

Cucumber Beetles

A couple of years ago my neighbor shared with me that something was eating the cucumbers as they were coming up. I was quite surprised to see that the culprit was the cucumber beetle. I know they appear when the cucumbers are blooming, but had never seen them on young plants.

In early June, I planted my cucumbers just before I left for Houston, Texas. When I returned the beetle had stripped my young cucumber plants. I sprayed with Sevin and replanted. Some of the earlier plants came back and I'm watching the new plants very carefully.

Striped and spotted cucumber beetles can cause serious losses in cucumbers, muskmelon and watermelons. The striped cucumber beetles are yellow-green with three black stripes down the back and are $\frac{1}{4}$ inch long.

Although similar in appearance, the striped cucumber beetle and the western corn rootworm are not the same. The stripes on the striped cucumber beetle are straighter than those on the western corn rootworm. Also, the middle segment of the hind leg on the striped cucumber beetle is yellow, while that on the western corn rootworm is black.

The spotted cucumber beetle is also known as the southern corn rootworm. It is about $\frac{1}{4}$ inch long and is yellow-green with 12 black spots on its back.

Cucumber beetles overwinter as adults in protected areas near buildings, in fence rows, or in wood lots. They become active in mid-spring when temperatures begin to increase. Currently, there is no good method for predicting when activity will begin. Beetles quickly locate host plants. The adults feed and females deposit eggs in cracks in the soil at the base of the plant. The eggs hatch and the larvae feed on the roots. These larvae will pupate in the soil, later in the summer the next generation of beetles will emerge. These beetles will also feed on the cucumber and melon plants, including the fruit, and overwinter until the next spring.

While the adults feed mainly on foliage, pollen and flowers, their feeding on melon rinds late in the season may reduce market quality. Larvae of these insects feed on roots and stems, but this damage is minimal compared to the potential losses due to bacterial wilt.

The bacterium that causes bacterial wilt overwinters in the gut of some of the striped cucumber beetles. When beetles become active in the spring and begin feeding, they spread the bacterium either through their feces or from contaminated mouthparts. Chewing damage on young leaves or cotyledons opens entry points for the pathogen. Once inside the plant, the bacterium multiplies quickly in the vascular system, producing blockages that cause the leaves to wilt. Beetles are attracted to infected plants and can pick up the bacterium and move it to healthy plants. The first symptoms of bacterial wilt on cucumbers and muskmelon is a distinct flagging of lateral and individual leaves. Beetle feeding is not always obvious on wilted leaves. Soon, adjacent leaves and finally the entire vine will wilt.

When you see a few beetles early in the season, they may be controlled by picking them and destroying. If you must use a chemical, use malathion or carbaryl (Sevin). Always check the pesticide label before spraying on vegetables. If you do any spraying when the cucumbers are in the flower stage, you will destroy beneficial insects such as bees that are needed for pollination.

Submitted by Jerry Vitalis
Chisago County Master Gardener

It's almost County Fair time! The Master Gardeners will be back in the commercial building this year at the Chicago County Fair in Rush City. Stop by with your gardening questions or to check out the displays. You can also bring samples to be diagnosed or identified.

PLANT CLINICS: Volunteer Master Gardeners will be available Mondays from 4-7 at the Extension Office in North Branch at 38780 Eight Ave. to answer your gardening questions. You can also call 651-674-4417 during these hours to speak with a Master Gardener. Samples can be dropped off during the day on Monday if you cannot stop in during clinic hours. *Please note MONDAY is the only day you can drop off samples, as there is no longer staff at the North Branch Office who can answer gardening questions.*

VOICE MAIL: You can leave a question for a volunteer Master Gardener at 651-674-4417. Depending on the volume of calls, they try to respond within a couple of days. During office hours ask for the Master Gardener voicemail, after hours, select ext. 18. You can also get your question answered on the web at:
www.extension.umn.edu/askmg