

Cotton Comments

Cotton Yield, Quality, and Gross Returns: 2004 Arkansas Cotton Variety Trials

Rob Hogan

Extension Economist

Fred Bourland

Director/Professor -
Cotton Breeding

Bill Robertson

Extension Agronomist -
Cotton

Gross revenue in cotton production is a function of lint yield and lint price. For cotton, CCC loan rates must first be calculated. These are adjustments with respect to fiber qualities made to base cotton price. Gross revenue is then the product of CCC loan rate and per-acre lint yield.

The results in this publication are for one year only. The 2004 cotton variety trial data was acquired from Dr. F. M. Bourland, Cotton Breeder, University of Arkansas Division of Agriculture. The entire data set may be viewed online at www.arkansasvarietytesting.org.

Data discussed in this publication include yield by variety for each of six different tests with both irrigated and non-irrigated regimes for four different test sites: two sites in northern Arkansas (Tables 1, 2, and 3) and two sites in southern Arkansas (Tables 4, 5, and 6). Table 7 is a summary of variety tests across the state. The summary table does not make a distinction of either test site or irrigated–non-irrigated management regime.

The data includes respective micronaire, staple length, uniformity, and fiber strength for each variety. Using the 2004 CCC loan value table (Anonymous, 2004), 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. Then 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 was taken from the Greenwood, Mississippi 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 all 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 four cases, Tables 2, 3, 5, and 6, ranking varieties by gross revenue is the same as ranking by lint yield. In Table 1, the irrigated trial at Keiser on Tunica silty clay soil, the top two varieties are switched. An 8-pound increase in lint is offset by a 1.6¢ per pound increase in loan value due to better fiber quality, thereby leading to greater gross revenue. In Table 4, the irrigated trial at Marianna on Calloway silt loam, the top yielding variety, ST5242BR, with 1,625 pounds of lint is placed in fourth place in gross revenue as DP444BG/RR, the top gross revenue contender, has 1.05¢ per pound greater loan value due to better fiber quality, generating more revenue than the 13-pound increase in lint yield. Similarly in Table 7, state summary, the yield ranking is identical to rank by gross revenue.

Equality across varieties on color grade and leaf grade was assumed. This may bias the study with respect to hairy leaf cultivars.

References

Anonymous, 2004 CCC Loan Values at Greenwood, Mississippi, and Equivalent Locations, Courtesy of Staplcofn.



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Table 1. 2004 Arkansas Cotton Variety Test Results - Irrigated Tunica Silty Clay Soil at Keiser, AR.

Variety	Lint Yield ^a lbs. (<i>r</i>)	Micronaire ^b	Length ^b in.	Uniformity ^b %	Strength ^b g/tex	CCC Loan Value ^a ¢/lb (<i>r</i>)	Gross Revenue ^a \$/acre (<i>r</i>)
DP444BG/RR	1570 (2)	4.00 (0.25)	1.18 (1.80)	85.40 (0.45)	27.80 (0.00)	54.85 (15)	861.15 (1)
ST5242BR	1578 (1)	4.80 (0.00)	1.12 (1.45)	85.00 (0.45)	29.00 (0.00)	54.25 (25)	856.07 (2)
ST5599BR	1521 (3)	4.30 (0.00)	1.19 (1.80)	85.30 (0.45)	33.00 (0.60)	55.20 (5)	839.59 (3)
FM958LL	1464 (5)	4.30 (0.00)	1.22 (1.80)	86.10 (0.55)	34.30 (0.60)	55.30 (4)	809.59 (4)
PHY410R	1450 (6)	4.40 (0.00)	1.19 (1.80)	86.10 (0.55)	31.30 (0.50)	55.20 (9)	800.40 (5)
ST4892BR	1465 (4)	4.30 (0.00)	1.15 (1.75)	85.20 (0.45)	28.60 (0.00)	54.55 (23)	799.16 (6)
ST4793R	1450 (7)	4.40 (0.00)	1.16 (1.80)	84.70 (0.35)	30.20 (0.30)	54.80 (19)	794.60 (7)
ST4646B2R	1437 (8)	3.70 (0.25)	1.17 (1.80)	84.60 (0.35)	28.60 (0.00)	54.75 (20)	786.76 (8)
FM960BR	1406 (10)	4.50 (0.00)	1.17 (1.80)	85.20 (0.45)	36.80 (0.60)	55.20 (5)	776.11 (9)
BCG28R	1408 (9)	4.60 (0.00)	1.22 (1.80)	86.30 (0.55)	30.10 (0.30)	55.00 (12)	774.40 (10)
FM966LL	1365 (11)	4.10 (0.25)	1.21 (1.80)	87.10 (0.55)	35.20 (0.60)	55.55 (1)	758.26 (11)
PM1218BG/RR	1358 (12)	4.90 (0.00)	1.15 (1.75)	85.20 (0.45)	30.00 (0.30)	54.85 (15)	744.86 (12)
DP432RR	1350 (14)	4.30 (0.00)	1.21 (1.80)	86.60 (0.55)	30.30 (0.30)	55.00 (12)	742.50 (13)
DP434RR	1355 (13)	4.30 (0.00)	1.23 (1.80)	86.10 (0.55)	25.80 (0.00)	54.70 (21)	741.19 (14)
DP494RR	1325 (16)	4.80 (0.00)	1.21 (1.80)	85.60 (0.45)	33.60 (0.60)	55.20 (5)	731.40 (15)
DP451B/RR	1334 (15)	4.40 (0.00)	1.19 (1.80)	85.80 (0.45)	28.00 (0.00)	54.60 (22)	728.36 (16)
FM989BR	1302 (18)	3.90 (0.25)	1.21 (1.80)	86.20 (0.55)	31.50 (0.50)	55.45 (3)	721.96 (17)
DP393	1310 (17)	4.30 (0.00)	1.19 (1.80)	85.70 (0.45)	30.30 (0.30)	54.90 (14)	719.19 (18)
DP424BGII/RR	1300 (19)	4.10 (0.25)	1.17 (1.80)	85.40 (0.45)	28.20 (0.00)	54.85 (15)	713.05 (19)
ST5303R	1281 (20)	4.20 (0.25)	1.15 (1.75)	86.10 (0.55)	33.60 (0.60)	55.50 (2)	710.96 (20)
BCG295	1277 (21)	4.30 (0.00)	1.23 (1.80)	86.30 (0.55)	30.50 (0.50)	55.20 (9)	704.90 (21)
DP555BG/RR	1221 (22)	4.50 (0.00)	1.20 (1.80)	85.50 (0.45)	30.70 (0.50)	55.10 (11)	672.77 (22)
BCG24R	1221 (23)	4.30 (0.00)	1.15 (1.75)	85.10 (0.45)	29.20 (0.00)	54.55 (23)	666.06 (23)
DP449BG/RR	1200 (24)	4.40 (0.00)	1.19 (1.80)	85.80 (0.45)	32.60 (0.60)	55.20 (5)	662.40 (24)
DP436RR	1148 (25)	4.10 (0.25)	1.19 (1.80)	85.60 (0.45)	27.10 (0.00)	54.85 (15)	629.68 (25)

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

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

Table 2. 2004 Arkansas Cotton Variety Test Results - Non-irrigated Tunica Silty Clay at Keiser, AR.

Variety	Lint Yield ^a lbs. (<i>r</i>)	Micronaire ^b	Length ^b in.	Uniformity ^b %	Strength ^b g/tex	CCC Loan Value ^a ¢/lb (<i>r</i>)	Gross Revenue ^a \$/acre (<i>r</i>)
ST5599BR	1567 (<i>1</i>)	4.90 (0.00)	1.16 (1.80)	85.40 (0.45)	32.70 (0.60)	55.20 (<i>4</i>)	864.98 (<i>1</i>)
ST5242BR	1456 (<i>2</i>)	4.80 (0.00)	1.14 (1.75)	85.20 (0.45)	28.00 (0.00)	54.55 (<i>22</i>)	794.25 (<i>2</i>)
DP494RR	1435 (<i>3</i>)	4.80 (0.00)	1.21 (1.80)	85.70 (0.45)	33.70 (0.60)	55.20 (<i>4</i>)	792.12 (<i>3</i>)
DP393	1360 (<i>4</i>)	4.40 (0.00)	1.21 (1.80)	86.70 (0.55)	31.60 (0.50)	55.20 (<i>9</i>)	750.72 (<i>4</i>)
ST4892BR	1357 (<i>5</i>)	4.80 (0.00)	1.15 (1.75)	85.30 (0.45)	30.60 (0.50)	55.05 (<i>10</i>)	747.03 (<i>5</i>)
ST4646B2R	1276 (<i>7</i>)	4.50 (0.00)	1.13 (1.75)	84.00 (0.35)	30.70 (0.50)	54.95 (<i>12</i>)	701.16 (<i>6</i>)
FM958LL	1266 (<i>9</i>)	4.80 (0.00)	1.19 (1.80)	86.10 (0.55)	35.30 (0.60)	55.30 (<i>1</i>)	700.10 (<i>7</i>)
PHY410R	1264 (<i>10</i>)	4.90 (0.00)	1.16 (1.80)	86.40 (0.55)	33.50 (0.60)	55.30 (<i>1</i>)	698.99 (<i>8</i>)
DP444BG/RR	1274 (<i>8</i>)	4.30 (0.00)	1.15 (1.75)	85.50 (0.45)	29.80 (0.30)	54.85 (<i>16</i>)	698.79 (<i>9</i>)
FM960BR	1248 (<i>11</i>)	4.50 (0.00)	1.16 (1.80)	85.60 (0.45)	37.70 (0.60)	55.20 (<i>4</i>)	688.90 (<i>10</i>)
ST4793R	1248 (<i>12</i>)	4.70 (0.00)	1.13 (1.75)	84.80 (0.35)	31.00 (0.50)	54.95 (<i>12</i>)	685.78 (<i>11</i>)
FM966LL	1239 (<i>13</i>)	4.60 (0.00)	1.19 (1.80)	86.40 (0.55)	40.30 (0.60)	55.30 (<i>1</i>)	685.17 (<i>12</i>)
DP424BGII/RR	1232 (<i>14</i>)	4.40 (0.00)	1.16 (1.80)	85.00 (0.45)	26.70 (0.00)	54.60 (<i>20</i>)	672.67 (<i>13</i>)
PM1218BG/RR	1298 (<i>6</i>)	5.20 (-3.65)	1.13 (1.75)	85.60 (0.45)	30.20 (0.30)	51.20 (<i>25</i>)	664.58 (<i>14</i>)
DP451B/RR	1172 (<i>16</i>)	4.50 (0.00)	1.19 (1.80)	86.80 (0.55)	28.90 (0.00)	54.70 (<i>19</i>)	641.08 (<i>15</i>)
DP555BG/RR	1168 (<i>18</i>)	4.60 (0.00)	1.17 (1.80)	84.80 (0.35)	30.20 (0.30)	54.80 (<i>18</i>)	640.06 (<i>16</i>)
DP434RR	1170 (<i>17</i>)	4.50 (0.00)	1.20 (1.80)	84.90 (0.35)	27.30 (0.00)	54.50 (<i>23</i>)	637.65 (<i>17</i>)
DP449BG/RR	1141 (<i>20</i>)	4.40 (0.00)	1.16 (1.80)	85.30 (0.45)	32.60 (0.60)	55.20 (<i>4</i>)	629.83 (<i>18</i>)
ST5303R	1144 (<i>19</i>)	4.90 (0.00)	1.12 (1.45)	85.20 (0.45)	34.50 (0.60)	54.85 (<i>16</i>)	627.48 (<i>19</i>)
DP432RR	1185 (<i>15</i>)	5.00 (-3.65)	1.16 (1.80)	85.70 (0.45)	30.60 (0.50)	51.45 (<i>24</i>)	609.68 (<i>20</i>)
DP436RR	1100 (<i>21</i>)	4.50 (0.00)	1.17 (1.80)	85.80 (0.45)	28.10 (0.00)	54.60 (<i>20</i>)	600.60 (<i>21</i>)
FM989BR	1061 (<i>22</i>)	4.50 (0.00)	1.20 (1.80)	85.90 (0.45)	33.10 (0.60)	55.20 (<i>4</i>)	585.67 (<i>22</i>)
BCG28R	1057 (<i>23</i>)	4.90 (0.00)	1.18 (1.80)	85.40 (0.45)	29.70 (0.30)	54.90 (<i>14</i>)	580.29 (<i>23</i>)
BCG295	1054 (<i>24</i>)	4.50 (0.00)	1.23 (1.80)	86.50 (0.55)	30.40 (0.30)	55.00 (<i>11</i>)	579.70 (<i>24</i>)
BCG24R	1009 (<i>25</i>)	4.70 (0.00)	1.16 (1.80)	85.60 (0.45)	30.20 (0.30)	54.90 (<i>14</i>)	553.94 (<i>25</i>)

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

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

Table 3. 2004 Arkansas Cotton Variety Test Results - Irrigated Dundee Silt Loam at Clarkedale, AR.

Variety	Lint Yield ^a lbs. (<i>r</i>)	Micronaire ^b	Length ^b in.	Uniformity ^b %	Strength ^b g/tex	CCC Loan Value ^a ¢/lb (<i>r</i>)	Gross Revenue ^a \$/acre (<i>r</i>)
ST4793R	1717 (1)	4.50 (0.00)	1.12 (1.45)	84.70 (0.35)	28.50 (0.00)	54.15 (24)	929.76 (1)
ST4646B2R	1664 (2)	4.70 (0.00)	1.13 (1.75)	83.70 (0.25)	31.10 (0.50)	54.85 (11)	912.70 (2)
PHY410R	1654 (3)	4.40 (0.00)	1.16 (1.80)	85.50 (0.45)	29.10 (0.00)	54.60 (19)	903.08 (3)
DP444BG/RR	1644 (4)	4.00 (0.25)	1.15 (1.75)	85.60 (0.45)	28.30 (0.00)	54.80 (13)	900.91 (4)
ST4892BR	1638 (5)	4.60 (0.00)	1.13 (1.75)	84.60 (0.35)	29.90 (0.30)	54.75 (14)	896.81 (5)
FM960BR	1614 (7)	4.10 (0.25)	1.15 (1.75)	84.00 (0.35)	36.30 (0.60)	55.30 (3)	892.54 (6)
ST5599BR	1622 (6)	4.60 (0.00)	1.15 (1.75)	84.00 (0.35)	31.10 (0.50)	54.95 (8)	891.29 (7)
FM958LL	1565 (8)	4.40 (0.00)	1.18 (1.80)	85.00 (0.45)	33.70 (0.60)	55.20 (4)	863.88 (8)
DP434RR	1560 (9)	3.70 (0.25)	1.20 (1.80)	86.20 (0.55)	28.20 (0.00)	54.95 (9)	857.22 (9)
ST5303R	1504 (10)	4.60 (0.00)	1.12 (1.45)	85.50 (0.45)	33.10 (0.60)	54.85 (11)	824.94 (10)
ST5242BR	1499 (11)	3.90 (0.25)	1.12 (1.45)	84.80 (0.35)	28.10 (0.00)	54.40 (23)	815.46 (11)
DP432RR	1477 (12)	4.60 (0.00)	1.11 (1.45)	84.60 (0.35)	29.70 (0.30)	54.45 (22)	804.23 (12)
FM966LL	1434 (13)	4.20 (0.25)	1.17 (1.80)	86.00 (0.55)	35.90 (0.60)	55.55 (1)	796.59 (13)
DP393	1432 (14)	4.10 (0.25)	1.17 (1.80)	85.40 (0.45)	30.00 (0.30)	55.15 (6)	789.75 (14)
FM989BR	1420 (15)	3.80 (0.25)	1.19 (1.80)	85.50 (0.45)	31.80 (0.50)	55.35 (2)	785.97 (15)
DP451B/RR	1369 (16)	4.60 (0.00)	1.16 (1.80)	84.80 (0.35)	27.00 (0.00)	54.50 (21)	746.11 (16)
DP494RR	1342 (18)	4.60 (0.00)	1.17 (1.80)	84.60 (0.35)	33.60 (0.60)	55.10 (7)	739.44 (17)
DP424BGII/RR	1349 (17)	4.40 (0.00)	1.16 (1.80)	85.40 (0.45)	28.20 (0.00)	54.60 (19)	736.55 (18)
DP555BG/RR	1338 (19)	4.20 (0.25)	1.15 (1.75)	83.60 (0.25)	29.50 (0.30)	54.90 (10)	734.56 (19)
DP449BG/RR	1305 (20)	4.70 (0.00)	1.12 (1.45)	84.00 (0.35)	31.80 (0.50)	54.65 (17)	713.18 (20)
BCG28R	1259 (21)	4.20 (0.25)	1.16 (1.80)	83.70 (0.25)	28.90 (0.00)	54.65 (17)	688.04 (21)
BCG24R	1245 (22)	4.50 (0.00)	1.13 (1.75)	84.80 (0.35)	30.00 (0.30)	54.75 (14)	681.64 (22)
BCG295	1220 (24)	4.50 (0.00)	1.20 (1.80)	85.60 (0.45)	34.50 (0.60)	55.20 (4)	673.44 (23)
PM1218BG/RR	1224 (23)	4.40 (0.00)	1.11 (1.45)	84.40 (0.35)	29.40 (0.00)	54.15 (24)	662.80 (24)
DP436RR	1138 (25)	4.00 (0.25)	1.16 (1.80)	84.60 (0.35)	26.80 (0.00)	54.75 (14)	623.06 (25)

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

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

Table 4. 2004 Arkansas Cotton Variety Test Results - Irrigated Calloway Silt Loam at Marianna, AR.

Variety	Lint Yield ^a lbs. (<i>r</i>)	Micronaire ^b	Length ^b in.	Uniformity ^b %	Strength ^b g/tex	CCC Loan Value ^a ¢/lb (<i>r</i>)	Gross Revenue ^a \$/acre (<i>r</i>)
DP444BG/RR	1612 (3)	3.70 (0.25)	1.16 (1.80)	85.40 (0.45)	30.80 (0.50)	55.35 (3)	892.24 (1)
DP434RR	1625 (2)	4.00 (0.25)	1.18 (1.80)	85.80 (0.45)	27.90 (0.00)	54.85 (16)	891.31 (2)
ST5599BR	1595 (4)	4.20 (0.25)	1.18 (1.80)	85.00 (0.45)	31.30 (0.50)	55.35 (3)	882.83 (3)
ST5242BR	1625 (1)	4.20 (0.25)	1.12 (1.45)	83.90 (0.25)	28.60 (0.00)	54.30 (25)	882.38 (4)
DP393	1538 (5)	4.60 (0.00)	1.20 (1.80)	86.30 (0.55)	31.30 (0.50)	55.20 (7)	848.98 (5)
FM958LL	1532 (8)	4.10 (0.25)	1.17 (1.80)	84.70 (0.35)	35.30 (0.60)	55.35 (3)	847.96 (6)
DP432RR	1537 (7)	4.40 (0.00)	1.15 (1.75)	84.90 (0.35)	30.90 (0.50)	54.95 (13)	844.58 (7)
FM989BR	1518 (9)	3.90 (0.25)	1.19 (1.80)	86.10 (0.55)	32.30 (0.50)	55.45 (2)	841.73 (8)
ST4892BR	1538 (6)	4.40 (0.00)	1.11 (1.45)	84.40 (0.35)	31.20 (0.50)	54.65 (19)	840.52 (9)
FM960BR	1512 (10)	4.30 (0.00)	1.14 (1.75)	85.30 (0.45)	37.00 (0.60)	55.15 (8)	833.87 (10)
FM966LL	1489 (12)	4.00 (0.25)	1.17 (1.80)	85.90 (0.45)	35.70 (0.60)	55.45 (1)	825.65 (11)
PHY410R	1496 (11)	4.40 (0.00)	1.18 (1.80)	85.70 (0.45)	31.00 (0.50)	55.10 (10)	824.30 (12)
ST4646B2R	1485 (13)	4.60 (0.00)	1.15 (1.75)	85.10 (0.45)	30.00 (0.30)	54.85 (16)	814.52 (13)
PM1218BG/RR	1484 (14)	4.60 (0.00)	1.12 (1.45)	84.10 (0.35)	29.80 (0.30)	54.45 (24)	808.04 (14)
ST4793R	1470 (15)	4.60 (0.00)	1.11 (1.45)	84.30 (0.35)	31.40 (0.50)	54.65 (19)	803.36 (15)
BCG28R	1436 (17)	4.90 (0.00)	1.15 (1.75)	84.00 (0.35)	32.30 (0.50)	54.95 (13)	789.08 (16)
BCG24R	1439 (16)	4.50 (0.00)	1.14 (1.75)	85.20 (0.45)	29.30 (0.00)	54.55 (22)	784.97 (17)
ST5303R	1395 (18)	4.40 (0.00)	1.13 (1.75)	85.40 (0.45)	34.50 (0.60)	55.15 (8)	769.34 (18)
DP449BG/RR	1378 (19)	4.40 (0.00)	1.15 (1.75)	84.80 (0.35)	34.50 (0.60)	55.05 (12)	758.59 (19)
DP494RR	1348 (20)	4.50 (0.00)	1.18 (1.80)	85.60 (0.45)	34.10 (0.60)	55.20 (6)	744.10 (20)
DP555BG/RR	1325 (21)	4.70 (0.00)	1.16 (1.80)	83.90 (0.25)	31.30 (0.50)	54.90 (15)	727.43 (21)
DP451B/RR	1309 (22)	4.60 (0.00)	1.18 (1.80)	85.80 (0.45)	29.30 (0.00)	54.60 (21)	714.71 (22)
DP436RR	1285 (23)	4.10 (0.25)	1.19 (1.80)	85.70 (0.45)	27.90 (0.00)	54.85 (16)	704.82 (23)
BCG295	1249 (24)	4.50 (0.00)	1.18 (1.80)	85.20 (0.45)	32.10 (0.50)	55.10 (10)	688.20 (24)
DP424BGII/RR	1193 (25)	4.60 (0.00)	1.16 (1.80)	84.80 (0.35)	28.70 (0.00)	54.50 (23)	650.19 (25)

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

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

Table 5. 2004 Arkansas Cotton Variety Test Results - Non-irrigated Calloway Silt Loam at Marianna, AR.

Variety	Lint Yield ^a lbs. (<i>r</i>)	Micronaire ^b	Length ^b in.	Uniformity ^b %	Strength ^b g/tex	CCC Loan Value ^a ¢/lb (<i>r</i>)	Gross Revenue ^a \$/acre (<i>r</i>)
DP432RR	1184 (<i>1</i>)	4.60 (0.00)	1.10 (1.45)	83.30 (0.25)	31.10 (0.50)	54.55 (<i>16</i>)	645.87 (1)
ST5242BR	1159 (<i>2</i>)	4.40 (0.00)	1.10 (1.45)	83.30 (0.25)	28.60 (0.00)	54.05 (<i>20</i>)	626.44 (2)
DP393	1134 (<i>3</i>)	4.70 (0.00)	1.16 (1.80)	84.70 (0.35)	31.60 (0.50)	55.00 (<i>6</i>)	623.70 (3)
DP444BG/RR	1115 (<i>4</i>)	4.20 (0.25)	1.13 (1.75)	84.50 (0.35)	30.20 (0.30)	55.00 (<i>6</i>)	613.25 (4)
ST5599BR	1109 (<i>5</i>)	4.20 (0.25)	1.17 (1.80)	83.50 (0.25)	30.70 (0.50)	55.15 (<i>5</i>)	611.61 (5)
ST4892BR	1081 (<i>6</i>)	4.80 (0.00)	1.11 (1.45)	83.50 (0.25)	31.20 (0.50)	54.55 (<i>16</i>)	589.69 (6)
ST5303R	1076 (<i>7</i>)	4.50 (0.00)	1.11 (1.45)	84.70 (0.35)	35.90 (0.60)	54.75 (<i>11</i>)	589.11 (7)
FM958LL	1060 (<i>10</i>)	4.00 (0.25)	1.17 (1.80)	83.90 (0.25)	34.20 (0.60)	55.25 (<i>2</i>)	585.65 (8)
DP434RR	1068 (<i>8</i>)	4.70 (0.00)	1.17 (1.80)	85.40 (0.45)	28.10 (0.00)	54.60 (<i>15</i>)	583.13 (<i>9</i>)
PHY410R	1044 (<i>12</i>)	4.60 (0.00)	1.14 (1.75)	84.90 (0.35)	31.60 (0.50)	54.95 (<i>8</i>)	573.68 (<i>10</i>)
BCG28R	1046 (<i>11</i>)	4.40 (0.00)	1.16 (1.80)	84.10 (0.35)	29.60 (0.30)	54.80 (<i>10</i>)	573.21 (<i>11</i>)
ST4793R	1065 (<i>9</i>)	4.90 (0.00)	1.08 (0.00)	83.10 (0.25)	30.60 (0.50)	53.10 (<i>23</i>)	565.52 (<i>12</i>)
DP449BG/RR	1005 (<i>14</i>)	4.60 (0.00)	1.16 (1.80)	85.10 (0.45)	35.20 (0.60)	55.20 (<i>3</i>)	554.76 (<i>13</i>)
BCG24R	1014 (<i>13</i>)	4.80 (0.00)	1.09 (0.00)	83.40 (0.25)	30.90 (0.50)	53.10 (<i>23</i>)	538.43 (<i>14</i>)
FM989BR	968 (<i>17</i>)	4.60 (0.00)	1.12 (1.45)	83.70 (0.25)	34.10 (0.60)	54.65 (<i>14</i>)	529.01 (<i>15</i>)
DP494RR	962 (<i>19</i>)	4.70 (0.00)	1.13 (1.75)	84.60 (0.35)	32.30 (0.50)	54.95 (<i>8</i>)	528.62 (<i>16</i>)
ST4646B2R	965 (<i>18</i>)	4.50 (0.00)	1.13 (1.75)	84.70 (0.35)	30.20 (0.30)	54.75 (<i>11</i>)	528.34 (<i>17</i>)
PM1218BG/RR	989 (<i>15</i>)	4.80 (0.00)	1.07 (0.00)	83.40 (0.25)	31.90 (0.50)	53.10 (<i>23</i>)	525.16 (<i>18</i>)
DP424BGII/RR	976 (<i>16</i>)	4.60 (0.00)	1.09 (0.00)	84.30 (0.35)	30.70 (0.50)	53.20 (<i>22</i>)	519.23 (<i>19</i>)
DP451B/RR	924 (<i>21</i>)	4.20 (0.25)	1.15 (1.75)	84.30 (0.35)	29.20 (0.00)	54.70 (<i>13</i>)	505.43 (<i>20</i>)
FM960BR	941 (<i>20</i>)	4.60 (0.00)	1.09 (0.00)	84.10 (0.35)	33.00 (0.60)	53.30 (<i>21</i>)	501.55 (<i>21</i>)
DP436RR	922 (<i>22</i>)	4.50 (0.00)	1.12 (1.45)	83.90 (0.25)	29.50 (0.30)	54.35 (<i>19</i>)	501.11 (<i>22</i>)
DP555BG/RR	906 (<i>23</i>)	4.50 (0.00)	1.12 (1.45)	83.60 (0.25)	31.70 (0.50)	54.55 (<i>16</i>)	494.22 (<i>23</i>)
BCG295	862 (<i>24</i>)	4.80 (0.00)	1.18 (1.80)	85.20 (0.45)	33.60 (0.60)	55.20 (<i>3</i>)	475.82 (<i>24</i>)
FM966LL	851 (<i>25</i>)	3.90 (0.25)	1.16 (1.80)	85.50 (0.45)	37.40 (0.60)	55.45 (<i>1</i>)	471.88 (<i>25</i>)

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

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

Table 6. 2004 Arkansas Cotton Variety Test Results - Irrigated Desha Silt Loam at Rohwer, AR.

Variety	Lint Yield ^a lbs. (<i>r</i>)	Micronaire ^b	Length ^b in.	Uniformity ^b %	Strength ^b g/tex	CCC Loan Value ^a ¢/lb (<i>r</i>)	Gross Revenue ^a \$/acre (<i>r</i>)
ST5242BR	1586 (<i>1</i>)	4.20 (0.25)	1.14 (1.75)	85.30 (0.45)	27.60 (0.00)	54.80 (<i>17</i>)	869.13 (<i>1</i>)
DP444BG/RR	1537 (<i>2</i>)	4.20 (0.25)	1.18 (1.80)	85.50 (0.45)	31.20 (0.50)	55.35 (<i>2</i>)	850.73 (<i>2</i>)
DP434RR	1533 (<i>3</i>)	4.10 (0.25)	1.23 (1.80)	86.30 (0.55)	27.80 (0.00)	54.95 (<i>12</i>)	842.38 (<i>3</i>)
ST5599BR	1518 (<i>4</i>)	4.40 (0.00)	1.17 (1.80)	84.80 (0.35)	33.90 (0.60)	55.10 (<i>7</i>)	836.42 (<i>4</i>)
DP432RR	1509 (<i>5</i>)	4.50 (0.00)	1.15 (1.75)	85.50 (0.45)	29.70 (0.30)	54.85 (<i>14</i>)	827.69 (<i>5</i>)
ST4892BR	1393 (<i>6</i>)	4.60 (0.00)	1.14 (1.75)	85.20 (0.45)	31.30 (0.50)	55.05 (<i>9</i>)	766.85 (<i>6</i>)
FM966LL	1389 (<i>7</i>)	4.30 (0.00)	1.13 (1.75)	84.90 (0.35)	35.60 (0.60)	55.05 (<i>9</i>)	764.64 (<i>7</i>)
DP393	1364 (<i>9</i>)	4.70 (0.00)	1.17 (1.80)	85.30 (0.45)	32.80 (0.60)	55.20 (<i>5</i>)	752.93 (<i>8</i>)
DP451B/RR	1353 (<i>10</i>)	4.80 (0.00)	1.19 (1.80)	85.80 (0.45)	29.00 (0.00)	54.60 (<i>20</i>)	738.74 (<i>9</i>)
DP424BGII/RR	1334 (<i>11</i>)	4.80 (0.00)	1.15 (1.75)	85.30 (0.45)	29.00 (0.00)	54.55 (<i>21</i>)	727.70 (<i>10</i>)
PM1218BG/RR	1330 (<i>12</i>)	4.80 (0.00)	1.11 (1.45)	85.10 (0.45)	28.30 (0.00)	54.25 (<i>24</i>)	721.53 (<i>11</i>)
DP436RR	1314 (<i>13</i>)	4.50 (0.00)	1.18 (1.80)	86.00 (0.55)	27.40 (0.00)	54.70 (<i>18</i>)	718.76 (<i>12</i>)
ST4793R	1384 (<i>8</i>)	5.00 (-3.65)	1.15 (1.75)	85.00 (0.45)	30.30 (0.30)	51.20 (<i>25</i>)	708.61 (<i>13</i>)
ST4646B2R	1293 (<i>14</i>)	4.80 (0.00)	1.15 (1.75)	84.70 (0.35)	29.10 (0.00)	54.45 (<i>23</i>)	704.04 (<i>14</i>)
BCG24R	1262 (<i>15</i>)	4.80 (0.00)	1.15 (1.75)	85.40 (0.45)	29.90 (0.30)	54.85 (<i>14</i>)	692.21 (<i>15</i>)
BCG28R	1237 (<i>16</i>)	4.80 (0.00)	1.16 (1.80)	85.10 (0.45)	30.20 (0.30)	54.90 (<i>13</i>)	679.11 (<i>16</i>)
FM958LL	1207 (<i>18</i>)	4.70 (0.00)	1.20 (1.80)	86.10 (0.55)	33.20 (0.60)	55.30 (<i>3</i>)	667.47 (<i>17</i>)
ST5303R	1210 (<i>17</i>)	4.40 (0.00)	1.12 (1.45)	85.10 (0.45)	32.80 (0.60)	54.85 (<i>14</i>)	663.69 (<i>18</i>)
PHY410R	1188 (<i>19</i>)	4.90 (0.00)	1.14 (1.75)	85.40 (0.45)	31.90 (0.50)	55.05 (<i>9</i>)	653.99 (<i>19</i>)
DP449BG/RR	1172 (<i>21</i>)	4.60 (0.00)	1.17 (1.80)	85.60 (0.45)	32.20 (0.50)	55.10 (<i>7</i>)	645.77 (<i>20</i>)
DP555BG/RR	1173 (<i>20</i>)	4.50 (0.00)	1.17 (1.80)	84.20 (0.35)	28.70 (0.00)	54.50 (<i>22</i>)	639.29 (<i>21</i>)
FM989BR	1145 (<i>22</i>)	4.30 (0.00)	1.21 (1.80)	85.50 (0.45)	33.60 (0.60)	55.20 (<i>5</i>)	632.04 (<i>22</i>)
FM960BR	1143 (<i>23</i>)	4.70 (0.00)	1.12 (1.45)	83.60 (0.25)	37.90 (0.60)	54.65 (<i>19</i>)	624.65 (<i>23</i>)
DP494RR	1063 (<i>24</i>)	4.50 (0.00)	1.23 (1.80)	86.10 (0.55)	34.30 (0.60)	55.30 (<i>3</i>)	587.84 (<i>24</i>)
BCG295	1055 (<i>25</i>)	4.10 (0.25)	1.22 (1.80)	86.10 (0.55)	31.90 (0.50)	55.45 (<i>1</i>)	585.00 (<i>25</i>)

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

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

Table 7. 2004 Arkansas Cotton Variety Test Results - Means Across Six Arkansas Test Sites.

Variety	Lint Yield ^a lbs. (<i>r</i>)	Micronaire ^b	Length ^b in.	Uniformity ^b %	Strength ^b g/tex	CCC Loan Value ^a ¢/lb (<i>r</i>)	Gross Revenue ^a \$/acre (<i>r</i>)
ST5599BR	1487 (<i>1</i>)	4.40 (0.00)	1.17 (1.80)	84.60 (0.35)	32.10 (0.50)	55.00 (<i>12</i>)	817.85 (<i>1</i>)
DP444BG/RR	1459 (<i>3</i>)	4.00 (0.25)	1.16 (1.80)	85.30 (0.45)	29.70 (0.30)	55.15 (<i>7</i>)	804.64 (<i>2</i>)
ST5242BR	1484 (<i>2</i>)	4.40 (0.00)	1.12 (1.45)	84.60 (0.35)	28.30 (0.00)	54.15 (<i>25</i>)	803.59 (<i>3</i>)
ST4892BR	1412 (<i>4</i>)	4.60 (0.00)	1.13 (1.75)	84.70 (0.35)	30.50 (0.50)	54.95 (<i>13</i>)	775.89 (<i>4</i>)
ST4793R	1389 (<i>5</i>)	4.70 (0.00)	1.12 (1.45)	84.40 (0.35)	30.30 (0.30)	54.45 (<i>23</i>)	756.31 (<i>5</i>)
DP432RR	1374 (<i>6</i>)	4.50 (0.00)	1.14 (1.75)	85.10 (0.45)	30.40 (0.30)	54.85 (<i>14</i>)	753.64 (<i>6</i>)
DP434RR	1368 (<i>7</i>)	4.20 (0.25)	1.20 (1.80)	85.80 (0.45)	27.50 (0.00)	54.85 (<i>14</i>)	750.35 (<i>7</i>)
FM958LL	1355 (<i>9</i>)	4.40 (0.00)	1.19 (1.80)	85.30 (0.45)	34.30 (0.60)	55.20 (<i>3</i>)	747.96 (<i>8</i>)
DP393	1356 (<i>8</i>)	4.40 (0.00)	1.18 (1.80)	85.70 (0.45)	31.20 (0.50)	55.10 (<i>8</i>)	747.16 (<i>9</i>)
PHY410R	1349 (<i>11</i>)	4.60 (0.00)	1.16 (1.80)	85.60 (0.45)	31.40 (0.50)	55.10 (<i>8</i>)	743.30 (<i>10</i>)
ST4646B2R	1353 (<i>10</i>)	4.50 (0.00)	1.14 (1.75)	84.50 (0.35)	29.90 (0.30)	54.75 (<i>18</i>)	740.77 (<i>11</i>)
FM960BR	1311 (<i>12</i>)	4.40 (0.00)	1.13 (1.75)	84.60 (0.35)	36.40 (0.60)	55.05 (<i>11</i>)	721.71 (<i>12</i>)
FM966LL	1290 (<i>13</i>)	4.10 (0.25)	1.17 (1.80)	85.90 (0.45)	36.70 (0.60)	55.45 (<i>1</i>)	715.31 (<i>13</i>)
ST5303R	1274 (<i>15</i>)	4.50 (0.00)	1.13 (1.75)	85.30 (0.45)	34.00 (0.60)	55.15 (<i>6</i>)	702.61 (<i>14</i>)
PM1218BG/RR	1281 (<i>14</i>)	4.80 (0.00)	1.11 (1.45)	84.60 (0.35)	29.90 (0.30)	54.45 (<i>23</i>)	697.50 (<i>15</i>)
DP494RR	1246 (<i>16</i>)	4.60 (0.00)	1.19 (1.80)	85.30 (0.45)	33.60 (0.60)	55.20 (<i>3</i>)	687.79 (<i>16</i>)
FM989BR	1236 (<i>19</i>)	4.10 (0.25)	1.18 (1.80)	85.40 (0.45)	32.70 (0.60)	55.45 (<i>1</i>)	685.36 (<i>17</i>)
BCG28R	1240 (<i>17</i>)	4.60 (0.00)	1.17 (1.80)	84.70 (0.35)	30.10 (0.30)	54.80 (<i>16</i>)	679.52 (<i>18</i>)
DP451B/RR	1239 (<i>18</i>)	4.50 (0.00)	1.18 (1.80)	85.50 (0.45)	28.50 (0.00)	54.60 (<i>20</i>)	676.49 (<i>19</i>)
DP424BGII/RR	1231 (<i>20</i>)	4.40 (0.00)	1.15 (1.75)	85.00 (0.45)	28.60 (0.00)	54.55 (<i>22</i>)	671.51 (<i>20</i>)
DP449BG/RR	1202 (<i>21</i>)	4.50 (0.00)	1.16 (1.80)	85.10 (0.45)	33.10 (0.60)	55.20 (<i>3</i>)	663.50 (<i>21</i>)
BCG24R	1198 (<i>22</i>)	4.60 (0.00)	1.14 (1.75)	84.90 (0.35)	29.90 (0.30)	54.75 (<i>18</i>)	655.91 (<i>22</i>)
DP555BG/RR	1189 (<i>23</i>)	4.50 (0.00)	1.16 (1.80)	84.30 (0.35)	30.30 (0.30)	54.80 (<i>16</i>)	651.57 (<i>23</i>)
DP436RR	1144 (<i>24</i>)	4.30 (0.00)	1.17 (1.80)	85.30 (0.45)	27.80 (0.00)	54.60 (<i>20</i>)	624.62 (<i>24</i>)
BCG295	1125 (<i>25</i>)	4.40 (0.00)	1.21 (1.80)	85.80 (0.45)	32.10 (0.50)	55.10 (<i>8</i>)	619.88 (<i>25</i>)

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

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

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