

## ERVI-SYSTEM

### TECHNICAL DATA SHEET



### Targets

Large aphid species:

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

### Crops

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

### Registration number

- Österreich: Pfl. Reg. Nr. 2929
- Costa Rica: 037
- Norge: 2018.91
- Türkiye: 54065

### What is Ervi-System?

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

### 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 350 eggs, most of them during the first 5-7 days of adulthood.
- The presence of a parasitic wasp can cause aphids to drop from the plant in a panic reaction.

### Product specifications

Product	Package size	Package content
Ervi-System 500	100 ml	500 mummies <sup>(1)</sup>
Ervi-System 2.000	100 ml	2.000 mummies <sup>(1)</sup>
Ervi-System 5.000	30 ml	5.000 mummies <sup>(2)</sup>

<sup>(1)</sup> on a carrier of sawdust/<sup>(2)</sup> no carrier

### 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	0.5-1 ind./m <sup>2</sup>	Hotspots and surroundings	Continuously 1 week interval
High curative	1-2 ind./m <sup>2</sup>	Hotspots and surroundings	Continuously 1 week interval

## Instructions of use

### Release moment

Ervi-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 gall midge *A. aphidimyza* (Aphidoletes-System) is advised. More severe infestations can be tackled in combination with the ladybird *A. bipunctata* (Adalia-System).

Ervi-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. ervi* is active in a temperature range from 10°C/50°F up to 32°C/89°F. In summer time, the presence of hyperparasitoids can severely reduce the efficacy of *A. ervi*.

## Life cycle and appearance

Egg	Parasitized aphid (mummy)	Adult
<ul style="list-style-type: none"> <li>- Eggs are laid inside the host aphid</li> <li>- Duration: 2-3 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: 5 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>- 4-5 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. ervi* 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.