Black cutworm - *Agrotis ipsilon* Hfn.

The adults are large dark noctuids with a wingspan of 35-50 mm, with a grey body, grey forewings with dark brownish-black markings; the hindwings are almost white basally but with a dark terminal fringe(in males this is paler).

The host plants of the larva include cotton, rice, potato, tobacco, cereals, crucifers, but it can attack seedlings of almost any crop plants. Damages: the young larvae feed on the leaves; the older caterpillars feed at the base of crop plants or on the roots or stem underground. Seedlings are typically cut through at ground level, one caterpillar may destroy a number of seedlings in this manner in a single night, often working along the plant row.

The moth, which is captured in the trap

The larva and its damage, which should be averted

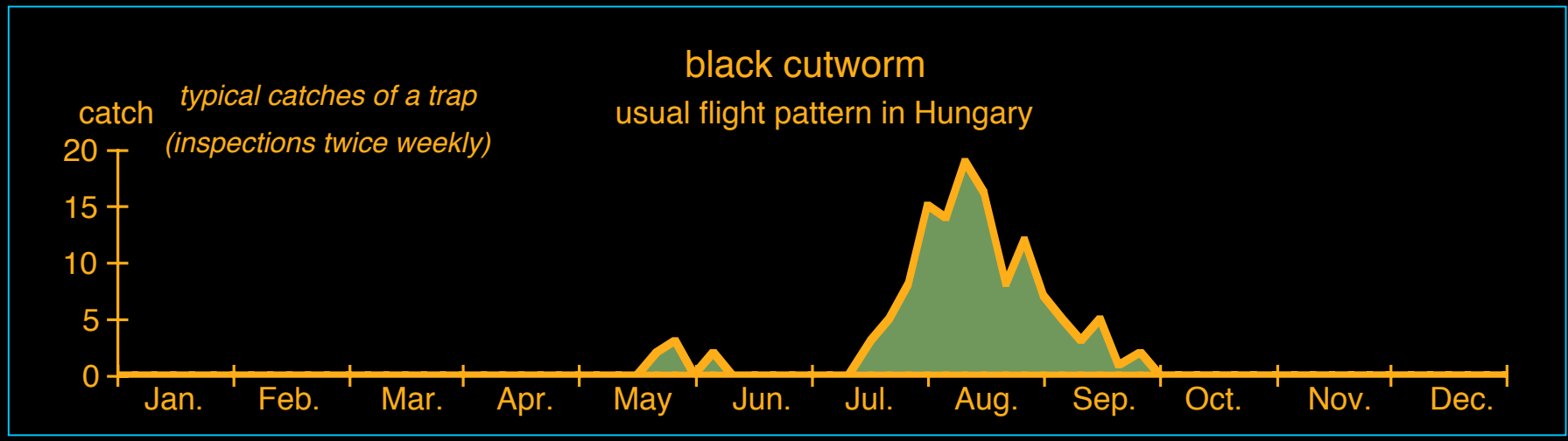
The CSALOMON® pheromone trap should be placed in the vicinity of the plant culture to be studied, at the level of the top of the vegetation. It is advantageous to hang the traps from lower branches of nearby trees or bushes at a height of no more than 1 - 1.5 m above soil. Moths usually congregate in hedges, or the weedy edges bordering a field, so this is where high captures can be expected. In the spring black cutworm adults migrate to the north from the south of Europe or Africa (in case of favouralble winds this can happen in masses), and arrive to Central Europe in April. The locally developing further flights are in late July -September.

Selectivity of the CSALOMON® pheromone trap (based on experience in Hungary): the trap can catch low numbers of the turnip moth *Agrotis segetum*, which is always smaller and not as dark as the black cutworm (traps with a much more efficient pheromone bait optimized for the turnip moth are available in the CSALOMON® trap family). Occasionally *Hoplodrina* spp. can also be trapped, these are also much smaller in size than the black cutworm.

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 black cutworm. The VARL+ trap is 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. Several papers in the literature deal with the pheromone trapping of the black cutworm.[1]

[1] *Hill, J. Chem. Ecol. 5:439-457, 1979; Clement, Environ. Entomol., 10:521-523, 1981; Willson, J. Econ. Entomol., 74:517-519, 1981; Clement, Calif. Agric. Calif. Agric. Exp. Stn., 36:20-21, 1982; Levine, Bull. Entomol. Soc. Am., 28, 139-142, 1982; Gemeno, Ann. Ent. Soc. Amer 93:1322-1328, 2000; Hong, J. Econ. Ent. 97 :1666-1670, 2004.*



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

Photo: M. Tóth

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