In some cases, edema develops in warm and humid days accompanied by rainfall, followed by cool nights. The elevated water pressure 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.



Edema on tomato a tomato leaf
(Photo: S. Ghimire)



Edema on arugula
(Photos by Jaime Konopka,
Northwest Corner
Farm, Winchester
CT)

Slugs

Slug activity is promoted by plant residue on the soil surface and moist conditions. Slugs are active at night. During the day, they hide under clods and debris or in unsealed seed slots. However, they are sometimes active during daylight hours, if cloudy and humid conditions prevail. As they move about, they leave a slimy, silver-colored trail behind them. They feed on decaying organic matter and plant foliage.

Slugs usually feed on the lower part of plants, eating partly or completely through the leaf. They leave narrow, irregular, linear tracks or scars of various lengths. Severe feeding can result in split or tattered leaves that resembles damage from hailstorms. The damage they cause is similar in appearance to that caused by some insects (e.g., corn flea beetle), but the presence of silver-colored slime trails is a sign of the presence of slugs. Normally in corn, damage is severe only on emerging to four-leaf stage corn. Stand losses due to slug feeding often occur when fields are too wet for seed slots to properly close during planting operations and remain open during early plant growth. In this situation, slugs are able to feed day or night on the seedlings, often destroying the growing point. Iron phosphate ([Sluggo: Snail and Slug Bait](#)) is labeled for slug control in many vegetables including corn, cucumbers, eggplants, peppers, squash, and tomatoes.



Slug damage on sweet corn and okra (Photos: S. Ghimire)

Japanese, oriental and Asiatic garden beetles damage is being reported on various crops. They feed on many crops, basil, sweet corn, and okra are particularly susceptible to significant damage from these pests. Japanese and Oriental beetles feed during the day, while Asiatic garden beetles feed at night and take refuge in the soil during the day. Heavy infestations may warrant insecticide applications. see the applicable crop section of the New England Vegetable Management Guide for a list of labeled materials. In small plantings, hand-picking into a bucket of soapy water is effective.



Japanese, Oriental, and Asiatic garden beetles from left to right (photos: The Garden Barn, Vernon, CT)

Continue to be on the lookout for the following pests that were covered in [the previous pest alerts \(2023\)](#):

- **Squash vine borers:** report from 1 farm in Berlin for this week: 5 moths/week, which is the threshold for susceptible cucurbits like summer squash.
- **European corn borers:** reports from 2 farms for this week. NY strain- 2, IA-1 and Hybrid-1, and 0% infestation in field at a farm in Berlin; 2 of each type, total 6 ECB at a farm in Shelton.
- **Corn earworm:** 1.16 moths/night in Berlin (= 4-day spray schedule), and 2/night in Shelton (4-day spray schedule).
- **Imported cabbageworm**
- **Potato leafhopper**
- **Squash bugs**
- **Colorado potato beetles**
- **Striped cucumber beetles**
- **Onion thrips**
- **Solanaceous flea beetles**
- **Brassica flea beetles**

UConn Extension and Department of Plant Science and Landscape Architecture

CT IPM CROP TALK

Volume 19, Issue II — June 2023

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Clover and oats between the plastic mulched vegetable beds at Ciccarellis Harrison Hill Farm in Northford, CT. Cover crops between the beds provide weed control, reduce soil erosion, can add nitrogen and organic matter to the soil, and provide habitat for pollinators (photo by Shuresh Ghimire).

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Also see the latest issue of Crop Talk newsletter if you missed it earlier:
[Crop Talk newsletter](#)



Vegetable IPM Field Workshop

August 8, 2023 Rain date August 9

10am – 2:30pm

UConn Plant Science Research and Education Facility

59 Agronomy Road, Storrs CT

Join UConn Extension Faculty at the Plant Science Research Farm to learn about important vegetable pests and management options.

Presentation topics include:

- UConn Plant Diagnostic Lab updates
- Powdery mildew and downy mildew management
- Alternaria survey results and fungicide sensitivity evaluation
- Biodegradable plastic mulch: impacts on crops and soil
- Allium insect pests
- Evaluation of a push and pull system for diamondback moth management
- Remote sensing of potato leafhopper damage and drone demonstration



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- There is no cost to attend this workshop but **registration by July 31 is required**. Seating is limited - reserve your spot today!
 - Complimentary lunch and refreshments will be offered
 - Register online (preferred) at this link: <https://forms.gle/2pAd28Jg6tRkewzS6> or call 860-486-0572 to register by phone.
 - 2.5 pesticide recertification credits approved in PA and 1A categories.
 - Questions can be e-mailed to ana.legrand@uconn.edu or leave a message at 860-486-0572.
 - If you require an accommodation to participate in this event, please contact organizer at above e-mail or phone number by July 31, 2023.

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National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

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