

Potato tuberworm moth - *Phthorimaea operculellum* Zell.

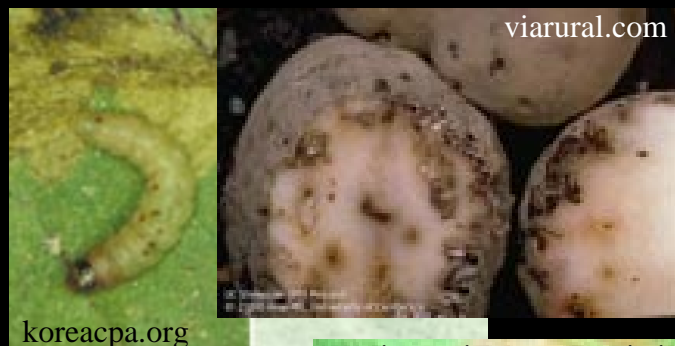
The wingspan of the moth is 10-15 mm. The wings are narrow, lance-shaped, with long fringes. The forewings are brownish gray or gray, with small darker gray flecks. The hindwings are light grey. The antennae are thin, very long, they reach to the end of the abdomen.



The moth, which is captured in the trap

The **host plants** of the larva include **potato** and tobacco, but it can develop also on eggplants, tomato, peppers, and on related weeds.

Damage: the small larvae make mines in the leaves, later they chew galleries in the leaves, the stem, and in the potato tubers. On the tuber the entrance of a gallery is indicated by a reddish dot, later the faeces collects on



the tuber surface. The galleries open way to microbial infestations, and the tubers rot. Stored potato can be totally destroyed within 1-2 months due to damage caused by *P. operculellum*.

The pheromone trap should be suspended from poles at a height of 0.5-1.0 m in the potato field, traps should not stick out above the level of the vegetation. Usual beginning of trapping in Central and Southern Europe is **end of April**.

Selectivity of the **CSALOMON®** trap (based on tests performed in Bulgaria and Hungary): in potato fields no other moth species is attracted. In the vicinity of forests or orchards occasionally the leafminer *Lithocolletis corylifoliella* can come to the traps, which is much smaller and cannot be confounded with *P. operculellum*.

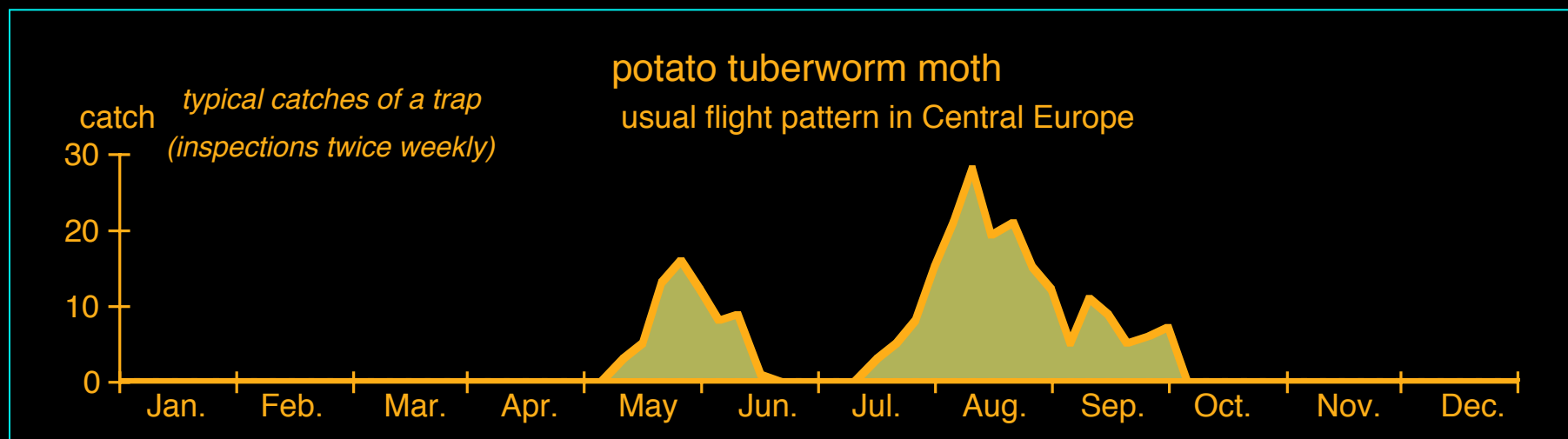
Longevity of the **CSALOMON®** trap in field conditions: depending on the warmth of the weather at least **4-6 weeks**. This period is usually enough for the monitoring of the flight of one adult generation of *P. operculellum*. Renewal of sticky inserts in intervals of 7-10 days. In case of high catches this may become necessary more often.



The damage, which should be averted

Pheromone traps can be used for **detecting** the occurrence and for **monitoring** the flight pattern of the pest. Based on our catches forecast of gradations becomes possible. Several papers deal with application of pheromone traps of this moth species.[1]

[1] Thal, Anz. Schadlingskd. Pflanzenschutz. Umweltschutz. 51:107 1978, Shelton, Environ. Entomol. 8:541 1979, Shelton, J. Econ. Entomol. 72:599 1979, Thal, Anz. Schadlingskd. Pflanzenschutz. Umweltschutz. 52:44 1979, Yathom, Phytoparasitica. 7:195 1979, Raman, Environ. Entomol. 11:367 1982, Saxena, J. Indian. Potato. Assoc. 9:16 1982, Raman, Environ. Entomol. 13:61 1984, Ono, Appl. Ent. Zool. 21:632 1986, Yathom, Phytoparasitica 15:156 1987, Raman, Agirc. Ecosyst. & Environ. 21:85 1988, Coll, Bull Ent. Res. 90:309 2000.



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Foto: M. Subchev

So it looks when caught in the CSALOMON[®] RAG trap