

COTTON TRIAL 3

MID SEASON RESULTS



HIGHLIGHTS:

- The boll number per plant significantly increased when compared to the control fields (31.3% increase)
- The total length of the top five internodes and the average internode lengths were both significantly shortened compared to the control fields (11.7% reduction)
- The root length significantly increased when compared to the control fields. (12.3% increase)
- TerraPlex showed improvements in more stressful areas of the treatment field when compared to more stressful areas of the control field.

TRIAL OVERVIEW:

At each field, data collection zones were created with 100 ft buffers from field edges and other zones. All data was collected within these zones. Within each zone, 5 data collection points were established across the field to account for field variability. At each point, 5 measurements were collected for each data field and averaged to account for plant variability. A paired T-Test and Least Significant Difference analysis were performed on this data.

Metric-specific goals were created for the TerraCell component of the study. Below are the target metrics that were specified and accounted for during the mid-season measurements:

- Internodes
 - Early squaring: 0.75 to 1.2 inches per node,
 - Large square to first bloom: 1.2 to 1.7 inches per node
 - Early bloom: 1.7 to 2.0 inches per node)
- Increase Boll Retention

Farm Partner: Repp Farm
Crop: Cotton
Treatment: TerraPlex Packaged Solution

- Data Collected:**
- Total length of top 5 internodes
 - Average length of top five internodes
 - Early vigor*
 - Plant height in inches
 - Root length in inches
 - Number of bolls.

Early Vigor = Ratio of height from cotyledonary node to first fruiting branch to number of nodes to first fruiting branch

Fields	Set Up	Planting	# of Seeds
Mutt	Valve Split (Treatment/Control)	May 13, 2022 PHY 411 W3FE	42,000 44,000
Holstead	Separate Treatment & Control Fields	May 16, 2022 (T) May 15, 2022 @ PHY 400 W3FE	39,000