

Biological control
Chrysoperla carnea

CHRYSOcontrol | TECHNICAL DATA SHEET

PRODUCT:

- Box 100 individuals emerged from pupae.
- Bottle 500 individuals.
- Bottle 1,000 individuals.
- Bucket 10,000 individuals.



PRODUCT DESCRIPTION

Chrysoperla carnea is a Neoptera of the family Chrysopidae, considered to be a generalist predator. It has a cosmopolitan distribution and is known to prey on numerous species of **aphis**.

BIOLOGY. Adults are pale green, with a long narrow abdomen, relatively large bright golden eyes, two pairs of membranous, transparent green wings, and two long, filiform antennae. Its mouthparts are powerful, adapted for chewing. The larvae are campoide form (depressed body), with hairs on the dorsum of the body, a light-coloured head with two divergent dark stripes and, on the dorsum, a pair of dark longitudinal bands, together with several parallel transverse stripes. The third larval stage is about 8 mm long. The pupa, with 3 our 4 mm in diameter, has a silky whitish appearance. The stalked eggs are greenish-yellow at first, evolving to a greyish colour.

The duration of development of *C.carnea* is strongly influenced by temperature and is generally 2 or 3 weeks at 25ºC (77ºF). The larva emerges in 3 to 6 days, reaching the third larval stage in 10 to13 days, giving rise to the pupal stage. Finally, the developed adult emerges. Under natural conditions, it can complete 3 generations per year.

Outdoors, this chrysopid overwinters as a pupa, usually in leaf litter near crops. During spring and summer, the adults appear. Each adult female lays about 20 eggs/day, singly or in clusters, usually on the underside of the leaves.

ACTION MODE

- Adults have a great capacity for dispersal, which allows them to locate their prey and lay their eggs near them.
- Only the larvae are active predators: they sink their jaws into their prey and suck out its contents.
- In the absence of aphids, C. carnea can feed on mites, thrips and even small lepidoptera.
- It remains predatory within a temperature range of 12°C to 35°C.



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ADVANTAGES

- Good behaviour for aphid colony control.
- Great adaptability to adverse environmental conditions and wide thermal fluctuations.
- Compatible and complementary with other parasitoids and predators.

RECOMMENDED DOSE

Larvae format: 10 to 20 ind/m^2, applied in curative doses for several weeks until the aphid outbreak is controlled.

Pupa format: 2 to 3 boxes per hectare, preventively, combined with other biological control organisms.

Dosage may vary depending on crop and pest level. Consult the recommended dose with an Agrobío technician.

RECOMMENDED CROPS

Many horticultural, ornamental and fruit crops.

USE

Larvae format: open the can and shake thoroughly so that the larvae fall on the plants that need to be treated. Distribute evenly throughout the plantation or concentrate it in the areas with the highest incidence of the pest.

Pupae format: to use the pupae format, it is essential that there are flowers on the farm, either from the crop itself or from reservoir plants such as PLANTA-Lobularia or MIXconservativo. Distribute them evenly around the farm, in places where no ants are present. Once they are in place, remove the side tab.

Apply first thing in the morning or at evening.

PRESERVATION

Keep the bottle horizontally and at a temperature between 8ºC (46.4ºF) and 10ºC (50ºF). Do not break the cold chain in all the transport and storage process. Do not store the product after 48 hours of receipt, and never expose it to sunlight or pesticides.

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