# Bio**Aphitis** Aphytis melinus

BioAphytis *(Aphytis melinus)* is a small parasitic wasp.



Red scale damage on citrus

# DESCRIPTION

BioAphytis is a light-yellow parasitoid wasp of about 1mm in length. The female wasps lay eggs under the waxy scale covering the scale. A larva hatches and starts feeding on the scale as an ectoparasitoid, ultimately killing the scale insect. Adult female wasps actively search for suitable hosts; prefering to parasitize 2nd and 3rd instar nymphs as well as unmated mature scale females.

On average one female wasp can lay up to 100 eggs and can feed regularly on scale insects (host feeding) to obtain protein for egg development.

Aphytis pass through approximately three generations for every generation of red scale.



# **TEMPERATURE & DEVELOPMENT**

Total development of BioAphytis from egg to adult is between 13 to 18 days depending on temperature. BioAphytis is well adapted to high ambient temperature of between 25°C to 35°C and low humidity.

#### TARGET PESTS

BioAphytis is used in the control of California red scale *(Aonidiella aurantia)*, Oleander scale *(Aspidiotus nerii)* and Oriental scale *(Aonidiella orientalis).* 



California red scale on citrus

#### CROPS

Citrus, field and fruit crops.



BIOBEE

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# THE PRODUCT

BioAphytis is packed in disposable cardboard containers with 5,000 or 10,000 adult parasitic wasps.

Each container consists of 4 to 8 corrugated cardboards( depending on the amount of parasitic wasps).



# Bio**Aphitis**

#### MONITORING

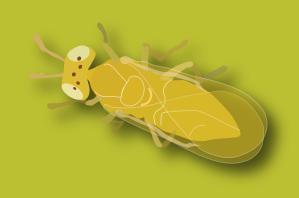
#### Scouting and monitoring is crucial.

The amount and frequency of releases is determined by the degree of infestation, weather conditions and damage inflicted on the crop.

#### **APPLICATION & HANDLING**

- Keep the containers inside the insulated shipping boxes until placement in the field.
- Keep the product in a cool location until release.
- To release, open the lid of the container and allow some wasps to fly out onto the foliage. Gently tap the lid to dislodge wasps from the lid/rim of the container onto the foliage.
- Place one corrugated cardboard into the tree canopy for each release point.
- After all the corrugated cardboards have been removed, place the container into the tree for the final release point.
- During hot days, releases should be done in the early morning or late in the afternoon, when termperatures are cooler.
- The wasps should be released within 24 hours of receipt.





Do not expose the bottles to direct sunlight.



# **BIOLOGICAL PEST CONTROL**

Biological pest control continues throughout the growing season, as successive generations of BioAphytis continue to control the red scales, providing a long-term solution.



#### GENERAL COMMENTS

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

#### DISCLAIMER

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



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