

GLUFOSINATE AND INSECTICIDE COMBINATIONS IN LIBERTY LINK COTTON

D. K. Miller
LSU AgCenter
St. Joseph, LA
D. O. Stephenson
LSU AgCenter
Alexandria, LA
M. S. Mathews
LSU AgCenter
St. Joseph, LA

Abstract

A field study was conducted in 2009 at the Northeast Research Station near St. Joseph, La and the Dean Lee Research Station near Alexandria La to evaluate effects of insecticides on Liberty Link cotton tolerance when co-applied with Ignite or Ignite and Stance. Treatments evaluated included a factorial arrangement of herbicide program (Ignite alone at 29 oz/A or at 29 oz/A co-applied with Stance at 3 oz/A), insecticides (Acephate at 0.5 lb ai/A, Baythroid at 0.033 lb ai/A, Bidrin at 0.4 lb ai/A, Centric at 0.047 lb ai/A, Dimethoate at 0.25 lb ai/A, Diamond at 9 oz/A, Carbine at 0.088 lb ai/A, Zephyr at 5 oz/A, Oberon at 5 oz/A, Vydate C-LV at 0.4 lb ai/A, or no insecticide) and plant growth stage (match head square or first bloom). Treatments were applied with 11002 FF nozzles at 15GPA to 'FM 1735 LL' cotton. Parameter estimates included visual injury 7, 14, and 28 d after each application and seed cotton yield.

For the match head square or first bloom growth stage application, injury at either location in the form of minor leaf speckling was no greater than 5% for any treatment. Averaged across insecticides and application timing, cotton height was lower with the addition of Stance to Ignite compared to Ignite alone at Alexandria (145 vs 138 cm) but not St. Joseph (96 vs 92 cm). At both locations, averaged across Stance co-application and application timing, Ignite co-applied with insecticides did not result in reduced height late season compared with Ignite applied alone. Averaged across insecticides and application timing, Ignite applied alone resulted in a seedcotton yield of 2792 and 1447 lb/A at Alexandria and St. Joseph, respectively, and was not reduced with addition of Stance. Similarly, at both locations yield was not reduced with addition of insecticides to Ignite when compared to Ignite applied alone or in combination with Stance.

Co-application of insecticides evaluated in this study did not negatively affect growth or yield of Liberty Link cotton when co-applied with Ignite alone or with Stance.