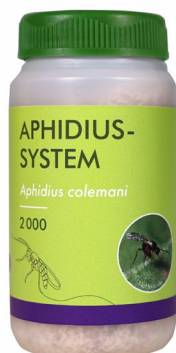


## APHIDIUS-SYSTEM

### TECHNICAL DATA SHEET



### Targets

Small aphid species:

- Melon cotton aphid (*Aphis gossypii*)
- Black bean aphid (*Aphis fabae*)
- Peach aphid (*Myzus persicae*)
- Tobacco aphid (*Myzus persicae* subsp. *nicotianae*)

### Crops

- Vegetable crops
- Soft fruits
- Ornamental crops
- Medicinal cannabis
- Tree nursery

### Registration number

- Österreich: Pfl. Reg. Nr. 3512
- Costa Rica: 023
- Ireland: REG 49 27/2019
- Latvija: reg. No. 0442
- Norge: 2018.39 - 2018.89
- Türkiye: 54008
- Ελλάδα: 7470/82448/18-7-2016
- España: 515/2008

### What is Aphidius-System?

- Parasitic wasp for controlling small aphid species
- *Aphidius colemani*
- Endoparasitoid
- Very good search behaviour that allows them to detect and parasitize developing aphid hot spots at low prey density
- Develops and spreads fast in the crop

### Mode of action

- The female wasps search for nymphs or adults of aphids, by sensing the odour of infested plants and the aphid's honeydew secretion.
- Using her ovipositor, the female will insert an egg inside the aphid host.
- When the egg hatches, the larva begins to eat the aphid from the inside out causing its death.
- A new adult emerges through a round exit hole at the back of the mummy.
- Each female wasp can lay up to 300 eggs, most of them during the first 4 days of adulthood.
- The presence of a parasitic wasp can cause a panic reaction, due to which the aphids let themselves fall down and die.

### Product specifications

Product	Package size	Package content
Aphidius-System 500	30 ml	500 mummies
Aphidius-System 2.000	100 ml	2000 mummies
Aphidius-System 5.000	250 ml	5000 mummies

Note: all mummies are provided on a carrier of sawdust

### Storage

Use immediately upon receipt. If not possible, product can be briefly stored in at 6-8°C/43-46°F and RH > 85%. Always respect the use-by-date.

### Dose rate

Mode	Dosage	Area	Repeat
Preventative	0.25 ind./m <sup>2</sup>	Full field On leaves	Once every 1-2 weeks
Low curative	0.25-0.5 ind./m <sup>2</sup>	Hotspots and surroundings	3 times 1 week interval
High curative	0.5-1 ind./m <sup>2</sup>	Hotspots and surroundings	4 times 1 week interval

## Instructions of use

### Release moment

Aphidius-System can be released preventatively. When aphids are detected, increase the dosage rate in line with pest density. In case of curative treatments a simultaneous release of the gall midge *A. aphidimyza* (Aphidoletes-System) is advised. More severe infestations can be tackled in combination with the ladybird *A. bipunctata* (Adalia-System). Aphidius-System is also suited for preventative control using banker plants.




### Release method

Gently rotate the bottle horizontally to ensure homogenous distribution. Sprinkle the content on the horizontal 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.

### Release conditions

*A. colemani* is active in a temperature range from 15°C/59°F up to 32°C/89°F. In summer time, the presence of hyperparasitoids can severely reduce the efficacy of *A. colemani*. The efficiency of *A. colemani* as a control agent will lessen with increasing aphid colonies, as excessive honeydew can hamper its mobility.

## Life cycle and appearance

Egg stage	Parasitized aphid (mummy)	Adult
<ul style="list-style-type: none"> <li>- Egg are laid inside the host aphid</li> <li>- Duration: 3 days*</li> </ul>	<ul style="list-style-type: none"> <li>- Parasitized aphids swell and change into golden-brown mummies</li> <li>- Larva develops inside the host</li> <li>- The larva fixes the aphid on the leaf and starts to pupate</li> <li>- Larval stage duration: 7 days*</li> <li>- Pupal stage duration: 4 days*</li> </ul>	<ul style="list-style-type: none"> <li>- Emerges through an exit hole in the mummy</li> <li>- Slender, black body with brown legs, long antennae and noticeable wing venation</li> <li>- 2-3 mm long</li> <li>- Lifespan: 2-3 weeks*</li> </ul>
		

\*In case of an average temperature of 21°C/70°F

## Monitoring

- Mummies can be observed on leaves of the crop 10-14 days after the first application.
- The presence of a perfect round hole at the back of the mummy indicates that an adult of *A. colemani* has emerged.
- Control is achieved when 80% of the aphids are parasitized.
- The efficacy can be checked by observing a reduction in pest population, reduced hotspots, and healthy plant growth, free of honeydew or sooty mould.

### DISCLAIMER

Use plant protection products safely. Please read the label and product information before use. Please consult the instructions for use to prevent potential harm to people and environment.