

**TEXAS-OKLAHOMA PRODUCER COTTON
MARKET SUMMARY: 1997/98**
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Abstract

The 1997/98 Texas-Oklahoma producer cotton markets experienced a decrease in the average producer price of almost 5.5 cents/lb. from the previous marketing year. Overall, quality was generally high and differed little from the 1996 crop. The size of the 1997 crop increased significantly, while the amount of cotton available in the spot market increased accordingly, possibly contributing to the fall in prices. With the exception of strength, discounts for the 1997 crop decreased for every quality attribute, while premiums increased for every quality except staple.

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 cotton sales and estimates 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 official HVI standards used by the U.S. Department of Agriculture 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 1997/98 marketing year (1997 crop).

1997/98 Statistics

A total of 1,851,428 bales (1,705,128 from West Texas and 146,300 from East Texas/Oklahoma), and 21,269 sales transactions were used in DPES computations. Total volume increased by about 27% over that of the 1996 crop, partially because of an increase in crop size and a slight decrease in forward contracting. Overall, the DPES used an estimated 57% of producers' cash market sales in 1997/98.

Table 1 provides the simple averages for the 1997/98 and 1996/97 marketing years. The 1997 crop was of high quality. Quality and variation in quality differed little from the previous year. However, average prices continued to fall for the third year in a row. The larger volume of cotton available on the market could account for the overall decrease in spot market prices.

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 and Base Prices

The 1997/98 marketing year covered a longer time period (mid October to early June) than the previous year. The majority of the sales took place between the middle of December and the middle of February. After February 10, sales dropped off sharply, and, with the exception of occasional surges, the market remained largely inactive until the end of the season (Figure 1).

The average price received by producers for 1997/98 was 57.99 cents/lb. (Table 1), down from the previous three years. The pattern of base price movements throughout the first half of the year revealed a distinct downward trend (Figure 2), while a slight upward trend emerged in the latter part of the year. The rise in prices coincides with the drop-off in market activity and may have been caused by the shortage of cotton on the spot market.

Patterns of Premiums and 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

Both average premiums and discounts for leaf grade decreased in 1997/98 over those of the 1996/97 marketing year (Figure 3). Leaf grade premiums showed slightly more variation than in 1996/97.

Color Grade

Discounts for color were somewhat erratic throughout the beginning of the 1997/98 season, but began to stabilize around the first of December. The first digit of the color grade had slightly higher premiums between grades 1 and 2 than in 1996/97, while discounts for grades 5 and 6 decreased from the previous year (Figure 4). Discounts for the second digit in the color grade are virtually identical to those of the previous year except for color grade 4 which showed a large increase over the previous year (Figure 5).

Staple

Discounts for staple fluctuated widely throughout most of the year with a slight downward trend until mid-December when they leveled off slightly. Premiums for 1997/98 decreased slightly while discounts decreased over those of 1996/97, never reaching the levels seen in the previous year (Figure 6). There was also an increase from last year in the number of days in which staple had no affect on price.

Strength

Discounts and premiums for strength were erratic throughout the 1997/98 season. Both premiums and discounts increased over 1996/97 levels (Figure 7). There were several days, as in previous years, in which strength did not affect price.

Micronaire

Micronaire discounts in 1997/98 were more erratic than those seen in 1996/97, consistent with patterns seen in earlier years. Discounts for the 1997 crop decreased for all ranges of micronaire, differing by as much as 300 points below the previous year's levels (Figure 8).

Bark

Bark discounts fluctuated throughout the first of the season, but exhibited an upward trend around the middle of December which continued to the end of the season with the majority of the season's discounts falling between 50 and 250 points/lb. Discounts for level 1 and level 2 bark in 1997/98 were smaller than in 1996/97 (Figure 9).

Conclusions

The 1997 crop was of generally high quality for Texas and Oklahoma and experienced no major change in quality from the previous year. However, the price decreased from the previous year. The volume of producer spot market sales showed a more modest increase over the volume of 1996/97 due to either a decrease in forward contracting and/or an increase in the crop size. Discounts decreased for every quality except for strength. Premiums increased for every quality except for staple. The availability of more cotton on the market as a result of a larger crop and less forward contracting may have resulted in an overall drop in price. Therefore, buyers may have readjusted their bids in order to take advantage of the large crop size. As prices continued to fall with few signs of recovery, producers may have held out for higher bids, resulting in periods of inactivity seen toward the latter part of the year. The tactic may have worked to some extent, as prices recovered slightly toward the end of the year. Buyers, faced with having to meet demand, may have been forced to eventually concede. However, this appears to have done little to help the average price level for the year, as the bulk of the 1997 crop was sold prior to that time.

Acknowledgements

The authors acknowledge Plains Cotton Cooperative Association, DTN Cotnet, and Intelligent Cotton Market for cooperation in obtaining data for this research, and Emmett Elam, Kalyan Chakraborty, and Blake Bennett for their comments and suggestions. This research is supported by Cotton Incorporated, the Texas State Support Committee, and the Committee for Cotton Research. Department of Agricultural and Applied Economics Cotton Economics Research Publication No. CER-99-45.

References

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- 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.
- Hoelscher, K., D. Hudson, and D. Ethridge. "Texas-Oklahoma Producer Cotton Market Summary: 1996/97." Department of Agricultural and Applied Economics, Texas Tech University, CER-97-14.

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

Attribute	Average		95% Population Range ^a	
	1997/98	1996/97	1997/98	1996/97
Price (cents/lb.)	57.99	63.48	49.87 - 66.10	56.01 - 70.96
Bales per Sale	87	65	1 - 347	1 - 244
Leaf Grade	3.40	3.18	1.37 - 5.43	1.48 - 4.87
Color Grade (1)	2.48	2.62	1.06 - 3.91	1.34 - 3.91
Color Grade (2)	1.70	1.46	1 - 3.15	1 - 2.56
Staple	33.57	34.23	31.31 - 35.83	31.87 - 36.59
Strength	28.68	27.33	25.49 - 31.87	23.80 - 30.86
Micronaire	3.95	3.77	3.08 - 4.83	2.71 - 4.83
Level 1 Bark (%)	22.74	26.14	0 - 80.57	0 - 88.75
Level 2 Bark (%)	0.95	0.06	0 - 8.95	0 - 3.12
Level 1 Other (%)	0.86	0.87	0 - 11.09	0 - 12.64
Level 2 Other (%)	0.48	0.12	0 - 7.71	0 - 5.36

^aThe range within which 95% of the population will fall.

Table 2. 1997/98 Weighted Average Price Estimates from the DPES, West Texas.

Yearly Weighted Average of the Daily Spot Cotton Price Estimates Dept. of Ag. and Applied Econ., Texas Tech Univ. # Sales: 18220
 Date: 1997 Crop Region: West Texas # Bales: 1705128
 Color Grade and Staple Premiums and Discounts in Points/lb.^a

Staple Length														
Color	28	29	30	31	32	33	34	35	36	37	38	Grade		
11	--	-157	-79	-8	53	105	147	180	202	215	218			
21	--	-167	-89	-18	43	95	137	169	192	204	207			
31	--	-214	-136	-67	-6	45	87	120	142	154	157			
41	--	-297	-220	-152	-92	-41	58.03 ^b	32	54	66	69			
51	--	-414	-339	-272	-214	-164	-124	-93	-71	-59	-57			
61	--	-564	-491	-426	-369	-321	-281	-251	-230	-218	-216			
71	--	--	--	--	--	--	--	--	--	--	--			
12	--	-241	-163	-94	-34	17	59	91	113	126	128			
22	--	-251	-173	-104	-44	7	49	81	103	115	118			
32	--	-297	-220	-152	-92	-41	-0	32	54	66	68			
42	--	-379	-303	-236	-177	-127	-86	-55	-33	-21	-19			
52	--	-494	-420	-354	-297	-248	-208	-177	-156	-144	-142			
62	--	-642	-570	-505	-449	-402	-363	-333	-313	-301	-299			
23	--	-458	-384	-317	-259	-210	-170	-139	-118	-106	-103			
33	--	-503	-429	-363	-305	-256	-217	-186	-165	-153	-151			
43	--	-581	-508	-443	-387	-339	-300	-269	-248	-237	-235			
53	--	-693	-621	-558	-502	-455	-417	-387	-367	-355	-353			
63	--	-834	-765	-703	-649	-603	-566	-538	-518	-507	-504			
34	--	-817	-747	-685	-631	-585	-548	-519	-499	-488	-486			
44	--	-891	-822	-761	-708	-663	-626	-597	-578	-567	-565			
54	--	-996	-928	-869	-816	-772	-736	-708	-689	-678	-676			
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	-520	1	--	Level 1	-139	18&below	--							
25-26	-433	2	52	Level 2	-594	19	--							
27-29	-304	3	48	-----		20	--							
30-32	-177	4	0	Other		21	--							
33-34	-96	5	-90	Discounts		22	-64							
35-49	0	6	-219	Points/lb.		23	-36							
50-52	-207	7	-386	-----		24 & 25	0							
53&above	-294	-----		Other		26	28							
-----				Code		Disc.	27	43						
-				-----			28	54						
				Level 1		-398	29	62						
^a 100 points = 1 cent				Level 2		-607	30	66						
^b Base Price in cents/lb.				-----			31&above	67						

Table 3. 1997/98 Weighted Average Price Estimates from the DPES, East Texas/Oklahoma.

Yearly Weighted Average of the Daily Spot Cotton Price Estimates Dept. of Ag. and Applied Econ., Texas Tech Univ. # Sales: 3049
 Date: 1997 Crop Region: East Texas/Okla. # Bales: 146300
 Color Grade and Staple Premiums and Discounts in Points/lb.^a

Staple Length														
Col	28	29	30	31	32	33	34	35	36	37	38	Grade		
11	--	-158	-79	-8	53	105	147	180	203	215	218			
21	--	-167	-89	-18	43	95	137	169	192	205	207			
31	--	-214	-136	-67	-6	45	87	120	142	155	157			
41	--	-297	-220	-152	-92	-41	58.07 ^b	32	54	66	69			
51	--	-415	-339	-272	-214	-164	-124	-93	-71	-59	-57			
61	--	-564	-491	-426	-369	-321	-281	-251	-230	-218	-216			
71	--	--	--	--	--	--	--	--	--	--	--			
12	--	-241	-164	-94	-34	17	59	91	113	126	128			
22	--	-251	-174	-104	-44	7	49	81	103	115	118			
32	--	-297	-220	-152	-92	-41	-0	32	54	66	68			
42	--	-379	-303	-236	-177	-127	-86	-55	-33	-21	-19			
52	--	-495	-421	-354	-297	-248	-208	-177	-156	-144	-142			
62	--	-642	-570	-506	-450	-402	-363	-334	-313	-301	-299			
23	--	-459	-384	-317	-259	-210	-170	-139	-118	-106	-103			
33	--	-503	-429	-363	-305	-257	-217	-186	-165	-153	-151			
43	--	-582	-509	-444	-387	-339	-300	-270	-249	-237	-235			
53	--	-693	-622	-558	-502	-455	-417	-388	-367	-356	-353			
63	--	-835	-765	-704	-650	-604	-567	-538	-518	-507	-505			
34	--	-817	-748	-686	-632	-586	-548	-519	-499	-488	-486			
44	--	-891	-823	-762	-708	-663	-626	-598	-578	-567	-565			
54	--	-996	-929	-869	-817	-773	-737	-709	-690	-679	-677			
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	-521	1	--	Level 1	-139	18&below	--							
25-26	-434	2	52	Level 2	-595	19	--							
27-29	-304	3	48	-----		20	--							
30-32	-177	4	-0	Other		21	--							
33-34	-96	5	-90	Discounts		22	-64							
35-49	-0	6	-220	Points/lb.		23	-36							
50-52	-207	7	-387	-----		24 & 25	-0							
53&above	-294	-----		Other		26	28							
-----				Code		Disc.	27	43						
-				-----			28	54						
				Level 1		-399	29	62						
^a 100 points = 1 cent				Level 2		-607	30	66						
^b Base Price in cents/lb.				-----			31&above	67						

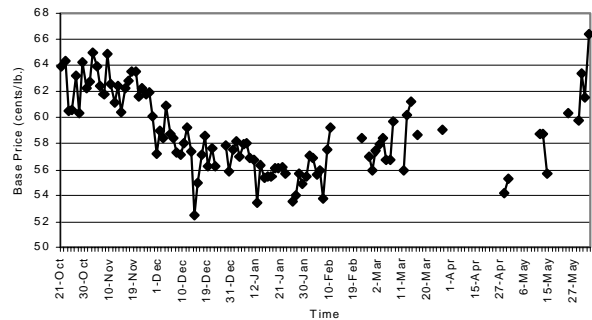


Figure 1. Movement of Base Price for the 1997/98 Marketing Year, West Texas.

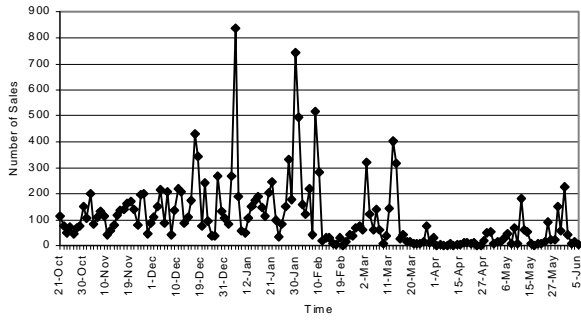


Figure 2. Daily Volume of Transactions for the 1997/98 Marketing Year, West Texas.

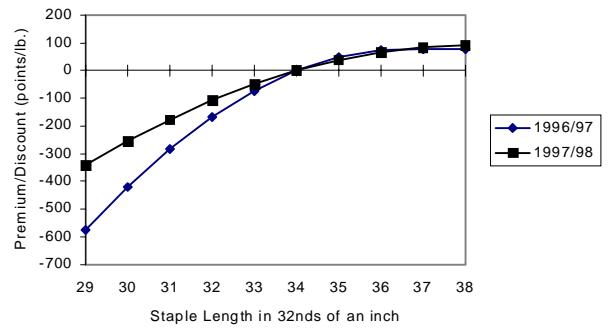


Figure 6. Staple Length Premiums/Discounts, 1996/97 and 1997/98, West Texas.

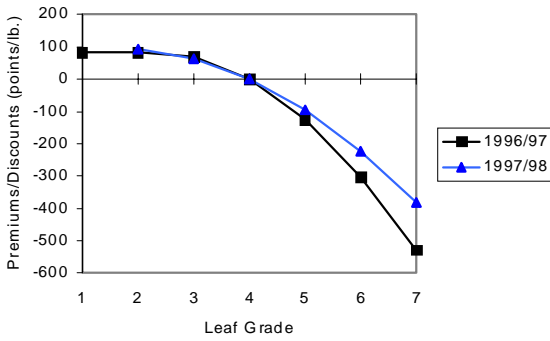


Figure 3. Leaf Grade Premiums/Discounts, 1996/97 and 1997/98, West Texas.

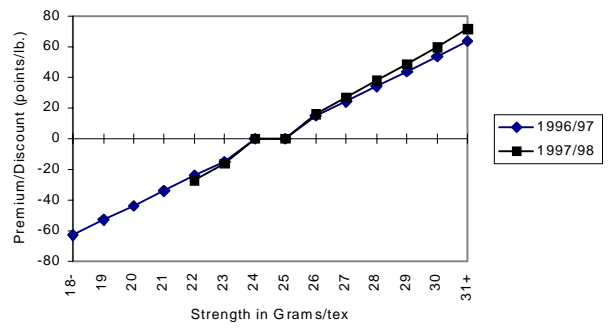


Figure 7. Strength Premium/Discounts, 1996/97 and 1997/98, West Texas.

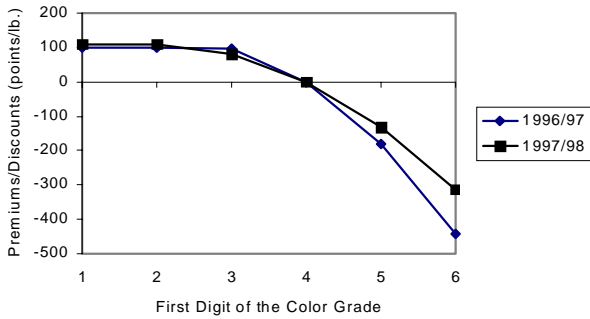


Figure 4. 1st Digit of the Color Grade Premiums/Discounts, 1996/97 and 1997/98, West Texas

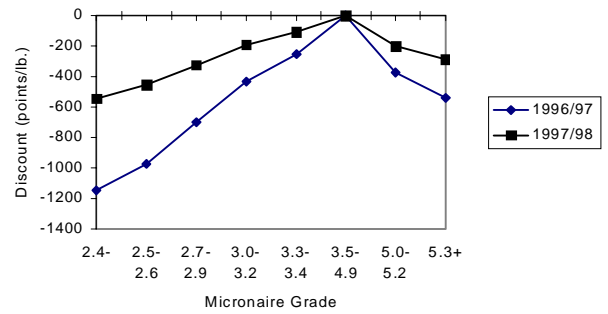


Figure 8. Micronaire Discounts, 1996/97 and 1997/98, West Texas.

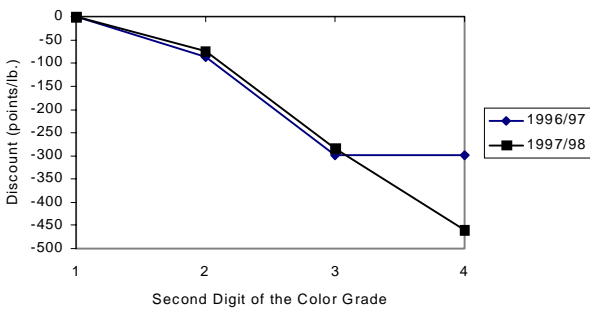


Figure 5. 2nd Digit of the Color Discounts, 1996/97 and 1997/98, West Texas.

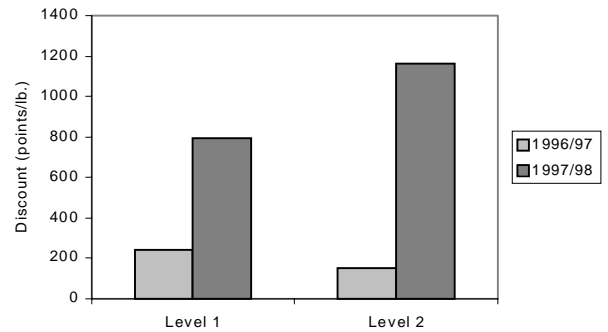


Figure 9. Bark Discounts, 1996/97 and 1997/98, West Texas.