

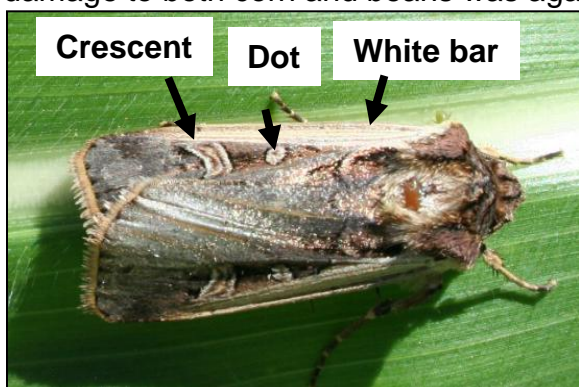
Western Bean Cutworm Identification and Lifecycle

CDD#007
Updated
Feb 2010

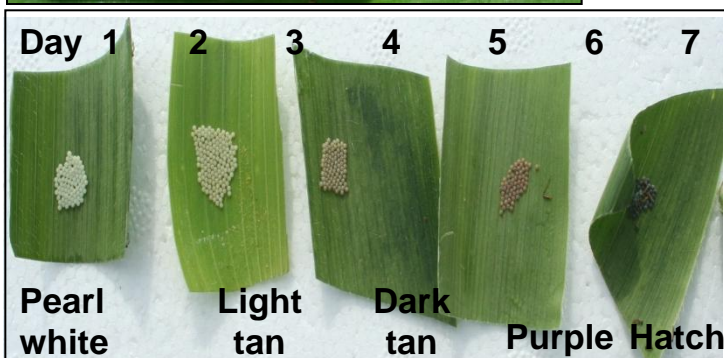
Chris DiFonzo, Entomology Dept.
Michigan State University
East Lansing, MI 48824

Photo credits:
Chris DiFonzo
Michigan State University

Western bean cutworm (WBC) is native to the western United States, first reported in Arizona in 1887. Although mainly a pest in the western states through most of the twentieth century, the range of WBC has rapidly expanded eastward since the early 2000s. Moths were first trapped in Michigan and Ohio in 2006, and Ontario in 2008. In Michigan, larval damage to field corn was first reported in 2007. Economic damage to dry beans was reported a year later in central Michigan. In 2009, damage to both corn and beans was again reported in central Michigan (I127/I75 corridor).



Adults are brown and $\frac{3}{4}$ of an inch long with a 1.5 inch wing span. The most distinguishable feature is a white bar on the leading edge of the forewing. There is also a dot and crescent behind the white bar. These characters are bright on fresh young moths, but fade on dead moths sitting in traps for several days.



Eggs are pearly white when first laid, then turn progressively darker shades of tan and finally dark purple before hatch. Eggs are laid in groups of 5-200 with an average of 50 eggs per mass.



First instar larvae are brown with a black head and markings down their back. Mature larvae are smooth, light tan to pink. At first glance, WBC larvae may appear to be a 'gigantic' corn borer, but can be distinguished by two distinctive dark brown stripes immediately behind the head.

Lifecycle: In the western U.S., there is one generation per year. Adults emerge in early July. Females lay eggs on the upper side of corn leaves or the underside of dry bean leaves. Eggs hatch in 5-7 days and go through a color change from pearly white, to tan, to purple prior to hatch. Larvae feed for about a month then drop to the soil, burrow down 4-10 inches and overwinter as a cold-hardy pre-pupa. Pupation takes place in late May to early June.