## ASSESSING SEEDLING VIGOR IN COMMERCIALLY-AVAILABLE COTTON CULTIVARS IN RESPONSE TO PLANTING DEPTH Tony Barnes University of Georgia Pearson, GA Calvin Meeks John L. Snider University of Georgia Tifton, GA Megan E. Babb-Hartman University of Georgia, Griffin, GA

## <u>Abstract</u>

Cotton seedling vigor characteristics have been evaluated many times in the past, but due to the constant release of new varieties coupled with new seed technologies, evaluation for characteristics for proper stand establishment is critical. Stand establishment and crop growth analysis were conducted at three and five weeks after planting for 4 cotton cultivars planted at 3 different depths. This study was conducted in 2015 at the Lang-Rigdon Research farm on the UGA Tifton Campus. Cultivar effects were negligible in the infield research. Both sampling dates demonstrated significant differences in cotton seedling vigor based on planting depth. Significant reductions in observed seedling vigor (leaf area) were noted as planting depth increased. The number of plants emerged in a meter of row also demonstrated a significant negative effect as planting depth was increased. These observations suggest that current planting depth recommendations with newer cultivars may need to be reexamined.