

## Angoumois grain moth - *Sitotroga cerealella* Oliv.

The wingspan of the moth is 13-20 mm. The basic colour of the forewings is golden yellow, with a blackish tinge in the apical part and in the wrinkle. Apart from this usually a larger dark spot is also visible on the wing. The hindwings are light gray. The wings are characteristically pointed, and have long lashes along their edges.

**Host plant** of the larvae: it is first of all a stored product pest. It feeds on stored cereals, rice (only on grains with husk), maize. Most damage is caused within the outer 15-20 cm crust of the stored grains. The caterpillar lives inside the seeds. While a larva develops inside a seed, the damage is not conspicuous.

When the moth emerges, it leaves a round emergence hole, with the skin of the pupa in the side of the grain, which are easily visible.

Its damages can be told apart from those of bean weevils (Coleoptera, Curculionidae) by observing the skin of the pupa in the emergence hole on damaged seeds. The larva does no webbing on or around the damaged seeds.



www.jki.bund.de



entweb.clemson.edu

*The moth, which is captured in the trap*



www.poppens.de

*The damage of the larva, which should be averted*

The pheromone trap should be placed above the stored product in the warehouse. Trapping should be conducted continuously during all year as long as the storage is going on.

**Selectivity** of the CSALOMON<sup>®</sup> trap (based on tests performed in Hungary): in stores and mills the bait attracts only *S. cerealella*, other moths only fly in by chance into the trap. In the open field occasionally some catches of other non-pest gelechiids (i.e. *Pexicopia* spp.) can occur. The Angoumois grain moth can be told apart from these based on its wing morphology.

A CSALOMON<sup>®</sup> pheromone trap starts slowly to decrease its attractive activity after 6-8 weeks of field exposure (depending on actual temperature conditions). After this period it is advisable to set up a new trap for reliable detection and monitoring.

Trap design recommended: for detection our sticky trap design (RAG) is most suitable. By setting up a grid of sticky traps the starting points of infestation can be pinpointed very easily within a larger storehouse. Also, high risk periods, when introduction from the field is most intense, can be determined by using sticky traps around the storehouse or mill. 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, especially in dusty areas (i.e. mills), where the sticky surface of a RAG sticky trap can easily become covered by dust.

[www.lepidoptera.pl](http://www.lepidoptera.pl)

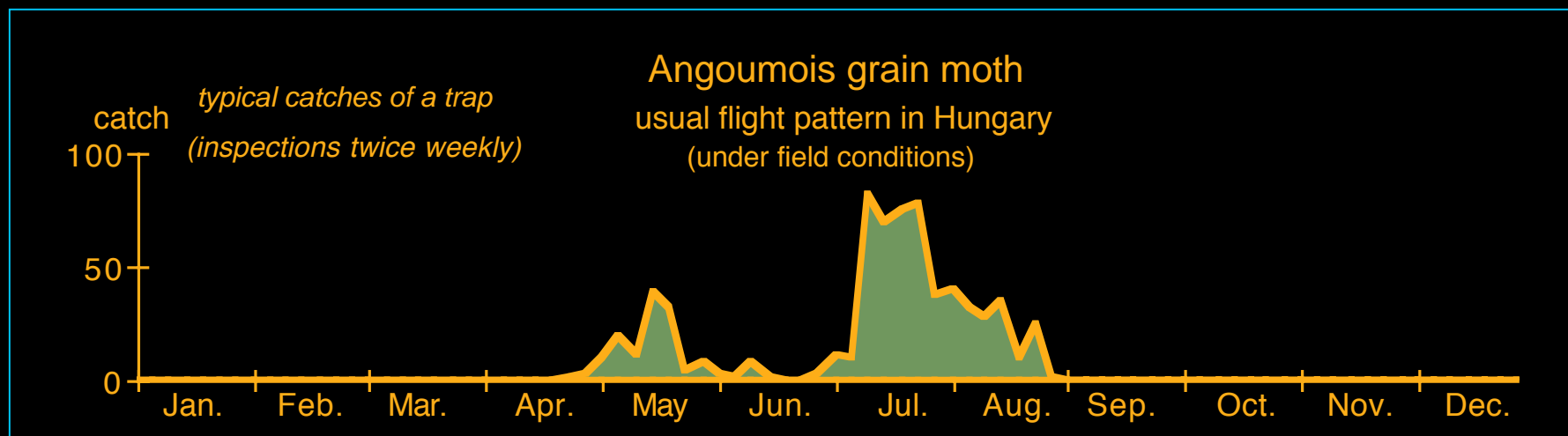


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*The larva and its damage,  
which should be averted*

There are several reports in the literature on the usage and applicability of the pheromone traps of *S. cerealella* [1]. Contrary to an earlier report[2], according to our tests it is not advisable to use *Sitotroga* baits together with pheromone baits for *Plodia* and *Ephestia* in the same trap: the two baits interact with each other which will result in reduced sensitivity of the traps towards *S. cerealella*.

[1] Kanaujia K.R. and Sidhu H.S. *Z. Angew. Entomol. J. Appl. Entomol.* 89:387-390, 1980; Cogburn R.R. and Vick K.W. *Environ. Entomol.* 10:1003-1007, 1981; Kanaujia K.R. and Sidhu H.S. *Curr. Sci.* 50:512-514, 1981; Barney R.J. and Weston P.A. *Environ. Entomol.*, 25:261-267, 1996. [2] Vick K.W. et al., *J. Econ. Entomol.*, 72:245-249, 1979



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So it looks when caught in the  
CSALOMON® RAG trap!



Photo: Nagy Z. L.



In dusty places (mills,  
stores) the use of the  
VARL funnel traps is  
more convenient.