



**DIVISION OF AGRICULTURE**  
**RESEARCH & EXTENSION**

*University of Arkansas System*

**Cotton Comments**

**Cotton Yield, Quality, and Revenue: 2014 Arkansas Cotton Variety Test**

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Crop revenue accrues to Arkansas cotton producers as a combination of both market returns and payments deriving from marketing loan gains (or loan deficiency payments). At any given price, neither revenue source is predictable due to variability in yields. Information concerning yield potential of the numerous cotton varieties available to producers increases profitability of the Arkansas cotton industry.

The University of Arkansas Cotton Variety Testing Program provides unbiased comparisons of cotton varieties over a range of environments. Trials are conducted at several locations and results indicate adaptability of specific varieties to particular regions of the state. Methodology of the test treats each variety identically with respect to weed and insect control, and no specialized production inputs are utilized for genetically enhanced varieties. Cultural inputs at each location are generally based on University of Arkansas Cooperative Extension Service recommendations for cotton production. Treatments across locations may vary due to localized conditions, but all varieties are treated identically within a location (Bourland et al 2015).

Cotton variety trials conducted in 2014 for this report were at five locations in Arkansas. Test sites included the Northeast Research and Extension Center at Keiser, the Judd Hill Cooperative Research Station at Judd Hill near Trumann, the Lon Mann Cotton Research Station at Marianna, the Rohwer Research Station at Rohwer, and the Manila Airport Cotton Research Farm at Manila. Furrow irrigation was applied at each location.

Cotton is subject to price deductions and premiums based on quality. A complete evaluation of producer income potential from cotton varieties includes fiber properties that increase or decrease lint value from what is determined by yield only. Quality factors for micronaire, staple length, uniformity, and strength are included in the 2013 cotton variety trials. Quality factors reported in the variety trials are applied with premiums and discounts for each fiber property (Falconer and Reeves 2014).

Effective cotton prices for producers include loan deficiency payments (LDP) which vary with the cotton adjusted world price (AWP). Values for LDP are determined by the difference between AWP and the loan rate of \$0.52/lb. established by USDA income support programs (Westcott, Young, and Price 2002). This report calculates revenue by multiplying yield and the U.S. loan rate after adjusting for quality to determine the relative value of cotton varieties. Yield is applied with the U.S. loan rate adjusted for quality to determine the gross lint value of each cotton variety tested.

Cotton breeding and cultivar testing programs usually collect hand-picked boll samples and gin the samples on small, laboratory gins (Bourland, Benson, and Robertson 2000; Bowman 1997). Fiber breakage during ginning is minimized on laboratory gins, and resulting values of fiber length and length uniformity index may be slightly exaggerated relative to commercially ginned cotton. However, variation in measured fiber properties derived from boll samples provides valid comparisons of entries within a test. Color and trash measurements are not attained from these hand-picked boll samples.

Potential costs of production may differ between locations and exact net revenue comparisons are limited to varieties within a test site. Table 1 indicates that the top two varieties for revenue at Keiser are identical in yield rankings. The number one ranked variety for revenue is PX3122-b51WRF and has a value that is \$92.51 greater than the variety ranked fifth. Results for Judd Hill in Table 2 show the ranking of the top six varieties for revenue is identical to the rankings for yield. The number one ranked variety for revenue is PX3122-b51WRF and has a value that is \$105.87 greater than the variety ranked

fifth. At Marianna, the ranking of the top two varieties for revenue is identical to the rankings for yield in Table 3. The variety having the highest revenue is ST 4747GLB2 with revenue that is \$79.48 greater than the fifth ranked variety. The correlation between revenue rankings and yield rankings is not as consistent at Rohwer in Table 4 as at other locations. ST 4946GLB2 has the greatest revenue, and it is \$52.04 more than the fifth ranked variety. Table 5 indicates that the top five varieties for revenue at Manila are identical in yield rankings. The number one ranked variety for revenue is PX3122-b51WRF and has a value that is \$86.94 greater than the variety ranked fifth. Across four locations at Keiser, Judd Hill, Marianna, and Rohwer, revenue rankings for the top ten varieties include varieties that are in the top ten ranking for yield in Table 6. Revenue for the number one revenue variety (PX3122b51WRF) is \$58.26 greater than the fifth ranked variety.

Table 1. Fiber Properties and Revenue - 2014 Results at Keiser, AR, Ranked by Revenue

Variety	Lint					Loan					r		
	Yield	r	Mic.	Length		Uniform.	Strength	Value	Rev				
	lb/ac			in	¢/lb	%	¢/lb	g/tex	¢/lb	¢/lb	\$/ac		
PX3122-b51WRF	1622	1	4.6	0.00	1.17	1.70	86.1	0.45	32.5	0.45	54.60	885.61	1
PHY 333 WRF	1497	2	4.3	0.00	1.23	1.75	85.7	0.35	32.3	0.45	54.55	816.61	2
DP 1321 B2RF	1476	4	4.9	0.00	1.17	1.70	84.9	0.25	33.8	0.45	54.40	802.94	3
DP 0912 B2RF	1477	3	4.9	0.00	1.12	1.65	84.2	0.25	31.5	0.45	54.35	802.75	4
ST 4747GLB2	1466	5	4.4	0.00	1.22	1.75	84.1	0.25	29.6	0.10	54.10	793.11	5
PX4444-13WRF	1406	7	4.0	0.15	1.26	1.75	87.3	0.45	33.6	0.45	54.80	770.49	6
ST 5032GLT	1407	6	4.2	0.15	1.16	1.70	84.1	0.25	33.1	0.45	54.55	767.52	7
NG 1511 B2RF	1403	8	4.8	0.00	1.17	1.70	84.7	0.25	34.6	0.45	54.40	763.23	8
FM 1944GLB2	1401	9	4.6	0.00	1.20	1.75	84.2	0.25	32.2	0.45	54.45	762.84	9
ST 4946GLB2	1391	10	4.6	0.00	1.17	1.70	85.4	0.35	33.6	0.45	54.50	758.10	10
PHY 495 W3RF	1377	12	4.3	0.00	1.16	1.70	86.7	0.45	37.8	0.45	54.60	751.84	11
PHY 499 WRF	1377	11	4.4	0.00	1.17	1.70	85.4	0.35	35.0	0.45	54.50	750.47	12
PX5540-10WRF	1365	14	4.1	0.15	1.18	1.75	85.2	0.35	33.7	0.45	54.70	746.66	13
DP 1311 B2RF	1370	13	4.3	0.00	1.16	1.70	84.0	0.25	32.0	0.45	54.40	745.28	14
PX3003-04WRF	1361	15	4.4	0.00	1.19	1.75	85.5	0.35	34.8	0.45	54.55	742.43	15
SSG UA222	1358	16	4.6	0.00	1.23	1.75	85.4	0.35	33.7	0.45	54.55	740.79	16
PX3003-14WRF	1353	17	4.3	0.00	1.14	1.70	85.0	0.35	34.2	0.45	54.50	737.39	17
PX3003-10WRF	1353	18	4.5	0.00	1.16	1.70	85.3	0.35	34.8	0.45	54.50	737.39	18
PHY 339WRF	1337	19	4.2	0.15	1.20	1.75	85.4	0.35	34.2	0.45	54.70	731.34	19
ST 5289GLT	1317	20	4.8	0.00	1.17	1.70	85.2	0.35	32.6	0.45	54.50	717.77	20
Dyna-Gro 2570 B2RF	1283	21	4.5	0.00	1.18	1.75	85.7	0.35	33.8	0.45	54.55	699.88	21
Dyna-Gro 2355 B2RF	1279	22	4.2	0.15	1.19	1.75	85.5	0.35	33.6	0.45	54.70	699.61	22
Mon 12R224B2R2	1270	24	4.3	0.00	1.19	1.75	85.8	0.35	32.4	0.45	54.55	692.79	23
Croplan 3787 B2RF	1270	23	4.5	0.00	1.15	1.70	84.4	0.25	31.2	0.45	54.40	690.88	24
Dyna-Gro CT14515	1239	25	4.8	0.00	1.20	1.75	84.4	0.25	33.8	0.45	54.45	674.64	25
Dyna-Gro 2285 B2RF	1227	26	4.4	0.00	1.20	1.75	84.1	0.25	31.3	0.45	54.45	668.10	26
PHY 427 WRF	1178	27	4.6	0.00	1.19	1.75	86.0	0.45	35.2	0.45	54.65	643.78	27
AM UA48	1122	28	4.8	0.00	1.27	1.75	87.8	0.45	37.1	0.45	54.65	613.17	28
BRS - 335	1107	29	4.1	0.15	1.19	1.75	84.6	0.25	32.9	0.45	54.60	604.42	29
BRS - 286	1073	30	4.5	0.00	1.16	1.70	84.9	0.25	36.1	0.45	54.40	583.71	30
SSG UA103	1064	31	4.7	0.00	1.23	1.75	86.4	0.45	34.7	0.45	54.65	581.48	31
SSG HQ210CT	1036	32	5.0	-2.85	1.19	1.75	84.3	0.25	34.7	0.45	51.60	534.58	32
BRS - 293	845	33	4.5	0.00	1.19	1.75	84.8	0.25	37.0	0.45	54.45	460.10	33
BRS - 269	745	34	4.6	0.00	1.23	1.75	85.0	0.35	34.3	0.45	54.55	406.40	34

Table 2. Fiber Properties and Revenue - 2014 Results at Judd Hill, AR, Ranked by Revenue

Variety	Lint						Loan						
	Yield lb/ac	r	Mic. <i>ϕ</i> /lb	Length in <i>ϕ</i> /lb		Uniform. %	Strength g/tex <i>ϕ</i> /lb		Value <i>ϕ</i> /lb	Rev \$/ac	r		
PX3122-b51WRF	1394	1	4.2	0.15	1.21	1.75	86.8	0.45	32.3	0.45	54.80	763.91	1
ST 4747GLB2	1293	2	3.8	0.15	1.21	1.75	83.3	0.20	28.7	0.00	54.10	699.51	2
PHY 333 WRF	1228	3	4.0	0.15	1.24	1.75	86.0	0.45	31.8	0.45	54.80	672.94	3
DP 0912 B2RF	1223	4	4.3	0.00	1.16	1.70	85.7	0.35	32.0	0.45	54.50	666.54	4
SSG UA222	1203	5	4.0	0.15	1.25	1.75	85.7	0.35	34.5	0.45	54.70	658.04	5
NG 1511 B2RF	1191	6	4.3	0.00	1.14	1.70	84.2	0.25	32.6	0.45	54.40	647.90	6
ST 4946GLB2	1118	8	4.1	0.15	1.15	1.70	85.2	0.35	33.8	0.45	54.65	610.99	7
DP 1321 B2RF	1116	9	4.4	0.00	1.17	1.70	85.7	0.35	32.3	0.45	54.50	608.22	8
Dyna-Gro 2285 B2RF	1106	10	4.0	0.15	1.19	1.75	85.3	0.35	32.1	0.45	54.70	604.98	9
PHY 495 W3RF	1082	12	3.7	0.15	1.16	1.70	85.0	0.35	36.0	0.45	54.65	591.31	10
DP 1311 B2RF	1083	11	3.7	0.15	1.16	1.70	84.6	0.25	32.4	0.45	54.55	590.78	11
Mon 12R224B2R2	1074	13	3.9	0.15	1.17	1.70	85.2	0.35	32.3	0.45	54.65	586.94	12
Dyna-Gro 2570 B2RF	1054	14	3.7	0.15	1.18	1.75	85.0	0.35	33.1	0.45	54.70	576.54	13
PX4444-13WRF	1124	7	3.2	-3.45	1.28	1.75	86.8	0.45	31.5	0.45	51.20	575.49	14
PHY 339WRF	1033	16	3.7	0.15	1.21	1.75	83.8	0.20	32.2	0.45	54.55	563.50	15
ST 5032GLT	1017	17	3.8	0.15	1.21	1.75	85.7	0.35	32.8	0.45	54.70	556.30	16
AM UA48	991	18	4.5	0.00	1.31	1.75	88.5	0.45	35.9	0.45	54.65	541.58	17
PX5540-10WRF	1045	15	3.2	-3.45	1.16	1.70	85.0	0.35	33.5	0.45	51.05	533.47	18
BRS - 335	962	19	3.7	0.15	1.22	1.75	85.1	0.35	34.1	0.45	54.70	526.21	19
Dyna-Gro 2355 B2RF	955	20	3.8	0.15	1.19	1.75	85.1	0.35	34.9	0.45	54.70	522.39	20
Dyna-Gro CT14515	947	22	3.8	0.15	1.22	1.75	85.6	0.35	32.7	0.45	54.70	518.01	21
PX3003-14WRF	949	21	3.5	0.00	1.18	1.75	84.7	0.25	32.1	0.45	54.45	516.73	22
PHY 499 WRF	931	24	4.4	0.00	1.17	1.70	86.4	0.45	34.8	0.45	54.60	508.33	23
PX3003-04WRF	917	25	3.6	0.00	1.19	1.75	84.3	0.25	31.5	0.45	54.45	499.31	24
PHY 427 WRF	946	23	3.4	-1.70	1.17	1.70	84.6	0.25	33.1	0.45	52.70	498.54	25
FM 1944GLB2	910	26	3.3	-1.70	1.25	1.75	85.6	0.35	32.5	0.45	52.85	480.94	26
SSG UA103	858	27	3.6	0.00	1.26	1.75	85.9	0.35	32.0	0.45	54.55	468.04	27
BRS - 293	847	28	4.1	0.15	1.17	1.70	84.0	0.25	33.9	0.45	54.55	462.04	28
ST 5289GLT	842	29	3.4	-1.70	1.20	1.75	82.9	0.10	30.1	0.25	52.40	441.21	29
BRS - 286	805	31	3.9	0.15	1.17	1.70	84.3	0.25	33.8	0.45	54.55	439.13	30
Croplan 3787 B2RF	807	30	3.6	0.00	1.17	1.70	84.5	0.25	31.7	0.45	54.40	439.01	31
PX3003-10WRF	801	32	3.8	0.15	1.16	1.70	83.8	0.20	32.5	0.45	54.50	436.55	32
SSG HQ210CT	734	33	3.3	-1.70	1.20	1.75	84.0	0.25	33.7	0.45	52.75	387.19	33
BRS - 269	553	34	4.2	0.15	1.22	1.75	86.6	0.45	34.4	0.45	54.80	303.04	34

Table 3. Fiber Properties and Revenue - 2014 Results at Marianna, AR, Ranked by Revenue

Variety	Lint						Loan						
	Yield	r	Mic.	Length		Uniform.		Strength		Value	Rev	r	
	lb/ac			in	¢/lb	%	¢/lb	g/tex	¢/lb	¢/lb	\$/ac		
ST 4747GLB2	1577	1	4.4	0.00	1.19	1.75	84.3	0.25	28.9	0.00	54.00	851.58	1
PHY 333 WRF	1542	2	4.7	0.00	1.19	1.75	85.5	0.35	33.7	0.45	54.55	841.16	2
Mon 12R224B2R2	1450	4	4.6	0.00	1.17	1.70	84.4	0.25	31.4	0.45	54.40	788.80	3
PX3122-b51WRF	1424	5	4.4	0.00	1.20	1.75	87.4	0.45	34.5	0.45	54.65	778.22	4
DP 1311 B2RF	1418	6	4.5	0.00	1.12	1.65	85.3	0.35	32.6	0.45	54.45	772.10	5
Dyna-Gro 2285 B2RF	1397	8	4.7	0.00	1.14	1.70	84.4	0.25	30.6	0.25	54.20	757.17	6
ST 4946GLB2	1457	3	5.0	-2.85	1.15	1.70	83.9	0.20	34.0	0.45	51.50	750.36	7
SSG UA222	1371	10	4.4	0.00	1.19	1.75	86.0	0.45	35.1	0.45	54.65	749.25	8
ST 5032GLT	1372	9	4.4	0.00	1.20	1.75	85.2	0.35	32.9	0.45	54.55	748.43	9
NG 1511 B2RF	1403	7	5.1	-2.85	1.14	1.70	84.3	0.25	33.5	0.45	51.55	723.25	10
PHY 427 WRF	1325	12	4.9	0.00	1.15	1.70	84.3	0.25	33.8	0.45	54.40	720.80	11
DP 1321 B2RF	1315	13	4.7	0.00	1.17	1.70	85.4	0.35	31.7	0.45	54.50	716.68	12
SSG UA103	1275	15	4.3	0.00	1.19	1.75	86.1	0.45	33.5	0.45	54.65	696.79	13
PX5540-10WRF	1277	14	4.4	0.00	1.19	1.75	85.3	0.35	33.7	0.45	54.55	696.60	14
DP 0912 B2RF	1368	11	5.0	-2.85	1.08	0.95	83.9	0.20	31.2	0.45	50.75	694.26	15
PHY 339WRF	1264	16	4.5	0.00	1.20	1.75	86.2	0.45	32.8	0.45	54.65	690.78	16
Dyna-Gro 2570 B2RF	1262	17	4.8	0.00	1.16	1.70	86.2	0.45	35.9	0.45	54.60	689.05	17
ST 5289GLT	1253	18	4.7	0.00	1.15	1.70	84.7	0.25	31.4	0.45	54.40	681.63	18
Dyna-Gro 2355 B2RF	1218	21	4.7	0.00	1.12	1.65	84.2	0.25	33.4	0.45	54.35	661.98	19
PX3003-14WRF	1221	20	4.9	0.00	1.10	0.95	84.5	0.25	34.5	0.45	53.65	655.07	20
PHY 495 W3RF	1190	22	4.9	0.00	1.14	1.70	85.0	0.35	36.7	0.45	54.50	648.55	21
PHY 499 WRF	1222	19	5.0	-2.85	1.12	1.65	85.2	0.35	35.7	0.45	51.60	630.55	22
FM 1944GLB2	1117	23	4.8	0.00	1.23	1.75	85.2	0.35	31.3	0.45	54.55	609.32	23
PX3003-10WRF	1111	24	4.9	0.00	1.11	1.65	85.5	0.35	33.7	0.45	54.45	604.94	24
PX4444-13WRF	1103	25	4.0	0.15	1.24	1.75	86.0	0.45	33.1	0.45	54.80	604.44	25
AM UA48	1047	26	4.9	0.00	1.24	1.75	86.9	0.45	35.5	0.45	54.65	572.19	26
Dyna-Gro CT14515	1025	27	4.6	0.00	1.18	1.75	84.9	0.25	34.1	0.45	54.45	558.11	27
Croplan 3787 B2RF	1013	28	4.7	0.00	1.18	1.75	85.4	0.35	32.1	0.45	54.55	552.59	28
PX3003-04WRF	1008	29	4.7	0.00	1.18	1.75	84.8	0.25	35.5	0.45	54.45	548.86	29
BRS - 335	957	30	4.5	0.00	1.15	1.70	84.9	0.25	32.9	0.45	54.40	520.61	30
SSG HQ210CT	954	31	5.3	-4.10	1.10	0.95	83.4	0.20	33.5	0.45	49.50	472.23	31
BRS - 286	831	32	4.6	0.00	1.15	1.70	85.8	0.35	34.4	0.45	54.50	452.90	32
BRS - 293	763	33	5.2	-2.85	1.14	1.70	83.8	0.20	35.7	0.45	51.50	392.95	33
BRS - 269	587	34	4.8	0.00	1.19	1.75	85.0	0.35	32.4	0.45	54.55	320.21	34

Table 4. Fiber Properties and Revenue - 2014 Results at Rohwer, AR, Ranked by Revenue

Variety	Lint						Loan						
	Yield	r	Mic.	Length		Uniform.		Strength		Value	Rev	r	
	lb/ac			in	¢/lb	%	¢/lb	g/tex	¢/lb	¢/lb	\$/ac		
ST 4946GLB2	1808	2	4.8	0.00	1.15	1.70	85.3	0.35	33.2	0.45	54.50	985.36	1
PX3122-b51WRF	1738	5	4.9	0.00	1.15	1.70	84.9	0.25	31.2	0.45	54.40	945.47	2
DP 1321 B2RF	1828	1	5.0	-2.85	1.12	1.65	86.4	0.45	33.1	0.45	51.70	945.08	3
PX3003-14WRF	1721	7	4.7	0.00	1.13	1.65	84.0	0.25	32.9	0.45	54.35	935.36	4
Mon 12R224B2R2	1722	6	4.5	0.00	1.17	1.70	84.6	0.25	30.5	0.25	54.20	933.32	5
NG 1511 B2RF	1781	4	5.0	-2.85	1.13	1.65	84.7	0.25	32.4	0.45	51.50	917.22	6
ST 5289GLT	1687	8	4.8	0.00	1.15	1.70	82.9	0.10	29.1	0.10	53.90	909.29	7
DP 0912 B2RF	1793	3	5.1	-2.85	1.09	0.95	83.9	0.20	30.7	0.25	50.55	906.36	8
PHY 495 W3RF	1640	9	4.6	0.00	1.13	1.65	85.1	0.35	34.6	0.45	54.45	892.98	9
Dyna-Gro 2570 B2RF	1638	10	4.9	0.00	1.15	1.70	85.0	0.35	33.3	0.45	54.50	892.71	10
Croplan 3787 B2RF	1634	11	4.8	0.00	1.16	1.70	85.2	0.35	31.9	0.45	54.50	890.53	11
PX3003-04WRF	1622	12	4.2	0.15	1.17	1.70	85.8	0.35	30.9	0.25	54.45	883.18	12
PX5540-10WRF	1606	14	4.4	0.00	1.16	1.70	84.3	0.25	32.7	0.45	54.40	873.66	13
PHY 339WRF	1599	16	4.5	0.00	1.19	1.75	85.7	0.35	32.3	0.45	54.55	872.25	14
PX3003-10WRF	1600	15	4.5	0.00	1.13	1.65	85.2	0.35	32.9	0.45	54.45	871.20	15
ST 4747GLB2	1610	13	4.4	0.00	1.21	1.75	85.4	0.35	27.8	0.00	54.10	871.01	16
PX4444-13WRF	1582	18	3.9	0.15	1.25	1.75	86.4	0.45	32.2	0.45	54.80	866.94	17
Dyna-Gro 2285 B2RF	1582	19	4.7	0.00	1.14	1.70	85.0	0.35	30.1	0.25	54.30	859.03	18
PHY 333 WRF	1592	17	4.4	0.00	1.16	1.70	84.1	0.25	28.0	0.00	53.95	858.88	19
PHY 427 WRF	1538	21	4.7	0.00	1.17	1.70	84.9	0.25	33.8	0.45	54.40	836.67	20
ST 5032GLT	1529	23	4.6	0.00	1.16	1.70	84.5	0.25	31.6	0.45	54.40	831.78	21
DP 1311 B2RF	1533	22	4.6	0.00	1.14	1.70	84.5	0.25	30.3	0.25	54.20	830.89	22
FM 1944GLB2	1520	24	4.8	0.00	1.19	1.75	84.6	0.25	30.9	0.25	54.25	824.60	23
Dyna-Gro 2355 B2RF	1510	25	4.3	0.00	1.13	1.65	84.8	0.25	34.2	0.45	54.35	820.69	24
Dyna-Gro CT14515	1502	26	4.5	0.00	1.16	1.70	83.1	0.20	32.5	0.45	54.35	816.34	25
PHY 499 WRF	1560	20	5.1	-2.85	1.16	1.70	85.4	0.35	33.8	0.45	51.65	805.74	26
SSG UA222	1231	27	4.7	0.00	1.23	1.75	85.2	0.35	32.5	0.45	54.55	671.51	27
BRS - 293	1166	28	4.8	0.00	1.13	1.65	84.0	0.25	33.9	0.45	54.35	633.72	28
BRS - 335	1094	29	4.7	0.00	1.14	1.70	84.6	0.25	32.6	0.45	54.40	595.14	29
BRS - 286	1017	31	4.7	0.00	1.15	1.70	85.5	0.35	34.0	0.45	54.50	554.27	30
AM UA48	1030	30	5.0	-2.85	1.28	1.75	86.9	0.45	37.1	0.45	51.80	533.54	31
SSG UA103	944	33	4.5	0.00	1.23	1.75	86.7	0.45	34.2	0.45	54.65	515.90	32
SSG HQ210CT	968	32	5.0	-2.85	1.12	1.65	84.4	0.25	34.3	0.45	51.50	498.52	33
BRS - 269	777	34	4.9	0.00	1.17	1.70	85.2	0.35	33.1	0.45	54.50	423.47	34

Table 5. Fiber Properties and Revenue - 2014 Results at Manila, AR, Ranked by Revenue

Variety	Lint					Loan					r		
	Yield	r	Mic.	Length		Uniform.	Strength	Value	Rev				
	lb/ac		$\phi/lb$	in	$\phi/lb$	%	$\phi/lb$	g/tex	$\phi/lb$	$\phi/lb$	\$/ac		
PX3122-b51WRF	1506	1	4.7	0.00	1.17	1.70	86.2	0.45	32.7	0.45	54.60	822.28	1
ST 4747GLB2	1413	2	4.8	0.00	1.20	1.75	85.5	0.35	30.5	0.25	54.35	767.97	2
DP 1321 B2RF	1401	3	4.9	0.00	1.15	1.70	85.2	0.35	34.3	0.45	54.50	763.55	3
PX3003-04WRF	1363	4	4.7	0.00	1.16	1.70	85.5	0.35	34.0	0.45	54.50	742.84	4
Mon 12R224B2R2	1348	5	4.4	0.00	1.19	1.75	85.7	0.35	31.5	0.45	54.55	735.33	5
PHY 333 WRF	1334	7	4.6	0.00	1.15	1.70	84.9	0.25	31.5	0.45	54.40	725.70	6
Dyna-Gro 2285 B2RF	1284	9	4.9	0.00	1.17	1.70	86.2	0.45	32.8	0.45	54.60	701.06	7
ST 4946GLB2	1318	8	5.1	-2.85	1.16	1.70	85.0	0.35	35.4	0.45	51.65	680.75	8
DP 0912 B2RF	1344	6	5.4	-4.10	1.14	1.70	84.4	0.25	33.3	0.45	50.30	676.03	9
PHY 339WRF	1227	11	4.8	0.00	1.18	1.75	84.4	0.25	33.2	0.45	54.45	668.10	10
Dyna-Gro 2355 B2RF	1214	14	4.8	0.00	1.18	1.75	85.7	0.35	33.7	0.45	54.55	662.24	11
PHY 427 WRF	1197	15	4.6	0.00	1.16	1.70	86.2	0.45	34.7	0.45	54.60	653.56	13
ST 5032GLT	1186	16	4.6	0.00	1.20	1.75	85.1	0.35	33.6	0.45	54.55	646.96	12
PX3003-10WRF	1233	10	5.0	-2.85	1.14	1.70	84.5	0.25	32.7	0.45	51.55	635.61	14
NG 1511 B2RF	1225	13	5.2	-2.85	1.18	1.75	85.3	0.35	35.6	0.45	51.70	633.33	15
ST 5289GLT	1225	12	5.0	-2.85	1.17	1.70	84.0	0.25	31.4	0.45	51.55	631.49	16
DP 1311 B2RF	1156	18	4.7	0.00	1.15	1.70	84.2	0.25	31.0	0.45	54.40	628.86	17
PHY 495 W3RF	1142	19	4.9	0.00	1.13	1.65	85.6	0.35	35.8	0.45	54.45	621.82	18
Dyna-Gro 2570 B2RF	1172	17	5.3	-4.10	1.13	1.65	86.1	0.45	34.2	0.45	50.45	591.27	19
PX3003-14WRF	1067	21	4.7	0.00	1.12	1.65	83.9	0.20	31.5	0.45	54.30	579.38	20
PX5540-10WRF	1042	22	4.7	0.00	1.17	1.70	85.4	0.35	34.0	0.45	54.50	567.89	21
Dyna-Gro CT14515	1074	20	5.0	-2.85	1.19	1.75	85.3	0.35	33.1	0.45	51.70	555.26	22
PX4444-13WRF	993	24	4.2	0.15	1.23	1.75	87.5	0.45	32.4	0.45	54.80	544.16	23
FM 1944GLB2	965	26	4.8	0.00	1.24	1.75	86.2	0.45	32.5	0.45	54.65	527.37	24
Croplan 3787 B2RF	1007	23	5.0	-2.85	1.15	1.70	85.5	0.35	32.9	0.45	51.65	520.12	25
PHY 499 WRF	986	25	5.3	-4.10	1.13	1.65	85.8	0.35	36.0	0.45	50.35	496.45	26



Table 6. Fiber Properties and Revenue - 2014 Averages Across Four Arkansas Sites, Ranked by Revenue

Variety	Lint				Strength				Loan			r	
	Yield	r	Mic.	Length	Uniform.	Strength	Value	Rev	r				
	lb/ac		<i>¢/lb</i>	in	<i>¢/lb</i>	%	<i>¢/lb</i>	g/tex	<i>¢/lb</i>	<i>¢/lb</i>	\$/ac		
PX3122-b51WRF	1545	1	4.5	0.00	1.18	1.75	86.3	0.45	32.6	0.45	54.65	844.34	1
ST 4747GLB2	1486	2	4.2	0.15	1.21	1.75	84.3	0.25	28.7	0.00	54.15	804.67	2
PHY 333 WRF	1465	4	4.3	0.00	1.20	1.75	85.3	0.35	31.4	0.45	54.55	799.16	3
DP 0912 B2RF	1465	3	4.8	0.00	1.11	1.65	84.4	0.25	31.3	0.45	54.35	796.23	4
NG 1511 B2RF	1445	5	4.8	0.00	1.14	1.70	84.4	0.25	33.3	0.45	54.40	786.08	5
ST 4946GLB2	1444	6	4.6	0.00	1.15	1.70	84.9	0.25	33.6	0.45	54.40	785.54	6
DP 1321 B2RF	1434	7	4.7	0.00	1.16	1.70	85.6	0.35	32.7	0.45	54.50	781.53	7
Mon 12R224B2R2	1379	8	4.3	0.00	1.17	1.70	85.0	0.35	31.6	0.45	54.50	751.56	8
DP 1311 B2RF	1351	9	4.2	0.15	1.14	1.70	84.6	0.25	31.8	0.45	54.55	736.97	9
ST 5032GLT	1331	10	4.2	0.15	1.18	1.75	84.9	0.25	32.6	0.45	54.60	726.73	10
Dyna-Gro 2285 B2RF	1328	11	4.4	0.00	1.16	1.70	84.7	0.25	31.0	0.45	54.40	722.43	11
PX5540-10WRF	1323	12	4.0	0.15	1.17	1.70	84.9	0.25	33.4	0.45	54.55	721.70	12
PHY 495 W3RF	1322	13	4.3	0.00	1.14	1.70	85.4	0.35	36.3	0.45	54.50	720.49	13
PHY 339WRF	1308	16	4.2	0.15	1.20	1.75	85.3	0.35	32.9	0.45	54.70	715.48	14
PX4444-13WRF	1304	17	3.8	0.15	1.26	1.75	86.6	0.45	32.6	0.45	54.80	714.59	15
Dyna-Gro 2570 B2RF	1309	15	4.5	0.00	1.17	1.70	85.4	0.35	34.0	0.45	54.50	713.41	16
PX3003-14WRF	1311	14	4.3	0.00	1.14	1.70	84.5	0.25	33.4	0.45	54.40	713.18	17
SSG UA222	1291	18	4.4	0.00	1.22	1.75	85.6	0.35	33.9	0.45	54.55	704.24	18
PHY 499 WRF	1272	20	4.7	0.00	1.15	1.70	85.6	0.35	34.8	0.45	54.50	693.24	19
ST 5289GLT	1275	19	4.4	0.00	1.17	1.70	83.9	0.20	30.8	0.25	54.15	690.41	20
PHY 427 WRF	1247	21	4.4	0.00	1.17	1.70	84.9	0.25	34.0	0.45	54.40	678.37	21
Dyna-Gro 2355 B2RF	1240	22	4.2	0.15	1.16	1.70	84.9	0.25	34.0	0.45	54.55	676.42	22
FM 1944GLB2	1237	23	4.4	0.00	1.22	1.75	84.9	0.25	31.7	0.45	54.45	673.55	23
PX3003-04WRF	1227	24	4.2	0.15	1.18	1.75	85.1	0.35	33.2	0.45	54.70	671.17	24
PX3003-10WRF	1216	25	4.4	0.00	1.14	1.70	84.9	0.25	33.5	0.45	54.40	661.50	25
Croplan 3787 B2RF	1181	26	4.4	0.00	1.17	1.70	84.8	0.25	31.7	0.45	54.40	642.46	26
Dyna-Gro CT14515	1178	27	4.4	0.00	1.19	1.75	84.5	0.25	33.3	0.45	54.45	641.42	27
AM UA48	1047	28	4.8	0.00	1.27	1.75	87.5	0.45	36.4	0.45	54.65	572.19	28
SSG UA103	1035	29	4.2	0.15	1.23	1.75	86.3	0.45	33.6	0.45	54.80	567.18	29
BRS - 335	1030	30	4.2	0.15	1.17	1.70	84.8	0.25	33.1	0.45	54.55	561.87	30
BRS - 286	932	31	4.4	0.00	1.15	1.70	85.1	0.35	34.6	0.45	54.50	507.94	31
SSG HQ210CT	923	32	4.6	0.00	1.15	1.70	84.0	0.25	34.0	0.45	54.40	502.11	32
BRS - 293	905	33	4.6	0.00	1.16	1.70	84.1	0.25	35.1	0.45	54.40	492.32	33
BRS - 269	666	34	4.6	0.00	1.20	1.75	85.4	0.35	33.5	0.45	54.55	363.30	34

## References

- Bourland, F., A. Beach, C. Kennedy, L. Martin, A. Rouse, and B. Robertson. 2015. "Arkansas Cotton Variety Test 2014." Arkansas Agricultural Experiment Station, Research Series 623, University of Arkansas, Division of Agriculture, Fayetteville, AR.
- Bourland, F.M., N.R. Benson, and W.C. Robertson. 2000. "Inherent Biases in the Arkansas Cotton Variety Testing Program. Proceedings of the Beltwide Cotton Conferences, San Antonio, TX, Jan. 4-8, National Cotton Council of America, Memphis, TN, pp. 547-49.
- Bowman, D.T. 1997. "Cotton Variety Testing Recommendations." Proceedings of the Beltwide Cotton Conferences, New Orleans, LA, Jan 7-10, National Cotton Council of America, Memphis, TN, pp. 490-91.
- Falconer, L. and J. Reeves. 2014. "2014 Crop Cotton Loan Evaluation Program." Cotton Incorporated, Cary, NC. Available online at:  
<http://www.cottoninc.com/fiber/AgriculturalDisciplines/AgriculturalEconomics/Cotton-Farming-Decision-Aids/>
- Westcott, P., C. Young, and J. Price. 2002. *The 2002 Farm Act Provisions and Implications for Commodity Markets*. USDA, Economic Research Service AIB 778, Washington, DC.