

Summary of variety performance of cotton cultivars containing multiple technologies[†]
tested together in county large plot variety testing program.

Variety Name	Ashley County		Clay County		Craighead County		Desha County		Lee County		Lonoke County		Mississippi County		Phillips/Monroe County		Poinsett County		St. Francis County		Average Rank	
	Lint lb/A	R	Lint lb/A	R	Lint lb/A	R	Lint lb/A	R	Lint lb/A	R	Lint lb/A	R	Lint lb/A	R	Lint lb/A	R	Lint lb/A	R	Lint lb/A	R	Lint lb/A	R
ST 4550 GLTP	1272	2	1310		1953	1	1891	3	1723	2	1733	2	1848		1145	4	1668	1	1579	3	1621	2.25
PHY 400 W3FE (PXEB07)	1288	1	1366		1848	2	1848	5	1578	5	1666	5	1651		1211	1	1599	3	1625	2	1583	3.00
DP 1646 B2XF	1262	3	1393		1758	4	1807	6	1614	3	1676	4	1591		1202	2	1628	2	1516	5	1558	3.63
NG 4936 B3XF	1134	5	1418		1737	6	1897	2	1613	4	1906	1	1594		905	9	1499	6	1648	1	1542	4.25
DP 1916 B3XF	1038	9			1817	3	1852	4	1530	7	1691	3	1602		1089	7	1465	8	1409	7	1486	6.00
DP 1518 B2XF	1095	7			1673	7	1565	11	1748	1	1452	7	1470		1167	3	1557	4	1364	8	1453	6.00
PHY 350 W3FE	1201	4	1305		1673	8	1625	10	1556	6	1480	6	1457		1095	6	1524	5	1308	10	1433	6.88
DG 3427 B3XF	975	11			1749	5	1800	7	1415	11	1408	10			1142	5	1467	7	1341	9	1412	8.13
NG 3994 B3XF	992	10	1330		1543	11	1943	1	1522	9	1426	9	1556		854	10	1426	11	1469	6	1397	8.38
DG 3317 B3XF	1038	8	1200		1628	9	1782	8	1503	10	1376	11	1672		812	11	1445	9	1551	4	1392	8.75
ST 5600 B2XF	1127	6			1564	10	1672	9	1528	8	1447	8	1334		1052	8	1439	10	1298	11	1391	8.75
CG 9608 B3XF			1451														1485					
DG 3385 B2XF			1508																			
DP 1725 B2XF			1286		1982																	
PHY 430 W3FE														846								
ST 5471 GLTP			1298																			

[†]Technology Key –

Bt Traits:

Two gene – B2, W, T

Three gene – W3, B3, TP

Herbicide Tolerant Traits:

RF – tolerant to glyphosate

GL – tolerant to glyphosate, glufosinate

XF – tolerant to glyphosate, glufosinate, dicamba

FE – tolerant to glyphosate, glufosinate, 2,4-D choline

Table 1. Lint yield and fiber properties - Ashley county transgenic variety test.

Cooperator: Bruce Bond		Date Planted: 5/30/19								
Soil Type: Hebert Silt Loam		Date of Harvest: 11/15/19								
Irrigation: Furrow		Replications: 4								
Agent: Kevin Norton										
Variety	Lint		Fiber properties							
	yield	r	Micronaire	r	Length	r	UI^a	r	Strength	r
	lb/a				Staple		%		g/tex	
PHY 400 W3FE (PXEB07)	1288	1	4.55	7	38.50	4	82.4	6	33.9	1
ST 4550 GLTP	1272	2	4.88	4	37.80	6	83.5	1	33.5	3
DP 1646 B2XF	1262	3	4.43	10	39.00	1	81.8	9	31.7	8
PHY 350 W3FE	1201	4	4.53	9	38.50	5	83.0	3	33.0	4
NG 4936 B3XF	1134	5	4.55	8	39.00	2	82.9	4	31.0	9
ST 5600 B2XF	1127	6	5.18	1	39.00	3	83.5	2	33.9	2
DP 1518 B2XF	1095	7	4.15	11	37.50	8	82.9	5	30.6	10
DG 3317 B3XF	1038	8	4.95	3	37.30	10	82.1	8	31.8	7
DP 1916 B3XF	1038	9	4.78	6	36.80	11	80.1	10	32.5	6
NG 3994 B3XF	992	10	4.98	2	37.50	9	79.1	11	30.6	11
DG 3427 B3XF	975	11	4.85	5	37.80	7	82.2	7	32.8	5
Mean	1129		4.7		38.06		82.1		32.3	
Var. LSD 0.05	103		0.2		1.70		3.0		1.7	
C.V.%	6.3		3.3		3.1		2.6		3.6	
Prob (var)	0.0001		0.0001		0.1067		0.1117		0.0007	

^a UI = Fiber length uniformity Index

Table 2. Lint yield and fiber properties - Clay county transgenic variety test.

Cooperator: David Cagle		Date Planted: 5/17/19								
Soil Type: Fountain Silt Loam		Date of Harvest: 10/9/19								
Irrigation: Furrow		Replications:								
Agent: Allison Howell										
Variety	Lint		Fiber properties							
	yield	r	Micronaire	r	Length	r	UI ^a	r	Strength	r
	lb/a				Staple				g/tex	
DG 3385 B2XF	1508	1	4.9	1	37.00	4	84.5	2	29.9	10
CG 9608 B3XF	1451	2	4.5	7	37.00	8	82.2	9	29.9	11
NG 4936 B3XF	1418	3	4.5	8	39.00	1	84.6	1	31.9	3
DP 1646 B2XF	1393	4	4.5	9	38.90	2	83.0	6	31.3	5
PHY 400 W3FE (PXEB07)	1366	5	4.3	11	37.00	10	83.2	4	33.3	1
NG 3994 B3XF	1330	6	4.8	2	37.00	5	82.8	8	31.0	8
ST 4550 GLTP	1310	7	4.6	6	37.00	7	83.1	5	32.4	2
PHY 350 W3FE	1305	8	4.7	3	37.10	3	83.8	3	31.9	4
ST 5471 GLTP	1298	9	4.5	10	37.00	9	81.7	10	31.2	7
DP 1725 B2XF	1286	10	4.7	4	36.00	11	81.7	11	30.2	9
DG 3317 B3XF	1200	11	4.7	5	37.00	6	83.0	7	31.2	6
Mean	1351		4.6		37.27		83.1		31.3	

^a UI = Fiber length uniformity Index

Table 3. Lint yield and fiber properties - Craighead county transgenic variety test.

Cooperator: Brannon Qualls		Date Planted: 5/14/19								
Soil Type: Fountain Silt Loam		Date of Harvest: 10/5/19								
Irrigation: Furrow		Replications: 1								
Agent: Branon Thiesse Chris Grimes										
Variety	Lint		Fiber properties							
	yield	r	Micronaire	r	Length	r	UI ^a	r	Strength	r
	lb/a				Staple		%		g/tex	
DP 1725 B2XF	1982	1	4.90	3	38.00	4	83.5	9	30.0	10
ST 4550 GLTP	1953	2	4.70	10	38.00	7	84.3	5	32.4	8
PHY 400 W3FE (PXEB07)	1848	3	4.20	12	38.00	8	84.0	7	37.3	1
DP 1916 B3XF	1817	4	4.90	4	38.00	5	83.2	11	35.2	3
DP 1646 B2XF	1758	5	4.80	7	41.00	1	85.9	1	29.0	12
DG 3427 B3XF	1749	6	5.10	1	37.00	9	85.3	2	32.7	7
NG 4936 B3XF	1737	7	4.60	11	40.00	2	84.8	3	32.9	6
PHY 350 W3FE	1673	9	4.90	5	39.00	3	84.6	4	34.3	4
DP 1518 B2XF	1673	8	4.80	8	38.00	6	84.2	6	29.9	11
DG 3317 B3XF	1628	10	4.90	6	37.00	11	81.8	12	35.6	2
ST 5600 B2XF	1564	11	4.80	9	37.00	12	83.3	10	34.3	5
NG 3994 B3XF	1543	12	5.10	2	37.00	10	83.7	8	31.4	9
Mean	1744		4.8		38.17		84.1		32.9	

^a UI = Fiber length uniformity Index

Table 4. Lint yield and fiber properties - Desha county transgenic variety test.

Cooperator: Steve Stevens Wes Kirkpatrick		Date Planted: 5/1/19								
Soil Type: Sharkey & Desha Clays		Date of Harvest: 10/3/19								
Irrigation: Furrow		Replications: 1								
Agent: John David Farabough										
Variety	Lint		Fiber properties							
	yield	r	Micronaire	r	Length	r	UI ^a	r	Strength	r
	lb/a				Staple		%		g/tex	
NG 3994 B3XF	1943	1	5.0	1	39.00	2	84.9	1	29.4	8
NG 4936 B3XF	1897	2	4.6	6	39.00	3	83.8	6	29.2	9
ST 4550 GLTP	1891	3	4.4	9	38.00	4	83.1	9	32.7	4
DP 1916 B3XF	1852	4	4.7	4	37.00	7	82.6	10	33.4	3
PHY 400 W3FE (PXEB07)	1848	5	4.1	11	39.00	5	83.4	8	33.6	2
DP 1646 B2XF	1807	6	4.5	7	40.00	1	84.3	5	28.9	10
DG 3427 B3XF	1800	7	4.7	5	37.00	8	80.9	11	30.4	7
DG 3317 B3XF	1782	8	4.8	3	37.00	9	84.9	2	31.2	6
ST 5600 B2XF	1672	9	5.0	2	38.00	5	83.6	7	32.4	5
PHY 350 W3FE	1625	10	4.3	10	38.00	6	84.5	4	34.5	1
DP 1518 B2XF	1565	11	4.5	8	37.00	10	82.9	3	28.3	11
Mean	1789		4.6		38.09		83.5		31.3	

^a UI = Fiber length uniformity Index

Table 5. Lint yield and fiber properties - Lee county transgenic variety test.

Cooperator: Trent Felton		Date Planted: 5/29/19								
Soil Type: Loring Silt Loam		Date of Harvest: 11/15/19								
Irrigation: Furrow		Replications: 4								
Agent: Stan Baker										
Variety	Lint		Fiber properties							
	yield	r	Micronaire	r	Length	r	UI ^a	r	Strength	r
	lb/a				Staple		%		g/tex	
DP 1518 B2XF	1748	1	4.2	11	38.50	6	84.0	3	31.1	9
ST 4550 GLTP	1723	2	4.8	3	37.30	11	82.7	10	31.9	6
DP 1646 B2XF	1614	3	4.3	10	40.50	1	83.4	5	30.7	11
NG 4936 B3XF	1613	4	4.6	4	38.80	3	83.1	7	30.9	10
PHY 400 W3FE (PXEB07)	1578	5	4.6	5	38.50	7	83.6	4	33.0	3
PHY 350 W3FE	1556	6	4.6	6	38.50	8	83.2	6	32.8	4
DP 1916 B3XF	1530	7	4.6	7	40.00	2	84.4	1	33.9	1
ST 5600 B2XF	1528	8	4.6	8	38.80	4	83.1	8	33.4	2
NG 3994 B3XF	1522	9	4.9	1	38.80	5	83.0	9	31.4	8
DG 3317 B3XF	1503	10	4.9	2	37.80	10	84.2	2	31.7	7
DG 3427 B3XF	1415	11	4.5	9	38.00	9	82.6	11	32.6	5
Mean	1575		4.6		38.68		83.4		32.1	
Var. LSD 0.05	128		0.2		1.23		2.0		1.6	
C.V.%	5.6		3.7		2.2		1.6		3.5	
Prob (var)	0.0004		0.0001		0.0004		0.6244		0.0036	

^a UI = Fiber length uniformity Index

Table 6. Lint yield and fiber properties - Lonoke county transgenic variety test.

Cooperator: Rick Bransford		Date Planted: 5/27/19								
Soil Type: Caspiana Silt Loam		Date of Harvest: 11/4/19								
Irrigation: Furrow		Replications: 1								
Agent: Keith Perkins Maxwell Coffin										
Variety	Lint		Fiber properties							
	yield	r	Micronaire	r	Length	r	UI ^a	r	Strength	r
	lb/a				Staple		%		g/tex	
NG 4936 B3XF	1906	1	3.8	11	41.00	1	85.2	3	29.0	10
ST 4550 GLTP	1733	2	4.5	4	39.00	4	85.7	1	30.6	7
DP 1916 B3XF	1691	3	4.1	10	41.00	2	85.1	4	31.7	5
DP 1646 B2XF	1676	4	4.4	5	40.00	3	82.6	11	28.8	11
PHY 400 W3FE (PXEB07)	1666	5	4.4	6	38.00	8	83.5	10	35.1	1
PHY 350 W3FE	1480	6	4.4	7	38.00	9	84.4	6	32.2	2
DP 1518 B2XF	1452	7	4.4	8	39.00	5	83.8	8	30.6	8
ST 5600 B2XF	1447	8	4.7	3	39.00	6	85.3	2	31.9	4
NG 3994 B3XF	1426	9	4.9	2	38.00	10	84.7	5	31.2	6
DG 3427 B3XF	1408	10	4.3	9	39.00	7	84.0	7	32.1	3
DG 3317 B3XF	1376	11	5.1	1	37.00	11	83.7	9	30.3	9
Mean	1569		4.5		39.00		84.4		31.1	

^a UI = Fiber length uniformity Index

Table 7. Lint yield and fiber properties - Mississippi county transgenic variety test.

Cooperator: David Wildy
Soil Type: Roton-Dundee Crevasse Complex
Irrigation: Pivot
Agent: Ray Benson
 Shawn Lancaster
Date Planted: 5/29/19
Date of Harvest: 11/19/19
Replications: 4

Variety	Lint		Fiber properties							
	yield	r	Micronaire	r	Length	r	UI ^a	r	Strength	r
	lb/a				Staple		%		g/tex	
ST 4550 GLTP	1848	1	4.5	3	39.80	5	85.5	1	32.5	3
DG 3317 B3XF	1672	2	4.5	4	38.30	10	84.4	7	30.9	7
PHY 400 W3FE (PXEB07)	1651	3	4.6	2	40.30	4	84.7	6	32.6	2
DP 1916 B3XF	1602	4	4.2	8	39.80	6	85.5	2	33.7	1
NG 4936 B3XF	1594	5	4.1	9	40.80	2	84.9	5	31.0	6
DP 1646 B2XF	1591	6	4.2	6	41.00	1	84.2	9	30.1	9
NG 3994 B3XF	1556	7	4.6	1	40.50	3	85.0	3	30.8	8
DP 1518 B2XF	1470	8	3.9	10	38.50	9	84.3	8	29.8	10
PHY 350 W3FE	1457	9	4.2	7	39.50	8	85.0	4	31.2	5
ST 5600 B2XF	1334	10	4.4	5	39.50	7	84.1	10	32.0	4
Mean	1578		4.3		39.80		84.8		31.5	

^a UI = Fiber length uniformity Index

Table 8. Lint yield and fiber properties - Phillips/Monroe county transgenic variety test.

Variety		Lint		Fiber properties							
		yield	r	Micronaire	r	Length	r	UI ^a	r	Strength	r
		lb/a				Staple		%		g/tex	
PHY 400 W3FE (PXEB07)		1211	1	4.7	12	38.50	5	83.4	7	34.1	5
DP 1646 B2XF		1202	2	4.9	10	40.30	1	83.4	5	32.1	12
DP 1518 B2XF		1167	3	4.9	11	37.80	10	83.7	3	33.2	10
ST 4550 GLTP		1145	4	5.2	3	38.00	7	84.0	1	34.6	1
DG 3427 B3XF		1142	5	5.1	4	37.50	11	81.9	12	32.3	11
PHY 350 W3FE		1095	6	4.9	9	38.80	4	83.6	4	34.2	3
DP 1916 B3XF		1089	7	5.0	7	37.80	9	82.6	10	33.3	8
ST 5600 B2XF		1052	8	5.6	1	38.30	6	83.3	8	34.2	4
NG 4936 B3XF		905	9	5.0	8	40.00	2	83.4	6	33.9	6
NG 3994 B3XF		854	10	5.0	5	39.00	3	82.9	9	33.4	7
PHY 430 W3FE		846	11	5.0	6	37.30	12	82.6	11	34.4	2
DG 3317 B3XF		812	12	5.3	2	37.80	8	83.9	2	33.2	9
Mean		1043		5.0		38.43		83.2		33.6	

^a UI = Fiber length uniformity Index

Table 9. Lint yield and fiber properties - Poinsett county transgenic variety test.

Cooperator: Marty White		Date Planted: 5/17/19								
Soil Type: Mhoon Silt Loam		Date of Harvest: 11/20/19								
Irrigation: Furrow		Replications: 4								
Agent: Craig Allen Jeffery Works										
Variety	Lint		Fiber properties							
	yield	r	Micronaire	r	Length	r	UI^a	r	Strength	r
	lb/a				Staple		%		g/tex	
ST 4550 GLTP	1668	1	4.6	5	37.80	7	83.7	4	33.2	3
DP 1646 B2XF	1628	2	4.6	6	40.00	1	82.8	10	29.6	12
PHY 400 W3FE (PXEB07)	1599	3	4.1	12	39.00	3	83.1	6	33.5	1
DP 1518 B2XF	1557	4	4.5	7	37.80	8	83.0	7	29.6	11
PHY 350 W3FE	1524	5	4.4	9	38.80	4	83.8	3	32.3	4
NG 4936 B3XF	1499	6	4.4	10	39.80	2	85.0	1	31.1	6
CG 9608 B3XF	1485	7	4.5	8	37.80	9	82.6	11	31.3	5
DG 3427 B3XF	1467	8	4.8	4	37.50	10	80.8	12	29.7	10
DP 1916 B3XF	1465	9	4.4	11	37.30	12	82.9	8	33.4	2
DG 3317 B3XF	1445	10	4.8	3	37.30	11	83.3	5	30.5	8
ST 5600 B2XF	1439	11	5.0	1	38.30	5	84.0	2	31.1	7
NG 3994 B3XF	1426	12	4.8	2	38.30	6	82.9	9	29.8	9
Mean	1517		4.6		38.31		83.2		31.3	
Var. LSD 0.05	115		0.3		0.94		1.3		1.7	
C.V.%	5.3		4.4		1.7		1.1		3.8	
Prob (var)	0.0010		0.0001		0.0001		0.0002		0.0001	

^a UI = Fiber length uniformity Index

Table 10. Lint yield and fiber properties - St Francis county transgenic variety test.

Cooperator: Joe Whittenton		Date Planted: 5/26/19								
Soil Type: Loring silt loam		Date of Harvest: 11/4/19								
Irrigation: Furrow		Replications: 4								
Variety	Lint		Fiber properties							
	yield	r	Micronaire	r	Length	r	UI ^a	r	Strength	r
	lb/a				Staple		%		g/tex	
NG 4936 B3XF	1648	1	4.2	7	40.30	2	85.2	1	30.7	11
PHY 400 W3FE (PXEB07)	1625	2	4.2	8	39.50	3	84.6	2	32.1	6
ST 4550 GLTP	1579	3	4.4	5	38.80	6	84.5	3	33.4	1
DG 3317 B3XF	1551	4	4.7	1	37.80	11	84.1	6	31.1	8
DP 1646 B2XF	1516	5	4.4	6	40.80	1	83.9	9	31.0	9
NG 3994 B3XF	1469	6	4.7	2	39.00	4	84.4	5	31.5	7
DP 1916 B3XF	1409	7	4.5	4	38.50	10	84.1	7	33.2	2
DP 1518 B2XF	1364	8	4.0	11	38.80	7	83.8	10	31.0	10
DG 3427 B3XF	1341	9	4.2	9	38.80	8	83.0	11	32.5	4
PHY 350 W3FE	1308	10	4.2	10	39.00	5	84.5	4	32.4	5
ST 5600 B2XF	1298	11	4.7	3	38.80	9	84.0	8	32.7	3
Mean	1464		4.4		39.10		84.2		32.0	
Var. LSD 0.05	140		0.3		0.84		1.1		2.1	
C.V.%	6.6		4.9		1.5		0.9		4.5	
Prob (var)	0.0001		0.0002		0.0001		0.0546		0.1246	

^a UI = Fiber length uniformity Index