

**LIBERTY LINK COTTON WEED CONTROL PROGRAMS**

**D. K. Miller**  
**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 to evaluate weed control programs in Liberty Link cotton. Treatments evaluated included Ignite (glufosinate) at 22 oz/A applied at the 2 to 3, 6 to 8, and 8 to 10 leaf growth stage, Dual Magnum (s-metolachlor) at 16 oz/A applied PRE followed by (fb) Ignite at 22 oz/A applied at the 2 to 3, 6 to 8, and 8 to 10 leaf growth stage, Ignite at 22 oz/A in combination with Dual Magnum at 16 oz/A applied at the 2 to 3 leaf growth stage fb Ignite at 22 oz/A applied alone at the 6 to 8 and 8 to 10 leaf growth stage, and Ignite at 22 oz/A applied in combination with Staple LX (pyrithiobac) at 2 oz/A at the 2 to 3 leaf growth stage fb Ignite at 22 oz/A applied alone at the 6 to 8 and 8 to 10 leaf growth stage. Treatments were applied at 15GPA and soil type was a silt loam with pH 6.8. Cotton 'FM 1735 LL' was planted on May 15. Parameter estimates included visual weed control at 7, 14, and 28 d after each application timing.

At 14 d after the 2 to 3 leaf application, Ignite alone provided 89, 71, 59, 95, 94, 93, and 81% control of barnyardgrass, crabgrass, redroot pigweed, hemp sesbania, sicklepod, pitted morningglory, and entireleaf morningglory, respectively. Control of barnyardgrass (89 vs 99%), crabgrass (71 vs 91%), and redroot pigweed (59 vs 84%) was significantly increased with the inclusion of Dual Magnum PRE. Addition of Staple LX to Ignite at the 2 to 3 leaf application increased control of redroot pigweed (59 vs 83%) and entireleaf morningglory (81 vs 96%). Injury in the form of leaf speckling with the addition of Dual Magnum or Staple LX was no greater than 3%. At 28 d after the 8 to 10 leaf application, Ignite alone resulted in 79, 66, 85, 80, 84, 91, and 78% control of previously noted weed species. Inclusion of Dual Magnum PRE increased control of barnyardgrass (79 vs 93%) and crabgrass (66 vs 88%). Excessive rainfall received prior to harvest resulted in significant variation in yield, therefore yield is not discussed.

Addition of Dual Magnum PRE (increased grass and redroot pigweed control) or Staple LX EPOST (increased redroot pigweed control) can be beneficial in a Liberty Link weed control system.