

Pest Monitoring Network

Taking an Environmentally Sensitive Approach to Pest Management

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True Armyworm



About True Armyworm

Several insect pests are called armyworm. The true armyworm, Pseuduletia unipuncta, undergoes complete metamorphosis: egg, larvae, pupa, and adult

moth. The stage that damages crop plants is the larvae, but it is the adult moths that are attracted to and captured in traps.

True armyworm larvae are greenish brown with a narrow, mid-dorsal stripe. White-bordered orange stripes run along each side of the body. The yellowish head is honeycombed with dark lines. A single large dark spot occurs at the base of each of the four pairs of fleshy abdominal prologs. Of the four insect pests in Missouri called armyworm, only the true armyworm possesses the orange stripes and the dark spots associated with the abdominal prologs. Maximum larvae length is about 1.5 inches.

True army worm moths are nocturnal with a wingspan of about 1.5 inches. Forewings are grayish- brown with a white spot near the center of each forewing. The hind wings are grayish-white.

How to Field-Scout for True Armyworm (TAW) Larvae

Scouting saves money and reduces insecticide use. Unlike some pests, true armyworm larvae feed on several crops species including wheat, corn and forages grasses. Scouting procedures and thresholds for insecticide application varies among these crop species.

Corn

For corn, thresholds are based on the percentage of damaged plants and whether or not larvae are present. Examine 20 plants in each of at least five locations within a field. Observe and record signs of larvae feeding. Larvae begin feeding at the edge of leaves and continue in towards the midrib. The midrib is often not eaten.

Larvae are usually not active during the day. If plants exhibit feeding damage, carefully unroll emerging leaves to find larvae hiding within the leaf whorl. Larvae also hide in soil cracks and underneath surface litter. Estimate larvae size. Maximum length is 1.5 inches. Ignore larvae larger than 1 inch because they will soon stop feeding and pupate.

Calculate the percentage of plants damaged. For example, 12 damaged plants found among the 100 plants observed (20 plants X 5 areas) means that 12% of the stand was infested. The threshold for insecticide treatment is 25% of corn plants damaged and larvae are present.

Wheat and Forage Grasses

For wheat and forage grasses, thresholds are based on the number of larvae found. Count larvae in five places for each 50 acres of field size. Each counting site should be 9 square feet in area (e.g. 3 feet by 3 feet). Because thresholds are based on larvae number you must scout when larvae are active – early morning or just before dusk.

Larvae primarily feed on leaves and leaf feeding is a sign that larvae may be present. As leaf area is removed, larvae may feed on tender parts of young inflorescences. Sometimes, true armyworm larvae will chew completely through wheat peduncles (head clipping) and the entire head will fall to the ground.

The threshold for insecticide treatment for wheat and forage grasses is an average of 4 larvae per square foot. This translates to a total of 270 larvae counted in five places. Ignore larvae larger than 1 inch because they will soon stop feeding and pupate. Because head clipping is so destructive of wheat yield, insecticide application should be made if 2% of heads are clipped and larvaeare present.