

COTTONSEED QUALITY

CROP OF 1976



UNITED STATES DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service Cotton Division

Memphis, Tennessee

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Cottonseed Quality - 1976 Crop

Cottonseed from the 1976 crop was higher in grade than a year earlier, according to the Cotton Division, Agricultural Marketing Service, USDA. The average grade was 97.5, up from 96.5 for the 1975 crop and 95.5 in 1974. The quality index was 98.4 against 97.0 and 96.5 in 1975 and 1974, respectively. Free fatty acids content was lower than 1975, foreign matter content was slightly higher, and moisture content was the same. The quantity index of cottonseed from the 1976 crop was 98.93, down from 99.50 the previous year. Average oil content of seed from the 1976 crop was slightly lower than the previous year while ammonia content was higher.

Data from grade certificates covering 52,048 samples of cottonseed were used to compile the information included in this report. Averages of cottonseed quantity and quality factors, and grades are shown by states (when sufficient certificates were received), by classing office territories, by months and by specified frequencies. Average grade factors of cottonseed are shown by states in Table 3. Data from Arizona and California are included in the "all other" category because only a light volume of cottonseed from these states was officially graded. The averages in this report are arithmetic means of grade factors and indexes tabulated and averaged from the individual grade certificates issued by chemists licensed by the U. S. Department of Agriculture.

The summary of national averages appearing in Table 1 below and presented in other tables of this report are based on state quantity and quality factors, and grades weighted by the number of certificates received.

Table 1. Cottonseed grade factors, indexes and grades,
1952-1976

Year beginning August 1	Quantity Factors			Quality Factors			Quantity	Quality	Average grade	Number of samples
	Oil Percent	Ammonia Percent	Linters Percent	Moisture Percent	Free fatty acids Percent	Foreign matter Percent				
1952	18.6	4.04	-	9.5	1.0	0.9	102.95	98.1	101.0	145,146
1953	18.7	4.00	-	9.0	0.7	0.8	103.46	99.0	102.5	166,916
1954	18.2	4.12	11.4	9.2	0.7	1.0	102.07	99.2	101.5	128,983
1955	18.9	3.95	10.4	10.4	0.7	0.9	102.96	98.9	102.0	101,174
1956	18.9	4.12	10.2	9.1	0.5	0.8	103.51	99.5	103.0	79,071
1957	18.8	3.78	10.0	12.5	2.5	1.3	100.81	92.9	93.5	74,016
1958	19.0	3.76	10.4	11.5	1.4	1.0	102.09	97.0	99.0	72,076
1959	18.8	3.89	10.2	11.4	1.3	0.9	102.10	97.1	100.0	87,772
1960	18.6	3.98	9.7	11.7	1.6	1.1	100.70	95.7	96.0	83,410
1961	18.8	3.83	10.1	10.9	0.9	1.2	101.16	98.0	99.5	92,251
1962	18.2	3.96	10.1	11.1	1.4	1.1	98.54	97.6	96.5	98,390
1963	18.7	4.05	10.3	9.3	0.7	1.1	103.55	99.2	103.0	86,035
1964	18.4	3.98	10.4	10.6	0.9	1.1	102.07	98.5	100.5	91,881
1965	18.0	4.00	10.3	11.1	1.2	1.2	100.49	97.9	98.5	108,828
1966	18.2	3.97	10.8	10.7	0.9	1.3	101.84	98.8	101.0	71,072
1967	18.4	3.89	10.7	10.1	0.9	1.3	101.97	98.5	100.5	45,838
1968	18.0	3.91	11.2	10.6	0.7	1.2	100.91	98.9	100.0	67,254
1969	17.9	3.97	11.1	10.6	0.9	1.3	101.03	98.3	99.5	62,522
1970	17.8	3.92	11.3	10.8	1.6	1.3	100.52	97.1	98.0	60,118
1971	17.7	3.84	11.0	11.1	1.5	1.5	99.29	96.2	95.5	57,960
1972	17.3	3.92	1/	11.9	1.6	1.6	97.67	95.7	94.0	71,210
1973	18.0	3.94	1/	11.0	1.3	1.4	100.81	96.7	98.0	62,504
1974	17.7	3.82	1/	11.0	1.6	1.6	98.42	96.5	95.5	61,114
1975	18.0	3.75	1/	10.6	1.4	1.6	99.50	97.0	96.5	44,250
1976	17.7	3.88	1/	10.6	0.7	1.8	98.93	98.4	97.5	52,048

1/ The linters factor was eliminated from official grade standards effective September 4, 1972.

Standards for Grades of Cottonseed Sold or Offered for Sale
for Crushing Purposes Within the United States

Determination of grade. The grade of cottonseed shall be determined from the analysis of samples, and it shall be the result, stated in the nearest whole or half number, obtained by multiplying a quantity index by a quality index and dividing the result by 100. The quantity index and the quality index shall be determined as hereinafter provided.

- (a) The basis grade of cottonseed shall be grade 100.
- (b) High grades of cottonseed shall be those grades above 100.
- (c) Low grades of cottonseed shall be those grades below 100.

Determination of quantity index. The quantity index of cottonseed shall be determined as follows:

- (a) For Upland cottonseed the quantity index shall equal 4 times the percentage of oil plus 6 times the percentage of ammonia plus 5.
- (b) For American Pima cottonseed the quantity index shall equal 4 times the percentage of oil plus 6 times the percentage of ammonia minus 10.

Determination of quality index. The quality index of cottonseed shall be an index of purity and soundness, and shall be determined as follows:

- (a) Prime quality cottonseed. Cottonseed that by analysis contain not more than 1.0 percent of foreign matter, not more than 12.0 percent of moisture, and not more than 1.8 percent free fatty acids in the oil in the seed, shall be known as prime quality cottonseed and shall have a quality index of 100.
- (b) Below prime quality cottonseed. The quality index of cottonseed that by analysis contain foreign matter, moisture, or free fatty acids in the oil in the seed, in excess of the percentage prescribed in (a) above shall be found by reducing the quality index of prime quality cottonseed as follows:
 - (1) Four-tenths of a unit for each 0.1 percent of free fatty acids in the oil in the seed in excess of 1.8 percent.
 - (2) One-tenth of a unit for each 0.1 percent of foreign matter in excess of 1.0 percent.
 - (3) One-tenth of a unit for each 0.1 percent of moisture in excess of 12.0 percent.
- (c) Off quality cottonseed. Cottonseed that has been treated by either mechanical or chemical process other than the usual cleaning, drying, and ginning (except sterilization required by the United States Department of Agriculture for quarantine purposes) or that are fermented or hot, or that upon analysis are found to contain 12.5 percent or more of free fatty acids in the oil in the seed, or more than 10.0 percent of foreign matter, or more than 20.0 percent of moisture, or more than 25.0 percent of moisture and foreign matter combined, shall be designated as "off quality cottonseed".
- (d) Below grade cottonseed. Cottonseed the grade of which when calculated according to the foregoing is below grade 40.0 shall be designated as "below grade cottonseed" and a numerical grade shall not be indicated.

Table 2. Examples of the computation of cottonseed quality and quantity indexes and grades, by qualities in accordance with the Official Standards of the United States 1/

Ex- ample 2/	Quality Factors								Quantity Factors								Grade			
	FFA 3/		FM 4/		H ₂ O 5/		Total reduc- tions 6/		Qual- ity index		Oil 7/		NH ₃ 8/		Sum of pro- ducts		Ad just- ment factors			
	Total Re- duction	Pct.	Total Re- duction	Pct.	Total Re- duction	Pct.	Total Re- duction	Pct.	Total	Pct.	Total	Pct.	Total	Pct.	Total	Pct.	Total	Pct.		
Pct. Units																				
1	0.5	0.0	0.3	0.0	10.0	0.0	0.0	100.0	19.0	76.0	3.60	21.60	97.60	45	102.60	102.5				
2	1.8	0.0	1.0	0.0	12.0	0.0	0.0	100.0	17.8	71.2	4.10	24.60	95.80	45	100.80	101.0				
3	1.2	0.0	0.8	0.0	9.6	0.0	0.0	100.0	16.2	64.8	3.97	23.82	88.62	45	93.62	93.5				
BELOW PRIME QUALITY SEED																				
4	1.9	0.4	1.0	0.0	12.0	0.0	0.4	99.6	18.5	74.0	3.50	21.00	95.00	45	100.00	99.5				
5	1.8	0.0	1.1	0.1	12.0	0.0	0.1	99.9	19.7	78.8	3.75	22.50	101.30	45	106.30	106.0				
6	1.8	0.0	1.0	0.0	12.1	0.1	0.1	99.9	17.3	69.2	4.23	25.38	94.58	45	99.58	99.5				
7	1.9	0.4	1.1	0.1	12.1	0.1	0.6	99.4	15.8	63.2	2.98	17.88	81.08	45	86.08	85.5				
8	2.5	2.8	3.2	2.2	7.4	0.0	5.0	95.0	24.7	98.8	4.15	24.90	123.70	-10	113.70	108.0 AP	1	3		
OFF QUALITY SEED																				
9	12.5	42.8	0.7	0.0	12.0	0.0	42.8	57.2	20.1	80.4	3.67	22.02	102.42	45	107.42	61.5				
10	1.8	0.0	10.1	9.1	12.0	0.0	9.1	90.9	16.9	67.6	4.13	24.78	92.38	45	97.38	88.5				
11	1.8	0.0	1.0	0.0	20.1	8.1	8.1	91.9	18.8	75.2	3.80	22.80	98.00	45	103.00	94.5				
12	1.8	0.0	15.8	14.8	11.1	0.0	14.8	85.2	19.3	77.2	4.06	24.48	101.68	45	106.68	91.0				
13	4.6	11.2	11.5	10.5	9.2	0.0	21.7	78.3	16.4	65.6	4.32	25.92	91.52	45	96.52	75.5				
BELOW GRADE SEED																				
14	10.5	34.8	20.8	19.8	15.6	3.6	58.2	41.8	17.0	68.0	3.41	20.46	88.46	+5	93.46	BG*				
15	17.5	62.8	0.5	0.0	14.1	2.1	64.9	35.1	19.5	78.0	3.94	23.64	101.64	+5	106.64	BG*				

1/ Important key figures that determine the range of various qualities of cottonseed are underscored.

2/ Example "8", demonstration of application of grading system on American Pima seed; all others relate to upland cottonseed.

3/ Free fatty acids in the oil in the seed.

4/ Foreign matter in the seed.

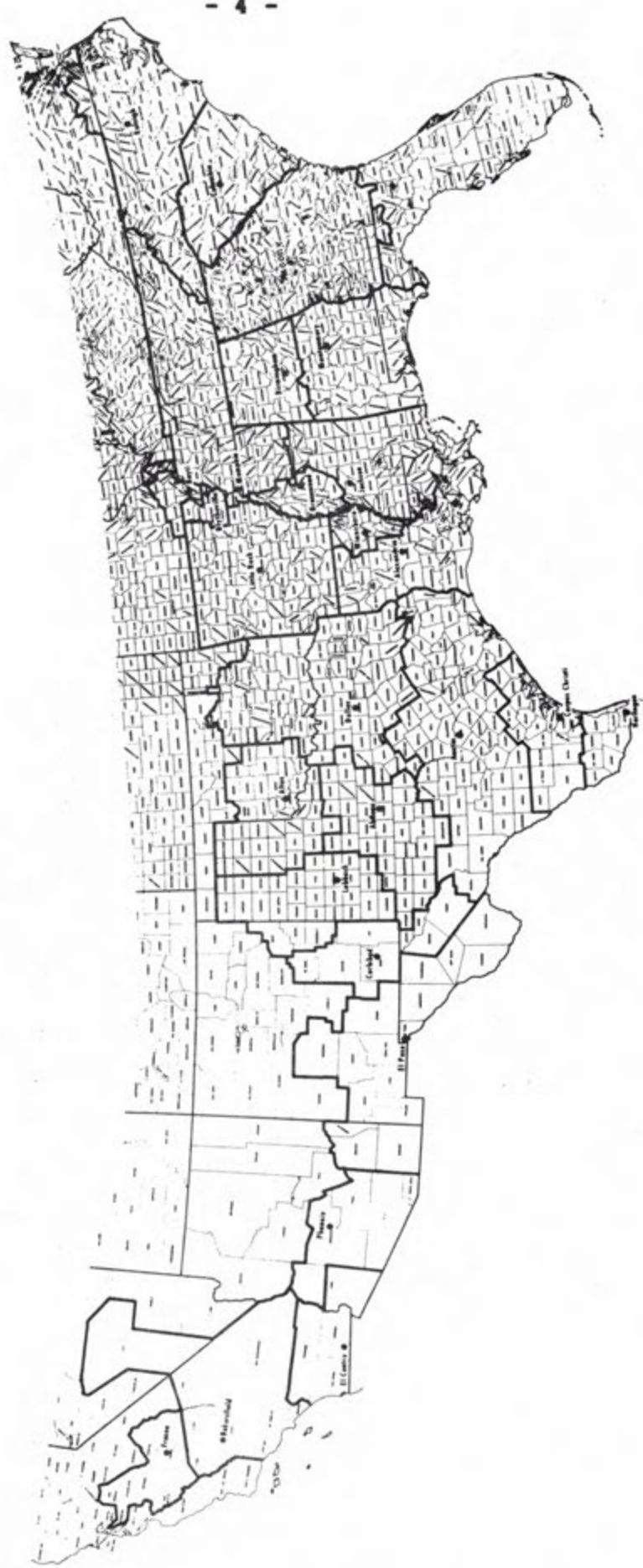
5/ Reductions are the adjustments made in the quality index for excesses of free fatty acids, foreign matter, and moisture above or below tolerances.

6/ "Products" are percentages of oil and ammonia in the seed multiplied by the factor used in computing the quantity index.

7/ Ammonia in the seed.

8/ Below grade 40. No numerical grade is indicated.

UNITED STATES
Smith-Doxey Cotton Classing Office Territories



AGRICULTURAL MARKETING SERVICE, USDA

July 27, 1977

Table 3. Cottonseed: Quality factors, indexes and grades, by states and United States, 1975 and 1976

State	Cottonseed analysis										Average Index				Average grade	
	011		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality			
	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976
NC	19.3	19.2	4.09	4.28	11.3	10.5	7.3	0.7	1.2	1.0	106.95	107.43	76.6	99.4	81.5	107.0
SC	19.4	19.8	4.08	4.20	11.0	10.4	5.6	0.9	1.2	1.1	107.50	109.86	84.0	98.8	90.5	109.0
GA	19.8	19.9	3.90	4.17	11.0	10.4	5.7	3.2	0.9	0.7	107.93	109.81	84.3	93.8	90.5	103.0
AL	18.9	18.1	3.64	3.89	11.8	11.7	3.1	1.0	1.6	1.7	102.43	100.90	93.3	98.0	95.5	99.0
MS	18.1	16.6	3.59	3.82	12.2	11.8	1.1	0.5	1.2	1.4	98.72	94.22	98.4	98.8	97.5	93.5
TN	18.4	17.3	3.55	3.71	12.7	11.9	1.2	0.5	1.1	2.1	99.72	96.22	98.4	98.3	98.5	95.0
MO	17.6	16.6	3.61	3.89	12.5	11.7	1.1	0.5	1.1	1.3	96.90	94.52	98.5	98.8	96.0	94.0
AR	17.5	16.6	3.68	3.90	11.9	11.5	0.8	0.4	0.8	1.0	97.17	94.44	99.0	99.3	96.5	94.0
LA	18.6	17.4	3.52	3.82	11.7	10.8	1.0	0.5	0.7	0.9	100.34	97.50	99.1	99.6	99.5	97.5
OK	18.4	18.4	3.89	4.18	9.3	9.0	0.6	0.6	2.3	1.8	101.76	103.85	98.6	99.2	100.5	103.0
TX	17.6	18.3	3.90	3.86	8.3	9.2	0.7	0.6	2.5	2.7	98.61	101.41	97.9	98.0	97.0	99.5
NM	19.2	19.6	3.85	3.77	7.4	8.7	0.4	0.6	2.2	2.5	104.56	106.29	98.7	98.2	103.5	105.0
All other	18.8	18.5	3.96	3.98	8.1	8.6	1.4	0.8	1.2	1.4	103.77	102.82	96.5	99.2	100.5	102.5
U. S.	18.0	17.7	3.75	3.88	10.6	10.6	1.4	0.7	1.6	1.8	99.50	98.93	97.0	98.4	96.5	97.5

Table 4. Cottonseed: Quality factors, indexes and grades, by specified periods and states, 1975 and 1976

NORTH CAROLINA

Month	Cottonseed analysis												Average index				Average grade				Samples			
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1975		1976		1975		1976		No.	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	No.	No.
Sept.	17.5	20.7	4.07	4.07	12.9	9.6	1.2	8.0	0.7	0.9	98.83	112.50	99.1	77.5	98.5	87.5	6	2						
Oct.	19.3	18.9	4.15	4.25	11.6	11.9	8.4	0.5	0.5	0.5	107.36	106.44	74.1	99.2	78.5	106.0	138	102						
Nov.	19.4	19.2	4.06	4.29	11.3	10.1	7.7	0.5	1.3	1.0	106.91	107.55	74.3	99.7	80.0	107.5	316	310						
Dec.	19.3	19.1	4.08	4.26	11.0	10.6	5.5	0.7	1.2	1.4	106.92	107.12	83.7	99.3	88.0	106.5	98	126						
Jan.	19.2	19.2	4.20	4.38	10.1	11.0	4.2	0.8	2.0	1.4	107.57	107.66	90.0	99.2	96.5	107.5	14	22						
Feb.	18.9	19.2	3.92	4.31	10.6	9.6	6.9	1.2	1.0	1.5	104.67	107.58	80.1	98.9	85.5	107.0	6	20						
Mar. and later	20.0	20.1	4.30	4.34	9.1	9.4	7.6	1.3	2.2	1.1	110.63	110.77	76.8	99.2	83.0	110.0	4	26						
Season	19.3	19.2	4.09	4.28	11.3	10.5	7.3	0.7	1.2	1.0	106.95	107.43	76.6	99.4	81.5	107.0	582	608						
SOUTH CAROLINA																								
Sept.	19.0	18.8	4.00	4.18	11.8	10.7	2.2	3.2	1.7	0.9	105.14	105.29	92.0	88.6	98.5	96.0	44	34						
Oct.	19.1	19.4	4.06	4.17	11.6	11.9	6.4	0.6	1.1	0.6	105.90	108.08	80.3	99.1	84.5	107.5	286	280						
Nov.	19.5	19.9	4.07	4.23	11.4	10.1	6.1	0.6	1.1	1.0	107.81	110.21	81.9	99.5	88.5	110.0	316	494						
Dec.	19.7	19.9	4.07	4.15	10.2	10.6	4.1	0.8	1.1	1.4	108.76	109.64	90.5	99.1	98.5	109.0	182	284						
Jan.	19.4	20.2	4.18	4.22	10.1	10.1	5.9	1.2	1.3	1.0	107.99	111.61	84.4	98.6	91.0	110.0	74	118						
Feb.	19.8	20.3	4.09	4.26	9.5	8.9	5.1	1.2	1.7	1.3	108.84	111.97	86.3	99.3	94.5	111.5	58	90						
Mar. and later	20.1	20.2	4.18	4.23	9.1	9.0	5.8	2.0	1.6	1.3	110.56	111.27	85.1	97.1	93.0	108.0	40	102						
Season	19.4	19.8	4.08	4.20	11.0	10.4	5.6	0.9	1.2	1.1	107.50	109.86	84.0	98.8	90.5	109.0	1,000	1,402						
GEORGIA																								
Aug.	-	19.7	-	4.07	-	9.6	-	6.0	-	0.9	-	108.75	-	-	87.5	-	91.0	-	2					
Sept.	19.3	19.3	4.13	4.02	10.0	10.6	6.4	7.7	1.2	1.9	107.29	105.88	80.8	64.7	87.0	73.5	14	12						
Oct.	19.6	19.3	3.91	4.17	11.4	11.4	6.4	2.1	0.8	0.6	107.31	107.71	81.5	97.4	87.0	105.0	266	310						
Nov.	19.9	20.0	3.88	4.19	11.4	10.0	6.5	2.6	0.7	0.6	108.01	110.38	81.1	96.2	87.0	106.5	548	742						
Dec.	20.0	19.7	3.90	4.13	10.7	10.8	4.9	3.1	0.8	0.7	108.46	109.02	87.2	94.1	94.5	102.5	386	358						
Jan.	19.6	20.0	3.92	4.16	11.0	11.0	3.8	4.3	1.1	0.9	107.39	110.34	91.9	89.9	99.0	99.5	120	128						
Feb.	19.4	20.4	4.00	4.19	9.8	9.4	4.9	5.1	1.9	1.0	107.01	112.17	85.9	87.2	92.5	97.5	54	138						
Mar. and later	19.8	20.2	4.02	4.20	10.1	9.1	4.0	6.0	1.2	1.6	108.52	111.47	91.3	82.3	99.0	92.5	60	100						
Season	19.8	19.9	3.90	4.17	11.0	10.4	5.7	3.2	0.9	0.7	107.93	109.81	84.3	93.8	90.5	103.0	1,448	1,790						

Table 4. Cottonseed: Quality factors, indexes and grades, by specified periods and states, 1975 and 1976 (Continued)

ALABAMA

Month	Cottonseed analysis												Average index						Average grade				Samples			
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Pot.		Pot.		Quantity		Quality		1975		1976		1975			
	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	No.	No.		
Sept.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	83.5	89.5	85.0	10	28			
Sept.	18.0	18.5	3.77	3.86	12.3	11.7	4.3	5.7	2.3	1.7	99.75	102.09	89.2	99.2	94.0	100.5	442	596								
Oct.	18.8	18.1	3.61	4.01	12.2	11.5	3.4	1.2	1.3	1.2	101.80	101.66	92.3	98.3	95.5	101.0	978	1,104								
Nov.	18.9	18.3	3.64	3.91	12.1	11.6	3.1	0.6	1.5	1.4	102.49	101.60	93.2	99.0	98.0	97.5	744	646								
Dec.	19.2	17.8	3.65	3.79	11.6	12.4	2.6	0.8	1.8	1.8	102.95	98.95	95.0	98.0	98.0	97.5	97.5	744								
Jan.	18.8	17.9	3.67	3.84	11.4	12.6	3.3	1.1	1.8	2.2	102.22	99.52	92.5	96.6	94.5	97.0	97.0	254	236							
Feb.	18.7	18.6	3.70	3.82	10.6	10.8	3.6	1.3	1.9	2.9	101.98	102.29	91.6	96.9	93.5	99.5	99.5	128	126							
Mar. and later	18.8	18.4	3.66	3.90	10.9	10.4	4.4	1.9	2.2	2.9	101.86	101.88	88.6	95.7	90.5	98.0	98.0	70	142							
Season	18.9	18.1	3.64	3.89	11.8	11.7	3.1	1.0	1.6	1.7	102.43	100.90	93.3	98.0	95.5	99.0	99.0	2,626	2,878							
MISSISSIPPI																			77.7	-	79.5	-	4			
Aug.	-	19.0	-	3.70	-	9.6	-	7.2	-	2.2	-	103.00	-	-	-	-	-	-	90.0	90.0	20	84				
Sept.	17.1	16.3	3.82	4.06	12.3	11.0	6.9	2.0	2.5	1.0	96.08	94.28	61.5	95.6	71.5	93.5	93.5	1,866	3,954							
Oct.	18.2	16.4	3.63	3.91	12.2	11.8	1.0	0.4	0.9	1.0	99.66	94.12	98.5	99.2	98.5	99.0	99.0	100.0	94.5	3,476	3,490					
Nov.	18.5	16.8	3.60	3.78	12.1	11.6	0.9	0.4	1.1	1.4	100.49	94.81	99.0	99.0	99.0	99.0	99.0	99.0	91.0	2,274	1,002					
Dec.	17.6	16.4	3.56	3.67	12.6	12.4	1.0	0.6	1.4	2.1	96.75	92.54	98.6	98.0	98.0	96.0	96.0	96.0	91.0	528	168					
Jan.	17.3	16.6	3.53	3.65	12.5	12.0	1.3	0.7	1.7	3.4	95.13	93.16	98.1	97.0	97.0	93.5	93.5	90.5	90.5	372	198					
Feb.	17.5	16.7	3.58	3.71	11.7	11.6	1.7	1.1	2.2	3.6	96.15	94.05	97.5	96.1	94.0	90.0	90.0	90.0	92.5	240	174					
Mar. and later	17.6	17.0	3.58	3.75	11.6	10.7	2.9	1.3	2.8	3.2	96.71	95.29	92.7	96.9	90.0	92.5	92.5	92.5	92.5	240	174					
Season	18.1	16.6	3.59	3.82	12.2	11.8	1.1	0.5	1.2	1.4	98.72	94.22	98.4	98.8	97.5	93.5	93.5	8,776	9,074							
TENNESSEE																			92.0	96.0	10	2				
Sept.	17.8	19.7	3.41	3.62	15.7	10.6	1.5	4.5	0.9	1.3	96.50	106.25	96.1	91.2	92.0	96.0	96.0	96.0	99.4	97.5	896	464				
Oct.	18.1	17.2	3.53	3.76	12.9	11.9	0.9	0.5	0.7	0.9	98.41	96.11	98.8	99.4	98.8	99.0	99.0	99.5	766	1,052						
Nov.	18.5	17.5	3.55	3.75	12.8	11.6	1.2	0.4	1.3	1.7	100.35	97.41	98.2	98.8	98.8	99.0	99.0	99.5	97.3	101.5	93.0	270	518			
Dec.	18.9	17.0	3.62	3.66	11.8	12.3	1.2	0.5	1.5	2.8	102.29	94.98	99.1	97.3	97.3	97.0	97.0	97.0	97.0	90.0	46	110				
Jan.	19.5	16.8	3.64	3.61	11.8	12.5	2.3	0.8	1.8	3.7	100.53	93.89	96.4	96.1	96.1	97.0	97.0	97.0	97.0	90.0	46	110				
Feb.	18.2	17.1	3.67	3.61	11.6	11.8	2.7	0.8	2.0	4.1	99.79	94.90	95.6	96.4	96.4	92.0	92.0	92.0	92.0	90.0	28	58				
Mar. and later	18.1	16.6	3.58	3.60	11.8	10.9	3.4	1.3	2.8	4.8	99.02	93.02	91.4	95.2	95.2	89.0	89.0	89.0	89.0	89.0	24	78				
Season	18.4	17.3	3.55	3.71	12.7	11.9	1.2	0.5	1.1	2.1	99.72	96.22	98.4	98.3	98.5	95.0	95.0	95.0	95.0	95.0	2,040	2,282				

Table 4. Cottonseed: Quality factors, indexes and grades, by specified periods and states, 1975 and 1976 (Continued)

MISSOURI

Month	Cottonseed analysis												Average index				Average grade				Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Pot.		Pot.		Pot.		Pot.		Pot.		Pot.	
	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	No.	No.
Sept.	17.5	17.2	3.68	3.92	14.6	10.6	1.7	6.0	1.0	3.6	97.21	98.75	93.1	82.4	91.0	77.5	48	48	48	48	2	
Oct.	17.8	16.5	3.65	3.96	12.2	12.0	1.0	0.6	1.0	1.0	97.77	94.37	99.0	98.7	97.0	94.0	99.0	94.0	99.0	94.0	616	
Nov.	17.3	16.8	3.54	3.90	13.0	11.5	1.1	0.4	1.1	1.2	95.30	95.42	98.5	99.3	94.0	95.0	95.0	95.0	95.0	95.0	746	
Dec.	17.5	16.3	3.55	3.78	12.1	11.7	1.2	0.4	1.3	2.1	96.21	92.80	98.3	98.3	95.5	91.5	138	138	138	138	202	
Jan.	17.3	16.1	3.45	3.63	12.9	12.5	1.7	0.9	1.3	2.3	94.76	90.91	97.4	97.8	93.0	89.0	89.0	89.0	89.0	89.0	22	
Feb.	17.4	16.8	3.65	3.65	11.9	11.9	1.9	1.5	1.4	3.8	96.23	92.80	97.1	94.3	93.5	86.5	86.5	86.5	86.5	86.5	20	
Mar. and later	17.8	16.3	3.64	3.67	11.1	10.6	3.0	1.0	2.1	4.1	97.61	91.97	92.9	96.2	91.5	88.5	88.5	88.5	88.5	88.5	48	
Season	17.6	16.6	3.61	3.89	12.5	11.7	1.1	0.5	1.1	1.3	96.90	94.52	98.5	98.8	96.0	94.0	1,728	1,728	1,728	1,728	1,656	
ARKANSAS																						
Aug.	"	18.2	"	3.70	"	10.6	"	1.9	"	0.9	"	100.13	"	99.7	"	100.0	"	100.0	"	100.0	4	
Sept.	16.9	18.3	3.71	3.96	14.7	11.4	1.1	1.1	0.7	0.8	94.68	102.16	95.9	99.0	91.5	102.0	178	178	178	178	16	
Oct.	17.5	16.5	3.74	3.98	11.6	11.4	0.7	0.4	0.4	0.6	97.47	94.59	99.4	99.6	97.0	94.5	94.5	94.5	94.5	94.5	3,156	
Nov.	17.7	16.8	3.63	3.89	12.3	11.5	0.7	0.4	0.4	0.8	97.54	95.34	98.9	99.4	97.0	95.0	95.0	95.0	95.0	95.0	3,462	
Dec.	17.4	16.3	3.61	3.77	11.9	12.0	0.8	0.5	1.1	1.4	96.17	92.32	99.1	98.9	95.5	91.5	91.5	91.5	91.5	91.5	1,084	
Jan.	17.1	16.0	3.63	3.74	12.5	12.1	1.1	0.6	1.4	2.3	95.20	91.35	98.3	98.1	93.5	89.5	89.5	89.5	89.5	89.5	250	
Feb.	16.9	16.2	3.66	3.77	12.7	11.8	1.8	0.8	1.7	3.2	94.53	92.08	96.2	96.7	91.0	89.0	89.0	89.0	89.0	89.0	204	
Mar. and later	18.0	16.4	3.66	3.85	10.8	11.0	1.6	0.8	1.1	2.4	98.75	93.43	98.1	97.8	97.0	91.5	91.5	91.5	91.5	91.5	110	
Season	17.5	16.6	3.68	3.90	11.9	11.5	0.8	0.4	0.8	1.0	97.17	94.44	99.0	99.3	96.5	94.0	6,936	6,936	6,936	6,936	8,360	
LOUISIANA																						
Sept.	18.4	16.1	3.52	4.09	11.2	11.1	3.3	0.6	0.7	0.7	99.13	93.87	90.7	99.7	93.0	94.0	94.0	94.0	94.0	94.0	150	
Oct.	18.7	17.5	3.49	3.92	11.6	10.7	1.1	0.4	0.4	0.7	0.6	100.75	98.62	98.7	99.8	99.5	98.5	98.5	98.5	98.5	1,900	
Nov.	18.7	17.6	3.51	3.74	12.0	10.7	0.9	0.4	0.7	0.8	101.01	97.71	99.2	99.7	100.5	98.0	1,314	1,314	1,314	1,314	1,406	
Dec.	18.0	16.9	3.57	3.64	11.3	11.4	0.9	0.6	0.9	1.6	98.59	94.42	99.6	98.9	98.5	93.5	93.5	93.5	93.5	93.5	388	
Jan.	17.8	16.6	3.52	3.61	12.0	11.7	1.2	0.9	1.0	2.2	96.94	92.89	99.1	98.4	96.0	91.0	91.0	91.0	91.0	91.0	74	
Feb.	16.9	16.6	3.51	3.64	11.6	11.2	1.4	0.9	1.5	2.8	93.21	92.50	99.1	97.7	92.5	91.5	91.5	91.5	91.5	91.5	32	
Mar. and later	18.2	17.0	3.56	3.69	10.9	10.4	1.5	1.4	0.6	2.4	99.10	95.05	99.2	97.4	98.0	92.5	92.5	92.5	92.5	92.5	26	
Season	18.6	17.4	3.52	3.82	11.7	10.8	1.0	0.5	0.7	0.9	100.34	97.50	99.1	99.6	99.5	97.5	2,700	2,700	2,700	2,700	4,024	

Table 4. Cottonseed: Quality factors, indexes and grades, by specified periods and states, 1975 and 1976 (Continued)

OKLAHOMA

Month	Cottonseed analysis												Average index						Average grade				Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Pet.		Pet.		Pet.		Pet.		Pet.		Pet.		Pet.	
	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	No.	No.
Oct.	18.2	17.8	3.98	4.07	10.2	9.4	1.1	0.6	1.5	1.4	102.00	100.56	97.5	99.4	99.5	100.5	16	24	9	-	-	-	-	-
Nov.	18.3	18.5	3.97	4.21	10.0	9.0	0.5	0.5	1.3	1.7	102.05	104.24	99.5	99.2	101.5	103.5	54	462	-	-	-	-	-	-
Dec.	18.4	18.5	3.94	4.16	9.0	9.0	0.5	0.6	2.2	1.8	102.18	103.81	98.7	99.2	101.0	103.0	654	384	-	-	-	-	-	-
Jan.	18.3	18.2	3.79	4.20	9.6	9.1	0.6	0.7	2.7	1.8	101.01	103.04	98.3	99.1	99.5	102.5	290	14	-	-	-	-	-	-
Feb.	18.1	18.1	3.79	4.10	9.2	9.6	0.9	0.7	3.2	2.1	100.27	101.71	97.6	98.8	98.0	100.5	46	34	-	-	-	-	-	-
Mar. and later	18.2	18.2	3.70	3.77	9.1	8.6	1.7	1.1	2.6	3.6	100.13	101.50	98.5	97.5	98.5	98.5	4	2	-	-	-	-	-	-
Season	18.4	18.4	3.89	4.18	9.3	9.0	0.6	0.6	2.3	1.8	101.76	103.85	98.6	99.2	100.5	103.0	920	-	-	-	-	-	-	-
											TEXAS													
Aug.	17.6	16.7	3.78	3.70	11.2	10.8	1.6	0.7	1.2	0.9	97.76	101.71	98.1	99.3	96.5	101.0	834	1,510	-	-	-	-	-	-
Sept.	16.9	17.0	3.78	3.74	11.0	10.8	1.8	0.9	1.7	1.8	95.10	94.99	95.7	98.2	91.5	93.5	1,034	988	-	-	-	-	-	-
Oct.	16.5	17.5	3.95	3.86	9.1	10.5	1.4	0.9	2.0	2.3	94.74	98.14	95.7	98.1	91.5	96.5	892	1,322	-	-	-	-	-	-
Nov.	17.4	18.7	3.96	3.89	8.2	9.3	0.5	0.5	2.0	2.6	98.27	103.05	98.9	98.3	97.5	101.5	3,216	4,752	-	-	-	-	-	-
Dec.	17.8	18.5	3.92	3.90	7.4	8.6	0.5	0.5	2.6	2.9	99.80	102.23	98.4	98.0	98.5	100.5	5,726	6,796	-	-	-	-	-	-
Jan.	17.8	18.2	3.85	3.88	8.5	8.5	0.5	0.7	3.3	3.6	99.19	100.88	97.7	97.3	97.0	98.5	2,220	2,220	-	-	-	-	-	-
Feb.	17.9	17.9	3.83	3.78	7.9	9.6	0.8	0.9	3.4	4.6	99.58	99.17	97.4	95.3	97.5	94.5	506	626	-	-	-	-	-	-
Mar. and later	17.9	17.9	3.90	3.79	7.8	8.8	1.3	1.2	3.9	5.2	99.58	98.97	94.9	92.8	94.5	92.5	258	250	-	-	-	-	-	-
Season	17.6	18.3	3.90	3.86	8.3	9.2	0.7	0.6	2.5	2.7	98.61	101.41	97.9	98.0	97.0	99.5	14,686	18,464	-	-	-	-	-	-
											NEW MEXICO													
Oct.	20.5	20.6	3.72	3.73	9.2	9.2	0.4	0.4	0.7	1.1	110.36	110.90	99.9	99.5	110.5	110.5	32	78	-	-	-	-	-	-
Nov.	20.0	20.0	3.85	3.75	7.6	8.6	0.4	0.5	1.5	1.7	107.92	107.89	99.3	99.2	107.5	108.0	168	118	-	-	-	-	-	-
Dec.	18.6	19.3	3.87	3.80	6.9	8.5	0.4	0.5	2.5	2.6	102.22	105.10	98.4	98.3	101.0	103.5	170	128	-	-	-	-	-	-
Jan.	18.1	18.5	3.86	3.77	7.4	8.6	0.5	0.9	3.5	4.4	100.28	101.67	97.5	95.3	98.0	97.0	76	52	-	-	-	-	-	-
Feb.	18.9	18.1	3.92	3.80	7.4	8.6	0.5	0.9	3.1	5.7	103.56	100.43	98.0	95.1	102.0	96.5	16	20	-	-	-	-	-	-
Mar. and later	18.2	17.7	4.03	3.70	7.3	9.1	0.6	1.4	2.8	6.4	103.19	97.00	98.0	93.3	101.0	93.0	8	4	-	-	-	-	-	-
Season	19.2	19.6	3.85	3.77	7.4	8.7	0.4	0.6	2.2	2.5	104.56	106.29	98.7	98.2	103.5	105.0	470	400	-	-	-	-	-	-

Table 5. Cottonseed: Quality factors, indexes and grades by classing office territories, by states, 1975 and 1976

SOUTHEASTERN

Classing Office	Cottonseed analysis										Average index						Average grade				Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		1975		1976		Quality		1975		1976	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	1975	1976	1975	1976	1975	1976	1975	1976	No.	No.
Raleigh NC	19.3	19.2	4.09	4.28	11.3	10.4	7.3	0.7	1.2	1.0	106.96	107.45	76.7	99.4	82.0	107.0	592	1/	616	1/		
Columbia SC	19.4	19.8	4.08	4.20	11.0	10.4	5.6	0.9	1.2	1.1	107.50	109.86	84.0	98.8	90.5	109.0	1,000		1,402			
Macon GA	19.8	19.9	3.90	4.17	11.0	10.4	5.7	3.2	0.9	0.7	107.93	109.81	84.3	93.8	90.5	103.0	1,448		1,790			
Birmingham AL	18.7	18.1	3.55	3.79	12.0	12.1	2.6	0.8	1.5	1.8	100.88	99.95	94.9	97.9	96.0	98.0	1,688		1,714			
Montgomery AL	19.3	18.3	3.81	4.04	11.4	11.1	4.0	1.2	1.7	1.5	105.14	102.32	90.2	98.3	95.0	101.0	968	2/	1,222	2/		

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SOUTH CENTRAL

Classing Office	Cottonseed analysis										Average index						Average grade				Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		1975		1976		Quality		1975		1976	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	1975	1976	1975	1976	1975	1976	1975	1976	No.	No.
Greenwood MS	17.9	16.6	3.61	3.85	12.2	11.7	1.0	0.5	1.2	1.4	98.03	94.21	98.4	98.8	97.0	93.5	6,458	6,016				
Jackson MS	18.7	17.2	3.55	3.84	12.2	11.2	1.4	0.5	1.1	1.3	101.15	96.68	98.4	99.0	100.0	96.0	1,012	1,230				
Memphis TN	18.3	16.8	3.57	3.74	12.5	12.0	1.1	0.5	1.1	1.7	99.36	94.44	98.5	98.5	98.0	93.5	3,814	4,778				
AR	18.4	17.3	3.55	3.71	12.7	11.9	1.2	0.5	1.1	2.1	99.72	96.22	98.4	98.3	98.5	95.0	2,040	2,282				
MS	16.9	16.2	3.80	3.92	12.4	11.7	0.8	0.5	0.8	0.8	95.25	93.43	98.9	99.3	94.5	93.0	468	668				
Hayti MO	18.6	16.4	3.51	3.71	12.2	12.3	1.1	0.5	1.3	1.6	100.26	92.59	98.4	98.5	99.0	91.5	1,306	1,828				
Blytheville AR	17.6	16.6	3.61	3.89	12.5	11.7	1.1	0.5	1.1	1.3	96.90	94.52	98.5	98.8	96.0	94.0	1,728	1,656				
Little Rock AR	17.0	16.3	3.70	3.92	12.8	11.7	1.0	0.4	0.8	1.1	94.86	93.69	98.5	99.0	93.5	93.0	2,378	3,050				
Winnisboro LA	18.0	16.7	3.66	3.89	11.4	11.4	0.6	0.4	0.7	0.9	96.73	95.08	99.4	99.4	98.5	95.0	4,090	4,642				
Alexandria LA	18.5	17.3	3.52	3.87	11.8	10.8	0.9	0.5	0.7	0.9	100.30	97.17	99.1	99.6	99.5	97.0	2,190	3,052				

1/ Includes 10 certificates in 1975 and 8 certificates in 1976 for Virginia.

2/ Includes 30 certificates in 1975 and 58 certificates in 1976 for Florida.

Table 5. Cottonseed: Quality factors, indexes and grades by classing office territories, by states, 1975 and 1976 (Continued)

SOUTHWESTERN

REFERENCES

3/ Includes 70 certificates in 1975 and 46 certificates in 1976 for Arizona.

4/ Includes 94 certificates for Texas.

Table 6. Percentage distribution of quantity index by specified frequencies, by states and United States, 1975 and 1976

State	Quantity Index												Total							
	Under 65		65-69		70-74		75-79		80-84		85-89		90-94		95-99		100-104		105 and over	
	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976
Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.7	2.1	1.9	20.5	17.1
SC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	0.1	1.4	22.6	8.6	75.2
GA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.2	1.4	0.5	16.6	8.0
AL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.1	0.8	3.0	8.7	22.6
MS	*	*	*	*	0.1	0.2	0.4	1.6	2.8	12.3	14.9	39.6	39.1	37.9	36.3	7.9	6.4	0.4	100.0	100.0
TN	-	-	-	-	-	-	-	-	0.1	1.1	0.3	6.1	7.1	25.2	43.5	50.3	42.8	16.1	6.2	1.1
MO	-	0.1	-	-	-	-	-	-	-	-	0.4	1.9	7.6	24.2	43.8	55.4	41.8	17.7	6.2	0.8
AR	*	-	*	0.1	0.1	0.1	0.1	0.4	1.9	4.2	11.1	23.4	39.7	44.8	36.8	23.3	9.5	3.7	0.7	100.0
LA	-	-	-	-	-	-	-	-	0.1	0.2	0.7	2.5	5.8	20.7	34.6	50.1	52.4	24.4	6.4	2.1
OK	-	-	-	-	-	-	-	-	-	-	0.4	-	2.4	0.7	23.4	9.6	60.1	52.0	13.7	37.7
TX	*	-	*	-	*	*	0.1	0.3	2.1	1.5	16.8	8.8	40.9	24.5	33.9	40.7	6.0	24.1	100.0	100.0
NM	-	-	-	-	-	-	-	-	0.4	-	0.9	-	4.7	2.0	11.9	11.0	32.4	30.5	49.7	56.5
All other	-	-	-	-	-	-	-	-	-	-	-	-	1.1	2.1	11.4	7.4	54.5	66.2	32.0	23.2
U. S.	*	*	*	*	*	*	*	*	0.1	0.3	0.8	2.1	5.2	14.2	21.1	36.8	30.6	34.3	24.6	12.3

* Less than 0.05 percent.

Table 7. Percentage distribution of quality index by specified frequencies, by states and United States, 1975 and 1976

State	Below grade	Quality Index												Total					
		Below prime quality				95.0-99.9				Prime quality				100					
		1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976		
Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.		
NC	1.4	-	2.1	-	15.8	-	39.4	0.3	13.7	-	14.8	-	6.9	0.3	4.9	50.0	1.0	49.4	
SC	0.4	0.1	0.6	0.1	12.2	0.1	18.0	0.2	12.0	0.3	18.0	0.4	15.0	1.5	18.8	49.3	5.0	48.0	
GA	-	0.1	0.1	-	9.4	1.8	20.9	3.5	13.8	4.2	22.5	11.6	15.6	18.9	14.7	39.8	3.0	20.1	
AL	-	0.1	0.2	0.1	0.6	0.2	2.7	0.4	6.1	0.4	13.0	2.1	25.9	5.5	46.2	64.7	5.3	26.5	
MS	0.1	*	-	0.1	0.1	0.2	0.2	0.3	0.2	0.8	0.4	2.9	2.5	70.8	67.7	24.8	28.9	100.0	
TN	-	-	-	-	-	0.1	-	0.4	0.3	0.4	1.1	2.8	5.7	79.2	75.4	17.1	17.5	100.0	
MO	-	-	-	-	0.6	0.1	-	0.2	-	0.4	0.5	0.7	1.8	2.6	72.4	61.7	24.7	34.3	100.0
AR	-	-	-	0.1	*	0.1	*	*	0.1	0.3	0.3	2.0	1.6	50.7	44.0	46.8	54.0	100.0	
LA	-	-	0.1	-	0.1	-	0.2	*	0.1	-	0.2	-	1.1	0.7	47.3	30.6	50.9	68.7	100.0
OK	-	-	-	-	-	-	-	-	0.2	-	-	-	3.0	0.7	80.1	69.7	16.7	29.6	100.0
TX	0.1	*	0.1	*	0.4	0.1	0.3	0.2	0.3	0.3	0.7	0.6	4.0	4.9	83.4	82.9	10.7	11.0	100.0
NM	-	-	-	-	-	-	-	0.5	-	-	0.4	3.0	4.3	5.0	58.3	60.5	37.0	31.0	100.0
All other	-	-	-	-	2.1	-	5.2	-	2.1	-	9.3	3.2	19.6	37.9	59.6	58.9	100.0	100.0	
U. S.	0.1	*	0.1	*	1.0	0.1	1.9	0.3	1.5	0.4	2.6	0.9	5.1	3.9	65.5	64.7	22.2	29.7	100.0

* Less than 0.05 percent.

Table 8. Percentage distribution of grades by specified frequencies, by states and United States, 1975 and 1976

State	Grade												Total									
	Below grade		40.0-74.9		75.0-79.9		80.0-84.9		85.0-89.9		90.0-94.9		95.0-99.9		100.0		105.0		110.0			
	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976		
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.		
NC	1.4	-	19.9	-	14.8	-	19.9	-	14.4	0.3	13.1	0.6	9.3	2.6	4.1	18.9	1.0	62.2	2.1	15.4	100.0	
SC	0.4	0.1	13.2	0.3	6.6	0.1	8.4	-	12.6	0.1	14.4	0.9	14.2	3.6	15.2	10.4	8.2	40.2	6.8	44.3	100.0	
GA	0.1	0.1	8.8	1.1	7.9	0.6	10.6	1.3	13.3	3.7	18.2	5.4	16.6	12.6	13.3	24.0	7.6	35.7	3.6	15.5	100.0	
AL	-	0.1	1.5	0.3	1.0	0.5	3.2	1.4	9.0	3.8	22.8	13.8	36.1	29.5	20.9	34.7	4.9	15.0	0.6	0.9	100.0	
MS	0.2	-	0.4	0.5	0.4	0.7	1.0	4.1	6.1	15.9	18.7	36.6	36.3	34.1	30.9	7.7	5.9	0.4	0.1	*	100.0	
TN	-	-	0.1	0.4	0.3	1.1	0.3	3.2	2.3	11.0	15.9	26.8	42.9	43.1	33.1	13.9	4.9	0.5	0.2	-	100.0	
MO	-	-	0.6	0.2	-	0.7	0.9	2.7	6.0	10.9	28.6	41.7	48.1	38.1	15.1	5.7	0.7	-	-	-	100.0	
AR	-	-	0.3	0.6	0.3	0.7	1.2	2.9	7.4	12.2	24.8	38.1	40.1	34.9	21.8	9.8	4.0	0.7	0.1	0.1	100.0	
LA	-	-	0.4	*	0.1	*	0.2	0.6	1.9	4.2	8.6	20.5	35.0	46.8	46.2	25.2	7.6	2.7	-	-	100.0	
OK	-	-	-	-	-	-	0.8	-	1.1	0.4	6.4	1.5	29.0	14.6	52.4	51.0	10.3	32.3	-	0.2	100.0	
TX	0.1	*	0.7	0.3	0.4	0.4	1.0	1.0	5.1	3.6	22.4	12.6	40.9	30.4	25.8	34.6	3.3	15.2	0.3	1.9	100.0	
NM	-	-	-	-	-	0.5	1.3	-	1.7	1.5	7.7	6.5	16.1	15.0	28.5	25.5	29.8	24.0	14.9	27.0	100.0	
All other	-	-	2.1	-	-	2.1	2.1	6.2	-	8.3	4.3	12.4	8.4	46.4	63.1	18.4	22.1	4.1	-	100.0	100.0	
U. S.	0.1	*	1.4	0.4	0.9	0.5	1.8	1.9	6.0	7.5	20.1	22.1	37.2	31.8	26.8	22.5	5.0	10.5	0.7	2.8	100.0	100.0

* Less than 0.05 percent.

Table 9. Percentage distribution of oil by specified frequencies, by states and United States, 1975 and 1976

State	Oil												Total											
	Under 15.0		15.0- 15.9		16.0- 16.4		16.5- 16.9		17.0- 17.4		17.5- 17.9		18.0- 18.4		18.5- 18.9		19.0- 19.9		20.0- 20.9					
	Pct.	Pct.	Pct.																					
NC	-	-	0.3	-	0.3	-	0.3	-	1.6	3.4	2.0	5.2	9.2	17.5	24.0	60.2	49.7	12.7	11.9	0.7	1.0	100.0	100.0	
SC	-	-	-	-	0.6	0.1	0.4	0.6	3.0	0.7	7.2	4.7	16.0	7.6	43.0	40.4	28.6	37.6	1.2	8.3	100.0	100.0		
GA	-	0.1	0.1	-	0.1	0.1	-	0.2	0.3	0.2	0.8	0.4	2.1	2.5	8.3	7.2	44.8	43.1	38.5	39.3	5.0	6.9	100.0	100.0
AL	-	0.4	0.1	0.8	0.6	3.4	1.6	7.1	3.4	10.4	6.7	18.2	15.2	21.3	23.8	18.9	38.0	17.1	10.3	2.2	0.3	0.2	100.0	100.0
MS	0.8	5.6	3.1	19.6	4.3	16.9	7.8	20.3	11.4	17.9	15.5	10.7	17.3	5.2	17.5	2.4	19.4	1.3	2.8	0.1	0.1	-	100.0	100.0
TN	0.1	1.9	0.4	7.2	1.1	8.1	3.4	14.7	6.8	22.3	16.7	23.6	24.4	13.8	22.4	6.7	22.3	1.6	2.3	0.1	0.1	-	100.0	100.0
MO	0.1	1.8	2.0	17.1	4.4	23.2	14.0	25.1	20.3	18.0	26.6	9.4	18.8	4.3	10.4	1.0	3.3	0.1	0.1	-	-	-	100.0	100.0
AR	1.3	5.8	5.7	20.4	7.6	18.4	13.1	21.6	18.6	15.4	18.0	10.0	14.9	5.0	10.9	2.4	9.2	0.9	0.7	*	-	0.1	100.0	100.0
LA	0.2	0.7	1.0	6.6	0.7	9.9	2.3	14.3	5.6	20.5	11.3	18.9	21.2	13.7	24.6	8.6	29.3	6.2	3.6	0.6	0.2	*	100.0	100.0
OK	-	0.8	0.4	0.8	0.2	2.4	2.0	6.4	7.2	13.7	13.3	27.4	25.7	30.1	27.9	17.8	20.7	0.6	2.6	-	-	-	100.0	100.0
TX	1.1	0.6	5.4	2.7	8.5	3.0	11.7	6.2	16.2	8.4	19.2	13.6	17.8	18.2	11.4	16.3	7.7	24.3	0.6	5.8	0.4	0.9	100.0	100.0
NM	0.9	-	0.9	-	2.6	0.5	3.0	3.0	4.7	2.5	8.9	7.5	8.9	8.0	14.8	14.0	21.7	20.0	20.4	19.5	13.2	25.0	100.0	100.0
All other	1.0	-	1.1	2.1	1.1	1.0	1.1	2.1	1.1	10.3	9.5	20.6	39.6	20.6	21.1	29.9	23.2	5.2	1.1	7.2	1.1	100.0	100.0	
U. S.	0.8	2.3	3.5	9.1	5.2	9.0	8.5	12.2	12.4	12.4	15.8	12.5	16.9	12.2	15.2	10.1	17.0	14.2	4.1	5.0	0.6	1.0	100.0	100.0

* Less than 0.05 percent.

Table 10. Percentage distribution of ammonia by specified frequencies, by states and United States, 1975 and 1976

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State	Ammonia												4.15 and over				Total				
	Under 2.95		2.95-3.09		3.10-3.24		3.25-3.39		3.40-3.54		3.55-3.69		3.70-3.84		3.85-3.99		4.00-4.14				
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.			
NC	-	-	-	-	-	-	-	-	-	-	0.7	-	6.9	0.3	26.8	4.6	28.4	14.5			
SC	-	-	-	-	-	0.6	-	1.0	0.1	2.0	0.3	5.8	2.7	20.4	9.6	32.6	23.4	37.6			
GA	-	-	-	-	-	0.8	-	3.3	0.3	8.6	1.2	25.6	6.7	31.0	12.7	18.8	24.2	11.9			
AL	0.1	0.1	-	-	1.6	0.1	9.5	1.1	22.8	4.1	27.9	13.2	20.6	24.7	12.3	25.5	4.5	17.6			
MS	0.1	-	0.2	*	1.7	0.2	10.7	1.0	26.9	6.1	33.0	17.3	20.3	29.4	6.0	28.6	1.0	13.5			
TN	0.1	-	0.3	-	2.5	-	15.3	1.6	33.2	8.5	27.0	33.7	16.1	39.6	5.1	15.2	0.3	1.4			
MO	-	-	-	1.0	-	5.3	0.2	26.9	2.2	40.3	7.9	20.5	22.5	4.6	43.3	1.2	20.3	0.2	3.6		
AR	*	-	*	-	0.2	*	2.6	0.3	15.6	2.0	37.5	9.6	27.9	22.5	13.0	36.1	3.1	23.8	0.1	5.7	
LA	0.1	-	0.8	*	3.8	0.2	15.1	3.0	35.7	8.5	33.1	19.9	10.4	23.0	0.9	20.0	-	15.6	0.1	9.8	
OK	-	-	-	-	-	-	0.2	3.0	1.1	8.6	1.7	25.8	5.9	33.8	8.5	23.5	16.5	5.3	66.1	100.0	
TX	*	*	0.1	0.2	0.6	1.4	1.5	3.2	5.5	9.7	14.5	22.3	24.8	31.2	25.4	21.4	17.3	10.6	10.3	100.0	
NM	-	-	0.4	-	-	0.5	0.4	3.0	4.3	12.5	17.9	21.0	24.3	29.0	27.5	19.0	17.9	10.0	7.3	5.0	100.0
All other	-	-	-	-	-	-	-	-	7.2	-	11.3	8.4	13.4	21.1	9.3	18.9	39.3	32.6	19.5	19.0	100.0
U. S.	*	*	0.1	*	0.9	0.3	5.5	1.1	15.2	4.8	22.9	14.0	21.2	23.8	17.7	26.0	10.8	17.3	5.7	12.7	100.0

* Less than 0.05 percent.

Table II. Percentage distribution of moisture in cottonseed samples by specified frequencies,
by states and United States, 1975

State	Prime quality 0-12.0	Below prime quality 20.1 and over	Moisture												Total	
			Pct.	Pct.	Off quality 20.1 and over	0.0	5.1	7.1	9.1	10.1	11.1	12.1	14.1	16.1	18.1 and over	
NC	74.3	25.7	-	-	-	-	-	3.4	17.5	23.0	30.4	23.7	1.3	0.7	-	100.0
SC	81.0	19.0	-	-	-	-	-	6.8	21.0	29.4	23.8	15.0	3.8	0.2	-	100.0
GA	83.0	16.9	0.1	-	-	2.9	18.5	35.9	25.7	14.2	2.1	0.6	-	0.1	100.0	
AL	60.4	39.6	-	-	-	1.1	8.2	23.1	28.0	32.3	6.4	0.7	0.2	-	100.0	
MS	47.6	52.4	*	*	*	0.3	4.1	15.7	27.5	43.0	8.2	0.9	0.3	*	100.0	
TN	36.4	63.6	-	-	-	0.1	2.2	10.2	23.9	46.9	14.8	1.7	0.2	-	100.0	
MO	43.6	56.3	0.1	-	-	0.6	2.3	13.2	27.5	40.3	14.8	1.2	-	0.1	100.0	
AR	56.3	43.7	-	-	0.1	2.7	10.6	19.2	23.7	32.1	9.7	1.4	0.5	-	100.0	
LA	63.0	37.0	-	-	0.1	0.7	11.6	25.2	25.4	28.5	7.5	1.0	-	-	100.0	
OK	99.0	1.0	-	-	0.2	45.9	36.7	13.0	3.2	1.0	-	-	-	-	100.0	
TX	95.8	4.2	*	0.1	16.7	61.8	9.9	4.5	2.8	2.7	1.2	0.3	*	*	100.0	
NM	99.6	0.4	-	-	43.0	48.5	6.0	2.1	-	0.4	-	-	-	-	100.0	
All other	96.9	3.1	-	1.0	23.8	52.5	6.2	4.1	9.3	3.1	-	-	-	-	100.0	
U. S.	70.3	29.7	*	*	6.1	23.3	9.4	14.0	17.5	23.0	5.8	0.8	0.1	*	100.0	

* Less than 0.05 percent.

Table 12. Percentage distribution of moisture in cottonseed samples by specified frequencies,
by states and United States, 1976

State	Prime quality 0-12.0	Below prime quality 12.1-20.0	Moisture												Total
			Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
NC	83.8	16.2	-	-	-	16.2	26.7	25.7	13.2	13.9	2.3	-	-	-	100.0
SC	84.7	15.3	-	0.1	-	20.3	26.7	23.3	14.3	11.5	3.0	0.7	0.1	-	100.0
GA	86.7	13.3	-	-	-	20.2	25.0	25.9	15.6	11.4	1.6	0.2	0.1	-	100.0
AL	61.1	38.8	0.1	-	-	2.5	12.5	22.0	24.1	30.2	6.8	1.5	0.3	0.1	100.0
MS	61.8	38.2	*	*	-	1.7	9.8	21.7	28.6	30.7	6.6	0.9	*	*	100.0
TN	62.7	37.1	0.2	-	-	0.3	4.9	27.7	29.8	28.9	7.1	1.1	-	0.2	100.0
MO	65.3	34.7	-	-	-	0.4	6.0	30.0	28.9	28.3	5.8	0.6	-	-	100.0
AR	71.7	28.0	0.3	*	-	1.0	9.6	30.4	30.7	22.9	3.9	0.9	0.3	0.3	100.0
LA	85.0	15.0	-	-	-	4.6	25.4	32.4	22.6	13.0	1.9	0.1	*	-	100.0
OK	100.0	-	-	-	0.2	56.6	33.0	9.3	0.9	-	-	-	-	-	100.0
TX	93.7	6.3	*	*	1.6	54.4	21.4	10.5	5.8	4.5	1.4	0.3	0.1	*	100.0
MM	98.5	1.5	-	-	1.5	68.0	21.5	6.0	1.5	1.5	-	-	-	-	100.0
All other	96.7	3.3	-	1.1	13.7	48.3	10.5	16.8	6.3	2.2	1.1	-	-	-	100.0
U. S.	79.3	20.6	0.1	*	0.6	23.5	16.6	20.2	18.4	16.4	3.5	0.6	0.1	0.1	100.0

* Less than 0.05 percent.

Table 13. Percentage distribution of free fatty acids in cottonseed samples by specified frequencies,
by states and United States, 1975

State	Prime quality 0-1.8	Below prime quality 1.9-12.4	Free fatty acids												Total
			Pct.	Pct.	Off quality 12.5 and over	0	0.5	1.0	1.5	1.9	3.0	5.0	7.0	9.0	11.0
NC	2.4	92.1	5.5	-	-	1.4	1.0	3.4	13.8	23.7	33.4	13.7	4.1	5.5	100.0
SC	11.2	85.8	3.0	-	2.8	4.4	4.0	13.0	22.6	22.8	15.6	8.6	3.2	3.0	100.0
GA	4.8	94.2	1.0	-	0.4	2.1	2.3	12.5	26.4	26.3	17.7	9.4	1.9	1.0	100.0
AL	24.4	75.3	0.3	0.8	3.2	8.5	11.9	31.7	31.8	9.3	2.1	0.4	-	0.3	100.0
MS	92.6	7.2	0.2	5.2	49.9	30.1	7.4	5.2	1.6	0.3	0.1	*	-	0.2	100.0
TN	91.8	8.2	-	1.2	42.9	34.9	12.8	5.7	1.9	0.6	-	-	-	-	100.0
MO	93.7	6.2	0.1	1.4	49.2	34.4	8.7	4.0	1.8	-	0.1	0.2	0.1	0.1	100.0
AR	96.7	3.3	*	26.8	51.7	13.7	4.5	2.4	0.7	0.1	-	0.1	*	*	100.0
LA	94.8	5.1	0.1	10.0	55.0	24.8	5.0	3.9	0.8	0.1	0.2	-	0.1	0.1	100.0
OK	99.4	0.6	-	23.3	74.5	1.0	0.6	0.2	0.2	-	-	-	-	-	100.0
TX	95.2	4.5	0.3	48.9	38.2	6.4	1.7	2.5	1.2	0.5	0.1	0.1	0.1	0.3	100.0
NM	100.0	-	-	76.6	21.7	1.7	-	-	-	-	-	-	-	-	100.0
All other	79.4	20.6	-	64.9	10.3	2.1	2.1	6.2	7.2	4.1	-	1.0	-	1.0	100.0
U. S.	84.4	15.3	0.3	23.8	40.3	15.4	4.9	5.6	4.5	2.6	1.6	0.8	0.2	0.3	100.0

* Less than 0.05 percent.

Table 14. Percentage distribution of free fatty acids in cottonseed samples by specified frequencies,
by states and United States, 1976

State	Prime quality 0-1.8	Below prime quality 1.9-12.4	Off quality 12.5 and over	Free fatty acids												Total
				Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
NC	97.4	2.6	-	38.9	49.3	7.9	1.3	2.0	0.3	-	0.3	-	-	-	-	100.0
SC	93.2	6.5	0.3	27.4	48.7	12.7	4.4	4.5	1.3	0.3	0.3	-	0.1	0.3	0.3	100.0
GA	27.8	72.1	0.1	1.0	7.6	5.6	13.6	30.6	26.6	9.6	3.4	1.1	0.8	0.1	0.1	100.0
AL	91.4	8.5	0.1	22.6	48.6	14.6	5.6	4.8	2.3	0.9	0.3	0.1	0.1	0.1	0.1	100.0
MS	99.1	0.9	-	66.4	28.5	3.5	0.7	0.5	0.3	0.1	*	*	*	-	-	100.0
TN	98.6	1.4	-	57.0	36.9	3.6	1.1	0.7	0.6	0.1	-	-	-	-	-	100.0
MO	97.7	2.2	0.1	79.8	16.3	1.2	0.4	0.8	0.8	0.2	0.4	-	-	0.1	0.1	100.0
AR	99.7	0.3	-	69.4	28.8	1.3	0.2	0.3	*	-	*	-	-	-	-	100.0
LA	99.2	0.7	0.1	69.7	25.9	3.2	0.4	0.6	0.1	*	-	-	-	0.1	0.1	100.0
OK	100.0	-	-	18.7	77.9	3.0	0.4	-	-	-	-	-	-	-	-	100.0
TX	98.2	1.8	*	46.2	44.5	5.9	1.6	1.3	0.4	0.1	*	*	*	*	*	100.0
NM	97.5	2.5	-	51.5	43.5	1.0	1.5	2.0	0.5	-	-	-	-	-	-	100.0
All other	95.7	4.3	-	38.9	35.7	13.7	7.4	3.2	1.1	-	-	-	-	-	-	100.0
U. S.	95.6	4.4	*	52.7	36.2	4.9	1.8	2.2	1.4	0.5	0.2	0.1	*	*	*	100.0

* Less than 0.05 percent.

Table 15. Percentage distribution of foreign matter in cottonseed samples by specified frequencies,
by states and United States, 1975

State	Prime quality 0-1.0	Below prime quality		Off quality 10.1 and over		Foreign matter						Total
		Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
NC	56.7	43.3	-	16.8	39.9	31.0	8.6	2.7	0.7	0.3	-	-
SC	56.6	43.4	-	18.0	38.6	32.2	8.4	1.8	0.4	0.4	0.2	-
GA	76.4	23.6	-	31.9	44.5	21.0	1.5	0.6	0.1	0.3	-	100.0
AL	35.4	64.5	0.1	6.6	28.8	40.9	16.3	4.6	2.0	0.3	0.3	0.1
MS	53.8	45.9	0.3	18.5	35.3	36.0	6.2	1.9	1.0	0.5	0.2	0.3
TN	61.0	39.0	-	27.6	33.4	30.5	6.4	1.2	0.7	0.2	-	-
MO	61.8	38.2	-	18.2	43.6	31.2	5.1	1.5	0.2	-	0.1	0.1
AR	82.7	17.3	-	46.1	36.6	14.0	2.1	0.6	0.4	0.1	0.1	*
LA	86.6	13.4	-	43.8	42.8	11.2	1.6	0.3	0.2	0.1	-	-
OK	16.9	83.1	-	2.1	14.8	37.6	23.0	13.0	5.8	1.3	1.3	-
TX	14.8	84.9	0.3	2.1	12.7	33.9	26.1	13.4	7.6	2.7	0.9	0.3
NM	37.0	62.6	0.4	8.1	28.9	24.7	15.3	8.5	8.5	2.1	2.6	0.9
All other	68.1	31.9	-	15.5	52.6	20.6	4.1	1.0	3.1	2.1	1.0	-
U. S.	46.7	53.1	0.2	18.5	28.2	29.6	12.8	5.8	3.2	1.1	0.4	0.2

* Less than 0.05 percent.

Table 16. Percentage distribution of foreign matter in cottonseed samples by specified frequencies,
by states and United States, 1976

State	Prime quality 0-1.0	Below prime quality 1.1-10.0	Off quality 10.1 and over	Foreign matter										Total
				Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
NC	63.9	36.1	-	24.7	39.2	27.3	7.2	1.6	-	-	-	-	-	100.0
SC	63.6	36.3	0.1	31.4	32.2	27.1	6.0	1.9	1.0	0.3	-	-	0.1	100.0
GA	84.7	15.3	-	47.6	37.1	12.1	2.3	0.7	0.1	-	-	-	-	100.0
AL	41.5	57.9	0.6	7.6	33.9	35.2	13.3	4.7	3.1	1.0	0.3	0.3	0.6	100.0
MS	45.6	53.9	0.5	10.3	35.3	40.0	8.2	2.5	1.9	0.7	0.4	0.2	0.5	100.0
TN	30.6	68.4	1.0	7.9	22.7	35.8	17.7	7.0	3.8	2.0	1.0	1.1	1.0	100.0
MO	56.8	43.0	0.2	13.4	43.4	28.4	7.7	4.0	1.9	0.6	0.2	0.2	0.2	100.0
AR	74.4	25.2	0.4	33.6	40.8	18.5	3.9	1.4	0.8	0.4	0.1	0.1	0.4	100.0
LA	81.1	18.9	-	36.8	44.3	13.3	2.7	1.8	0.7	0.4	-	-	-	100.0
OK	29.6	70.4	-	4.6	25.0	42.6	17.6	6.3	2.8	0.9	0.2	-	-	100.0
TX	14.2	84.9	0.9	4.4	9.8	26.4	27.0	16.0	9.8	4.0	1.2	0.5	0.9	100.0
NM	33.0	63.0	4.0	5.0	28.0	28.5	14.0	8.5	4.0	6.0	1.0	1.0	4.0	100.0
All other	62.0	38.0	-	6.3	55.7	25.3	1.1	4.2	4.2	2.1	-	1.1	-	100.0
U. S.	43.0	56.4	0.6	15.7	27.3	27.4	14.3	7.4	4.5	1.9	0.6	0.3	0.6	100.0

Table 17. Number of cottonseed samples by specified groups, by qualities, and number reduced in grade for specified causes, by states and United States, 1975 and 1976

State	Quality						Reduced due to excess							
	Prime		Below prime and off quality		Below grade		Total samples graded		Moisture		Free fatty acids			
	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976		
NC	6	300	568	308	8	-	582	608	150	98	568	16	252	220
SC	50	670	946	730	4	2	1,000	1,402	190	216	888	94	434	510
GA	44	358	1,404	1,430	-	2	1,448	1,790	246	240	1,378	1,292	342	274
AL	138	762	2,488	2,114	-	2	2,626	2,878	1,038	1,118	1,988	244	1,696	1,684
MS	2,180	2,620	6,584	6,452	12	2	8,776	9,074	4,602	3,480	646	100	4,054	4,940
TN	348	400	1,692	1,882	-	-	2,040	2,282	1,298	848	166	28	794	1,596
MO	426	568	1,302	1,088	-	-	1,728	1,656	974	574	110	38	660	718
AR	3,234	4,500	3,702	3,860	-	-	6,936	8,360	3,030	2,368	236	36	1,196	2,142
LA	1,372	2,758	1,328	1,266	-	-	2,700	4,024	1,000	610	144	38	364	762
OK	178	272	896	648	-	-	1,064	920	10	-	6	-	884	648
TX	1,568	2,028	13,106	16,434	12	2	14,686	18,464	632	1,148	740	336	12,514	15,842
NM	174	124	296	276	-	-	470	400	2	6	-	10	296	268
All other	116	112	78	78	-	-	194	190	6	6	40	8	62	72
U. S.	9,834	15,472	34,380	36,566	36	10	44,250	52,048	13,178	10,712	6,910	2,240	23,548	29,666