

QUALITY OF THE 2003 CROP

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Abstract

The overall quality of the 2003 American Upland cotton crop, which totaled about 16.1 million bales as of December 25, is significantly higher than that of the previous years. This crop harvest was later than normal throughout most of the cotton belt. Favorable weather conditions at harvest time allowed for much of the crop to avoid the deterioration that was experienced during the 2002 harvest in much of the cotton belt. As a result of this weather, average fiber quality measurements were higher for color grade, leaf grade and extraneous matter. Staple length was longer when compared to the 2002 crop. Micronaire was down slightly and the length uniformity index remained at about the same level. The average strength increased significantly and was higher than any of the previous five crop years.

The percentage of official color grades that were 41/32 and higher was 96 compared to 75 percent for the 2002 crop. The classer leaf grade average was 3.1 in 2003, which was less leaf trash than the 3.4 average for 2002. Through December 25, 2003, extraneous matter was identified in significantly less cotton than in 2002. Extraneous matter was found in 2.6 percent of the 2003 crop versus 6.6 percent of the 2002 crop.

The average micronaire for 2003 was 4.5, slightly below the 4.6 average for the previous two years. Strength measurements for U.S. cotton continued to increase for the third consecutive year, reaching an average of 28.8 grams per tex in 2003, up noticeably from the average of 28.5 in 2002. Average staple length was longer for 2003 at 34.8 thirty-seconds. This was the longest average since the 1997 crop average of 35.1. Length uniformity remained consistent with previous years at 81.3.

The quality of the 2003 American Pima crop increased from 2002. Grade 3 and higher accounted for 97.3 percent of the crop, compared to 96.7 percent the previous year. Average micronaire for Pima was consistent with previous years at 4.1. Pima length was longer at 46.9 thirty-seconds and strength was equal to 2002 at 40.6 grams per tex.

Introduction

Quality of the 2003 Upland and American Pima cotton crop as determined by USDA classification procedures is compared with crops from the previous five years for the most important quality factors.

The official color and leaf grades for American Upland and American Pima cotton, extraneous matter for Upland, plus instrument measurements for micronaire, strength, staple length, and the length uniformity index were compared. The comparisons were made for the entire United States Upland and Pima crops with the following regional comparisons made for Upland: the Southeast; the Mid-South; Texas-Oklahoma-Kansas; the Desert Southwest; and the San Joaquin Valley. The regional breakdown and USDA classing office groupings by region are as follows:

<u>REGION</u>	<u>CLASSING OFFICES DATA INCLUDED</u>
Southeast	Florence, Macon, Birmingham
Mid-South	Rayville, Dumas, Memphis
Texas-Oklahoma-Kansas	Corpus Christi, Abilene, Lamesa, Lubbock
Desert Southwest	Phoenix
San Joaquin Valley	Visalia

Discussion

Color Grade

The percentage of official color grades for American Upland in the 41/32 and higher-grade range was 96 for the 2003 crop, the highest percentage recorded in the six years being compared. Percentages of 41/32 grades were also higher in 2003 when compared to the previous year in every region. The largest increase occurred in the Southeast and Mid-South regions. The Southeast increased from 45.8 to 94.8 percent and the Mid-South from 69.4 to 97.1 percent. The extremely wet harvest season for 2002 had a negative impact on color grades where 2003 was a more normal harvest season.

Classer's Leaf Grade

The leaf grade average of 3.1 for the 2003 U.S. crop is lower than the 3.4 average for 2002 and is in line with the 3.0 for years 2000 and 2001. The leaf grade average by region ranged from a low of 2.2 for the Desert Southwest to a high of 3.4 for both the Southeast and Mid-South.

Extraneous Matter (Bark and Grass)

Extraneous matter percentages for this year's crop were the lowest recorded in the last six years at 2.6 percent. This is a significant decrease from the 6.6 percent for 2002. The Texas-Oklahoma-Kansas region continued to account for the highest amount at 6.0 percent but this is a reduction of over half of this regions percentage of last year.

Micronaire

Micronaire averaged 4.5 for 2003 which was down slightly from the 4.6 average last year. The micronaire average by region ranged from a low of 4.1 for the San Joaquin Valley to a high of 4.7 for the Desert Southwest. The biggest change by region occurred in the Southeast where the average mike dropped from 4.8 in 2002 to 4.3 in 2003.

Strength

Average 2003 crop strength was 28.8 grams per tex, up significantly from the 28.5 average in 2002. The U.S. crop average strength has increased each year since the 2000 crop which averaged 27.6 grams per tex. In four of the five regions the average strength is higher for 2003 when compared to 2002. The only region in which the average was lower was the San Joaquin Valley. The average fell from 33.1 in 2002 to 32.7 in 2003.

Length

The 2003 Upland cotton crop averaged 34.8 thirty-seconds of an inch in length. This was the longest average since 1997 when the crop averaged 35.1. The crop ranges from a 34.3 in the Southeast region to a 37.3 in the San Joaquin Valley. The Texas-Oklahoma-Kansas region had the largest increase from the previous season at .8 thirty-seconds. All regions were longer for 2003 when compared to the 2002 crop.

Length Uniformity

The length uniformity index average increased slightly for the 2003 crop to 81.3. This follows the pattern of crop years 1998 to present, when the length uniformity index remained in a narrow range between 81.1 and 81.4. The length uniformity ranged from 80.7 in the Desert Southwest to 82.0 in the San Joaquin Valley when comparing the five regions for 2003.

American Pima

American Pima cotton color and leaf grades were first separated for the 2001 crop harvest. Grade 3 and higher color and leaf accounted for 97.3 percent of the 2003 crop. This was slightly higher than the previous year and second only to the record high percentage of 99.4 for 1999. The Micronaire average for this cotton was 4.1, consistent with previous year's averages. The length average was 46.8 thirty-seconds of an inch, longer than any year in the comparison. The strength average of 40.7 grams per tex for American Pima was the highest recorded in the past six years.

Summary

The 2003 U. S. American Upland Crop quality will be remembered as one of the highest for many years. Especially, when compared to the previous year (2002) which was the lowest quality crop in recent years. Overall, 58.0 percent of the crop fell in the base quality for all factors measured compared to 34.0 percent for 2002 (white color grades Strict Low Middling or higher, leaf grade 1 to 4, no extraneous matter, length of 34 thirty-seconds and longer, strength of 26.5 grams per tex and higher, micronaire of 3.5 to 4.9, and a uniformity index of 80 and higher). Color grades of 41/32 and higher accounted for 96 percent of the crop, leaf grades of 4 and higher accounted for 97.6 percent and the average leaf grade was 3.1. The percentage of extraneous matter was the lowest in the past six years at 2.6 percent. Micronaire was slightly lower than the two previous years. Staple length average was the longest since 1997. The average strength was higher at 28.8 grams per tex than any of the past six years. Length Uniformity index remained consistent at 81.3.

The American Pima crop quality was excellent for 2003. Color and leaf grades were the second highest in the six years compared. Micronaire average remained constant at 4.1. The length average was the longest in the six years compared and the average strength was at 40.6 grams per tex which equaled the 2002 crop.