



Aphelinus abdominalis is a parasitic wasp of large aphids. It has a short search range, so female wasps walk or make short flights in search of hosts. They sense the odor of infested plants and the aphids honeydew secretion. The parasitic wasps parasitize adults and nymphs. Using her ovipositor, the female inserts an egg inside the aphid host. When the egg hatches, the larva begins to eat the aphid from the inside out causing its death. The aphid will turn into a black mummy. A new adult wasp emerges through a round exit hole at the back of the mummy. Females start laying eggs on the 3rd or 4th day after emergence. Each female wasp parasitizes 5 to 10 aphids a day, with a total of up to 250 aphids during its entire lifetime. Even though *Aphelinus* takes time to establish, it has a long-lasting activity due to its long lifespan, the ability to host feed even on species it doesn't parasitize, and a reduced susceptibility to hyperparasitoids.

Product Specifications

Commercial name	Specifications
Aphelinus-System - 1,000	<ul style="list-style-type: none"> • 100 ml bottle: 1,000 pupae • Carrier: vermiculite

Storage

Use immediately upon receipt. If not possible, product can be briefly stored at 43-46°F (6-8°C) and RH > 85%.

APHELINUS-SYSTEM

Aphelinus abdominalis

Features

- Parasitic wasp for control of large aphid species
- Long lived
- Adults also kill by feeding directly on aphids (host feeding)
- Resistant to high temperatures
- Less sensitive to hyperparasitism
- Distinguishes parasitized from non-parasitized aphids (host discrimination)
- Mummified aphids turn black

Targets

Large aphid species such as:

- Potato aphid (*Macrosiphum euphorbiae*)
- Foxglove aphid (*Aulacorthum solani*)
- Strawberry aphid (*Chaetosiphon fragaefolii*)
- Blueberry aphid (*Ericaphis fimbriata*)
- Rose aphid (*Macrosiphum rosae*)

Crops (Indoor / Outdoor)

- Vegetables / Herbs
- Fruits
- Ornamentals
- Cannabis / Hemp



APHELINUS-SYSTEM

Rates

Mode	Dose	Area	Repeat
Preventative	0.15-1 ind./m ²	Full field	Once Every 1-2 weeks
Curative	1-3 ind./m ²	Hot spots and surroundings	Weekly until control is achieved

Instructions

Timing of application

Aphelinus-System can be used preventatively. When aphids are detected, increase the dosage rate in line with pest density. In case of curative treatments a simultaneous release of the parasitic wasp *Aphidius ervi* (Ervi-System) and the gall midge *Aphidoletes aphidimyza* (Aphidoletes-System) is advised. More severe infestations can be tackled in combination with the ladybird *Adalia bipunctata* (Adalia-System) or *Chrysoperla rufilabris* (Chrysopa-System).

Release method

Gently rotate the bottle horizontally to ensure homogenous distribution within the carrier. Sprinkle the contents on top of slabs, flat leaves or into Bio-Boxes and hang in the plants.

Do not place mummies directly onto soil or substrate. Make sure the material remains dry and is not moved from its introduction site for at least a few days or until adult emergence takes place.




Release conditions

Aphelinus abdominalis is active at temperatures between 50-89°F (10-32°C). Hyperparasites appear to show less preference for *A. abdominalis*, making it a good choice for aphid control during the summer months.

Monitoring

- Look for adults around aphid colonies and black mummified aphids.
- The efficacy can be checked by observing an increased number of mummies, a reduction in pest population, reduced number of hot spots, and healthy plant growth free of honeydew or sooty mould.
- Flip leaves and count the number of black mummies over healthy aphids. Control is achieved when 80% of the aphids are parasitized.
- The presence of a perfect round hole at the back of the mummy indicates that an adult of *Aphelinus abdominalis* has emerged.

Life cycle and appearance

Egg	Larva / Pupa	Adult
<ul style="list-style-type: none">• Eggs are laid inside the host aphid• Duration: 2-3 days*	<ul style="list-style-type: none">• Larva develops inside the host• The larva fixes the aphid on the leaf and starts to pupate• Parasitized aphids swell and change into black mummies• Larval stage duration: 7 days*• Pupal stage duration: 8 days*	<ul style="list-style-type: none">• Emerges through an exit hole in the mummy• Females have a black thorax and yellow abdomen• Short legs and antennae• 3 mm long• Lifespan: 8 weeks*
		

*At an average temperature of 68°F (20°C).

