in 1987. In 1985, banding 15-0-0 and 15-15-0 increased yields 159 and 102 lb/A, respectively. Banding 30-0-0 and 15-15-0 in 1986 increased yields 186 and 183 lb/A, respectively. Banding 15-30-0 in 1988 at Milan increased yields 116 lb/A. Banding 15-15-0 in 1988 at Ames increased yields 125 lb/A. Dryer than normal weather conditions in 1987 and 1988 may have affected fertilizer placement. Cotton was planted and treatments applied to a hot dry seed bed in 1987. The dry weather in late May and June may also have affected treatment effects during 1988.

¹Associate Professors, Plant and Soil Science, University of Tennessee, W.T.E.S., 605 Airways Blvd., Jackson, TN 38301.

Starter N-P-K Combinations Effect On No-Tillage Cotton

D.D. Howard and P.E. Hoskinson¹

Abstract

Little information is available concerning starter applications for no-tillage cotton (*Gossypium hirsutum* L.). This study was conducted to evaluate N-P-K starter combinations on no-tillage cotton. Research was conducted at two locations for four years (5-site years) on a Memphis silt loam (Typic Hapludalf). A randomized complete block with treatments replicated five times was utilized at each location. Eight treatments were evaluated in 1985 but were expanded to ten in 1986. Broadcast fertilization rates were either 60-30-30 or 30-30-30 lb/A N-P₂O₅-K₂O, respectively. Equivalent nutrient rates were applied as a band plus broadcast combination. Banded treatments included 15-0-0, 30-0-0, 15-8-0, 15-15-0, 15-30-0, 30-15-0, and 15-15-15 lb/A N- P₂O₅-K₂O, respectively. Yields varied with year, treatment, and location. One or more banded treatments significantly increased lint yields when compared with the broadcast yield, except

86