

Problem: Cucumber Beetles - Acalymma vittatum



Hosts: Primarily cucumber, cantaloupe, squash, pumpkin, gourd, and watermelon but may also feed on beans, corn, potatoes and other crops.

Description: There are two types of cucumber beetles: striped and spotted. The striped cucumber beetle is the most common. Cucumber Beetles are insects with chewing mouthparts. Having overwintered under debris in and around fields, adult beetles appear early in the season often feeding on various alternate host plants. Eventually, beetles are attracted to newly seeded fields. Beetles may burrow into the soil and destroy plants before they break the surface. Beetles also feed on and kill newly emerged seedlings.

The ¹/₄ inch long striped cucumber beetles are conspicuously colored: black head and antennae, straw-yellow thorax and yellowish wing covers with 3 distinct parallel and longitudinal black stripes. Beetles deposit their eggs in the soil around the bases of host plants. While root feeding by many beetle larvae may cause plants to be stunted, larval feeding is generally of little concern. Feeding stops when larvae pupate.

Newly emerged first-generation beetles (mid-July to early August) are of lesser concern because by this time, most plants are of sufficient size to tolerate feeding. A second generation of striped cucumber beetles is produced in pumpkin fields, as well as on various alternate hosts including goldenrod, sunflowers, and various ornamentals, such as asters. Second generation adults emerge late in the season and feed until they are forced into hibernation.

These insects also carry bacterial wilt. This disease is carried from plant to plant as the beetles feed. Cantaloupe and cucumber are most likely to become diseased. Affected plants wilt and eventually die.

Recommendations: Control measures for spotted and striped cucumber beetles are the same. Cucumber beetles are difficult to control because adults attack plants so close to or even below ground level. Young plants can be protected by use of row covers, cones, or other types of mechanical barriers. Edges must be sealed to ensure that the beetles do not find a place of entry. Plants will eventually outgrow these barriers or they will need to be removed to allow insect pollination of the flowers.

Suggested insecticides include permethrin (Eight Vegetable, Fruit & Flower Concentrate; Hi-Yield Garden and Farm Insect Spray). If insecticides are used, be sure to spray or dust weekly from the time the beetles appear until the end of the growing season. Spray in the evening after the flowers have closed to protect bees.

References:

- 1. <u>Striped Cucumber Beetle</u>, Cornell Cooperative Extension Service
- 2. Cucumber Beetles, University of Minnesota Extension

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