## BOLLGARD® PLUS ROUNDUP READY® CULTIVAR COMPARISON IN SOUTHWEST GEORGIA Rome Ethredge and Jeff Nunnery Cooperative Extension Service University of Georgia Donalsonville, GA Wes Briggs Irrigation Services Bainbridge, GA

### Abstract

New transgenic varieties are coming at cotton growers faster than they can be evaluated. Southwest Georgia has confirmed Budworm resistance so Bollgard® technology is needed in most fields. Roundup Ready® technology is proving to be popular and beneficial to growers as well. Thus information needed the most by growers is local yield and quality information on new "Stacked" cultivars. Six cultivars were evaluated onfarm in the first year of this study in a replicated (3X), randomized test. The objective was to be able to provide growers with useful information concerning new "Stacked" cultivars. All performed well with some differences in yield and quality factors (Tables 1 and 2).

### **Methods**

The test was planted on May 24,2000 in a Tifton Sandy Loam soil on Seldom Rest Farm in Seminole County Georgia. The field was center pivot irrigated and production practices were those commonly followed by farmer Mark Burkett, and were the same across the study. Cultivars were exclusively Bollgard® plus Roundup Ready®, commonly called "Stacked" varieties. Included were SG501BR, SG125BR, ST4892BR, PM 1218BRR, DP458BRR, and DP451BRR. Six row plots were planted in 3 randomized block replications. The individual plot areas averaged 0.72 acre each. The plots were harvested mechanically on Nov. 11, 2000 and the seed cotton weighed in a weigh-wagon. Individual plot samples were taken to get quality data and gin turnout to determine lint yields. Statistics shown were using LSD at the 0.10 probability level.

#### Conclusions

- \* These six "stacked" varieties performed well in this irrigated, high yielding situation in Southwest Georgia.
- \* More and continued study is needed to evaluate cultivars on a local level to assist growers in decision making and to serve as demonstration plots so growers and others can observe growth characteristics during the season.
- \* State University cultivar comparisons should continue to be the principal source for grower cultivar information.

Cultivar	%lint	Yield (lb/A)
SG501BR	40.1 bc	1511 b
SG125BR	39.3 c	1481 b
ST4892BR	42.5 a	1604 a
PM1218BR	41 b	1110 c
DP458BRR	41 b	1505 b
DP451BRR	39.2 c	1576 a

# Table 1. Lint percent and yield (lb lint/A) as influenced by cultivar.

Means in a column followed by the same letter are not significantly different at P=0.10

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#### Table 2. Cotton lint quality factors as influenced by cultivar

Cultivar	Micronaire	Length (in)	Strength (grams/tex)
SG501BR	4.5 a	1.09 bc	29.2 a
SG125BR	4.3 b	1.08 c	26.7 b
ST4892BR	4.7 a	1.11 ab	27.0 b
PM1218BR	4.3 b	1.08 c	26.5 b
DP458BR	4.0 c	1.12 a	29.0 a
DP451BRR	4.2 bc	1.13 a	26.7 b

Means in a column followed by the same letter are not significantly different at P=0.10