



# OUR WATER – OUR WORLD

## Tips for Managing Western Spotted Cucumber Beetle

Western Spotted Cucumber Beetles are found throughout California, and are a pest of cucurbit crops like cucumber, squash and melons. They are easy to recognize with their yellow-green color and 12 black spots on their wing covers. They are sometimes mistaken for lady beetles, but you can identify them by their color and their long, slender antennae. Though often found on cucurbits crops, these beetles will also feed on a wide variety of plants including vegetables, soft fruits, grasses, peas, grains and flowers like sunflowers.

Cucumber beetles are small, about ¼ inch long. They overwinter as adults, usually in weedy areas, and become active in early spring. They lay eggs at the base of plants, and the larva feed on plant roots. Once the larvae pupate and emerge as adults, they eat leaves and fruit. There is a related species, the western striped cucumber beetle, but that beetle is primarily found in Southern California.



Photo courtesy of UC Statewide IPM Program

### DAMAGE

In most home gardens, spotted cucumber beetles don't usually cause substantial damage. The most common damage you may see are holes chewed in leaves, shoots and flowers. You may also see scarring on the skin of young fruits. Larvae feed on the roots of plants, but do not usually cause substantial damage.

### MONITORING

The best way to manage spotted cucumber beetles is to catch them early in the season.

- The most important step is to watch for the pests from seedling to fruiting so that you can take action before the beetles cause a problem. One way you can find the beetles is to shake a plant over a piece of white paper or cloth.
- You can use a Cucumber Beetle Trap and Lure which uses a pheromone lure to catch them in a sticky trap. This is a good way to identify the beetles.
- You may never have a problem, even if you see a few beetles on your plants. Determine what your threshold for damage is before using pesticides.

## MANAGEMENT

- Spotted cucumber beetles like moisture, but don't like heat. Water early in the morning so the garden beds don't retain moisture during the day, and provide good air circulation between plants.
- You can place a protective covering, like floating row covers, over emerging seedlings. Remove the covering when plants are large enough to withstand some damage and when they begin to flower.
- Hand pick: You can shake the beetles into a bucket of soapy water.
- If you see significant damage on stone-fruit trees, harvest fruit early.
- Apply a layer of mulch around plants, especially cucurbits, to discourage cucumber beetles from laying eggs.
- Eliminate grasses and weeds near crops that might attract the beetles and provide them with food before your seedlings emerge.
- Watch for the beneficial insects like lady beetles, lacewings and assassin bugs that will eat cucumber beetles. Don't use pesticides when they are present.
- Beneficial nematodes are microscopic organisms that can be applied to the soil to kill cucumber beetle larva. Look for this species: *Heterorhabditis bacteriophora*.
- At the end of the season, remove and dispose of leaf litter and garden debris to reduce sites where adult beetles can overwinter.

## USING CHEMICAL CONTROLS

If you have significant damage to crops and need to use a pesticide, look for environmentally-friendly products that can help to manage spotted cucumber beetles with little impact to beneficial insects like pollinators. In general, apply products in the late afternoon when the weather cools and beneficial insects are not present. As with all products, be sure to read the label and use as directed, and be sure the plant you want to treat is listed on the label. Here are some active ingredients you can look for:

- Neem oil is a plant-based pesticide which discourages insects from feeding.
- Pyrethrins are plant-based pesticides that break down quickly. This product needs to come in contact with the beetle to work.
- Spinosad sprays can be used as soil drenches to kill beetle larvae.

Our Water Our World helps consumers find less-toxic products for use in their homes and gardens. For information on managing common garden pests, rats, yellowjackets and a wide variety of other pests, visit our web site at

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