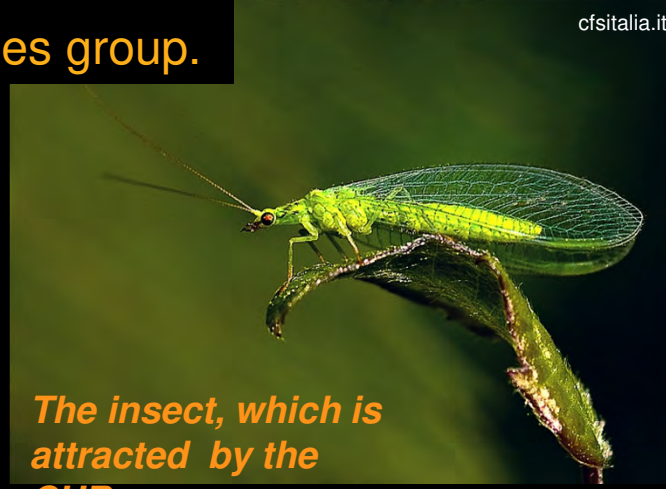
Lacewing egg concentrator - *Chrysoperla carnea* species group.



The insect, which is attracted by the CHRegg

Green lacewings (*Chrysoperla carnea* species group) occur commonly in agricultural and horticultural crops. The adult insect is 10-12 mm long, its body is grassgreen (overwintering specimens are reddish), there is a yellow stripe along the middle line of the dorsal part of the thorax and abdomen. The wings are 10-13 mm long, elongated oval, transparent, with dense green veins. The *carnea* species group has 2-3 overlapping generations per season.[1] Eggs are laid singly, they are 1-1.5 mm long, oval, and they sit on 6-8 mm long, very thin hairs. Until after 1-2 days after egglaying the eggs remain green, later during the 7-15 days of embryonic development they turn greyish. The egg skin remaining after the larvae hatch is white.[1] The larvae develop through 3 instars which takes 10-25 days. Their mouthparts resemble a teeth or fang, they rip with it the body of the prey and feed on the body liquids.[1]

Preys of the larvae include first of all aphids, but in their absence many other soft-bodied arthropods and their developmental stages (i.e. eggs of moths) may serve as food. They are efficient predators, one larva can devour 200-500 aphids during its larval life.[1,2]

The egg and the larva feeding aphids

Photo: S. Koczor

Setting out of the CSALOMON® CHRegg egg concentrator: the device complete with the synthetic lure should be placed on terminal parts of branches, possibly in the vicinity of aphid colonies. It is advantageous if the device touches green leaves, one can even fold some leaves into the inside of the device. This helps hatching lacewing larvae to get to the plant from the device. The main egglaying period of lacewings is June and July, but it is advisable to set out the concentrator from the end of May. In many cases one can still find new eggs on the device even in August and September.

Selectivity of the CSALOMON® CHRegg lacewing egg concentrator: the synthetic lure attracts only the *Chrysoperla carnea* species group (*C. carnea s. str., C. lucasina, C. pallida*), egglaying by other species has not been observed. Longevity: the lure does not start to loose from its activity for at least 2-3 weeks in the field. Later on it is suggested to replace the bait with a new one.

How does the CHRegg lacewing egg concentrator work? The synthetic lure attracts adult lacewings. Since the inner surface of the device is rich in tactile stimuli enhancing egglaying, the female lacewings attracted will lay many eggs on the concentrator device. This will result in predatory lacewing larvae hatching in the device, and these larvae will predate aphids on and around the plant where the device is set out.

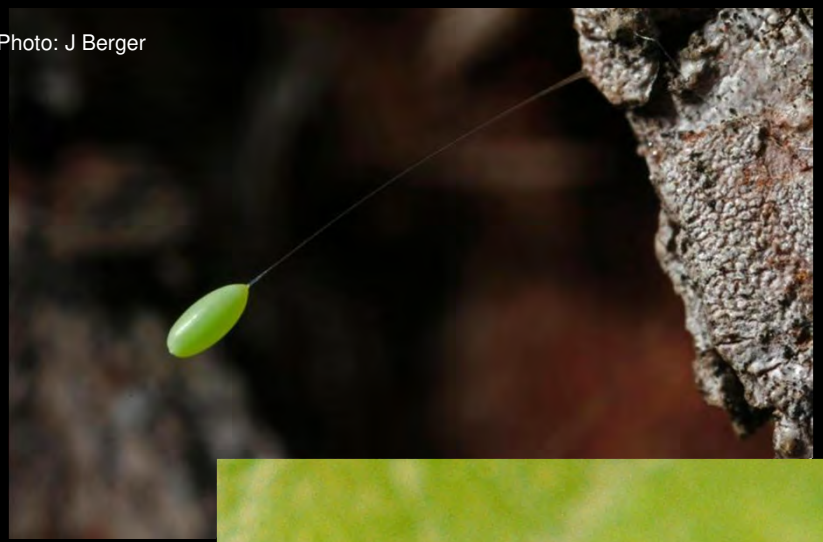


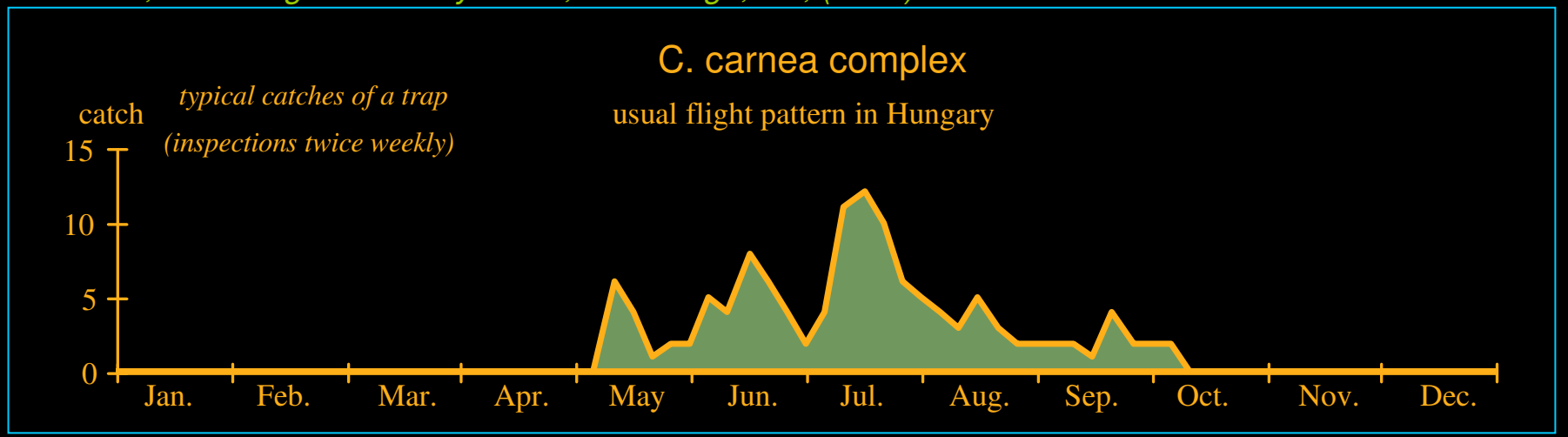
Photo: J Berger

pbase.com

Photo: S. Koczor

By the help of the CSALOMON® CHRegg lacewing egg concenrator one can concentrate a large number of eggs on the plant to be protected (trees, bushes, dense stands or rows of smaller plants). You can transfer eggs by moving the device with eggs on it to the place of preference in your garden, where you need the presence of predatory lacewing larvae the most. (If we put the devices with eggs into crops in our greenhouse, the hatching lacewing larvae will prey on pest aphids and mites right there.). The synthetic lure alone can also be used: if put onto a branch the lacewings will lay many eggs on that particular plant, and this will result in a higher population of lacewing larvae on that plant. Another option is to place the synthetic lure on overwintering boxes. According to experience 2 to 3 times more adult lacewings will overwinter in the boxes with lures than in boxes with no lure.
IMPORTANT! The population density of lacewings depends on local conditions and can be variable from one site to the other. Pesticide sprays performed in the vicinity may reduce severely the populations of predatory insects as well.

[1] *Balázs K. és Mészáros Z. (szerk.): Biological control with natural enemies (in Hung.). Mezőgazdasági Kiadó, Budapest, pp. 92-116, (1989);* [2] *McEwen P.K., New T.R. and Whittington A. (eds.): Lacewings in the crop environment, Cambridge University Press, Cambridge, UK, (2001).*



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Photos: S. Koczor

So it looks when lacewings laid their eggs on the CSALOMON® CHRegg!