

# BioAphidoletes

## *Aphidoletes aphidimyza*

BioAphidoletes (*Aphidoletes aphidimyza*), commonly referred to as the aphid midge, is a predatory insect.



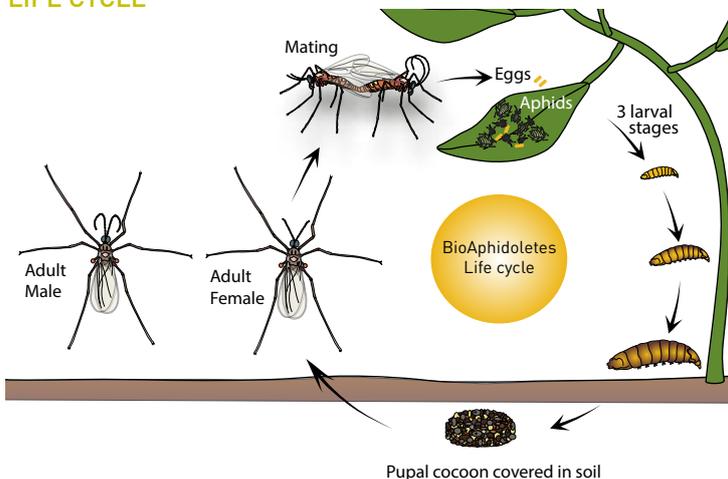
Aphid damage

### DESCRIPTION

Adults are small, delicate, mosquito-like flies with long, dangling legs and long antennae. The female deposits clusters of small, shiny orange and oval (0.3 mm diameter) eggs near aphid colonies. Eggs hatch in about 3 days. *Aphidoletes* larvae (which look like small maggots) can feed and consume aphids much larger than themselves. Depending on their food source, their color varies from bright-orange to red. Larvae feed for about 7-11 days, reaching about 1/8 inch in length and drop to the ground to pupate. The life cycle takes about 15-20 days, depending on temperature and food resources.

Aphid colonies secrete a honeydew odor that attracts adult *A. aphidimyza*. They deposit their eggs in these colonies so the larvae have a direct food source once they hatch. The larva paralyzes the aphids and proceeds to feed on them.

### LIFE CYCLE



### TARGET PESTS

Over 70 aphid species including green peach aphid (*Myzus persicae*), cotton aphid (*Aphis gossypii*), tobacco aphid (*M.p. nicotianae*), potato aphid (*Macrosiphum euphorbiae*) and cannabis aphid (*Phorodon cannabis*).



### CROPS

Vegetables, vineyards, cannabis ornamentals, strawberries and citrus.



### PRODUCT

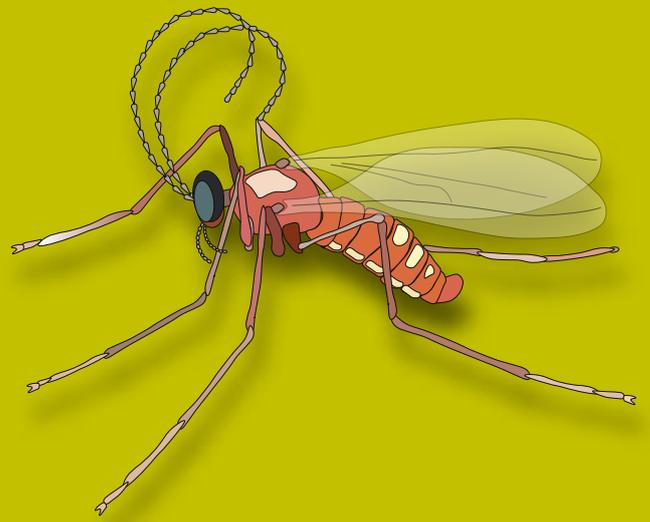
- BioAphidoletes is packaged in a container with 1,000 pupae in a moist vermiculite or peat moss substrate.



D-boxes can be used to apply BioAphidoletes throughout the crop



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## APPLICATION & HANDLING

- Ants can feed on *Aphidoletes* pupae. Treat the area against ants before application.
- To improve hatching rates, BioAphidoletes may be held at room temperature until emergence begins.
- Pupae are sensitive to desiccation thus, to achieve optimum results, release the product in a relatively high humidity environment to ensure emergence.
- Open the release container and place horizontally in a shaded location for emergence. Alternatively, place small piles of the product directly onto the growing media, within the foliage or in a D-box, hung inside the canopy, within the shade.
- Place the product adjacent to aphid hot spots.
- BioAphidoletes adults are nocturnal, so it's important that night temperatures stay above 61°F to ensure oviposition conditions and establishment.
- BioAphidoletes may diapause under short-day length, unless supplemental lighting is used.

**Do not expose the product to direct sunlight.**



## STORAGE

- BioAphidoletes is shipped in chilled, insulated boxes and should be transported in the original packaging.
- Store in a cool dark place at temperatures between 46°- 50°F.
- Store the bottle horizontally.

## DOSAGE

- The amount and frequency of releases is determined by crop, degree of infestation, weather conditions and damage inflicted on the crop.
- Multiple releases might be needed according to the infestation level and scouting information.

## MONITORING

**Scouting and monitoring is crucial.**



Biological pest control continues throughout the growing season, as successive generations of *Aphidoletes aphidimyza* establish in the crop. The level of success can be evaluated within ten to twenty days after release.

## GENERAL COMMENTS

Before combining BioAphidoletes with any chemical pesticide in the crop, please consult your BioBee technical advisory representative.

The success of biological pest control is affected by the crop's initial pest population (upon application of the product), weather conditions and chemical residue present in the crop, among other possible aggravating factors.