

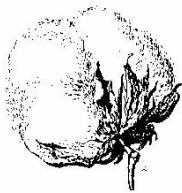
United States Department of Agriculture, University of Arkansas, and County Governments Cooperating

Cotton Comments

Cotton Yield, Quality, and Gross Returns: 2006 Arkansas Flex Cotton Variety Test

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Gross revenue in cotton production is a function of lint yield and lint price. Lint price will be approximated by CCC loan rate. For cotton, CCC loan rate is government loan price adjusted for fiber quality. Gross revenue is then the product of CCC loan rate and per acre lint yield.

The results of this publication are for one year only and were based on data from the 2006 Arkansas flex cotton variety test (Bourland et al, 2007). These data include yield by variety for each of five different locations, three sites (2 irrigated and 1 non-irrigated) in northern Arkansas (Tables 1, 2, and 3) and two sites (irrigated) in southern Arkansas (Tables 4 and 5). Table 6 is a summary of variety tests across the five sites. The summary table does not make a distinction between test sites or irrigated/non-irrigated management regime. The data include respective micronaire, staple length, uniformity, and fiber strength for each variety. Using the 2006 CCC loan value table (Anonymous, 2006), a loan value was calculated for each of the varieties in each test. A color grade of 41 and a leaf grade of 4 were assumed for all varieties. Micronaire, staple length, uniformity, and fiber strength measurements of each variety were used to determine premium and discount values for each variety for each test. It was further assumed that all price data were taken from the Greenwood, MS station. The CCC loan values were then ranked to

determine which variety yielded the greatest price per pound adjusted for fiber quality characteristics. Using these calculated loan values, gross revenue for an acre of each variety for each test was computed. These gross revenues were then ranked to determine the variety that yielded the greatest revenue inclusive of fiber quality premiums and discounts for that variety.

Calculated CCC loan values and gross revenues for all varieties are displayed in Tables 1–6. In Table 1, the irrigated Keiser test, ranking of varieties by gross revenue is the same as ranking by lint yield with the exception of ST 6611 B2RF and DP 143 B2RF. Both varieties have the same lint yield, but greater lint quality premiums for ST 6611 B2RF placed this variety ahead of DP 143 B2RF. In Table 2, the non-irrigated test at Keiser, the ranking of gross revenues is the same as ranking by lint yield, except that PHY 425 RF received a discount due to high micronaire, which dropped its ranking relative to other varieties. These two tables probably resemble one another because of multiple rainfalls at Keiser.

The test at Judd Hill shown in Table 3, ranking by gross revenue, is approximately the same as ranking by lint yield in the top ten (10) varieties, except that BW-3255 B2F places higher than DG 2520 B2RF due to premiums in uniformity and strength. Lower micronaire values at Judd Hill may be the result of late planting of all varieties.

Tables 4 and 5 show the results of tests at Marianna and Rohwer, respectively. These rankings by gross revenue are similar to ranking by lint yield. Changes in ranking are caused by lint value discounts due to high micronaire values in certain varieties.

Table 6 – Means Across Six Arkansas Test Sites – describes the summary of the five tests. Rankings by gross revenue reflect rankings by lint yield except PHY 425 RF which is ranked lower in gross revenue due to a discount for high micronaire.

Equality across varieties on color grade and leaf grade was assumed. This may bias the study with respect to hairy leaf cultivars. Production costs will vary across different genetic traits. Production budgets for cotton in various regions of the state, tillage strategies, and genetic traits utilized may be obtained from the following site
<http://www.arkagriculture.org/crops/cotton/budgets/default.htm>.

References

Anonymous, 2006 CCC Loan Values at Greenwood, MS and equivalent Locations, Courtesy of Staplcotn.

Bourland, F.M., B. S. Brown, J. M. Hornbeck, and K. Kaufman. 2007, Arkansas Cotton Variety Test 2006. Arkansas Agricultural Experiment Station Research Series 547.

Table 1. 2006 Arkansas Flex Cotton Variety Test Results - Irrigated Tunica Silty Clay Soil at Keiser, AR.

| Variety | Lint Yield ^a lbs. (<i>r</i>) | Micronaire ^b | Length ^{bc} in. | Uniformity ^{bc} % | Strength ^b g/tex | CCC Loan Value ^a ¢/lb (<i>r</i>) | Gross Revenue ^a \$/acre (<i>r</i>) |
|---------------------------|--|-------------------------|-----------------------------|-------------------------------|--------------------------------|--|--|
| DP 164 B2RF | 1028 (<i>1</i>) | 4.70 (0.00) | 1.21 (2.05) | 84.60 (0.45) | 32.60 (0.50) | 55.35 (<i>8</i>) | 569.00 (<i>1</i>) |
| DP 444 BG/RR ^d | 1024 (<i>2</i>) | 4.20 (0.20) | 1.15 (2.05) | 84.00 (0.35) | 31.60 (0.45) | 55.40 (<i>6</i>) | 567.30 (<i>2</i>) |
| DP 117 B2RF | 1013 (<i>3</i>) | 4.50 (0.00) | 1.19 (2.05) | 85.10 (0.45) | 35.10 (0.50) | 55.35 (<i>8</i>) | 560.70 (<i>3</i>) |
| CG 3520 B2RF | 993 (<i>4</i>) | 4.20 (0.20) | 1.18 (2.05) | 85.90 (0.55) | 29.60 (0.25) | 55.40 (<i>7</i>) | 550.12 (<i>4</i>) |
| ST 5599 BR ^d | 968 (<i>5</i>) | 4.90 (0.00) | 1.16 (2.05) | 84.20 (0.35) | 31.50 (0.45) | 55.20 (<i>22</i>) | 534.34 (<i>5</i>) |
| ST 6611 B2RF | 964 (<i>7</i>) | 4.60 (0.00) | 1.18 (2.05) | 84.00 (0.35) | 33.30 (0.50) | 55.25 (<i>19</i>) | 532.61 (<i>6</i>) |
| DP 143 B2RF | 964 (<i>6</i>) | 4.30 (0.00) | 1.27 (2.05) | 84.60 (0.45) | 28.80 (0.00) | 54.85 (<i>26</i>) | 528.75 (<i>7</i>) |
| DP 147 RF | 951 (<i>8</i>) | 4.50 (0.00) | 1.25 (2.05) | 84.90 (0.45) | 30.60 (0.45) | 55.30 (<i>13</i>) | 525.90 (<i>8</i>) |
| DG 2520 B2RF | 950 (<i>9</i>) | 3.80 (0.20) | 1.17 (2.05) | 84.20 (0.35) | 29.60 (0.25) | 55.20 (<i>22</i>) | 524.40 (<i>9</i>) |
| ST 4554 B2RF | 938 (<i>10</i>) | 4.40 (0.00) | 1.14 (2.05) | 84.30 (0.35) | 35.80 (0.50) | 55.25 (<i>19</i>) | 518.25 (<i>10</i>) |
| ST 4664 RF | 901 (<i>11</i>) | 4.30 (0.00) | 1.17 (2.05) | 84.20 (0.35) | 35.40 (0.50) | 55.25 (<i>19</i>) | 497.80 (<i>11</i>) |
| BW-2038 B2F | 895 (<i>12</i>) | 4.20 (0.20) | 1.17 (2.05) | 84.80 (0.45) | 30.90 (0.45) | 55.50 (<i>2</i>) | 496.73 (<i>12</i>) |
| DG 2242 B2RF | 867 (<i>13</i>) | 3.90 (0.20) | 1.16 (2.05) | 83.80 (0.35) | 29.60 (0.25) | 55.20 (<i>22</i>) | 478.58 (<i>13</i>) |
| PHY 425 RF | 859 (<i>14</i>) | 4.90 (0.00) | 1.15 (2.05) | 84.90 (0.45) | 34.40 (0.50) | 55.35 (<i>8</i>) | 475.46 (<i>14</i>) |
| BW-8391 B2F | 856 (<i>15</i>) | 4.10 (0.20) | 1.22 (2.05) | 85.30 (0.45) | 31.40 (0.45) | 55.50 (<i>2</i>) | 475.08 (<i>15</i>) |
| DP 167 RF | 856 (<i>16</i>) | 4.30 (0.00) | 1.22 (2.05) | 84.90 (0.45) | 32.40 (0.45) | 55.30 (<i>13</i>) | 473.37 (<i>16</i>) |
| DP 110 RF | 846 (<i>17</i>) | 4.80 (0.00) | 1.17 (2.05) | 85.00 (0.45) | 38.50 (0.50) | 55.35 (<i>8</i>) | 468.26 (<i>17</i>) |
| CG 4020 B2RF | 843 (<i>18</i>) | 4.30 (0.00) | 1.18 (2.05) | 85.40 (0.45) | 31.00 (0.45) | 55.30 (<i>13</i>) | 466.18 (<i>18</i>) |
| ST 6622 RF | 834 (<i>19</i>) | 4.50 (0.00) | 1.21 (2.05) | 85.30 (0.45) | 33.90 (0.50) | 55.35 (<i>8</i>) | 461.62 (<i>19</i>) |
| DG 2100 B2RF | 833 (<i>20</i>) | 3.80 (0.20) | 1.14 (2.05) | 84.30 (0.35) | 30.30 (0.25) | 55.20 (<i>22</i>) | 459.82 (<i>20</i>) |
| CG 3020 B2RF | 818 (<i>21</i>) | 4.00 (0.20) | 1.15 (2.05) | 85.00 (0.45) | 31.10 (0.45) | 55.50 (<i>2</i>) | 453.99 (<i>21</i>) |
| BW-3255 B2F | 811 (<i>22</i>) | 4.00 (0.20) | 1.16 (2.05) | 85.10 (0.45) | 30.70 (0.45) | 55.50 (<i>2</i>) | 450.11 (<i>22</i>) |
| DG 2215 B2RF | 808 (<i>23</i>) | 4.10 (0.20) | 1.18 (2.05) | 85.20 (0.45) | 32.60 (0.50) | 55.55 (<i>1</i>) | 448.84 (<i>23</i>) |
| BW-4021 B2F | 793 (<i>24</i>) | 3.80 (0.20) | 1.17 (2.05) | 84.60 (0.45) | 30.20 (0.25) | 55.30 (<i>13</i>) | 438.53 (<i>24</i>) |
| BW-4630 B2F | 781 (<i>25</i>) | 4.30 (0.00) | 1.19 (2.05) | 85.10 (0.45) | 30.70 (0.45) | 55.30 (<i>13</i>) | 431.89 (<i>25</i>) |
| ST 4357 B2RF | 778 (<i>26</i>) | 4.10 (0.20) | 1.19 (2.05) | 84.50 (0.45) | 29.70 (0.25) | 55.30 (<i>13</i>) | 430.23 (<i>26</i>) |

^a The numbers in parentheses and italics represent that variety's rank in that characteristic.

^b The numbers in parentheses represent premium (positive number), no change (0.00), or discount (negative number) given the value of that fiber trait for that variety.

^c Measurements of fiber length and length uniformity may be exaggerated since samples were processed on a small laboratory gin with no lint cleaning. Although values are exaggerated, comparisons among varieties for these parameters are generally valid, but may be biased against hairy leaf varieties since smooth leaf varieties tend to require less lint cleaning than hairy leaf varieties.

^d Commonly used non-flex variety used for the purpose of comparison.

Table 2. 2006 Arkansas Flex Cotton Variety Test Results - Non-irrigated Tunica Silty Clay at Keiser, AR.

| Variety | Lint Yield ^a lbs. (<i>r</i>) | Micronaire ^b | Length ^{bc} in. | Uniformity ^{bc} % | Strength ^b g/tex | CCC Loan Value ^a ¢/lb (<i>r</i>) | Gross Revenue ^a \$/acre (<i>r</i>) |
|---------------------------|--|-------------------------|-----------------------------|-------------------------------|--------------------------------|--|--|
| DP 117 B2RF | 1253 (<i>1</i>) | 4.50 (0.00) | 1.17 (2.05) | 83.70 (0.35) | 34.40 (0.50) | 55.25 (<i>12</i>) | 692.28 (<i>1</i>) |
| DP 167 RF | 1075 (<i>2</i>) | 4.60 (0.00) | 1.23 (2.05) | 84.70 (0.45) | 32.00 (0.45) | 55.30 (<i>7</i>) | 594.48 (<i>2</i>) |
| CG 4020 B2RF | 1066 (<i>3</i>) | 4.20 (0.20) | 1.19 (2.05) | 84.30 (0.35) | 29.90 (0.25) | 55.20 (<i>14</i>) | 588.43 (<i>3</i>) |
| CG 3520 B2RF | 1056 (<i>4</i>) | 4.20 (0.20) | 1.18 (2.05) | 84.50 (0.45) | 30.40 (0.25) | 55.30 (<i>7</i>) | 583.97 (<i>4</i>) |
| DP 164 B2RF | 1050 (<i>5</i>) | 4.20 (0.20) | 1.22 (2.05) | 84.10 (0.35) | 31.40 (0.45) | 55.40 (<i>3</i>) | 581.70 (<i>5</i>) |
| ST 4664 RF | 1042 (<i>6</i>) | 4.40 (0.00) | 1.14 (2.05) | 83.40 (0.25) | 33.70 (0.50) | 55.15 (<i>17</i>) | 574.66 (<i>6</i>) |
| DP 444 BG/RR ^d | 1031 (<i>7</i>) | 4.50 (0.00) | 1.14 (2.05) | 83.90 (0.35) | 30.40 (0.25) | 55.00 (<i>21</i>) | 567.05 (<i>7</i>) |
| ST 5599 BR ^d | 1027 (<i>8</i>) | 4.90 (0.00) | 1.15 (2.05) | 84.40 (0.35) | 31.80 (0.45) | 55.20 (<i>14</i>) | 566.90 (<i>8</i>) |
| DG 2520 B2RF | 985 (<i>10</i>) | 3.90 (0.20) | 1.17 (2.05) | 84.10 (0.35) | 30.00 (0.25) | 55.20 (<i>14</i>) | 543.72 (<i>9</i>) |
| DG 2100 B2RF | 978 (<i>11</i>) | 3.90 (0.20) | 1.14 (2.05) | 84.30 (0.35) | 29.20 (0.00) | 54.95 (<i>22</i>) | 537.41 (<i>10</i>) |
| DP 143 B2RF | 958 (<i>12</i>) | 4.20 (0.20) | 1.26 (2.05) | 84.20 (0.35) | 30.90 (0.45) | 55.40 (<i>3</i>) | 530.73 (<i>11</i>) |
| CG 3020 B2RF | 944 (<i>13</i>) | 3.90 (0.20) | 1.16 (2.05) | 84.60 (0.45) | 29.40 (0.00) | 55.05 (<i>20</i>) | 519.67 (<i>12</i>) |
| PHY 425 RF | 989 (<i>9</i>) | 5.30 (-3.60) | 1.15 (2.05) | 85.20 (0.45) | 35.60 (0.50) | 51.75 (<i>26</i>) | 511.81 (<i>13</i>) |
| ST 6611 B2RF | 922 (<i>14</i>) | 4.50 (0.00) | 1.20 (2.05) | 85.20 (0.45) | 32.00 (0.45) | 55.30 (<i>7</i>) | 509.87 (<i>14</i>) |
| BW-2038 B2F | 914 (<i>15</i>) | 4.10 (0.20) | 1.18 (2.05) | 84.60 (0.45) | 29.90 (0.25) | 55.30 (<i>7</i>) | 505.44 (<i>15</i>) |
| ST 4357 B2RF | 858 (<i>16</i>) | 4.20 (0.20) | 1.19 (2.05) | 84.40 (0.35) | 28.70 (0.00) | 54.95 (<i>22</i>) | 471.47 (<i>16</i>) |
| DG 2242 B2RF | 857 (<i>17</i>) | 4.30 (0.00) | 1.17 (2.05) | 84.20 (0.35) | 29.40 (0.00) | 54.75 (<i>25</i>) | 469.21 (<i>17</i>) |
| DP 147 RF | 842 (<i>18</i>) | 4.40 (0.00) | 1.24 (2.05) | 85.10 (0.45) | 30.40 (0.25) | 55.10 (<i>18</i>) | 463.94 (<i>18</i>) |
| DP 110 RF | 822 (<i>19</i>) | 4.90 (0.00) | 1.18 (2.05) | 85.10 (0.45) | 39.50 (0.50) | 55.35 (<i>6</i>) | 454.98 (<i>19</i>) |
| ST 6622 RF | 784 (<i>20</i>) | 4.50 (0.00) | 1.19 (2.05) | 85.90 (0.55) | 34.00 (0.50) | 55.45 (<i>2</i>) | 434.73 (<i>20</i>) |
| ST 4554 B2RF | 783 (<i>21</i>) | 4.30 (0.00) | 1.15 (2.05) | 83.90 (0.35) | 33.80 (0.50) | 55.25 (<i>12</i>) | 432.61 (<i>21</i>) |
| BW-8391 B2F | 778 (<i>22</i>) | 3.70 (0.20) | 1.23 (2.05) | 85.40 (0.45) | 30.40 (0.25) | 55.30 (<i>7</i>) | 430.23 (<i>22</i>) |
| DG 2215 B2RF | 770 (<i>23</i>) | 4.30 (0.00) | 1.17 (2.05) | 84.60 (0.45) | 30.20 (0.25) | 55.10 (<i>18</i>) | 424.27 (<i>23</i>) |
| BW-4630 B2F | 763 (<i>24</i>) | 4.10 (0.20) | 1.18 (2.05) | 83.90 (0.35) | 29.40 (0.00) | 54.95 (<i>22</i>) | 419.27 (<i>24</i>) |
| BW-3255 B2F | 724 (<i>25</i>) | 3.70 (0.20) | 1.14 (2.05) | 84.00 (0.35) | 31.20 (0.45) | 55.40 (<i>3</i>) | 401.10 (<i>25</i>) |
| BW-4021 B2F | 654 (<i>26</i>) | 4.00 (0.20) | 1.18 (2.05) | 84.70 (0.45) | 31.40 (0.45) | 55.50 (<i>1</i>) | 362.97 (<i>26</i>) |

^a The numbers in parentheses and italics represent that variety's rank in that characteristic.

^b The numbers in parentheses represent premium (positive number), no change (0.00), or discount (negative number) given the value of that fiber trait for that variety.

^c Measurements of fiber length and length uniformity may be exaggerated since samples were processed on a small laboratory gin with no lint cleaning. Although values are exaggerated, comparisons among varieties for these parameters are generally valid, but may be biased against hairy leaf varieties since smooth leaf varieties tend to require less lint cleaning than hairy leaf varieties.

^d Commonly used non-flex variety used for the purpose of comparison.

Table 3. 2006 Arkansas Flex Cotton Variety Test Results - Irrigated Dundee Silt Loam at Judd Hill, AR.

| Variety | Lint Yield ^a lbs. (r) | Micronaire ^b | Length ^{bc} in. | Uniformity ^{bc} % | Strength ^b g/tex | CCC Loan Value ^a ¢/lb (r) | Gross Revenue ^a \$/acre (r) |
|---------------------------|-------------------------------------|-------------------------|-----------------------------|-------------------------------|--------------------------------|---|---|
| CG 3020 B2RF | 1315 (1) | 3.90 (0.20) | 1.16 (2.05) | 85.00 (0.45) | 30.70 (0.45) | 55.50 (4) | 729.83 (1) |
| ST 4357 B2RF | 1310 (2) | 4.40 (0.00) | 1.17 (2.05) | 84.40 (0.35) | 30.30 (0.25) | 55.00 (22) | 720.50 (2) |
| ST 4664 RF | 1292 (3) | 3.90 (0.20) | 1.14 (2.05) | 83.30 (0.25) | 33.80 (0.50) | 55.35 (14) | 715.12 (3) |
| ST 6611 B2RF | 1274 (4) | 3.90 (0.20) | 1.19 (2.05) | 83.90 (0.35) | 32.30 (0.45) | 55.40 (10) | 705.80 (4) |
| DP 117 B2RF | 1257 (5) | 4.10 (0.20) | 1.19 (2.05) | 84.70 (0.45) | 36.00 (0.50) | 55.55 (1) | 698.26 (5) |
| DG 2100 B2RF | 1249 (6) | 4.20 (0.20) | 1.15 (2.05) | 84.70 (0.45) | 30.60 (0.45) | 55.50 (4) | 693.20 (6) |
| BW-2038 B2F | 1230 (7) | 4.00 (0.20) | 1.19 (2.05) | 84.90 (0.45) | 29.60 (0.25) | 55.30 (16) | 680.19 (7) |
| BW-3255 B2F | 1222 (9) | 3.80 (0.20) | 1.17 (2.05) | 84.80 (0.45) | 31.40 (0.45) | 55.50 (4) | 678.21 (8) |
| DG 2520 B2RF | 1227 (8) | 3.90 (0.20) | 1.16 (2.05) | 83.90 (0.35) | 29.80 (0.25) | 55.20 (19) | 677.30 (9) |
| DP 444 BG/RR ^d | 1208 (10) | 4.00 (0.20) | 1.14 (2.05) | 84.60 (0.45) | 32.50 (0.50) | 55.55 (1) | 671.04 (10) |
| DP 110 RF | 1204 (11) | 4.10 (0.20) | 1.19 (2.05) | 85.00 (0.45) | 37.50 (0.50) | 55.55 (1) | 668.82 (11) |
| DG 2242 B2RF | 1186 (13) | 3.70 (0.20) | 1.19 (2.05) | 83.90 (0.35) | 30.00 (0.25) | 55.20 (19) | 654.67 (12) |
| DG 2215 B2RF | 1193 (12) | 3.60 (0.00) | 1.16 (2.05) | 83.40 (0.25) | 28.80 (0.00) | 54.65 (23) | 651.97 (13) |
| PHY 425 RF | 1164 (14) | 4.50 (0.00) | 1.18 (2.05) | 85.20 (0.45) | 34.50 (0.50) | 55.35 (14) | 644.27 (14) |
| CG 3520 B2RF | 1157 (15) | 3.70 (0.20) | 1.19 (2.05) | 83.90 (0.35) | 29.80 (0.25) | 55.20 (19) | 638.66 (15) |
| ST 4554 B2RF | 1137 (16) | 3.80 (0.20) | 1.17 (2.05) | 84.10 (0.35) | 33.30 (0.50) | 55.45 (8) | 630.47 (16) |
| BW-4630 B2F | 1115 (17) | 3.70 (0.20) | 1.20 (2.05) | 84.30 (0.35) | 30.90 (0.45) | 55.40 (10) | 617.71 (17) |
| ST 6622 RF | 1064 (20) | 4.00 (0.20) | 1.18 (2.05) | 84.40 (0.35) | 33.20 (0.50) | 55.45 (8) | 589.99 (18) |
| ST 5599 BR ^d | 1048 (22) | 3.90 (0.20) | 1.19 (2.05) | 84.00 (0.35) | 31.70 (0.45) | 55.40 (10) | 580.59 (19) |
| DP 167 RF | 1041 (23) | 4.00 (0.20) | 1.23 (2.05) | 84.90 (0.45) | 32.20 (0.45) | 55.50 (4) | 577.76 (20) |
| BW-4021 B2F | 1088 (18) | 3.40 (-1.90) | 1.17 (2.05) | 83.60 (0.35) | 30.40 (0.25) | 53.10 (26) | 577.73 (21) |
| DP 147 RF | 1081 (19) | 3.30 (-1.90) | 1.23 (2.05) | 83.30 (0.25) | 30.50 (0.45) | 53.20 (25) | 575.09 (22) |
| DP 143 B2RF | 1050 (21) | 3.60 (0.00) | 1.24 (2.05) | 83.20 (0.25) | 29.30 (0.00) | 54.65 (23) | 573.83 (23) |
| CG 4020 B2RF | 1013 (24) | 3.90 (0.20) | 1.19 (2.05) | 84.70 (0.45) | 30.20 (0.25) | 55.30 (16) | 560.19 (24) |
| DP 164 B2RF | 993 (25) | 3.50 (0.00) | 1.21 (2.05) | 84.70 (0.45) | 30.60 (0.45) | 55.30 (16) | 549.13 (25) |
| BW-8391 B2F | 983 (26) | 3.60 (0.00) | 1.23 (2.05) | 85.50 (0.55) | 32.20 (0.45) | 55.40 (13) | 544.58 (26) |

^a The numbers in parentheses and italics represent that variety's rank in that characteristic.

^b The numbers in parentheses represent premium (positive number), no change (0.00), or discount (negative number) given the value of that fiber trait for that variety.

^c Measurements of fiber length and length uniformity may be exaggerated since samples were processed on a small laboratory gin with no lint cleaning. Although values are exaggerated, comparisons among varieties for these parameters are generally valid, but may be biased against hairy leaf varieties since smooth leaf varieties tend to require less lint cleaning than hairy leaf varieties.

^d Commonly used non-flex variety used for the purpose of comparison.

Table 4. 2006 Arkansas Flex Cotton Variety Test Results - Irrigated Calloway Silt Loam at Marianna, AR.

| Variety | Lint Yield ^a lbs. (<i>r</i>) | Micronaire ^b | Length ^{bc} in. | Uniformity ^{bc} % | Strength ^b g/tex | CCC Loan Value ^a ¢/lb (<i>r</i>) | Gross Revenue ^a \$/acre (<i>r</i>) |
|---------------------------|--|-------------------------|-----------------------------|-------------------------------|--------------------------------|--|--|
| ST 5599 BR ^d | 1727 (<i>1</i>) | 5.60 (-3.60) | 1.14 (2.05) | 83.30 (0.25) | 30.60 (0.45) | 51.50 (<i>18</i>) | 889.41 (<i>1</i>) |
| ST 4664 RF | 1691 (<i>2</i>) | 5.00 (-2.75) | 1.11 (1.40) | 83.70 (0.35) | 30.40 (0.25) | 51.60 (<i>17</i>) | 872.56 (<i>2</i>) |
| DP 147 RF | 1510 (<i>5</i>) | 4.70 (0.00) | 1.21 (2.05) | 83.80 (0.35) | 29.10 (0.00) | 54.75 (<i>5</i>) | 826.73 (<i>3</i>) |
| ST 4554 B2RF | 1576 (<i>3</i>) | 5.30 (-3.60) | 1.10 (1.40) | 83.30 (0.25) | 33.50 (0.50) | 50.90 (<i>24</i>) | 802.18 (<i>4</i>) |
| DP 117 B2RF | 1542 (<i>4</i>) | 5.30 (-3.60) | 1.12 (1.40) | 82.00 (0.00) | 31.30 (0.45) | 50.60 (<i>25</i>) | 780.25 (<i>5</i>) |
| DP 143 B2RF | 1459 (<i>6</i>) | 5.00 (-2.75) | 1.20 (2.05) | 83.50 (0.35) | 29.20 (0.00) | 52.00 (<i>15</i>) | 758.68 (<i>6</i>) |
| CG 4020 B2RF | 1382 (<i>13</i>) | 4.90 (0.00) | 1.15 (2.05) | 83.50 (0.35) | 28.00 (0.00) | 54.75 (<i>5</i>) | 756.65 (<i>7</i>) |
| BW-2038 B2F | 1395 (<i>11</i>) | 4.90 (0.00) | 1.10 (1.40) | 83.30 (0.25) | 28.10 (0.00) | 54.00 (<i>10</i>) | 753.30 (<i>8</i>) |
| DG 2242 B2RF | 1437 (<i>8</i>) | 5.20 (-2.75) | 1.15 (2.05) | 83.60 (0.35) | 29.70 (0.25) | 52.25 (<i>13</i>) | 750.83 (<i>9</i>) |
| BW-3255 B2F | 1455 (<i>7</i>) | 5.10 (-2.75) | 1.10 (1.40) | 84.20 (0.35) | 26.90 (0.00) | 51.35 (<i>20</i>) | 747.14 (<i>10</i>) |
| CG 3520 B2RF | 1363 (<i>15</i>) | 4.80 (0.00) | 1.15 (2.05) | 84.40 (0.35) | 28.30 (0.00) | 54.75 (<i>5</i>) | 746.24 (<i>11</i>) |
| PHY 425 RF | 1429 (<i>9</i>) | 5.50 (-3.60) | 1.14 (2.05) | 83.40 (0.25) | 31.50 (0.45) | 51.50 (<i>18</i>) | 735.94 (<i>12</i>) |
| BW-8391 B2F | 1318 (<i>19</i>) | 4.60 (0.00) | 1.18 (2.05) | 85.20 (0.45) | 30.00 (0.25) | 55.10 (<i>2</i>) | 726.22 (<i>13</i>) |
| DP 164 B2RF | 1378 (<i>14</i>) | 5.20 (-2.75) | 1.17 (2.05) | 83.40 (0.25) | 30.20 (0.25) | 52.15 (<i>14</i>) | 718.63 (<i>14</i>) |
| DG 2520 B2RF | 1404 (<i>10</i>) | 5.30 (-3.60) | 1.14 (2.05) | 84.30 (0.35) | 28.50 (0.00) | 51.15 (<i>23</i>) | 718.15 (<i>15</i>) |
| BW-4021 B2F | 1294 (<i>21</i>) | 4.60 (0.00) | 1.16 (2.05) | 84.20 (0.35) | 29.90 (0.25) | 55.00 (<i>4</i>) | 711.70 (<i>16</i>) |
| ST 4357 B2RF | 1299 (<i>20</i>) | 4.90 (0.00) | 1.15 (2.05) | 83.70 (0.35) | 28.20 (0.00) | 54.75 (<i>5</i>) | 711.20 (<i>17</i>) |
| DG 2100 B2RF | 1382 (<i>12</i>) | 5.00 (-2.75) | 1.12 (1.40) | 83.70 (0.35) | 28.40 (0.00) | 51.35 (<i>20</i>) | 709.66 (<i>18</i>) |
| DP 167 RF | 1258 (<i>23</i>) | 4.80 (0.00) | 1.18 (2.05) | 84.30 (0.35) | 31.20 (0.45) | 55.20 (<i>1</i>) | 694.42 (<i>19</i>) |
| BW-4630 B2F | 1345 (<i>16</i>) | 5.10 (-2.75) | 1.12 (1.40) | 83.40 (0.25) | 28.00 (0.00) | 51.25 (<i>22</i>) | 689.31 (<i>20</i>) |
| DP 444 BG/RR ^d | 1270 (<i>22</i>) | 4.90 (0.00) | 1.10 (1.40) | 83.00 (0.25) | 27.30 (0.00) | 54.00 (<i>10</i>) | 685.80 (<i>21</i>) |
| DG 2215 B2RF | 1320 (<i>18</i>) | 5.00 (-2.75) | 1.14 (2.05) | 83.20 (0.25) | 29.30 (0.00) | 51.90 (<i>16</i>) | 685.08 (<i>22</i>) |
| CG 3020 B2RF | 1258 (<i>24</i>) | 4.90 (0.00) | 1.11 (1.40) | 83.70 (0.35) | 28.30 (0.00) | 54.10 (<i>9</i>) | 680.58 (<i>23</i>) |
| ST 6622 RF | 1228 (<i>25</i>) | 4.90 (0.00) | 1.13 (2.05) | 82.90 (0.25) | 31.90 (0.45) | 55.10 (<i>2</i>) | 676.63 (<i>24</i>) |
| DP 110 RF | 1342 (<i>17</i>) | 5.30 (-3.60) | 1.09 (0.00) | 83.50 (0.35) | 35.80 (0.50) | 49.60 (<i>26</i>) | 665.63 (<i>25</i>) |
| ST 6611 B2RF | 1176 (<i>26</i>) | 5.20 (-2.75) | 1.14 (2.05) | 82.90 (0.25) | 31.20 (0.45) | 52.35 (<i>12</i>) | 615.64 (<i>26</i>) |

^a The numbers in parentheses and italics represent that variety's rank in that characteristic.

^b The numbers in parentheses represent premium (positive number), no change (0.00), or discount (negative number) given the value of that fiber trait for that variety.

^c Measurements of fiber length and length uniformity may be exaggerated since samples were processed on a small laboratory gin with no lint cleaning. Although values are exaggerated, comparisons among varieties for these parameters are generally valid, but may be biased against hairy leaf varieties since smooth leaf varieties tend to require less lint cleaning than hairy leaf varieties.

^d Commonly used non-flex variety used for the purpose of comparison.

Table 5. 2006 Arkansas Flex Cotton Variety Test Results - Irrigated Desha Silt Loam at Rohwer, AR.

| Variety | Lint Yield ^a lbs. (<i>r</i>) | Micronaire ^b | Length ^{bc} in. | Uniformity ^{bc} % | Strength ^b g/tex | CCC Loan Value ^a ¢/lb (<i>r</i>) | Gross Revenue ^a \$/acre (<i>r</i>) |
|---------------------------|--|-------------------------|-----------------------------|-------------------------------|--------------------------------|--|--|
| DP 147 RF | 1375 (<i>1</i>) | 4.80 (0.00) | 1.16 (2.05) | 82.80 (0.25) | 28.00 (0.00) | 54.65 (<i>4</i>) | 751.44 (<i>1</i>) |
| DP 143 B2RF | 1295 (<i>4</i>) | 4.60 (0.00) | 1.24 (2.05) | 83.90 (0.35) | 29.70 (0.25) | 55.00 (<i>1</i>) | 712.25 (<i>2</i>) |
| DP 167 RF | 1270 (<i>6</i>) | 4.80 (0.00) | 1.14 (2.05) | 83.10 (0.25) | 28.70 (0.00) | 54.65 (<i>4</i>) | 694.06 (<i>3</i>) |
| DP 117 B2RF | 1313 (<i>2</i>) | 5.20 (-2.75) | 1.12 (1.40) | 83.80 (0.35) | 29.10 (0.00) | 51.35 (<i>24</i>) | 674.23 (<i>4</i>) |
| PHY 425 RF | 1300 (<i>3</i>) | 5.50 (-3.60) | 1.13 (2.05) | 84.30 (0.35) | 31.90 (0.45) | 51.60 (<i>22</i>) | 670.80 (<i>5</i>) |
| CG 4020 B2RF | 1217 (<i>7</i>) | 4.50 (0.00) | 1.16 (2.05) | 84.30 (0.35) | 27.70 (0.00) | 54.75 (<i>3</i>) | 666.31 (<i>6</i>) |
| ST 5599 BR ^d | 1283 (<i>5</i>) | 5.40 (-3.60) | 1.11 (1.40) | 82.90 (0.25) | 28.90 (0.00) | 50.40 (<i>25</i>) | 646.63 (<i>7</i>) |
| ST 4664 RF | 1171 (<i>8</i>) | 4.90 (0.00) | 1.10 (1.40) | 82.40 (0.00) | 33.20 (0.50) | 54.25 (<i>11</i>) | 635.27 (<i>8</i>) |
| BW-4630 B2F | 1150 (<i>10</i>) | 4.60 (0.00) | 1.13 (2.05) | 83.00 (0.25) | 26.80 (0.00) | 54.65 (<i>4</i>) | 628.48 (<i>9</i>) |
| DP 164 B2RF | 1135 (<i>11</i>) | 4.90 (0.00) | 1.15 (2.05) | 83.00 (0.25) | 28.20 (0.00) | 54.65 (<i>4</i>) | 620.28 (<i>10</i>) |
| DP 110 RF | 1156 (<i>9</i>) | 5.10 (-2.75) | 1.13 (2.05) | 83.90 (0.35) | 33.00 (0.50) | 52.50 (<i>21</i>) | 606.90 (<i>11</i>) |
| BW-2038 B2F | 1090 (<i>13</i>) | 4.60 (0.00) | 1.12 (1.40) | 82.80 (0.25) | 26.80 (0.00) | 54.00 (<i>17</i>) | 588.60 (<i>12</i>) |
| DP 444 BG/RR ^d | 1082 (<i>14</i>) | 4.60 (0.00) | 1.12 (1.40) | 83.60 (0.35) | 27.60 (0.00) | 54.10 (<i>13</i>) | 585.36 (<i>13</i>) |
| BW-4021 B2F | 1064 (<i>17</i>) | 4.40 (0.00) | 1.13 (2.05) | 83.30 (0.25) | 26.70 (0.00) | 54.65 (<i>4</i>) | 581.48 (<i>14</i>) |
| DG 2100 B2RF | 1055 (<i>18</i>) | 4.50 (0.00) | 1.10 (1.40) | 83.40 (0.25) | 27.50 (0.00) | 54.00 (<i>17</i>) | 569.70 (<i>15</i>) |
| ST 4357 B2RF | 1050 (<i>19</i>) | 4.60 (0.00) | 1.12 (1.40) | 83.70 (0.35) | 26.60 (0.00) | 54.10 (<i>13</i>) | 568.05 (<i>16</i>) |
| ST 6622 RF | 1072 (<i>15</i>) | 4.90 (0.00) | 1.09 (0.00) | 83.90 (0.35) | 29.60 (0.25) | 52.95 (<i>20</i>) | 567.62 (<i>17</i>) |
| DG 2520 B2RF | 1036 (<i>20</i>) | 4.50 (0.00) | 1.14 (2.05) | 82.70 (0.25) | 27.30 (0.00) | 54.65 (<i>4</i>) | 566.17 (<i>18</i>) |
| DG 2242 B2RF | 1030 (<i>21</i>) | 4.50 (0.00) | 1.13 (2.05) | 82.90 (0.25) | 27.50 (0.00) | 54.65 (<i>4</i>) | 562.90 (<i>19</i>) |
| ST 4554 B2RF | 1098 (<i>12</i>) | 5.20 (-2.75) | 1.08 (0.00) | 83.20 (0.25) | 31.20 (0.45) | 50.30 (<i>26</i>) | 552.29 (<i>20</i>) |
| ST 6611 B2RF | 1069 (<i>16</i>) | 5.00 (-2.75) | 1.10 (1.40) | 82.20 (0.00) | 30.70 (0.45) | 51.45 (<i>23</i>) | 550.00 (<i>21</i>) |
| CG 3520 B2RF | 992 (<i>22</i>) | 4.70 (0.00) | 1.12 (1.40) | 83.70 (0.35) | 27.20 (0.00) | 54.10 (<i>13</i>) | 536.67 (<i>22</i>) |
| BW-8391 B2F | 952 (<i>23</i>) | 4.70 (0.00) | 1.17 (2.05) | 84.60 (0.45) | 29.30 (0.00) | 54.85 (<i>2</i>) | 522.17 (<i>23</i>) |
| BW-3255 B2F | 849 (<i>24</i>) | 4.60 (0.00) | 1.12 (1.40) | 83.90 (0.35) | 27.70 (0.00) | 54.10 (<i>13</i>) | 459.31 (<i>24</i>) |
| CG 3020 B2RF | 828 (<i>25</i>) | 4.50 (0.00) | 1.10 (1.40) | 83.40 (0.25) | 26.70 (0.00) | 54.00 (<i>17</i>) | 447.12 (<i>25</i>) |
| DG 2215 B2RF | 790 (<i>26</i>) | 4.10 (0.20) | 1.10 (1.40) | 82.60 (0.25) | 26.70 (0.00) | 54.20 (<i>12</i>) | 428.18 (<i>26</i>) |

^a The numbers in parentheses and italics represent that variety's rank in that characteristic.

^b The numbers in parentheses represent premium (positive number), no change (0.00), or discount (negative number) given the value of that fiber trait for that variety.

^c Measurements of fiber length and length uniformity may be exaggerated since samples were processed on a small laboratory gin with no lint cleaning. Although values are exaggerated, comparisons among varieties for these parameters are generally valid, but may be biased against hairy leaf varieties since smooth leaf varieties tend to require less lint cleaning than hairy leaf varieties.

^d Commonly used non-flex variety used for the purpose of comparison.

Table 6. 2006 Arkansas Flex Cotton Variety Test Results - Means Across Six Arkansas Test Sites.

| Variety | Lint Yield ^a lbs. (<i>r</i>) | Micronaire ^b | Length ^{bc} in. | Uniformity ^{bc} % | Strength ^b g/tex | CCC Loan Value ^a ¢/lb (<i>r</i>) | Gross Revenue ^a \$/acre (<i>r</i>) |
|---------------------------|--|-------------------------|-----------------------------|-------------------------------|--------------------------------|--|--|
| DP 117 B2RF | 1276 (<i>1</i>) | 4.70 (0.00) | 1.16 (2.05) | 83.80 (0.35) | 33.20 (0.50) | 55.25 (<i>4</i>) | 704.99 (<i>1</i>) |
| ST 4664 RF | 1219 (<i>2</i>) | 4.50 (0.00) | 1.13 (2.05) | 83.40 (0.25) | 33.20 (0.50) | 55.15 (<i>13</i>) | 672.28 (<i>2</i>) |
| ST 5599 BR ^d | 1211 (<i>3</i>) | 4.90 (0.00) | 1.15 (2.05) | 83.70 (0.35) | 30.90 (0.45) | 55.20 (<i>6</i>) | 668.47 (<i>3</i>) |
| DP 147 RF | 1168 (<i>4</i>) | 4.30 (0.00) | 1.22 (2.05) | 84.00 (0.35) | 29.70 (0.25) | 55.00 (<i>14</i>) | 642.40 (<i>4</i>) |
| DP 143 B2RF | 1145 (<i>6</i>) | 4.30 (0.00) | 1.24 (2.05) | 83.90 (0.35) | 29.60 (0.25) | 55.00 (<i>14</i>) | 629.75 (<i>5</i>) |
| DP 444 BG/RR ^d | 1128 (<i>7</i>) | 4.40 (0.00) | 1.13 (2.05) | 83.80 (0.35) | 30.10 (0.25) | 55.00 (<i>14</i>) | 620.40 (<i>6</i>) |
| DP 164 B2RF | 1117 (<i>10</i>) | 4.50 (0.00) | 1.19 (2.05) | 83.90 (0.35) | 30.60 (0.45) | 55.20 (<i>6</i>) | 616.58 (<i>7</i>) |
| DG 2520 B2RF | 1120 (<i>8</i>) | 4.30 (0.00) | 1.16 (2.05) | 83.80 (0.35) | 29.00 (0.00) | 54.75 (<i>19</i>) | 613.20 (<i>8</i>) |
| CG 3520 B2RF | 1119 (<i>9</i>) | 4.30 (0.00) | 1.16 (2.05) | 84.40 (0.35) | 29.10 (0.00) | 54.75 (<i>19</i>) | 612.65 (<i>9</i>) |
| ST 4554 B2RF | 1106 (<i>11</i>) | 4.60 (0.00) | 1.13 (2.05) | 83.70 (0.35) | 33.50 (0.50) | 55.25 (<i>4</i>) | 611.07 (<i>10</i>) |
| DP 167 RF | 1100 (<i>13</i>) | 4.50 (0.00) | 1.20 (2.05) | 84.40 (0.35) | 31.30 (0.45) | 55.20 (<i>6</i>) | 607.20 (<i>11</i>) |
| BW-2038 B2F | 1105 (<i>12</i>) | 4.30 (0.00) | 1.15 (2.05) | 84.10 (0.35) | 29.00 (0.00) | 54.75 (<i>19</i>) | 604.99 (<i>12</i>) |
| DG 2100 B2RF | 1100 (<i>14</i>) | 4.20 (0.20) | 1.13 (2.05) | 84.10 (0.35) | 29.20 (0.00) | 54.95 (<i>17</i>) | 604.45 (<i>13</i>) |
| PHY 425 RF | 1148 (<i>5</i>) | 5.10 (-2.75) | 1.15 (2.05) | 84.60 (0.45) | 33.50 (0.50) | 52.60 (<i>26</i>) | 603.85 (<i>14</i>) |
| CG 4020 B2RF | 1098 (<i>15</i>) | 4.30 (0.00) | 1.17 (2.05) | 84.40 (0.35) | 29.40 (0.00) | 54.75 (<i>19</i>) | 601.16 (<i>15</i>) |
| ST 6611 B2RF | 1081 (<i>16</i>) | 4.60 (0.00) | 1.16 (2.05) | 83.60 (0.35) | 31.90 (0.45) | 55.20 (<i>6</i>) | 596.71 (<i>16</i>) |
| DP 110 RF | 1074 (<i>18</i>) | 4.80 (0.00) | 1.15 (2.05) | 84.50 (0.45) | 36.80 (0.50) | 55.35 (<i>2</i>) | 594.46 (<i>17</i>) |
| DG 2242 B2RF | 1076 (<i>17</i>) | 4.30 (0.00) | 1.16 (2.05) | 83.70 (0.35) | 29.20 (0.00) | 54.75 (<i>19</i>) | 589.11 (<i>18</i>) |
| ST 4357 B2RF | 1059 (<i>19</i>) | 4.40 (0.00) | 1.16 (2.05) | 84.10 (0.35) | 28.70 (0.00) | 54.75 (<i>19</i>) | 579.80 (<i>19</i>) |
| CG 3020 B2RF | 1032 (<i>20</i>) | 4.20 (0.20) | 1.13 (2.05) | 84.30 (0.35) | 29.20 (0.00) | 54.95 (<i>17</i>) | 567.08 (<i>20</i>) |
| BW-4630 B2F | 1031 (<i>21</i>) | 4.30 (0.00) | 1.16 (2.05) | 83.90 (0.35) | 29.10 (0.00) | 54.75 (<i>19</i>) | 564.47 (<i>21</i>) |
| BW-3255 B2F | 1012 (<i>22</i>) | 4.20 (0.20) | 1.14 (2.05) | 84.40 (0.35) | 29.60 (0.25) | 55.20 (<i>6</i>) | 558.62 (<i>22</i>) |
| ST 6622 RF | 997 (<i>23</i>) | 4.50 (0.00) | 1.16 (2.05) | 84.50 (0.45) | 32.50 (0.50) | 55.35 (<i>2</i>) | 551.84 (<i>23</i>) |
| BW-8391 B2F | 977 (<i>25</i>) | 4.10 (0.20) | 1.20 (2.05) | 85.20 (0.45) | 30.60 (0.45) | 55.50 (<i>1</i>) | 542.24 (<i>24</i>) |
| BW-4021 B2F | 979 (<i>24</i>) | 4.00 (0.20) | 1.16 (2.05) | 84.10 (0.35) | 29.70 (0.25) | 55.20 (<i>6</i>) | 540.41 (<i>25</i>) |
| DG 2215 B2RF | 976 (<i>26</i>) | 4.20 (0.20) | 1.15 (2.05) | 83.80 (0.35) | 29.50 (0.25) | 55.20 (<i>6</i>) | 538.75 (<i>26</i>) |

^a The numbers in parentheses and italics represent that variety's rank in that characteristic.

^b The numbers in parentheses represent premium (positive number), no change (0.00), or discount (negative number) given the value of that fiber trait for that variety.

^c Measurements of fiber length and length uniformity may be exaggerated since samples were processed on a small laboratory gin with no lint cleaning. Although values are exaggerated, comparisons among varieties for these parameters are generally valid, but may be biased against hairy leaf varieties since smooth leaf varieties tend to require less lint cleaning than hairy leaf varieties.

^d Commonly used non-flex variety used for the purpose of comparison.