

2007 BEN HILL, IRWIN, and PULASKI COUNTY COTTON VARIETY TRIAL

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Introduction

A multi-county large plot variety trial was initiated in 2007 in Ben Hill, Irwin and Pulaski County. Seed was requested from area seed representatives, farmer cooperators were located and plans finalized. Due to the drought conditions the plot was not conducted in the dry land plot in Irwin County. The two other trials in Ben Hill and Pulaski featured 12 stacked cotton varieties. The varieties included: CG 3020 B2RF, CG 3520 B2RF, CG 4020 B2RF, DP 117 B2RF, DP143 B2RF, DP 515 BG/RR, DP 555 BG/RR, FM 064330 B2F, FM 1880 B2F, PHY 370 WR, PHY 480 WR, and PHY 485 WRF. The Pulaski County Trial was planting on May 20, 2007 and harvested on November 15, 2007. The Ben Hill County Trial was planted on June 15, 2008 and harvested on November 21, 2007 (replications 1 and 2) and November 28, 2007 (replication 3). Many of these varieties were duplicated from the previous variety trials conducted across the state in 2005, and 2006. A large body of information has been gathered on these varieties and this trial adds to that base of information.

Materials and Methods

Both trials were identical in planting design and replicated three times. Both trials were established under strip till conditions. Each trial was maintained in similar fashion across all replications. At harvest of each replication the seed cotton was weighed and samples taken. Those samples were ginned at the UGA Micro Gin facility in Tifton.

Results and Discussion

A combined analysis of yield and quality are listed in Table 1. Data from the Ben Hill and Pulaski trial are shown in Tables 2 and 3 respectfully.

Conclusions

The trials were a good success in 2007. The trials allow agents and growers a closer look at these 12 varieties and their comparison to DP 555 BG/RR, which has become a the cotton cultivar for Georgia.

Table 1. Ben Hill and Pulaski County combined variety data 2007; Strip-tillage large cotton variety trial.

Variety	Lint lb/A
DP 555 BG/RR	1439.62 a
DP 515 BG/RR	1455.92 a
DP 117 B2RF	1284.05 b
PHY 485 WRF	1284.03 b
PHY 370 WR	1280.15 b
FM 064330 B2F	1247.90 bc
PHY 480 WR	1241.47 bc
FM 1880 B2F	1150.05 bcd
DP 143 B2RF	1114.18 cd
CG 4020 B2RF	1085.77 d
CG 3020 B2RF	1032.62 d
CG 3520 B2RF	1010.90 d

Table 2 Ben Hill county 2007 – Dryland strip-tillage large plot cotton variety trial.

Variety	Lint lb/A	Turnout %	Seed Cotton lb/A	Micronaire	Length	Uniformity	Strength
DP 555 BG/RR	1195.7 a	0.3802 a	3141.3	3.5	1.16 de	81.23 d	30.13 cd
DP 515 BG/RR	1187.7 a	0.3582 cd	3323.2	3.6	1.17 d	82.70 c	31.80 bc
PHY 485 WRF	1177.2 ab	0.3549 d	3301.0	4.0	1.20 bc	83.73 ab	31.57 bc
PHY 480 WR	1173.3 ab	0.3599 cd	3253.4	3.9	1.19 cd	83.63 abc	31.83 abc
PHY 370 WR	1139.1 ab	0.3666 bc	3097.2	3.9	1.12 f	83.03 bc	29.03 de
DP 117 B2RF	1107.3 ab	0.3624 cd	3058.4	3.7	1.18 cd	82.70 c	33.80 a
FM 064330 B2F	1057.2 abc	0.3754 ab	2835.3	3.3	1.22 ab	84.13 a	32.67 ab
CG 4020 B2RF	1028.37 bc	0.3431 e	2992.7	3.9	1.18 cd	83.73 ab	29.57 de
FM 1880 B2F	947.23 c	0.3376 e	2775.5	3.1	1.18 cd	81.13 d	30.13 cd
CG 3520 B2RF	915.7 c	0.3252 fg	2818.1	3.6	1.17 d	82.70 c	27.73 e
DP 143 B2RF	910.1 c	0.3330 ef	2730.7	3.3	1.23 a	80.77 d	30.20 cd
CG 3020 B2RF	908.8 c	0.3172 g	2847.3	3.4	1.14 ef	82.80 bc	28.43 de

Agent Scott Carlson and Phillip Edwards

Grower Kyle and Kent Phillips

Planted 15-Jun-07

Harvested 21-Nov-07 and 28-Nov-07

Table 3 Pulaski County 2007 irrigated strip-tillage large plot cotton variety trial.

Variety	Lint/A	Turnout %	Seed		Length	Uniformity	Strength
			Cotton/A	Micronaire			
DP 515 BG/RR	1715.5 a	0.3703	4632.6	4.6	1.12	80.5	28.4
DP 555 BG/RR	1684.1 ab	0.3823	4405.2	4.4	1.14	83.5	29.1
DP 117 B2RF	1460.9 bc	0.3605	4052.5	4.1	1.14	81.8	32.2
FM 064330 B2F	1439.5 c	0.3677	3914.9	3.8	1.18	83.5	33.7
PHY 370 WR	1420.0 c	0.3660	3879.9	4.2	1.12	81.8	30.4
PHY 485 WRF	1390.8 c	0.3504	3969.3	4.6	1.15	82.9	29.8
FM 1880 B2F	1334.7 cd	0.3355	3978.3	3.8	1.16	81.4	31.2
DP 143 B2RF	1317.6 cde	0.3464	3803.7	4.0	1.19	80.9	30.2
PHY 480 WR	1288.8 cde	0.3464	3720.5	4.2	1.15	83.7	31.7
CG 3020 B2RF	1156.2 de	0.3233	3576.1	3.6	1.11	82.4	26.8
CG 4020 B2RF	1140.8 de	0.3316	3440.3	3.9	1.18	82.5	29.1
CG 3520 B2RF	1105.8 e	0.3344	3306.8	3.9	1.12	82.9	27.4

Agent Ronnie Barentine

Grower Alfred & Mike Carr

Planted 5-20-07

Harvested 11-15-07
