

# **WEED CONTROL EFFICACY AND LINT YIELD OF HERBICIDE RESISTANT COTTON TECHNOLOGIES UNDER DIFFERENT TILLAGE SYSTEMS AND ROW SPACING**

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## **SUMMARY**

A field study was conducted from 2004 through 2006 at the E.V. Smith Research Center, Field Crops Unit near Shorter, AL, to compare weed control efficacy and lint yield in a conventional variety, a glyphosate tolerant variety, and a glufosinate tolerant variety under conventional and the conservation tillage systems with standard row (100 cm) and narrow row (37.5 cm) spacing. In 2005, conventional cotton produced 12% greater yields, while glyphosate-tolerant cotton produced 13% greater yields compared to glufosinate-tolerant cotton. In 2006, glyphosate-tolerant cotton was superior to both conventional and glufosinate-tolerant cotton by 29%. There were no remarkable yield differences during 2004 among different weed control technologies. Similarly, the 37.5 cm lint yields were equivalent to 100 cm cotton lint yields. As regard weed control, both the Roundup ready and the Liberty link varieties were significantly better than conventional variety under the conventional tillage systems. Likewise, row spacing did not offer any significant enhancement in weed control in HR varieties but in conventional variety.