

Cabbage armyworm - *Mamestra brassicae* L.

The wingspan of the moth is 40-48 mm. The basic colour of the forewings is dark greyish black. The reniform stigma is clearly visible, with large, whitish scales. The orbicular and claviform stigmatae are also well visible, but darker. There is a long zig-zag line along the outer edge of the wings. The hindwings are greyish. The thorax is woolly, its colour is similar to the forewings.

The host plants of the larva include different varieties of cabbage, sugar-beet, lettuce, hemp, hop, spinach, tobacco, maize, peas, vetch, flax, poppy, tomato, paprika, and other (first of all cruciferous or fabaceous) vegetables and field crops, but also ornamental and medicinal herbs and certain orchard trees. It is characteristic to the damages caused by the caterpillars (especially of the autumn generation) that they feed among the succulent large leaves of cabbage, and they bore into the inside of the head. The faeces of the larvae is also wet, which is enhanced by rain seeping in through the gallery. As a result the cabbage head attacked will start to rot.

The CSALOMON® pheromone trap should be placed in the vicinity of the plant culture to be studied, at the level of the top of the vegetation. It is advantageous to hang the traps from lower



The moth, which is captured in the trap



The larva and its damage, which should be averted



branches of nearby trees or bushes at a height of no more than 1 - 1.5 m above soil. Moths usually congregate in hedges, or the weedy edges bordering a field, so this is where high captures can be expected. The first moth flight usually starts in Hungary in the beginning of May, and the second flight in the beginning of July.

Selectivity of the CSALOMON® pheromone trap: the trap can catch relatively large numbers of the noctuid *Discestra trifolii*, which is always smaller and not as dark as the cabbagearmyworm. The white scales in the reniform stigma are always missing. Some occasional specimens of *Apamea* spp. can also be recorded, these are larger and the wing pattern is different. A few specimens of various *Mythimna* species, also noctuids, were sometimes also caught. These species can easily be distinguished from *M. brassicae* by their much lighter, yellowish colour.

The bait in a CSALOMON® pheromone trap starts slowly to decrease its attractive activity after 4-6 weeks of field exposure (depending on actual weather conditions).

After this period it is advisable to replace the bait for reliable detection and monitoring. From the range of our trap designs the VARL+ funnel trap is best suited for catching the cabbage armyworm. This trap type proved to be excellent and very sensitive for detection of occurrence, and since it has virtually unlimited catch capacity, it is also good for quantitative monitoring of flight dynamics. In our experience sticky trap types were not reliable enough for this species.

www.chromosoma.unimo.it



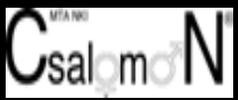
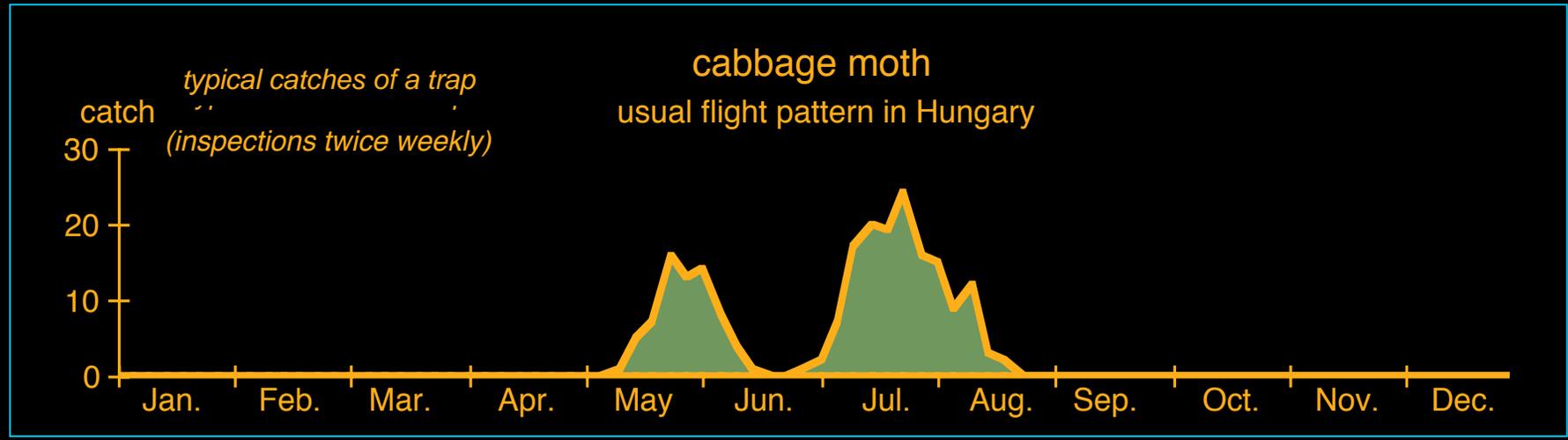
The larva and its damage, which should be averted

Pheromone traps are ideal for the timing of insecticide sprays, which are most effective when performed when the freshly hatched larvae still feed in groups at the surface of the plants. When the larvae later disperse and bore into the cabbage heads, they are not so easily reachable by the insecticide. For diminishing the number of food sources of adult moths it is advisable to keep our field free of weeds.[1] Some papers in the literature deal with the pheromone trapping of the cabbage armyworm.[2]

[1] Balázs K és mtsi, *Növényvédelem* 34:79-92, 1998. [2] Terytze, K. Adam, H. *Arch. Phytopathol. Pflanzenschutz*.17:387-396, 1981; Rahn R. et al. *Colloq. INRA.*, p.109-111, 1980; Bues R. Poitout H.S. *Colloq. INRA.*, p.117-122, 1980



The larva and its damage, which should be averted



is a registered trademark of the Plant Protection Institute, MTA ATK, Budapest, Hungary.

To order / to inquire: MTA ATK Növényvédelmi Intézet (Plant Prot. Inst. MTA ATK) Budapest, Pf 102, H-1525, Hungary; phone. +(36-1)-391-8637, +(36)-30-9824999; fax +(36-1)-3918655; e-mail: <csalomon.orders@julia-nki.hu> or <h2371tot@ella.hu>; internet: <<http://www.julia-nki.hu/traps/>>.



The CSALOMON® VARL+ funnel traps can capture very large numbers of the cabbage armyworm without saturating. The RAG sticky traps do not give satisfactory performance in this species.