

Sunflower maggot fly - *Strauzia longipennis* Weidemann

The fly is of yellowish colour, it has metallic green eyes. The wingspan is 12-14 mm, the body length is 6 mm. There are dark stripes on the wing, forming an "F" shape towards the tip of the wing [1]. The female lays her elongated oval-shaped white eggs (ca. 1 mm) into the stems of young sunflower plants. The maggot is milky white, headless and legless. It develops through 3 instars before pupation.

Host plants of the maggot include: **sunflower** (*Helianthus annuus*) and related plants, i.e. *H. tuberosus*. It can damage also ornamental plants of the Asteraceae family. **Damages**: the magg tissues and develops in the plant. Usually it overwinters as larva, or lives inside the stem of sunflower. It feeds on the inside among plant debris in the soil.

According to observations from North America the maggot can leave the host plant in August-September and overwinters as pupa.

Traps should be placed to the higher parts of plants, to the **level of flowers**, to a **sunny** place. The flies do not like dark, shady places. Usual **beginning of trapping** is **middle of June**. The flight starts in the second half of June, when flower buds reach 5-10 cm size [2], and goes on in July.

Selectivity of the CSALOMON® PALz sunflower maggot fly trap: in the vicinity of cherry or sour cherry orchards the trap can catch some cherry fruit flies (*Rhagoletis cerasi*, *R. cingulata*). These are smaller, than *S. longipennis*, and can be told apart based on their yellow spot on the thorax and their wing pattern. Due to the fluorescent yellow colour of the trap it will attract many other insects as well. The sunflower maggot fly can be recognized based on its characteristic wing pattern and colouring.

Longevity of the CSALOMON® PALz trap in field conditions: the fluorescent yellow colouring of the trap is predominantly responsible for attraction of the sunflower maggot fly, however, catches are increased many times by the addition of the synthetic food attractant (the composition of which is identical to the food attractant used for



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The fly, which is captured in the trap



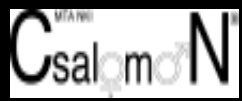
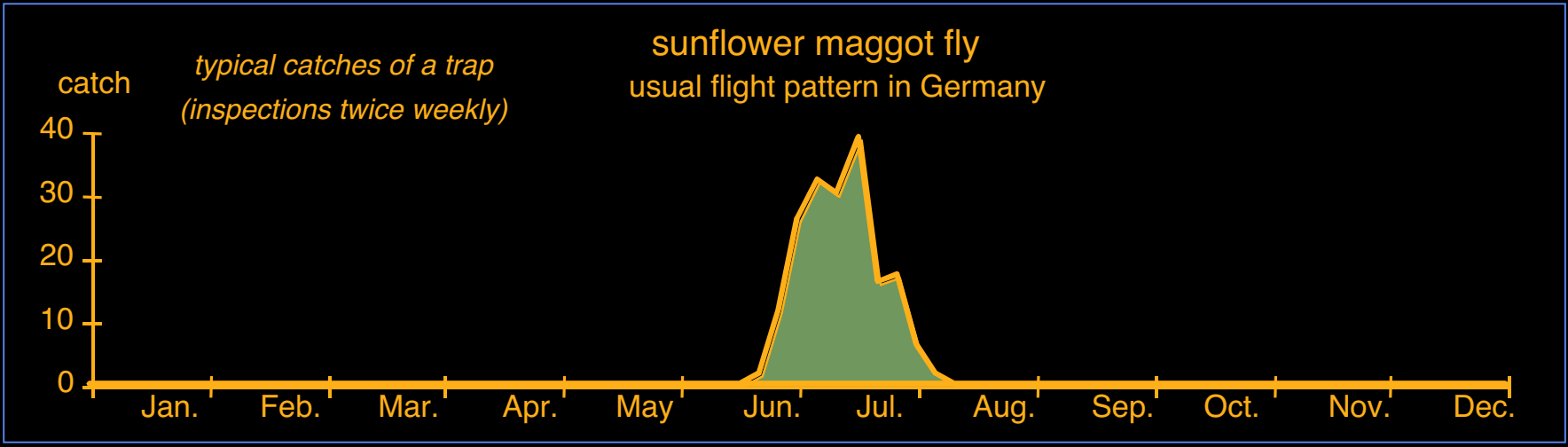
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The damage of the larva, which should be averted

catching the cherry fruit flies *Rhagoletis cerasi* and *R. cingulata*). In contrast to pheromone traps, the trap will catch both male and female sunflower maggot flies. Efficacy of the trap is retained until all of the sticky surface is covered by captured insects. This can happen within **6-8 weeks**, depending on weather conditions.

The traps can be used for **early detection** and to **monitor** the **flight pattern** of the sunflower maggot fly. The species has its origin in North America, it was first detected in Europe in Germany in 2010 [3]. Its eventual spread in sunflower growing areas of Europe can be expected. According to North American experience the pest ususally does not reach an economic threshold, probably due to the population decreasing effect of its natural enemies. However, the presence of none of the natural enemies has been reported in Europe [4], so here more serious damages can be expected

[1] <http://www.gov.mb.ca/agriculture/crops/insects/fad41s00.html>
[2] http://www.cirrus image.com/fly_fruit_Strauzia.htm
[3] http://www.rpd-science.org/RPD-Abstracts/V001/RPD_Abstracts_V1_09.pdf
[4] http://www.eppo.int/QUARANTINE/Alert_List/insects/str auzia_longipennis.htm



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So the insect looks which is caught in the CSALOMON® PALz trap!