







## CRYPTOLAEMUS-(L)-SYSTEM

Cryptolaemus montrouzier

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.

## **Product Specifications**

| Commercial name             | Specifications   |
|-----------------------------|--|
| Cryptolaemus-L-System - 250 | <ul><li>250 ml bottle: 250 larvae</li><li>Carrier: buckwheat and vermiculite</li></ul> |
| Cryptolaemus-System - 500   | <ul><li>250 ml bottle: 500 adults</li><li>Carrier: shredded paper</li></ul>            |

## Storage

Release the beneficials immediately upon receipt. If needed, store for a short time at a temperature of  $50-59^{\circ}F$  ( $10-15^{\circ}C$ ).

### Rates

| Mode          | Dosage                    | Area                      | Repeat               |
|---------------|---------------------------|---------------------------|----------------------|
| Preventative  | 0.5-2 ind./m <sup>2</sup> | General release           | Bi-weekly or monthly |
| Low curative  | 2-10 ind./m <sup>2</sup>  | Hotspots and surroundings | 3 times<br>Weekly    |
| High curative | 10-50 ind./m <sup>2</sup> | Hotspots and surroundings | 3 times<br>Weekly    |

### **Features**

- · Black-brown ladybird
- Both the larvae and the adults are effective 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
- Adults live for about 2 months depending on temperature

## **Targets**

· Mealybug (with egg masses)

### Crops

- Ornamental crops
- Fruit crops
- Vegetable crops



# **CRYPTOLAEMUS-(L)-SYSTEM**

### Instructions

### **Timing**

Introduce Cryptolaemus-(L)-System at the first signs of mealy-bugs.

#### Release method & conditions

- This product comes formulated as larvae or adults.
- Release larvae onto infested plants by carefully transferring them alone or with the shredded paper carrier onto plants or into Bio-Boxes.
- Release adults on hot spots preferably in the evening and if possible cover the plants with a breathable fabric to keep the beetles in.
- Ants in the crop adversely affect the work performance of this predator. Make sure to control ants before attempting to control the mealybugs.

Cryptolaemus montrouzieri is most active when the weather is sunny. A temperature of 72-77°F (22 -25°C) and a relative humidity of 70-80% are optimal for egg laying. Activity decreases when temperatures drop below 61°F (16°C) or rises above 91°F (33°C), 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. Control ants for optimum Cryptoleamus performance.

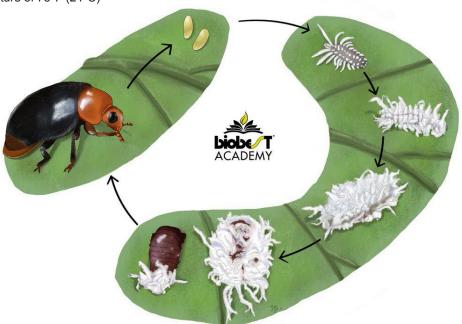
## Monitoring

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 difficult to distinguish from the pest because they have evolved to mimic them. They move faster than mealybugs and are wider and more separated.

## Life cycle and appearance

|                      | Pupa                 | Adult                         |
|----------------------|----------------------|-------------------------------|
| etes white downy wax | Duration: 7-10 days* | Black-brown wing-cases        |
| ids                  |                      | Orange-brown head, thorax and |
| n length: 13 mm      |                      | abdomen                       |
| tion: 12-20 days*    |                      | Mean length of 4 mm           |
|                      |                      | • Lifespan: 2 months*         |
| 1                    | ds<br>length: 13 mm  | ds<br>length: 13 mm           |

\*At an average temperature of 75°F (24°C)



DISCLAIMER: These are general guidelines. Please read label and product information before use. For questions and/or recommendations, please contact your local advisor.