FIBERMAX LIBERTYLINK[®] VARIETIES: CROP TOLERANCE TO GLUFOSINATE-AMMONIUM Steve Hague Bayer Cotton Seed International Leland, MS

Abstract

Successful cotton production with FiberMax LibertyLink[®](LL) varieties depends upon plants with the LL25 event expressing a high level of tolerance to glufosinate-ammonium, the active ingredient in Ignite[™] herbicide. This study was conducted to determine the crop tolerance of 'FM 958LL', 'FM 966LL', 'FM 981LL', and 'FM 832LL' to Ignite herbicide. Recurrent parents and LL conversions were treated with three regimes of herbicide applications (control; two sequential 40 oz Ignite/ac; two sequential 120 oz Ignite/ac) in a split-plot design in multiple locations in the Mid-South and Southeast during the 2001-2003 growing seasons. Tolerance evaluation included measurements of lint yield, fiber traits, plant morphology, and other agronomic characteristics. Applications of Ignite did not affect crop performance in any of the FiberMax LibertyLink cotton varieties. Furthermore, no significant interactions for traits were observed between location and herbicide treatment, and cotton variety and herbicide treatment. Growers can feel confident that the LibertyLink system will provide flexible weed control without risk of injuring their crop.