

Black bean aphid

Aphis fabae

Crops affected: Capsicum, Cucumber, Tomato

What is it?

Black bean aphid, also known as black fly, causes damage to greenhouse crops, such as **cucumber**, **capsicum** and **tomato**. In the greenhouse environment, black bean aphids can develop year-round. Black bean aphids feed on many hosts and are associated with a large variety of vegetables. Economic damage is mainly the result of direct feeding. Virus transmission has relatively minor economic importance for affected crops..

What does it look like?

Adults are about 2 mm long with a small head and bulbous abdomen (Fig 1). Colour can range from a dark olive green to black. They sometimes have white flecks on the upper surface of their body, and their legs are a light colour with black 'knees and ankles'. Black bean aphids have two black, backward pointing abdominal tubes called cornicles, and they may or may not have wings (Fig 2).

What should I look for?

Symptoms of damage include leaf curling, distortion and wilting especially on young actively growing leaves. Plant leaves may also turn yellow and wilt along the edges first. Aggregations of black bean aphids may develop on soft shoot tips, flower stems and the underside of younger leaves (Fig 3). There may also be white skin casts associated with infestations. The presence of sooty mould growing on excreted honeydew, and ants, are often associated with black bean aphids.

How does it spread?

Black bean aphids can be carried on planting material and some vegetables. The main method of dispersal is by migratory flight. Black bean aphids overwinter on a primary host, e.g. *Euonmyos europaeus* or *Viburnum* spp., then move to a secondary host to complete its life cycle. Secondary hosts are a limited range of crop plants. Females are able to reproduce without mating during parts of the year.

Why is it important?

Black bean aphids have piercing and sucking mouthparts. They suck sap from stems and leaves and cause shoot distortion, stunted plants, and reduced yield. Black bean aphids excrete honeydew which encourages the growth of sooty mould which can spoil crops. Heavy infestations can reduce seed formation and cause plants to die. Black bean aphids can also transmit viruses. In favourable conditions, populations can increase rapidly resulting in rapid exploitation of host plants.

Where is it present?

Black bean aphids are widely distributed in many parts of Europe, Asia, Africa, North and South America, and in the Caribbean.

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. Black bean aphid adults and nymphs.
Photo credit: Jack Kelly Clark, courtesy University of California Statewide IPM Program



Fig 2. Winged adult Black bean aphid.
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Fig 3. Black bean aphid adults and nymphs. Photo credit: [royal brinkman](#)