

REDUCING AT-PLANTING COSTS THROUGH SKIP-ROW PLANTING TECHNIQUES

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Abstract

A study was conducted in the 2000 and 2001 growing seasons to examine the potential for maximizing grower profits through the use of skip-row planting strategies. Stacked gene varieties were used in both years and treatments consisted of early and late plantings of solid planted cotton, cotton containing a skip in every third row (two and one), and cotton containing a skip every fifth row (four and one). In 2000, 36-inch row spacings were used and in 2001, 38 inch row spacing was used. In both years, plants compensated similarly for the skipped rows. As expected, relative to yields in the solid planted cotton, the four and one treatments compensated proportionally higher than two and one treatments. Plant mapping data revealed that this compensation took place through an increase in the production of vegetative bolls and bolls past position two on sympodial branches. Micronaire and uniformity index were both reduced significantly in the later planted cotton while strength and staple length were unaffected by any treatment affects. The feasibility of using skip-row planting techniques will vary depending on management strategies, cotton price, and input savings associated with the skipped rows. Costs analyses revealed that if various input costs can be reduced in the down the row management of skip-row cotton, growers may be able to increase their profit margin through the use of skip-row cotton.