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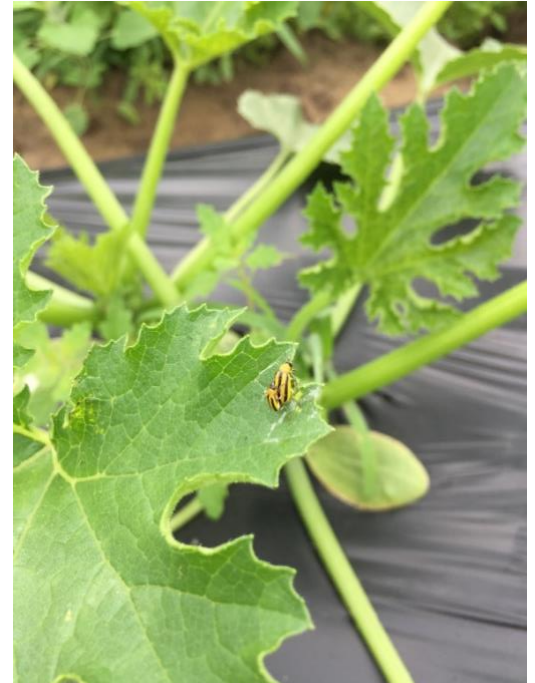
EXTENSION

Vegetable Pest Alert

June 3, 2023

Striped cucumber beetles (SCB) are active. Young plants are particularly vulnerable to the feeding damage from SCB, as well as to bacterial wilt, the disease vectored by SCB. Adults overwinter primarily in field edges near last year's crop, with a small proportion remaining in the field. With the onset of warm days (> 50° F), beetles feed on pollen in early-blooming wild plants. High tunnel and greenhouse cucumbers draw beetles first, followed by early field crops.

Cucumber and muskmelon are highly susceptible to bacterial wilt; treat those crops if 1 beetle is found for every 2 plants. Butternut, watermelon, and most pumpkins are less susceptible to bacterial wilt and can tolerate 1-2 beetles per plant. There aren't many bee-friendly options for chemical control, so get populations under control early on to prevent the need to spray during flowering or consider spraying in the evening after bees have stopped foraging. The most effective OMRI-listed material is pyrethrin (e.g. Pyganic). Small plants can also be protected using kaolin clay (e.g. Surround), which needs to be reapplied to protect new growth. See <https://nevegetable.org/crops/insect-control-7> for the list of pesticides that can be used to control SCB.



Striped cucumber beetles (Photo: S. Ghimire)

Colorado potato beetle (CPB) adults are emerging now from overwintering sites in field edges of last year's eggplant and potato fields. Start scouting, 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 ladybeetle eggs, although ladybeetle eggs tend to be lighter yellow and more widely spaced within each cluster, so if you see ladybeetles around your potato or eggplant crop while scouting for CPB eggs, keep this in mind.



Photo: Pam Cooper, UConn

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 delay and reduce infestation. See <http://nevegetable.org/crops/insect-control-18> for action threshold and management options.

Onion thrips are seen in low numbers so far. Their populations are favored by hot, dry weather. Heavy rain or overhead irrigation can lower populations. Scout plants along field margins where infestations build early, as well as checking across the field. Look closely between the leaf blades to find the light-yellow nymphs or darker adults. Damage may appear as silver lines, white patches, tip dieback, curling and twisting of leaves, slowed growth, reduced bulb size and yields, or if severe enough can result in plant death. Begin applications when damage is first noticed or when there are 3 or more thrips per leaf.

The most effective material for organic growers is spinosad (e.g. Entrust) applied with insecticidal soap (e.g. M-Pede) to increase efficacy. Entrust can only be used two times in a row before rotating to a different insecticide class. Neem oil (e.g. Trilogy) and azadirachtin (e.g. Azatin O) may be effective also if applied when populations are still low. Pyrethrin (e.g. Pyganic) can provide knockdown control. See <http://nevegetable.org/crops/insect-control-14> for more spray options.



Thrips nymphs on onion leaf
(Photo: UMass Extension)

Sunburn on vegetable leaves

Vegetable leaves turning a papery white, tan, or necrotic can indicate sunburn or sunscald. These symptoms on vegetable plants also can be caused at times by cold or wind damage. Sunscald on plants can occur when plants are set in the field after coming straight out of the greenhouse/indoor condition without being thoroughly hardened off. In the transplant production house plants are exposed to filtered/low light so they grow leaves that are good at

absorbing as much light as possible. Such plants are not ready for the extra UV rays they are going to receive out in the sun. The epidermal layers of leaf tissue desiccate (burn) with the intense sun exposure, causing light tan to white discoloration, or sometime necrosis on the leaves and stems of tender plants. Hardening off the transplants would have prevented the sunscald on the new transplants. Make sure to appropriately water and feed plants that have sunscald/sunburn while they are recovering and watch for any secondary foliar infections in the damaged tissue.



Sunburn on pepper leaves (top left photo by Josh Bristol, Bristol Farm Market), a crucifer leaf (right photo by C. Bowers), and Swiss chard (bottom photo by T Ogun)

Precautions when transplanting vegetables into plastic mulch:

When transplanting seedlings into black plastic mulch (polyethylene or biodegradable), you can take some precautions to avoid heat and abrasion injury to the seedlings.

- First make sure planting holes on the mulch is wide enough so the transplant does not touch the edge of the plastic.
- Fill the holes with soil to keeps the plants from leaning over and touching the plastic. This will minimize the potential chimney effect that could burn the plant when hot and sunny days occur shortly after transplanting.
- Placing soil around the transplant will prevent water from puddling around the plant and will reduce the chances of root and crown diseases.
- If an herbicide is applied in pathways that is harmful to the crop planted into the plastic mulch, filling the hole with soil from pathways could be damage or kill the crop. Read the herbicide label before using row middle soil to fill in the planting hole.



This pepper seedling is wilting because the stem is severely burned where it touched the hot plastic mulch (Photo: Richard VanVranken).

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