

The 2006 Crop Year in Review

Steven M. Brown
Crop & Soil Sciences, The University of Georgia

The 2006 production season was nothing short of remarkable. It was truly the year of the “Comeback Crop” given the unexpected, unprecedented recovery from a horrendous summer drought. The Boll Weevil Eradication Program certified 1,379,746 planted acres as of August 10, 2006. Parts of the state suffered intense, prolonged drought from June through mid-August, and there were grave concerns about widespread crop failure and economic disaster. Rains that came in late August and early September seemed too little, too late, leading to predictions of a 500 lb/A average and 1.5 million bale crop. Late showers rejuvenated dryland, severely stunted fields, and many growers, having marginal yields or worse, chose to gamble on a late crop. In countless fields what was a half bale or worse crop in mid-September, rebounded to make respectable yields. Early harvest from dry land fields was typically 400 lb/A or less and irrigated fields produced 600 to 900 lb/A. Thereafter, yields began improving, and some producers even made their best-ever crop. Final yields will average about 825 lb/A and the total production will exceed 2.3 million bales. Given how poor the crop was in early September, how did such an unbelievable crop materialize? Possible explanations include (1) the scarcity of boll rot, (2) favorable autumn weather, (3) the full season maturity of DP 555 BG/RR, (4) the availability of fertilizer (which had not leached), and (5) the lack of late season insect pressure, particularly stink bugs.

Average Cotton 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
2000-04	1,399	1,284-1,495	667	557-785	1,874	1,663-2,220
2005	1,214	—	849	---	2,140	---
2006	1,380	—	825	---	2,340	---

*Yield based on planted acreage and total bale production.

Quality of the 2006 crop was better than anticipated. Given the extreme heat and drought of midsummer, high percentages of short staple, high mic cotton were expected. Final numbers on both will be slightly greater than 20 percent. Color grade was quite good, but challenges still remain in regards to uniformity. Georgia still ranks at the bottom of the national average in uniformity.

Fiber Quality of Bales Classed at the Macon USDA Classing Office

Color Grade 31/41 or better (% of crop)	Bark/Grass/Pre p (% of crop)	Avg Staple (in)	Avg Leaf Grade	Avg Strength (g/tex)	Avg Mic	Avg Uniformity
49 / 97	0.7 / 0.4 / 0.1	34.4	3.3	28.4	4.68	80.4
Based on 2.31 million bales classed through February 15, 2007. Bales classed: short staple (< 34)- 20%, high mic (>4.9) - 22%						

DP 555 BG/RR again dominated the state's acreage, with almost 77 percent of crop planted to that variety (USDA AMS Survey). The USDA Survey estimated that more than 98 percent of the Georgia crop was planted in transgenic varieties, primarily in Bollgard/Roundup Ready varieties. Other technologies, including Bollgard II, Widestrike, Roundup Ready Flex and Liberty, have been planted on limited acreage but will likely gain in future in seasons. 2006 was the "Year of the Pigweed," with serious escapes of Palmer amaranth across Georgia. Reasons for pigweed control failures include the influence of dry weather at planting and the failure to activate preemergence herbicides; the effects of dry weather on the efficacy of early postemergence herbicide applications; the widespread occurrence of ALS-herbicide resistance in Palmer amaranth; and the existence of glyphosate resistance in Palmer amaranth. Glyphosate-resistant Palmer amaranth has been confirmed in at least three counties beyond the original three county area in Central Georgia. Prevailing dry conditions also contributed to greater than normal problems with aphids, pests which are normally by the spread of a naturally occurring fungus.

Again, the most remarkable aspect of the 2006 crop was its comeback performance. Final yield and production numbers continue to amaze.

Technology Distribution of Cotton Planted in Georgia in 2006

Bollgard/Roundup Ready	Roundup Ready	Conventional	Other
89.1	5.6	0.2	4.6
USDA Agricultural Marketing Service Survey, August 2006.			