

# COTTONSEED QUALITY

CROP OF 1978



**UNITED STATES DEPARTMENT OF AGRICULTURE**

*Agricultural Marketing Service Cotton Division*

*Memphis, Tennessee*

*July 1979*

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Cottonseed Quality - 1978 Crop

Cottonseed from the 1978 crop was higher in grade than a year earlier, according to the Cotton Division, Agricultural Marketing Service, USDA. The average grade was 98.0, up from 94.5 for the 1977 crop and 97.5 in 1976. The quality index was 98.5 against 95.6 and 98.4 in 1977 and 1976, respectively. Free fatty acids content and moisture content were lower than in 1977 while foreign matter content was higher. The quantity index of cottonseed from the 1978 crop was 98.97, up from 98.85 a year earlier. Average oil content of seed from the 1978 crop was slightly lower than the previous year while ammonia content was slightly higher.

Data from grade certificates covering 50,418 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 marketing services office areas, by months and by specified frequencies. Average grade factors of cottonseed are shown by states in Table 3. Data from California are included in the "all other" category because only a light volume of cottonseed from this state 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,  
1954-1978

Year beginning August 1	Quantity Factors			Quality Factors			Quantity	Quality	Average grade	Number of samples
	Oil	Ammonia	Linters	Moisture	Free fatty acids	Foreign matter				
	Percent	Percent	Percent	Percent	Percent	Percent	Index	Index		Number
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
1977	17.5	3.99	1/	10.8	1.8	1.4	98.85	95.6	94.5	61,466
1978	17.4	4.08	1/	10.5	0.9	1.5	98.97	98.5	98.0	50,418

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- sample 2/	Quality Factors						Quantity Factors						Grade			
	FFA 3/		FM 4/		H <sub>2</sub> O 5/		Total reduc- tions 6/	Qual- ity index	Oil		NH <sub>3</sub> 8/			Sum of pro- ducts	Adjust- ment factors	Quan- tity index
	Total Re- duction	Pct.	Total Re- duction	Pct.	Total Re- duction	Pct.			Total	Pro- duct 7/	Total	Pro- duct 7/				
Pct.	Units	Pct.	Units	Pct.	Units	Units	Pct.									
PRIME QUALITY SEED																
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	+5	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	+5	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	+5	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	+5	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	+5	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	+5	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	+5	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
OFF QUALITY SEED																
Treated (other than usual), Fermented, Hot																
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	+5	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	+5	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	+5	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	4.08	24.48	101.68	+5	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	+5	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/ Moisture in the seed.

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

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

8/ Ammonia in the seed.

\* Below grade 40. No numerical grade is indicated.

# UNITED STATES

SMITH-DOXEY MARKETING SERVICES OFFICE AREAS



AGRICULTURAL MARKETING SERVICE, USDA

Table 3. Cottonseed: Quality factors, indexes and grades, by states and United States, 1977 and 1978

State	Oil		Cottonseed analysis										Average index				Average grade	
	1977 Pct.	1978 Pct.	Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1977	1978	1977	1978
			1977 Pct.	1978 Pct.	1977 Pct.	1978 Pct.	1977 Pct.	1978 Pct.	1977 Pct.	1978 Pct.	1977	1978	1977	1978				
NC	18.9	18.8	4.32	4.03	12.3	10.7	3.7	0.7	1.2	1.2	106.65	104.46	90.3	99.1	97.0	104.0		
SC	19.1	18.7	4.26	4.26	11.5	10.3	3.2	0.9	1.0	0.8	107.10	105.47	93.2	99.4	100.0	105.0		
GA	18.7	18.2	4.23	4.33	11.7	9.4	6.4	0.8	1.1	0.9	105.23	104.11	79.4	99.2	84.5	103.5		
AL	17.0	16.9	4.07	4.16	12.8	11.1	6.5	0.8	1.7	1.2	97.35	97.43	78.0	98.7	75.5	96.5		
MS	16.6	16.7	4.00	4.16	12.4	11.0	2.7	1.2	1.3	1.2	95.04	96.63	93.8	98.6	89.0	95.5		
TN	16.7	17.1	3.90	3.97	13.8	11.3	2.9	0.7	1.5	1.2	95.03	97.17	91.4	98.8	87.0	96.5		
MO	16.7	16.6	3.77	3.86	13.9	12.4	2.3	0.6	1.5	0.9	94.25	94.41	94.3	98.7	89.5	93.5		
AR	16.3	16.6	3.90	3.98	13.3	12.0	1.8	1.1	1.1	0.9	93.52	95.34	96.0	98.6	90.0	94.5		
LA	17.2	17.0	3.86	4.10	12.1	11.5	2.2	1.8	1.0	0.9	97.09	97.59	96.2	97.3	93.5	95.0		
OK	17.8	17.8	4.10	4.10	8.8	9.7	0.5	0.6	1.7	1.6	100.77	100.96	99.1	99.1	100.0	100.5		
TX	18.4	17.9	4.06	4.08	8.1	9.7	0.5	0.7	1.6	2.1	103.13	101.07	99.1	98.4	102.5	100.0		
NM	19.5	18.2	4.05	4.07	8.2	9.3	0.4	0.6	2.2	3.6	107.82	102.01	98.7	96.7	106.5	99.0		
AZ	-	17.7	-	4.13	-	9.8	-	1.3	-	1.6	-	100.21	-	97.4	-	97.5		
Other	18.5	19.1	3.81	3.73	11.1	10.3	2.8	0.8	1.1	0.7	101.09	103.69	93.9	100.0	94.5	104.0		
U. S.	17.5	17.4	3.99	4.08	10.8	10.5	1.8	0.9	1.4	1.5	98.85	98.97	95.6	98.5	94.5	98.0		



Table 4. Cottonseed: Quality factors, indexes and grades, by specified periods and states, 1977 and 1978

NORTH CAROLINA

Month	Cottonseed analysis												Average index		Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		No.			
	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978		
Aug.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.					No.	No.		
Sept.	18.3	-	4.40	-	11.8	-	3.1	-	1.5	-	108.75	-	98.5	-	106.0	2		
Oct.	18.9	18.8	4.33	4.13	12.5	10.3	2.0	0.7	0.6	0.8	104.45	-	91.0	-	94.5	10		
Nov.	18.8	19.0	4.27	4.00	12.7	10.4	3.0	0.6	1.2	1.2	106.63	105.12	96.3	99.4	103.0	148		
Dec.	19.0	18.3	4.35	3.96	11.7	12.3	5.2	0.9	1.6	1.7	106.29	105.22	92.6	99.5	98.5	158		
Jan.	18.9	18.9	4.33	3.98	11.7	10.6	6.4	1.2	1.6	1.9	107.22	101.63	86.2	98.4	92.0	106		
Feb.	18.6	18.1	4.35	3.88	11.8	10.6	7.6	0.6	2.1	1.2	106.99	104.81	80.0	98.4	85.5	34		
Mar. and later	19.0	18.4	4.39	3.98	11.2	11.4	6.6	1.6	1.6	1.4	106.25	100.94	77.9	99.5	84.0	14		
											107.56	103.60	74.4	97.5	86.0	18		

Season	18.9	18.8	4.32	4.03	12.3	10.7	3.7	0.7	1.2	1.2	106.65	104.46	90.3	99.1	97.0	104.0	488	374
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SOUTH CAROLINA

Sept.	18.9	18.6	4.41	4.26	12.6	11.5	1.4	1.1	0.6	0.7	107.78	104.85	98.5	98.3	106.0	103.0	56	60
Oct.	19.2	18.7	4.35	4.27	11.6	10.2	2.1	0.7	0.7	0.6	108.31	105.52	97.4	99.6	106.0	105.5	254	400
Nov.	18.9	18.6	4.27	4.28	12.3	10.0	3.4	0.7	1.2	1.0	106.47	105.07	92.0	99.6	98.5	105.0	284	186
Dec.	18.8	18.5	4.16	4.19	11.6	10.7	3.2	1.2	1.2	0.9	105.62	104.45	93.5	99.2	98.0	104.0	208	122
Jan.	19.3	19.0	4.17	4.31	10.7	9.6	3.6	1.0	1.1	1.2	107.34	106.35	92.0	99.6	99.0	104.5	124	64
Feb.	19.2	18.9	4.28	4.33	10.6	9.1	4.4	1.3	1.0	1.0	107.57	107.40	89.4	98.4	96.0	105.5	116	42
Mar. and later	19.2	18.8	4.24	4.26	10.3	10.3	5.6	1.3	1.0	0.6	107.94	105.92	84.9	99.4	92.0	105.5	64	36

Season	19.1	18.7	4.26	4.26	11.5	10.3	3.2	0.9	1.0	0.8	107.10	105.47	93.2	99.4	100.0	105.0	1,106	910
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GEORGIA

Aug.	20.2	21.2	4.07	4.37	8.6	8.6	2.2	11.7	0.9	0.1	112.50	117.50	98.5	60.0	108.5	60.0	2	2
Sept.	17.2	18.4	4.30	4.35	13.7	10.5	5.6	1.0	1.1	0.6	99.79	105.11	82.0	97.0	79.5	102.5	52	44
Oct.	18.2	18.2	4.42	4.36	12.4	8.8	7.9	0.6	0.8	0.7	104.58	104.14	71.0	99.8	76.0	104.0	176	524
Nov.	18.6	18.2	4.22	4.31	12.0	9.5	6.6	0.8	1.1	1.0	104.72	103.98	78.1	99.3	83.5	103.5	338	232
Dec.	19.0	18.2	4.12	4.25	11.6	11.0	5.5	1.3	1.1	1.1	105.84	103.59	84.6	98.1	88.5	101.5	290	84
Jan.	19.0	18.3	4.20	4.21	10.9	10.6	5.8	1.1	1.2	1.4	106.27	103.56	81.7	98.9	89.0	102.5	138	40
Feb.	19.1	18.5	4.16	4.20	10.9	10.9	6.2	1.8	1.1	1.3	106.73	104.72	82.3	98.1	88.0	103.0	74	16
Mar. and later	19.4	18.4	4.28	4.27	10.3	10.7	7.8	1.6	2.3	2.8	107.99	104.04	73.5	95.8	82.0	100.5	46	26

Season	18.7	18.2	4.23	4.33	11.7	9.4	6.4	0.8	1.1	0.9	105.23	104.11	79.4	99.2	84.5	103.5	1,116	968
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Table 4. Cottonseed: Quality factors, indexes and grades, by specified periods and states, 1977 and 1978 (Continued)

ALABAMA

Month	Cottonseed analysis												Average index		Average grade		Samples		
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1977		1978		
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	1977	1978	1977	1978	No.	No.	1977	1978	
Aug.	-	16.2	-	4.07	-	11.6	-	6.0	-	0.7	-	92.50	-	87.5	-	-	-	-	2
Sept.	16.4	17.0	4.05	4.20	13.5	12.1	1.3	1.6	1.4	1.1	95.01	98.40	96.0	95.5	91.5	94.5	354	150	
Oct.	16.9	16.7	4.11	4.19	13.3	11.1	6.5	0.6	1.6	1.0	97.02	97.00	78.7	99.3	75.0	96.5	918	1,048	
Nov.	17.2	17.1	4.08	4.15	12.6	10.5	8.9	0.8	1.8	1.4	97.94	98.06	68.8	98.8	69.0	97.5	622	534	
Dec.	17.5	16.8	4.00	4.08	12.1	12.0	7.6	1.1	1.7	1.7	98.94	96.78	74.4	98.1	73.0	95.5	314	218	
Jan.	17.4	17.0	3.95	4.05	11.9	11.2	7.5	1.2	1.9	1.8	98.50	97.38	75.8	97.9	74.0	95.5	106	116	
Feb.	17.8	17.2	4.12	4.14	11.4	10.8	6.8	1.4	1.4	1.5	100.90	98.68	79.6	97.9	78.5	97.0	26	30	
Mar. and later	17.3	17.2	4.04	4.23	10.6	9.9	6.1	1.2	1.3	0.8	98.53	98.92	80.2	99.7	78.0	98.5	44	56	

Season	17.0	16.9	4.07	4.16	12.8	11.1	6.5	0.8	1.7	1.2	97.35	97.43	78.0	98.7	75.5	96.5	2,384	2,154
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MISSISSIPPI

Aug.	16.5	17.8	3.91	4.08	11.2	10.4	2.0	5.6	1.0	1.4	93.54	98.90	97.2	81.6	91.5	84.0	24	60
Sept.	16.3	16.4	4.01	4.13	12.6	12.4	0.8	1.2	1.0	1.0	94.41	95.45	98.6	97.7	93.5	94.0	2,436	1,296
Oct.	16.9	16.9	3.97	4.20	12.4	10.6	2.4	1.1	1.2	1.1	96.06	97.58	95.3	99.3	91.5	97.5	5,434	5,156
Nov.	16.4	16.4	3.91	4.07	12.5	10.8	3.8	1.2	1.7	1.7	93.92	95.16	90.6	98.4	84.5	94.0	2,492	1,618
Dec.	16.2	16.1	3.89	4.01	12.2	12.4	5.3	1.7	2.2	2.1	92.81	93.32	83.9	96.6	76.5	90.5	582	284
Jan.	16.5	16.5	3.95	4.07	11.8	11.7	5.8	1.9	2.3	1.8	94.22	95.18	81.7	96.7	75.5	92.0	184	96
Feb.	16.6	16.5	4.03	4.10	11.3	11.4	6.0	1.7	2.1	1.4	94.42	95.29	82.0	97.3	77.5	93.0	178	94
Mar. and later	17.0	16.7	4.00	4.19	11.1	10.5	5.7	2.0	1.4	1.1	96.76	96.88	82.4	97.4	80.5	94.5	208	234

Season	16.6	16.7	4.00	4.16	12.4	11.0	2.7	1.2	1.3	1.2	95.04	96.63	93.8	98.6	89.0	95.5	11,538	8,838
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TENNESSEE

Aug.	-	16.7	-	3.77	-	10.6	-	4.5	-	0.7	-	92.50	-	91.2	-	82.5	-	-	2
Sept.	16.6	16.5	3.89	4.00	14.1	13.3	0.6	0.9	0.7	0.7	94.87	94.93	97.5	97.5	93.0	93.0	666	134	
Oct.	16.7	17.2	3.90	4.01	14.3	11.2	2.8	0.6	1.2	0.8	95.12	97.96	92.5	99.5	88.5	98.0	1,022	1,074	
Nov.	16.7	17.2	3.91	3.94	13.1	10.6	4.8	0.6	2.3	1.6	95.29	97.10	86.2	99.0	81.0	96.5	482	484	
Dec.	16.7	16.4	3.89	3.85	12.3	12.8	5.0	1.0	2.9	2.3	95.26	93.53	83.3	97.0	78.0	91.5	106	120	
Jan.	16.7	16.9	3.91	3.85	12.3	13.1	6.6	1.5	3.3	2.9	94.78	95.25	78.1	96.2	71.5	92.5	40	28	
Feb.	16.7	16.9	3.89	3.73	12.2	12.3	6.3	1.2	2.3	2.2	95.55	94.94	78.8	97.7	74.5	93.5	28	8	
Mar. and later	16.5	17.3	3.89	3.87	12.4	11.4	7.3	3.1	2.8	1.6	92.31	97.48	75.2	89.8	68.0	90.5	52	28	

Season	16.7	17.1	3.90	3.97	13.8	11.3	2.9	0.7	1.5	1.2	95.03	97.17	91.4	98.8	87.0	96.5	2,396	1,878
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Table 4. Cottonseed: Quality factors, indexes and grades by specified periods and states, 1977 and 1978 (Continued)

MISSOURI

Month	Cottonseed analysis												Average index		Average grade		Samples			
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1977	1978	1977	1978	No.	No.
	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978						
Aug.	16.3	4.12	10.2	9.3	1.9	96.42	70.0	-	-	66.0	-	-	-	-	-	-	-	-	6	-
Sept.	16.2	3.75	15.2	0.8	0.8	92.56	96.3	0.9	0.8	89.5	93.56	96.8	89.5	90.5	372	164	372	164	372	164
Oct.	17.0	3.79	13.9	2.2	0.5	95.50	95.4	1.5	0.9	91.5	95.40	99.3	91.5	95.0	942	1,000	942	1,000	942	1,000
Nov.	16.6	3.73	13.7	2.3	0.6	93.48	93.2	1.7	1.0	87.0	92.63	98.9	87.0	92.0	442	358	442	358	442	358
Dec.	16.4	3.76	12.3	3.8	0.8	93.14	90.6	2.2	1.0	85.0	90.06	97.7	85.0	88.5	96	42	96	42	96	42
Jan.	16.8	3.91	11.4	4.3	3.5	95.77	87.9	2.4	1.0	82.0	92.50	89.6	82.0	80.5	24	6	24	6	24	6
Feb.	17.3	3.80	11.9	3.8	1.4	96.67	91.6	1.8	1.4	89.5	97.50	99.7	89.5	97.5	12	4	12	4	12	4
Mar. and later	16.7	3.81	11.8	4.8	1.8	90.99	81.9	3.0	2.2	82.0	93.36	96.8	82.0	90.0	52	32	52	32	52	32
Season	16.7	3.77	13.9	2.3	0.6	94.25	94.3	1.5	0.9	89.5	94.41	98.7	89.5	93.5	1,940	1,612	1,940	1,612	1,940	1,612

ARKANSAS

Aug.	17.5	4.02	12.1	0.7	6.0	100.42	98.1	1.5	0.1	97.0	92.50	82.5	97.0	77.5	6	2	6	2	6	2
Sept.	16.2	3.94	13.3	0.6	1.2	93.47	98.3	0.7	0.7	92.0	94.05	96.8	92.0	91.5	2,580	304	2,580	304	2,580	304
Oct.	16.5	3.89	13.3	1.6	0.9	94.11	96.9	1.0	0.8	91.5	96.43	99.4	91.5	96.0	4,974	3,736	4,974	3,736	4,974	3,736
Nov.	16.1	3.83	13.5	2.7	0.9	92.14	93.3	1.6	1.0	85.5	94.53	99.0	85.5	94.0	1,590	1,556	1,590	1,556	1,590	1,556
Dec.	16.0	3.85	13.0	3.6	1.5	91.84	90.7	1.8	1.4	82.5	92.22	96.0	82.5	88.5	370	390	370	390	370	390
Jan.	16.0	3.91	12.5	4.5	2.1	92.35	87.8	2.0	2.3	79.0	93.00	93.9	79.0	88.0	118	120	118	120	118	120
Feb.	16.0	3.91	12.9	5.4	2.4	91.96	83.9	1.9	2.1	76.5	90.84	93.3	76.5	84.5	104	106	104	106	104	106
Mar. and later	16.6	3.94	12.1	4.7	2.4	94.64	85.0	2.1	2.0	81.5	92.63	94.2	81.5	87.0	234	168	234	168	234	168
Season	16.3	3.90	13.3	1.8	1.1	93.52	96.0	1.1	0.9	90.0	95.34	98.6	90.0	94.5	9,976	6,382	9,976	6,382	9,976	6,382

LOUISIANA

Aug.	17.6	3.92	9.8	5.9	1.8	98.75	70.1	-	-	78.0	98.75	70.1	-	78.0	-	8	-	-	-	8
Sept.	16.4	3.96	13.1	1.9	1.2	94.35	95.9	0.7	0.7	90.5	93.88	97.4	90.5	91.5	482	422	482	422	482	422
Oct.	17.6	3.91	11.7	2.1	1.8	99.02	97.0	0.8	0.7	96.5	99.05	97.8	96.5	97.0	2,076	1,942	2,076	1,942	2,076	1,942
Nov.	17.0	3.79	12.5	2.1	1.7	95.71	96.5	1.2	1.2	92.5	96.77	97.9	92.5	95.0	1,386	676	1,386	676	1,386	676
Dec.	16.7	3.77	12.2	3.0	2.4	94.55	93.5	1.7	1.8	88.5	93.26	93.9	88.5	88.0	358	144	358	144	358	144
Jan.	16.7	3.80	11.6	3.6	2.8	94.38	91.3	2.1	1.6	86.5	96.93	93.5	86.5	91.5	92	80	92	80	92	80
Feb.	17.5	3.89	11.3	3.3	2.6	98.19	93.4	1.1	1.2	91.5	97.07	94.9	91.5	92.0	86	104	86	104	86	104
Mar. and later	17.7	3.83	10.7	3.1	2.4	98.55	94.7	1.0	0.7	93.5	97.53	97.1	93.5	94.5	208	142	208	142	208	142
Season	17.2	3.86	12.1	2.2	1.8	97.09	96.2	1.0	0.9	93.5	97.59	97.3	93.5	95.0	4,688	3,518	4,688	3,518	4,688	3,518



Table 4. Cottonseed: Quality factors, indexes and grades, by specified periods and states, 1977 and 1978 (Continued)

OKLAHOMA

Month	Cottonseed analysis												Average index				Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality							
	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	No.	No.	1977	1978
Sept.	18.2	17.2	3.92	3.77	8.9	10.6	0.8	4.5	1.3	2.6	101.83	98.75	99.5	87.5	102.0	87.5	6	2	100.0	102.0
Oct.	18.0	18.3	4.17	3.97	8.1	9.2	0.4	0.5	1.0	0.9	101.79	101.96	99.8	99.7	102.0	102.0	196	66	98.5	98.5
Nov.	17.6	17.5	4.14	4.12	9.2	9.3	0.4	0.7	1.5	1.5	100.34	99.55	99.3	98.8	100.0	98.5	652	218	99.5	99.5
Dec.	17.9	17.6	4.10	4.15	8.7	9.9	0.5	0.4	1.9	1.6	101.18	100.15	99.1	99.2	100.5	99.5	1,030	598	99.5	99.5
Jan.	17.9	18.1	4.02	4.14	8.1	9.0	0.5	0.4	2.1	1.4	100.64	102.38	98.9	99.5	99.5	102.0	224	688	96.5	96.5
Feb.	17.2	18.0	4.00	4.03	9.7	11.3	0.5	0.6	2.9	1.9	97.92	100.94	97.7	98.7	96.5	99.5	58	140	96.5	96.5
Mar. and later	17.2	17.9	4.01	3.99	10.1	10.3	0.8	0.9	2.3	2.0	97.83	100.40	98.5	98.5	96.5	99.0	50	440	96.5	99.0
Season	17.8	17.8	4.10	4.10	8.8	9.7	0.5	0.6	1.7	1.6	100.77	100.96	99.1	99.1	100.0	100.5	2,216	2,152	99.1	100.5

TEXAS

Aug.	17.6	17.1	3.75	3.90	9.6	10.4	0.4	0.5	0.8	1.0	97.89	96.52	99.6	99.5	98.0	96.5	2,772	2,756	98.0	96.5
Sept.	17.1	16.4	3.92	4.06	9.7	10.9	0.6	1.0	1.3	1.4	96.75	94.60	99.0	98.4	96.0	93.5	2,724	1,192	96.0	93.5
Oct.	18.3	17.3	4.11	4.20	8.1	9.9	0.5	1.3	1.6	1.7	102.87	99.23	99.1	96.6	102.5	96.5	4,770	1,400	102.5	96.5
Nov.	18.9	17.7	4.13	4.09	7.6	11.1	0.4	0.9	1.5	1.9	105.68	100.08	99.3	97.7	105.5	98.5	6,780	1,478	105.5	98.5
Dec.	19.0	18.3	4.15	4.12	6.9	9.0	0.5	0.5	1.8	2.1	106.28	103.07	99.0	98.8	105.5	102.0	4,238	6,276	105.5	102.0
Jan.	18.9	18.4	4.15	4.12	7.1	9.0	0.6	0.5	2.4	2.3	105.52	103.26	98.4	98.6	104.0	102.0	1,292	4,788	104.0	102.0
Feb.	18.4	18.0	4.07	4.03	8.7	10.0	0.8	0.6	3.0	2.8	103.00	101.27	97.7	97.7	101.0	99.5	320	1,944	101.0	99.5
Mar. and later	18.0	18.1	4.00	4.03	9.4	9.9	1.2	1.1	3.8	3.0	101.21	101.71	96.2	96.9	98.5	99.0	298	1,284	98.5	99.0
Season	18.4	17.9	4.06	4.09	8.1	9.7	0.5	0.7	1.6	2.1	103.13	101.07	99.1	98.4	102.5	100.0	23,194	21,118	102.5	100.0

NEW MEXICO

Sept.	19.4	-	3.98	-	9.8	-	0.4	-	1.0	-	106.80	-	99.8	-	107.0	-	10	-	107.0	-
Oct.	19.8	20.7	3.95	3.92	9.6	9.6	0.4	0.4	1.5	2.6	108.48	112.50	99.3	98.5	108.0	112.5	144	2	108.0	112.5
Nov.	19.4	18.1	4.14	4.00	7.4	12.3	0.4	0.9	2.3	3.1	108.00	101.18	98.7	95.5	106.5	97.0	110	22	106.5	97.0
Dec.	19.4	18.3	4.11	4.10	6.7	9.0	0.4	0.5	3.0	2.5	107.06	102.71	97.9	98.6	105.0	101.5	62	92	105.0	101.5
Jan.	19.1	18.1	4.14	4.07	7.1	9.1	0.5	0.4	3.9	3.6	106.47	101.65	97.1	97.3	104.0	99.5	18	60	104.0	99.5
Feb.	18.7	17.7	4.07	4.02	7.6	9.4	0.8	0.7	3.7	5.2	104.00	99.85	97.0	94.0	100.5	94.5	4	34	100.5	94.5
Mar. and later	17.7	18.4	4.07	4.14	8.6	7.8	1.4	1.9	10.8	7.3	98.75	103.53	87.5	91.8	87.5	95.5	2	18	87.5	95.5
Season	19.5	18.2	4.05	4.07	8.2	9.3	0.4	0.6	2.2	3.6	107.82	102.01	98.7	96.7	106.5	99.0	350	228	106.5	99.0

ARIZONA

Nov.	-	18.0	-	4.09	-	9.6	-	0.5	-	1.7	-	101.51	-	99.2	-	101.0	-	74	-	101.0	-
Dec.	-	17.8	-	4.12	-	9.5	-	0.8	-	1.0	-	101.04	-	99.7	-	101.0	-	50	-	101.0	-
Jan.	-	17.7	-	4.06	-	11.6	-	1.1	-	2.5	-	99.95	-	96.3	-	97.0	-	22	-	97.0	-
Feb.	-	17.5	-	4.09	-	10.4	-	1.3	-	2.0	-	98.57	-	97.5	-	96.0	-	38	-	96.0	-
Mar. and later	-	17.3	-	4.23	-	9.6	-	2.4	-	1.5	-	99.33	-	94.3	-	93.5	-	78	-	93.5	-
Season	-	17.7	-	4.13	-	9.8	-	1.3	-	1.6	-	100.21	-	97.4	-	97.5	-	262	-	97.5	-

Table 5. Cottonseed: Quality factors, indexes and grades by marketing services office areas, by states, 1977 and 1978

SOUTHEASTERN

Marketing Services Office	Cottonseed analysis														Average index		Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1977	1978	1977	1978	No.	No.
	1977 Pct.	1978 Pct.	1977 Pct.	1978 Pct.	1977 Pct.	1978 Pct.	1977 Pct.	1978 Pct.	1977 Pct.	1978 Pct.	1977	1978	1977	1978	1977	1978	No.	No.		
Raleigh	18.9	18.8	4.32	4.03	12.3	10.7	3.7	0.7	1.2	1.2	1.2	106.64	104.46	90.0	99.1	96.5	104.0*	496	1/ 374	
NC																				
Columbia	19.1	18.7	4.26	4.26	11.5	10.3	3.2	0.9	1.0	0.8	107.10	105.47	93.2	99.4	100.0	105.0		1,106	910	
SC																				
Macon	18.7	18.2	4.23	4.33	11.7	9.4	6.4	0.8	1.1	0.9	105.23	104.11	79.4	99.2	84.5	103.5		1,116	968	
GA																				
Birmingham	16.5	16.6	4.07	4.12	13.1	11.4	5.7	0.8	1.9	1.4		95.97	80.7	98.4	76.5	95.0		1,460	1,424	
AL																				
Montgomery	17.8	17.5	4.04	4.21	12.3	10.4	7.6	0.9	1.3	0.9	100.15	100.37	74.7	99.3	75.0	100.0		968	2/ 754	
AL																				

SOUTH CENTRAL

Greenwood	16.5	16.7	3.98	4.17	12.4	11.0	2.3	1.3	1.3	1.2	94.56	96.70	95.1	98.6	90.0	95.5		8,544	7,572	
MS																				
Jackson	17.1	-	3.98*	-	12.4	-	4.5	-	1.4	-	97.26	-	87.6	-	85.0	-		1,186	-	
MS																				
Memphis	16.7	16.9	3.91	4.00	13.2	11.2	2.8	0.9	1.4	1.2	95.24	96.62	92.2	98.8	88.0	96.0		4,840	3,642	
TN																				
AR	16.4	16.8	4.00	3.92	13.1	11.6	1.5	1.1	0.8	0.9	94.38	95.57	97.1	98.8	92.0	94.5		2,396	1,878	
AR																				
MS	16.9	16.7	3.89	4.08	12.5	10.8	3.3	0.9	1.4	1.2	95.82	96.20	91.6	98.8	87.5	95.5		636	498	
MS																				
Hayti	16.7	16.6	3.77	3.86	13.9	12.4	2.3	0.6	1.5	0.9	94.25	94.41	94.3	98.7	89.5	93.5		1,940	1,612	
MO																				
Blytheville	16.0	16.7	3.91	3.86	14.3	12.3	1.7	0.8	0.9	0.9	92.15	94.80	95.4	98.8	88.0	94.0		3,958	2,470	
AR																				
Little Rock	16.6	16.6	3.87	4.07	12.6	11.8	1.9	1.2	1.2	1.0	94.43	95.69	96.2	98.5	91.0	94.5		5,382	3,414	
AR																				
Winnsboro	17.1	16.9	3.87	4.10	12.1	11.5	2.2	1.5	1.0	0.9	96.50	97.27	96.3	98.2	93.0	96.0		3,822	2,936	
LA																				
Alexandria	17.9	17.4	3.83	4.10	11.7	11.4	2.4	3.1	0.8	0.9	99.70	99.20	95.7	92.6	95.5	92.0		866	582	
LA																				



Table 5. Cottonseed: Quality factors, indexes and grades by marketing services office areas, by states, 1977 and 1978 (Continued)

SOUTHWESTERN

Marketing Services Office	Cottonseed analysis												Average index				Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1977	1978	1977	1978	No.	No.
	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978
Altus	18.0	18.0	4.14	4.09	8.2	9.7	5.3	0.6	1.7	2.0	101.77	101.50	99.2	98.8	101.0	100.0	3,766	3,714		
OK	17.8	17.8	4.10	4.09	8.7	9.7	4.6	0.5	1.7	1.6	100.79	100.92	99.1	99.1	100.0	100.0	2,162	2,000		
TX	18.2	18.1	4.19	4.10	7.5	9.6	6.2	0.6	1.7	2.3	103.10	102.17	99.2	98.4	102.5	100.5	1,604	1,714		
Dallas	16.4	16.6	4.07	4.18	8.9	9.2	0.7	0.8	1.6	1.4	94.95	96.51	99.2	99.1	94.5	96.0	756	868		
TX	16.3	16.4	4.07	4.18	8.9	9.2	0.7	0.8	1.6	1.4	94.55	95.45	99.2	99.0	94.0	95.0	702	716		
OK	17.5	17.9	4.18	4.17	9.6	9.2	0.7	0.8	1.4	1.0	100.09	101.47	99.2	99.4	99.5	101.0	54	152		
Austin	16.8	16.5	3.90	4.07	10.8	10.5	0.9	1.3	1.2	1.4	95.53	95.32	98.2	97.2	94.0	93.0	1,110	1,324		
TX																				
Corpus Christi	17.8	16.8	3.78	3.99	10.1	11.0	0.7	1.1	1.2	1.4	98.59	96.01	98.9	97.6	98.0	94.5	1,390	1,202		
TX																				
Harlingen	17.3	17.1	3.73	3.81	9.5	10.8	0.4	0.6	0.8	0.9	96.52	95.96	99.8	99.2	96.5	95.5	2,274	1,590		
TX																				
Abilene	17.8	18.3	4.14	4.12	7.5	9.4	0.4	0.6	1.4	2.1	101.20	102.77	99.3	98.6	101.0	101.5	3,492	3,418		
TX																				
Lubbock	19.2	18.3	4.12	4.11	7.6	9.4	0.4	0.5	1.9	2.4	106.53	102.69	99.0	98.4	105.5	101.5	12,642	11,098		
TX																				
NM	19.2	18.3	4.12	4.11	7.6	9.4	0.4	0.5	1.9	2.4	106.53	102.71	99.0	98.4	105.5	101.5	12,508	10,966		
NM	19.2	17.9	4.15	4.09	7.1	9.4	0.4	0.5	2.4	3.3	107.09	100.99	98.6	97.0	105.5	98.5	134	132		
El Paso	19.4	18.3	3.99	4.08	8.9	9.3	0.6	1.0	2.0	3.2	106.70	101.96	98.6	96.7	105.5	99.0	342	3/	414	
TX																				
NM	18.8	18.3	4.03	4.11	8.9	9.3	0.9	1.3	1.9	3.2	103.86	101.40	98.2	95.9	102.0	97.5	114	188		
NM	19.8	18.5	3.99	4.05	8.9	9.2	0.4	0.8	2.1	4.0	108.27	103.40	98.7	96.4	107.0	100.0	216	96		
AZ	-	18.2	-	4.06	-	9.4	-	0.6	-	2.5	-	101.72	-	98.0	-	100.0	-	-	-	130

WESTERN

Bakersfield	19.2	-	4.16	-	7.0	-	0.4	-	0.6	-	106.40	-	100.0	-	107.0	-	10	-		
CA																				
Phoenix	-	17.2	-	4.20	-	10.3	-	2.0	-	0.8	-	98.73	-	96.7	-	95.0	-	-	-	132
AZ																				

1/ Includes 8 certificates in 1977 for Virginia.

2/ Includes 44 certificates in 1977 and 24 certificates in 1978 for Florida.

3/ Includes 12 certificates in 1977 for Arizona.

Table 6. Percentage distribution of quantity index by specified frequencies, by states and United States, 1977 and 1978

State	Quantity Index														Total					
	Under 65														105 and over					
	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978				
NC	-	-	-	-	-	-	-	-	1.1	3.3	6.4	25.3	48.5	71.4	44.0	100.0	100.0			
SC	-	-	-	-	-	-	-	1.1	0.2	3.8	5.3	20.6	35.0	74.5	59.5	100.0	100.0			
GA	-	-	0.2	-	0.2	-	0.2	-	0.7	1.0	9.7	11.8	34.4	45.7	54.4	41.5	100.0	100.0		
AL	-	-	0.2	-	0.4	0.2	5.5	2.1	24.9	23.9	37.3	46.3	26.1	24.4	5.5	3.1	100.0	100.0		
MS	*	*	-	0.3	0.1	1.9	0.6	9.0	3.9	33.1	25.1	43.7	50.6	10.8	18.4	1.2	1.3	100.0	100.0	
TN	0.1	-	-	0.2	-	0.8	0.1	7.3	2.8	38.2	22.9	42.7	49.5	9.8	23.3	0.9	1.4	100.0	100.0	
MO	-	-	-	0.2	-	0.8	0.7	11.1	8.7	43.4	38.8	38.6	48.3	5.6	3.3	0.5	-	100.0	100.0	
AR	*	-	-	0.3	0.2	2.2	1.4	15.4	7.6	44.8	32.2	30.4	45.5	6.5	12.1	0.4	1.0	100.0	100.0	
LA	-	-	-	*	-	0.4	0.2	5.2	3.5	24.2	22.0	43.0	45.2	23.5	25.3	3.7	3.8	100.0	100.0	
OK	-	-	-	-	-	-	-	0.1	0.3	1.9	4.9	30.0	30.0	63.8	53.8	4.2	11.0	100.0	100.0	
TX	-	*	-	*	-	0.1	0.1	1.2	1.2	9.3	9.3	17.3	24.2	29.2	46.6	42.9	18.6	100.0	100.0	
NM	-	-	-	-	-	-	0.9	-	-	1.8	1.7	22.7	16.7	56.1	81.6	18.5	100.0	100.0		
AZ	-	-	-	-	-	-	-	-	-	13.0	-	30.6	-	45.7	-	10.7	-	100.0	100.0	
Other	-	-	-	-	-	-	-	2.7	-	10.8	-	32.5	16.6	24.3	41.7	29.7	41.7	100.0	100.0	
U. S.	*	*	*	*	0.1	*	0.9	0.4	5.9	2.9	22.7	17.4	28.7	35.1	21.1	32.8	20.6	11.4	100.0	100.0

\* Less than 0.05 percent.



Table 7. Percentage distribution of quality index by specified frequencies, by states and United States, 1977 and 1978

State	Quality Index														Total					
	Below grade		Below prime quality										Prime quality 100		1977	1978				
	1977	1978	40.0-49.9	50.0-69.9	70.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	Pct.	Pct.	Pct.	Pct.	Pct.			Pct.			
NC	0.4	-	0.4	-	4.1	-	8.1	0.5	9.4	-	15.7	-	16.8	2.1	32.0	46.0	13.1	51.4	100.0	100.0
SC	-	-	-	-	1.3	0.4	4.7	0.2	6.1	-	13.4	-	20.4	1.1	38.5	28.1	15.6	70.2	100.0	100.0
GA	2.7	-	2.2	0.2	15.4	0.2	20.8	0.6	10.8	-	14.5	0.8	16.6	1.2	13.4	28.5	3.6	68.5	100.0	100.0
AL	0.8	0.2	2.6	0.2	24.0	0.2	22.0	0.2	13.5	0.3	10.0	0.3	7.4	1.8	17.4	54.9	2.3	41.9	100.0	100.0
MS	0.1	0.1	0.1	0.1	1.7	0.2	4.4	0.3	5.3	0.4	8.9	0.7	17.3	3.0	50.9	60.4	11.3	34.8	100.0	100.0
TN	-	-	0.3	0.1	1.9	0.2	7.1	0.2	7.5	0.1	14.1	0.5	23.6	2.0	42.2	59.8	3.3	37.1	100.0	100.0
MO	-	-	0.1	-	0.2	0.2	2.0	0.6	3.3	0.4	7.1	0.1	25.8	1.8	60.5	65.9	1.0	31.0	100.0	100.0
AR	0.1	-	*	*	0.6	0.3	1.3	0.4	2.2	0.5	4.9	1.1	14.8	3.3	59.4	50.7	16.7	43.7	100.0	100.0
LA	-	0.1	*	0.1	0.6	0.4	1.6	0.9	1.9	1.4	5.8	3.3	13.9	8.3	56.8	51.4	19.4	34.1	100.0	100.0
OK	-	-	-	-	-	-	-	0.4	-	0.1	0.1	0.2	0.9	1.3	67.8	63.5	31.2	34.5	100.0	100.0
TX	*	*	*	0.2	0.1	0.2	0.1	0.3	0.1	0.3	0.3	0.7	1.3	2.6	64.3	76.4	33.8	19.3	100.0	100.0
NM	-	-	-	-	-	0.9	-	0.9	-	-	0.6	1.8	3.4	15.7	77.7	72.8	18.3	7.9	100.0	100.0
AZ	-	-	-	-	-	0.8	-	3.1	-	1.5	-	2.3	-	3.9	-	43.6	-	44.8	-	100.0
Other	-	-	-	-	5.4	-	2.7	-	-	-	10.8	-	10.8	-	43.2	8.3	27.1	91.7	100.0	100.0
U. S.	0.1	*	0.2	0.1	1.8	0.2	2.9	0.3	2.8	0.4	4.8	0.8	10.1	3.0	56.4	64.2	20.9	31.0	100.0	100.0

\* Less than 0.05 percent.

Table 8. Percentage distribution of grades by specified frequencies, by states and United States, 1977 and 1978

State	Grade														Total							
	Below grade 00.0-39.9		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 - 104.9		105.0 - 109.9		110.0 and over			
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.		
NC	0.4	-	4.1	-	3.3	-	6.6	0.5	7.4	1.1	14.8	1.6	13.5	10.7	23.3	41.7	22.5	41.7	4.1	2.7	100.0	100.0
SC	-	-	1.4	0.2	2.2	0.2	2.4	-	7.2	-	11.7	1.8	16.3	6.2	24.1	36.0	25.8	52.1	8.9	3.5	100.0	100.0
GA	2.3	-	20.5	0.8	7.0	-	12.2	0.2	13.6	0.4	9.9	2.7	16.3	13.6	12.8	41.6	4.9	36.8	0.5	3.9	100.0	100.0
AL	0.4	0.3	40.6	0.5	12.6	0.4	12.5	0.9	13.7	5.4	12.3	24.6	5.6	41.4	2.3	23.1	-	3.2	-	0.2	100.0	100.0
MS	0.1	0.1	6.9	0.8	5.3	0.6	10.3	1.8	17.3	6.0	31.0	27.1	23.9	46.0	4.8	16.4	0.4	1.1	*	0.1	100.0	100.0
TN	0.1	-	8.3	0.4	8.3	0.5	13.7	1.0	25.5	4.9	27.8	23.3	12.3	45.9	3.8	22.5	0.1	1.5	0.1	-	100.0	100.0
MO	-	-	2.4	1.0	4.0	0.4	11.2	3.1	29.9	11.4	35.5	39.1	15.6	41.2	1.3	3.8	0.1	-	-	-	100.0	100.0
AR	*	*	3.5	1.1	4.0	1.2	10.4	3.2	24.4	10.0	32.7	30.2	19.5	41.6	4.9	11.8	0.5	0.9	0.1	-	100.0	100.0
LA	-	0.1	1.4	0.9	2.1	1.0	5.0	3.4	12.9	10.7	30.9	24.1	33.6	37.7	12.5	19.5	1.6	2.5	-	0.1	100.0	100.0
OK	0.1	-	-	0.3	-	0.2	0.1	0.6	0.6	1.0	4.1	6.9	37.3	32.1	54.2	49.5	3.5	9.1	0.1	0.3	100.0	100.0
TX	*	0.1	0.2	0.6	0.1	0.3	0.3	0.6	1.8	2.0	10.0	11.4	17.6	28.3	31.0	43.8	31.4	12.6	7.6	0.3	100.0	100.0
NM	-	-	-	1.8	-	-	-	0.9	0.6	0.9	-	10.6	4.5	34.9	29.6	41.2	49.3	7.9	16.0	1.8	100.0	100.0
AZ	-	-	-	3.8	-	0.8	-	0.8	-	5.3	-	10.0	-	28.1	-	44.3	-	6.1	-	0.8	-	100.0
Other	-	-	8.1	-	2.7	-	2.7	-	8.1	-	24.4	-	13.5	8.3	18.9	41.6	18.9	50.1	2.7	-	100.0	100.0
U. S.	0.1	0.1	4.5	0.7	3.0	0.5	5.8	1.4	11.6	4.8	20.7	18.7	20.2	34.8	17.7	30.3	13.2	8.4	3.2	0.3	100.0	100.0

\* Less than 0.05 percent.



Table 9. Percentage distribution of oil by specified frequencies, by states and United States, 1977 and 1978

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	21.0 and over	1977		1978										
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.									
NC	-	-	0.5	0.8	0.5	3.7	3.7	4.9	7.0	16.4	18.7	24.6	27.4	44.3	38.0	5.3	3.7	-	-	100.0	100.0			
SC	-	0.7	0.2	0.4	0.4	1.3	1.8	4.3	9.9	11.6	18.2	22.8	30.6	43.7	33.4	13.4	2.6	0.2	-	100.0	100.0			
GA	-	0.4	0.2	0.7	1.2	3.2	3.7	5.7	9.9	12.7	19.2	14.2	27.9	21.1	21.9	32.7	14.4	8.6	1.4	0.7	0.2	100.0	100.0	
AL	2.9	1.5	14.0	12.4	15.9	18.0	14.1	22.1	17.0	20.0	15.9	13.4	10.0	9.2	5.8	2.2	4.1	1.2	0.3	-	-	100.0	100.0	
MS	7.1	3.2	17.0	16.5	17.3	18.9	20.8	22.4	17.1	19.0	11.8	11.8	5.4	5.3	2.0	1.9	1.3	1.0	0.1	*	0.1	-	100.0	100.0
TN	2.5	1.3	16.5	6.8	18.4	11.8	24.8	21.1	18.9	23.1	11.3	20.5	4.9	11.5	1.9	2.3	0.5	1.6	0.3	-	-	100.0	100.0	
MO	1.8	2.9	15.4	17.1	18.7	18.4	25.3	26.0	22.0	23.7	10.2	8.9	4.4	2.5	1.2	0.5	1.0	-	-	-	-	100.0	100.0	
AR	8.6	5.0	25.9	15.6	20.0	17.5	19.5	25.0	13.0	18.4	7.2	10.9	3.6	4.5	1.6	2.0	0.5	1.0	0.1	0.1	*	-	100.0	100.0
LA	2.6	2.2	10.2	14.5	11.4	13.5	13.1	17.8	18.7	19.5	17.1	15.0	12.5	8.5	8.0	4.5	5.8	4.0	0.6	0.5	-	-	100.0	100.0
OK	-	0.1	0.5	1.5	1.1	3.6	6.3	10.1	18.8	16.5	33.7	21.8	27.0	21.7	9.9	15.6	2.5	8.4	0.2	0.7	-	-	100.0	100.0
TX	0.5	0.7	3.8	4.6	4.8	4.9	6.5	7.1	6.3	10.9	8.7	16.6	13.0	21.9	16.6	20.0	30.5	12.7	9.0	0.6	0.3	*	100.0	100.0
NM	-	0.9	-	1.8	-	-	0.6	3.5	0.6	7.9	1.1	27.2	5.7	26.3	12.6	15.8	56.6	14.0	15.4	2.6	7.4	-	100.0	100.0
AZ	-	0.8	-	7.6	-	4.6	-	6.9	-	19.1	-	19.0	-	19.1	-	12.2	-	8.4	-	1.5	-	0.8	100.0	100.0
Other	-	-	-	-	-	-	-	-	13.5	-	10.8	8.3	24.4	16.7	21.6	8.3	21.6	58.4	8.1	8.3	-	-	100.0	100.0
U. S.	3.4	1.9	11.3	9.3	11.2	10.5	13.0	14.4	12.1	15.3	10.9	14.8	9.8	14.3	9.3	11.4	14.7	7.6	4.1	0.5	0.2	*	100.0	100.0

\* Less than 0.05 percent.

Table 10. Percentage distribution of ammonia by specified frequencies, by states and United States, 1977 and 1978

State	Ammonia																							
	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 and over		4.15 and over		Total			
	1977	Pct.	1977	Pct.	1977	Pct.	1977	Pct.	1977	Pct.	1977	Pct.	1977	Pct.	1977	Pct.	1977	Pct.	1977	Pct.	1977	Pct.	1978	Pct.
NC	-	-	-	-	-	-	0.4	-	-	1.1	-	4.3	0.4	13.9	1.6	18.2	14.3	33.1	83.3	29.4	100.0	100.0	100.0	100.0
SC	-	-	-	-	-	-	-	0.4	0.2	-	0.7	0.9	1.1	6.3	5.1	18.4	16.9	73.5	75.6	100.0	100.0	100.0	100.0	100.0
GA	-	-	-	-	-	-	1.3	-	0.5	0.2	1.4	0.8	3.2	0.4	9.0	3.3	18.5	12.0	66.1	83.3	100.0	100.0	100.0	100.0
AL	-	-	-	-	0.1	-	0.3	-	0.9	0.4	4.0	0.6	8.2	3.3	19.0	11.0	31.1	30.2	36.4	54.5	100.0	100.0	100.0	100.0
MS	-	-	0.1	-	0.1	-	0.3	0.1	1.0	0.1	4.3	0.7	16.3	3.3	33.3	11.7	32.7	29.3	12.1	54.6	100.0	100.0	100.0	100.0
TN	-	-	0.2	-	0.1	-	0.2	0.2	1.5	0.6	7.2	4.6	25.3	15.2	37.3	32.8	22.8	32.1	5.4	14.5	100.0	100.0	100.0	100.0
MO	-	-	0.4	-	-	-	0.6	0.1	4.2	1.5	23.3	9.1	42.1	33.1	24.3	39.6	4.0	14.5	1.1	2.1	100.0	100.0	100.0	100.0
AR	-	-	*	-	0.1	*	0.2	0.2	1.3	1.3	8.0	6.2	28.1	18.8	35.8	26.6	20.8	24.8	5.7	22.1	100.0	100.0	100.0	100.0
LA	*	-	-	-	0.1	-	0.7	-	3.4	0.3	14.2	2.8	26.5	7.7	31.0	15.3	19.5	26.9	4.6	47.0	100.0	100.0	100.0	100.0
OK	0.1	-	-	-	-	-	0.1	-	0.3	0.1	1.1	1.9	3.4	7.7	15.3	10.6	39.7	37.3	40.0	42.4	100.0	100.0	100.0	100.0
TX	*	*	*	*	0.1	-	0.4	0.1	2.3	0.8	5.4	2.6	8.4	6.4	16.0	17.1	28.7	36.1	38.7	36.9	100.0	100.0	100.0	100.0
NM	-	-	-	-	-	-	-	-	0.6	0.9	3.4	-	8.0	0.9	25.1	25.4	29.1	47.4	33.8	25.4	100.0	100.0	100.0	100.0
AZ	-	-	-	-	-	-	-	-	-	-	-	0.8	-	3.1	-	11.5	-	36.5	-	48.1	100.0	100.0	100.0	100.0
Other	-	-	-	-	-	-	10.8	-	19.0	8.3	18.9	33.3	16.2	41.8	-	8.3	10.8	8.3	24.3	-	100.0	100.0	100.0	100.0
U. S.	*	*	*	*	*	*	0.4	0.1	1.8	0.7	6.5	2.8	15.7	8.5	24.4	17.5	26.5	31.0	24.7	39.4	100.0	100.0	100.0	100.0

\* Less than 0.05 percent.



Table 11. Percentage distribution of moisture in cottonseed samples by specified frequencies, by states and United States, 1977

State	Moisture														Total	
	Pct.	Prime quality 0-12.0	Below prime quality 12.1-20.0	Off quality 20.1 and over	Pct.	0.0	5.1	7.1	9.1	10.1	11.1	12.1	14.1	16.1		18.1
NC	55.0	45.0	-	-	0.8	4.5	17.2	32.5	31.9	8.6	4.1	0.4	-	-	100.0	
SC	69.3	30.7	-	-	3.1	14.5	26.0	25.7	21.7	7.6	1.4	-	-	100.0		
GA	63.3	36.5	0.2	0.2	4.3	9.7	26.2	22.9	25.8	8.4	1.6	0.7	0.2	100.0		
AL	36.6	63.0	0.4	-	1.4	3.9	13.1	18.2	38.4	19.8	4.1	0.7	0.4	100.0		
MS	47.7	51.8	0.5	-	0.7	4.8	17.0	25.2	37.3	11.7	2.2	0.6	0.5	100.0		
TN	20.0	79.6	0.4	-	0.5	1.3	5.7	12.5	35.5	32.0	9.7	2.4	0.4	100.0		
MO	19.6	80.2	0.2	-	0.2	0.9	5.3	13.2	33.7	34.2	10.8	1.5	0.2	100.0		
AR	28.8	70.7	0.5	-	0.8	3.2	9.0	15.8	38.9	23.3	7.0	1.5	0.5	100.0		
LA	55.5	44.3	0.2	*	0.9	7.0	23.2	24.4	32.6	10.0	1.4	0.3	0.2	100.0		
OK	99.0	1.0	-	-	3.2	62.5	24.8	6.3	2.2	0.8	0.2	-	-	100.0		
TX	96.1	3.9	*	0.1	29.3	49.8	10.6	4.1	2.2	2.6	1.1	0.2	*	100.0		
NM	98.8	1.2	-	-	33.0	35.5	14.3	8.6	7.4	1.2	-	-	-	100.0		
Other	64.9	35.1	-	-	10.8	8.1	19.0	13.5	24.3	8.1	2.7	-	-	100.0		
U. S.	63.9	35.8	0.3	*	11.3	21.9	7.7	10.3	12.7	21.9	10.6	2.7	0.6	0.3	100.0	

\* Less than 0.05 percent.

Table 12. Percentage distribution of moisture in cottonseed samples by specified frequencies, by states and United States, 1978

State	Moisture														Total									
	Pct.	Pct.	Off quality 20.1 and over	Pct.	0.0 - 5.0	Pct.	5.1 - 7.0	Pct.	7.1 - 9.0	Pct.	9.1 - 10.0	Pct.	10.1 - 11.0	Pct.		11.1 - 12.0	Pct.	12.1 - 14.0	Pct.	14.1 - 16.0	Pct.	16.1 - 18.0	Pct.	18.1 - 20.0
NC	87.2	12.8	-	-	4.8	27.3	35.8	19.3	10.7	2.1	-	-	-	100.0										
SC	89.4	10.6	-	-	18.4	32.1	25.7	13.2	8.6	1.3	0.7	-	-	100.0										
GA	92.4	7.6	-	-	1.4	46.1	21.3	15.5	8.1	7.0	0.6	-	-	100.0										
AL	74.0	26.0	-	-	9.7	19.6	23.8	20.9	21.0	4.8	0.2	-	-	100.0										
MS	76.1	23.9	*	0.1	8.1	23.0	26.1	18.8	19.7	3.5	0.6	0.1	*	100.0										
TN	68.8	31.2	-	-	3.9	22.8	25.5	16.6	23.0	7.6	0.6	-	-	100.0										
MO	45.2	54.7	0.1	-	0.5	2.0	13.2	29.5	43.1	9.2	1.9	0.5	0.1	100.0										
AR	58.0	41.8	0.2	-	1.8	8.3	20.6	27.3	30.6	8.5	2.2	0.5	0.2	100.0										
LA	67.2	32.7	0.1	-	7.3	18.5	22.4	18.9	21.0	8.7	2.6	0.4	0.1	100.0										
OK	95.0	4.9	0.1	0.1	36.8	30.4	18.9	8.7	3.5	1.0	0.4	-	0.1	100.0										
TX	91.6	8.3	0.1	0.1	41.0	25.9	14.9	8.7	6.2	1.3	0.5	0.3	0.1	100.0										
NM	94.6	4.5	0.9	-	2.6	56.0	24.6	7.9	3.5	1.8	-	0.9	0.9	100.0										
AZ	92.3	7.7	-	-	3.8	26.7	28.9	26.0	6.9	4.6	1.5	-	-	100.0										
Other	100.0	-	-	-	8.3	33.3	33.4	25.0	-	-	-	-	-	100.0										
U. S.	80.1	19.8	0.1	0.1	0.5	23.2	21.8	19.4	15.1	15.0	3.7	0.9	0.2	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, 1977

State	Free fatty acids													Total	
	Prime quality 0-1.8	Below prime quality 1.9-12.4	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 and 12.4		12.5 and over
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
NC	30.7	68.1	1.2	1.6	15.2	8.6	5.3	15.6	26.2	16.0	7.4	2.5	0.4	1.2	100.0
SC	26.8	73.0	0.2	-	3.3	11.7	11.8	29.9	26.8	10.7	4.5	0.9	0.2	0.2	100.0
GA	6.0	85.4	8.6	0.2	2.7	1.7	1.4	9.5	29.7	15.6	15.9	8.2	6.5	8.6	100.0
AL	18.1	74.7	7.2	2.9	7.6	4.5	3.1	4.0	12.4	20.1	16.9	14.2	7.1	7.2	100.0
MS	45.4	54.1	0.5	4.9	17.4	13.2	9.9	21.6	19.9	8.0	3.1	1.2	0.3	0.5	100.0
TN	42.2	57.3	0.5	7.8	20.9	6.8	6.7	15.6	26.2	9.6	4.4	1.3	0.2	0.5	100.0
MO	43.0	56.9	0.1	4.6	9.7	11.7	17.0	35.3	17.0	3.9	0.6	0.1	-	0.1	100.0
AR	67.2	32.7	0.1	8.8	27.1	17.8	13.5	18.1	10.2	3.0	0.8	0.4	0.2	0.1	100.0
LA	53.0	47.0	*	0.4	11.7	22.8	18.1	26.6	15.0	3.6	1.2	0.5	0.1	*	100.0
OK	99.8	0.2	-	52.1	46.6	1.0	0.1	0.1	0.1	-	-	-	-	-	100.0
TX	99.1	0.9	*	65.1	30.0	3.4	0.6	0.4	0.3	0.1	0.1	*	*	*	100.0
NM	100.0	-	-	80.5	18.3	1.2	-	-	-	-	-	-	-	-	100.0
Other	46.0	51.3	2.7	21.7	10.8	-	13.5	24.3	16.2	2.7	2.7	5.4	-	2.7	100.0
U. S.	69.7	29.7	0.6	29.9	23.4	9.5	6.9	11.9	9.9	4.2	2.1	1.1	0.5	0.6	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, 1978

State	Free fatty acids											Total			
	Prime quality 0-1.8	Below prime quality 1.9-12.4	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	12.5 over
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
NC	94.2	5.8	-	28.9	57.3	5.3	2.7	4.2	1.1	-	0.5	-	-	-	100.0
SC	95.4	4.6	-	9.5	66.8	15.6	3.5	3.6	0.4	-	0.2	-	0.4	-	100.0
GA	94.8	5.2	-	23.1	59.9	8.5	3.3	2.4	2.0	0.2	-	0.4	0.2	-	100.0
AL	96.0	3.6	0.4	22.2	57.4	13.0	3.4	2.2	0.4	0.5	0.2	0.2	0.1	0.4	100.0
MS	89.1	10.7	0.2	4.2	41.4	32.1	11.4	7.8	2.1	0.4	0.1	0.2	0.1	0.2	100.0
TN	97.5	2.4	0.1	10.1	78.9	7.2	1.3	1.2	0.8	-	0.1	0.3	-	0.1	100.0
MO	97.3	2.7	-	55.3	36.5	4.1	1.4	0.8	0.6	0.4	0.5	0.4	-	-	100.0
AR	92.2	7.8	-	8.2	50.3	25.6	8.1	5.2	1.9	0.3	0.2	0.1	0.1	-	100.0
LA	68.2	31.6	0.2	0.7	24.0	27.6	15.9	19.2	8.7	2.5	1.0	0.2	-	0.2	100.0
OK	98.6	1.4	-	49.0	45.6	3.3	0.7	0.5	0.4	0.2	0.2	0.1	-	-	100.0
TX	96.8	3.0	0.2	49.0	41.8	4.5	1.5	1.4	0.8	0.3	0.3	0.1	0.1	0.2	100.0
NM	93.9	6.1	-	58.7	29.0	5.3	0.9	3.5	2.6	-	-	-	-	-	100.0
AZ	83.1	16.9	-	31.8	22.2	13.8	15.3	10.0	3.1	1.5	2.3	-	-	-	100.0
Other	100.0	-	-	25.0	41.7	33.3	-	-	-	-	-	-	-	-	100.0
U. S.	92.7	7.2	0.1	28.6	44.4	14.4	5.3	4.4	1.7	0.5	0.3	0.2	0.1	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, 1977

State	Foreign matter										Total		
	Prime quality 0-1.0	Below prime quality 1.1-10.0	Off quality 10.1 and over	0	0.6	1.1	2.1	3.1	4.1	5.6		7.1	8.6
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
NC	59.0	41.0	-	21.7	37.3	29.1	7.8	2.9	0.8	0.4	-	-	100.0
SC	65.8	34.2	-	23.5	42.3	27.1	5.8	0.7	0.4	0.2	-	-	100.0
GA	66.6	33.2	0.2	32.2	34.4	23.3	5.9	1.8	1.3	0.7	-	0.2	100.0
AL	33.2	66.6	0.2	6.4	26.8	43.9	14.0	5.5	2.5	0.3	0.2	0.2	100.0
MS	49.5	50.4	0.1	10.0	39.5	37.6	8.2	2.3	1.5	0.5	0.2	0.1	100.0
TN	51.8	48.2	-	18.3	33.5	28.2	11.3	4.6	2.7	0.5	0.5	0.3	100.0
MO	37.2	62.7	0.1	7.3	29.9	44.7	11.9	3.6	2.2	0.1	0.1	0.1	100.0
AR	67.1	32.6	0.3	25.5	41.6	24.8	5.0	1.5	0.7	0.3	0.2	0.1	100.0
LA	73.1	26.6	0.3	26.0	47.1	20.9	3.6	1.3	0.5	0.3	*	-	100.0
OK	31.7	68.2	0.1	5.8	25.9	39.8	18.8	5.9	2.9	0.7	0.1	-	100.0
TX	36.4	63.3	0.3	10.3	26.1	42.2	14.0	3.8	1.9	0.7	0.5	0.2	100.0
NM	19.5	79.9	0.6	6.9	12.6	39.9	20.0	10.3	5.7	3.4	0.6	-	100.0
Other	56.7	43.3	-	16.2	40.5	37.9	2.7	2.7	-	-	-	-	100.0
U. S.	48.1	51.7	0.2	14.5	33.6	35.8	10.3	3.1	1.6	0.5	0.3	0.1	100.0

\* Less than 0.05 percent.



Table 16. Percentage distribution of foreign matter in cottonseed samples by specified frequencies, by states and United States, 1978

State	Foreign matter													
	Prime quality 0-1.0	Below prime quality 1.1-10.0	Off quality 10.1 and over	0	0.6	1.1	2.1	3.1	4.1	5.6	7.1	8.6	10.1 and over	Total
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
NC	57.8	42.2	-	19.3	38.5	27.3	11.2	2.7	0.5	0.5	-	-	-	100.0
SC	79.0	21.0	-	42.1	36.9	17.6	2.6	0.2	0.4	-	-	0.2	-	100.0
GA	74.8	25.0	0.2	32.4	42.4	21.1	2.9	0.6	-	0.2	-	0.2	0.2	100.0
AL	56.1	43.9	-	15.8	40.3	31.1	7.9	3.0	1.4	0.3	0.2	-	-	100.0
MS	52.1	47.9	*	13.3	38.8	37.5	6.8	2.0	1.0	0.4	0.1	0.1	*	100.0
TN	60.2	39.8	-	29.1	31.1	27.5	8.7	1.5	1.6	0.2	0.1	0.2	-	100.0
MO	73.9	26.0	0.1	21.9	52.0	22.2	2.9	0.6	0.2	-	0.1	-	0.1	100.0
AR	75.3	24.6	0.1	26.0	49.3	19.5	2.9	0.8	0.9	0.2	0.2	0.1	0.1	100.0
LA	77.6	22.3	0.1	29.7	47.9	17.0	3.5	1.0	0.6	0.1	-	0.1	0.1	100.0
OK	35.3	64.7	-	9.1	26.2	39.9	17.2	5.9	1.6	0.1	-	-	-	100.0
TX	22.7	77.0	0.3	6.6	16.1	38.8	22.0	9.2	4.8	1.4	0.5	0.3	0.3	100.0
NM	8.0	90.2	1.8	0.9	7.1	28.1	16.6	15.8	10.5	9.6	3.5	6.1	1.8	100.0
AZ	58.6	40.6	0.8	26.6	32.0	10.0	17.6	6.1	4.6	0.8	1.5	-	0.8	100.0
Other	91.7	8.3	-	50.1	41.6	8.3	-	-	-	-	-	-	-	100.0
U. S.	45.8	54.0	0.2	15.0	30.8	32.3	12.8	5.0	2.6	0.8	0.3	0.2	0.2	100.0

\* Less than 0.05 percent.

Table 17. Number of cottonseed samples by specified groups, by qualities, and number reduced in grade for specified causes, by states and United States, 1977 and 1978

State	Quality										Reduced due to excess					
	Prime		Below prime and off quality				Below grade		Total samples graded		Moisture		Free fatty acids		Foreign matter	
	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978
NC	64	192	422	182	2	-	488	374	220	48	338	22	200	158		
SC	172	638	934	272	-	-	1,106	910	340	96	810	42	378	192		
GA	40	662	1,046	306	30	-	1,116	968	410	74	1,050	52	372	244		
AL	54	906	2,312	1,244	18	4	2,384	2,154	1,514	560	1,952	84	1,594	946		
MS	1,300	3,080	10,224	5,748	14	10	11,538	8,838	6,048	2,110	6,288	948	5,826	4,238		
TN	78	694	2,318	1,184	-	-	2,396	1,878	1,916	586	1,388	48	1,154	748		
MO	20	500	1,920	1,112	-	-	1,940	1,612	1,560	882	1,104	44	1,218	422		
AR	1,642	2,788	8,328	3,594	6	-	9,976	6,382	7,098	2,678	3,258	496	3,282	1,570		
LA	900	1,196	3,788	2,320	-	2	4,688	3,518	2,082	1,154	2,206	1,118	1,266	788		
OK	692	742	1,524	1,410	-	-	2,216	2,152	20	106	4	28	1,514	1,392		
TX	7,828	4,076	15,364	17,034	2	8	23,194	21,118	910	1,744	214	670	14,734	16,332		
NM	64	18	286	210	-	-	350	228	4	12	-	14	282	210		
AZ	-	118	-	144	-	-	-	262	-	20	-	44	-	108		
Other	20	22	54	2	-	-	74	24	26	-	40	-	32	2		
U. S.	12,874	15,632	48,520	34,762	72	24	61,466	50,418	22,148	10,070	18,652	3,610	31,852	27,350		