

MICROMUS-SYSTEM

TECHNICAL DATA SHEET



Targets

- Aphids

Crops

- Vegetable crops
- Soft fruit crops
- Ornamental crops
- Medicinal cannabis

Registration number

- ESP: 106/2021
- GRC: ΕΚΣΦΜ 07034

What is Micromus-System?

- *Micromus angulatus*
- Brown lacewing
- Both larvae and adults are voracious predators of aphids
- Adults are very robust; they can develop in colder temperatures, they survive at low prey availability and have a long lifespan
- Low rates of cannibalism; prey sharing can occur when aphid pressure is low

Mode of action

- Both larvae and adults predate on agriculturally important aphid species.
- One larva can consume an average of 130 aphids before it enters pupation.
- One adult can consume up to 100 aphids per day.
- Female adults lay their eggs low in the plant. The larvae are great prey detectors and are able to crawl upwards on the plant.
- Female adults can live for up to 70 days and lay up to 1,000 eggs

Product specifications

Product	Package size	Package content
Micromus-System	240 ml ⁽¹⁾	250 adults Carrier: Honeycomb paper

⁽¹⁾ Packaging consists of a fully biodegradable carton cup and lid. The bottom is covered with a gel layer that serves as a source of water during transport.

Storage

Use immediately upon receipt. If not possible, product can be briefly stored at 8-10°C/46-50°F. Always respect the use-by-date.

Dose rate

Mode	Dosage	Area	Repeat
Low curative	0.2-0.4 ind./m ²	Full field	2-3 times at weekly intervals
High curative	20-50 ind./plant	Hotspots and surroundings	Weekly

Application

Release moment

Release Micromus-System at the first signs of aphids. As the adults are nocturnal, it is advised to introduce late in the afternoon or early in the evening.

Release method & conditions

Micromus-System can be used in both full field and hotspot treatments. For a full field treatment, open the cup at the end of a row (with a history of infestation) on the façade side and move towards the beginning of the row, while holding the cup close to the canopy of the crop. Take the pieces of honeycomb paper from the cup and place in the crop to introduce more individuals. The 100% biodegradable cup can be left in situ and cleaned out together with the plants at the end of a crop cycle.

M. angulatus can complete its development in temperatures as low as 10 °C/50 °F. The activity decreases at temperatures higher than 35 °C/95 °F. The optimal temperature for both the larvae and the adults to perform is between 15°C/59 °F and 26°C/79 °F.

Micromus-System is compatible with and complementary to existing commercial solutions for aphid control. Combine with parasitoids, hoverflies, Aphidoletes-System or Chrysopa-(E)-System to reduce the number of aphids even more drastically.

Life cycle and appearance

Egg	Larva	Pupa	Adult
<ul style="list-style-type: none"> - Oval shaped - Pale white to brown color - 0.94 mm long - Deposited without stalks, separately or in groups - Duration: 6 days* 	<ul style="list-style-type: none"> - 3 larval stages - Brown color - Pair of pincer-like mandibles - Black marking on abdomen - 2-10 mm long - Duration: 7 days* 	<ul style="list-style-type: none"> - Circular, silk-like cocoon - Pupa is mostly visible inside cocoon - 6 mm long - Duration: 7 days* 	<ul style="list-style-type: none"> - Light brown color - Long, transparent, fine-veined wings - Long antennae - 8 mm long - Pre-oviposition period: 7 days* - Lifespan: 10-12 weeks*
			

*At an average temperature of 24 °C/75°F and a RH of 70%

Monitoring

- The efficacy can be checked by observing a reduction in pest population, reduced hotspots, and healthy plant growth, free of honeydew or sooty mould.
- The larvae can be easily observed, preying within the aphid colonies, frequently several larvae sharing the same aphid. Pupae can be seen on the underside of a leaf, close to a leaf vein.
- Adults are nocturnal and will therefore be more difficult to observe. Their presence can be assured by observing dark brown drops on the leaves (=faeces).
- Attacked aphids can be recognised by their shrivelled and desiccated appearance.

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