

REPLICATED AGRONOMIC COTTON EVALUATION (RACE) ROLLING PLAINS OF TEXAS, 2012



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ACKNOWLEDGMENTS

Appreciation is expressed to the cooperators that provided their land, equipment and time in assisting with prepping, planting, managing and harvesting of these plots throughout the year. All cooperators are listed in Table 1.

Appreciation is extended to the **Texas Department of Agriculture** for funding that supports the fiber grading/analysis performed at the Fiber and Biopolymer Research Institute in Lubbock. Without this support, these trials would not be possible. Also, appreciation is extended to all of the local cooperators who take time to plant, manage and harvest all of these trials with their own equipment. Finally, we would like to extend our appreciation to **Cotton Incorporated** through the **Texas State Support Committee** for their partial funding of these trials.

2012 HIGHLIGHTS

Variety selection is the most important decision made during the year. Unlike herbicide or insecticide decisions that can be changed during the season to address specific conditions and pests, variety selection is made only once, and variety selection dictates the management of a field for the entire season. Variety decisions should be based on genetics first and transgenic technology second. Attention should be focused on agronomic characteristics such as yield, maturity, and fiber quality when selecting varieties. Figure 1 outlines the Best Management Practices for variety selection.

Texas producers planted 6.6 million acres of cotton in 2012 which was about 0.5 million less than 2011. Transgenic varieties accounted for 99% of the state acreage in 2012 which is up from 86% in 2011. According to the USDA-Agricultural Marketing Service "Cotton Varieties Planted 2012 Crop" survey, the estimated percentage of upland cotton planted to specific Brands in Texas are as follows, Alltex had 8.6%, Americot/NexGen had 18.6%, Bayer CropScience – FiberMax had 40%, Bayer CropScience – Stoneville had 2.3%, Croplan Genetics had 0.3%, Delta Pine had 19%, Dyna-Grow had 2.4%, FiberMax had 45%, Phytogen had 8.4% and other at 0.4%.

To assist Texas cotton producers in remaining competitive in the Rolling Plains of Texas the Texas A&M AgriLife Extension Service Agronomy program has been conducting, large plot, on-farm, replicated variety trials (Figure 2). This approach provides a good foundation of information that can be utilized to assist the variety selection process. We have also been evaluating the use of TopGuard for Cotton Root Rot Control for the past two years to help farmers control cotton root rot.

Seven Replicated Agronomic Cotton Evaluation (RACE) Trials were planted in 2012 and one strip trial. Only four out of the eight trials were harvested due to the drought and are listed in Table 1. Two cotton root rot trials were initiated to determine the efficacy and phytotoxicity of [TopGuard](#)[®] for managing Cotton Root Rot in the Rolling Plains of Texas. We only harvested one due to no disease pressure at the other location which is also listed in Table 1.

All the cotton seed companies with RoundupFlex[®] or Glytol[®] and Bt2[®] or Widestrike[®] technology had the opportunity to include at least one variety in the RACE trial at each location. All varieties were treated with either Aeris or Avicta Complete Pak seed treatment. Included in this publication are the cotton variety descriptions provided by the company. See descriptions on page 7-8 these trials were initiated on producers' farms and are replicated trials. . The cotton root rot trials were initiated on producer's fields and were small plot replicated. We used TopGuard[®] applying it with a 5 inch T band at planting following the "v" openers on the planter before the closing wheels closed the seed furrow. At three different rates which included one pint, one and half pints, two pints, and an untreated plot. We put out TopGuard[®] using rate of ten gallons of water per acre, 8002EVS nozzles, four seeds per foot, and at a speed of 3 miles per hour.

Table 1 provides a list of planting and harvest dates, row spacing and plot area for each location. Tables 2 and 3 shows numerical rankings based upon lint yield for the Variety Trials across all locations. Variety trials were planted at Wellington Texas (Table 4) and Haskell Texas (Table 5), Munday Texas (Table 6), Quanah Texas (Table 7) were included in these four tables. Table 8 shows results from Munday Root Rot Replicated Trial. Tables 4 to 7 include the cotton variety yield data and fiber analysis for each individual location. Table 8 shows treatment yield data and fiber analysis for the Munday Root Rot location. Data featured in these tables include, statistical analysis of yield, turnout, fiber quality parameters, loan and gross lint value/acre. All locations were ginned at Lubbock with the research gin with one lint cleaner. Additionally, all data were standardized to a color grade and leaf of 41-4.

The statistical analysis quantifies the variability of the test site conditions, such as soil type, harvesting, insect damage, etc. A CV (coefficient of variation) of 15% or less is generally considered acceptable and means the data are dependable. A trial with a small LSD (least significant difference), indicates more consistency within the trial and higher likelihood of identifying differences among varieties. A trial location with a large LSD and large CV indicates a higher degree of variability at the trial location. Non-significance is represented as "NS" and indicates no differences among the varieties within the data column at a 5% significance level.



First 40 Days – Fruiting to Finish

The Most Critical Period in Cotton Production Expert Recommendations of Best Management practices for an Efficient, Cost Effective Cotton Production System

Variety Selection

Cultivar selection is the most important decision made in the production enterprise. This decision has a lasting effect on the crop's early-season vigor and on overall plant health and uniformity during the First 40 Days. The crop's ultimate yield and fiber quality potential at harvest begin with variety selection and seed quality.

- ❖ Consider planting disease tolerant varieties, or those that have at least some resistance, where disease is a problem.

Choose Varieties with Genetic Potential for Higher Yield and Excellent Fiber Quality

Yield remains the ultimate measure of the crop, although the ever-increasing demand for higher fiber quality makes this factor a close second in priority. With more than 70% of the U.S. crop exported, fiber quality will become the single most important factor for U.S. cotton in the foreseeable future. International mill standards and specifications are higher than domestic mills.

- ❖ Long staple length – >35 (>1.08 inches)
- ❖ High strength – 28 to 29
- ❖ Premium micronaire – 3.8 to 4.8
- ❖ High uniformity Index – 82
- ❖ Smooth leaf with plant confirmation suitable for efficient harvest – 21/31 Grades 2-3 leaf

Plant Several Varieties: Consider Specific Traits and Crop Maturity after Yield and Quality

Consider planting 3 to 4 varieties to determine which cultivars and trait combinations perform best on your farms. Multiple varieties also minimize the risk of planting the entire farm to a potentially poor performing variety or using traits that do not add value to the individual cropping system.

- ❖ Always evaluate more than one year of variety data prior to planting large acreage to a new cultivar.

Select the Highest Quality Seed for Planting

High quality seed is critical to early success and the crop's ultimate performance. Rapid germination and emergence is best because it narrows the window for seedling disease and minimizes pest impact. In addition to the standard warm germination test, a cool germination test is recommended. Cool/Warm Vigor Index of 160 is best (e.g. 90 warm germ + 70 cool germ – 160)

Early planting into cool soils requires the best vigor index available in the variety you are planting

- ❖ CWVI >160 = Excellent
- ❖ CWVI 140-159 = Good
- ❖ CWVI 120-139 = Fair
- ❖ CWVI <120 = Poor

Variety Characteristics/Highlights

Below are the cotton variety characteristics and highlights that were included in the 2012 Uniform Variety Trials and other common varieties planted in the Rolling Plains. These cotton variety descriptions were provided by individual seed company representatives or publicly available information.

AllTex Edge B2RF

- Early-Medium maturity
- Semi-smooth leaf plant
- Excellent seedling vigor
- Very good storm tolerance
- Excellent fiber package

AllTex Nitro44 B2RF

- Mid maturity variety
- Semi Smooth leaf
- Medium-tall height
- Very good storm tolerance
- Excellent seeding vigor

Americot 1550 B2RF

- Early-Medium Maturity
- Excellent Seeding Vigor
- Semi-Smooth leaf
- Medium plant height

DeltaPine 1044 B2RF

- Mid-full maturity
- Semi-smooth leaf
- Excellent fit on dryland and limited irrigation
- V good Verticillium and Bacterial Blight resistance

DeltaPine 1219 B2RF

- Medium-tall plant height
- Early maturity variety
- Semi-smooth leaf
- Broadly adapted across Texas
- Good combination of yield and fiber quality

FiberMax 9170 B2RF

- Medium maturity variety
- Moderate Height
- Features good fiber properties
- Well-adapted to all cotton growing areas

FiberMax 1944 GLB2

- GlyTol® + LibertyLink® and Bollgard II® technology
- Early-medium maturity....more towards medium maturity
- Widely adapted across entire Cotton Belt – irrigated or dryland
- Well suited for limited irrigation

NexGen 1511B2RF

- Medium maturity
- Semi-smooth leaf
- Semi-smooth leaf
- Excellent seedling vigor

Phytogen 367 WRF

- Indeterminate,
- Semi-smooth leaf
- Medium-tall plant height
- Excellent seedling vigor
- Root Knot Nematode resistance

Phytogen 499 WRF

- Mid-maturity variety with exceptional yield potential and very high turnout
- Aggressive growth, greater than PHY 375 WRF
- Consistent across soils and environments, suited for dryland and irrigated fields
- Outstanding seedling vigor and early season growth
- Larger seed size ~ 4,000 – 4,200 seed/lb.

Stoneville 5458 B2RF

- Medium maturity
- Exceptional yield potential
- Root-knot nematode tolerance
- Good fiber quality
- Excellent seedling vigor
- High lint percent

Table 1. Trial, cooperators, planting date, harvest date, row spacing, plot dimensions and area of 2012 Texas A&M AgriLife Extension RACE Trials harvested.

| Cooperator: | Location | Planting Date | Harvest Date | Row Spacing (inches) | Plot Dimensions | Irrigated | Area harvested/plot |
|----------------|------------|---------------|--------------|----------------------|--------------------|------------------|---------------------|
| Jason Poole | Quanah | Jun 11 | Nov 26 | 30 | 8 rows x 1162 feet | Furrow Irrigated | 0.53 |
| Robert Watts | Wellington | May 5 | Oct 23 | 36 | 6 rows x 500 feet | Pivot Irrigated | 0.21 |
| Crispen Avalos | Munday | May 18 | Nov 15 | 40 | 4 rows x 700 feet | Furrow Irrigated | 0.21 |
| Steve McGuire | Haskell | May 30 | Nov 5 | 30 | 10 rows x 837 feet | Pivot Irrigated | 0.48 |
| Crispen Avalos | Munday CRR | May 19 | Nov 16 | 40 | 4 rows x 75 feet | Furrow Irrigated | 0.02 |

Table 2. Variety ranking based on lint value/acre, Rolling Plains, 2012.

| Variety | Trial | | | Mean |
|-----------------|------------|--------|--------|------|
| | Wellington | Munday | Quanah | |
| DP 1044B2F | 4 | 3 | 8 | 4.75 |
| PHY 367WRF | 7 | 6 | 2 | 5.50 |
| DP 1219B2F | 2 | 10 | 7 | 5.00 |
| NG 1511B2RF | 3 | 1 | 3 | 3.25 |
| AT Edge B2RF | 10 | 9 | 5 | 8.00 |
| FM 9170B2F | 9 | 8 | 10 | 9.00 |
| PHY 499WRF | 6 | 4 | 9 | 6.00 |
| AT Nitro 44B2RF | 8 | 7 | 6 | 8.00 |
| AM 1550B2RF | 1 | 5 | 4 | 3.25 |
| ST 5458 B2F | 5 | 2 | 1 | 2.50 |

All trials were irrigated.

¹ Haskell was not a replicated trial

Table 3. Variety ranking based on lint yield, Rolling Plains, 2012.

| Variety | Trial | | | Mean |
|-----------------|------------|--------|--------|------|
| | Wellington | Munday | Quanah | |
| DP 1044B2F | 5 | 2 | 8 | 4.75 |
| PHY 367WRF | 7 | 6 | 2 | 5.50 |
| DP 1219B2F | 2 | 10 | 7 | 5.00 |
| NG 1511B2RF | 3 | 1 | 4 | 3.50 |
| AT Edge B2RF | 10 | 9 | 5 | 8.00 |
| FM 9170B2F | 9 | 8 | 10 | 9.00 |
| PHY 499WRF | 6 | 4 | 9 | 6.00 |
| AT Nitro 44B2RF | 8 | 7 | 6 | 8.00 |
| AM 1550B2RF | 1 | 5 | 3 | 3.00 |
| ST 5458 B2F | 4 | 3 | 1 | 2.50 |

**Table 4. Uniform Stacked-Gene Cotton Variety Trials, 2012
Collingsworth Co., Wellington TX¹
Cooperator: Robert Watts
Dale Dunlap, County Extension Agent
Dr. Gaylon Morgan, Extension Cotton Agronomist
Jonathan Ramirez Extension Demonstration Technician**

| Variety | Lint (lbs/acre) | | Turnout % | | Micronaire | | Length (inches) | | Strength (g/tex) | | Uniformity | | Loan Value (¢/lb) | | Lint Value (\$/acre) ² | |
|---------------------|-----------------|-----|--------------|-----|-------------|---|-----------------|-----|------------------|-----|--------------|---|-------------------|---|-----------------------------------|---|
| AllTex Edge B2RF | 1485 | d | 28.63 | de | 4.83 | a | 1.16 | cd | 33.53 | bc | 82.53 | a | 52.71 | a | 784.00 | a |
| Deltapine 1219B2RF | 1832 | ab | 33.80 | a | 4.20 | a | 1.20 | b | 35.67 | a | 83.17 | a | 54.06 | a | 990.70 | a |
| Americot 1550B2RF | 1860 | a | 31.90 | abc | 4.53 | a | 1.13 | ef | 30.73 | e | 82.10 | a | 53.70 | a | 999.00 | a |
| Phytogen 367WRF | 1634 | bcd | 29.90 | cde | 4.30 | a | 1.14 | def | 32.97 | bcd | 82.53 | a | 53.86 | a | 880.00 | a |
| Stoneville 5458 B2F | 1751 | abc | 30.70 | cde | 4.77 | a | 1.13 | ef | 32.37 | d | 81.77 | a | 52.93 | a | 929.00 | a |
| Deltapine 1044B2RF | 1730 | abc | 30.33 | cde | 4.70 | a | 1.14 | def | 32.57 | cd | 82.07 | a | 53.76 | a | 930.30 | a |
| NexGen 1511B2RF | 1761 | abc | 33.37 | ab | 4.73 | a | 1.12 | f | 32.53 | cd | 83.33 | a | 52.95 | a | 932.70 | a |
| Fibermax 9170B2F | 1605 | cd | 31.43 | abc | 4.30 | a | 1.19 | bc | 33.10 | bcd | 82.63 | a | 53.96 | a | 866.30 | a |
| AllTex Nitro 44B2RF | 1606 | cd | 28.30 | e | 4.13 | a | 1.26 | a | 36.43 | a | 83.87 | a | 54.16 | a | 869.70 | a |
| Phytogen 499WRF | 1694 | a-d | 31.00 | bc | 4.53 | a | 1.15 | de | 33.70 | b | 83.23 | a | 54.00 | a | 914.70 | a |
| Mean | 1695.80 | | 30.94 | | 4.50 | | 1.17 | | 33.36 | | 82.72 | | 53.61 | | 909.64 | |
| LSD (P=.05) | 214.22 | | 2.494 | | 0.533 | | 0.0308 | | 1.065 | | 1.297 | | 1.6654 | | 129.46 | |
| STD DEV | 124.88 | | 1.454 | | 0.311 | | 0.0179 | | .621 | | 0.756 | | 0.9708 | | 75.47 | |
| CV% | 7.36 | | 4.70 | | 6.90 | | 1.54 | | 1.86 | | 0.91 | | 1.81 | | 8.30 | |

¹ Indicates the location was irrigated

² Lint values were calculated using the 2012 Upland Cotton Loan Valuation Model from Cotton Incorporated.

Table 5. Uniform Stacked-Gene Cotton Variety Trials, 2012
Haskell County, Haskell TX¹
Cooperator: Steve McGuire
Wes Utley, County Extension Agent
Dr. Gaylon Morgan, Extension Cotton Agronomist
Jonathan Ramirez Extension Demonstration Technician

| Variety | Lint (lbs/acre) | Turnout % | Micronaire | Length (inches) | Strength (g/tex) | Uniformity | Loan Value (¢/lb) | Lint Value (\$/acre) ² |
|----------------------|-----------------|--------------|-------------|-----------------|------------------|--------------|-------------------|-----------------------------------|
| Phytogen 499WRF | 875 | 30.60 | 3.60 | 1.18 | 38.10 | 84.20 | 54.05 | 473.00 |
| Phytogen 367WRF | 810 | 26.80 | 4.30 | 1.15 | 34.10 | 82.20 | 53.85 | 436.00 |
| Fibermax 1944 | 741 | 26.20 | 3.50 | 1.19 | 34.30 | 83.10 | 52.10 | 386.00 |
| Fibermax 9170B2F | 788 | 26.40 | 3.90 | 1.22 | 38.90 | 84.20 | 54.20 | 427.00 |
| All Tex EdgeB2RF | 797 | 25.80 | 4.60 | 1.15 | 34.10 | 82.90 | 53.85 | 429.00 |
| All Tex Nitro 44B2RF | 666 | 25.20 | 4.10 | 1.2 | 38.60 | 85.00 | 54.30 | 362.00 |
| NexGen 1511B2RF | 868 | 31.30 | 4.00 | 1.11 | 34.80 | 82.60 | 53.95 | 468.00 |
| Americot 1550B2RF | 950 | 27.90 | 4.20 | 1.12 | 31.80 | 82.80 | 53.90 | 512.00 |
| Stoneville 5458 B2F | 956 | 27.60 | 3.70 | 1.14 | 33.60 | 81.50 | 53.90 | 515.00 |
| Deltapine 1044B2RF | 948 | 28.60 | 4.00 | 1.16 | 34.50 | 82.60 | 54.00 | 512.00 |
| Deltapine 1219B2RF | 1082 | 28.70 | 3.20 | 1.16 | 35.10 | 81.70 | 50.25 | 544.00 |
| Mean | 861.91 | 27.74 | 3.92 | 1.16 | 35.26 | 82.98 | 53.49 | 460.36 |

¹ Indicates the location was irrigated

² Lint values were calculated using the 2012 Upland Cotton Loan Valuation Model from Cotton Incorporated.

**Table 6. Uniform Stacked-Gene Cotton Variety Trials, 2012
Knox County, Munday TX¹
Cooperator: Crispen Avalos
Jerry Copeland, County Extension Agent
Dr. Gaylon Morgan, Extension Cotton Agronomist
Dr. Jason Woodward Plant Pathologist
Jonathan Ramirez Extension Demonstration Technician
Eric Williams Extension Assistant
Ira Yates Technician, Bobby Rodriguez Technician**

| Variety | Lint (lbs/acre) | | Turnout % | | Micronaire | | Length (inches) | | Strength (g/tex) | | Uniformity | | Loan Value (¢/lb) | | Lint Value (\$/acre) ² | |
|----------------------|-----------------|---|--------------|---|-------------|---|-----------------|----|------------------|-----|--------------|---|-------------------|----|-----------------------------------|---|
| Phytogen 499WRF | 1388 | a | 37.10 | a | 4.20 | a | 1.17 | bc | 34.25 | bc | 84.00 | a | 54.08 | ab | 751.00 | a |
| Phytogen 367WRF | 1331 | a | 33.45 | a | 4.10 | a | 1.11 | d | 33.00 | cd | 82.60 | a | 53.73 | bc | 715.50 | a |
| AllTex Edge B2RF | 1118 | a | 32.20 | a | 4.40 | a | 1.21 | ab | 33.30 | bcd | 83.50 | a | 54.00 | ab | 604.00 | a |
| AllTex Nitro44 B2RF | 1206 | a | 30.20 | a | 3.85 | a | 1.22 | a | 36.15 | a | 83.65 | a | 54.10 | a | 652.50 | a |
| Deltapine 1219 B2RF | 1079 | a | 34.35 | a | 3.95 | a | 1.19 | ab | 34.65 | ab | 82.90 | a | 54.05 | ab | 583.50 | a |
| Deltapine 1044 B2RF | 1515 | a | 32.90 | a | 4.50 | a | 1.13 | cd | 31.40 | e | 82.70 | a | 53.73 | bc | 814.00 | a |
| Stoneville 5458 B2RF | 1512 | a | 33.25 | a | 4.10 | a | 1.17 | bc | 32.10 | de | 82.15 | a | 53.88 | ab | 814.50 | a |
| Fibermax 9170 B2RF | 1185 | a | 31.95 | a | 4.05 | a | 1.18 | ab | 32.65 | de | 82.80 | a | 53.95 | ab | 639.00 | a |
| Americot 1550 B2RF | 1359 | a | 34.25 | a | 4.10 | a | 1.12 | d | 29.70 | f | 82.80 | a | 53.48 | cd | 727.50 | a |
| Nexgen 1511 B2RF | 1592 | a | 34.75 | a | 4.50 | a | 1.09 | d | 32.05 | de | 82.20 | a | 53.35 | d | 849.50 | a |
| Mean | 1328.50 | | 33.44 | | 4.18 | | 1.16 | | 32.93 | | 82.93 | | 53.84 | | 715.10 | |
| LSD (P=.05) | 359.96 | | 4.208 | | 0.423 | | 0.0453 | | 1.576 | | 1.513 | | 0.3714 | | 191.56 | |
| STD DEV | 159.13 | | 1.86 | | 0.187 | | 0.02 | | 0.697 | | 0.669 | | 0.1642 | | 84.68 | |
| CV% | 11.98 | | 5.56 | | 4.48 | | 1.72 | | 2.12 | | 0.81 | | 0.3 | | 11.84 | |

¹ Indicates the location was irrigated

² Lint values were calculated using the 2012 Upland Cotton Loan Valuation Model from Cotton Incorporated.

**Table 7. Uniform Stacked-Gene Cotton Variety Trials, 2012
Hardeman County, Quanah TX¹
Cooperator: Jason Poole
Steven Sparkman, County Extension Agent
Dr. Gaylon Morgan, Extension Cotton Agronomist
Dr. Jason Woodward Plant Pathologist
Jonathan Ramirez Extension Demonstration Technician
Eric Williams Extension Assistant
Ira Yates Technician, Bobby Rodriguez Technician**

| Variety | Lint (lbs/acre) | | Turnout % | | Micronaire | | Length (inches) | | Strength (g/tex) | | Uniformity | | Loan Value (¢/lb) | | Lint Value (\$/acre) ² | |
|---------------------|-----------------|---|--------------|---|-------------|-----|-----------------|----|------------------|---|--------------|-----|-------------------|-----|-----------------------------------|---|
| | | | | | | | | | | | | | | | | |
| Phytogen 499WRF | 433 | a | 25.10 | a | 2.65 | d | 1.15 | bc | 32.90 | a | 83.10 | ab | 45.93 | cd | 199.50 | a |
| Americot 1550B2RF | 567 | a | 26.70 | a | 2.85 | cd | 1.12 | c | 28.60 | b | 81.55 | de | 46.65 | cd | 268.00 | a |
| Phytogen 367WRF | 598 | a | 28.25 | a | 3.10 | a-d | 1.16 | bc | 31.55 | a | 81.70 | cde | 50.25 | abc | 300.50 | a |
| Deltapine 1219B2RF | 489 | a | 24.30 | a | 2.90 | bcd | 1.19 | ab | 32.85 | a | 81.95 | cd | 47.33 | bcd | 231.50 | a |
| Nexgen 1511B2RF | 548 | a | 29.60 | a | 3.40 | ab | 1.16 | bc | 31.85 | a | 82.55 | bc | 52.00 | a | 283.50 | a |
| Stoneville 5458 B2F | 675 | a | 27.60 | a | 3.35 | abc | 1.14 | bc | 31.20 | a | 80.90 | e | 51.78 | ab | 349.50 | a |
| Deltapine 1044B2RF | 443 | a | 22.30 | a | 2.65 | d | 1.19 | ab | 32.30 | a | 82.20 | bcd | 45.78 | d | 201.50 | a |
| AllTex EdgeB2RF | 507 | a | 27.85 | a | 3.60 | a | 1.16 | bc | 31.95 | a | 81.60 | de | 52.00 | a | 264.00 | a |
| Fibermax 9170B2F | 347 | a | 27.15 | a | 2.75 | d | 1.20 | ab | 31.40 | a | 82.00 | cd | 47.30 | cd | 164.50 | a |
| AllTex Nitro 44B2RF | 495 | a | 24.75 | a | 3.00 | bcd | 1.24 | a | 32.55 | a | 83.70 | a | 48.95 | a-d | 243.50 | a |
| Mean | 510.20 | | 26.36 | | 3.03 | | 1.17 | | 31.72 | | 82.13 | | 48.80 | | 250.60 | |
| LSD (P=.05) | 202.07 | | 5.662 | | 0.533 | | .0612 | | 2.22 | | 0.932 | | 4.4616 | | 105.31 | |
| STD DEV | 89.33 | | 2.503 | | 0.236 | | 0.027 | | 0.981 | | 0.412 | | 1.9724 | | 46.56 | |
| CV% | 17.50 | | 9.50 | | 7.80 | | 2.30 | | 3.09 | | 0.50 | | 4.04 | | 18.58 | |

¹ Indicates the location was irrigated

² Lint values were calculated using the 2012 Upland Cotton Loan Valuation Model from Cotton Incorporated.

Table 8. Evaluation of TopGuard® for Cotton Root Rot Control, 2012

Knox County, Munday TX¹

Cooperator: Crispen Avalos

Dr. Gaylon Morgan, Extension Cotton Agronomist

Dr. Jason Woodward Plant Pathologist

Jonathan Ramirez Extension Demonstration Technician

Eric Williams Extension Assistant

Ira Yates Technician, Bobby Rodriguez Technician

| Treatments | Lint (lbs/acre) | | Turnout % | | Micronaire | | Length (inches) | | Strength (g/tex) | | Uniformity | | Loan Value (¢/lb) | | Lint Value (\$/acre) ² | |
|----------------|-----------------|---|--------------|---|-------------|---|-----------------|---|------------------|---|--------------|---|-------------------|---|-----------------------------------|---|
| | | | | | | | | | | | | | | | | |
| 1 Pint/acre | 1342 | a | 32.15 | a | 4.13 | a | 1.12 | a | 31.90 | a | 82.23 | a | 53.79 | a | 721.90 | a |
| 1.5 Pints/acre | 1388 | a | 32.35 | a | 4.13 | a | 1.12 | a | 32.63 | a | 82.78 | a | 53.83 | a | 747.30 | a |
| 2 Pints/acre | 1417 | a | 32.18 | a | 4.15 | a | 1.13 | a | 32.00 | a | 82.60 | a | 53.94 | a | 764.50 | a |
| Untreated | 1198 | b | 31.60 | a | 4.08 | a | 1.12 | a | 31.75 | a | 82.13 | a | 53.81 | a | 644.80 | b |
| Mean | 1336.25 | | 32.07 | | 4.12 | | 1.13 | | 32.07 | | 82.44 | | 53.84 | | 719.63 | |
| LSD (P=.05) | 118.32 | | 1.545 | | 0.287 | | 0.0251 | | 1.902 | | 0.62 | | 0.2706 | | 65.00 | |
| STD DEV | 72.56 | | 0.966 | | 0.18 | | 0.0157 | | 1.189 | | 0.388 | | 0.1692 | | 39.86 | |
| CV% | 5.43 | | 3.01 | | 4.36 | | 1.39 | | 3.71 | | 0.47 | | 0.31 | | 5.54 | |

¹ Indicates the location was irrigated.

² Lint values were calculated using the 2012 Upland Cotton Loan Valuation Model from Cotton Incorporated.

Variety used was Deltapine 1044 B2RF



<http://cotton.tamu.edu/>

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