Winter moth - *Operophtera brumata* L.

The thin body of the male moths is 15-17 mm, the wingspan is 25-30 mm. The basic colour of the wings is yellowish-brownish, their pattern is darker, with greyish undulating bands across. The females of the species are wingless, they possess only a short stub of wings which are only a couple of mm long.

The host plants of the larva are: cherry, apple, but it feeds on almost any orchard trees.

It can cause significant damages usually in the vicinity of forests. Its favorite host plants among forest trees include oaks, hornbeam, and other deciduous trees. The winter moth ranks among the most important forestry pests in Europe.

Damage: in the spring the hatchlings prepare a hiding place by webbing one or two leaves together. Later they feed on the fully developed leaves. In many cases only the veins remain from the leave attacked by the caterpillars. In case of an outbreak virtually all leaves of the trees can be devoured.

The pheromone trap should be placed at the height of 0.5 - 1 m near the trunks of trees. Usual starting date for trapping is end of October (Hungary).

Selectivity of the CSALOMON® trap (based on tests performed in Hungary): in Hungary no other moth species is attracted during the usual flight period of the winter moth.

The male moth, which is captured in the trap

A CSALOMON® pheromone trap may start 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 set up a new trap for reliable detection and monitoring.

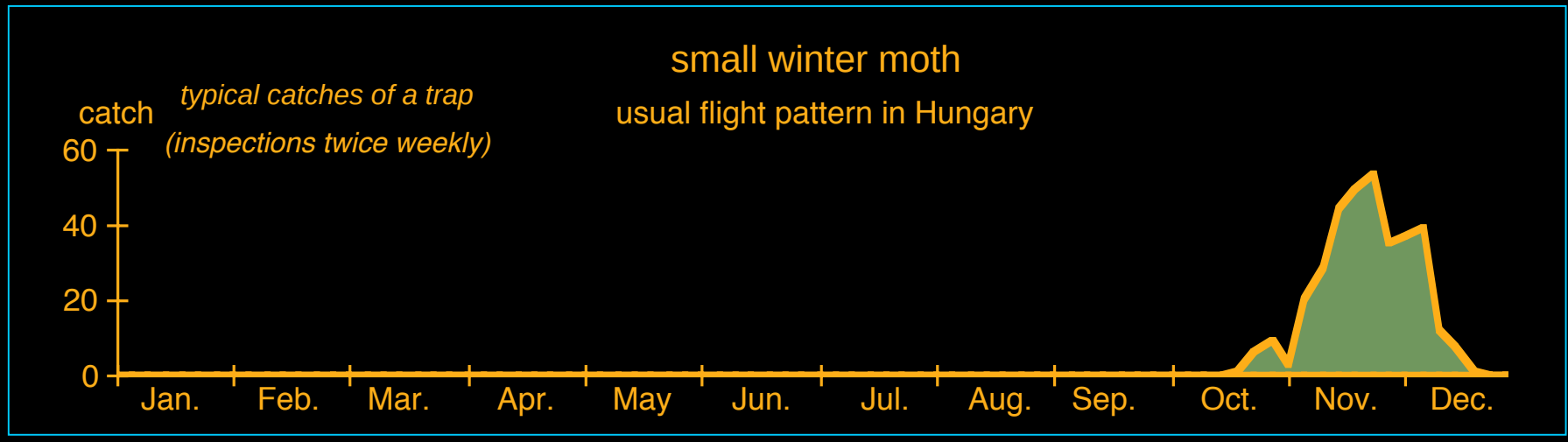
The larva and its damage, which should be averted

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.
There are numerous references in the literature dealing with the identification, synthesis and application of the pheromone of the winter moth:

Nikolaeva L.A. Kovalev B.G. Ishchenko R.I.; Khimiya Prirodnykh Soedinenii 1992, 1992, 122-125; Stoakley J.T.; Z. angew. Ent. 1985, 99, 153-160; Baker R. Omahony M.J. Swain C.J.; JOURNAL OF CHEMICAL RESEARCH-S 1984, 6, 190-191; Albert R. Bogenschutz H. Konig E.; Z. angew. Ent. 1984, 98, 286-298; Knauf W. Bestmann H.J. Vostrowsky O.; Ent. exp. & appl. 1984, 35, 208-210; Hand S.C. Ellis N.W. Stoakley J.T.; CROP PROTECTION 1987, 6, 191-196; Subchev M.A.; Ekologiia. Sofiia. 1980, 80-83., 80-83; Bestmann H.J. Brosche T. Koschatzky K.H. Michaelis K. Platz H.; Tetrahedron. Lett. 1982, 23, 4007-4010; Roelofs W.L. Hill A.S. Linn C.E. Meinwald J. Jain S.C. Herbert H.J. Smith R.F.; Science. 1982, 217, 657-659; Knauf W. Bestmann H.J. Vostrowsky O.; Entomol. Exp. Appl. 1984, 35, 208-210; Szocs G. Toth M.; Acta. Phytopathol. 1978, 13, 213-217.

The male moth, which is captured in the trap



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

kis téliaraszoló
O. brumata

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.