

## COMPARISON OF A CONVENTIONAL, ROUNDUP READY, AND STACKED GENE CULTIVAR IN SOLID AND SKIP-ROW PATTERNS IN A NO-TILL SYSTEM

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### ABSTRACT

Continued low cotton (*Gossypium hirsutum* L.) prices have precipitated the evaluation of production systems with lower input costs. The objectives of this study were to evaluate the performance of conventional and transgenic cultivars and to compare solid and skip-row planting patterns in a no-till system. A field experiment was conducted on a Bosket very-fine sandy loam soil (fine-loamy, mixed, active, thermic Typic Hapludalf) from 2003 to 2004. Treatments were row pattern, row spacing, and cultivar. Row patterns were solid and 2 x 1 skip-row. Row spacings were 30-in. and 40-in. rows. Cultivars were ST 474, ST 4793R, and ST 4892BR. Cotton planted solid produced 20 and 17% more lint compared to skip-row planted cotton on a land-acre basis for 2003 and 2004, respectively. There were no differences in lint yield between 30-in. and 40-in. row spacings. Lint yields were similar for cultivars in 2003. In 2004, ST 474 had a lower lint yield compared to the transgenic cultivars. Overall, fiber qualities were not significantly impacted by row spacing or row pattern. Differences observed in fiber strength and micronaire were largely attributed to cultivar.