

# ERETMOCERUS-SYSTEM

### TECHNICAL DATA SHEET



## **Targets**

- Greenhouse whitefly
- Tobacco whitefly

## Crops

- Vegetable crops
- Ornamental crops
- Soft fruit

## Registration number

- Österreich: Pfl. Reg. Nr. 3555
- Costa Rica: 016
- Ελλάδα: 7468/82444/18-7-2016
- Ireland: REG 49 33/2019
- 日本: Nr. 21511
- Latvija: reg. No. 0466
- Norge: 2018.65/2018.83
- España: 499/2007
- Türkiye: 54049
- United Kingdom: NN-BCA-19-10 -

NN-BCA-19-11

## What is Eretmocerus-System?

- Parasitic wasp
- Eretmocerus eremicus
- Ectoparasitoid that controls whitefly infestations
- Effective at high temperatures
- Less sensitive to pesticides than other parasitic wasps against whitefly

## Mode of action

- Female wasps will lay their eggs under the whitefly larvae
- Eretmocerus can develop in any larval stage of the whitefly, but prefers the second and early third stage
- If an egg is laid in the first larval stage, a developmental arrest occurs, and will last until the whitefly larva has reached the second larval stage
- When the egg hatches, the larva will enter the host
- A new adult emerges through a round exit hole at the back of the pupa
- One female can parasitize around 150 whitefly larvae

## Product specifications

Product	Package size	Package content
Eretmocerus-System (100-5.000)	50 cards	100 pupae/card; 5.000 pupae <sup>(1)</sup>
Eretmocerus-System (100-10.000)	100 cards	100 pupae/card; 10.000 pupae <sup>(1)</sup>
Eretmocerus-System 10.000	100 ml	10.000 pupae <sup>(2)</sup>

 $^{(1)}$ Pupae are provided on a card with hook/ $^{(2)}$ Loose pupae are provided on a carrier of sawdust

## Storage

Use immediately upon receipt. If not possible, product can be briefly stored horizontally at 6-8°C/43-46°F. Always respect the use-by-date.

## Dose rate

Mode	Dosage	Area	Repeat
Preventative	1.5-3 ind./m <sup>2</sup>	Full field On leaves or in plants	1-2 times Every 2 weeks
Low curative	3-6 ind./m <sup>2</sup>	Hotspots and surroundings	Weekly min. 3 times
High curative	10-15 ind./m <sup>2</sup>	Hotspots and surroundings	Weekly min. 3 times

## **Application**

#### Release moment

Eretmocerus-System can be used preventatively. When whitefly larvae are detected, increase the dosage rate in line with pest density. It is recommended to combine the use of Eretmocerus-System with Encarsia-System.

#### Release method

Loose pupae: Gently rotate the bottle horizontally to ensure homogenous distribution. Pupae can be spread very easily in the crop, either on the leaves or using a Bio-Box. It is very important to scatter the pupae on a dry surface avoiding direct sunlight.

On cards: Bend and tear off the cards opposite from the mounting hook. Suspend the cards in the crop by the hook, if possible, approximately 75cm below the top of the plants. Avoid direct sunlight. Spread the cards equally over the surface that has to be treated to guarantee the best result. To prevent from damage, be careful to not touch the pupae while loosening and hanging the cards in the culture.

#### Release conditions

Conditions for optimal activity of Eretmocerus require a minimum average greenhouse temperature of 20°C/68°F. However, successful introduction is possible at lower temperatures. Eretmocerus eremicus remains active at temperatures above 30°C/86°F, which makes it more tolerant against high temperatures compared to other parasitic wasps that control whitefly.

## Life cycle and appearance

- Eggs are not detectable as they are laid under the host's larva
- Duration: 2-4 days<sup>(1)</sup>
- Note: Picture show a nonparasitized whitefly

- Whitefly pupae that have been parasitized appear beige in color
- Wasp larva passes through three instars inside the host
- Round exit hole visible when the Lifespan: 6-12 days<sup>(1)</sup> adult has emerged
- Larval & pupal stage duration: 12 days<sup>(1)</sup>

- Pale yellow color with green eyes
- Clubbed antennae
- 1 mm long
- One female lays 5-15 eggs/day<sup>(2)</sup>







(1) In case of an average temperature of 25°C/77°F./(2) Depending on the whitefly species.

## Monitoring

- Parasitized whitefly larvae can be observed in the crop 10-14 days after the first application.
- The presence of a perfect round hole in the pupae indicates that an adult of E. eremicus has emerged.
- Control is achieved when 80% of the whitefly larvae 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.