

# CRYPTOLAEMUS-(L)-SYSTEM

TECHNICAL DATA SHEET



# **Targets**

Mealybug

#### Crops

- Ornamental crops
- Fruit crops
- Vegetable crops

#### Mode of action

- Females can lay up to 400 eggs in mealybug hotspots
- Adults and young larvae prefer the eggs and young mealybugs, while older larvae feed on all stages
- Adults and old larvae are the most voracious
- On average they consume 30 to 70 mealybugs a day

## Registration number

- Costa Rica: 010

Norway: 2018.47/2018.32
 Spain: OCB 0372 463/2009
 Austria: Pfl.Reg.Nr.4126
 Switzerland: W-4909

# What is Cryptolaemus-(L)-System?

- Cryptolaemus montrouzieri
- Black-brown ladybird
- Both the larvae and the adults are efficient against several mealybug species such as *Planococcus citri* and *Pseudococcus viburni*
- The adults are strong fliers with good searching capabilities
- They may also survive on alternative prey such as aphids and scale bugs

# Product specifications Package size Package content Cryptolaemus-System - 500 250 ml 500 adults(1) Cryptolaemus-L-System - 250 250 ml 250 larvae(2)

(1)In a carrier of filter paper / (2)In a carrier of buckwheat and vermiculite

# Storage

Release the beneficials immediately upon receipt. If needed, store for a short time at a temperature of 10-15°C (50-59°F) and a RH>85%.

#### Dose rate

Mode	Dosage	Area	Repeat
Preventative	<1 ind./m <sup>2</sup>	General release	Bi-weekly or monthly
Low curative	2-3 ind./m <sup>2</sup>	Hotspots and surroundings	3 times Weekly
High curative	20-50 ind./m <sup>2</sup>	Hotspots and surroundings	3 times Weekly

#### **Application**

## **Release moment**

Introduce Cryptolaemus-System at the first signs of mealybugs.

#### Release method & conditions

Use a Bio-Box hung on the plant, away from the ground and avoid direct sunlight. Divide the contents of the Cryptolaemus-(L)-System bottle equally over the Bio-Boxes.

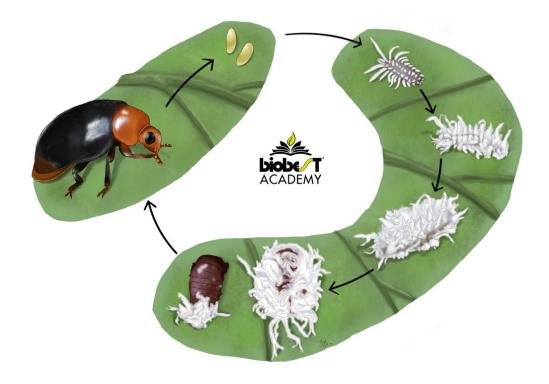
Cryptolaemus montrouzieri is most active when the weather is sunny. A temperature of 22 -25°C (72-77°F) and a relative humidity of 70-80% are optimal for egg laying. Activity decreases when temperatures drop below 16°C (61°F) or rises above 33°C (91°F), but in hot conditions Cryptolaemus is able to move to cooler parts of the crop.

The presence of ants in the crop adversely affects the work of *Cryptolaemus*. Ants are very keen on the mealybug's honeydew and will therefore protect them against this predator

# Life cycle and appearance

Egg	Larva	Pupa	Adult
<ul><li>Cycle: 5 days*</li><li>Laid amongst mealybug colonies</li></ul>	<ul><li>Secretes white downy wax threads</li><li>Mean length: 13 mm</li><li>Cycle: 12-20 days*</li></ul>	- Cycle: 7-10 days*	<ul> <li>Black-brown wing-cases</li> <li>Orange-brown head, thorax and abdomen</li> <li>Mean length of 4 mm</li> <li>Lifespan: 2 months*</li> </ul>

<sup>\*</sup>At an average temperature of 24°C (75°F)



# Monitoring

- After 2-3 weeks once a population of *Cryptolaemus* is established in the crop, adults can be seen hunting within mealybug colonies. The larvae are less easy to spot as they have evolved to resemble mealybugs, but can be identified by the fact that they move faster that mealybugs and can be observed eating mealybugs.