

BioMatriariae

Aphidius matricariae

Aphidius matricariae is a parasitic wasp, known to attack more than 40 aphid species in the family Aphididae.

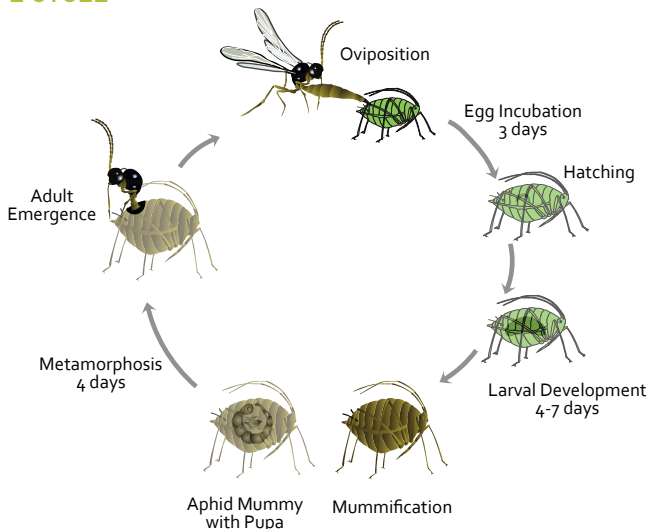


Indirect aphid damage

DESCRIPTION

The adults are small slender wasps with black, brown and yellow coloration, brown legs and long antennae. The female inserts a single egg in the host aphid, which develops whilst consuming the internal tissues of the host. *Aphidius matricariae*'s size depends on the size of the parasitized aphid, but is usually about 2-4 mm long. *Aphidius matricariae*'s activity is optimal between temperatures of 59°F-82°F (15-28°C). This species is not strongly affected by short-day induced diapause, so it can be used all year long. A complete life cycle takes about 10 days at 77°F (25°C) and under optimal conditions female wasps may parasitize 100 or more aphids in her lifetime.

LIFE CYCLE



TARGET PESTS

BioMatriariae mainly targets the green peach aphid (*Myzus persicae*), the cotton/melon aphid (*Aphis gossypii*), the tobacco aphid (*M.p. nicotianae*) and black bean aphid (*Aphis fabae*) among others.



CROPS

Cannabis, vegetables, field crops, greenhouse ornamentals, strawberries. It is often used in greenhouse production, but can also be used in open fields.

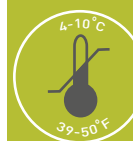
THE PRODUCT



- BioMatriariae is supplied as mummies containing the parasitoid's pupa. Thus, the product reaches its destination while "fresh" and its performance is enhanced.



- Each bottle contains 1,000 mummified aphids mixed in buckwheat.
- At least 50% of the emerging adults are female.
- D-boxes can be used to apply the mummies.



BioMatriariae



APPLICATION & HANDLING

- BioMatriariae is shipped in temperature-controlled boxes which must be kept intact until reaching the end-user.
- Ants may interfere with parasitic wasps. If ants are present, treat the area before applying the wasps.
- Do not sprinkle the mummies actively from the container.
- Distribute by opening the bottle, allowing wasps to fly out in search of aphids.
- Place the bottle in the shade (under the plant canopy), near the infested plants. Bottles may also be emptied into D-Boxes and hung in the plant canopy.
- If necessary, it is recommended to keep the product at room temperature until emergence is observed.
- **Do not expose the bottles to direct sunlight.**



STORAGE

- BioMatriariae may be stored for up to 48 hours, under recommended conditions.
- Store and transport in the original packaging.
- Store horizontally.

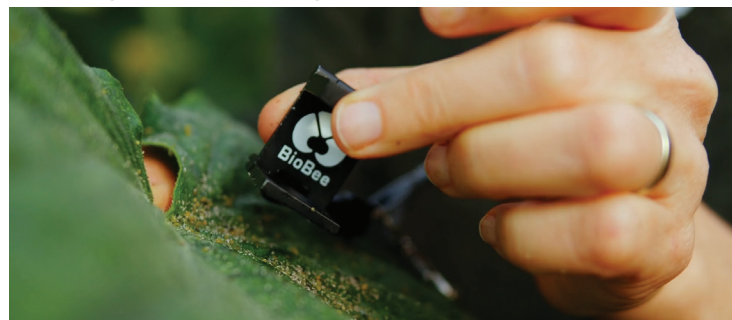
DOSAGE

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

Repeat applications may be needed to achieve long-term control.

MONITORING

Scouting and monitoring is crucial.



The level of success can be evaluated starting 10-14 days after release by looking for golden-brown aphid mummies.



Aphid mummies

GENERAL COMMENTS

Before combining BioMatriariae with any chemical pesticide in the crop, please consult your BioBee 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.