QUALITY OF THE 1998 CROP<br>Mack Bennett<br>USDA, AMS, Cotton Program<br>Memphis, TN

## Abstract

The 1998 American Upland crop was lower in quality from recent seasons for several quality factors. Classer color grades of $41 / 32$ and higher at 80.1 percent were the lowest since the 78.8 percent of the 1994 crop. The classer leaf grade average rose to 3.3, the highest average leaf content in the crop since the separation of color and leaf occurred commencing with the 1993 crop. Mike average of 45 for the 1998 crop is the highest on record. The average staple of 34.3 is the shortest since 1983. The strength average of 28.0 grams per tex is the lowest since the 1992 crop. The American Pima percentage of Grade 3 and higher at 88 percent was lower than any of the past four crops. On the other hand, American Pima mike averaged 4.1, the highest of any of the past four crops. Pima length was a record 46.4, and strength was an all-time high of 39.4 grams per tex.

## Introduction

The quality of the 1998 Upland and Pima cotton crops based on USDA classification has been compared with crops from the previous four years for the most important quality factors. Classers' color grade and leaf grade for Upland cotton, classers' grade for Pima cotton, and extraneous matter plus HVI mike, strength, and length were the quality factors compared. Quality factors not compared in this report were length uniformity, HVI color and trash (Upland). Comparisons were made for the entire United States Upland and Pima crops with regional comparisons made for Upland: the Southeast, the Mid-South, Texas/Oklahoma, the Desert Southwest, and the San Joaquin Valley. The regional breakdown and classing office groupings by region are as follows:

REGION
Southeast
Mid-South
Texas/Oklahoma
Desert Southwest
San Joaquin Valley

CLASSING OFFICES DATA INCLUDED
Florence, Macon, Birmingham
Rayville, Dumas, Memphis, Hayti
Corpus Christi, Abilene, Lamesa, Lubbock Phoenix
Visalia

The 1998 data was cut off on December 15. The Cotton Program had classed $12,000,000$ samples (including 211,000 Pima) through that date. The Cotton Program expects to class around 13,400,000 samples from the 1998 crop by season's end.

The data represents Upland and Pima classings from recent crop years as shown below:

|  | CLASSINGS |  |
| :--- | ---: | :--- |
| $\frac{\text { Crop Year }}{1998^{*}}$ | $12,000,000$ | Pimand |
| 1997 | $17,600,000$ | 211,000 |
| 1996 | $17,680,000$ | 450,000 |
| 1995 | $16,752,000$ | 301,000 |
| 1994 | $18,521,000$ | 289,000 |
|  |  |  |

## Discussion

## Classers' Color Grade

The percentage of $41 / 32$ and higher for the 1998 crop was 80 percent, the lowest percent since 79 percent in 1994. Only 68 percent of color grades were $41 / 32$ and higher in the Mid-South, lower than any of the past four crops. Color grades were about average in other areas except the Desert Southwest that had higher color grades.

## Classers' Leaf Grade

Leaf grades averaged 3.3 for the 1998 crop, the lowest or leafiest since the separation of color and leaf started in 1993. Leaf grade averages indicated higher leaf content in the Southeast, Mid-South, and San Joaquin Valley with average or better in Texas-Oklahoma and the Desert Southwest.

## Extraneous Matter (Grass and Bark)

Bark content was only 2.8 percent through mid-December, lower than any of the previous four seasons. Grass content of only 1.4 percent was about average.

## Mike

Mike averaged 4.5 for the 1998 crop. This is the highest mike average on record. Records date back to 1966. The Texas-Oklahoma crop average 4.3, higher than any of the previous four years. The Southeast and Mid-South mike average was 4.6 , the same as 1995 . The Desert Southwest averaged 4.7, and the San Joaquin Valley averaged 4.1.

## Strength

Average strength for the 1998 crop averaged 28.0 grams per tex, down from 28.7 in 1997 and lower than any of the previous four crops. The Southeast strength average of 27.6, and the Mid-South average of 27.4 were also lower than the previous four crops. The Texas-Oklahoma average of 27.6 was down from 29.0 of 1997 and compared with 27.6 in 1996. The Desert Southwest strength average of 28.8 was up from 27.9 in 1997 but down from 29.1 in 1996. The San Joaquin strength average of 33.2 is the highest on record and is up sharply from 31.8 for the 1997 crop.

## Length

The U.S. Upland crop averaged 34.3 thirty-seconds of an inch, the lowest since 1983. The Southeast, Mid-South, and Texas-Oklahoma crops averaged significantly lower in
length average in 1998 than in any of the previous four crop years. The Desert Southwest crop at 35.7 was about average, up from 35.4 of a year ago. The San Joaquin Valley crop averaged 36.9 , the longest on record.

## American Pima

Grade 3 and higher averaged 88 percent for the 1998 crop through mid-December. Grade 3 and higher percentages ranged from 89 percent to 97 percent for the past four crops. Mike averaged 4.1 in 1998. The past four crops averaged 3.8 to 4.0 mike. The length average of 46.4 was the longest on record. The strength average of 39.4 grams per tex was the strongest on record.

## Summary

The U.S. Upland crop was generally lower in quality than those of the past four years. The 1998 crop had lower color grades, leaf grades, higher mike average, shorter length, and lower strength than most recent crops in the past twelve to fifteen years. American Pima grades were also lower, but the mike average was higher. The length average was the longest on record, and the strength average was strongest on record.


Figure 1. United States Color Grades 41/32 and Higher Chart.

Southeast
Color Grade 41/32 and Higher


Figure 2. Southeast Color Grades 41/32 and Higher Chart.


Figure 3. Mid South Color Grades 41/32 and Higher Chart.


Figure 4. Texas-Oklahoma Color Grades $41 / 32$ and Higher Chart.


Figure 5. Desert Southwest Color Grades 41/32 and Higher Chart.


Figure 6. San Joaquin Valley Color Grades 41/32 and Higher Chart.


Figure 7. United States Leaf Grade Average Chart.


Figure 8. Southeast Leaf Grade Average Chart.


Figure 9. Mid South Leaf Grade Average Chart.


Figure 10. Texas-Oklahoma Leaf Grade Average Chart.


Figure 11. Desert Southwest Leaf Grade Average Chart.


Figure 12. San Joaquin Valley Leaf Grade Average Chart.


Figure 13. United States Extraneous Matter (Bark) Chart.


Figure 14. United States Extraneous Matter (Grass) Chart.


Figure 15. United States Micronaire Average Chart.


Figure 16. Southeast Micronaire Average Chart.


Figure 17. Mid South Micronaire Average Chart.


Figure 18. Texas - Oklahoma Micronaire Average Chart.


Figure 19. Desert Southwest Micronaire Average Chart.


Figure 20. San Joaquin Valley Micronaire Average Chart.


Figure 21. United States Length Average Chart.


Figure 22. Southeast Length Average Chart.


Figure 23. Mid South Length Average Chart.


Figure 24. Texas - Oklahoma Length Average Chart.


Figure 25. Desert Southwest Length Average Chart.


Figure 26. San Joaquin Valley Length Average Chart.


Figure 27. United States Strength Average Chart.


Figure 28. Southeast Strength Average Chart.


Figure 29. Mid South Strength Average Chart.


Figure 30. Texas - Oklahoma Strength Average Chart.


Figure 31. Desert Southwest Strength Average Chart.


Figure 32. San Joaquin Valley Strength Average Chart.


Figure 33. American Pima Grade 3 and Higher Chart.


Figure 34. American Pima Micronaire Average Chart.


Figure 35. American Pima Strength Average Chart.


Figure 36. American Pima Length Average Chart.

