



# Western Bean Cutworm damage to dry beans

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Photo credits:  
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Western bean cutworm (WBC) has a host range which includes both field corn and dry beans (soybeans are NOT a host). Female moths prefer to lay eggs in corn that is in the late whorl stage, just prior to tasseling. In central Michigan and the Thumb, where dry beans are grown, moths may enter bean fields as well. This is particularly true if nearby corn has tasseled and pollen shed is complete. As corn matures, females switch to egg laying entirely in dry beans. Egg masses are laid on the undersides of dry bean leaves, making them difficult to find in a heavy canopy. The egg masses below were on corn, but show the size and shape of eggs and larvae relative to a penny.

*Left – 2-3 day-old egg mass. Right – newly hatched larvae. There are 50-60 eggs per mass.*



Young larvae feed first on leaves near the egg mass, leaving a small area of skeletonizing (left) that is easy to miss or confuse with feeding by another insect. Once the tiny larvae disperse, they are very difficult to find in the canopy. Larvae feed on leaves and blossoms, then as they grow, chew small holes into pods (right), opening pods up to pathogens and other insects.



Older larvae chew directly through pods (below left) into developing beans (below middle). During the day, older larvae hide at the base of the plant in soil, coming up only at night or on cloudy days to feed. This not only makes it difficult to directly scout for caterpillars, but likely increases the number of pods a single larva damages over time, since it may chew into a new pod each night. It is common to find only a single bean damaged in an individual pod (below right).



After defoliation, damaged pods are obvious (left). Feeding on beans directly reduces yield, and potentially reduces quality by creating damaged culls that are difficult to separate from undamaged beans (right). Thus WBC causes economic loss not only through reduced cwt per acre, but through extra handling time required to separate pick from marketable yield.

