Horse-chestnut leafminer - *Cameraria ohridella* Deschka et Dimic

The moth, which is captured in the trap

The wingspan of of this tiny moth is 6-8 mm. The forewings are golden brown, with white, cuneiform marks. On the head there is a tuft of scales. The wings are elongated, narrow. The species looks very similar at first glance to other, well established leafminers, i.e. *Lithocolletis blancardella*; it can reliably be told apart from other *Lithocolletis* spp. only by genitalia analysis.

The host plant of the larva includes the white-blossomed variety of horse-chestnut **(***Aesculus hippocastanum*), occasionally it can occur also on red- coloured varieties (*Aesculus pavia* and *Aesculus x carnea*). The larvae bore mines inside the green leaves. The mine looks more or less transparent when viewed across the sunlight, in contrast to the symptoms of the fungus disease (*Guignardia*) which causes dark patches on the leaves. The mine is a patch of undefined shape, it may reach across secondary veins (but not across the main veins). Several mines can occur on a single leave, already at the time of the first generation. Mines of later generations may reach into each other resulting in no green surface on the leave. Strong damage usually is followed by defoliation.

The CSALOMON® pheromone trap should be suspended from branches at a height of 1.5-2.5 m in the tree canopy. Usual beginning of trapping in Hungary is middle of April.

The larva and its damage, which should be averted

Selectivity of the CSALOMON® trap (based on tests performed in Hungary): the pheromone bait is highly selective for *C. ohridella*. Only sporadic random catches from other species can be observed in the traps.

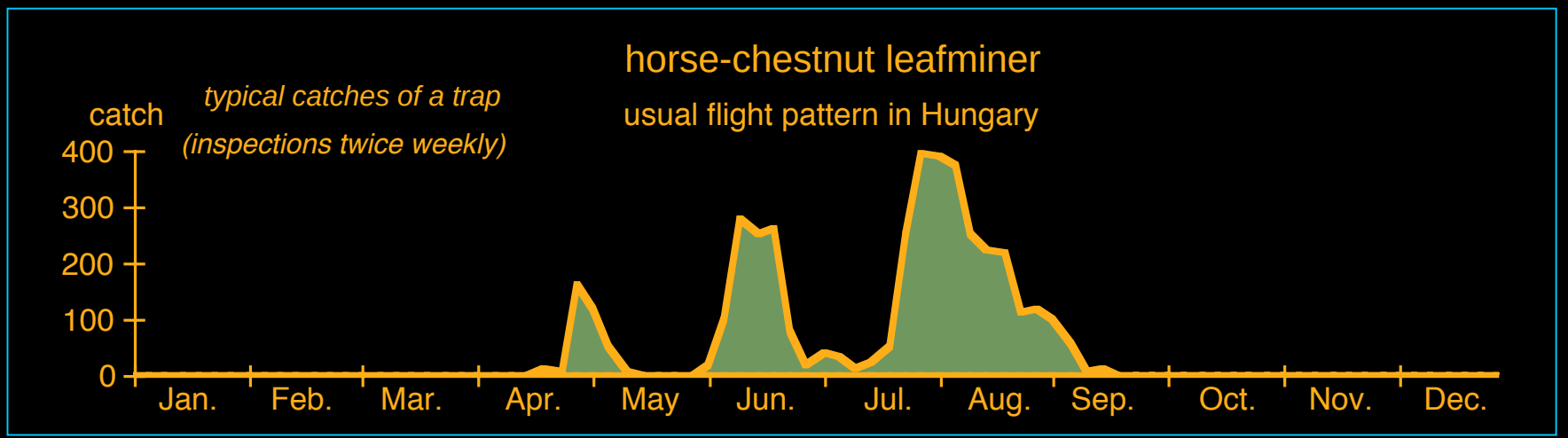
Longevity of the CSALOMON® trap in field conditions: depending on the warmth of the weather at least 4-6 weeks. After this period we suggest to set up a new trap for most effective detection and monitoring. Trap design recommended: For detection our sticky trap design (RAG) is most suitable. It proved to be excellent and very sensitive for detection of occurrence and monitoring of flight dynamics of the species.

The sticky insert can become saturated with captured specimens within a relatively short period (1-2 days even) at high population densities, so frequent renewal of sticky inserts may become necessary.

For catching large numbers of moths and/or for quantitative monitoring the funnel (VARL+) design can be recommended. In case of the funnel design it is advisable to kill the moths captured by placing a killing agent (not provided with the trap) into the catch container.

The horse-chestnut leafminer has become a pest in Europe in the past couple of years[1] and natural enemies (i.e. parasitoid wasps) can only partially control its population[2]. However if the parasitoids are killed off in the spring (for example by an insecticide treatment not timed properly), the leafminer can show a sudden outbreak. Insecticide sprayings should be timed for best efficacy to the period preceding the mass egglaying of the moths emerging from the overwintering pupae. This can be determined by recording when the catches in our pheromone traps start sharply to increase in the spring. Apart from insecticide sprays, some promosing results were achieved by the alternative control method of the collection of fallen leaves in the autumn to hamper overwintering of the pest [3].

[1] *Szœcs, G. Élet és Tudomány, 46:1451, 1997.* [2]*Balázs K., Növényvédelem 36:281, 2000.* [3] *Józsa S. & Czencz, K. Növényvédelem 36:291, 2000.*



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-nk
or <h2371tot@ella.hu>; internet: <http://www.julia-nki.hu/traps/>.

Photo: Nagy Z. L.

The funnel VARL+ traps can capture very large numbers without saturating.

So it looks when caught in the CSALOMON® RAG trap, which, although can be used for detection, can get saturated with the catch relatively fast.