

**SCREENING STRATEGY FOR MAINTAINING PURITY AND SEED QUALITY IN A COTTON
BREEDING NURSERIES**

Ryan Allen Gregory

Texas Tech University

Lubbock, TX

Jane K. Dever

Texas A&M AgriLife Research

Lubbock, TX

Abstract

A screening method is being developed to accurately phenotype glyphosate resistant transgenic cotton plants in conventional cotton breeding nurseries. Broadcast glyphosate applications were made to induce herbicide damage symptoms in non-resistant plants to distinguish from resistant plants. Two glyphosate rates were evaluated at three different timings to identify resistant plants and potential subsequent impacts on harvested cotton seed viability.