

COTTON

Bainbridge, Georgia:

Earlier Maturity Cotton Variety Performance, 2016, Irrigated

Variety	Lint Yield lb/acre	Lint* %	Uniformity		Strength* g/tex	Micronaire* units
			Index* %	Length* inches		
DP 1522 B2XF	1835	44.4	83.6	1.13	30.1	5.3
PHY 444 WRF	1794	44.8	86.3	1.20	31.0	4.6
BRS 286	1782	43.0	83.0	1.07	30.1	5.1
PHY 487 WRF	1778	44.7	82.8	1.06	27.5	5.5
SSG UA 222	1769	44.6	85.2	1.15	30.5	5.2
MON 15R513B2XF	1754	44.4	84.9	1.15	30.3	5.4
DG CT15634 B2RF	1752	45.1	84.7	1.10	29.4	5.0
DG 2615 B2RF	1746	44.1	84.7	1.14	30.6	5.2
PHY 312 WRF	1724	44.4	85.1	1.13	30.7	5.3
GA 2011113	1705	44.5	85.1	1.11	30.3	5.3
BRS 335	1648	42.9	84.6	1.14	29.3	4.9
NG 3406 B2XF	1630	43.9	84.6	1.14	29.8	5.0
GA 2012141	1617	43.1	84.6	1.19	31.5	4.8
NG 3522 B2XF	1608	44.0	83.6	1.08	26.3	5.3
PHY 333 WRF	1594	42.9	85.0	1.14	29.3	4.8
PHY 499 WRF	1591	45.0	85.0	1.11	32.1	5.2
GA 2012050	1563	43.6	85.9	1.18	33.8	5.1
GA 2012082	1509	42.6	85.1	1.14	30.5	5.0
SSG HQ 212 CT	1482	43.8	83.5	1.07	30.4	5.6
DP 1614 B2XF	1465	43.9	84.3	1.14	32.3	5.5
DG 3526 B2XF	1408	44.3	84.9	1.12	29.8	5.4
SSG HQ 210 CT	1305	43.1	83.5	1.09	31.4	5.4
Average	1639	44.0	84.5	1.12	30.3	5.2
LSD at 10% Level	157	N.S. ¹	1.2	0.04	1.6	0.2
CV %	8.1	3.5	0.8	1.98	3.1	2.6

* A random quality sample was taken on the picker during harvest and ginned in small gin in the SWVT Lab on the UGA Griffin Campus to determine lint fraction. A lint sample was sent to the USDA classing office in Macon, Georgia, for quality testing.

1. The F-test indicated no statistical differences at the alpha = 0.10 probability level; therefore, an LSD value was not calculated.

Bolding indicates entries not significantly different from highest yielding entry based on Fisher's protected LSD (P = 0.10).

Planted: May 11, 2016.

Harvested: October 19, 2016.

Seeding Rate: 4 seeds/foot in 36" rows.

Soil Type: Faceville sandy loam.

Soil Test: P = High, K = Medium, and pH = 6.0.

Fertilization: 27.5 lb N, 55 lb P₂O₅, and 46 lb K₂O/acre.

Sidedress: 127.7 lb N, 144 lb K₂O, and 22.8 lb S/acre.

Previous Crop: Peanuts.

Management: Strip-tilled and subsoiled; Prowl, Cotoran, and MSMA used for weed control; Acephate, Imidacloprid, Prevathon, and Bidrin used for insect control.

	May	June	July	Aug.	Sept.
Irrigation (in):	1.50	0.75	4.50	2.25	0.00
Rainfall (in):	2.40	7.80	3.25	2.65	6.50

Trials conducted by D. Dunn, R. Brooke, and G. South.

Midville, Georgia: Earlier Maturity Cotton Variety Performance, 2016, Irrigated

Variety	Lint Yield lb/acre	Lint* %	Uniformity	Length* inches	Strength* g/tex	Micronaire* units
			Index* %			
GA 2011113	1978	43.3	83.8	1.20	34.0	3.8
DG 2615 B2RF	1975	40.8	84.0	1.21	32.8	3.9
PHY 444 WRF	1970	42.7	84.8	1.27	33.8	4.1
DG CT15634 B2RF	1746	43.0	84.2	1.16	30.9	3.7
PHY 487 WRF	1705	38.1	81.7	1.11	30.3	3.6
PHY 333 WRF	1675	39.9	81.7	1.15	31.8	3.7
NG 3522 B2XF	1671	42.1	81.7	1.11	28.6	3.6
BRS 286	1648	38.4	84.2	1.19	34.8	3.8
GA 2012141	1638	39.3	84.5	1.22	32.7	3.9
SSG HQ 210 CT	1598	40.6	82.5	1.15	31.0	3.7
DP 1614 B2XF	1576	41.4	84.0	1.21	31.5	3.9
BRS 335	1570	38.9	84.4	1.23	33.1	4.0
PHY 312 WRF	1565	38.9	83.2	1.16	31.5	3.7
SSG HQ 212 CT	1563	38.0	83.3	1.14	32.2	3.7
PHY 499 WRF	1557	37.8	84.7	1.17	33.9	3.8
GA 2012082	1556	39.8	84.1	1.23	31.8	4.0
DP 1522 B2XF	1546	37.2	83.1	1.17	33.0	3.7
NG 3406 B2XF	1544	39.2	82.2	1.13	29.9	3.7
MON 15R513B2XF	1486	38.1	83.5	1.23	33.4	4.0
DG 3526 B2XF	1478	40.5	82.4	1.11	29.8	3.6
GA 2012050	1462	37.4	83.7	1.16	32.2	3.7
SSG UA 222	1448	36.8	84.5	1.18	32.6	3.8
Average	1634	39.6	83.4	1.18	32.0	3.8
LSD at 10% Level	147	1.3	N.S. ¹	0.04	2.7	0.1
CV %	7.6	2.7	1.6	2.20	4.9	2.0

* A random quality sample was taken on the picker during harvest and ginned in small gin in the SWVT Lab on the UGA Griffin Campus to determine lint fraction. A lint sample was sent to the USDA classing office in Macon, Georgia, for quality testing.

1. The F-test indicated no statistical differences at the alpha = 0.10 probability level; therefore, an LSD value was not calculated.

Bolding indicates entries not significantly different from highest yielding entry based on Fisher's protected LSD (P = 0.10).

Planted: May 9, 2016.

Harvested: October 6, 2016.

Seeding Rate: 4 seeds/foot in 36" rows.

Soil Type: Tifton loamy sand.

Soil Test: P = High, K = Medium, and pH = 6.5.

Fertilization: 30 lb N, 30 lb P₂O₅, and 80 lb K₂O/acre. Sidedress: 65 lb N and .25 lb Boron/acre.

Previous Crop: Peanuts.

Management: Disked and subsoiled/bedded; Pendimethalin, Diuron, Reflex, Staple, MSMA, Envoke, and Select used for weed control; Acephate and Prevathon used for insect control; Telon II used for nematode control; Mepiquat, Def, Drop, and Ethephon used for PGR.

	May	June	July	Aug.	Sept.
Irrigation (in):	1.35	2.00	2.00	2.75	0.00
Rainfall (in):	4.22	3.95	6.20	3.88	4.88

Trials conducted by R. Brooke, D. Dunn, and G. South.

Plains, Georgia: Earlier Maturity Cotton Variety Performance, 2016, Irrigated

Variety	Lint Yield lb/acre	Lint* %	Uniformity	Length* inches	Strength* g/tex	Micronaire* units
			Index* %			
BRS 286	1942	41.5	82.00	1.17	32.20	4.3
DG 2615 B2RF	1877	43.3	83.20	1.21	32.70	4.5
DG CT15634 B2RF	1850	44.0	83.50	1.15	29.70	4.7
DP 1522 B2XF	1833	41.1	83.10	1.13	30.40	4.8
PHY 444 WRF	1822	42.7	85.20	1.26	31.60	3.7
NG 3406 B2XF	1821	40.7	81.60	1.10	29.10	4.2
PHY 487 WRF	1818	41.7	82.30	1.11	29.40	4.6
GA 2011113	1802	42.7	83.30	1.17	33.80	4.5
BRS 335	1787	40.2	83.40	1.19	31.80	4.3
PHY 312 WRF	1730	41.3	83.80	1.15	30.00	4.3
PHY 333 WRF	1727	41.7	83.00	1.15	30.20	4.4
GA 2012082	1710	42.2	83.90	1.17	32.30	4.4
DG 3526 B2XF	1694	43.4	82.50	1.11	28.00	4.4
GA 2012141	1693	41.8	83.80	1.21	32.20	4.4
PHY 499 WRF	1663	41.6	83.60	1.11	31.90	4.6
NG 3522 B2XF	1615	40.2	81.30	1.08	28.00	4.4
SSG UA 222	1613	39.9	83.80	1.16	29.80	4.5
MON 15R513B2XF	1601	40.0	83.70	1.17	29.70	4.7
DP 1614 B2XF	1577	44.2	84.10	1.16	29.60	4.9
SSG HQ 210 CT	1411	38.1	83.00	1.10	30.00	4.4
GA 2012050	1400	39.5	84.50	1.16	32.80	4.1
SSG HQ 212 CT	1379	37.7	82.10	1.08	30.20	4.4
Average	1698	41.3	83.2	1.15	30.7	4.4
LSD at 10% Level	145	0.7	1.3	0.03	1.2	0.4
CV %	7.2	1.5	0.9	1.54	2.4	4.8

* A random quality sample was taken on the picker during harvest and ginned in small gin in the SWVT Lab on the UGA Griffin Campus to determine lint fraction. A lint sample was sent to the USDA classing office in Macon, Georgia, for quality testing.

Bolding indicates entries not significantly different from highest yielding entry based on Fisher's protected LSD (P = 0.10).

Planted: May 4, 2016.

Harvested: October 17, 2016.

Seeding Rate: 4 seeds/foot in 36" rows.

Soil Type: Faceville sandy loam.

Soil Test: P = Medium, K = High, and pH = 6.1.

Fertilization: 18 lb N, 16 lb P₂O₅, 60 lb K₂O, and 1000 lb lime/acre. Sidedress: 80 lb N/acre.

Previous Crop: Soybeans.

Management: Disked, subsoiled/bedded, rototilled, and cultivated; Prowl, Reflex, Diuron, MSMA, and Staple used for weed control; Bidrin and Bifenthrin used for insect control; Mepiquat Chloride used for PGR.

Irrigation: 10.93 inches.

	May	June	July	Aug.	Sept.
Rainfall (in):	0.79	4.02	1.03	0.90	2.20

Trials conducted by D. Dunn, R. Brooke, and G. South.

Tifton, Georgia: Earlier Maturity Cotton Variety Performance, 2016, Irrigated

Variety	Lint Yield lb/acre	Lint* %	Uniformity	Length* inches	Strength* g/tex	Micronaire* units
			Index* %			
DG 2615 B2RF	1575	40.1	82.8	1.15	30.8	4.6
NG 3522 B2XF	1421	39.9	82.6	1.11	28.6	4.6
DP 1522 B2XF	1319	38.4	83.8	1.15	31.9	4.6
NG 3406 B2XF	1307	38.8	83.7	1.12	28.7	4.6
DG 3526 B2XF	1298	41.6	83.1	1.12	27.8	4.5
MON 15R513B2XF	1291	39.8	84.3	1.18	30.3	4.9
PHY 312 WRF	1280	39.3	82.6	1.17	32.0	4.4
BRS 286	1270	37.5	82.3	1.14	32.5	4.3
PHY 333 WRF	1244	38.7	82.9	1.15	31.3	4.5
PHY 487 WRF	1231	38.0	82.1	1.09	29.0	4.6
PHY 499 WRF	1220	39.5	84.0	1.13	32.1	4.8
SSG UA 222	1201	36.6	83.8	1.16	31.2	4.6
SSG HQ 212 CT	1197	36.5	82.3	1.12	31.6	4.8
DP 1614 B2XF	1197	39.7	84.1	1.14	29.9	4.9
PHY 444 WRF	1182	38.7	83.0	1.13	29.6	4.4
GA 2012050	1165	37.0	82.7	1.14	30.6	4.4
GA 2012082	1153	37.4	82.4	1.15	30.5	4.3
BRS 335	1127	38.8	83.4	1.16	32.6	4.6
DG CT15634 B2RF	1119	42.3	84.0	1.15	30.0	4.6
SSG HQ 210 CT	1089	37.2	82.4	1.1	29.5	4.9
GA 2011113	1082	38.7	83.6	1.19	33.6	4.3
GA 2012141	964	40.3	82.8	1.22	35.3	4.1
Average	1224	38.9	83.1	1.14	30.9	4.6
LSD at 10% Level	185	1.0	N.S. ¹	0.04	1.9	0.3
CV %	12.8	2.3	1.2	1.99	3.7	3.8

* Percent lint fractions were determined from plot seed cotton ginned in the Micro-Gin located on the UGA Tifton Campus. A lint sample was sent to the USDA classing office in Macon, Georgia, for quality testing.

1. The F-test indicated no statistical differences at the alpha = 0.10 probability level; therefore, an LSD value was not calculated.

Bolding indicates entries not significantly different from highest yielding entry based on Fisher's protected LSD (P = 0.10).

Planted: May 6, 2016.

Harvested: September 27, 2016.

Seeding Rate: 4 seeds/foot in 36" rows.

Soil Type: Tifton sandy loam.

Soil Test: P = Medium, K = Medium, and pH = 6.5.

Fertilization: 25 lb N, 80 lb P₂O₅, and 80 lb K₂O/acre. Sidedress: 75 lb N and 30 lb K₂O/acre.

Previous Crop: Peanuts.

Management: Disked and subsoiled/bedded; Reflex, Cotoran, Warrant, Dual Magnum, and Select Max used for weed control; Besiege and Knack used for insect control; Prep, Folex, and Dropp used for defoliation.

	May	June	July	Aug.	Sept.
Irrigation (in):	1.75	2.00	5.00	2.50	0.50
Rainfall (in):	2.20	5.09	2.19	4.86	6.58

Trials conducted by S. Willis, R. Brooke, D. Dunn, and G. South.

Yield Summary of Earlier Maturity Cotton Varieties, 2016, Irrigated

Variety	Lint Yield ^a				4-Loc. Average	Lint %	Unif. Index %	Length in	Strength g/tex	Mic. units
	Bainbridge	Midville	Plains	Tifton						
DG 2615 B2RF	1746 ⁸	1975 ²	1877 ²	1575 ¹	1793 ¹	42.1	83.6	1.18	31.7	4.5
PHY 444 WRF	1794 ²	1970 ³	1822 ⁵	1182 ¹⁴	1692 ²	42.2	84.8	1.21	31.5	4.2
BRS 286	1782 ³	1648 ⁸	1942 ¹	1270 ⁸	1661 ³	40.1	82.9	1.14	32.4	4.3
GA 2011113	1705 ¹⁰	1978 ¹	1802 ⁸	1082 ²⁰	1642 ⁴	42.3	83.9	1.17	32.9	4.5
DP 1522 B2XF	1835 ¹	1546 ¹⁷	1833 ⁴	1319 ³	1633 ^{5T}	40.3	83.4	1.14	31.3	4.6
PHY 487 WRF	1778 ⁴	1705 ⁵	1818 ⁷	1231 ¹⁰	1633 ^{5T}	40.6	82.2	1.09	29.0	4.6
DG CT15634 B2RF	1752 ⁷	1746 ⁴	1850 ³	1119 ¹⁸	1617 ⁶	43.6	84.1	1.14	30.0	4.5
NG 3522 B2XF	1608 ¹⁴	1671 ⁷	1615 ¹⁶	1421 ²	1579 ⁷	41.5	82.3	1.09	27.9	4.5
NG 3406 B2XF	1630 ¹²	1544 ¹⁸	1821 ⁶	1307 ⁴	1576 ⁸	40.7	83.0	1.12	29.3	4.4
PHY 312 WRF	1724 ⁹	1565 ¹³	1730 ¹⁰	1280 ⁷	1575 ⁹	41.0	83.7	1.15	31.0	4.4
PHY 333 WRF	1594 ¹⁵	1675 ⁶	1727 ¹¹	1244 ⁹	1560 ¹⁰	40.8	83.1	1.14	30.6	4.3
MON 15R513B2XF	1754 ⁶	1486 ¹⁹	1601 ¹⁸	1291 ⁶	1533 ^{11T}	40.6	84.1	1.19	30.9	4.7
BRS 335	1648 ¹¹	1570 ¹²	1787 ⁹	1127 ¹⁷	1533 ^{11T}	40.2	84.0	1.18	31.7	4.4
PHY 499 WRF	1591 ¹⁶	1557 ¹⁵	1663 ¹⁵	1220 ¹¹	1508 ^{12T}	41.0	84.3	1.13	32.5	4.6
SSG UA 222	1769 ⁵	1448 ²²	1613 ¹⁷	1201 ¹²	1508 ^{12T}	39.5	84.3	1.16	31.0	4.5
GA 2012082	1509 ¹⁸	1556 ¹⁶	1710 ¹²	1153 ¹⁶	1482 ¹³	40.5	83.8	1.17	31.3	4.4
GA 2012141	1617 ¹³	1638 ⁹	1693 ¹⁴	964 ²¹	1478 ¹⁴	41.1	83.9	1.21	32.9	4.3
DG 3526 B2XF	1408 ²¹	1478 ²⁰	1694 ¹³	1298 ⁵	1469 ¹⁵	42.4	83.2	1.11	28.8	4.4
DP 1614 B2XF	1465 ⁵⁰	1576 ¹¹	1577 ¹⁹	1197 ^{13T}	1454 ¹⁶	42.3	84.1	1.16	30.8	4.8
SSG HQ 212 CT	1482 ¹⁹	1563 ¹⁴	1379 ²²	1197 ^{13T}	1405 ¹⁷	39.0	82.8	1.10	31.1	4.6
GA 2012050	1563 ¹⁷	1462 ²¹	1400 ²¹	1165 ¹⁵	1397 ¹⁸	39.4	84.2	1.16	32.3	4.3
SSG HQ 210 CT	1305 ²²	1598 ¹⁰	1411 ²⁰	1089 ¹⁹	1351 ¹⁹	39.7	82.8	1.11	30.5	4.6
Average	1639	1634	1698	1224	1549	40.9	83.6	1.15	31.0	4.5
LSD at 10% Level	157	147	145	185	137	1.4	0.8	0.03	1.2	0.2
CV %	8.1	7.6	7.2	12.8	8.8	2.6	1.2	1.90	3.6	3.5

^a Superscript numbers indicate ranking at that location.

Bolding indicates entries not significantly different from highest yielding entry based on Fisher's protected LSD (P = 0.10).

Two-Year Summary of Earlier Maturity Cotton Varieties at Four Locations¹, 2015-2016, Irrigated

Variety	Lint Yield lb/acre	Lint %	Uniformity	Length inches	Strength g/tex	Micronaire units
			Index %			
DG 2615 B2RF	1712	43.1	83.6	1.18	32.2	4.7
PHY 444 WRF	1695	43.9	84.8	1.24	31.9	4.1
DP 1522 B2XF	1685	41.8	83.8	1.16	31.4	4.7
PHY 487 WRF	1671	42.0	82.3	1.10	29.3	4.7
PHY 333 WRF	1637	42.5	83.6	1.17	31.3	4.3
PHY 312 WRF	1618	42.4	84.2	1.17	31.9	4.4
MON 15R513B2XF	1564	42.0	84.2	1.19	31.1	4.8
NG 3406 B2XF	1545	41.8	83.4	1.14	29.7	4.5
BRS 335	1537	40.9	83.7	1.18	32.3	4.4
PHY 499 WRF	1530	42.7	84.3	1.14	32.9	4.6
SSG UA 222	1521	40.5	84.1	1.19	31.4	4.5
DP 1614 B2XF	1479	43.9	84.3	1.19	31.2	4.8
SSG HQ 212 CT	1390	40.2	83.0	1.12	31.6	4.7
SSG HQ 210 CT	1382	40.0	82.8	1.12	31.2	4.7
Average	1569	42	83.7	1.16	31.4	4.6
LSD at 10% Level	60	0.3	0.5	0.01	0.6	0.1
CV %	9.3	2.0	1.0	1.70	3.3	3.8

1. Bainbridge, Midville, Plains, and Tifton.

Bolding indicates entries not significantly different from highest yielding entry based on Fisher's protected LSD (P = 0.10).