

Sunflower

Banded Sunflower Moth

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Field Biology and Identification

Adult moths are straw-colored and have a 12.5 millimeter (1/2 inch) wingspan. The front pair of wings have a brown triangular area near the middle. In the early stages of growth, larvae are cream colored, whereas mature larvae (8.5 to 12.5 millimeters, or 1/3 to 1/2 inches long) range from pink to reddish brown with a brown head capsule. Adults begin to emerge from June to early July. Peak egg laying coincides with the late bud crop growth stage. Larvae feed on sunflower heads through late September to early October. Larvae overwinter in the soil and pupate in June of the following year. Adults are most active during the early morning and early evening. During the day they rest quietly underneath the lower leaves of sunflower plants, but flutter from plant to plant when disturbed.

Plant Response and Damage

Larvae feed primarily on seed and florets in the central portion of the head. A single larvae may feed on from three to five seeds. As many as 30 larvae have been found in a single head.

Management Approaches

Chemical Control

Applications are made to prevent moths from laying eggs. Scouting in the early morning or early evening will provide the most accurate counts, since moths are most active at these times. Pheromone traps can be used to determine when scouting should be started, but a pheromone-based treatment threshold is not available. When scouting, sample sites should be 75 to 100 feet from the edge of the field. Use an X-pattern, counting moths on 20 heads per sampling site for a total of 100 heads. Research is continuing into accurate economic thresholds, however one moth per two plants might be a reasonable economic threshold level.

Insecticide applications are made to prevent moths from laying eggs. Eggs are laid during the bud stage, so treat for banded sunflower moth at early bloom (R5.1).

Product list for Banded Sunflower Moth

Pesticide	Product/Acre (Fl oz. or oz. product)	Preharvest Interval, remarks
Asana XL ^{R,1}	5.8 - 9.6	28 days. Do not feed forage or fodder to livestock. Extremely Hazardous to Bees!
<i>Bacillus thuringiensis</i> ^{1,2}	See labels	0 days.
Baythroid XL ^{R,1}	2.0 – 2.8	30 days. Extremely Hazardous to Bees!
chlorpyrifos 4E ^{R1,2}	16 - 24	42 days. Do not graze. Up to 2 lb preplant. Up to total AI/yr. Extremely Hazardous to Bees!
Delta Gold ^{R,1}	1.0 – 1.5	21 days to harvest. Do not apply more than 0.04 ai/acre/crop. Do not graze or feed treated forage to livestock. Extremely Hazardous to Bees!
lambda cyhalothrin ^{R1,2}	2.56 – 3.84	45 days. Do not exceed 0.12 lb total AI/yr. Extremely Hazardous to Bees!
Proaxis ^{R,1}	2.56 – 3.84	45 days. Do not exceed 0.06 lb total AI/yr. Extremely Hazardous to Bees!

^RRestricted use pesticide. ¹Labeled for chemigation. ²Generic active ingredient, may be additional formulation. The information herein is supplied with the understanding that no discrimination is intended and that listing of commercial products, necessary to this guide, implies endorsement by the authors or the Extension Services of Nebraska, Colorado, Wyoming or Montana. Criticism of products or equipment not listed is neither implied nor intended. Due to constantly changing labels, laws and regulations, the Extension Services can assume no liability for the suggested use of chemicals contained herein. Users must be applied legally complying with all label directions and precautions on the pesticide container and any supplemental labeling and rules of state and federal regulatory agencies. State rules and regulations and special pesticide use allowances may vary from state to state: contact your State Department of Agriculture for regulations and allowances applicable in your state and locality.

Categories: Sunflower, Insects, Banded sunflower moth

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