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**DIVISION OF FARM AND RANCH ECONOMICS** 

## RELATION OF FARM PRICES TO QUALITY OF COTTON

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†As of July 1, 1928. \*\*In cooperation with U. S. Department of Agriculture. \*\*In cooperation with the School of Agriculture.

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#### SYNOPSIS

The chief defect of the local or primary cotton market is its failure to recognize quality as a basis for trading. A corollary to this is the failure to properly reflect central market values. The fundamental weakness involved is the prevailing system of "point buying," or the system of buying cotton on the average basis. Such a system fails to adequately reward quality as designated by grade, staple, and character; consequently the individual grower is discouraged in his efforts to improve the quality of his product. The primary object of this study is to more accurately measure and describe the present situation. Such information should contribute to a more satisfactory solution of the problem.

An analysis of the price data collected shows a tendency to follow grade differences, but not a uniform and consistent one. The grades from middling to low middling, inclusive, show a rather uniform difference between the price obtained in the local market and the quoted price for cotton of the same description in the Houston market on the same day less certain handling charges. This uniformity of differences or spreads indicates a conscious effort on the part of the buyer to recognize grade in the price paid. The net spread of this group averaged about \$3.25 per bale. For the grades below and above this group, with slight exceptions, a much wider spread is shown—averaging about \$5.35 per bale. A plausible explanation of this is that the lower grades were unduly penalized for the lack of quality, while the extra quality of the upper grades was largely disregarded.

Very little evidence, if any, was found of a conscious effort on the part of the buyer to recognize staple length on the individual bale basis. A decided tendency was shown for the spread to widen with an increase in staple length. The average net spread per bale for the different staple lengths is as follows:

Staple Length	Average Net Spread Per Bale	Staple Length	Average Net Spread Per Bale
3/4" 13/16" 15/16" 15/16"	\$ .74 1.56 4.26 3.50 3.93	1 1/32" 1 1/16" 1 3/32" 1 1/8"	\$ 5.86 7.26 8.17 8.09

It was quite evident that prices tend to conform to the average quality of cotton produced by each community. As an example, the average monthly price paid per pound for strict middling during October at Robstown, Hillsboro, Henderson, and Lubbock was 13.25 cents, 13 cents, 11.33 cents, and 11.09 cents, respectively. The sample secured at Robstown graded 99 per cent white with 80 per cent of it 1" to 1-1/16" in length; Hillsboro was 91 per cent white with 92 per cent 15/16" to  $1^{-1}/16$ " in length; Lubbock was 71 per cent white with 92 per cent 7/8" to 1" in length; and Henderson was 97 per cent white with 94 per cent 13/16" to 15/16" in length. This fact suggests the possibility of a community's materially raising its price level by mproving the quality of its cotton, particularly the staple. It is too idealstic, however, under the present system of local buying to expect the individual producer, actuated largely by economic motives, to make a sacrifice or something as intangible as an increase in the average price for the community. The desired response is much more likely to be secured through a ystem which rewards him personally on the basis of the quality of product which he produces.

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#### G. L. CRAWFORD AND L. P. GABBARD

IN COOPERATION WITH BUREAU OF AGRICULTURAL ECONOMICS, DIVISION OF COTTON MARKETING, UNITED STATES DEPARTMENT OF AGRICULTURE

Cotton is by far the most important crop grown in the state of Texas. Not only is it the most important crop in so far as wealth created is concerned, but it is more universally grown, involving by far a greater number of farmers in its production than any other one crop. It is nighly commercialized, and with the exception of a small amount of seed fed to livestock on the farm, is grown entirely for the market. At present the bulk of the crop is sold locally by the individual grower. It is through the local market that he makes contacts with the cotton crade, and it is here that a price is put on his cotton. The common practices on this market determine to a large degree whether or not this price is satisfactory. Furthermore, they may have a far-reaching induence on the quality of cotton produced.

Those in a position to know claim that the quality of Texas cotton has indergone a gradual deterioration during the past ten to fifteen years. Substantial premiums formerly paid for a Texas bill of lading, on account of the rugged, hard, and even character of our cotton, have lmost been lost. Last year (1926) in particular, Europe paid more or short staple cotton from the Southeast than for Texas cotton of imilar descriptions. It is almost impossible to measure the significance of such a condition accurately in terms of money, but it is safe to say hat it is costing the State as a whole an enormous sum. Such a loss need not be sustained. The soil and climatic conditions of Texas favor he production of a high-quality cotton, and it is fair to assume that he grower would produce a higher-quality product if the premiums paid in the central market were properly reflected in the local prices paid the rower.

The local market may be characterized by two main groups—sellers nd buyers. The sellers are primarily growers and as growers quite ften efficient. As sellers, however, it cannot be claimed that they are qually as efficient. They are selling a commodity, the market value of thich is based on quality as indicated by grade, staple, and character. The bulk of them are not able to class their cotton, and do not have ccess to such a service. This fact practically precludes the possibility f their knowing anything very definite as to the market value of the otton which they are offering for sale. Then, too, it is often necessary or them to sell regardless of price in order to satisfy obligations against he crop they have produced. Thus, as bargainers they are in a very reak position.

#### **OBJECT OF THE STUDY**

The object of this study is to show what quality of cotton selected localities in different parts of the State are producing relative to grade, staple, and character; the extent to which the farmer is paid on the basis of quality for his cotton, and to what extent central market values are reflected in these prices.

The data summarized in this Bulletin are for the season of 1926, and are offered as a preliminary report. It includes data for the first year of a study outlined to extend over a period of three to five years.

The present report is a summary of data collected on four representative local or primary cotton markets in the State for the season of 1926. The aim of such research is to present a more detailed picture and make a more accurate measurement of the present situation than now exists.

The word "primary" is the term used in defining the first sale or country cotton market as found in most literature on the subject. In order to conform to local usage and probably avoid confusion, the term "local" is used in this publication instead of "primary" in designating the markets.

#### METHOD OF PROCEDURE

Four local markets, representative of the four principal cottonproducing areas of the State, were selected for this study: Robstown for South Texas, Henderson for East Texas, Hillsboro for the black waxy prairie belt, and Lubbock for West Texas. The study has been expanded to include other points for the season of 1927.

A field man was placed at each of these local points at the beginning of the harvesting season where he remained until its close. Samples were secured daily on each market from growers and local buyers, chiefly growers, throughout the ginning season. Along with each sample such data as the date ginned, the date sold, the price received, the variety grown, etc., were secured. Also general information relative to the organization and practices of each market was noted.

All samples secured were assembled at the Texas Agricultural Experiment Station, where at the close of the season they were classified as to grade, staple, and character by cotton classers of the Division of Cotton Marketing, Bureau of Agricultural Economics, U. S. D. A.

#### QUALITY OF COTTON GROWN

One of the first steps in a program for the improvement of cotton in a community is to secure a knowledge of the quality of cotton that is being produced at present. This can be determined fairly accurately by a sample, say, of 10 per cent, secured throughout the ginning season and classified as to grade, staple, and character. With a knowledge of the quality of cotton being produced, with information as to soil and climatic factors, and finally with facts indicating the probable market prospects for cotton of the various grades and staple lengths, the community is in a position to intelligently formulate a constructive program

of cotton production. The logical procedure is to make this program parallel as closely as possible market demands. Mills buy cotton for the purpose of spinning it, and pay for it on the basis of its spinning utility. In all of the important cotton markets of the world cotton is bought and sold on a quality basis. If growers fail in a significant degree to produce the kind of cotton spinners want and are willing to pay for, there must be a serious maladjustment in the methods of buying cotton by the trade which fails to carry back to the grower the full force of the consumptive demand. With this viewpoint in mind a brief analysis of the data collected will be presented.

The first task of this report will be to present data showing the quality of cotton sold by growers on the local markets mentioned above for the season of 1926-27. No doubt the quality of cotton for each of these points will vary considerably from year to year, due principally to variations in climatic factors. A continuation of this study over a period of years should help to reveal the nature and extent of such variations.

#### Grade

In Table 1 is given a distribution by grades of the 2,518 samples of cotton collected at the four local markets during the months of August, September, October, November, December, 1926, and January, 1927. One will readily observe that almost 90 per cent of this cotton was white, 10.5 per cent spotted, and .1 per cent tinged. All but 4.6 per cent of it was within tenderable grades.

	Color								
Grade	Wł	nite	Spo	tted	Tinged				
	Number	Per Cent	Number	Per Cent	Number	Per Cent			
Strict Good Middling Good Middling Striet Middling. Middling. Striet Low Middling. Low Middling. Striet Good Ordinary. Good Ordinary. Total.	$ \begin{array}{r}     3 \\     98 \\     532 \\     887 \\     482 \\     183 \\     58 \\     8 \\   \end{array} $	$\begin{array}{r} .1 \\ 3.9 \\ 21.1 \\ 35.2 \\ 19.2 \\ 7.3 \\ 2.3 \\ .3 \\ \hline \\ 89.4 \end{array}$	$\begin{array}{r} & & & 2\\ 115\\ 100\\ 40\\ 8\\ \hline \\ \hline \\ 265 \end{array}$	$     \begin{array}{r}                                     $	2 2 2				

Table 1. Distribution of grades, 2,518 bales, four local markets, Texas, 1926.

	Color								
Grade	Wł	nite	Spo	tted	Tir	nged			
	Number	Per Cent	Number	Per Cent	Number	Per Cent			
Robstown: Good Middling. Strict Middling. Middling. Strict Low Middling. Low Middling.	$5\\81\\244\\65\\9$	$1.2 \\ 19.9 \\ 59.8 \\ 15.9 \\ 2.2$	0 3 1 0 0						
Total	404	99.0	4	1.0					
Henderson: Good Middling. Strict Middling. Middling. Strict Low Middling. Low Middling. Strict Good Ordinary. Good Ordinary.	$16 \\ 324 \\ 407 \\ 151 \\ 12 \\ 2 \\ 1$	$1.7 \\ 34.5 \\ 43.4 \\ 16.1 \\ 1.3 \\ .2 \\ .1$	$ \begin{array}{c} 1 \\ 24 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \dots \\ 0 \end{array} $	2.6					
Total	913	97.3	25	2.7					
Hillsboro: Good Middling. Striet Middling. Middling. Striet Low Middling. Low Middling. Striet Good Ordinary. Good Ordinary.	$\begin{array}{c} 6\\ 90\\ 146\\ 139\\ 33\\ 21\\ 3\end{array}$	$1.3 \\ 18.8 \\ 30.5 \\ 29.1 \\ 6.9 \\ 4.4 \\6$	$1 \\ 13 \\ 23 \\ 3 \\ \dots \\ \dots \\ \dots$	2.7 4.8 .7					
Total	438	91.6	40	8.4					
Lubbock: Strict Good Middling. Good Middling. Strict Middling. Middling. Strict Low Middling. Low Middling. Strict Good Ordinary. Good Ordinary.	$371 \\ 3790 \\ 127 \\ 129 \\ 35 \\ 4$	$\begin{array}{r} .4\\ 10.2\\ 5.3\\ 13.0\\ 18.3\\ 18.6\\ 5.0\\ .6\end{array}$	75 76 37 8	10.8 11.0 5.3 1.2	2	.3			
Total	496	71.4	196	28.3	2	.3			

Table 2. Distribution of grades on four local cotton markets, Texas, 1926.

Table 2 shows the distribution of grades for each local point in a way similar to that shown for all points in Table 1. It is apparent that grade is influenced very decidedly by the date of harvest. For example, as shown in Table 2 the samples collected at Robstown class out 99 per cent white while those collected at Lubbock class out only 71 per cent The bulk of the cotton crop was harvested at Robstown during white. the months of August and September, while at Lubbock a very small amount of the crop was harvested before October 1. This means that the cotton crop at Lubbock was subjected much more severely to weather hazards such as frost and wind than at any of the other three points. Then, too, the methods of harvesting at Lubbock were considerably different from the methods used in other markets studied. The bulk of the cotton crop at Lubbock during the season of 1926 was either snapped or sledded. These methods, it has been found, lower the grade from one to two grades. The marked improvements being made in ginning machinery of this region is doing much to offset the disadvantages of snapping and sledding, and should encourage the mechanical harvesting of cotton.

#### **Date of Harvest**

Table 3 shows a distribution of grades by months for each of the four markets. It will be observed that the grades became lower as the harvesting season advanced. This fact shows the importance of getting the crop out of the field as early as possible. It is in this connection that mechanical methods of harvesting cotton, once they are satisfactorily perfected, may function in a very beneficial way.

	DATE													
Grade	Ju	ly	Aug	ust	Septe	ember	Octo	ober	November		December		Jar	nuary
	No. Bales	Per Cent	No. Bales	Per Cent	No. Bales	Per Cent	No. Bales	Per Cent	No. Bales	Per Cent	No. Bales	Per Cent	No. Bales	Per Cent
Robstown: Good Middling Striet Middling Striet Low Middling Low Middling Striet Middling Spotted. Middling Spotted.	····i ·····		5 35 106 19 2 2	1.2 8.6 26.0 4.7 .5 .5	44 122 33 7 1	10.8 29.9 8.1 1.7 .2	1 16 13  1	 4.0 3.2 					· · · · · · · · · · · · · · · · · · ·	
Total	1	.2	169	41.5	207	50.7	31	7.6						
Henderson: Good Middling, Spotted. Striet Middling Spotted. Striet Middling. Striet Low Middling. Low Middling. Striet Low Middling. Striet Good Ordinary. Good Ordinary.			12 12 3 3	.2 1.3 .3 	10 1 183 11 110 3	1.1 .1 19.5 1.2 11.8 .3 	77 8 185 49 1	8.2 .9 19.6 5.2 .1	32 1 92 80 8 2 1	.3 3.4 .1 9.8 8.6 .9 .2 .1	1 16 13 16 3	.1 1.7 1.4 1.7 .3	2 1 4 2	
Total			20	2.1	318	34.0	320	34.2	219	23.4	49	5.2	9	1.0
Hillsboro: Good Middling,	·····	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	6 1 45 10 68 16 14	1.3 .2 9.6 2.1 14.4 3.4 3.0	40 3 76 6 67 2 9	8.5 .7 16.1 1.3 14.2 .4 1.9	2  57 1 22 17		····· ····· ···· 1		· · · · · · · · · · · · · · · · · · ·	
Good Ordinary							4		3	.7				
Total					160	34.0	205	43.5	103	21.9	3	.6		
Lubboek: Striet Good Middling Good Middling Striet Middling Spotted Middling Spotted Middling Spotted Striet Low Middling. Striet Low Middling. Low Middling Spotted Low Middling Spotted Striet Good Ordinary. Good Ordinary					3 66 22  1 	.4 9.6 3.2 	$\begin{array}{c} & 3 \\ 14 \\ 658 \\ 566 \\ 677 \\ 17 \\ 24 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array}$	.5 2.1 9.4 8.4 8.1 9.7 2.55 3.5 .1 .1 .1 .1	$\begin{array}{c} \dots \\ 2 \\ 1 \\ 10 \\ 29 \\ 19 \\ 56 \\ 18 \\ 90 \\ 1 \\ \dots \\ 7 \\ \dots \end{array}$		 4 1 12 3  13 13	 	      	
Total					95	13.8	308	44.6	233	33.8	34	4.9	20	2.9

Table 3. Distribution of grades by months of samples collected at four local cotton markets, Texas, 1926.\*

\*One bale secured in February.

Staple in Inches	Number of Bales	Per Cent of Total
3/4	25	1.0
7/8	205 568 727	22.5
13/10	533	25.5
1/32	204	8.1
$1 \ 3/32$ $1 \ 1/8$	$\begin{bmatrix} 15\\2 \end{bmatrix}$	0.6
Total	2.518	100.0

Table 4. Percentage of staple lengths, 2,518 bales, four local markets, Texas, 1926.

Table 5. Number and percentage of staple lengths at four local cotton markets, Texas, 1926

Staple in Inches	Number of Bales	Percentage
78 $15/16$ $1/32$ $1/16$ $1/32$ $1/16$ $1/32$ $1/16$ $1/16$ $1/16$ $1/16$ $1/16$ $1/16$ $1/16$ $1/16$	$256 \\ 125 \\ 44 \\ 168 \\ 12 \\ 1$	$\begin{array}{r} .5\\ 13.7\\ 30.6\\ 10.8\\ 41.2\\ 2.9\\ 13.0 \end{array}$
Total	408	100.0
$\begin{array}{c} \text{Henderson:} & 3/4. & & \\ & 3/4. & & \\ & 13/16. & & & \\ & 7/8. & & \\ & 15/16. & & & \\ 1. & & & \\ 1. & 1/32. & & \\ 1 & 1/16. & & & \\ \end{array}$	$23 \\ 278 \\ 427 \\ 172 \\ 33 \\ 1 \\ 4$	2.5 29.7 45.5 18.3 3.5 .1 .4
Total	938	100.0
Hillsboro: 7/8 15/16 1.1/32 1.1/16 1.3/32 1.1/8	$     \begin{array}{r}       13 \\       180 \\       194 \\       65 \\       24 \\       1 \\       1     \end{array} $	2.737.740.613.65.0.2.2
Total	478	100.0
Lubbock: 3/4. 13/16. 7/8. 15/16. 15/16. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	25 5 126 329 181 41 8 2	$\begin{array}{r} .3\\ .7\\ 18.2\\ 47.4\\ 26.1\\ 5.9\\ 1.1\\ .3\end{array}$
Total	694	100.0

#### Staple

Table 4 gives the number of bales and percentages of staple lengths for the same 2,518 bales of cotton for which a distribution of grade is shown in Table 1. Almost 88 per cent of this cotton is of tenderable length,  $\frac{\pi}{3}$  and above, while 36 per cent has a staple length of one inch and above. As will be pointed out in a distribution of staple by local points, the staple lengths in Table 4 below  $\frac{\pi}{3}$  are due, with the exception of seven bales, to a single local point. Of the 2,518 bales secured on the four local markets, 383, or 15.2 per cent, are not tenderable because of grade or staple, or both.

Table 5 shows the percentage of staple lengths for each of the four local markets studied. This table admits of some rather interesting comparisons. For example, the samples secured at Robstown and Hillsboro show no cotton below  $\frac{1}{3}$ " in length, while one per cent of the sample secured at Lubbock, and 32.2 per cent of the sample secured at Henderson are below  $\frac{1}{3}$ " in staple length, or untenderable on account of length. The relatively large amount of "short" cotton coming on to the Henderson market is due largely to the growing of varieties of short staple.

#### **RELATION OF FARM PRICES TO QUALITY**

The ideal situation for the local cotton market would be one in which cotton is sold on the basis of quality as indicated by its grade, staple, and character. In this event, there would be a more or less constant parallel between central and local prices at any given time for cotton of the same grade, staple, and character. Unfortunately this is an ideal yet to be realized. General observation and the facts available agree that far too little consideration is given to the grade and staple of cotton on the local market.

#### Grade

Table 6 gives monthly average prices received by farmers, arranged according to grade. This indicates a slight tendency to recognize grade differences, but not a uniform and consistent one. For example, the monthly average prices paid for cotton on the Robstown market for the month of August show a gradual decline from 18.8 cents for good middling to 15.0 cents for low middling. On the other hand, the same degree of regularity is not true of the month of October. The prices are 13.25 cents for strict middling, 12.55 cents for middling, 13.75 cents for middling spotted, and 12.38 cents for strict low middling. This illustration holds good in a general way for the other three markets. As a further illustration in this connection, let us examine the daily prices paid for different grades of the same staple. For nine different sales during the period August 17 to September 16, strict middling sold only twice for more, four times for the same, and three times for less than middling. Illustrations of this nature could be duplicated many times from the data secured on the local markets studied.

Table 6. Monthly Average price paid farmers for cotton, 1926.

Grade		Averag	e Price of I	Lint Per Pe	ound	
	August	Sept.	Oct.	Nov.	Dec.	Jan.
Robstown: Good Middling Strict Middling Spotted Middling Middling Spotted Strict Low Middling. Low Middling.	$18.80 \\ 18.25 \\ 18.38 \\ 17.84 \\ \\ 17.34 \\ 15.00$	$17.34 \\ 18.00 \\ 16.44 \\ 14.79 \\ 15.13$	$13.25 \\ 12.55 \\ 13.75 \\ 12.38 \\ \dots$			· · · · · · · · · · · · · · · · · · ·
Henderson: Good Middling Strict Middling Spotted Middling Strict Low Middling Low Middling Strict Good Ordinary	$\begin{array}{c} 18.02 \\ 16.08 \\ 16.97 \\ 17.68 \end{array}$	$17.08 \\ 15.41 \\ 15.19 \\ 15.09 \\ 15.87 $	$\begin{array}{c} 11.33\\ 10.90\\ 11.09\\ 10.17\\ 10.00\\ \end{array}$	$10.97 \\ 11.52 \\ 10.86 \\ 9.94 \\ 10.05 \\ 6.88 \\ 10000000000000000000000000000000000$	11.00 10.78 9.98 9.50	$\begin{array}{c} 12.22\\ 12.45\\ 11.50\\ 11.00\\ \end{array}$
Hillsboro: Good Middling Good Middling Spotted Strict Middling Spotted Middling Spotted Strict Low Middling Low Middling Strict Good Ordinary Good Ordinary		15.05 17.75 14.95 15.86 15.96 17.41 16.80	$\begin{array}{c} 13.00\\ 13.03\\ 12.38\\ 12.00\\ 10.99\\ 10.42\\ 8.75\\ \end{array}$	$\begin{array}{c} 10.25\\11.00\\ \hline 7.65\\9.98\\8.92\\7.83\\8.50\\ \end{array}$	6.00 7.00	
Lubbock: Strict Good Middling Good Middling. Strict Middling Spotted Middling Spotted Middling Spotted Strict Low Middling		$13.83 \\ 14.52 \\ 14.62 \\ 14.75 \\ \\ 14.75$	$\begin{array}{c} 11.25\\ 11.09\\ 10.56\\ 10.49\\ 10.24\\ 9.38 \end{array}$	$\begin{array}{c} 8.60\\ 10.09\\ 10.09\\ 9.50\\ 8.83 \end{array}$	11.25  5.50	
Strict Low Middling Spotted Low Middling Spotted Low Middling Tinged Strict Good Ordinary Good Ordinary	· · · · · · · · · · · · · · · · · · ·	14.85	8.99 8.94  8.00 8.00 8.00	8.92 8.38 7.75	$6.28 \\ 5.87 \\ 5.84 \\ 6.50$	7.22 6.75 6.86 6.65

#### (Basis-Grade)

#### Staple

Table 7 gives a tabulation of the monthly average prices paid farmers grouped on the basis of staple. An examination of these figures indicates that very little, if any, recognition is given staple length in determining the price paid the cotton grower. This fact is further illustrated by an examination of daily local sales selected at random. For example, on one of the local markets during the period September 18 to 24, a sale of 7 bales of good middling cotton, varying in staple from 3 to an inch in length, is recorded. In the case of three bales the lower grade sold for more, in one for the same, and in three for less than the next longer staple. On the same market during the period October 19 to October 28 a record of the sale of 9 bales of middling cotton varying in length from  $\frac{7}{8}$  to 1-1/16 inch shows that five times the

shorter staple sold for less and four times for more than the next longer staple. Here, as in the case of grade, similar illustrations may be duplicated many times from the data available.

	Average Price of Lint Per Pound							
Staple Length, Inches	August	Sept.	Oct.	Nov.	Dec.	Jan.		
Robstown: 7/8 15/16 1 1/32 1 1/16 1 3/32. 1 1/8	$\begin{array}{c} 17.92 \\ 17.95 \\ 17.59 \\ 17.86 \\ 18.45 \\ 17.00 \end{array}$	$15.75 \\ 15.06 \\ 16.24 \\ 16.47 \\ 17.56 \\ 16.69 $	13.25 12.33 13.00 12.50	12.44				
Henderson: 3/4 13/16 7/8 15/16 1	18.35 17.51 17.70 17.65	14.83 15.10 15.21 15.83 15.79	11.06 10.96 11.04 10.85 11.05 10.00	$\begin{array}{r} 9.50 \\ 10.36 \\ 10.62 \\ 10.66 \\ 10.92 \\ \\ 11.31 \end{array}$	10.42 10.08 10.92	12.00 10.75 11.90		
Hillsboro: 7/8 15/16 1 1.1/32 1.1/16 1.1/8		$15.58 \\ 16.24 \\ 15.90 \\ 16.86 \\ 17.80$	$12.20 \\ 11.75 \\ 11.74 \\ 12.01 \\ 11.55 \\ \dots \dots$	9.17 9.20 9.03 8.00	6.50 6.00	· · · · · · · · · · · · · · · · · · ·		
Lubbock: 3/4. 13/16. 7/8. 15/16. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		$11.75 \\ 14.25 \\ 14.41 \\ 14.58 \\ 15.39 $	9.50 10.00 10.25 10.06 10.13 10.12 10.94 10.75	8.60 9.08 9.01 8.90 9.92 8.50	6.15 5.96 5.94 6.50	6.88 6.98 6.92		

Table 7. Monthly average price paid farmers for cotton, 1926.

(Basis-Staple)

#### THE GROWER'S PRICE IS LARGELY ON AN AVERAGE OR "HOG ROUND" BASIS

As shown by Tables 6 and 7 with accompanying illustrations the grower generally sells his cotton locally on an average or "hog round" basis. This practice places a premium on cotton below the average for the community and a penalty on cotton above the average for the community. As a result of this practice, many growers have resorted to the growing of varieties of shorter staple and higher yields. Such a reaction is quite logical on the part of the individual grower, even though by this act the level of quality for the community and the State is lowered, the average price reduced, and the total wealth of the community diminished.

The harmfulness of this practice is not its failure to pay the community what its cotton is worth. No doubt it is paid approximately the worth of the cotton produced, some of it selling for more and some of it

for less than its market value, but all of it for about what it is worth. The unsound and uneconomic principle involved, however, is the fact that the local cotton market as organized and operated at present not only fails to reward the grower for the production of quality, but in reality places a penalty on *quality* and a premium on *volume* regardless of quality.

Table 8.	The average price paid for cotton during the month of October, 1926, on four
	local markets compared by grades.

Local Market	Average Monthly Price Per Pound by Grade.									
	Strict Middling	Strict Middling Spotted	Middling	Middling Spotted	Strict Low Middling	Low Middling				
Robstown	13.25	12.55		13.75	12.38					
Hillsboro	13.00	13.03	12.38	12.00	10.99	10.42				
Henderson	11.33	10.90	11.09		10.17	10.00				
Lubbock	11.09	10.56	10.49	10.24	9.38	8.94				

Under the system of "point buying," or buying on an average basis, the price paid tends to conform to the average grade and staple value of the cotton in that market. Or, stated differently, the price paid for the same grade of cotton on different markets will vary relative to the average quality of cotton produced on each market. This fact is illustrated in Table 8. The month of October has been chosen because the sample for this period is more adequate. It is evident from these figures that prices paid for the same grade of cotton on the Henderson and Lubbock markets were consistently, and in some cases, considerably lower than prices paid on either the Robstown or Hillsboro market. This difference is accounted for very largely by the difference in the average quality of cotton sold on these markets. It has already been pointed out in Tables 2 and 5 that 99 per cent of the cotton secured at Robstown was white and none of it below 3" in length; almost 92 per cent of the cotton secured at Hillsboro was white and none less than 3" in length; slightly above 97 per cent of the Henderson sample was white, but 32 per cent of it was below  $\frac{7}{5}$ " in length; and 71 per cent of the sample secured at Lubbock was white and one per cent below 3" in length.

#### PRICES ON LOCAL COTTON MARKET COMPARED WITH QUOTA-TIONS ON CENTRAL MARKET

In an attempt to compare local prices received by growers with central market values, certain difficulties arose and it is felt that an explanation of the manner in which they were met should be made clear before going into the details of this part of the report. In the first place it was necessary to reduce local and central prices to a comparable basis. This was done by adding to the grower's price the handling charges

necessary to move the cotton from the local markets to the Houston market. Such charges as freight and compress, interest, exchange, insurance, and drayage have been included. The amount per bale for each of these items and for each of the local markets studied is given in Table 9. One will readily observe that the item "freight and compress" comprises a very large part of the total handling charges.

	Charges on 514-pound Bale of Cotton*										
Local Points	Freight and Compress Charges to Houston	Interest (Cents)	Exchange (Cents)	Insurance (Cents)	Drayage (Cents)	Total	Points				
Robstown Henderson Hillsboro Lubbock	\$ 4.11 4.11 4.11 4.75	19.0     14.0     14.0     14.0     14.0     14.0     14.0	$22 \\ 16 \\ 16 \\ 13$	10 8 8 6	$\begin{array}{c} 0\\ 0\\ 0\\ 40 \end{array}$		90 87 87 106				
Average	\$ 4.43	16.5	17	8	19.2	\$ 4.86	92				

Table 9. Handling charges from local points to Houston, season of 1926-1927.

\*514 pounds average weight of cotton per bale, Texas, 1926. Estimate of the Bureau of Agricultural Economics.

The central market values as used in this comparison were calculated by adding to or subtracting from the Houston middling spot price\* the grade and staple differences of a particular bale of cotton for a specified date. For example, the price of middling spot cotton quoted for Houston, September 21, 1926, was 15.95 cents per pound. On this date strict middling cotton was 50 points on, and the staple premium for 15/16'' over  $\frac{1}{8}''$  was 60 points. The central market value, therefore, of strict middling 15/16'' cotton on the Houston market, September 21, 1926, was 15.95 cents plus 1.10 cents, grade and staple premiums, or 17.05 cents per pound. Staple differences corresponding to the daily grade differences are not quoted by the cotton exchanges. This being the case, an effort was made to secure such differences from concerns handling cotton on the Houston market. The most complete and satisfactory data were found in the records of the Texas Farm Bureau Cotton Association. This association kept a daily record by grade and staple of the premiums received for its cotton sold on the Houston market for the season 1926-27. For those grades and for those days for which no sales were made a judgment figure in line with the market was recorded. A complete record of the staple differences used is given in the appendix of this report, Table 1-a.

#### SPREAD BETWEEN LOCAL PRICE AND CENTRAL MARKET PRICE

The term *local price* as used in this comparison may be defined as the grower's price plus the necessary expenses incurred in moving the cotton

\*All middling spot prices and grade differences used were furnished by the Division of Cotton Marketing, Bureau of Agricultural Economics.

to the Houston market. The central market value is the middling spot quotation on the Houston market plus grade and staple differences. The spread is the difference between these two prices. To illustrate: on October 19, 1926, a grower received on the Henderson market 11.25 cents per pound for a middling 15/16" bale of cotton. The handling charges required to move cotton from this point to Houston, as calculated, amount to 87 cents per 100 pounds or .87 cent per pound. The grower's price (11.25 cents) plus handling charges per pound (.87 cent) equals 12.12 cents per pound delivered on the Houston market. On this date the middling spot quotation for Houston was 12.75 cents per pound. The staple premium for 15/16'' over  $\frac{3}{8}''$  was 10 points or .10 cent per pound. The central market value, therefore, for this cotton was 12.75 cents plus .10 cent or 12.85 cents per pound. The spread is 12.85 cents minus 12.12 cents or .73 cents per pound, making a spread of \$3.75 for a bale weighing 514 pounds. This is to say, the grower at Henderson received \$3.75 less for this bale than it was selling for on the Houston market.

In presenting the average net spread per bale for each market studied attention is called to the fact that wide variations on individual bales are evident in the data secured. For example, at Lubbock the highest plus spread recorded is \$35.15 and the highest minus spread is \$15.21 per bale. In other words, the farmer's price plus handling charges was \$35.15 less than the central market value in the first case, and \$15.21 more than the central market value in the second case.

Local Market	Number of Bales	Average Spread Per Bale	
Hillsboro Henderson. Robstown. Lubbock.	231 542 408 521	\$1.10 2.43 3.51 6.65	
Total	1,702	\$3.80	

Table 10. Average spread per bale on local markets studied.

The average spread per bale for each local market studied is given in Table 10. It ranges from \$1.10 per bale for Hillsboro to \$6.65 for Lubbock, with an average spread of \$3.80 for the four local markets. This means that of the four local points cotton growers on the Hillsboro market received the best price and growers on the Lubbock market the poorest price relative to central market values. Without attempting to explain the wide difference in the spread between cotton prices at Hillsboro and Lubbock, it may be observed that a greater amount of cotton on the Lubbock market sold on a rapidly declining price than on any of the other three markets. The decline in cotton prices for the season of 1926-27 started around the middle of September, at which time cotton harvesting in the Lubbock area was just getting well under way. Added

to this situation was the uncertainty introduced by a new method of harvesting known as "sledding." Naturally local buyers were reluctant to buy this cotton until it had been generally accepted by the trade, which action tended to cause a further depression of prices.

			· .							
Crada	Hill	sboro	Heno	lerson	Rob	stown	Lubbock		All Points	
Grade	No. Bales	Average Spread Per Bale	No. Bales	Average Spread Per Bale	No. Bales	Average Spread Per Bale	No. Bales	Average Spread Per Bale	No. Bales	Average Spread Per Bale
Striet Good Middling. Good Middling Spotted. Striet Middling Spotted. Middling Spotted. Middling Spotted. Striet Low Middling Spotted. Low Middling Spotted. Low Middling Spotted. Striet Good Ordinary. Good Ordinary. Good Ordinary. Low Middling Tinged.	$\begin{array}{c} & & & 2 \\ & & 1 \\ & & 28 \\ & 7 \\ & & 7 \\ & & 7 \\ & & 7 \\ & & 7 \\ & & 7 \\ & & & 7 \\ & & & &$	8.38 92 5.13 -2.93 -2.16 .76 .76 .77 1.72 2.33 -9.35	10 176 17 258 75 75 4 2	5.93 3.78 .24 1.95 1.14 2.09 4.27	81 3 244 1 65 9	6.42 7.15 2.06 3.77 8.48 38 6.80	$3 \\ 61 \\ \\ 30 \\ 68 \\ 80 \\ 61 \\ 79 \\ 20 \\ 79 \\ 6 \\ 28 \\ 4 \\ 2 \\ 2$	9.03 6.22 6.57 6.87 7.83 4.82 8.63 2.88 5.71 7.83 8.58 8.58 8.58 2.33	$egin{array}{c} 3\\ 78\\ 1\\ 315\\ 95\\ 649\\ 75\\ 292\\ 200\\ 112\\ 6\\ 47\\ 7\\ 7\\ 2 \end{array}$	$\begin{array}{r} 9.03 \\ 6.25 \\ .92 \\ 5.03 \\ 4.68 \\ 3.22 \\ 3.43 \\ 2.73 \\ 2.88 \\ 3.86 \\ 7.83 \\ 6.14 \\ -4.48 \\ .33 \end{array}$
Total	231	1.10	542	2.43	408	3.51	521	6.65	1702	3.80

Table 11.	Average spread	per	bale	between	local	and	central	market	value,	for season	1926-27.

(Basis-Grade)

A more detailed analysis of spread may be had by an examination of its relation to grade and staple considered separately. Table 11 shows the average spread per bale by grade for each of the four local markets considered, and for all combined. As one would surmise, a great many bales sold for more on the local market than they were being quoted on the central market. The comparison in such cases would result in a minus spread and has been so designated. In other words, the minus sign designates the average amount per bale by which the local price exceeds the central price. For all other bales the local price was less than or equal to the central market price. Theoretically local buyers lost on the former and made a profit on the latter.

Figure 1 shows graphically the amount and nature of the spread when like grades from the four markets were grouped and averaged. It will be observed at a glance that the widest fluctuations in spread are found among both the lower and higher grades. The most uniform spread is grouped about middling and includes the range of grades from strict middling to low middling. With but one exception, that of seven bales of good ordinary, the average spread by grade resulted in a plus quantity. The average spread for all grades and all points is \$3.80 per bale.

The fact that the spread was found to be considerably wider for both the lower and the higher grades is interpreted as significant. It suggests that the low grades show a marked contrast when compared with



Figure 1.—Shows the nature and extent of the average spread per bale grouped according to 'grade. Zero indicates the point at which local and central market prices coincide, or the roint of no spread. The bars above this line indicate the amount per bale by which central market prices exceed those of the local market, and vice versa below the line. The number of bales in each group is indicated by the figure in each bar. This scheme is followed for Figures 2, 3, and 4.





igure 2.—Average spread per bale according to grade with all plus spreads and minus spreads grouped and averaged separately.



#### Figure 3.-Average spread per bale grouped according to staple lengths.





middling cotton—hence are readily recognized and penalized. On the other hand the high grades show less contrast with middling and are less easily recognized. Then, too, it is to the advantage of the buyer to ignore or minimize the importance of the high grades.

As has already been stated, the local buyer does not always buy at a figure that will insure a profit. This is well illustrated in Figure 2. It will be observed from this figure that only three out of thirteen grades showed a profit in every bale, while the other ten grades showed that some of the bales lost money; but on an average a profit was realized for all grades except one. To illustrate: there were 112 bales of cotton of low middling grade in the sample secured on the four local markets. Of these, 24 were bought at a price which shows an average loss to the buyer of about \$6.50 per bale, while 88 bales were bought at a price which shows a profit of about \$6.40 per bale, or an average net profit on the entire lot of about \$3.70 per bale.

	5 3 3 5	Local Markets								
Staple	Hill	Hillsboro		Henderson [		Robstown		obock	An Folits	
	No. Bales	Average Spread Per Bale	No. Bales	Average Spread Per Bale	No. Bales	Average Spread Per Bale	No. Bales	Average Spread Per Bale	No. Bales	Average Spread Per Bale
3/4 13/16 7/8		4.01	20 163 243	.04 -1.59 4.09			2 4 88	8.56 18 5.05	22 167 340	.74 1.56 4.26
15/16	121 75 20	-59 2.20 4.37	86 25 1	$4.26 \\ 6.47 \\ 19.94$		90 .61 3.72	241 144 35		504 369 102	3.50 3.93 5.86
1/16 3/32 1/8		6.03 2.47	4	9.66	168 10 1	$     \begin{array}{r}       6.93 \\       8.17 \\       3.60     \end{array} $	6 1	16.40  18.20	$     185 \\     10 \\     3   $	7.26 8.17 8.09
Total	231	1.10	542	2.43	408	3.51	521	6.65	1702	3.80

Table 12.	Average spread per bale	between local and ce	entral market value,	for season 1926-27.
		(Basis-Staple)		

Still more light is thrown on the nature of the spread if examined in its relation to staple length. Table 12 exhibits the average spread per bale for the different staple lengths represented in the sample secured. The relation of spread to these different staple lengths is shown graphically in Figure 3. Out of the nine lengths included only one shows a minus spread, or was bought presumably at a loss to the buyer. The greatest uniformity of spread is indicated for  $\frac{1}{8}$ ", 15/16", and 1" lengths. These lengths include at least 70 per cent of the total number of bales. considered. The widest spread is shown for those staple lengths above an inch. There is a decided tendency for the spread to widen as the length increases. This indicates little, if any, effort on the part of the local buyer to recognize staple on the individual bale. A uniform spread for all staple lengths would have resulted had the cotton been bought strictly on a quality basis.

A similar fact holds here as in the case of the distribution on the

basis of grade that a considerable number of bales for the majority of staple lengths were bought at a price above the central market value or at a loss to the buyer. On the other hand, the bulk of the cotton showed a substantial plus spread, with the spread being more pronounced in the longer staple.

In relation to staple it was evident that little, if any, recognition was given length in the determination of local prices for individual bales. It is observed that spread is roughly divided into three groups. The first of these may be designated as "short" cotton, or the cotton of 3" and 13/16" in length. These lengths made up about 11 per cent of the total sample and taken together show a minus spread. The second group is that cotton included in  $\frac{7}{8}$ ", 15/16", and 1" lengths, composing about 71 per cent of the total. The spread for this group is fairly uniform and about equal to the average for the entire sample. The third group, including 1-1/32, 1-1/16, 1-3/32, and 11" lengths, and composing about 18 per cent of the total, shows the widest spread, with a marked tendency to increase with the increase in length. It appears evident that a prevailing or type staple length is recognized for each local market, which more or less fixes the staple basis for that point. The lengths above this basis are penalized, while those lengths below are paid a premium.

#### SUMMARY AND CONCLUSIONS

The primary object of this study is to determine the degree to which the local markets discriminate between the different grades and staples of cotton, and to show the extent to which central market values are reflected in the prices received by cotton growers.

A tabulation of monthly averages of local prices according to grade shows some effort on the part of the local trade to follow grade but not a consistent effort. Illustrations from the sale of individual bales of the same staple length for the same date revealed the fact that a given grade quite frequently sold for less than the next lower grade. In a study of the spread between local prices and central market values grouped according to grade, regardless of staple, it was quite evident that the low grades had been recognized and penalized. The higher grades seemed to have been bought on a flat basis, thus being automatically penalized.

In the case of staple there was no evidence of a conscious effort on the part of the local trade to reward long staple and penalize short staple. Each point seems to have had a staple rating and all cotton regardless of staple length bought on that basis. Such a practice fails to penalize cotton of short staple and to adequately reward cotton of long staple. This was evident in a study of the spread between local prices and central market values on the basis of staple. Thus it is seen that the great bulk of cotton is bought from the farmer, not on a quality basis, but on an *average* basis, and particularly so in regard to staple.

It is quite generally recognized that this method of local buying is

encouraging the farmers to plant varieties that will give them the highest yields regardless of staple. It has been estimated that of the fifteen million bushels or more of cotton seed planted in Texas during the spring of 1927, more than ten million bushels were gin-run seed, more than four and one-half million bushels were somewhat improved, and less than one-half million bushels were pedigreed seed. It is evident that the farmer who plants low quality varieties tends to reduce the average of the quality or spinning utility of the cotton of his community. However, under the method of buying "point cotton," the grower who grows cotton of high quality is penalized for his efforts to hold the average of the community high. In effect he is paying his neighbor who grows the poor-quality cotton a premium.

The responsibility for the solution of this problem cannot be placed upon any one group. It is one in which the full cooperation of growers, spinners, ginners, breeders, the cotton trade, and agricultural workers is required. Agricultural Experiment Stations in the cotton belt have done much to test and develop cotton varieties in an effort to keep the quality of cotton high. Cotton breeders have a constructive program of improvement, but all of these efforts fall far short of their possible application because the farmers' market fails to properly recognize and adequately reward a quality product.

The seriousness of the situation is recognized by the trade. A very wholesome and constructive attitude was recently expressed by H. G. Safford, President of the Texas Cotton Association, in an address delivered before the Seventeenth Annual Convention of the Texas Cotton Association at Galveston, Texas, relative to this immediate problem. He said:

"In a discussion of our 'buying methods' here at home, we must admit that we have been very remiss in a number of ways and have allowed to creep in, mistakes and abuses we should have avoided. By failure to give to the individual farmer the proper inducement for planting good seed and raising even stapled cotton of good character, we have helped to pave the way for the introduction of poor seed, such as half and half, of mixed planting and other reprehensible farming methods. We have allowed the State to lose its fair name and the premium it used to receive for the good character of its cotton. If we do adopt the principle of selling only against physical standards for staple, we must apply it equally in our buying. We must issue difference sheets for staple as well as for grade and must follow them as closely. In this way only, can the proper rewards be given to the growers for the use of good seed and proper farming methods and just penalties be assessed for poor seed and lack of intelligent farming. We must encourage 'community standardization,' proper ginning, crop rotation and the complete good farming program. In other words, we must help the farmer to improve the quality of our Texas cotton, but we cannot hope to succeed in this, unless we can show him that it is to his own direct profit and selfish

interest to do so. We must absolutely discontinue the unfair and unjust custom of buying 'point cotton.'"

What should be done about it? Evidently one of the first tasks is to assemble, analyze, and focus as much information as possible pertinent to the solution of the problem. The Bureau of Agricultural Economics, U. S. D. A., Division of Cotton Marketing, has under way some very constructive research work in this connection. For example, a ten per cent sample of the crop will be taken from which an estimate of the grade, staple, and character of the entire cotton crop will be made this year (1928). Also data as to the utilization of this cotton by mills are being studied. Such facts should help very much to indicate what we are producing as compared with what spinners need and are willing to pay most for. The final and important application of such information should be to help the grower fit his production program to mill needs. Such a program is possible only when the prices received by the grower reflect the values of the central market. For this situation to obtain, cotton must be sold in the local market on the same basis as in the central market—strictly a quality basis.

#### 15/16" 1" 1 1/32" 1 1/16" 1 1/8" Month Short 7/8" 1 3/16" 225 on 150 on 115 on 465 on 425 on 425 on 100 off 100 off 100 off 300 on 225 on 250 on 90 on 50 on 150 on 110 on 365 on Aug. 11. . pass 325 on Aug. 18..... Aug. 25..... pass 335 on Dass 100 on 110 on 250 on 225 on 210 on 275 on 275 on 100 off 100 off 100 off 1 90 on 120 on 150 on 155 on 350 on 450 on Sept. Dass Sept. 8 Sept. 15 100 on 125 on 340 on pass 425 on 130 on 300 on 340 on pass 95 on 160 on 385 on 150 on 150 on Sept. 22 Sept. 29 100 off 100 off pass 85 on 50 on 115 on 100 on 440 on 460 on 360 on Dass 415 on 100 off 30 on 55 on 105 on 240 on 315 on Oct. 6 Dass 115 on 130 on 130 on 230 on 245 on 250 on Oct. 13. Oct. 20. Oct. 27. 100 off 100 off 15 on 25 on 60 on 305 on 405 on Dass 320 on pass 80 on 420 on 20 on 100 off 325 on 425 on 75 on pass 275 on 275 on 275 on 280 on 25 on 25 on 25 on 100 on 450 on 450 on Nov. 3. Nov. 10. 100 off 100 off 100 off 150 on 350 on pass 90 on 150 on 155 on 350 on Dass Nov. 17. 90 on 350 on 450 on Dass Nov. 24. 100 off 25 on 90 on 160 on 355 on 455 on Dass 90 off 100 off 100 off 100 off 180 on 345 on Dec. 60 on 125 on 270 on 445 on 1 Dass 285 on 290 on 70 on 90 on 75 on 135 on 135 on 135 on 190 on 205 on 200 on pass Dec. 8 360 on 460 on 345 on Dec. 15..... pass 440 on 275 on 325 on 400 on Dec. Dass Dec. 29. 100 off 75 on 135 on 190 on 290 on 355 on 445 on Dass 285 on 285 on 285 on 100 off 100 off 100 off 75 on 75 on 185 on 185 on 440 on Jan. 5. . pass 130 on 340 on Jan. 12..... pass 130 on 340 on 440 on 19. 75 on 55 on 185 on 170 on pass 335 on Jan. 130 on 435 on Jan. 100 off 260 on 315 on 415 on 26 pass 115 on

#### APPENDIX

Table 1-a. Staple differences used in calculating the central market value of cotton. STRICT GOOD MIDDLING

#### GOOD MIDDLING

			1			the second se		
Aug. 11	100 off	pass	90 on	150 on	215 on	290 on	$\begin{array}{c} 365  { m on} \\ 325  { m on} \\ 325  { m on} \end{array}$	465 on
Aug. 18	100 off	pass	50 on	110 on	175 on	250 on		425 on
Aug. 25	100 off	pass	100 on	110 on	125 on	250 on		425 on
Sept. 1	100 off	pass	90 on	120 on	150 on	250 on	350 on	450 on
Sept. 8	100 off	pass	95 on	125 on	160 on	225 on	315 on	390 on
Sept. 15	100 off	pass	95 on	125 on	160 on	210 on	295 on	375 on
Sept. 22	100 off	pass	85 on	115 on	150 on	275 on	340 on	440 on
Sept. 29	100 off	pass	50 on	100 on	150 on	275 on	360 on	460 on
Oct.         6           Oct.         13           Oct.         20           Oct.         27	110 off	pass	20 on	55 on	105 on	240 on	315 on	415 on
	100 off	pass	15 on	60 on	110 on	235 on	315 on	415 on
	100 off	pass	25 on	80 on	135 on	250 on	325 on	425 on
	100 off	pass	20 on	75 on	130 on	255 on	320 on	415 on
Nov. 3	100 off	pass	25 on	90 on	150 on	275 on	350 on	450 on
Nov. 10	100 off	pass	30 on	95 on	160 on	275 on	350 on	450 on
Nov. 17	100 off	pass	30 on	95 on	160 on	275 on	350 on	455 on
Nov. 24	100 off	pass	30 on	95 on	165 on	275 on	350 on	450 on
Dec. 1	100 off	pass	60 on	115 on	170 on	260 on	335 on	435 on
Dec. 8	100 off	pass	70 on	130 on	185 on	275 on	350 on	450 on
Dec. 15	100 off	pass	95 on	140 on	210 on	295 on	350 on	440 on
Dec. 22	100 off	pass	75 on	135 on	200 on	275 on	325 on	400 on
Dec. 29	100 off	pass	80 on	135 on	195 on	295 on	355 on	450 on
Jan. 5	100 off	pass	75 on	130 on	185 on	285 on	340 on	435 on
Jan. 12	100 off	pass	75 on	130 on	195 on	285 on	340 on	435 on
Jan. 19	100 off	pass	75 on	130 on	185 on	285 on	335 on	435 on
Jan. 26	100 off	pass	55 on	115 on	170 on	265 on	315 on	415 on

Month	Short	7/8″	15/16"	1‴	1 1/32"	1 1/16"	1 1/8"	1 3/16"
Aug. 11	100 off	pass	75 on	130 on	175 on	275 on	350 on	450 on
Aug. 18	100 off	pass	50 on	105 on	160 on	235 on	310 on	410 on
Aug. 25	100 off	pass	75 on	100 on	125 on	235 on	310 on	410 on
Sept.         1           Sept.         8           Sept.         15           Sept.         22           Sept.         29	100 off	pass	65 on	100 on	135 on	240 on	315 on	410 on
	100 off	pass	60 on	95 on	140 on	215 on	290 on	400 on
	100 off	pass	60 on	95 on	135 on	210 on	285 on	395 on
	100 off	pass	50 on	100 on	150 on	235 on	310 on	400 on
	100 off	pass	45 on	100 on	150 on	275 on	345 on	445 on
Oct.         6           Oct.         13           Oct.         20           Oct.         27	100 off	pass	10 on	65 on	115 on	250 on	315 on	415 on
	100 off	pass	15 on	75 on	130 on	260 on	335 on	435 on
	100 off	pass	20 on	70 on	125 on	250 on	325 on	425 on
	100 off	pass	20 on	75 on	130 on	255 on	330 on	430 on
Nov. 3	100 off	pass	40 on	95 on	150 on	275 on	350 on	450 on
Nov. 10	100 off	pass	50 on	105 on	165 on	275 on	350 on	450 on
Nov. 17	100 off	pass	50 on	110 on	170 on	275 on	350 on	450 on
Nov. 24	100 off	pass	45 on	105 on	165 on	265 on	340 on	440 on
Dec. 1	100 off	pass	45 on	105 on	165 on	245 on	320 on	420 on
Dec. 8	100 off	pass	35 on	105 on	170 on	245 on	310 on	415 on
Dec. 15	100 off	pass	50 on	120 on	190 on	270 on	325 on	415 on
Dec. 22	100 off	pass	35 on	95 on	155 on	250 on	300 on	375 on
Dec. 29	100 off	pass	35 on	100 on	165 on	260 on	300 on	390 on
Jan. 5	100 off	pass	40 on	105 on	165 on	255 on	290 on	380 on
Jan. 12	100 off	pass	40 on	90 on	140 on	255 on	305 on	390 on
Jan. 19	100 off	pass	35 on	90 on	150 on	250 on	300 on	385 on
Jan. 26	100 off	pass	30 on	90 on	150 on	245 on	290 on	380 on
	14-3		MIDI	DLING				
Aug. 11	100 off	pass	30 on	100 on	150 on	240 on	315 on	415 on
Aug. 18	100 off	pass	50 on	80 on	110 on	210 on	285 on	385 on
Aug. 25	100 off	pass	50 on	60 on	75 on	200 on	275 on	375 on
Sept. 1	100 off	pass	50 on	75 on	100 on	185 on	260 on	360 on
Sept. 8	100 off	pass	45 on	75 on	100 on	175 on	250 on	335 on
Sept. 15	100 off	pass	45 on	70 on	100 on	165 on	235 on	325 on
Sept. 22	100 off	pass	30 on	65 on	105 on	185 on	260 on	350 on
Sept. 29	100 off	pass	15 on	50 on	90 on	190 on	265 on	365 on
Oct.         6           Oct.         13           Oct.         20           Oct.         27	100 off	pass	10 on	45 on	80 on	185 on	260 on	360 on
	100 off	pass	10 on	45 on	80 on	210 on	295 on	395 on
	100 off	pass	10 on	40 on	80 on	225 on	300 on	400 on
	100 off	pass	20 on	55 on	90 on	250 on	325 on	425 on
Nov. 3	100 off	pass	30 on	75 on	120 on	250 on	315 on	415 on
Nov. 10	100 off	pass	25 on	70 on	115 on	245 on	320 on	420 on
Nov. 17	100 off	pass	25 on	70 on	115 on	245 on	320 on	420 on
Nov. 24	100 off	pass	25 on	70 on	110 on	235 on	315 on	415 on
Dec. 1	100 off	pass	35 on	85 on	130 on	225 on	290 on	390 on
Dec. 8	100 off	pass	35 on	75 on	125 on	215 on	290 on	390 on
Dec. 15	100 off	pass	45 on	90 on	140 on	245 on	300 on	390 on
Dec. 22	100 off	pass	25 on	75 on	125 on	225 on	280 on	375 on
Dec. 29	100 off	pass	30 on	80 on	130 on	235 on	275 on	375 on
Jan. 5	100 off	pass	25 on	75 on	125 on	220 on	270 on	370 on
Jan. 12	100 off	pass	15 on	55 on	100 on	215 on	265 on	350 on
Jan. 19	100 off	pass	15 on	65 on	120 on	215 on	265 on	350 on
Jan. 26	100 off	pass	15 on	65 on	120 on	215 on	265 on	350 on

### Table 1-a. Staple differences used in calculating the central market value of cotton. STRICT MIDDLING

Month	Short	7/8"	15/16"	1‴	1 1/32"	1 1/16"	1 1/8"	1 3/16'
Aug. 11	100 off	pass	40 on	95 on	150 on	240 on	315 on	415 on
Aug. 18	100 off	pass	35 on	85 on	135 on	210 on	285 on	385 on
Aug. 25	100 off	pass	35 on	85 on	135 on	210 on	285 on	385 on
Sept.         1.           Sept.         8.           Sept.         15.           Sept.         22.           Sept.         29.	100 off	pass	50 on	85 on	125 on	210 on	280 on	380 on
	100 off	pass	50 on	75 on	110 on	195 on	265 on	365 on
	100 off	pass	55 on	70 on	100 on	180 on	255 on	350 on
	100 off	pass	45 on	75 on	100 on	200 on	275 on	365 on
	100 off	pass	20 on	55 on	85 on	185 on	260 on	360 on
Oct. 6	100 off	pass	25 on	55 on	85 on	185 on	260 on	360 on
Oct. 13	100 off	pass	15 on	45 on	75 on	175 on	250 on	350 on
Oct. 20	100 off	pass	15 on	45 on	75 on	175 on	250 on	350 on
Oct. 27	100 off	pass	30 on	65 on	100 on	210 on	255 on	385 on
Nov. 3	100 off	pass	30 on	65 on	105 on	215 on	290 on	390 on
Nov. 10	100 off	pass	25 on	65 on	95 on	205 on	280 on	380 on
Nov. 17	100 off	pass	25 on	65 on	95 on	205 on	280 on	380 on
Nov. 24	100 off	pass	20 on	60 on	85 on	200 on	275 on	375 on
Dec. 1	100 off	pass	15 on	60 on	105 on	180 on	255 on	355 on
Dec. 8	100 off	pass	10 off	35 on	80 on	145 on	220 on	320 on
Dec. 15	95 off	pass	25 on	70 on	120 on	190 on	240 on	315 on
Dec. 22	90 off	pass	25 on	60 on	100 on	200 on	265 on	325 on
Dec. 29	100 off	pass	25 on	35 on	85 on	200 on	260 on	325 on
Jan. 5 Jan. 12 Jan. 19 Jan. 26	100 off 100 off 100 off 100 off 100 off	pass pass pass pass	25 on. 10 on 15 on 20 on	35 on 40 on 45 on 45 on	85 on 70 on 75 on 75 on	190 on 185 on 190 on 175 on	255 on 240 on 240 on 225 on	325 on 310 on 315 on 300 on

Table 1-a. Staple differences used in calculating the central market value of cotton. STRICT LOW MIDDLING

LOW MIDDLING

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Aug. 11	100 off	pass	100 on	140 on	175 on	300 on	365 on	465 on
Aug. 18	100 off	pass	65 on	110 on	150 on	275 on	350 on	440 on
Aug. 25	100 off	pass	65 on	100 on	150 on	275 on	350 on	450 on
Sept.         1.           Sept.         8.           Sept.         15.           Sept.         22.           Sept.         29.	100 off	pass	35 on	80 on	125 on	300 on	375 on	450 on
	100 off	pass	65 on	90 on	175 on	310 on	375 on	460 on
	100 off	pass	80 on	100 on	195 on	315 on	390 on	475 on
	100 off	pass	65 on	100 on	135 on	285 on	365 on	465 on
	100 off	pass	75 on	100 on	150 on	260 on	355 on	455 on
Oct.         6           Oct.         13           Oct.         20           Oct.         27	100 off	pass	40 on	75 on	100 on	240 on	315 on	415 on
	100 off	pass	60 on	80 on	100 on	225 on	300 on	400 on
	100 off	pass	40 on	65 on	90 on	215 on	290 on	390 on
	100 off	pass	50 on	75 on	100 on	225 on	300 on	400 on
Nov. 3	100 off	pass	15 on	40 on	65 on	185 on	260 on	360 on
Nov. 10	100 off	pass	5 on	20 on	55 on	180 on	255 on	355 on
Nov. 17	100 off	pass	10 on	35 on	55 on	180 on	255 on	355 on
Nov. 24	100 off	pass	5 on	30 on	45 on	170 on	245 on	345 on
Dec. 1	100 off	pass	10 off	30 on	65 on	180 on	255 on	355 on
Dec. 8	100 off	pass	35 off	5 on	40 on	140 on	215 on	315 on
Dec. 15	100 off	pass	35 on	50 on	75 on	180 on	245 on	330 on
Dec. 22	100 off	pass	25 on	50 on	75 on	150 on	215 on	290 on
Dec. 29	100 off	pass	25 on	30 on	75 on	135 on	210 on	280 on
Jan. 5 Jan. 12 Jan. 19 Jan. 26.4	100 off 100 off 100 off 100 off	pass pass pass pass	25 on 25 on 25 on 25 on 25 on	40 on 50 on 50 on 45 on	80 on 75 on 75 on 65 on	140 on 150 on 150 on 140 on	205 on 215 on 215 on 205 on	270 on 280 on 280 on 280 on

Month	Short	7/8″	15/16"	1‴	1 1/32"	1 1/16"	1 1/8"	1 3/16"
Aug. 11	100 off	pass	95 on	130 on	170 on	295 on	365 on	465 on
Aug. 18	90 off	pass	65 on	110 on	150 on	275 on	355 on	435 on
Aug. 25	90 off	pass	65 on	110 on	150 on	275 on	350 on	440 <sup>*</sup> on
Sept.         1.           Sept.         8.           Sept.         15.           Sept.         22.           Sept.         29.	115 off	pass	35 on	100 on	145 on	300 on	375 on	450 on
	100 off	pass	65 on	90 on	175 on	300 on	375 on	450 on
	100 off	pass	75 on	90 on	190 on	310 on	365 on	435 on
	100 off	pass	65 on	100 on	135 on	285 on	365 on	440 on
	100 off	pass	65 on	90 on	140 on	260 on	355 on	455 on
Oct.         6           Oct.         13           Oct.         20           Oct.         27	100 off	pass	60 on	85 on	115 on	250 on	335 on	435 on
	100 off	pass	75 on	100 on	115 on	240 on	305 on	405 on
	100 off	pass	40 on	65 on	90 on	215 on	290 on	390 on
	100 off	pass	50 on	75 on	100 on	225 on	300 on	400 on
Nov. 3	100 off	pass	15 on	40 on	65 on	185 on	260 on	360 on
Nov. 10	100 off	pass	10 on	25 on	55 on	180 on	255 on	355 on
Nov. 17	100 off	pass	10 on	35 on	55 on	180 on	255 on	355 on
Nov. 24	100 off	pass	5 on	30 on	45 on	170 on	245 on	345 on
Dec. 1	100 off	pass	10 off	30 on	65 on	180 on	255 on	355 on
Dec. 8	100 off	pass	25 off	15 on	50 on	150 on	245 on	345 on
Dec. 15	100 off	pass	35 on	50 on	75 on	180 on	175 on	345 on
Dec. 22	100 off	pass	25 on	50 on	55 on	150 on	215 on	315 on
Dec. 29	100 off	pass	25 on	50 on	75 on	135 on	210 on	280 on
Jan. 5 Jan. 12 Jan. 19 Jan. 26	100 off 100 off 100 on 100 off	pass pass pass pass	25 on 25 on 25 on 25 on 25 on	40 on 50 on 50 on 45 on	80 on 75 on 75 on 65 on	140 on 150 on 150 on 140 on	210 on 215 on 215 on 205 on	310 on 315 on 315 on 305 on
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Aug. 11	100 off	pass	95 on	130 on	170 on	295 on	365 on	465 on
Aug. 18	90 off	pass	65 on	110 on	150 on	275 on	355 on	450 on
Aug. 25	100 off	pass	65 on	120 on	160 on	285 on	370 on	475 on
Sept.         1.           Sept.         8.           Sept.         15.           Sept.         22.           Sept.         29.	115 off	pass	35 on	100 on	145 on	300 on	375 on	650 on
	100 off	pass	75 on	90 on	180 on	300 on	375 on	425 on
	100 off	pass	75 on	90 on	190 on	310 on	365 on	425 on
	100 off	pass	65 on	100 on	135 on	285 on	365 on	440 on
	100 off	pass	65 on	90 on	140 on	260 on	355 on	455 on
Oct.         6           Oct.         13           Oct.         20           Oct.         27	100 off	pass	60 on	85 on	115 on	250 on	335 on	435 on
	100 off	pass	75 on	100 on	110 on	235 on	310 on	410 on
	100 off	pass	40 on	65 on	90 on	215 on	290 on	390 on
	100 off	pass	50 on	75 on	100 on	225 on	300 on	400 on
Nov. 3	100 off	pass	15 on	40 on	65 on	185 on	260 on	360 on
Nov. 10	100 off	pass	10 on	25 on	55 on	180 on	255 on	355 on
Nov. 17	100 off	pass	10 on	35 on	55 on	180 on	255 on	355 on
Nov. 24	100 off	pass	5 on	30 on	50 on	175 on	250 on	350 on
Dec. 1	100 off	pass	5 off	30 on	55 on	170 on	245 on	345 on
Dec. 8	100 off	pass	25 off	15 on	50 on	150 on	245 on	345 on
Dec. 15	100 off	pass	35 on	50 on	75 on	180 on	245 on	345 on
Dec. 22	100 off	pass	25 on	50 on	75 on	150 on	215 on	315 on
Dec. 29	100 off	pass	25 on	50 on	75 on	130 on	210 on	310 on
Jan. 5	100 off	pass	25 on	40 on	80 on	135 on	210 on	310 on
Jan. 12	100 off	pass	25 on	50 on	75 on	150 on	215 on	315 on
Jan. 19	100 off	pass	25 on	50 on	75 on	150 on	215 on	315 on
Jan. 26	100 off	pass	25 on	45 on	65 on	140 on	215 on	315 on

#### Table 1-a. Staple differences used in calculating the central market value of cotton. STRICT GOOD ORDINARY