

Cucurbit beetle

Diabrotica speciosa

Crops affected; Capsicum Chilli, Cucumber, Eggplant, Tomato

What is it?

Cucurbit beetle is very polyphagous and has a wide variety of host plants. It is mainly associated with cucurbits such as **cucumber**, but is also associated with **capsicum, chilli, eggplant** and **tomato**.

What does it look like?

Adult are 5-8 mm long with 4-5 mm dark antennae. They have a reddish brown to black coloured head, are grass-green coloured, with three large oval spots on each side of their back which are larger towards the head (Fig 1, 2 & 3). Male antennae are proportionally longer than those of females. Larvae are initially about 1 mm long and grow to 8-9 mm at maturity. They are chalky-white coloured with a yellow-brown head area (Fig 4).

What should I look for?

Cucurbit beetle larvae attack the roots of host plants, while adults feed on leaves, flowers and fruit. Larvae usually cause stunted growth due to reduced plant nutrient uptake. Root feeding can cause plant death for young host plants.

Adults can cause defoliation and general feeding damage to leaves, flowers and fruit. Adults are readily visible as they feed from dawn until dusk. Larval damage is more difficult to detect.

How does it spread?

Adult Cucurbit beetles can spread locally by flight, while contaminated vehicles or machinery can spread eggs, larvae or pupae in soil. Long-distance spread of adults and larvae is on plants (adults) and roots (larvae). A major potential pathway is soil as females lay their eggs on the soil.

Why is it important?

Cucurbit beetle is polyphagous and its larvae and adults feed on the leaves and roots of many economically important crops causing severe damage. It is a viral vector and can transmit bacterial wilt in cucurbits.

Where is it present?

The Cucurbit Beetle is widespread in Central and South America.

How can I protect my industry?

Check your production site frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common pests of your industry so you can recognise something different.



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Fig 1. Cucurbit beetle Photo credit: Alexander Derunkov, USDA, Bugwood.org



Fig 2. Cucurbit beetle on a potato leaf. Photo credit: maisafro.syngenta.com.br



Fig 3. Cucurbit Beetle on plant leaf. Photo credit: Jonas Janner Hamann, Universidade Federal de Santa Maria (UFSM), Bugwood.org



Fig 4. Cucurbit beetle larva. Photo credit: Paulo Lanzetta, ABBA, maisafro.syngenta.com.br