

SKIP-ROW COTTON PERFORMANCE ACROSS MULTIPLE YIELD ENVIRONMENTS

Philip Jost

Univ. of Georgia

Statesboro, GA

Don Shurley and Steve Brown

Univ. of Georgia

Tifton, GA

Richard McDaniel

Univ. of Georgia

Waynesboro, GA

Bob McNeill

Univ. of Georgia

Midville, GA

James Clark and Ronnie Blackley

Univ. of Georgia

Baxley, GA

Abstract

One practice that receives sporadic interest as a method to reduce production costs is skip-row cotton. Seven trials were conducted across East Georgia from 2001 through 2003 to examine the impact of 2x1, 4x1, 2x1 (modified) and 4x1 (modified) skip-row patterns on cotton yield and profit compared to conventional planting. In a 2x1 or 4x1 pattern, two or four rows are planted for every full row skipped, respectively. Modified patterns utilize a 50-inch skip instead of a full row width. A “partial budget” economic analysis was utilized, including only those costs that varied between the planting patterns. Net Return (NR) was considered to be the treatment variable costs subtracted from the crop value of 53.6 cents per pound. Input savings for skip-row calculated for these studies included seed, technology fees, and in-furrow insecticides. Collectively, the data indicated that overall production costs could be reduced with skip-row cotton, however there is a yield sacrifice, which is exacerbated in higher yielding environments. In these environments the yield reductions incurred were too great to be overcome with the savings analyzed. In lower yielding environments, there is the potential to increase profits with the 2x1 pattern. These studies did not include any analysis of fixed costs, and only a conservative estimate of direct cost savings. If more savings are accrued the yield environment below which 2x1 skip-row cotton becomes more profitable will increase. However, as the price of cotton increases the yield environment at which skip-row cotton is more profitable decreases.