2014 ROLLING PLAINS OF TEXAS – REPLICATED AGRONOMIC COTTON EVALUATION (RACE) – TRIAL SUMMARY

J. Ramirez
G. Morgan
J. Woodward
P. Delaune
C. Moore
B. Coufal
B. Rodriguez
I. Yates
L. Reagan
M. Shaw
K. White
J. Westbrook
Texas A&M AgriLife Extension Service
College Station, TX

Abstract

Cultivar selection is the most crucial decision made by cotton (*Gossypium hirsutum* L.) producers. The expansion of transgenic technology, new seed treatments for both early season insects and disease management, as well as new genetics, cultivar selection has become even more critical, and one of the biggest expenses of growing cotton, especially in non-irrigated Rolling Plains. Choosing a cultivar will dictate management strategies for the entire season, whereas, herbicide or insecticide decisions can be changed during the season to address specific conditions and pests. The objective of this project was to compare yield and lint quality of Stacked-Gene insect and herbicide tolerant cultivars grown in large plot replicated trials on producer-cooperator fields in the Rolling Plains region of Texas. Up to eight cultivars were planted at each irrigated location and up to 7 cultivars were planted at dryland locations. Plot dimensions ranged from 0.28 to 0.55 acres in size, depending upon the location. Studies were arranged in a randomized complete block design with three replications. All trials were machine harvested with grower harvesters. Plot weights were determined using a weighing boll buggy equipped with integral electronic scales. Sub-samples from each plot were ginned on a Continental 10 saw gin with a lint cleaner. Overall a mean yield of all varieties across three trials was 1658 lbs/ac with PHY 339WRF and DP 1219 B2RF averaging 1521 and 1856 lbs/ac, respectively. Turnout ranged from 30.7 to 35.5% for Stoneville 4747 GLB2 and NexGen 1511 B2RF, respectively. Yields from the Haskell Co. dryland trial ranged from 201 to 332 lbs/ac for Fibermax 1944 GLB2 and Phytogen 499 WRF for trial, respectively. Seven additional studies were conducted during 2014; however, inclement weather prohibited fields from being harvested in a timely manner; therefore, results from those trials were excluded from the analysis. Complete results from these and other cotton cultivar evaluations can be found at http://cotton.tamu.edu. In general, cotton yields from 2014 were better than recent years. Additional testing evaluating these and other cultivars is needed, to provide producers with the information needed to assist them with cultivar selection.