Beneficial Insects TECHNICAL DATA SHEET





ERVI-SYSTEM

Aphidius ervi



Female wasps have an excellent searching ability for nymph or adult aphids, by sensing the odor of infested plants and the aphid 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. The dead aphid will be mummified and remain attached to the leaf. A new adult emerges through a round exit hole at the back of the mummy. Each female wasp can lay up to 350 eggs, most of them during the first 4-5 days of adulthood. The presence of a parasitic wasp can cause aphids to drop from the plant in a panic reaction.

Product Specifications

Commercial name	Specifications
Ervi-System - 2,000	100 ml bottle: 2,000 pupaeCarrier: sawdust
Ervi-System - 5,000	 250 ml bottle: 5,000 pupae Carrier: sawdust

Storage

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

Rates

Mode	Dosage	Area	Repeat
Preventative	0.25-0.5 ind./m ²	Full field. On leaves, on a dry surface or inside bioboxes	Weekly or Bi-weekly
Low Curative	0.5-1 ind./m ²	Hotspots and surroundings	Weekly until control achieved
High Curative	1-2 ind./m ²	Hotspots and surroundings	Weekly until control achieved

Everything you need to grow



- Parasitic wasp for controlling large aphid species
- Endoparasitoid
- Excellent searchers allow them to detect low pest population
- Develops and spreads rapidly in the crop
- Packed as pupae (mummies)

Targets

Large aphid species:

- Potato aphid (Macrosiphum euphorbiae)
- Foxglove aphid (Aulacorthum solani)

Crops

- Vegetables / Herbs
- Soft fruits
- Ornamentals
- · Cannabis / Hemp
- Trees and shrubs



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Instructions

Application

Gently rotate the bottle horizontally to ensure even distribution within the carrier. Sprinkle the contents on flat leaves or into Bio-Boxes and hang in the plants. Do not place mummies directly onto soil or substrate, they prefer a dry surface. Make sure the material remains dry and is not moved from its introduction site for at least a few days.

Timing of Application

Start applications of Ervi-System preventatively. When aphids are detected, increase the dose in line with pest density. In case of curative treatments a simultaneous release of the predatory midge *A. aphidimyza* (Aphidoletes-System) is advised. More severe infestations can be tackled in combination with the ladybug *A. bipunctata* (Adalia-System) and *Chrysoperla rufilabris* (Chrysopa-System).

Release conditions

A. ervi is active in temperatures from $50^{\circ}F$ ($10^{\circ}C$) up to $89^{\circ}F$ ($32^{\circ}C$). In summer time, the presence of hyperparasitoids can severely reduce the efficacy of *A. ervi*.

Monitoring

- Mummies can be observed on leaves of the crop approximately 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. ervi has emerged.
- · Control is achieved when 80% of the aphids are parasitized.
- The efficacy can be checked in the crop by observing an increased number of mummies, reduction in pest population and healthy plant growth, free of honeydew or sooty mould.

Life cycle and appearance

Egg	Parasitized aphid (mummy)	Adult
Eggs are laid inside the aphid	Parasitized aphids swell and change into	Emerges through an exit hole in the mummy
Duration: 2-3 days*	golden-brown mummies	Slender, black body with brown legs, long
	Larva develops inside the host	antennae and noticeable wing venation
	The larva fixes the aphid on the leaf and starts	• 4-5 mm long
	to pupate	Lifespan: 2-3 weeks*
	 Larval stage duration: 7 days* 	
	 Pupal stage duration: 5 days* 	

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*At an average temperature of 70°F (21°C).