

Dry Beans XIII-2

Cutworms (early season)

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Cutworm Adult



Cutworm Larva

Several species of cutworms may be present early in the season in dry bean fields, but damaging levels are seldom experienced. In this region, the most likely problems will develop from the army cutworm or the pale western cutworm, but in the region beans are usually planted late enough to miss serious problems from these insects. Perhaps the greatest risk in the region is found in southwest Colorado.

Identification (and life cycle/seasonal history)

Army cutworm (*Euxoa auxiliaris*), Pale western cutworm (*Agrotis orthogonia*), and others: Adults of both the army and pale western cutworms are attracted to newly tilled soil to lay their eggs in the fall, and therefore, they are more likely to be a problem in fields planted to winter small-grain cover crops that are destroyed prior to bean planting.

Larvae of the army cutworm have a pale grayish body color that is splotched with variable white or light markings. The upper surface is lighter with a narrow pale stripe along the center of the back. There is a lighter band along the side of the larvae below the spiracles. Larvae can attain lengths of $1\frac{1}{2}$ - 2 inches when fully grown. Army cutworm eggs hatch in the fall or winter and the larvae feed during the winter and early spring. Army cutworms normally finish development in May, but may still be present when early-planted beans are emerging, especially if other food sources have been inadequate.

The pale western cutworm spends the winter in the egg stage and hatches in the early spring when temperatures at the soil surface reach 70°F (February - March). The pale western cutworm is pale with no distinct markings on its body and can be easily distinguished from other cutworms present at this time. When fully grown, the pale western cutworm is about $1\frac{1}{4}$ inch long. Pale western cutworms feed through the spring and mature in May and early June. Larvae can go without food for up to a month and later cause damage to emerging crops.

Plant Response and Damage

Cutworm damage to dry beans will be made evident by plants that have been cut off at the soil surface or by the presence of leaf feeding on young seedlings. The army

cutworm will climb on the bean plant and feed on leaves. The pale western cutworm is more damaging as it feeds at or below the soil surface and can cut off and kill entire plants.

Management Approaches

Serious cutworm problems are unlikely in the region because in most years these two major cutworm species have mostly completed their cycle when beans are emerging. Plant beans when conditions insure rapid emergence of seedlings. In high risk fields, cutworms can be monitored while beans are beginning to emerge and establish, and insecticide treatments can still be applied if damaging levels are present. High risk areas include fields that had been planted to a winter cereal cover crop or around the grassy borders of other fields. Other species of cutworms that develop later in the season may be found on occasion in the region. Risk of serious damage from these is relatively low; however, monitoring emerging beans for damage from various insects is an important management practice.

Product List for Cutworms:

Insecticide	Product per Acre	Preharvest Interval, remarks
Asana XL ^{RI}	5.8-9.6 oz./A	PHI 21 days; REI 12 hrs.
Cyfluthrin ^{RI} (Baythroid, generics)	See labels for rates.	PHI 21 days; REI 12 hrs.
Lannate SP ^R , LV ^R	SP: 0.5 lbs./A LV: 1.5 pts./A	PHI 14 days; REI 48 hrs.
Mustang MAX ^{RI}	1.28-4.0 oz./A	PHI 21 days; REI 12 hrs.
Orthene/acephate multiple formulations	See label for rates	PHI 14 days; REI 24 hrs
Sevin/carbaryl ^I multiple formulations	See label for rates	PHI 21 days; REI 12 hrs.
Lambda- cyhalothrin ^{RI} (Warrior, generics)	1.92-3.2 oz/A	PHI 21 days; REI 24 hrs.
^R Restricted use pesticide ^I Labeled for chemigation		

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Categories: Dry Beans, Cutworms, Soil Insects

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