

**TEXAS-OKLAHOMA PRODUCER COTTON
MARKET SUMMARY: 1995/96**

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Abstract

The Texas-Oklahoma producer cotton market exhibited different patterns in 1995/96 from previous years. The average producer price and the price for base quality cotton were both higher than previously observed. Quality attributes were generally higher, except for micronaire and bark content. Price movements over the marketing season failed to exhibit a seasonal trend, unlike the two previous years. Price discounts for color, short staple, low strength, low micronaire, and bark all increased compared to the 1994/95 season. Price premiums for color and strength increased and premiums for leaf content decreased.

Introduction

The Daily Price Estimation System (DPES) is maintained and operated by the Department of Agricultural and Applied Economics, Texas Tech University. The DPES is a computerized, econometric price analysis system that evaluates the producer cash market prices and quality premiums and discounts for the West Texas and East Texas-Oklahoma marketing regions on a daily basis (Brown et al.; Brown and Ethridge). All results are based on the U.S. Department of Agriculture's official HVI grading standards with respect to staple length, color grade, micronaire, leaf grade, bark, other extraneous matter, and strength. The information presented here is a summary of results for the entire 1995/96 marketing year (1995 crop).

1995/96 Statistics

A total of 836,478 bales (631,520 from West Texas and 204,958 from East Texas-Oklahoma), and 16,920 sales transactions were used in DPES computations. Total volume was down because production was lower and trading outside the cash market (e.g., forward contracting) was higher compared to previous years. Overall, the DPES used an estimated 36.5% of the total producers' cash market sales in 1995/96.

Table 1 consists of the simple averages for the 1995/96 and 1994/95 marketing years. Micronaire tended to be lower in the 1995/96 marketing year. Level one bark content increased substantially from 12.45% in 1994/95 to 26.7% in 1995/96. Prices received by producers were higher and

varied within a smaller range, compared to the previous two years.

Tables 2 and 3 consist of weighted average base prices and quality premiums and discounts for West Texas and East Texas-Oklahoma. The base price is shown at staple length 34 and color grade 41.

Patterns of Sales Activity & Base Prices

The 1995/96 marketing year covered a longer time period (November through April), and was different from previous years in that its activity was continuous for the first half of the marketing year, but erratic the last half. In prior years, the market tended to trade at a higher volume until the stock of cotton was exhausted (Hudson et. al.; Hudson and Ethridge).

The average price received by farmers for 1995/96 was 75.18 cents/lb. (Table 1). The base price showed a pattern different from the previous two years. The 1993/94 and 1994/95 prices tended to increase throughout the marketing year. In 1995/96, the price tended to move with no steady trend (Figure 1). Producers in the 1995/96 marketing may have expected prices to increase as they had done in 1993/94 and 1994/95, thus limiting trading activity in the early part of the marketing year. When prices began to recover, trading activity increased (Figures 1 and 2).

Patterns of Premiums & Discounts

When analyzing specific attributes, all other attributes are held at their base levels. In the explanations that follow, quality attribute premiums and discounts for West Texas are used, however, they are not appreciably different from those for East Texas-Oklahoma.

Leaf Grade. The average premiums were lower for better quality leaf grades in the 1995/96 marketing year when compared to 1994/95 (Figure 3), and there were several days on which the leaf grade did not affect price. This is likely due to the relative abundance of low leaf cotton in the market in 1995/96.

Color Grade. There was a slight downward trend in color discounts through the 1995/96 season. The first digit of the color grade had slightly higher premiums for grades 4 and lower in 1995/96 than in 1994/95 (Figure 4). Discounts for the second digit of the color grade were substantially larger in 1995/96 compared to 1994/95 (Figure 5). This may have been due to the relative scarcity of better color grades.

Staple. The discounts and premiums for staple were more variable in 1995/96 than in 1994/95. Just as in the previous two years, several days showed staple having no effect on price. Staple premiums and discounts for 1995/96 did not deviate appreciably from the previous year (Figure 6).

Premiums were virtually the same, while discounts were slightly larger compared to the 1994/95 marketing year.

Strength. Premiums and discounts for strength were more variable than in previous marketing years. Discounts and premiums were both larger in 1995/96, compared to 1994/95, at all levels of strength, indicating a higher degree of differentiation of price on the basis of strength (Figure 7).

Micronaire. Micronaire discounts were somewhat erratic during some periods of the 1995/96 marketing year. The discounts for micronaires less than 3.3 were almost twice as large in 1995/96 as they were in 1994/95 (Figure 8). The 1995/96 data did not have micronaire higher than 4.9, but there were micronaires lower than 2.7. The larger discounts are likely a result of more low micronaire cotton and no micronaire grades above 4.9 on the market in 1995/96.

Level 1 Bark. Level 1 bark discounts were highly variable in 1995/96, and the highest of any year since the DPES began measuring bark discounts in 1993/94. Bark discounts started high, dropped, and then trended upward. Reasons for the relatively high bark discounts are not clear.

Conclusions

The 1995/96 crop was generally of high quality for Texas and Oklahoma, except for micronaire. The lower micronaire may have been used by the market as an indicator of attributes other than maturity (e.g., some problems with stickiness). The premiums and discounts were both larger for all levels of the color grade, and appeared to be less variable when compared to previous years, indicating that the market continues to adjust to the new color grade system. Prices varied less than in 1994/95, and the average price received by farmers increased in 1995/96. Overall, prices in the 1995/96 marketing year followed a different pattern than in the previous two years, with no evidence of a strong growth in demand. Many sellers held out for higher prices when prices weakened, while buyers, simultaneously uncertain about final demand, appeared reluctant to enter the market. Thus the daily market volume was quite variable and general price levels changed directions several times during the season.

Acknowledgments

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References

Brown, J.E., and D.E. Ethridge. "Functional Form Model Specification: An Application to Hedonic Pricing." *Ag. and Res. Econ. Review*, Oct., 1995.

Brown, J.E., D.E. Ethridge, D. Hudson, and C. Engels. "An Automated Econometric Approach for Estimating and Reporting Daily Prices." *J. Agr. and Applied Econ.* 27 (2), Dec., 1995: 409-422.

Hudson, D., J. Brown, and D. Ethridge. "Texas-Oklahoma Producer Market Summary: 1993/94." Texas Tech College of Agricultural Sciences and Natural Resources Manuscript No. T-1-387, Aug., 1994.

Hudson, D., and D. Ethridge. "Texas-Oklahoma Producer Cotton Market Summary: 1994/95." Texas Tech College of Agricultural Sciences and Natural Resources Manuscript No. T-1-411, July, 1995

Table 1. Texas/Oklahoma Crop Statistics from the DPES, by Crop Year.

Attribute	Average			
	95% Population Range			
	95/96	94/95	95/96	94/95
Price (¢/lb.)	75.18	71.67	71.47-78.89	59.64-83.86
Bales per Sale	43	39	1-181	1-168
Leaf Grade	2.90	3.39	1.40-4.40	1.39-5.39
Color Grade(1)	2.41	2.47	1.29-3.53	1.34-4.58
Color Grade(2)	1.55	1.66	1-2.61	1-2.67
Staple	33.13	32.86	30.53-35.74	29.84-35.88
Strength	27.92	27.69	23.10-32.75	22.89-32.49
Micronaire	3.66	4.12	2.75-4.57	3.15-5.09
Level 1 Bark(%)	26.70	12.45	0-58.07	0-56
Level 2 Bark(%)	0.07	0.03	0-3.50	0-2
Level 1 Other(%)	1.17	2.07	0-15.18	0-22
Level 2 Other(%)	0.10	0.17	0-4.42	0-6.2

Table 2. 1995/96 DPES Weighted Average Price Estimates, West Texas.
 Dept. of Ag. & Appl. Economics, Texas Tech Univ. #Sales: 12690
 Date 1995 CROP Region: West Texas #Bales: 631520
 Color Grade and Staple Premiums and Discounts in Points/lb.

Color Grade	Staple Length											
	28	29	30	31	32	33	34	35	36	37	38	
11	--	--	--	--	--	--	--	--	--	--	--	
21	--	--	-168	-73	5	66	110	137	145	--	--	
31	--	--	-213	-118	-40	21	64	90	98	--	--	
41	--	--	-274	-181	-104	-43	76.05	76	76	--	--	
51	--	--	--	--	--	--	--	--	--	--	--	
61	--	--	--	--	--	--	--	--	--	--	--	
71	--	--	--	--	--	--	--	--	--	--	--	
12	--	--	--	--	--	--	--	--	--	--	--	
22	--	--	-214	-120	-42	19	62	88	96	--	--	
32	--	--	-259	-165	-88	-27	16	42	50	--	--	
42	--	--	-320	-227	-151	-90	-47	-22	-14	--	--	
52	--	--	--	--	--	--	--	--	--	--	--	
62	--	--	--	--	--	--	--	--	--	--	--	
23	--	--	-246	-152	-74	-14	30	56	64	--	--	
33	--	--	-290	-197	-119	-59	-16	10	18	--	--	
43	--	--	-351	-259	-182	-122	-79	-54	-46	--	--	
53	--	--	--	--	--	--	--	--	--	--	--	
63	--	--	--	--	--	--	--	--	--	--	--	
34	--	--	--	--	--	--	--	--	--	--	--	
44	--	--	--	--	--	--	--	--	--	--	--	
54	--	--	--	--	--	--	--	--	--	--	--	
Micronaire Differences Points/lb.	Leaf Grade Differences Points/lb.		Bark Discounts Points/lb.		Strength Differences Points/lb.							
Mike Range	Leaf Grade	Disc./ Prem.	Bark Code	Disc.	Grams/ Tex.	Disc./ Prem.						
24&below--	1	--	Level 1	-127	18&below	--						
25-26	-819	2	38	Level 2	-562	19	--					
27-29	-565	3	31			20	--					
30-32	-315	4	0	Other		21	--					
33-34	-157	5	-53	Discounts		22	-34					
35-49	0	6	--	Points/lb.		23	-20					
50-52	--	7	--			24 & 25	0					
53&above --				Other		26	20					
				Code	Disc.	27	34					
						28	48					
				Level 1	-319	29	61					
				Level 2	--	30	75					
						31&above	89					

Table 3. 1995/96 DPES Weighted Average Price Estimates, East Texas - Oklahoma.
 Dept. of Ag. & Appl. Economics, Texas Tech Univ. #Sales: 4230
 Date 1995 CROP Region: East Texas-Oklahoma #Bales: 204958
 Color Grade and Staple Premiums and Discounts in Points/lb.

Color Grade	Staple Length											
	28	29	30	31	32	33	34	35	36	37	38	
11	--	--	--	--	--	--	--	--	--	--	--	
21	--	--	-168	-73	5	66	110	136	145	--	--	
31	--	--	-212	-118	-40	20	64	90	98	--	--	
41	--	--	-274	-181	-104	-43	75.93	76	76	--	--	
51	--	--	--	--	--	--	--	--	--	--	--	
61	--	--	--	--	--	--	--	--	--	--	--	
71	--	--	--	--	--	--	--	--	--	--	--	
12	--	--	--	--	--	--	--	--	--	--	--	
22	--	--	-214	-120	-42	19	62	88	96	--	--	
32	--	--	-258	-165	-88	-27	16	42	50	--	--	
42	--	--	-320	-227	-150	-90	-47	-22	-14	--	--	
52	--	--	--	--	--	--	--	--	--	--	--	
62	--	--	--	--	--	--	--	--	--	--	--	
23	--	--	-246	-152	-74	-14	30	56	64	--	--	
33	--	--	-289	-196	-119	-59	-16	10	18	--	--	
43	--	--	-350	-258	-182	-122	-79	-54	-46	--	--	
53	--	--	--	--	--	--	--	--	--	--	--	
63	--	--	--	--	--	--	--	--	--	--	--	
34	--	--	--	--	--	--	--	--	--	--	--	
44	--	--	--	--	--	--	--	--	--	--	--	
54	--	--	--	--	--	--	--	--	--	--	--	
Micronaire Differences Points/lb.	Leaf Grade Differences Points/lb.		Bark Discounts Points/lb.		Strength Differences Points/lb.							
Mike Range	Leaf Grade	Disc./ Prem.	Bark Code	Disc.	Grams/ Tex.	Disc./ Prem.						
24&below--	1	--	Level 1	-127	18&below	--						
25-26	-818	2	38	Level 2	-561	19	--					
27-29	-564	3	30			20	--					
30-32	-314	4	0	Other		21	--					
33-34	-156	5	-53	Discounts		22	-34					
35-49	0	6	--	Points/lb.		23	-20					
50-52	--	7	--			24 & 25	0					
53&above --				Other		26	20					
				Code	Disc.	27	34					
						28	47					
				Level 1	-319	29	61					
				Level 2	--	30	75					
						31&above	88					

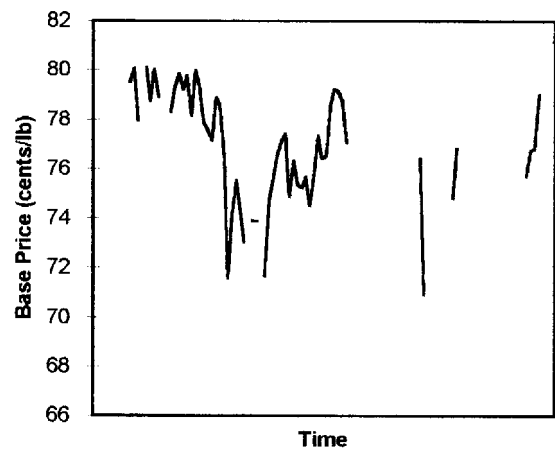


Figure 1. Movement of Base Prices for the 1995/96 Marketing Year, West Texas.

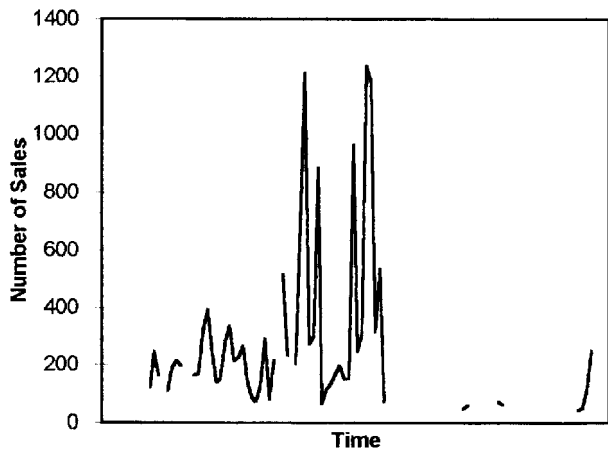


Figure 2. Daily Volume of Transactions for the 1995/96 Marketing Year, West Texas.

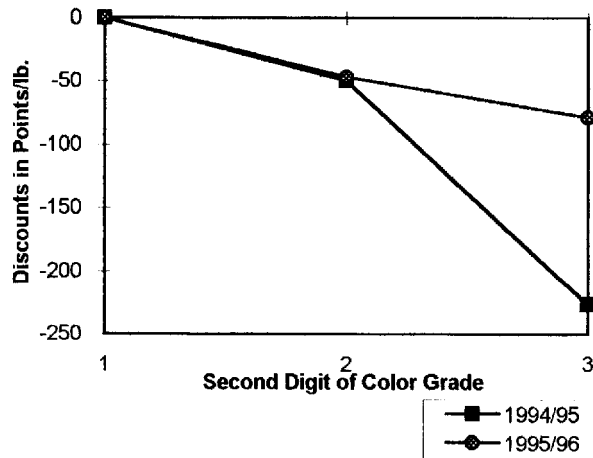


Figure 5. Second Digit of the Color Grade Premiums/Discounts, 1994/95 and 1995/96, West Texas.

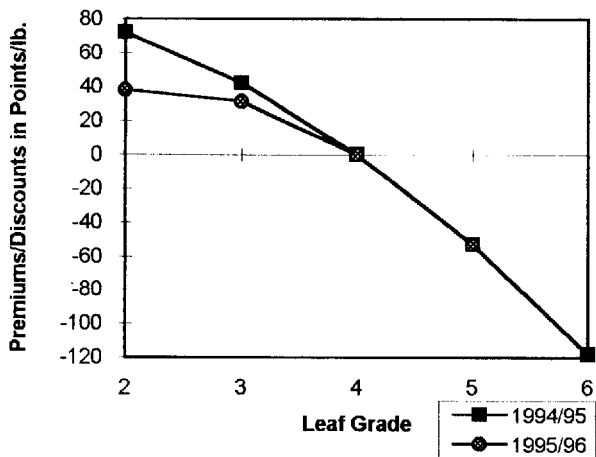


Figure 3. Leaf Grade Premiums/Discounts, 1994/95 and 1995/96, West Texas.

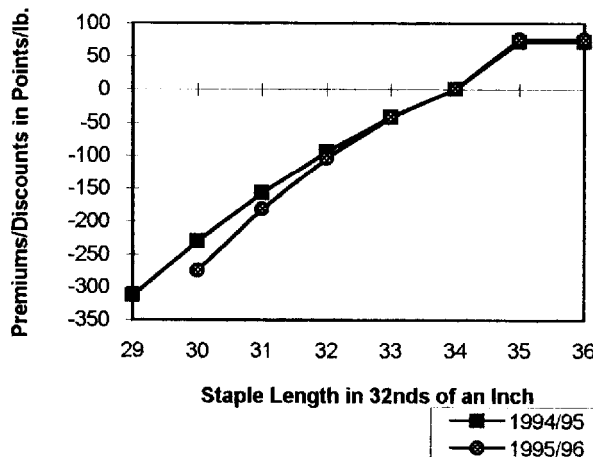


Figure 6. Staple Length Premium/Discount, 1994/95 and 1995/96, West Texas.

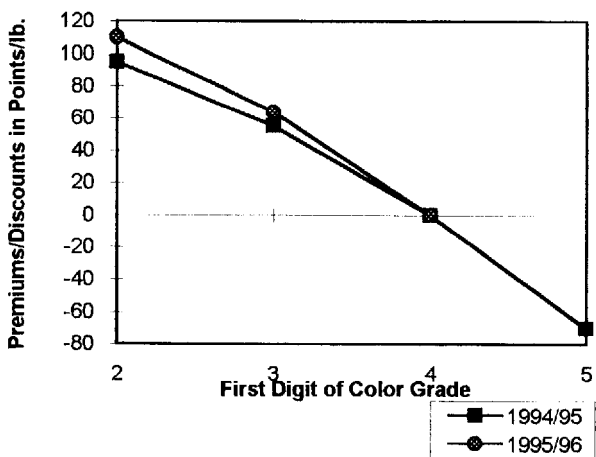


Figure 4. First Digit of the Color Grade Premiums/Discounts, 1994/95 and 1995/96, West Texas.

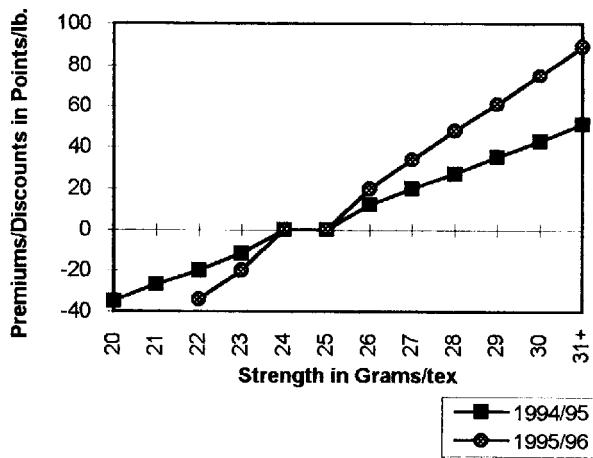


Figure 7. Strength Premiums/Discounts, 1994/95 and 1995/96, West Texas.

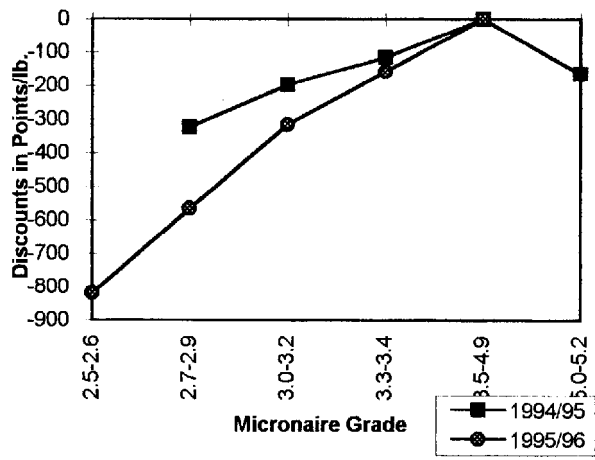


Figure 8. Micronaire Premiums/Discounts, 1994/95 and 1995/96, West Texas.