



|                       |                    |                       |                       |
|-----------------------|--------------------|-----------------------|-----------------------|
| <b>Crop:</b>          | <b>Cotton</b>      | <b>Producer:</b>      | David Cagle           |
| <b>Location:</b>      | Hargrave Corner    | <b>GPS:</b>           | 36.266507, -90.189186 |
| <b>Soil Type:</b>     | Fountain Silt Loam | <b>Row Width:</b>     | 38 inches             |
| <b>Previous Crop:</b> | Cotton             | <b>Planting Rate:</b> | 46,000                |
| <b>Planting Date:</b> | 5/17/2019          | <b>Harvest Date:</b>  | October 19-20, 2019   |
| <b>Irrigation:</b>    | Furrow             |                       |                       |

| Pesticide Rate per Acre and Product | Fertilizer (N-P-K-S-Zn) |
|-------------------------------------|-------------------------|
| Liberty + RoundUp                   | 0-40-90                 |
| Dual + RoundUp                      | 29 gallons of 28-0-0-4  |
| Centric                             |                         |
| Acephate + Diamond                  |                         |
| Bidrin + Bifenthrin                 |                         |
| Mepiquat @ 12 oz x 3                |                         |

| Variety      | Stand Counts | Lint Yield (lb/Acre) | Turnout % | Grade | Staple | Strength g/tex | Mic | Uniformity | Loan Rate Cents/Lb. | Per Acre Income |
|--------------|--------------|----------------------|-----------|-------|--------|----------------|-----|------------|---------------------|-----------------|
| DG 3385 B2XF | 44,000       | 1508.28              | 42.61     | 31-2  | 37.0   | 29.9           | 4.9 | 84.5       | 56.0458             | \$865.49        |
| CG 9608 B3XF | 33,000       | 1450.71              | 40.25     | 31-3  | 37.0   | 29.9           | 4.5 | 82.2       | 55.2937             | \$802.19        |
| NG 4936 B3XF | 30,000       | 1417.78              | 37.13     | 31-3  | 39.0   | 31.9           | 4.5 | 84.6       | 56.4117             | \$799.68        |
| DP 1646 B2XF | 42,000       | 1392.53              | 37.26     | 31-3  | 38.9   | 31.3           | 4.5 | 83.0       | 56.4211             | \$785.68        |
| PX3B07 W3FE  | 39,000       | 1365.86              | 41.43     | 31-3  | 37.0   | 33.3           | 4.3 | 83.2       | 55.2117             | \$754.09        |
| ST 4550 GLTP | 34,000       | 1309.70              | 41.24     | 31-3  | 37.0   | 32.4           | 4.6 | 83.1       | 56.1845             | \$735.89        |
| PHY 350 W3FE | 37,000       | 1304.65              | 40.77     | 31-3  | 37.1   | 31.9           | 4.7 | 83.8       | 56.2127             | \$733.35        |
| NG 3994 B3XF | 37,000       | 1329.90              | 42.75     | 31-4  | 37.0   | 31.0           | 4.8 | 82.8       | 54.6441             | \$726.74        |
| ST 5471 GLTP | 34,000       | 1297.17              | 36.97     | 31-3  | 37.0   | 31.2           | 4.5 | 81.7       | 55.6532             | \$721.88        |
| DP 1725 B2XF | 41,000       | 1285.86              | 39.63     | 31-2  | 36.0   | 30.2           | 4.7 | 81.7       | 55.4339             | \$712.76        |
| DG 3317 B3XF | 36,000       | 1200.00              | 41.43     | 31-3  | 37.0   | 31.2           | 4.7 | 83.0       | 56.0239             | \$672.30        |

Average income per acre does not reflect total income per acre. Farmers will receive a gin rebate plus the cotton buyers will purchase equity in the cotton from the farmers. Small plot cotton variety trials are conducted all throughout the south and in Arkansas, but little information is available with regard to the influence of fiber quality from a commercial ginned study. The Big Block Cotton Plot was implemented on David Cagle's farm. We planted 72 rows of eleven different cotton varieties from six different companies on May 17, 2019. Cagle treated this field just like any other cotton field throughout the growing season. At the end of the season, the cotton varieties were picked according to readiness. Fifty-four rows were picked out of each variety to make a module. The modules were then taken to Graves Gin where they were ginned separately. Barbi Anderson worked hard to sell the modules individually and put them into the loan separately. This allowed us to be able to see the quality of each of the varieties of cotton and not just the yield. It helped to see the income per acre, lint yield, leaf grade, turnout, staple, strength, mic, and uniformity. Discounts associated with excessive leaf and micronaire are common in Arkansas, so that is one thing that made this plot stand out. It showed the leaf and micronaire of each variety to help farmers compare varieties not just by quantity, but by quality. Sampling and selling each variety separately shows the differences in quality of each as well as the yield and the price earned from each acre. All varieties defoliated and performed well, but there were differences in leaf. These differences were associated with variety characteristics. Some varieties may be high lint yielders, but others may be better quality and bring more money dollars per acre even though they might not have picked as much as another variety.