



BioCryptolaemus

Cryptolaemus montrouzieri

Predatory beetle for biological control of mealybugs



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The predatory beetle *Cryptolaemus montrouzieri* belongs to a family of ladybird beetles. It is a general predator of mealybugs and feeds on a variety of mealybug species. The adult is 0.15 inch (4 mm) long, with a dark brown body and an orange head, prothorax, wing tips and abdomen.

The adult female lays eggs in the egg sac of the mealybugs. It is able to lay up to 500 eggs in its lifetime (10 per day). All larval stages and adults of the beetle feed on mealybugs.

Optimal conditions for *Cryptolaemus* development are temperatures between 70°F - 80°F (21°C - 27°C) with high humidity (70% or above). The beetle is most active during sunny days.

CROPS

Vineyards, citrus orchards, fruit trees and ornamentals.



THE PRODUCT

- 250 or 500 adults in a container with honey-soaked paper at the bottom as feed
- The quantity is listed on the label

APPLICATION AND HANDLING

Once the lid of the container is removed, the beetles will fly out in search of mealybugs. Three weeks to a month after the release, depending on weather conditions, different larval stages of the beetles should be present in the mealybugs' colony as well as carcasses of mealybugs.

- The beetles should be applied during the early morning or late afternoon, while temperature is relatively mild.
- The containers with the beetles are shipped in cooled insulated boxes. It should be delivered to the crop in these boxes. When released the containers should be removed from the box one at a time.
- The beetles should be released upon receipt and must be used within 24 hours of delivery to the grower.
- If for some reason the beetles cannot be released immediately, they must be stored in a cool place at a temperature of between 50°F - 54°F (10°C - 12°C).
- Ants stimulate the mealybugs to secrete honeydew. Their presence interferes with the beetles function. In the event ants are present, they should be eliminated.

The amount and frequency of beetles to be released is determined by the degree of infestation, weather conditions, and damage inflicted on the crop.

Biological pest control continues throughout the growing season, as successive generations of the *Cryptolaemus* beetle continue to control the mealybugs.

The predatory *Cryptolaemus* beetle can be combined with the *Anagyrus* wasp. These two natural enemies complement each other in controlling infestations of mealybugs and can coexist in the same environment.

GENERAL COMMENTS

For combining *BioCryptolaemus* with any chemical pesticide in the crop, consult your BioBee's technical advisory representative.