QUALITY OF THE 2001 CROP Robbie L. Seals USDA, AMS, Cotton Program Memphis, TN

<u>Abstract</u>

The overall quality of the 2001 American Upland cotton crop, one of the largest in history, is described in this paper. Improvements in quality were observed in color grade, extraneous matter, staple length, length uniformity and strength when compared to the 2000 crop for American Upland cotton. Leaf grade remained at the same level as the previous crop. The micronaire average 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 87.8 compared to 85.2 percent for the 2000 crop. Official USDA color grades were determined by HVI measurement instead of by classers again for the 2001 crop. This change in official cotton classing procedures was made by USDA in response to a unanimous request from the U.S. cotton industry for crop year 2000. The classer leaf grade average was at 3.0 in 2001, identical to the 2000 crop. Through December 27, 2001, extraneous matter was identified in less cotton than in 2000. Bark was recorded on 1.9 percent of the cotton classed and grass was 0.7 percent.

Micronaire measurements for the 2001 crop averaged 4.6 units, up considerably from 4.3 in 2000. Strength measurements for U.S. cotton returned to levels found prior to the 2000 crop and averaged 28.3 grams per tex. Average staple length also was slightly longer this season at 34.5 thirty-seconds. This was the longest average since the 1997 crop. Length uniformity was also higher for 2001 at 81.4 after dropping to a six year low in 2000 at 81.1.

The percentage of American Pima which was Grade 3 and higher in the 2001 crop was 97.2 up slightly from the previous year. Average micronaire for Pima was at 4.0 units. Pima length was longer at 45.8 thirty-seconds and strength was significantly higher at 40.9 grams per tex.

Introduction

Quality of the 2001 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; the Desert Southwest; and the San Joaquin Valley. The regional breakdown and USDA classing office groupings by region are as follows:

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

Discussion

Color Grade

The percentage of official color in the 41/32 and higher-grade range was 87.8 for the 2001 crop, second only to the 91.4 percentage recorded in 1999 in the six years being compared. Percentages of 41/32 grades were higher in 2001 when compared to the pervious year in each region except for the Mid-South. The Mid-South dropped to 76.9 percent this year and this decrease was mostly due to the unusual wet weather at harvest time.

Classer's Leaf Grade

The leaf grade average of 3.0 for the 2001 U.S. crop is comparable to the prior season. There were slight differences by region this season as the Southeast and Mid-South crops had a higher amount of leaf than in 2000 while the Texas-Oklahoma, Desert-Southwest and San Joaquin Valley regions had less.

Extraneous Matter (Bark and Grass)

The 2001 cotton crop had the lowest level of extraneous matter recorded in the last six years through December 27. The 2.6 percent level for 2001 (1.9 Bark and 0.7 Grass) compares very favorably with the low levels recorded prior to the 2000 crop year. Extraneous matter levels were extremely high in the Texas-Oklahoma region during 2000 but were down to normal levels for 2001.

Micronaire

Mike averaged 4.6 for 2001. This was up from the 4.3 average for 2000 and 4.4 for 1999. This was the highest mike average in recent years. Regional averages were higher in the Southeast, Mid-South, and Texas-Oklahoma for 2001.

Strength

Average 2001 crop strength was 28.3 grams per tex, up significantly from the 27.6 average in 2000 and is comparable to averages for each year prior to the 2000 crop. Regional strength averages for the Southeast, Mid-South, and Texas-Oklahoma were up significantly but the Desert Southwest and San Joaquin Valley remained comparable to 2000 levels.

Length

The U.S. Upland cotton crop averaged 34.5 thirty-seconds of an inch in staple length in 2001, and was the longest since the 35.1 average for the 1997 crop. Regions having the biggest increase in length were the Southeast, Mid-South, and Texas-Oklahoma.

Length Uniformity

The length uniformity average was up for the 2001 crop to 81.4. This follows the trend of crop years 1996 through 1999. The average dropped to 81.1 for the 2000 crop.

American Pima

The 2001 crop was the first year for the separation of color and leaf grade for American Pima cotton. Grade 3 and higher color and leaf accounted for 97.2 percent of the 2001 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 at 4.0, down slightly from the previous year and comparable to the 1996 thru 1999 crops. The length average was 45.8 thirty-seconds of an inch, slightly longer than the 45.6 average of both 1999 and 2000. The strength average of 40.9 grams per tex for American Pima was the highest recorded in the past six years.

Summary

The 2001 U.S. American Upland crop compares favorably with crops harvested in recent years. The percentage of 41/32 color grades and higher were the second highest in the past six years. The strength average returned to normal this year after being at a six year low in 2000. The staple length also rebounded and was the highest since 1997. The mike average increased significantly and was higher than any of the previous five years. Leaf grades and length uniformity showed little variation from previous years crops. Extraneous matter was at the lowest level recorded during the past six years.

American Pima color and leaf grades were the second highest in recent years. The micronaire average moved down slightly, the length average was slightly longer and the strength average was the highest in recent years.