

Cotton Variety Trials - 2004

Joel C. Faircloth, Cotton/Peanut Specialist, Tidewater AREC

Henry P. Wilson, Weed Scientist, Eastern Shore AREC

Jason Sanders, Postdoctoral Research Associate, Eastern Shore AREC

2004 Variety Yield Results

The Virginia Tech Cotton Variety Performance trials included 40 varieties at the Tidewater (Suffolk) and Eastern Shore (Painter) Agricultural Research and Extension Centers (TAREC and ESAREC respectively). Thirty-five transgenic varieties (15 Roundup Ready or Liberty Link and 22 Bollgard / Roundup Ready), one conventional variety, and one new experimental variety were evaluated in 2004.

The Virginia Cotton Variety Performance trials are conducted annually to provide an unbiased comparison of commercially available varieties, utilizing uniform cultural practices within each location. Variety performance in these trials was evaluated using standard production practices for nontransgenic varieties. At all locations, lint yield and fiber quality were obtained.

Trials in various locations in the production area make it possible to evaluate variety performance under the wide range of soil and climatic conditions existing in Virginia. The tests were conducted on a Eunola loamy fine sand soil at TAREC and a Bojac sandy loam at ESAREC. This testing program provides an opportunity for growers to evaluate cotton varieties under field conditions in their specific region. Additional strip trials were conducted at four locations and data were pooled and analyzed to evaluate nine transgenic varieties. Strip trial locations, cooperators, and soil types are listed in Table 10.

The variety trials were planted at TAREC on May 7 and at the ESAREC on May 13. The TAREC trial was harvested on October 29 and the ESAREC trial was harvested on November 29.

Summary of Yield and Performance

Tables 1 and 5 summarize the performance of all the entries at the TAREC and ESAREC locations. Tables 2 and 3 and 6 and 7 summarize the performance of the varieties by groups, Roundup Ready and Liberty Link and Bollgard Roundup Ready. Tables 4 and 8 summarize the performance of varieties evaluated over the past two years at both TAREC and ESAREC, respectively. Table 9 incorporates data from both years and locations. Tables 10 and 11 present specifics and results of county strip trials.

In 2004, yields at the TAREC and ESAREC locations ranged from 564 to 1,347 lb lint/A and 408 to 1460 lb lint/A, respectively. Most varieties yielded higher in 2004 than 2003, consistent with state averages.

Variety Selection

Variety selection should be independent of weed or insect problems and should be based on yield and quality performance. If you have a difficult weed problem, then select the variety with the greatest potential for yield and quality that will help you manage the weed problem. Growers are advised to plant only a limited acreage of any new variety until more information and experience is available from a wide range of soil and climatic conditions. This has become more difficult in the past five to ten years because the commercial variety list has changed rapidly. The trend is likely to continue, considering several new transgenic technologies that will be registered over the next several years.

Yield Results, Tidewater Agricultural Research and Extension Center, Suffolk, Va.

Table 1. Yield, fiber quality, and performance of ALL cotton varieties, 2004.

All Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Fiber Properties		
						Len. (in.)	Str. g/tex	Uni.
DeltaPine	DP 434 RR	1346.5	43.2	3.3	4.4	1.17	28.1	82.8
DeltaPine	DP 455 BG/RR	1277.1	44.0	3.5	4.2	1.11	30.8	82.5
Stoneville	ST 4892 BR	1215.4	43.2	2.8	5.0	1.06	28.7	83.3
Bayer CropScience	FM 989 BR	1212.2	41.6	3.3	4.5	1.12	31.9	82.8
Bayer CropScience	FM 958 LL	1185.5	41.4	3.8	4.7	1.15	32.9	83.3
Stoneville	ST 3636 B2R	1173.9	40.5	2.8	4.8	1.09	28.3	82.0
DeltaPine	SG 521 R	1156.4	41.9	3.3	4.8	1.08	27.9	83.5
DeltaPine	DP 444 BG/RR	1144.2	43.5	3.8	4.3	1.12	30.1	83.0
DeltaPine	PM 1218 BG/RR	1141.2	42.1	4.3	5.1	1.07	28.3	83.0
Stoneville	ST 5303 R	1132.8	41.3	3.8	4.7	1.08	31.3	83.8
Stoneville	ST 4646 B2R	1130.0	40.2	3.8	4.8	1.08	30.3	82.5
DeltaPine	DP 451 B/RR	1119.8	39.0	3.8	4.8	1.10	28.9	83.5
DeltaPine	SG 215 BG/RR	1104.8	41.3	3.5	4.8	1.05	26.0	82.8
DeltaPine	DP 393	1094.8	42.1	3.5	4.8	1.15	30.8	83.8
DeltaPine	DP 488 BG/RR	1091.9	43.5	3.0	4.8	1.13	32.0	83.5

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Table 1. Yield, fiber quality, and performance of ALL cotton varieties, 2004. (cont.)

All Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
Stoneville	ST 5242 BR	1076.1	42.0	3.8	4.8	1.05	27.5	83.8
DeltaPine	DP 432 RR	1049.2	41.6	3.3	4.8	1.10	29.2	83.5
DeltaPine	DPLX02T57R	1044.7	40.4	2.8	4.5	1.08	28.3	82.5
Bayer CropScience	FM 966 LL	1042.2	41.1	3.3	4.4	1.12	33.4	83.0
Bayer CropScience	FM 989 B2R	1029.3	39.6	3.5	4.6	1.10	32.3	82.8
Stoneville	ST 4686 R	1024.5	41.9	3.5	4.7	1.12	29.2	82.3
DeltaPine	DP 424 BGII/RR	1011.8	39.9	3.8	4.3	1.10	28.7	83.0
Stoneville	ST 4575 BR	1010.5	41.2	3.5	4.7	1.07	29.8	82.5
DeltaPine	PM 1199 RR	1002.6	41.2	2.8	4.9	1.10	30.4	83.8
DeltaPine	DP 445 BG/RR	998.5	43.2	3.0	4.7	1.12	30.0	82.8
Bayer CropScience	FM 960 BR	996.5	40.9	3.5	4.6	1.08	32.4	82.5
Beltwide Cotton Genetics	BCG 30R	987.3	37.9	3.5	4.7	1.11	30.5	82.5
Bayer CropScience	FM 960 RR	986.7	41.8	2.8	4.0	1.14	31.5	83.5
Bayer CropScience	FM 960 B2R	969.6	40.6	3.3	4.5	1.12	31.2	82.8
DeltaPine	DP 555 BG/RR	945.4	45.0	4.0	4.8	1.10	29.3	82.0
DeltaPine	DP 494 RR	943.1	43.6	3.3	4.8	1.14	32.6	83.0

Table 1. Yield, fiber quality, and performance of ALL cotton varieties, 2004. (cont.)

All Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Fiber Properties		
						Len. (in.)	Str. g/tex	Uni.
DeltaPine	DP 436 RR	933.7	37.5	3.0	4.7	1.15	27.7	83.3
DeltaPine	DP 449 BG/RR	924.0	41.4	2.3	4.7	1.10	30.1	83.3
Stoneville	ST 4793 R	920.9	42.3	3.3	5.1	1.07	30.3	82.8
Stoneville	ST 5454 B2R	913.4	37.7	3.5	5.1	1.11	28.9	82.5
Beltwide Cotton Genetics	BCG 24R	911.0	41.3	3.3	4.8	1.07	29.4	82.8
Stoneville	ST 5599 BR	893.2	41.6	3.0	4.6	1.11	31.9	83.0
DeltaPine	DP 458 B/RR	884.3	41.1	2.5	5.0	1.09	39.6	82.3
Beltwide Cotton Genetics	BCG 28R	847.5	41.8	3.0	4.8	1.09	29.0	82.0
All-Tex	All-Tex Atlas	563.5	37.6	3.0	4.7	1.07	29.1	82.5
	Mean	1035.9	41.3	3.3	4.7	1.10	30.0	82.9

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Table 2. Yield, fiber quality, and performance of Roundup Ready and Liberty Link varieties, 2004.

RR & LL Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
DeltaPine	DP 434 RR	1346.5	43.2	3.3	4.4	1.17	28.1	82.8
Bayer CropScience	FM 958 LL	1185.5	41.4	3.8	4.7	1.15	32.9	83.3
DeltaPine	SG 521 R	1156.4	41.9	3.3	4.8	1.08	27.9	83.5
Stoneville	ST 5303 R	1132.8	41.3	3.8	4.7	1.08	31.3	83.8
DeltaPine	DP 432 RR	1049.2	41.6	3.3	4.8	1.10	29.2	83.5
Bayer CropScience	FM 966 LL	1042.2	41.1	3.3	4.4	1.12	33.4	83.0
Stoneville	ST 4686 R	1024.5	41.9	3.5	4.7	1.12	29.2	82.3
DeltaPine	PM 1199 RR	1002.6	41.3	2.8	4.9	1.10	30.4	83.8
Beltwide Cotton Genetics	BCG 30R	987.3	37.9	3.5	4.7	1.11	30.5	82.5
Bayer CropScience	FM 960 RR	986.7	41.8	2.8	4.0	1.14	31.5	83.5
DeltaPine	DP 494 RR	943.1	43.6	3.3	4.8	1.14	32.6	83.0
DeltaPine	DP 436 RR	933.7	37.5	3.0	4.7	1.15	27.7	83.3
Stoneville	ST 4793 R	920.9	42.3	3.3	5.1	1.07	30.3	82.8
Beltwide Cotton Genetics	BCG 24R	911.0	41.3	3.3	4.8	1.07	29.4	82.8
Beltwide Cotton Genetics	BCG 28R	847.5	41.8	3.0	4.8	1.09	29.0	82.0
	Mean	1031.3	41.3	3.3	4.7	1.11	30.2	83.1

Table 3. Yield, fiber quality, and performance of Bollgard Roundup Ready varieties, 2004.

BG/RR Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
DeltaPine	DP 455 BG/RR	1277.1	44.0	3.5	4.2	1.11	30.8	82.5
Stoneville	ST 4892 BR	1215.4	43.2	2.8	5.0	1.06	28.7	83.3
Bayer CropScience	FM 989 BR	1212.2	41.6	3.3	4.5	1.12	31.9	82.8
Stoneville	ST 3636 B2R	1173.9	40.5	2.8	4.8	1.09	28.3	82.0
DeltaPine	DP 444 BG/RR	1144.2	43.5	3.8	4.3	1.12	30.1	83.0
DeltaPine	PM 1218 BG/RR	1141.2	42.1	4.3	5.1	1.07	28.3	83.0
Stoneville	ST 4646 B2R	1130.0	40.2	3.8	4.8	1.08	30.3	82.5
DeltaPine	DP 451 B/RR	1119.8	39.0	3.8	4.8	1.10	28.9	83.5
DeltaPine	SG 215 BG/RR	1104.8	41.3	3.5	4.8	1.05	26.0	82.8
DeltaPine	DP 488 BG/RR	1091.9	43.5	3.0	4.8	1.13	32.0	83.5
Stoneville	ST 5242 BR	1076.1	42.0	3.8	4.8	1.05	27.5	83.8
Bayer CropScience	FM 989 B2R	1029.3	39.6	3.5	4.6	1.10	32.3	82.8
DeltaPine	DP 424 BGII/RR	1011.8	39.9	3.8	4.3	1.10	28.7	83.0
Stoneville	ST 4575 BR	1010.5	41.2	3.5	4.7	1.07	29.8	82.8
DeltaPine	DP 445 BG/RR	998.5	43.0	3.0	4.7	1.12	30.0	82.8
Bayer CropScience	FM 960 BR	996.5	40.9	3.5	4.6	1.08	32.4	82.5

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Table 3. Yield, fiber quality, and performance of Bollgard Roundup Ready varieties, 2004. (cont.)

BG/RR Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
Bayer CropScience	FM 960 B2R	969.6	40.6	3.3	4.5	1.12	31.2	82.8
DeltaPine	DP 555 BG/RR	945.4	45.0	4.0	4.8	1.10	29.3	82.0
DeltaPine	DP 449 BG/RR	924.0	41.4	2.3	4.7	1.10	30.1	83.3
Stoneville	ST 5454 B2R	913.4	37.7	3.5	5.1	1.11	28.9	82.5
Stoneville	ST 5599 BR	893.2	41.6	3.0	4.6	1.11	31.9	83.0
DeltaPine	DP 458 B/RR	884.3	41.1	2.5	5.0	1.09	39.6	82.3
	Mean	1057.4	41.5	3.4	4.7	1.09	29.9	82.8

Table 4. Two-year average of yield, fiber quality, and performance of all cotton varieties.

2-year average Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
DeltaPine	DP 393	1308.4	43.1	4.3	4.5	1.17	30.9	81.4
Stoneville	ST 4892 BR	1211.0	42.4	3.0	4.5	1.10	30.1	83.6
Bayer CropScience	FM 989 BR	1208.9	40.4	3.6	4.1	1.15	32.7	83.4
DeltaPine	DP 444 BG/RR	1198.6	41.7	4.1	3.9	1.14	30.4	83.1
DeltaPine	DP 432 RR	1197.8	42.2	3.6	4.3	1.12	30.1	83.6
Bayer CropScience	FM 958 LL	1170.2	42.9	3.0	4.3	1.17	32.6	83.5
DeltaPine	SG 521 R	1149.9	41.3	3.7	4.3	1.10	28.3	83.6
Stoneville	ST 4646 B2R	1144.3	40.7	3.4	4.3	1.12	31.2	83.1
DeltaPine	DP 451 B/RR	1141.9	38.9	3.5	4.3	1.14	29.9	83.4
DeltaPine	S 215 BG/RR	1135.3	39.8	3.9	4.3	1.08	27.6	83.1
Stoneville	ST 5303 R	1111.5	42.0	3.3	4.2	1.11	32.2	83.9
Stoneville	ST 5599 BR	1072.7	41.8	3.4	4.1	1.13	32.3	83.0
DeltaPine	DP 555 BG/RR	1068.3	45.7	3.5	4.3	1.13	31.0	82.8
DeltaPine	PM 1218 BG/RR	1057.7	38.6	3.9	4.8	1.09	29.4	83.4
Bayer CropScience	FM 960 BR	1040.0	39.0	3.4	4.1	1.11	33.4	83.3
Bayer CropScience	FM 966 LL	1037.4	39.9	3.1	4.1	1.14	33.8	83.8

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Table 4. Two-year average of yield, fiber quality, and performance of all cotton varieties. (cont.)

2-year average Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Str. g/tex	Uni.
DeltaPine	DP 424 BGII/RR	1026.5	37.5	4.0	4.1	1.13	29.3	83.4
DeltaPine	PM 1199 RR	1026.3	39.1	3.2	4.5	1.13	31.1	83.8
DeltaPine	DP 436 RR	904.3	35.6	3.6	4.2	1.16	28.7	83.3
DeltaPine	DP 449 BG/RR	887.3	39.6	2.5	4.2	1.13	31.7	83.5
	Mean	1104.9	40.6	3.5	4.3	1.13	30.8	83.4

Yield Results, Eastern Shore Agricultural Research and Extension Center, Painter, Va., 2004

Table 5. Yield, fiber quality, and performance of ALL cotton varieties.

All Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
Stoneville	ST 5242 BR	1459.5	41.4	2.5	4.0	1.07	28.7	83.0
Bayer CropScience	FM 989 BR	1250.3	40.7	2.8	3.8	1.12	31.8	83.3
DeltaPine	DP 444 BG/RR	1247.0	41.2	3.5	3.7	1.13	31.2	84.3
Stoneville	ST 4892 BR	1246.9	41.3	2.5	4.2	1.09	29.6	83.0
DeltaPine	SG 215 BG/RR	1156.5	40.5	2.5	4.0	1.08	27.0	83.3
DeltaPine	DPLX01W93BR	1142.6	43.5	2.3	4.1	1.14	31.0	83.5
Stoneville	ST 5599 BR	1087.1	39.9	3.3	3.7	1.11	30.4	81.8
DeltaPine	DPLX02X39BR	1071.6	42.9	3.5	3.7	1.11	32.0	82.3
Stoneville	ST 3636 B2R	1066.8	38.2	2.3	4.1	1.11	29.8	81.5
Stoneville	ST 4575 BR	1041.9	40.8	2.5	3.8	1.13	30.6	83.0
DeltaPine	PM 1199 RR	1029.2	43.1	2.8	4.5	1.12	30.9	83.5
Stoneville	ST 4686 R	1019.3	40.9	3.0	4.0	1.13	30.2	83.0
DeltaPine	PM 1218 BG/RR	1007.9	40.6	4.0	4.5	1.05	28.3	82.5
Bayer CropScience	FM 960 BR	991.8	40.5	3.3	4.1	1.08	32.4	82.3
Stoneville	ST 4646 B2R	971.8	38.5	3.5	4.3	1.08	29.4	81.8

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Table 5. Yield, fiber quality, and performance of ALL cotton varieties. (cont.)

All Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
DeltaPine	DP 451 B/RR	950.8	37.2	3.3	3.9	1.12	29.3	82.5
Stoneville	ST 5303 R	926.2	39.4	2.5	4.0	1.09	31.2	83.5
DeltaPine	DP 449 BG/RR	913.4	39.2	2.0	3.6	1.14	32.7	83.8
Bayer CropScience	FM 989 B2R	913.2	38.2	3.5	3.9	1.11	32.4	82.3
Bayer CropScience	FM 958 LL	904.8	40.1	3.0	4.2	1.14	32.9	83.3
Bayer CropScience	FM 960 RR	871.9	39.1	2.8	3.8	1.15	32.1	83.3
DeltaPine	DP 434 RR	863.1	40.3	2.3	3.7	1.18	29.2	83.0
DeltaPine	DP 424 BGII/RR	860.7	36.2	3.3	3.8	1.10	28.3	82.3
DeltaPine	SG 521 R	857.0	39.6	2.3	4.0	1.10	28.0	83.8
DeltaPine	DP 488 BG/RR	843.5	41.3	2.3	3.7	1.15	31.2	82.3
Beltwide Cotton Genetics	BCG 24R	825.2	39.1	2.3	4.3	1.09	29.5	83.3
Bayer CropScience	FM 960 B2R	817.1	36.9	3.0	4.2	1.13	30.7	82.8
DeltaPine	DP 458 B/RR	814.1	39.3	2.5	4.0	1.11	32.7	82.0
DeltaPine	DP 393	794.2	40.0	2.8	4.1	1.14	30.0	83.0
DeltaPine	DP 555 BG/RR	789.2	41.7	3.0	3.6	1.12	30.9	82.0
Beltwide Cotton Genetics	BCG 30R	772.7	36.0	3.0	4.3	1.07	29.4	82.5

Table 5. Yield, fiber quality, and performance of ALL cotton varieties. (cont.)

All Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
DeltaPine	DPLX02T57R	474.6	37.6	2.8	4.2	1.10	27.9	82.5
Beltwide Cotton Genetics	BCG 28R	742.1	39.5	2.3	4.2	1.13	29.8	81.8
Bayer CropScience	FM 966 LL	686.3	38.4	3.3	3.9	1.15	33.6	82.8
DeltaPine	DP 436 RR	633.1	36.1	2.3	3.9	1.14	28.4	82.8
Stoneville	ST 5454 B2R	662.0	35.1	2.8	4.1	1.11	30.8	82.3
Stoneville	ST 4793 R	635.1	39.8	2.0	4.4	1.09	29.5	83.5
DeltaPine	DP 432 RR	592.0	39.2	2.8	4.2	1.10	30.4	83.5
DeltaPine	DP 494 RR	570.9	39.8	2.0	3.9	1.14	32.1	82.8
All-Tex	All-Tex Atlas	408.0	36.4	2.8	4.1	1.09	29.5	81.8
	Mean	904.9	39.5	2.8	4.0	1.11	30.4	82.8

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Table 6. Yield, fiber quality, and performance of Roundup Ready and Liberty Link varieties, 2004.

RR & LL Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
DeltaPine	PM 1199 RR	1029.2	43.1	2.8	4.5	1.12	30.9	83.5
Stoneville	ST 4686 R	1019.3	40.9	3.0	4.0	1.13	30.2	83.0
Stoneville	ST 5303 R	926.2	39.4	2.5	4.0	1.09	31.2	83.5
Bayer CropScience	FM 958 LL	904.8	40.1	3.0	4.2	1.14	32.9	83.3
Bayer CropScience	FM 960 RR	871.9	39.1	2.8	3.8	1.15	32.1	83.3
DeltaPine	DP 434 RR	863.1	40.3	2.3	3.7	1.18	29.2	83.0
DeltaPine	SG 521 R	857.0	39.6	2.3	4.0	1.10	28.0	83.8
Beltwide Cotton Genetics	BCG 24R	825.2	39.1	2.3	4.3	1.09	29.5	83.3
Beltwide Cotton Genetics	BCG 30R	772.7	36.0	3.0	4.3	1.07	29.4	82.5
Beltwide Cotton Genetics	BCG 28R	724.1	39.5	2.3	4.2	1.13	29.8	81.8
Bayer CropScience	FM 966 LL	686.3	38.4	3.3	3.9	1.15	33.6	82.8
DeltaPine	DP 436 RR	663.1	36.1	2.3	3.9	1.14	28.4	82.8
Stoneville	ST 4793 R	635.1	39.8	2.0	4.4	1.09	29.5	83.5
DeltaPine	DP 432 RR	592.0	38.2	2.8	4.2	1.10	30.4	83.5
DeltaPine	DP 494 RR	570.9	39.8	2.0	3.9	1.14	32.1	82.8
	Mean	796.1	39.3	2.6	4.1	1.12	30.5	83.1

Table 7. Yield, fiber quality, and performance of Bollgard Roundup Ready varieties, 2004.

BG/RR Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
Stoneville	ST 5242 BR	1459.5	41.4	2.5	4.0	1.07	28.7	83.0
Bayer CropScience	FM 989 BR	1250.3	40.7	2.8	3.8	1.12	31.8	83.3
DeltaPine	DP 444 BG/RR	1247.0	41.2	3.5	3.7	1.13	31.2	84.3
Stoneville	ST 4892 BR	1246.9	41.3	2.5	4.2	1.09	29.6	83.0
DeltaPine	SG 215 BG/RR	1156.5	40.5	2.5	4.0	1.08	27.0	83.3
DeltaPine	DP 445 BG/RR	1142.6	43.5	2.3	4.1	1.14	31.0	83.5
Stoneville	ST 5599 BR	1087.1	39.9	3.3	3.7	1.11	30.4	81.8
DeltaPine	DP 455 BG/RR	1071.6	42.9	3.5	3.7	1.11	32.0	82.3
Stoneville	ST 3636 B2R	1066.8	38.2	2.3	4.1	1.11	29.8	81.5
Stoneville	ST 4575 BR	1041.9	40.8	2.5	3.8	1.13	30.6	83.0
DeltaPine	PM 1218 BG/RR	1007.9	40.6	4.0	4.5	1.05	28.3	82.5
Bayer CropScience	FM 960 BR	991.8	40.5	3.3	4.1	1.08	32.4	82.3
Stoneville	ST 4646 B2R	971.8	38.5	3.5	4.3	1.08	29.4	81.8
DeltaPine	DP 451 B/RR	950.8	37.2	3.3	3.9	1.12	29.3	82.5
DeltaPine	DP 449 BG/RR	913.4	39.2	2.0	3.6	1.14	32.7	83.8
Bayer CropScience	FM 989 B2R	913.2	38.2	3.5	3.9	1.11	32.4	82.3

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Table 7. Yield, fiber quality, and performance of Bollgard Roundup Ready varieties, 2004. (cont.)

BG/RR Varieties Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
DeltaPine	DP 424 BGII/RR	860.7	36.2	3.3	3.8	1.10	28.3	82.3
DeltaPine	DP 488 BG/RR	843.5	41.3	2.3	3.7	1.15	31.2	82.3
Bayer CropScience	FM 960 B2R	817.1	36.9	3.0	4.2	1.13	30.7	82.8
DeltaPine	DP 458 B/RR	814.1	39.3	2.5	4.0	1.11	32.7	82.0
DeltaPine	DP 555 BG/RR	789.2	41.7	3.0	3.6	1.12	30.9	82.0
Stoneville	ST 5454 B2R	662.0	35.1	2.8	4.1	1.11	30.8	82.3
	Mean	1013.9	39.8	2.9	3.9	1.11	30.5	82.6

Table 8. Two-year average of yield, fiber quality, and performance of all cotton varieties.

2-year average Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Fiber Properties	
							Str. g/tex	Uni.
DeltaPine	DP 444 BG/RR	1381.3	44.2	3.1	3.5	1.15	31.0	83.9
Stoneville	ST 4892 BR	1297.1	44.2	2.6	3.5	1.14	29.2	83.5
DeltaPine	SG 215 BG/RR	1273.3	42.9	2.6	3.7	1.09	27.8	83.3
DeltaPine	PM 1199 RR	1267.2	45.4	2.6	4.0	1.13	31.0	83.4
Bayer CropScience	FM 989 BR	1237.0	43.6	2.8	3.5	1.13	31.2	83.0
DeltaPine	PM 1218 BG/RR	1160.7	43.8	2.9	4.1	1.07	28.9	82.9
DeltaPine	DP 451 B/RR	1154.6	39.8	2.6	3.5	1.14	29.0	82.6
DeltaPine	SG 521 R	1129.9	43.0	2.6	3.6	1.11	28.2	83.3
Bayer CropScience	FM 958 LL	1043.6	43.4	2.5	3.4	1.13	31.4	83.0
Stoneville	ST 5599 BR	1002.5	42.1	3.0	3.4	1.13	30.4	81.4
Bayer CropScience	FM 966 LL	993.8	42.4	2.8	3.4	1.12	32.4	83.3
Stoneville	ST 5303 R	992.0	42.4	2.4	3.5	1.12	30.6	83.4
Bayer CropScience	FM 960 BR	957.8	42.9	2.8	3.6	1.12	31.8	82.4
DeltaPine	DP 449 BG/RR	919.4	38.8	2.2	3.3	1.13	31.9	82.9
DeltaPine	DP 436 RR	865.4	38.8	2.3	3.5	1.15	28.9	82.9
DeltaPine	DP 424 BGII/RR	807.7	38.5	2.9	3.4	1.12	29.2	82.9
DeltaPine	DP 555 BG/RR	755.0	43.2	2.7	3.2	1.13	30.3	82.0
	Mean	1072.8	42.5	2.7	3.5	1.12	30.2	83.0

Yield Results, Two-year Average at Two Locations

Table 9. Two-year average at two locations (ESAREC, TAREC) of yield, fiber quality, and performance of all varieties.

2-year avg. at 2 locations Seed Company	Variety	Yield lb lint/A	Lint %	Vigor	Mike	Len. (in.)	Str. g/tex	Fiber Properties	
								Yield	Lint
DeltaPine	DP 444 BG/RR	1290.0	43.0	3.6	3.7	1.14	30.7		
Stoneville	ST 4892 BR	1254.1	43.3	2.8	4.0	1.12	29.7		
Bayer CropScience	FM 989 BR	1222.9	42.0	3.2	3.8	1.14	32.0		
DeltaPine	SG 215 BG/RR	1204.3	41.3	3.3	4.0	1.09	27.7		
DeltaPine	DP 451 B/RR	1148.2	39.3	3.0	3.9	1.14	29.4		
DeltaPine	PM 1199 RR	1146.8	42.3	2.9	4.2	1.13	31.0		
DeltaPine	SG 521 R	1139.9	42.2	3.1	4.0	1.11	28.3		
DeltaPine	PM 1218 BG/RR	1109.2	41.2	3.4	4.4	1.08	29.1		
Bayer CropScience	FM 958 LL	1106.9	43.2	2.8	3.9	1.15	32.0		
Stoneville	ST 5303 R	1051.8	42.2	2.8	3.9	1.12	31.4		
Stoneville	ST 5599 BR	1037.6	41.9	3.2	3.8	1.13	31.3		
Bayer CropScience	FM 966 LL	1015.6	41.2	3.0	3.8	1.13	33.1		
Bayer CropScience	FM 960 BR	998.9	40.9	3.1	3.9	1.11	32.6		
DeltaPine	DP 424 BGII/RR	917.1	38.0	3.4	3.7	1.12	29.2		
DeltaPine	DP 555 BG/RR	911.6	44.5	3.1	3.7	1.13	30.6		
DeltaPine	DP 449 BG/RR	903.3	40.8	2.4	3.7	1.13	31.8		
DeltaPine	DP 436 RR	884.9	37.2	3.0	3.9	1.16	28.8		
	Mean	1079.0	41.4	3.1	3.9	1.12	30.5		

Summary of County Strip Trials

Table 10. Location, cooperator, agent, and soil type at all variety strip trials, 2004.

Location	Cooperator	Agent	Soil type(s)
City of Suffolk	Tommy Rountree	Rex Cotten	Eunola/Lynchburg fine sandy loam
Isle of Wight	Philip Edwards	Glenn Rountree	Yemassee fine sandy loam
Southampton	Edward Hatfield	Wes Alexander	Slagle/Emporia fine sandy loam
Dinwiddie	Lance & Randy Everett	Mike Parrish	Mattaponi sandy loam

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Table 11. Combined yield, fiber quality, and performance of county variety strip trials (4 locations), 2004.

Seed Company	Variety	Yield lb lint/A	Lint %	Mike	Len. (in.)	Fiber Properties	
						Str. g/tex	Uni.
Stoneville	ST 5242 BR	1463.0	41.7	4.3	1.08	27.6	83.5
DeltaPine	DP 444 BG/RR	1432.2	43.1	3.8	1.13	29.8	83.8
Bayer CropScience	FM 960 BR	1410.6	41.3	4.0	1.14	31.7	83.3
Bayer CropScience	FM 989 BR	1398.9	40.9	4.1	1.13	31.1	82.0
Stoneville	ST 5599 BR	1365.5	42.3	4.2	1.12	29.8	82.5
DeltaPine	DP 451 BR	1365.3	39.3	4.2	1.14	28.2	83.3
DeltaPine	DP 449 BG/RR	1293.8	40.6	4.2	1.11	30.9	83.5
DeltaPine	DP 424 BGII/RR	1191.2	38.5	4.4	1.10	27.3	83.8
Stoneville	ST 4892 BR	1172.0	40.8	4.6	1.09	29.0	83.3
Mean		1343.6	40.9	4.2	1.11	29.5	83.2
LSD (p=0.05)		163.21	1.48	0.23	0.02	1.02	0.98