



Aphidius colemani - Aphid Parasitoid

Aphidius colemani will parasitise many aphid species including the green peach aphid (*Myzus persicae*) and the cotton or melon aphid (*Aphis gossypii*).

Description and Life Cycle:

Aphidius are about 2-3mm long and black with brown legs. They look very similar to a small black ant with wings, but the antennae are long and slender.

The parasite deposits an egg into the aphid in a matter of seconds. The aphid continues to move and feed for 3 days after the egg has been deposited. When the egg hatches, the Aphidius larva begins feeding on the aphid, eventually killing it. The parasitoid develops within the aphid body which at this stage called a "mummy". The mummy looks like an over inflated bronze aphid. The Aphidius chews a hole through the back of the mummy and emerges as an adult wasp ready to deposit eggs in live aphids.

Complete development time is temperature dependent, but is about 12 days at 25°C. This is longer than the development time of aphids, but each Aphidius female can parasitize over 100 aphids in her lifetime which can last 2-3 weeks when food and water are available.

Suitable Crops:

Aphidius can be used in all crops where susceptible aphids are pests. Aphidius is primarily used in greenhouse production, but can also be used in outdoor crops to get the parasitoids started earlier than would occur naturally. Crops that benefit from Aphidius include capsicums, tomatoes, cucumbers, flowers, a range of ornamentals, and some field crops such as cotton and sweetcorn.

When to Release:

Aphidius works best when used preventatively, or when aphids are first noticed in a crop. This parasitoid is very good at dispersing and finding low populations of aphids. If aphid numbers are already high it is advisable to use a non-disruptive insecticide to lower the aphid population prior to release. Residual broad spectrum insecticides should not be used for at least four weeks prior to the release of Aphidius.

How to Release:

Aphidius are sent as aphid mummies in a small vial. Each vial contains approximately 500 mummies. When they arrive some adults will have emerged. They should be released as soon as is possible. If they can not be put into the crop immediately they can be stored at 10-15 °C for a few days.

Open the vial in the crop where they are to be released. Place the vial underneath the canopy of the crop and allow the adults to fly out of the vial. The remainder of mummies in the vial should be spread throughout the area to be treated by sprinkling them onto the foliage.

Release Rates:

Rates will vary depending on the species of aphid targeted and the level of infestation at the time of release. The following rates have been determined overseas for the control of *M persicae* and *A. gossypii* in greenhouse vegetables and can be used as a guide.

Preventative: 0.15/m² weekly

After aphid detection: 0.5-1/m²/week for at least 3 weeks.



Ordering & Accounts:

Orders are sent via Express Post on Monday or Tuesday of each week, and usually arrive within a couple of days. Orders received after noon on Tuesday are sent the following Monday. Postage is charged at Australia Post rates.

Accounts are sent at the end of each month, and can be paid by cheque, BPay, or postal order.

For further enquiries please telephone our office between 8am and 4-30pm, Mon Fri.