

CHRYSOPA-SYSTEM

CHRYSOPA-E-SYSTEM

TECHNICAL DATA SHEET



Targets

- Aphids
- Mealybug

Crops

- Vegetable crops
- Soft fruit crops
- Ornamental crops
- Medicinal cannabis
- Herbs
- Public green

Registration number

- Österreich: Pfl. Reg. Nr. 3582
- España: 157/2015
- Ελλάδα: 7464/82438/18-7-2016
- Norge: 2015.45 - 2015.46

What is Chrysopa-(E)-System?

- *Chrysoperla carnea*
- Also known as the green lacewing
- Biological control of aphids by the larvae
- Larvae are highly voracious and polyphagous
- Ability to attack large prey
- Also feeds on other pests such as mealybugs, spider mites, thrips, whiteflies and some small caterpillars
- Adults feed on nectar, honeydew and pollen

Mode of action

- Larvae predate on agriculturally important aphid species
- One larva can consume up to 50 aphids a day and a total of 600 aphids during its entire development
- The last larval stage is the most voracious one, responsible for 75% of total consumption
- Adult females search for large aphid colonies to lay their eggs
- One female can lay an average of 20 eggs a day and up to 400 eggs during her lifespan

Product specifications

Product	Package size	Package content
Chrysopa-System 1.000	500 ml	1.000 larvae ⁽¹⁾
Chrysopa-System 10.000	5 L	10.000 larvae ⁽¹⁾
Chrysopa-E-System 100.000	100 ml	100.000 eggs ⁽²⁾

⁽¹⁾ in a carrier of buckwheat husks/⁽²⁾ no carrier

Storage

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

Dose rate

Mode	Dosage	Area	Repeat
<i>Chrysopa-System</i>			
Preventative	2-5 ind./m ²	Full field	1 time Weekly
Low curative	5-10 ind./m ²	Hotspots and surroundings	4-5 times Weekly
High curative	10-20 ind./m ²	Hotspots and surroundings	4-5 times Weekly
<i>Chrysopa-E-System</i>			
Preventative	20-50 ind./m ²	Full field	1 time Every 2-3 weeks
Curative	50-200 ind./m ²	Hotspots and surroundings	4-5 times Every 2-3 weeks

Application

Release moment

Start releasing Chrysopa-(E)-System in spring, when prey density increases and first hotspots appear.

Release method & conditions

Introduce Chrysopa-(E)-System near to their prey or in hotspots. To use preventively, spread evenly through the crop. Larvae should be applied directly onto the crop. For the release of eggs, the use of a Bio-Box is advised. *C. carnea* is active in a wide temperature range from 5°C/4 °F to 35°C/95°F. The activity of the larvae does not depend on relative humidity. For these reasons introduction can occur in crops with a high temperature variation and/or changing relative humidity.

Note: When food is scarce, cannibalism can occur in large *C. carnea* populations.

Life cycle and appearance

Egg	Larva	Pupa	Adult
<ul style="list-style-type: none"> - Oval shaped - Pale green to gray color - 0.7 mm long - Deposited separately or in groups on short stalks - Duration: 3-6 days* 	<ul style="list-style-type: none"> - 3 larval stages - Brown color - Pair of pincer-like mandibles - 1-8 mm long - Duration: 14-21 days* 	<ul style="list-style-type: none"> - Circular, silk-like cocoon - 4-6 mm long - Duration: 14-21 days* 	<ul style="list-style-type: none"> - Light green color - Long, transparent, fine-veined wings - Golden eyes - 12-20 mm long - Lifespan: 4-6 weeks*
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*At an average temperature of 20-25 °C/68-77°F.

Monitoring

- The efficacy can be checked by observing a reduction in pest population, reduced hotspots, and healthy plant growth, free of honeydew or sooty mould.
- Adults of *C. carnea* rarely establish a resident population in the crop, since they will mostly leave the greenhouse after hatching.
- The presence of eggs, larvae and pupae of *C. carnea* can be seen on the leaves.
- Some adults can be seen during the evenings and at night when they are attracted by light sources.
- Attacked aphids can be recognised by their shrivelled and desiccated appearance.

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