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QUALITY OF 2004 GEORGIA COTTON COULD BE MUCH IMPROVED AND THE BEST IN YEARS WHY IS OUALITY SO GOOD?

QUALITY OF 2004 GEORGIA COTTON COULD BE MUCH IMPROVED AND THE BEST IN YEARS *(Shurley, Jost, and Brown)*. As of November 4, approximately 784,000 "running bales" (46%) of the expected 2004 Georgia cotton crop had been harvested, ginned, and classed. The crop is expected to total 1.75 million bales and yield is expected to average 667 lbs per acre compared to 785 lbs per acre last year (USDA, October 12, 2004).

Wind and rain damage from hurricanes Frances, Ivan, and Jeanne took a toll on parts of the state and yield losses were substantial (mostly 10-30% for many producers). In fact, the potential size of the crop could have been higher than anticipated. Some producers are harvesting good yields despite significant boll losses. Fiber quality also appears to have survived the attack of the storms.

Color grade is on par (perhaps on average slightly better) than last season and much improved from 2002 (Table 1). Approximately 37% of bales graded thus far have been Color 31 or better and only about 11% have graded below 41 Color despite weathering from the storms.

Staple length appears much improved from 2003. The average Staple is 35 and only about 9% of bales graded thus far have been 33 and shorter. This compares to 22% in 2003 and almost 1/3 of the crop in 2002.

Uniformity has also improved. The 2004 crop graded to date has averaged 80.7 Uniformity and only 11% of the crop has been below the minimum base of 80. The average fiber length thus far for the 2004 crop has been 28.1 compared to 27.5 for both 2003 and 2002 (Average Length = Staple x Uniformity/100).

| | 2002 | 2003 | 2004 ² |
|---------------------------------|-------|-------|-------------------|
| % Bales Color 31 and Better | 9.4% | 31.9% | 33.6% |
| % Bales Color Below 41 | 49.2% | 8.5% | 10.7% |
| Average Staple | 33.9 | 34.2 | 34.8 |
| % Bales Staple 33 and Shorter | 32.1% | 22.2% | 8.8% |
| Average Uniformity | 81.0 | 80.5 | 80.7 |
| % Bales Uniformity Less Than 80 | 9.5% | 15.4% | 11.0% |
| Average Strength | 27.5 | 27.9 | 29.5 |
| % Bales Strength 29 and Higher | 27.6% | 31.8% | 73.4% |
| Average Micronaire | 4.9 | 4.3 | 4.5 |

Table 1. Comparison of Selected Fiber Quality Characteristics, Georgia¹, 2002-2004

^{1/}Macon, GA Classing Office, USDA-AMS. Includes a small amount of Florida cotton

^{2/} For bales classed through November 4, 2004

Fiber strength is perhaps the biggest improvement when compared to last year and 2002. Strength has averaged 29.5 for the bales classed to date and almost 3/4 of bales have been "high" strength of 29 or better. Micronaire is up slightly and has averaged 4.5 compared to 4.3 last year. Approximately 7% of bales to date have been "high mike" (above 4.9). This compares to only 1.1% last year and 48.1% in 2002.

Quality of the 2004 Georgia cotton crop has thus far been much improved when compared to last year and 2002. There are, however, several trends working against us that could reduce overall fiber quality as harvest progresses.

Figure 1 shows the Color grades of the cotton classed each week thus far this season. As harvest has progressed, the percentage of 31 and better Color has decreased and the percentage of Color 41 has increased. The percentage of cotton below 41 has not changed significantly during the harvest season and has been mostly around 10% in recent weeks. For the most recent cotton classed, Color distribution was approximately 23% Color 31 or better, 67% Color 41, and 10% below Color 41.

Figure 2 shows the average Staple length and length Uniformity of the bales classed each week thus far this season. Staple declined during September but has improved since. In recent weeks, Staple has averaged 34.8. Uniformity, however, has declined although stable the past 2 weeks. On average, Uniformity is still within the base range of 80 to 82. The decline in the average, however, signals that the distribution of bales has shifted and a greater percentage of bales are at lower Uniformity than earlier in the season.



Market price premiums and discounts for selected quality characteristics are shown in Table 2. These premiums and discounts change somewhat during the marketing year based on location, availability of cotton, and quality needs of merchants and mills.

Premiums are small compared to discounts. This is typical and expected. Premiums are relatively small if the quantity of competing cotton is plentiful and if higher quality has become the norm. Although a premium may be small, the discount and/or wider cash basis for lower quality acts as an incentive. The largest discounts are for Color, Micronaire, and Extraneous Matter or EM (grass and bark). The largest premiums are for Color and Staple.

| | Premium or Discount | | |
|-----------------------------|---------------------|--------------------------|--|
| Fiber Quality | Cents Per Lb. | \$ Per Bale ² | |
| Staple 35 | +0.75 | \$3.71 | |
| Staple 33 | -0.75 | -\$3.71 | |
| Color 31 | +1.50 | \$7.43 | |
| Color Below 41 ³ | -1.21 | -\$5.99 | |
| Uniformity 79 | -0.75 | -\$3.71 | |
| Uniformity 83 | +0.20 | \$0.99 | |
| Strength 30 | +0.25 | \$1.24 | |
| Micronaire 5.0-5.2 | -2.25 | -\$11.14 | |
| Bark/Grass (Level 1) | -3.75 | -\$18.56 | |

Table 2. Cash Market Price Premiums and DiscountsFor Fiber Quality, Georgia 1

¹/ USDA-AMS, November 4, 2004.

²/ Assumes a 495-lb bale

³/ Average for grades 51, 32, and 42

WHY IS QUALITY SO GOOD? (*Jost*) While these data are encouraging, they are somewhat a mystery. One would expect with excessive weathering of the lint due to the hurricanes that quality would be severely compromised. Yet, as discussed above it was not. Why?

It must be emphasized that approximately 46% of the crop has been classed, thus the story is not yet complete encouraging as it may be, we still have ways to go.

Despite the hurricanes harvest has not been as delayed as we might expect. As of October, 31 we had harvested 57% of the states crop, the 5-year average at this time is 54%. There is no doubt we had a better crop than we previously thought, and it was much earlier.

Other explanations are basically speculation. Stinkbug pressure was not nearly as severe as 2003, and most growers did a better job of control where they were a problem. But I think it all boils down to the fact that fiber quality is a complex issue. Variety, weather (both mid- and late-season), agronomics, insect control, and harvest timing all influence quality. The interactions between these factors are even less understood than the influence of each factor alone.

Again we still have almost half the crop to get out of the field. The quicker that can be done, the better chance there is for keeping this positive trend going.

Your local County Extension Agent is a source of more information on these subjects. Edited by: **Philip H. Jost**, Extension Agronomist-Cotton & Soybeans

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