QUALITY OF THE 2000 CROP

Robbie L. Seals
USDA, AMS, Cotton Program
Memphis, TN

Abstract

The overall quality of the 2000 American Upland cotton crop compares favorably with that of the previous five years, even though the average strength was somewhat lower. Crop quality for 2000 may have been boosted by the early maturity of the crop. This was offset, however, by mid-to late season inclement harvesting weather, which was detrimental to the color and leaf grades of later maturing cotton, and increased the level of extraneous matter classified.

The percentage of official color grades that were 41/32 and higher was 87.4 compared to 91.4 percent for the 1999 crop. Official USDA color grades were determined by HVI measurement instead of by classers for the first time during classing of the 2000 cotton crop. This change in official cotton classing procedures was made by USDA in response to a unanimous request from the U.S. cotton industry. The classer leaf grade average was 2.9, compared to 2.8 for last year. Extraneous matter was identified in more cotton than in 1999, but levels of bark and grass found in 2000 crop bales were comparable with other recent crops. The 1999 levels of extraneous matter - significant bark in 2.3 percent and grass in 0.8 percent of all cotton classed - were the lowest in over 35 years. The 2000 crop extraneous matter levels were a more normal 3.3 percent for bark in this crop, although the number of bales where a significant amount of grass was found remained at the low level of 0.8 percent recorded last year.

Micronaire measurements for the 2000 crop averaged 4.3, down considerably from 4.5 in 1999. Strength measurements for U.S. cotton dipped lower, with the 2000 crop averaging 27.6 grams per tex, compared to 28.3 in 1999. Average staple length was only slightly longer than the average of 34.1 thirty-seconds of an inch in 1999, and at 34.2, remained almost a thirty-second shorter than the averages of 35.1 for the crops from 1995 through1997. The length uniformity average was down slightly at 81.2 percent, compared to 81.3 for the previous crop.

The percentage of American Pima which was Grade 3 and higher in the 2000 crop was 97.6, down from the all-time high of 99.4 percent recorded last year. Average micronaire for Pima was 4.1, up from the average 4.0 last season.

Introduction

Quality of the 2000 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.

Reprinted from the *Proceedings of the Beltwide Cotton Conference*
Volume 1:366-367 (2001)
National Cotton Council, Memphis TN

The official color and leaf grades for American Upland cotton, the composite grade for American Pima cotton, extraneous matter for both Upland and Pima, 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 87.4 for the 2000 crop, second only to the 91.4 percentage recorded last year in the six years being compared. Percentages of 41/32 grades across the regions were all above the eighty percent level for 2000: Southeast was 88.8; Mid South was 83.3; Texas-Oklahoma was 80.4; Desert-Southwest was 97.0; and the San Joaquin Valley was 98.1.

Classer's Leaf Grade

An apparent three-year trend toward leafier cotton appears to have evaporated last year, as the average leaf grade for the U.S. dropped to 2.8 in 1999 - the lowest level since color and leaf were separated in 1993 - and was up only slightly to 2.9 in 2000. Regional leaf grade averages were respectably low for 2000, but none were record-level.

Extraneous Matter (Grass and Bark)

The 2000 cotton crop had the second lowest level of extraneous matter recorded in the last six years through December 14. The 4.1 percent level for 2000 compares very favorably with the record low levels recorded last year. Extraneous matter levels were highest, unsurprisingly, in the Texas-Oklahoma region, where a significant portion of the cotton is harvested by stripping.

Micronaire

Mike averaged 4.3 for 2000. This was down from the 4.5 averaged the past two years and was comparable to the previous year's averages. Regional micronaire averages were also lower across the board.

Strength

Average 2000 crop strength was 27.6 grams per tex, down significantly from the 28.3 average in 1999. Regional strength averages for the Southeast, Mid-South, and Texas-Oklahoma were lower in 2000 and higher in the Desert Southwest and San Joaquin Valley. The strength averages for the Southeast, Mid South, and Texas-Oklahoma were the lowest in six years.

Length

The U.S. Upland cotton crop averaged 34.2 thirty-seconds of an inch in staple length in 2000, and along with the averages recorded in 1998 and 1999, is shorter than the crops of 1995 - 1997.

American Pima

Grade 3 and higher accounted for 97.6 percent of the 2000 American Pima crop. This was second only to the record high percentage of 99.4 set last year. The Micronaire average for this cotton moved up to 4.1 after holding an average of 4.0 for four years. The length average was 45.6 thirty-

seconds of an inch, same as in 1999, and reflecting the shorter lengths also seen in the American Upland cotton. The strength average of 39.3 for American Pima was the highest recorded in the six years.

Summary

The 2000 U.S. American Upland crop compares favorably with crops harvested in recent years. The average official color grade was the second highest in the past six years, even though the averages for strength and staple length were somewhat lower. The mike average dropped to 4.3, the lowest since 1977. The averages for leaf grade and extraneous matter levels showed little variation from crop to crop over the past six years.

American Pima grades were also the second highest in recent years. The micronaire average moved up slightly, the length remained the same as 1999, and the average strength measurement was the highest in recent years.