

Corn Earworm Bioassay Department of Entomology, Kansas State University Jeff Whitworth, Holly Schwarting, JR Ewing

Approximately 300 corn earworm/soybean podworm/sorghum headworm, *Helicoverpa zea* (Boddie), were collected from an untreated soybean field in south east Kansas. Larvae (mixed sizes but predominantly relatively large instars, which are known to be more difficult to kill quickly) were equally divided into 6 treatments (Table 1). Larvae were placed individually in small petri dishes that had been coated with the selected insecticide at the rate listed and set aside to dry for 4 hours prior to adding the larvae. All treatments were individually evaluated 24 hours after the larvae were placed in the petri dishes. Larvae were evaluated as **live**: no apparent effect; **moribund**: larvae very sluggish, little or no movement unless prodded and then only very slow, unnatural movement, and; **dead**: no movement even when prodded. From this bioassay there does not appear to be any insecticide resistance to those insecticides and rates utilized (Table 1).

Treatment	% of Larvae	% of Larvae	% of Larvae Dead
	Live	Moribund	
Hero @ 6 oz/a	0	3.4	96.6
Lorsban @ 2 pts/a	0	8.6	91.4
Mustang Maxx @ 4	0	10.9	89.1
oz/a			
Baythroid @ 2.8 oz/a	0	15.5	84.5
Warrior II @ 1.6 oz/a	0	3.4	96.6
Untreated	87.5	9.4	3.1 (parasitized)