

## Aphid midges (*Aphidoletes aphidimyza*)

### **Identification**

The adult is a small (2 to 3 mm), night-flying fly resembling a mosquito, with long slender legs and beaded antennae often curled back over their heads. Bright-orange larvae are legless and very small, less than 3 mm in length. Their tiny eggs are also orange and oval. *Aphidoletes* are always found amid an aphid colony, whereas a similar looking pest of *Malus* trees, the apple leaf midge, is usually found inside rolled leaf edges.



Above Left: *Aphidoletes* adult on leaf



Above Right: Larvae within aphid colony.

### **Preferred food**

Only the larval stage is predaceous and is known to feed on over sixty species of aphids. The adults do not prey on insects but feed on honeydew and nectar. The larvae puncture the leg joint of aphids and inject a paralyzing poison before sucking the body fluids, leaving only a shriveled, black corpse. They are voracious, eating up to fifty aphids per day and often killing more aphids than they eat.

### **Life cycle**

*Aphidoletes* overwinter as pupae in soil or debris, emerging in early June when daylight is longer. Female adults will lay 150 to 200 eggs within aphid colonies over a lifespan. The eggs take two to five days to incubate and the larvae will feed for one to two weeks before dropping to the ground to pupate. Pupation requires one to three weeks. The duration from egg to adult is very rapid, approximately 20 days. Adults live for about ten days with three to five generations occurring per year.

### ***Status in ornamental plants***

*Aphidoletes* are very effective predators that can bring an aphid problem under control within a few days. When present on a plant, they should be allowed to do their work without interference from toxic pesticides.

For nursery and landscape managers, the difficulty is to find them. The adults fly mainly at night, and the young larvae are so tiny they are often hidden beneath aphids.

*Aphidoletes* are available from insectaries for commercial releases. Since they require open soil at the base of the plant for pupation, they are more appropriate for greenhouses, flower beds and rose gardens. Their impact can take up to one year to manifest but is sustained for many years.



*Above Left: Container with Aphidoletes*



*Above Right: Prepared for outdoor release.*