

# SPHAEROPHORIA- SYSTEM

TECHNICAL DATA SHEET



## Targets

- Aphids

## Crops

- Vegetable crops
- Fruit crops
- Ornamental crops

## Mode of action

- Larvae predate on agriculturally important aphid species
- One larva can eat up to 200 aphids during its entire development
- Adult females search for large aphid colonies to lay their eggs
- Adult hoverflies feed on pollen and nectar

## Registration number

- Ελλάδα - 7458/82428/18-7-2016
- Latvija - reg. No. 0660
- Nederland - FFW/BB/2015/005
- España - OCB 0618 - 338/2014

## What is Sphaerophoria-System?

- *Sphaerophoria rueppellii*
- Hoverfly species indigenous to Europe
- Larvae are voracious predators of agriculturally important aphids
- *Sphaerophoria* larvae can also predate on whitefly, thrips and spider mite
- Compatible with aphid parasitoids
- Can contribute to pollination

## Product specifications

Product	Package size	Package content
Sphaerophoria-System-100	100 ml	100 pupae

Note: all bottles contain a mix of buckwheat husks and vermiculite as carrier for the pupae.

## Storage

Release the beneficials immediately upon receipt. If needed, store in a dark place at 8-10°C (46-50°F) for maximum 24h.

## Dose rate

Mode	Dosage	Area	Repeat
Preventive	100 pupae/ha	3-4 release points per bottle, close to each other	6 times, weekly
Curative	200-300 pupae/ha	3-4 release points per bottle in and around hotspots	4 times, weekly

## Application

### Release moment

Introduce Sphaerophoria-System at the first signs of aphids.





### Release method & conditions

Use a Bio-Box hung on the plant, away from the ground and avoid direct sun light. Divide the contents of the Sphaerophoria-System bottle over 3-4 Bio-Boxes.

*Sphaerophoria rueppellii* is active in a temperature range from 12°C (53.6°F) up to 40°C (104.0°F), with an optimum between 25°C (77°F) and 35°C (95°F). Activity of the hoverflies may be reduced with decreasing daylight. While adults can tolerate drought, the larvae need a humid microclimate.

*Sphaerophoria rueppellii* can be combined with aphid parasitoids. Hoverfly larvae only eat the non-parasitized aphids. By using both, the number of aphids in crops can be reduced even more drastically.

## Life cycle and appearance

Egg	Larva	Pupa	Adult
<ul style="list-style-type: none"> <li>- Oval shaped,</li> <li>- White to grey color</li> <li>- Mean length of 0.90 mm</li> <li>- Duration*: 3 days</li> </ul>	<ul style="list-style-type: none"> <li>- Green color</li> <li>- One larva can eat up to 200 aphids</li> <li>- Duration*: 8-9 days</li> </ul>	<ul style="list-style-type: none"> <li>- Drop shaped,</li> <li>- Green to brown color</li> <li>- Duration*: 5-6 days</li> </ul>	<ul style="list-style-type: none"> <li>- Female adults lay 15-20 eggs/day</li> <li>- One female can lay up to 400 eggs</li> <li>- Lifespan**: 21 days</li> </ul>
			

\*At an average temperature of 25°C (77°F)

\*\* When adults have access to an adequate sugar source

## Monitoring

- Adults will start to emerge 1-2 days after introduction; usually all adults will have emerged 1 week after the introduction.
- Some flowering plants, like *Lobularia maritima*, can be planted next to release points to provide supplementary pollen and nectar for adult *Sphaerophoria*.
- Larvae are mainly active during the night and will therefore not be easy to observe on the plant. During the day they migrate to humid regions of the crop. As the larvae feed, however, streaks of their black faeces, also called meconium, can be observed on leaves next to cleaned aphid hotspots.

### 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