




**COUNTY VARIETY TRIAL**  
 (Clay County)

<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>Row Length:</b>	1,248 feet
<b>Planting Date:</b>	5/11/2020	<b>Planting Rate:</b>	46,000
<b>Irrigation:</b>	Furrow	<b>Harvest Date:</b>	October 22-24, 2020

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 3535 B3XF	28,700	1502.42	38.77	41-3	39.0	31.6	4.6	82.9	54.33	\$816.26
NG 4936 B3XF	37,300	1480.20	39.06	41-4	39.7	31.9	4.4	83.0	39.06	\$803.45
DP 2020 B3XF	37,700	1464.85	40.74	41-3	40.0	32.2	4.4	83.3	54.62	\$800.10
ST 4990 B3XF	37,700	1425.46	40.00	41-3	39.1	32.6	4.6	83.7	54.46	\$776.31
PHY 390 W3FE	36,700	1387.48	41.13	41-3	38.0	33.2	4.4	81.9	41.13	\$757.56
NG 4098 B3XF	29,300	1426.47	41.00	41-5	39.9	35.2	4.1	82.6	51.95	\$741.05
DP 2012 B3XF	30,700	1360.09	41.29	41-3	39.0	32.3	4.5	83.4	54.35	\$739.21
CP 9608 B3XF	31,700	1307.48	35.52	41-3	38.1	31.6	4.5	81.3	54.62	\$714.15
PHY 400 W3FE	31,700	1301.41	39.52	41-3	38.1	33.9	4.2	82.5	54.69	\$711.74
DG 3456 B3XF	33,000	1223.64	35.13	41-3	37.0	30.3	4.4	82.9	54.45	\$666.27
ST 4880 B3XF	26,700	1036.16	31.94	41-4	39.8	33.1	4.2	83.2	52.94	\$548.54

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 ten different cotton varieties from six different companies on May 11, 2020. One variety, DP 2012, only had 48 rows planted and harvested due to lack of seed. 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 (except for DP 2012, which had only 48 rows). 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 dollars per acre even though they might not have picked as much as another variety.