

### 2010...Replacing DP 555 BG/RR

- DP 555 BG/RR planted on approximately 82.53 % of cotton acres in GA during 2009
- Total 2009 GA acreage = 990,000
- 2009 DP 555 BGRR acreage = 817,077
- Dealers allotted 33 % of 2009 DP 555 BG/RR for 2010
- 2010 DP 555 BG/RR acreage = 269,635 + potentially 6000 acres (carryover from 2009) = 275635
- In 2010, an estimated 547,442 acres will be planted to new/other varieties, provided that acreage is stable.....increasing prices = likely increase in acreage

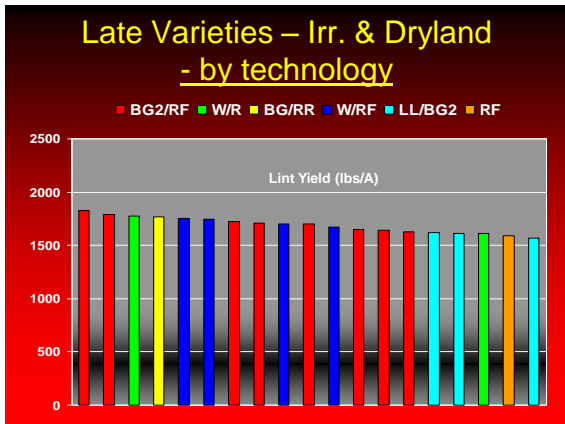
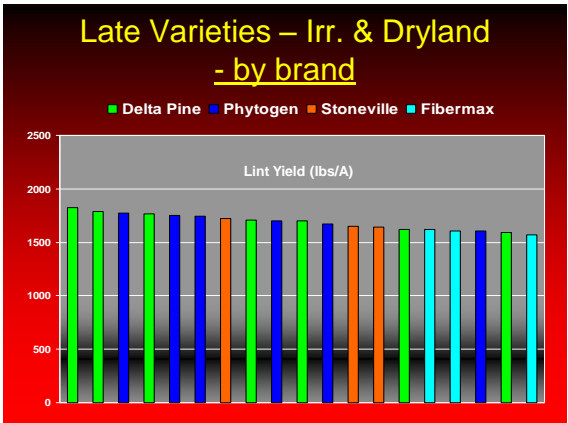
### 2010...Replacing DP 555 BG/RR

The "single variety" complex appears to be over

- No "new" single variety for all conditions
- Multiple varieties – spread risk
- Irrigated varieties and dryland varieties
- Changes in management (PGRs, maturity, etc)
- Short time to adjust or gain experience with new varieties

Where to find variety performance information

- [www.ugacotton.com](http://www.ugacotton.com) (OVT data)
- Variety strip trials (County agents)
- Industry variety trials
- Qualified neighbors with similar growing conditions
- Your own experience



### 2009 GA Cotton OVT – Irr. & Dry combined – Top 19 Varieties (Bainbridge, Midville, Plains, Tifton)

Early Varieties	Lint Yield	Late Varieties	Lint Yield
FM 1740 B2RF	1928	DP 0949 B2RF	1826
DG 2570 B2RF	1920	09R621 B2R2	1788
09R619 B2R2	1890	PHY 370 WR	1774
DP 0920 B2RF	1861	DP 555 BG/RR	1767
PHY 370 WR	1846	PHY 375 WRF	1755
DP 0935 B2RF	1833	PHY 565 WRF	1747
DP 0924 B2RF	1809	ST 5458 B2RF	1721
DP 0912B2RF	1800	DP 0935 B2RF	1707
ST 5288 B2F	1790	PHY 5922 WRF	1699
PHY 367 WRF	1789	DP 161 B2RF	1698
CG 3220 B2RF	1752	PHY485 WRF	1671
ST 4498 B2RF	1751	ST 5288 B2F	1653
AM 1550 B2RF	1726	ST 5327 B2RF	1644
PHY 375 WRF	1704	DP 164 B2RF	1624
ST 4288 B2F	1681	BCSX 1015 LLB2	1620
BCSX 1035 LLB2	1670	FM 1845 LLB2	1609
SSG CT Linwood	1666	PHY 480 WR	1609
NG 3331 B2RF	1653	DP 174 RF	1591
All-Tex Epic RF	1648	BCSX 1025 LLB2	1567

**2009 GA Cotton OVT – Irrigated, Early Maturing  
– Top 19 Varieties (Bainbridge, Midville, Plains, Tifton)**

Highlighted: NS from highest yielder – 4 loc. Avg.

Variety	Lint Yield	Lint %	Len	Mic	Str	UI
09R619 B2RF	2041	45.3	1.17	4.5	26.9	84.1
FM 1740 B2RF	2033	44.3	1.17	4.1	27.4	83.7
DP 0920 B2RF	2028	45.0	1.19	4.4	26.5	83.9
DG 2570 B2RF	2001	44.6	1.17	4.4	27.4	83.7
DP 0935 B2RF	1967	44.6	1.16	4.4	26.6	83.9
PHY 370 WR	1923	44.2	1.14	4.4	28.8	83.5
DP 0912 B2RF	1918	43.1	1.16	4.6	29.3	84.0
ST 4498 B2RF	1878	43.3	1.17	4.1	28.7	83.5
ST 5288 B2F	1876	43.6	1.17	4.5	27.3	83.4
SSG CT Linwood	1874	44.0	1.15	4.8	30.2	84.2
PHY 367 WRF	1868	43.7	1.20	4.0	28.4	84.3
DP 0924 B2RF	1846	43.5	1.16	4.5	28.0	84.0
CG 3220 B2RF	1840	43.0	1.19	4.5	26.7	84.1
AM 1550 B2RF	1802	43.9	1.15	4.3	25.4	83.8
ST 4288 B2F	1793	41.2	1.20	4.7	27.5	84.1
BCSX 1035 LLB2	1766	41.9	1.15	4.8	31.1	84.0
All-TEX A102	1761	42.4	1.19	4.0	27.7	83.9
ST 4554 B2RF	1742	43.3	1.19	4.4	28.3	83.3
PHY 375 WRF	1741	44.1	1.17	4.1	27.5	83.6

**2008-2009 GA Cotton OVT Top 10 Varieties  
– Irrigated, Early Maturing – 4 loc. Avg.**

Highlighted: NS from highest yielder – 4 loc. Avg.

Variety	Lint Yield	Lint %	Len	Mic	Str	UI
FM1740B2RF	1862	44.0	1.17	4.2	29.4	83.5
PHY370WR	1841	44.2	1.13	4.4	29.8	83.1
DP 0935 B2RF	1794	44.2	1.16	4.4	28.3	83.3
DP 0924 B2RF	1774	43.6	1.16	4.6	29.4	83.4
ST 4498B2RF	1746	43.2	1.16	4.2	30.4	83.4
CG 3220B2RF	1721	43.2	1.18	4.4	28.4	83.4
PHY375WRF	1705	44.2	1.16	4.1	28.6	83.2
AM1550B2RF	1691	43.5	1.15	4.3	27.0	83.3
ST 4554B2RF	1670	43.1	1.17	4.4	29.9	82.9
NG3331B2RF	1654	43.2	1.14	4.6	30.6	83.8

**2009 GA Cotton OVT – Irrigated, Late Maturing  
– Top 19 Varieties (Bainbridge, Midville, Plains, Tifton)**

Highlighted: NS from highest yielder – 4 loc. Avg.

Variety	Lint Yield	Lint %	Len	Mic	Str	UI
DP 0949B2RF	1944	45.2	1.19	4.6	29.1	84.0
09R621B2R2	1880	44.9	1.18	4.5	28.1	84.4
PHY375WRF	1867	43.5	1.16	4.1	28.1	83.2
DP 555 BG/RR	1831	44.5	1.17	4.0	30.3	82.5
PHY370WR	1844	44.2	1.14	4.4	29.1	83.0
PHY9922WRF	1835	43.8	1.18	4.2	29.9	84.2
PHY485WRF	1820	44.0	1.18	4.5	30.6	84.5
PHY565WRF	1819	43.5	1.20	4.0	31.2	83.7
ST 5458B2RF	1800	44.0	1.19	4.6	30.0	82.5
DP 0935 B2RF	1791	44.9	1.16	4.3	28.2	83.2
DP161B2RF	1789	42.8	1.24	4.2	31.9	84.3
BCSX 1015LLB2	1750	41.0	1.26	4.3	31.5	84.0
ST 5288B2F	1739	44.3	1.17	4.5	27.6	83.1
PHY480WR	1732	42.4	1.19	4.5	30.2	84.4
ST 5327B2RF	1727	43.8	1.18	4.3	29.9	84.0
DP 164 B2RF	1715	42.6	1.22	4.0	29.9	83.5
PHY440W	1679	42.0	1.18	4.2	30.3	83.7
FM 1845LLB2	1650	41.0	1.24	4.2	31.0	84.5
BCSX 1010B2F	1644	40.9	1.20	4.3	29.6	83.8

**2008-2009 GA Cotton OVT Top 10 Varieties  
– Irrigated, Late Maturing – 4 loc. Avg.**

Highlighted: NS from highest yielder – 4 loc. Avg.

Variety	Lint Yield	Lint %	Len	Mic	Str	UI
DP 555 BG/RR	1832	44.5	1.16	4.1	31.1	82.3
PHY375WRF	1793	43.8	1.16	4.0	29.1	83.0
DP 0935 B2RF	1789	44.5	1.15	4.3	28.9	82.8
ST 5288B2F	1763	44.1	1.16	4.5	29	82.7
DP161B2RF	1748	42.6	1.23	4.1	33.3	84.2
PHY485WRF	1743	43.5	1.17	4.5	31.2	83.9
PHY480WR	1714	42.3	1.19	4.5	31.0	84.2
DP174RF	1678	46.0	1.20	4.2	29.1	83.5
FM 1845LLB2	1659	41.4	1.24	4.2	32.4	84.4
PHY440W	1637	42.2	1.17	4.2	30.9	83.3

**2009 GA Cotton OVT – Dryland, Early Maturing  
– Top 19 Varieties (Athens, Midville, Plains, Tifton)**

Highlighted: NS from highest yielder – 4 loc. Avg.

Variety	Lint Yield	Lint %	Len	Mic	Str	UI	Excl. Athens
DG 2570B2RF	1485	45.6	1.14	5.0	28.2	83.5	DG 2570 B2RF
FM1740B2RF	1462	45.4	1.13	4.8	28.4	83.0	FM 1740 B2RF
DP 0924 B2RF	1459	44.7	1.11	4.9	28.7	83.3	DP 0924 B2RF
PHY370WR	1441	45.7	1.11	5.1	28.9	83.4	PHY 370 WR
ST 5288B2F	1422	45.0	1.13	4.9	28.0	82.5	DP09R619 B2R2
AM1550B2RF	1403	44.9	1.14	4.5	28.3	83	PHY 367 WRF
PHY375WRF	1399	46.0	1.14	4.6	28.3	83.2	ST 5288 B2F
09R619B2R2	1383	46.7	1.14	4.8	27.3	83.9	DP 0935 B2RF
DP 0912B2RF	1381	44.7	1.11	5.1	29.0	83.2	PHY 375 WRF
AM1550B2RF	1368	45.1	1.13	4.8	26.2	83.1	DP 0912 B2RF
DP 0920B2RF	1362	44.7	1.15	5.0	27.2	83.7	DP 0920 B2RF
CG 3220B2RF	1357	43.7	1.16	4.9	26.9	83.7	CG 3220 B2RF
NG3331B2RF	1348	43.7	1.12	5.1	30.1	83.4	AM 1550 B2RF
DP 0935 B2RF	1337	45.5	1.12	4.9	27.7	83.6	NG 3331 B2RF
ST 4498B2RF	1333	44.9	1.14	4.5	29.5	83.3	ST 4498 B2RF
BCSX 1035LLB2	1296	44.0	1.14	5.3	31.4	83.8	BCSX 1035 LLB2
CG4020B2RF	1266	43.4	1.19	4.5	27.3	84.2	All-TEX Epic RF
NG4370B2RF	1264	43.0	1.14	4.7	28.9	83.6	ST 4288 B2F
All-TEX Epic	1256	46.5	1.15	4.7	27.7	83.4	CG 4020 B2RF

**2008-2009 GA Cotton OVT Top 10 Varieties  
– Dryland, Early Maturing – 4 loc. Avg.**

Highlighted: NS from highest yielder – 4 loc. Avg.

Variety	Lint Yield	Lint %	Len	Mic	Str	UI
FM1740B2RF	1235	44.9	1.14	4.8	30.0	83.2
DP 0935 B2RF	1210	44.6	1.13	4.8	29.2	83.1
PHY370WR	1207	45.1	1.10	5.0	29.9	83.0
DP 0924 B2RF	1189	44.2	1.12	5.0	30.0	82.9
NG3331B2RF	1167	43.5	1.12	5.2	32.1	83.6
PHY375WRF	1154	46.0	1.14	4.7	29.3	82.8
AM1550B2RF	1126	44.4	1.13	4.9	27.7	82.5
ST 4498B2RF	1116	43.4	1.14	4.7	31.4	82.9
CG 3220B2RF	1113	43.4	1.15	4.9	28.4	82.9
NG4370B2RF	1111	42.6	1.14	4.8	30.2	83.2

### 2009 GA Cotton OVT – Dryland, Late Maturing – Top 19 Varieties (Athens, Midville, Plains, Tifton)

Highlighted: NS from highest yielder – 4 loc. Avg.

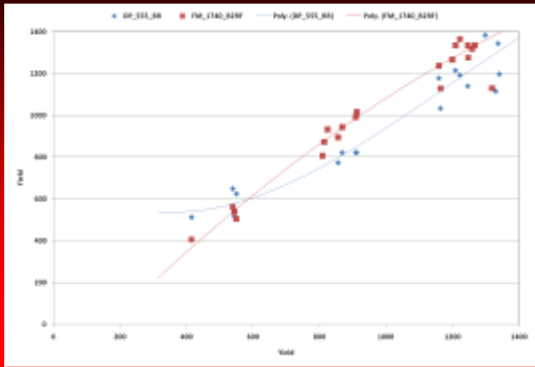
Variety	Lint Yield	Lint %	Len	Mic	Str	UI	Excl. Athens
PHY370WR	1413	45.7	1.11	5.0	30.1	83.5	PHY 370 WR
DP 0949B2RF	1401	46.0	1.15	5.1	29.5	83.7	DP 0949 B2RF
PHY565WRF	1380	45.4	1.15	4.8	30.9	83.6	DP09R621 B2R2
DP 555 BG/RR	1368	46.2	1.12	4.7	30.0	82.5	DP 555 BG/RR
09R621B2R2	1355	47.3	1.17	4.8	27.2	84.2	PHY 565 WRF
PHY375WRF	1355	46.0	1.13	4.6	29.0	83.2	ST 5458 B2RF
ST 5458B2RF	1332	45.0	1.13	5.1	30.2	82.4	PHY 375 WRF
FM 1845LLB2	1322	43.5	1.21	4.8	31.3	84.5	DP 0935 B2RF
DP161B2RF	1322	42.3	1.20	4.8	31.2	84.4	DP 161 B2RF
DP 0935 B2RF	1318	45.5	1.11	5.0	28.6	83.0	FM 1845 LLB2
DP174RF	1315	46.6	1.16	4.8	28.0	83.0	DP 174 RF
ST 5288B2F	1293	45.3	1.14	5.0	28.0	82.9	ST 5288 B2F
ST 5327B2RF	1292	44.9	1.13	4.7	29.4	83.1	ST 5327 B2RF
PHY592WRF	1288	44.6	1.14	4.9	30.5	84.1	PHY 5922 WRF
DP 164 B2RF	1287	43.2	1.19	4.7	30.2	83.7	BCSX 1025 LLB2
BCSX 1025LLB2	1286	43.7	1.20	4.7	31.8	83.8	DP 164 B2RF
PHY485WRF	1255	44.0	1.14	4.9	29.8	83.4	PHY 485 WRF
BCSX 1005LLB2	1239	42.7	1.20	5.2	32.2	83.9	BCSX 1005 LLB2
PHY440W	1235	43.6	1.14	4.8	29.7	83.7	BCSX 1010 B2F

### 2008-2009 GA Cotton OVT Top 10 Varieties – Dryland, Late Maturing – 4 loc. Avg.

Highlighted: NS from highest yielder – 4 loc. Avg.

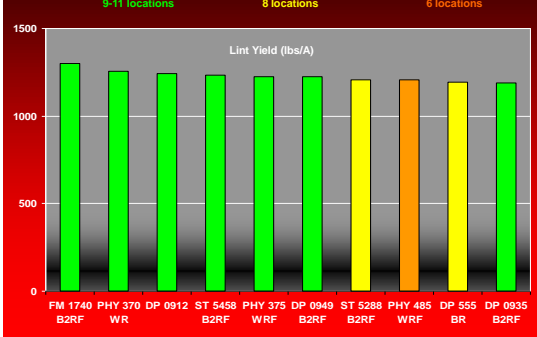
Variety	Lint Yield	Lint %	Len	Mic	Str	UI
DP 555 BG/RR	1280	44.9	1.14	4.7	31.6	82.7
DP 0935 B2RF	1239	44.7	1.13	5.0	29.2	82.6
DP174RF	1234	46.8	1.17	4.9	29.0	82.8
PHY375WRF	1218	45.7	1.13	4.8	29.3	82.6
DP 164 B2RF	1189	42.0	1.19	4.7	31.6	83.5
FM 1845LLB2	1184	43.0	1.21	4.9	32.8	84.1
DP161B2RF	1180	41.7	1.20	4.9	32.5	83.8
ST 5288B2F	1176	44.8	1.14	5.1	28.9	82.7
PHY485WRF	1111	43.2	1.15	5.0	30.9	83.3
PHY480WR	1109	42.0	1.16	5.0	31.4	83.5

### Yield FM 1740 vs. DP 555



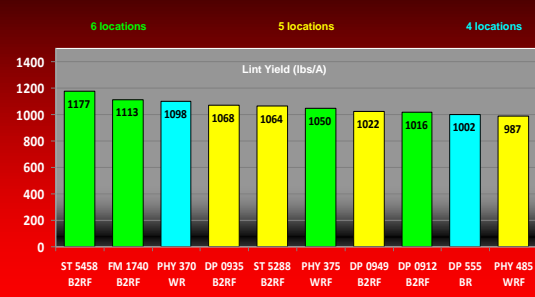
### 2009 GA County Trials – Irrigated (10 Core Varieties)

(Burke, Candler, Coffee, Colquitt, Early, Jeff Davis, Jenkins, Midville, Screven)  
40% turnout for varieties not yet ginned



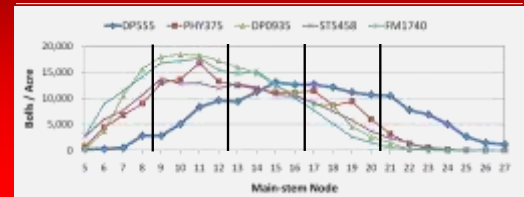
### 2009 GA County Trials – Dryland (10 Core Varieties)

(Burke, Candler, Colquitt, Early, Jefferson, Lowndes, SE Gin)  
40% turnout for varieties not yet ginned



### Boll Production Compared to DP 555 BG/RR (1st Position)

Position	Variety	Main-stem Node Zone				
		5-8	9-12	13-16	17-20	21 +
1st	PHY 375	=	+	=	=	-
	DP 0935	+	+	=	=	-
	ST 5458	=	+	=	=	-
	FM 1740	+	+	=	-	-



## 2009 GA Cotton OVT Consistency & Variability – Top 15 Early Varieties excluding Athens

Variety	Irrigated			Dryland			Avg Yield - locs combined
	Bainbridge	Midville	Plains	Tifton	Midville	Plains	
FM 1740 B2RF	1683	2145	2119	2167	1651	1770	1939
DG 2570 B2RF	1538	2111	2377	1980	1730	1913	1794
09R619 B2R2	1466	2101	2503	2034	1570	1805	1696
DP 0920 B2RF	1491	2100	2166	2154	1400	1729	1530
PHY 370 WR	1455	1979	2255	2095	1728	1796	1763
DP 0935 B2RF	1510	2190	2250	2080	1702	1709	1557
DP 0924 B2RF	1438	2130	2179	1649	1633	1770	1673
DP 0912 B2RF	1407	2080	2297	1918	1591	1827	1508
ST 5288 B2F	1296	2140	2189	1880	1537	1634	1652
PHY 367 WRF	1363	1883	2112	1887	1402	1675	1725
CG 3220 B2RF	1315	2000	2151	1812	1730	1537	1612
ST 4498 B2RF	1320	1975	2065	1752	1400	1577	1542
AM1550 B2RF	1430	1762	2014	1860	1508	1623	1747
PHY 375 WRF	1297	1765	2022	1881	1438	1703	1569
ST 4288 B2F	1306	1947	1948	1873	1479	1625	1489

## Variety selection criteria

- YIELD potential
- YIELD stability
- Technology
- Fiber quality
- Maturity and plant growth characteristics



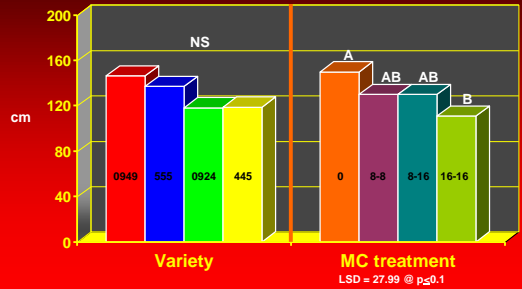
## Changes in management

- DP 555 BGRR® = full-season variety, very aggressive growth



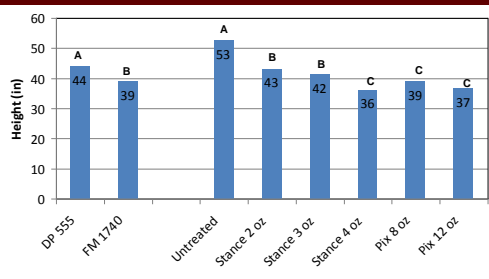
- New varieties = less aggressive growth???  
earlier maturity ???
- Changes in growth management (PGR's) ??
- Changes in defoliation (regrowth, timing) ??

## Plant height\*



\*Data pooled over locations

## Height – DP 555 vs. FM 1740

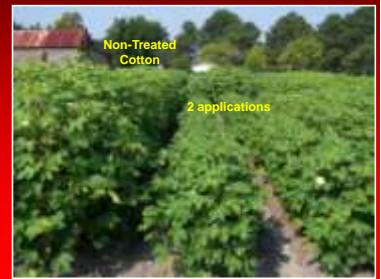


## PGR approaches for new varieties

Varieties appear to respond similarly to PGRs...

Im NOT saying to automatically reduce PGR rates or applications.....rank growth could still result

I AM saying to pay close attention to plant growth when making PGR decisions, because excessive PGR use could inhibit yield potential in some of these newer varieties



## General Considerations

- Strong grasp on variety choices for irrigated acres....look into past years data for dryland variety performance in addition to 2009 data
- Consider reserving DP 555 BR for 2010 dryland acres first
- Look at performance of varieties that have at least two years data/experience (or later maturing varieties) for other dryland acres (PHYS, Class of 09, 2-year STVs/FM).....keep in mind the rainfall in 2009
- Avoid planting a lot of acres of brand new varieties until we have more experience (especially on dryland)
- Aggressive cadillac PGR approaches for DP 555 BR may not be required for newer varieties, but they could especially in irrigated fields.....Pay attention to plant growth!!!!....apply PGRs appropriately
- Seed quality ....supply ????

## Acknowledgements

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Don Day and Larry Thompson

UGA Cotton Team

County Agents

Georgia Cotton Commission

