

APHID



WHAT IS THE THREAT:

Aphids are all generally small (1-3mm) and soft bodied, and have a pair of unique structures that resemble “tailpipes” near the end of their abdomen, called cornicles. Adults may or may not have wings. More than 20 aphid species can infest various greenhouse crops.

WHERE IS THE THREAT:

Aphids can be found worldwide and are considered pests of numerous crops. Aphids will attack plants in the field as well as in greenhouses. They can be host-specific but sometimes leave their primary host to feed on a wide range of plants. Aphids may be found feeding on all parts of the plant, including buds, stems, and the lower surfaces of leaves and even roots.

SYMPTOMS:

They feed by inserting their stylet-like mouthparts through plant tissue directly into the phloem and remove plant sap. Feeding can cause damage that results in stunting and leaf deformities. Large infestations can reduce plant growth rates and cause wilting. They produce a sweet, sticky secretion called “honeydew,” which incites sooty mold. Long-term infestation may reduce yields but the major concern is the transmission of viruses while feeding.

WHAT TO DO ABOUT IT:

Insecticides: Contact insecticides, such as Eco-1[®], can be very effective if all surfaces are treated. This can be difficult with large plants with a thick canopy. Thus, multiple applications are often needed with contact insecticides. If thorough coverage is isn't possible there are effective systemic and translaminar options, such as AzaSol[®]. These insecticides can be more effective than contact insecticides, if a high enough dose is delivered to the feeding sites. It is common for aphids to develop resistant to insecticides (carbamate, organophosphate, and/or pyrethroid insecticide) so chemistry rotations and diligent IPM programs are recommended.

Biological Control: Predatory insects are commercially available for aphid control. Some proven effective options include parasitic wasps (*Aphidius colemani*), predaceous midges (*Aphidoletes aphidimyza*), Ladybird beetles, lacewings. There is also a parasitic fungus called *Beauveria bassiana* that can work very well for light infestations.



Tobacco aphid



Feeding damage, aphids and a shed aphid skin



Damage to plum leaves caused by infestation with green peach aphids

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