

**EVALUATION OF ALTERNATIVE ROW
PATTERNS IN MISSISSIPPI COTTON**
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Abstract

Low cotton (*Gossypium hirsutum* L.) prices and high production costs have triggered interest in alternative cotton production systems in Mississippi with the predominant goal of increasing returns. Cropping adjustments being used include ultra-narrow row, no-till, reduced tillage, skip-row, and wide-row productions systems. Fewer linear feet of row per acre suggests potential savings in seed, chemical, and harvest costs and increased returns if yields can be maintained near that achieved on a solid planted basis. Field studies were conducted at the Delta Research and Extension Center in Stoneville, MS and at the North Mississippi Research and Extension Center in Verona, MS to evaluate easily adaptable row spacings to conventional row patterns in 2001. An early maturing variety, PM 1218BR, and a mid-maturing variety, DP 458BR, were evaluated in 30-in. solid, 30-in. 2x1 skip, and 60-in. solid row spacings.

Lint yields were not different on a land basis for PM 1218BR and DP 458BR at the Verona, MS location, averaging 887 and 870 lbs/A, respectively. At the Stoneville, MS location, PM 1218BR yielded higher than DP 458BR on a land basis, producing 176 lbs. more lint per acre. Percent lint was higher for PM 1218BR at both locations. In addition, row configuration had a significant effect on lint yields with cotton planted in 30-in. solid rows yielding higher than the alternative row spacings on a land basis at both locations. The 2x1 skip row pattern produced approximately 74% of the solid planted yield on a land acre basis while the 60-in. row spacing produced approximately 72%. Row configuration did not affect percent lint at either location.