

Cucumber beetles are not our friends



Bonnie Courter
Master Gardener

Question: Help! My vegetables are being eaten up by this flying greenish-yellow beetle that looks like a ladybug. What is this pest and how do I protect my crops?

Answer: Meet the bane of the home gardener – the western spotted cucumber beetle (*Diabrotica undecimpunctata*), and its cousin, the western striped cucumber beetle (*Aclyma trivittatum*). These two species of beetles overwinter in residue from the previous year's cucurbit crops, moving into your garden in the spring and gorging on stems, foliage and flowers throughout the summer. Whereas striped cucumber beetles have a stronger preference for cucurbits like melons and cucumbers, the spotted beetles feed on over 200 different crops and non-crop plants like dahlias and other flowers.

Striped cucumber beetles lay their eggs at the base of cucurbit plants where their larvae then feed on the roots. Spotted beetles lay their eggs on corn and other grasses, then pupate in the soil for a week before the adults emerge to feast.

Damage to cucurbit



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Spotted cucumber beetles feed on over 200 different crops and non-crop plants.

crops by beetle feeding results in the plant being stunted, and fruit set can be reduced if the flowers are eaten. Even worse, these beetles also transmit bacterial wilt disease and other viruses. Needless to say, cucumber beetles are not our friend.

So what to do? There are many methods that can help manage these pesky polka-dotted and striped fiends. Here are a few suggestions:

- Cucumber beetles are attracted to host plants by a bitter-tasting chemical called cucurbitacin, which the beetles absorb into their bodies to defend themselves against predators and pathogens. Therefore, choose cucurbit varieties with lower cucurbitacin levels and resistance to bacterial wilt disease.

- Encourage habitat for wolf spiders and ground beetles, which prey on cucumber beetles, by mulching around your plants with weed- and herbicide-free straw. Straw mulch is food for springtails and other decomposer insects, which are prey for spiders, building up their populations. Richly-mulched soils with high organic content also benefit the internal defenses of plants through soil microorganisms.

- Rotate your vegetable crops each year. Plant cucurbits as far away from the last year's cucurbits as possible. Be sure and remove mulch and plant debris after the fall harvest.

- If you should detect bacterial wilt, quickly remove (don't compost) infected plants to reduce the spread of the disease.



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Striped cucumber beetles prefer to eat cucurbit crops like cucumbers and melons.

- Try using transplants instead of direct seeding if possible, as seedlings and small plants are most susceptible to beetle feeding damage and bacterial wilt.

- Use floating row covers to protect crops against these flying fiends until crop flowering begins. These lightweight fabric covers can

be draped over plants, then removed for weeding or pollination. Find them at garden centers.

- Hang yellow sticky traps throughout your plant rows (also available at garden centers).

- When temps are cool and insects sluggish in the early morning, put on your garden gloves and get some instant

satisfaction by squishing them with your fingers. I've even heard of sucking them up using a vacuum or reversed leaf-blower.

If your infestation has become a serious problem, there are some organic chemical controls you can use. Kaolin clay dust makes crops unattractive to the cucumber beetles, gumming up their antennae. Neem oil, Spinosad, or pyrethrins have some effectiveness. When using any insecticides, apply when pollinators are least active, and always read and follow label directions.

Do you have a gardening question? Email, call, or visit the Douglas County Master Gardener Plant Clinic at douglasmg@oregonstate.edu, 541-672-4461, or 1134 SE Douglas Ave., Roseburg.