

DIGLYPHUS- SYSTEM

TECHNICAL DATA SHEET



Targets

- Leafminer

Crops

- Vegetable crops
- Ornamental crops
- Medicinal cannabis

Registration number

- Austria: Pfl.Reg.Nr.2886
- Costa Rica: 028
- Japan: Nr. 20884
- Norway: 2018.85/2018.48
- Spain: 498/2007
- Turkey: 46630
- Switzerland: W-4708
- Latvia: reg. No. 0443

What is Diglyphus-System?

- *Diglyphus isaea*
- Parasitic wasp
- Efficient biological control agent of leafminers
- Both *Diglyphus* larvae and adults feed on leafminer larvae
- Fast population build-up enables *Diglyphus* to control an increasing leafminer population in a short time span

Mode of action

- *Diglyphus* females search for leafminers by perching on mined leaves and drumming on the leaf surface with her antenna to locate a pest larva.
- She will puncture a leafminer larva, preferably of the late 2nd or 3rd stage, to paralyze the larva.
- The female then deposits an oval egg in a mine, next to the leafminer larva.
- Out of the egg a *Diglyphus* larva emerges, that will feed on the leafminer larva.
- A new adult parasitic wasp will leave the mine through a round hole in the upper side of the leaf
- During its entire lifespan one female can lay 200 to 300 eggs in total.
- To feed, a female *Diglyphus* punctures leafminer larvae of the late 1st and 2nd stage and sucks them empty. One female can kill about 70 larvae for feeding only.

Product specifications

Product	Package size	Package content
Diglyphus-System	30 ml	250 adults ⁽¹⁾

⁽¹⁾ On a carrier of filter paper

Storage

Use immediately upon receipt. If not possible, product can be briefly stored horizontally at 6-10°C/43-50°F. Always respect the use-by-date.

Dose rate

Mode	Dosage	Area	Repeat
Low curative	0.25 ind./m ²	Infested areas	3x Weekly
High curative	1 ind./m ²	Infested areas	3x Weekly

Application

Release moment





Introduce *Diglyphus*-System at the first signs of leafminers.

Release method & conditions

Apply in the morning or in the evening.

To introduce *Diglyphus*-System, the tube should be held low in the crop, in order to enable the wasps to fly out and start looking for leafminer larvae. *Diglyphus isaea* is active at temperatures of 15°C/59°F.

Life cycle and appearance

Egg	Larva	Pupa	Adult
<ul style="list-style-type: none"> - The female deposits an egg in a mine - Duration: 1-2 days* <p>Note: Picture shows a female depositing an egg in a mine</p>	<ul style="list-style-type: none"> - 3 larval stages; 1st instar is transparent, 2nd instar is yellowish and 3rd instar is green - Duration: 5 days* 	<ul style="list-style-type: none"> - Green to black color - To pupate the larva will build 6 columns of excrements that be easily seen as 6 black spots on the leaf - Duration: 5-6 days* 	<ul style="list-style-type: none"> - Black color - 2-3 mm long - Short segmental antennae - Females have a yellow stripe on the hind legs - Lifespan: 10 days*
			

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

Monitoring

- A predated leafminer larvae can be recognized by a short mine that stopped early.
- Larvae and pupae of *D. isaea* are easily detectable, which facilitates the follow-up of the population growth.

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.