UCONN
COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES
EXTENSION

Vegetable Pest Alert

May 13, 2023

Brassica flea beetles are active. Adult beetles overwinter outside cropped fields, in the soil surface and decaying plant residue of shrubby or woody borders. They search out host crops from early May into June and feed on leaves and stems, leaving small round pits and holes. Eggs are laid in soil near the plant. Tiny white larvae feed on root hairs and pupate underground. New adults emerge from mid-July through early August and feed throughout August.

Crops with more waxy leaves (*Brassica oleracea* such as cabbage, broccoli, and kale) are less attractive and feeding is more restricted to leaf margins, especially as crop matures. Crops with glossy leaves (e.g. *B. rapa* such bok choy, Napa cabbage, or *B. juncea* such as mustard) are highly attractive; the whole leaf is damaged and the crop is susceptible until harvest.

Be sure to protect direct-seeded crops and young transplants with a row cover or chemical control. Non-waxy brassica crops can be planted alongside waxy brassicas and sprayed regularly to function as a trap crop and reduce sprays to less preferred crops. A working threshold of 1 beetle per plant or >10% average leaf damage on 50% of the plants has proved effective in leafy greens and early stages of heading brassicas. Repeated applications may be needed if pressure is high. A list of labeled products can be found in the **New England Vegetable Management Guide**. Spinosad (e.g. Entrust) is an effective OMRI-listed material. Kaolin clay (e.g. Surround) will protect young transplants but needs to be frequently reapplied to cover new growth and will wash off in rain.

Brassica flea beetles damage without row cover (left) and with a row cover (right) (Photos: S. Ghimire)

Brassica flea beetles damage on brassica plants (photo courtesy of Dan Slywka, Daffodil Hill Growers).

Onion maggot infestations has been observed this past week. Cumulative growing degree days (GDD) can be used to monitor the activity of onion maggot fly: peak flight for the first generation is at 735 GDD, base 40°F. As of May 13th, the GDD for Storrs was 597 at base 40°F, whereas for Bridgeport, it was 797 GDD in the same period.

Planting in late-May is more likely to be safer than the first half of May as the high soil temperatures (95°F) can kill eggs.

Cover recently seeded or transplanted crops with floating row covers, placing the cover as soon as the transplants are set. Gathering culls into deep piles will limit reproduction to surface layers and reduce populations more than deep plowing or harrowing after harvest.

Biological controls, including naturally-occurring fungal diseases, predaceous ground beetles, and soil applications of the entomopathogenic nematode *Steinernema feltiae* can all reduce onion maggot numbers. Nematodes can be applied to transplants, in transplant water, or as a post-transplant drench. Nematodes need a moist soil environment to survive.


When scouting for onion maggot, look for plants that have fallen over. When you pull out the infested plants, they come out easy. They can also infest very small bulbs. (Photo courtesy: Matt Debacco).

This report is prepared by Shuresh Ghimire, UConn Extension. The information in this document is for educational purposes only. The recommendations contained are based on the best available knowledge at the time of publication. Any reference to commercial products, trade or brand names is for information only, and no endorsement or approval is intended. UConn Extension does not guarantee or warrant the standard of any product referenced or imply approval of the product to the exclusion of others which also may be available. The University of Connecticut, UConn Extension, College of Agriculture, Health and Natural Resources is an equal opportunity program provider.