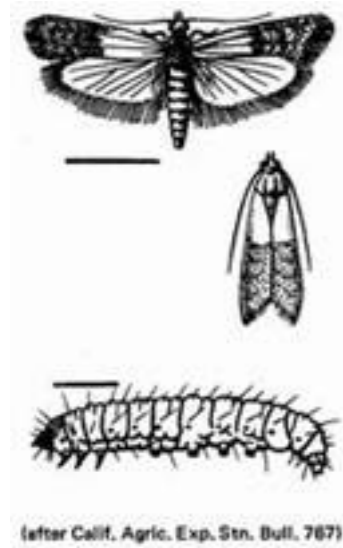


# Sunflower XIV-3

## Sunflower Moth

Frank B. Peairs



Pyralidae

### Field Biology and Identification

Adult sunflower moth has tan or gray wings with a 19 millimeter (3/4 inch) wingspread. The forewings have a small, dark discal dot near the center of each wing and two or three small, dark dots near the leading margin of each wing. Larvae have brown head capsules with alternate dark and light lines running longitudinally. Adults apparently migrate from southern areas and are attracted to sunflowers beginning to bloom. The annual northward dispersal is aided by southerly winds, and adults appear in the region from late June to July. Earlier adult migrations utilize wild sunflower and other host plants. Larvae begin to tunnel into seeds and other head tissue from July to August and each larvae can destroy four to six seeds during development. About 15 to 19 days is required for larval development from hatching to full maturity.

### Plant Response and Damage

Younger sunflower moth larvae feed primarily on florets and pollen. Older larvae tunnel through immature seeds and other parts of the head. As the larvae feed and spin silken threads, the dying florets and frass give the sunflower head a trashy appearance.

### Management Approaches

#### Chemical Control

Insecticide applications are made to prevent moths from laying eggs. Treat for sunflower moth at early bloom. Pheromone traps may be used to monitor moth activity (see the High Plains Sunflower Production Handbook, <http://www.oznet.ksu.edu/library/crps12/MF2384.pdf>, for details). Less than one moth trapped per night is considered low risk, while more than four moths trapped per night is considered high risk and justification for treatment. If visual scouting is used instead of pheromone traps, consider treatment if more than two sunflower head moths per five plants are observed while scouting during early bloom.

Product list for Sunflower Moth

Pesticide	Product/Acre (Fl oz. or oz. product)	Preharvest Interval, remarks
Asana XL <sup>R,1</sup>	5.8 - 9.6	28 days. Do not feed forage or fodder to livestock. <b>Extremely Hazardous to Bees!</b>
<i>Bacillus thuringiensis</i> <sup>1,2</sup>	See labels	0 days.
Baythroid XL <sup>R,1</sup>	2.0 ? 2.8	30 days. <b>Extremely Hazardous to Bees!</b>
carbaryl <sup>1,2</sup>	See labels	60 days. 30 days to graze or forage. <b>Extremely Hazardous to Bees!</b>
chlorpyrifos 4E <sup>R1,2</sup>	16 - 24	42 days. Do not graze. Up to 2 lb preplant. Up to 4.5 lb total AI/yr. <b>Extremely Hazardous to Bees!</b>
Delta Gold <sup>R,1</sup>	1.0 ? 1.5	21 days to harvest. Do not apply more than 0.045 lb ai/acre/crop.? Do not graze or feed treated forage to livestock. <b>Extremely Hazardous to Bees!</b>
lambda cyhalothrin <sup>R1,2</sup>	2.56 ? 3.84	45 days. Do not exceed 0.12 lb total AI/yr. <b>Extremely Hazardous to Bees!</b>
methyl parathion <sup>R</sup>	32	30 days. Do not feed seeds to birds. Do not exceed 3 applications/yr. <b>Extremely Hazardous to Bees!</b>
Proaxis <sup>R,1</sup>	2.56 ? 3.84	45 days. Do not exceed 0.06 lb total AI/yr. <b>Extremely Hazardous to Bees!</b>

<sup>R</sup>Restricted use pesticide. <sup>1</sup>Labeled for chemigation. <sup>2</sup>Generic active ingredient, may be additional formulations.

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Categories: Sunflower, Insects, Sunflower moth

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