








Technical Bulletin for: Cotton Bollworm

Helicoverpa armigera (Hübner) • Lepidoptera Noctuidae • HELARM



DISTRIBUTION	Central and southern Europe, temperate Asia, Africa, Australia and Oceania, and has also recently been confirmed to have successfully invaded Brazil.
HOSTS	Major pest on cotton, tomatoes, maize, chick peas, alfalfa and tobacco. Minor pest on potatoes, fruit trees and vegetables.
DESCRIPTION	
ADULT MOTH	Moths have a wing span of approximately 1.5 inches. The fore wings have dark irregular bands near the edge with an indistinct dark spot near the middle of the front margin and the hind wings are light gray with dark bands on the trailing margins.
LARVAE	Variable in color, but mostly greenish and yellow to red-brown. Up to 40mm in length.
EGGS	White, later becoming green as they mature. 0.4 to 0.6mm in diameter.
LIFE HISTORY	Overwinter in the soil and female moths emerge in the spring to lay up to 1000 or more eggs individually on host plants. Larvae hatch in 3-5 days and reach a length of about 1.5 inches at maturity. The larvae then drop to the soil and pupate burrowing into the soil to a maximum depth of about 4 inches. In about 10-12 days the moths begin to emerge from the pupal stage. This cycle from egg to adult is about 30 days and there are multiple generations per year.

MONITORING INFORMATION

LURE ACTIVE INGREDIENTS, SUBSTRATE & FIELD LIFE	Z9-16Ald and Z11-16Ald on white rubber septum. Field life: four (4) weeks. 
TRAP TO USE	Red paper or plastic Delta or Uni-Trap    
MONITORING STRATEGY	In smaller fields, use one trap every 1 to 1 ½ acre. A minimum of two traps should also be used for fields of uneven topography. For larger fields (10 acres or greater) use 1-2 traps per five acres. Traps should be placed at approximately the same height as the crop. Traps should be checked weekly or more frequently, depending on pest population. Check with Cooperative Extension or Master Gardener for local information and recommendations.
CULTURAL & PHYSICAL CONTROL	Mechanical exclusion can help prevent bugs from entering structures. Hand picking bugs and constant monitoring is suggested.

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