

THE 2003 CROP YEAR IN REVIEW

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The drought was finally broken! Prolonged drought, which began in June 1998, ended in the spring and summer of 2003. Growers across the state had opportunity to grow a crop with rain, something that has not happened in several seasons. Irrigation systems were operated infrequently or not at all because of frequent and abundant rainfall. Final acreage as measured by the Boll Weevil Eradication Program totaled 1,292,389. Increased peanut plantings in central and east Georgia and a wet spring in the eastern portions of the state contributed to the slight decline in cotton acreage.

Major challenges of the year included stink bugs and nematodes. The former has been a key pest since the introduction of Bt cotton in 1996, and this year there were dramatic differences resulting from variations in stink bug control. Nematodes continue to gain ground in the state – surveys indicate that over 30 percent of the state’s acreage has populations in excess of treatment thresholds.

Harvest conditions were generally good, though there were several rainfall events in mid-September through November. Final production should approach 2.1 million bales, with an average of just over 780 lb/A. Long-term yield averages are below (Table 1). Fiber quality, at least micronaire and color grades, was exceptional (Table 2). Fiber length continues to be a challenge (22 percent of the bales classed were considered “short staple”), suggesting a need for improved fiber length in transgenic varieties.

Table 1. Average Acreage and Production Since 1980.

Time period	Planted acreage, x 1,000		Yield, lb/A *		Total bales, x 1,000	
	Average	Range	Average	Range	Average	Range
1980-84	162	120-180	516	243-771	175	86-281
1985-89	269	225-350	573	395-696	321	185-370
1990-94	549	355-885	707	548-834	828	405-1,537
1995-99	1,426	1,350-1,500	610	512-739	1,810	1,542-2,079
2000	1,495	---	502	---	1,563	---
2001	1,483	---	709	---	2,200	---
2002	1,440	---	600	—	1,688	---
2003*	1,292	—	781	—	2,100	---

*Yield based on planted acreage and total bale production estimate of January 2004.

Table 2. Fiber Quality of Bales Classed at the Macon USDA Classing Office

Color Grade 41 or better (% of Crop)	Bark/Grass (% of Crop)	Avg Staple	Avg Leaf Grade	Avg Strength	Avg Mic	Avg Uniformity
92	1 / < 1	34.2	3.3	27.9	4.33	80.5

Based on 2,042,076 bales classed through January 8, 2004.
 Bales classed: short staple - 22%, high mic ~ 1.1%

Transgenic varieties again dominated the state (Table 3). USDA estimated that over 90 percent of the Georgia crop was planted in transgenic varieties, mostly Bollgard/Roundup Ready ("stacked") and Roundup Ready varieties. Growers continued to rely heavily on Roundup Ready technology, and as predicted, shifts in weeds spectrum have occurred. In extreme south Georgia, tropical spiderwort has proliferated and frustrated growers and scientists in regard to effective, economical control options. Acreage devoted to straight RR varieties declined compared to recent years, due to the emergence of DP 555 BG/RR as a dominant variety, increased worm pressure in 2002, and the recognition of reduced yield potential of RR varieties versus other options. Bollgard II varieties were planted in limited quantities.

Table 3. The Top 10 Varieties Planted (%) in Georgia in 2002, by Technology.

Bollgard/Roundup Ready	Roundup Ready	Bollgard	Conventional
DP 555 BG/RR (33.5) DP 458 B/RR (19.4) DP 451 BR (4.7) ST 4892 BR (2.9) FM 989 BR (1.9)	DP 5415 RR (6.0) DP 5690 RR (6.0) FM 989 RR (2.2) DP 436 RR (1.8)	NuCOTN 33B (2.6)	none
Percent of total plantings by technology:			
67.9	19.2	2.9	5.7
USDA Agricultural Marketing Service Survey, September 2003.			