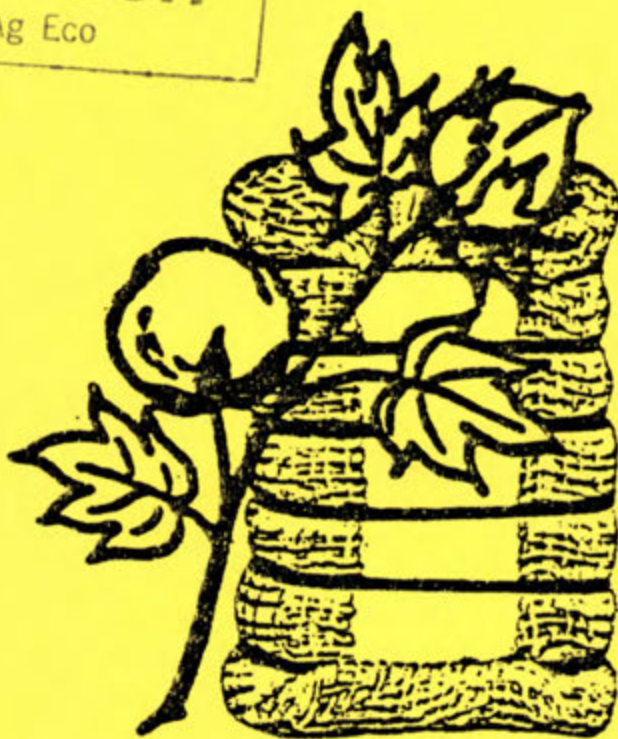


COTTONSEED QUALITY

CROP OF 1982

TEXAS TECH

Dept of Ag Eco



UNITED STATES DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service Cotton Division

Memphis, Tennessee

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Cottonseed Quality - 1982 Crop

Cottonseed from the 1982 crop was higher in grade than the two previous years, according to the Cotton Division, Agricultural Marketing Service, USDA. The average grade was 96.5 compared with 96.0 in 1981 and 95.5 in 1980. The quality index for the 1982 crop was 98.0. This compares with 98.1 last year and was the same as the 1980 crop. Foreign matter content in cottonseed was lower than in 1981 while the percentage of free fatty acids was the highest since 1977. Moisture content was the highest since 1974. The quantity index of cottonseed from the 1982 crop was 98.22, up from 97.69 a year earlier and 97.17 two years ago. Average oil content of seed from the 1982 crop was slightly higher than the previous year while ammonia content was lower.

Indicated 1982 cottonseed production is 4.78 million tons, 25 percent below production in 1981 of 6.40 million tons.

Data from grade certificates covering 33,612 samples of cottonseed were used to compile this report. Averages of cottonseed quantity and quality factors and grades are shown by states (when sufficient certificates were received), by months and by specified frequencies. Average grade factors of cottonseed are shown by states in Table 3. The averages in this table 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 is based on state quantity and quality factors and grades weighted by the number of certificates received.

Table 1. Cottonseed quality factors, indexes and grades, 1955-1982

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
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
1979	17.6	3.92	1/	10.3	1.0	1.7	98.92	97.7	97.0	56,792
1980	16.9	4.08	1/	10.4	0.9	1.7	97.17	98.0	95.5	38,224
1981	17.2	3.97	1/	10.1	0.8	2.0	97.69	98.1	96.0	50,636
1982	17.5	3.89	1/	10.9	1.1	1.4	98.22	98.0	96.5	33,612

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		RH 8/		Sum of pro-ducts	Adjust-ment factors	Quan-tity Index	
	Total	Re-duction	Total	Re-duction	Total	Re-duction			Total	Product	Total	Product				
Pct.	Units	Pct.	Units	Pct.	Units	Units	Pct.	Units	Pct.	Units	Pct.	Units	Pct.	Units		
<u>PRIME QUALITY SEED</u>																
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
<u>BELOW PRIME QUALITY SEED</u>																
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
<u>OFF QUALITY SEED</u>																
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
<u>BELOW GRADE SEED</u>																
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	BC*
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	BC*

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

2/ Example "g", 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.

Table 3. Cottonseed: Quality factors, indexes and grades, by states and United States, 1981 and 1982

State	Cottonseed analysis														Average index				Average grade	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1981	1982	1981	1982		
	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982						
	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>							
AL	17.4	17.9	4.05	3.80	11.2	10.6	1.0	1.1	1.4	1.3	99.03	99.32	98.4	98.1	97.5	97.5				
AZ	18.5	-	4.16	-	7.2	-	0.4	-	1.6	-	103.98	-	99.2	-	103.5	-				
AR	16.1	17.0	3.89	3.85	12.0	12.0	0.8	1.2	1.0	0.9	92.71	95.78	98.9	97.9	92.0	94.0				
GA	18.1	18.7	4.20	3.82	10.5	10.4	1.5	1.3	1.2	0.9	102.52	103.02	98.1	98.9	101.0	102.0				
LA	16.2	16.8	4.02	3.86	12.1	11.6	1.5	1.4	1.2	1.1	94.00	95.01	97.4	97.7	92.0	93.5				
MS	16.3	17.1	4.08	3.89	11.8	11.7	1.1	1.6	1.4	1.2	94.37	96.56	98.3	97.2	93.0	94.0				
MO	16.3	17.0	3.74	3.81	12.0	12.7	0.5	0.5	1.0	1.1	92.38	95.75	98.9	98.6	91.5	95.0				
NM	18.2	18.2	3.95	3.99	8.1	9.3	0.4	0.5	2.5	1.6	101.64	101.76	98.5	99.2	100.5	101.0				
NC	19.3	18.9	4.09	3.66	9.8	11.6	0.5	0.8	1.1	0.8	106.91	102.73	99.5	99.3	106.5	102.0				
OK	16.9	17.7	4.09	4.06	9.4	9.5	0.6	0.6	2.8	2.4	97.18	100.32	98.1	98.3	96.0	99.0				
SC	18.8	18.8	4.05	3.75	9.5	11.4	0.8	1.6	1.1	0.8	104.62	102.75	99.4	97.9	104.5	101.0				
TN	17.2	17.4	3.75	3.78	11.6	12.2	0.6	0.7	1.6	1.6	95.99	97.37	98.6	98.2	95.0	96.0				
TX	17.9	18.2	3.94	3.97	8.5	9.0	0.7	0.5	2.7	2.0	100.36	101.55	97.7	98.8	98.5	100.5				
Other	17.5	18.1	3.76	3.62	11.3	11.9	1.4	1.7	1.0	0.8	96.97	99.16	98.2	98.3	95.5	98.0				
U. S.	17.2	17.5	3.97	3.89	10.1	10.9	0.8	1.1	2.0	1.4	97.69	98.22	98.1	98.0	96.0	96.5				

Table 4. Cottonseed: Quality factors, indexes and grades, by specified periods and states, 1981 and 1982

Month	Oil		Cottonseed analysis						Average Index				Average grade		Samples			
	1981	1982	Ammonia	Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1981	1982	1981	1982	
				1981	1982	1981	1982	1981	1982	1981	1982	1981	1982					
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.						No.	No.		
ALABAMA																		
Sept.	17.1	17.6	4.09	3.82	11.8	11.1	1.3	1.0	1.1	1.0	97.91	98.10	97.7	97.4	95.5	96.5	188	90
Oct.	17.7	18.0	4.08	3.77	10.8	10.8	0.8	0.6	1.1	1.0	100.36	99.35	99.0	99.5	99.5	99.0	966	628
Nov.	17.3	18.0	4.01	3.82	11.8	10.2	1.0	0.9	1.8	1.4	98.13	99.86	98.1	99.3	96.5	99.5	612	555
Dec.	17.0	17.4	3.98	3.82	10.9	11.5	1.3	2.3	1.9	1.5	96.78	97.36	97.8	97.5	95.0	93.0	230	115
Jan.	17.0	17.9	4.08	3.83	11.3	10.6	1.7	5.8	1.2	2.3	97.02	99.13	96.6	81.4	94.5	79.5	26	50
Feb.	17.6	17.9	4.08	3.74	10.4	10.6	1.0	3.6	1.4	2.4	99.81	99.33	99.1	90.4	99.0	89.5	36	45
Mar. and later	17.6	18.3	4.07	3.86	9.9	9.4	2.2	1.7	2.2	1.9	99.58	101.61	94.3	95.0	93.0	97.5	32	14
Season	17.4	17.9	4.05	3.80	11.2	10.6	1.0	1.1	1.4	1.3	99.03	99.32	98.4	98.1	97.5	97.5	2,090	1,497
ARIZONA																		
Oct.	18.7	-	4.14	-	8.3	-	0.5	-	0.6	-	105.37	-	99.9	-	105.5	-	26	-
Nov.	18.9	-	4.23	-	6.6	-	0.4	-	1.1	-	106.15	-	99.6	-	106.0	-	62	-
Dec.	18.3	-	4.13	-	6.4	-	0.4	-	1.7	-	102.63	-	99.0	-	102.0	-	24	-
Jan.	17.7	-	4.04	-	7.9	-	0.4	-	2.5	-	100.06	-	98.5	-	99.0	-	18	-
Feb.	18.0	-	4.12	-	8.6	-	0.5	-	3.8	-	99.29	-	97.1	-	97.0	-	12	-
Mar. and later	17.7	-	4.07	-	7.6	-	1.1	-	3.6	-	101.13	-	97.5	-	99.0	-	4	-
Season	18.5	-	4.16	-	7.2	-	0.4	-	1.6	-	103.98	-	99.2	-	103.5	-	146	-
ARKANSAS																		
Sept.	16.2	16.8	4.13	3.83	11.0	13.3	0.6	0.5	0.6	0.7	94.70	94.89	99.7	98.3	94.5	93.5	296	460
Oct.	16.2	17.3	3.92	3.88	12.1	11.6	0.6	0.6	0.7	0.7	93.35	97.14	99.0	99.4	92.5	97.0	1,888	1,735
Nov.	16.2	16.8	3.85	3.85	12.2	11.6	1.0	1.4	1.1	1.3	92.39	95.08	98.8	98.5	91.5	94.0	1,642	950
Dec.	15.7	16.0	3.77	3.72	11.7	13.7	1.0	3.3	1.8	1.6	90.20	90.99	98.5	90.7	89.0	82.0	422	240
Jan.	15.9	16.7	3.78	3.80	12.1	12.8	1.4	6.0	2.4	1.1	90.30	94.23	97.3	82.8	87.5	77.5	74	75
Feb.	15.9	17.0	3.89	3.87	11.8	13.1	1.7	5.8	1.8	2.2	92.50	95.46	97.3	80.0	88.5	79.0	22	30
Mar. and later	15.9	16.6	3.85	3.86	11.3	10.3	1.3	4.4	2.1	2.8	91.18	92.86	97.2	79.1	88.5	78.5	28	7
Season	16.1	17.0	3.89	3.85	12.0	12.0	0.8	1.2	1.0	0.9	92.71	95.78	98.9	97.9	92.0	94.0	4,372	3,497
GEORGIA																		
Sept.	17.2	18.4	4.37	3.82	10.5	10.6	1.2	3.2	0.4	2.3	99.78	101.83	99.7	89.8	100.0	87.0	20	6
Oct.	18.3	18.4	4.25	3.72	9.5	10.4	1.4	0.8	0.7	0.7	104.15	100.98	98.6	99.8	102.5	101.0	72	80
Nov.	18.1	18.8	4.20	3.88	11.3	9.9	1.3	1.0	1.3	1.0	102.57	104.21	98.6	99.8	101.5	104.0	92	85
Dec.	17.8	19.3	4.12	3.87	10.3	11.2	1.8	2.0	1.7	0.9	101.33	105.46	96.4	98.4	98.0	104.5	46	30
Jan.	18.5	18.8	4.04	3.83	10.2	11.4	1.3	4.4	1.8	1.1	102.90	103.25	98.1	89.3	101.0	91.5	10	5
Feb.	18.0	18.6	4.15	3.80	10.6	11.0	2.6	3.7	1.3	1.2	101.50	102.15	96.6	91.2	98.5	94.0	4	5
Mar. and later	17.9	-	4.02	-	11.9	-	2.6	-	1.9	-	100.58	-	93.0	-	94.5	-	6	-
Season	18.1	18.7	4.20	3.82	10.5	10.4	1.5	1.3	1.2	0.9	102.52	103.02	98.1	98.9	101.0	102.0	250	211

Table 4. Cottonseed: Quality factors, indexes and grades, by specified periods and states, 1981 and 1982 (Continued)

Month	Cottonseed analysis												Average index		Average grade		Samples			
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1981	1982	1981	1982	1981	1982
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	1981	1982	1981	1982	No.	No.	No.	No.		
Sept.	16.2	16.8	4.16	3.93	11.0	11.3	0.7	0.5	0.9	0.8	94.64	95.65	99.5	99.6	94.5	95.5	916	604		
Oct.	16.4	16.9	4.02	3.87	11.9	11.4	1.0	0.8	1.1	0.9	94.65	95.57	98.7	99.4	93.5	95.5	1,884	2,100		
Nov.	16.1	16.7	3.92	3.82	13.4	11.8	2.2	2.1	1.5	1.4	92.71	94.25	95.5	97.0	88.5	92.0	1,028	1,430		
Dec.	16.0	16.3	3.93	3.81	12.2	13.3	3.3	4.2	2.0	1.6	92.41	92.88	91.9	88.2	84.5	81.5	334	225		
Jan.	15.5	16.8	3.92	3.93	12.6	11.1	6.8	4.7	4.1	1.8	89.89	95.67	77.5	82.8	68.5	82.5	22	75		
Feb.	16.2	16.3	4.03	3.88	11.9	10.8	3.3	5.2	1.4	1.7	94.20	93.44	92.1	71.9	88.0	75.5	22	20		
Mar. and later	17.0	17.2	3.99	4.07	10.9	11.6	2.0	3.5	0.8	0.9	96.58	96.25	97.8	93.7	95.0	91.0	44	1		
Season	16.2	16.8	4.02	3.86	12.1	11.6	1.5	1.4	1.2	1.1	94.00	95.01	97.4	97.7	92.0	93.5	4,250	4,455		
MISSISSIPPI																				
Sept.	16.1	17.2	4.22	3.95	11.2	11.8	0.7	0.4	0.8	0.9	94.76	97.26	99.5	99.3	94.5	97.0	1,758	1,030		
Oct.	16.4	17.2	4.09	3.91	11.8	11.7	0.9	1.0	1.1	0.9	94.87	97.28	98.9	99.1	94.0	96.5	4,474	3,970		
Nov.	16.2	17.0	3.98	3.86	12.4	11.6	1.4	2.0	2.0	1.5	93.43	95.96	97.0	96.7	91.0	93.0	2,104	3,030		
Dec.	16.0	16.8	3.95	3.85	11.8	12.4	2.2	3.9	2.7	1.9	92.42	94.75	94.9	90.0	87.5	85.0	372	610		
Jan.	16.4	16.6	3.94	3.84	11.2	12.2	2.4	5.1	4.1	2.2	92.93	93.96	92.4	86.5	86.5	82.0	46	130		
Feb.	16.4	16.1	3.93	3.83	12.1	13.0	2.5	8.7	2.4	2.6	93.44	91.77	93.1	70.5	88.0	69.0	48	65		
Mar. and later	16.2	16.6	4.06	3.98	11.1	11.3	1.7	4.4	1.9	2.8	92.77	96.14	96.9	88.1	90.5	82.5	84	35		
Season	16.3	17.1	4.08	3.89	11.8	11.7	1.1	1.6	1.4	1.2	94.37	96.56	98.3	97.2	93.0	94.0	8,886	8,870		
MISSOURI																				
Sept.	15.9	16.9	4.02	3.75	11.6	13.9	0.6	0.5	0.7	1.0	92.48	94.81	99.3	97.5	92.0	93.0	190	316		
Oct.	16.2	17.1	3.70	3.82	12.3	12.6	0.4	0.4	0.8	0.9	91.72	96.21	98.9	99.0	91.0	96.0	548	665		
Nov.	16.4	16.9	3.69	3.85	11.9	11.1	0.5	0.6	1.1	1.8	92.66	95.78	99.1	99.1	92.0	95.0	582	180		
Dec.	16.7	16.7	3.69	3.80	11.3	12.0	0.6	0.6	1.8	1.6	93.47	94.25	98.8	99.3	92.5	94.5	124	25		
Jan.	17.5	17.7	3.70	3.92	11.7	12.6	0.7	1.5	1.6	1.9	96.94	99.38	98.7	97.5	96.0	97.5	16	2		
Feb.	15.3	17.7	3.57	4.07	12.2	12.6	0.9	2.7	3.5	0.9	89.17	98.75	96.7	96.5	86.0	96.0	6	1		
Mar. and later	16.4	18.0	3.70	3.85	11.8	12.1	4.1	2.4	2.6	2.7	90.31	99.38	85.3	94.3	78.0	93.5	8	2		
Season	16.3	17.0	3.74	3.81	12.0	12.7	0.5	0.5	1.0	1.1	92.38	95.75	98.9	98.6	91.5	95.0	1,474	1,191		

Table 4. Cottonseed: Quality factors, Indexes and grades by specified periods and states, 1981 and 1982 (Continued)

Month	Cottonseed analysis														Average Index		Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1981	1982	1981	1982	1981	1982
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	1981	1982	1981	1982						
Oct.	18.2	18.5	3.83	3.85	11.1	9.1	0.4	0.4	1.2	1.6	100.94	102.50	99.5	99.5	100.5	101.0	24	2		
Nov.	18.4	18.6	3.96	4.03	7.6	8.6	0.4	0.5	2.2	1.3	102.14	103.63	98.8	99.6	101.0	103.5	64	16		
Dec.	18.3	18.2	3.98	4.02	7.2	9.6	0.4	0.5	2.8	1.7	101.86	101.81	98.3	99.2	100.5	101.0	50	13		
Jan.	18.2	18.4	3.92	4.01	7.9	9.4	0.5	0.5	3.3	1.4	101.27	102.60	97.7	99.5	99.0	102.0	32	5		
Feb.	17.9	17.5	3.98	3.88	8.0	10.6	0.5	0.7	2.9	2.4	101.00	97.82	98.0	97.9	99.5	96.5	14	7		
Mar. and later	17.7	17.2	4.15	3.85	8.1	8.1	1.1	0.6	2.7	1.6	100.38	97.50	98.5	99.2	99.5	96.0	4	2		
Season	18.2	18.2	3.95	3.99	8.1	9.3	0.4	0.5	2.5	1.6	101.64	101.76	98.5	99.2	100.5	101.0	188	45		
NEW MEXICO																				
Sept.	18.5	18.5	4.17	3.58	12.9	11.8	0.6	1.9	0.7	1.1	104.08	100.13	99.1	96.7	102.5	97.5	6	8		
Oct.	19.7	19.1	4.14	3.71	9.3	11.6	0.5	0.6	0.8	0.5	108.82	103.73	99.7	99.7	108.5	103.5	194	175		
Nov.	19.2	19.1	4.04	3.63	10.0	11.7	0.4	0.7	1.2	1.0	105.94	103.26	99.5	99.3	105.5	102.5	178	175		
Dec.	19.2	18.4	4.08	3.60	9.8	11.6	0.5	0.8	1.6	1.1	106.33	100.11	99.2	99.6	106.0	100.0	88	95		
Jan.	18.6	18.6	4.01	3.73	10.4	11.9	0.5	2.9	1.4	0.9	103.13	101.94	99.4	94.9	103.0	96.5	20	8		
Feb.	18.4	-	4.02	-	10.6	-	0.8	-	1.1	-	102.83	-	99.7	-	103.0	-	12	-		
Mar. and later	18.9	21.1	4.12	3.92	9.2	8.6	1.1	10.0	0.4	0.9	105.83	112.50	99.8	60.0	106.0	77.5	6	1		
Season	19.3	18.9	4.09	3.66	9.8	11.6	0.5	0.8	1.1	0.8	106.81	102.73	99.5	99.3	106.5	102.0	504	462		
NORTH CAROLINA																				
Sept.	16.3	18.1	4.04	4.00	9.6	7.9	1.3	1.5	1.1	3.1	94.00	100.16	98.6	97.2	93.5	98.0	10	16		
Oct.	16.4	17.3	3.98	3.65	10.9	10.6	0.5	0.4	1.2	0.6	93.80	96.14	99.3	99.7	94.0	96.0	66	45		
Nov.	16.6	17.5	4.11	4.07	10.4	9.1	0.5	0.6	2.2	1.3	96.24	99.18	98.6	99.5	95.0	99.0	292	200		
Dec.	17.1	17.7	4.13	4.08	8.8	9.8	0.5	0.6	2.7	2.2	97.96	100.42	98.3	98.7	96.5	99.0	694	285		
Jan.	17.1	18.1	4.07	4.11	9.5	9.1	0.6	0.6	3.0	2.7	97.54	102.04	97.9	98.3	96.0	100.5	608	285		
Feb.	16.8	17.2	4.04	4.02	9.4	10.9	0.8	1.0	3.7	5.6	96.36	98.04	97.3	94.3	94.5	93.0	186	65		
Mar. and later	16.4	18.1	4.03	4.13	10.4	10.3	1.3	1.2	3.7	4.5	94.82	101.61	96.9	94.8	92.0	96.5	34	35		
Season	16.9	17.7	4.09	4.06	9.4	9.5	0.6	0.6	2.8	2.4	97.18	100.32	98.1	98.3	96.0	99.0	1,890	931		
OKLAHOMA																				

Table 4. Cottonseed: Quality factors, indexes and grades, by specified periods and states, 1981 and 1982 (Continued)

Month	Cottonseed analysis												Average Index				Samples				
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		Average grade		1981		1982		
	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.	No.					
SOUTH CAROLINA																					
Sept.	19.5	18.7	4.08	3.84	10.5	11.4	1.3	1.3	0.7	1.4	107.63	102.88	98.7	97.1	106.5	100.0	72	26			
Oct.	19.3	19.1	4.09	3.74	9.0	11.3	0.7	1.1	0.8	0.6	107.05	103.73	99.8	99.3	107.0	103.5	514	445			
Nov.	18.4	18.8	4.00	3.74	10.2	11.4	0.7	2.2	1.1	0.9	102.71	102.69	99.6	97.1	102.5	100.0	294	225			
Dec.	17.7	17.6	4.01	3.73	9.6	12.1	0.8	1.7	2.1	1.0	99.78	97.81	98.5	97.8	98.5	96.0	126	85			
Jan.	18.1	18.8	4.01	3.75	9.4	11.1	0.9	4.1	1.3	1.2	101.04	102.72	99.5	90.9	101.0	93.0	48	40			
Feb.	18.5	18.2	4.01	3.94	9.9	11.2	1.2	4.3	1.0	1.8	103.21	101.48	99.4	89.3	103.0	91.5	36	10			
Mar. and later	18.3	19.2	4.04	3.87	9.6	10.2	0.9	2.8	2.6	1.6	102.60	104.75	98.2	94.3	101.0	101.0	34	3			
Season	18.8	18.8	4.05	3.75	9.5	11.4	0.8	1.6	1.1	0.8	104.62	102.75	99.4	97.9	104.5	101.0	1,124	834			
TENNESSEE																					
Sept.	17.1	17.4	3.86	3.76	11.4	13.4	0.7	0.5	0.6	0.7	96.38	96.88	99.4	98.4	96.0	95.5	120	342			
Oct.	17.4	17.5	3.78	3.77	11.9	12.3	0.5	0.5	1.0	1.2	97.24	97.48	99.0	98.9	96.5	97.0	862	1,105			
Nov.	17.1	17.5	3.74	3.82	11.3	10.8	0.5	0.7	2.1	2.8	95.74	97.79	98.7	97.9	95.0	96.0	960	500			
Dec.	16.6	16.9	3.69	3.78	11.7	12.9	0.7	2.0	2.7	2.6	93.62	95.48	97.7	95.0	91.0	91.0	312	80			
Jan.	16.3	17.5	3.68	3.71	13.8	13.8	2.0	4.6	1.4	3.3	91.69	96.75	93.7	85.5	85.0	80.0	40	25			
Feb.	17.7	17.7	3.92	3.81	11.6	12.3	0.8	6.0	1.8	3.9	98.75	98.71	99.5	81.7	98.5	81.0	2	7			
Mar. and later	18.3	17.7	3.82	3.77	11.9	11.6	2.8	5.1	1.1	4.8	100.83	99.38	93.0	83.1	94.5	82.5	6	2			
Season	17.2	17.4	3.75	3.78	11.6	12.2	0.6	0.7	1.6	1.6	95.99	97.37	98.6	98.2	95.0	96.0	2,302	2,061			
TEXAS																					
Aug.	17.8	17.7	3.78	3.91	10.4	9.5	0.9	0.4	1.0	1.0	98.70	99.01	99.3	99.6	98.5	99.0	1,736	1,866			
Sept.	17.0	16.7	3.90	3.99	11.3	9.3	2.2	0.4	1.6	1.1	96.07	95.61	94.6	99.5	91.0	95.5	1,318	624			
Oct.	16.9	17.7	4.06	4.09	10.6	8.2	1.5	0.4	1.7	1.9	96.92	100.74	96.8	99.0	93.5	95.5	848	480			
Nov.	17.9	18.6	3.98	4.06	8.6	8.1	0.5	0.5	2.4	1.9	100.40	103.95	98.3	99.0	99.0	103.0	5,414	2,430			
Dec.	18.2	18.6	3.97	3.95	7.9	9.3	0.5	0.5	2.9	2.3	101.44	102.99	97.8	98.6	99.5	102.0	7,578	2,095			
Jan.	18.1	18.4	3.93	3.93	7.8	9.2	0.5	0.5	3.4	2.7	101.05	102.21	97.6	98.2	99.0	100.5	4,270	1,110			
Feb.	18.1	18.2	3.88	3.86	8.2	10.4	0.6	0.7	3.7	3.4	100.57	101.07	97.2	97.0	98.0	98.5	1,516	650			
Mar. and later	18.0	17.8	3.86	3.91	8.1	9.7	1.1	1.3	4.0	4.1	99.91	99.47	95.7	95.6	96.5	95.5	412	220			
Season	17.9	18.2	3.94	3.97	8.5	9.0	0.7	0.5	2.7	2.0	100.36	101.55	97.7	98.8	98.5	100.5	23,092	9,475			

Table 5. Percentage distribution of quantity index by specified frequencies, by states and United States, 1981 and 1982

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		
	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
AL	-	-	-	-	-	-	-	-	-	-	0.8	0.5	10.7	9.0	47.9	46.3	37.2	40.0	3.4	4.2	100.0
AZ	-	-	-	-	-	-	-	-	-	-	-	-	2.7	-	12.3	-	42.3	-	42.7	-	100.0
AR	-	-	0.1	*	0.9	0.1	3.7	1.1	20.4	6.5	39.9	30.1	31.6	46.3	3.3	15.2	0.1	0.7	100.0	100.0	
GA	-	-	-	-	-	-	-	-	-	-	-	1.6	-	19.2	24.1	55.2	47.0	24.0	28.9	100.0	100.0
LA	-	-	-	-	0.1	-	0.8	0.2	13.5	5.4	37.6	38.8	45.0	50.3	2.9	5.0	0.1	0.3	100.0	100.0	
MS	-	-	*	-	0.2	0.1	1.3	1.2	9.6	5.2	39.1	22.1	44.5	52.7	5.2	17.6	0.1	1.1	100.0	100.0	
MO	-	-	-	-	0.4	-	3.0	-	20.8	2.9	51.1	38.4	21.3	44.2	3.3	14.3	0.1	0.2	100.0	100.0	
NM	-	-	-	-	-	-	-	-	-	-	-	1.1	4.4	30.9	33.3	55.3	37.8	12.7	24.5	100.0	100.0
NC	-	-	-	-	-	-	-	-	-	-	-	0.4	1.3	3.6	10.9	20.8	72.0	75.2	15.8	100.0	100.0
OK	-	-	-	-	-	-	0.2	-	1.5	1.6	17.5	8.6	63.1	31.8	17.1	45.6	0.6	12.4	100.0	100.0	
SC	-	-	-	-	-	-	0.2	-	0.5	0.6	2.5	4.2	13.7	10.1	29.5	60.7	53.6	24.4	100.0	100.0	
TN	-	-	-	-	0.1	-	0.2	-	4.5	0.5	29.3	16.0	52.0	66.8	13.5	15.5	0.4	1.2	100.0	100.0	
TX	-	-	*	-	0.1	-	0.2	0.2	0.7	0.8	6.3	7.8	33.6	23.8	51.3	44.9	7.8	22.5	100.0	100.0	
Other	-	-	-	-	-	-	-	-	-	-	29.5	8.4	47.0	61.5	23.5	24.1	-	6.0	100.0	100.0	
U. S.	-	-	*	-	0.2	*	0.8	0.5	5.8	3.2	20.4	19.4	37.6	41.5	29.2	26.9	6.0	8.5	100.0	100.0	

* Less than 0.05 percent.

Table 6. Percentage distribution of quality index by specified frequencies, by states and United States, 1981 and 1982

State	Quality index																			
	Below grade		Below prime quality												Prime quality 100					
	1981	1982	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	1981	1982	1981	1982	1981	1982	1981	1982			
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.			
AL	-	-	0.1	0.1	0.9	0.6	1.4	0.2	1.7	2.0	1.8	3.8	1.3	63.1	51.6	30.2	41.2	100.0	100.0	
AZ	-	-	-	-	-	-	-	-	-	-	-	-	-	56.2	-	43.8	-	100.0	-	
AR	-	*	-	-	0.7	-	1.5	0.2	0.6	0.5	1.4	2.2	5.4	59.2	52.6	37.9	37.8	100.0	100.0	
GA	-	-	-	-	-	0.9	0.8	1.4	1.4	2.4	1.4	12.8	-	45.6	36.4	38.4	59.9	100.0	100.0	
LA	-	0.2	*	0.1	0.4	1.0	1.0	1.6	0.4	3.2	1.2	8.3	8.2	52.7	50.3	32.8	38.2	100.0	100.0	
MS	-	-	-	0.1	0.1	0.9	0.3	1.2	0.5	1.1	1.6	2.7	5.1	8.9	59.6	55.1	32.8	30.0	100.0	100.0
MO	-	-	-	0.1	-	-	-	0.1	0.2	0.3	-	1.7	2.2	63.4	79.5	34.4	18.1	100.0	100.0	
NM	-	-	-	-	-	-	-	-	-	-	-	1.1	4.4	92.5	68.9	6.4	26.7	100.0	100.0	
NC	-	-	-	-	0.2	-	-	-	0.2	-	0.6	0.8	0.2	40.1	54.2	59.1	44.6	100.0	100.0	
OK	-	-	-	-	-	-	-	-	0.5	0.2	0.5	2.5	3.4	88.2	72.5	9.1	23.1	100.0	100.0	
SC	-	-	-	-	-	0.2	0.1	-	0.8	0.2	6.4	1.8	5.6	33.8	41.4	64.0	45.7	100.0	100.0	
TN	-	-	-	-	-	-	0.6	0.4	0.3	0.8	1.0	2.3	2.2	68.4	80.5	28.1	15.4	100.0	100.0	
TX	0.1	-	0.1	-	0.2	-	0.5	-	0.4	0.2	0.6	4.9	2.6	80.7	69.4	12.5	27.6	100.0	100.0	
Other	-	-	-	-	1.2	2.9	-	-	1.2	2.9	1.2	2.9	-	49.9	78.3	41.4	18.1	100.0	100.0	
U. S.	*	*	*	*	0.2	0.4	0.5	0.7	0.5	0.6	1.0	1.4	4.6	5.3	69.5	60.6	23.7	31.0	100.0	100.0

* Less than 0.05 percent.

Table 7. Percentage distribution of grades by specified frequencies, by states and United States, 1981 and 1982

State	Grade																					
	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.		
AL	-	-	0.6	1.7	0.6	1.7	1.2	1.7	3.8	2.2	16.7	9.6	42.0	43.5	31.5	35.8	3.4	3.5	0.2	0.3	100.0	100.0
AZ	-	-	-	-	-	-	-	-	-	-	4.1	-	12.3	-	38.3	-	42.6	-	2.7	-	100.0	-
AR	-	*	0.5	2.3	1.6	1.4	6.9	3.4	22.4	9.9	37.1	30.5	27.9	36.5	3.5	15.3	0.1	0.7	-	-	100.0	100.0
GA	-	-	-	0.9	-	-	0.8	0.9	1.6	1.4	10.4	0.5	26.4	21.9	40.0	48.4	19.2	21.3	1.6	4.7	100.0	100.0
LA	-	0.2	2.3	1.5	2.6	1.1	5.7	3.3	18.3	11.0	33.0	38.0	35.2	39.9	2.8	4.8	0.1	0.2	-	-	100.0	100.0
MS	-	0.1	0.9	2.3	1.5	1.7	4.7	4.5	12.5	9.1	38.4	24.3	37.5	43.1	4.4	14.1	0.1	0.8	-	-	100.0	100.0
MO	-	-	0.4	-	0.7	-	4.6	0.5	25.0	8.7	47.6	39.7	18.4	40.0	3.2	11.1	0.1	-	-	-	100.0	100.0
NM	-	-	-	-	-	-	-	-	-	2.2	4.3	6.6	42.5	33.5	42.6	33.3	10.6	24.4	-	-	100.0	100.0
NC	-	-	-	-	-	0.2	-	-	-	0.6	0.4	2.6	6.4	15.2	23.5	67.1	52.2	14.3	17.5	-	100.0	100.0
OK	-	-	-	-	-	0.5	0.4	1.6	4.4	1.1	33.2	12.3	51.3	41.8	10.4	35.2	0.3	7.5	-	-	100.0	100.0
SC	-	-	-	-	0.2	0.1	0.2	0.8	0.9	6.4	4.0	6.9	14.2	13.5	27.2	54.0	44.2	18.3	9.1	-	100.0	100.0
TN	-	-	0.3	0.2	0.6	0.1	1.1	1.6	8.7	4.3	33.6	30.0	44.0	49.4	11.3	13.2	0.4	1.2	-	-	100.0	100.0
TX	0.1	-	0.8	0.1	0.5	0.2	0.7	0.5	2.3	1.7	11.4	9.4	42.6	28.9	37.7	42.3	3.8	16.2	0.1	0.7	100.0	100.0
Other	-	-	-	1.2	2.9	-	2.9	2.4	2.9	-	23.5	12.0	50.2	48.3	17.6	30.1	-	6.0	-	-	100.0	100.0
U. S.	*	*	0.8	1.2	1.0	0.9	2.6	2.4	8.2	6.3	23.8	21.6	37.7	36.9	21.8	24.3	3.7	6.1	0.4	0.3	100.0	100.0

* Less than 0.05 percent.

Table 8. Percentage distribution of oil by specified frequencies, by states and United States, 1981 and 1982

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	1981	1982	Pct.	Pct.												
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.												
AL	0.3	4.5	3.3	4.6	3.7	14.2	6.9	24.8	10.6	26.1	24.4	16.6	25.3	6.4	15.4	2.3	9.6	0.2	0.8	-	-	100.0	100.0				
AZ	-	-	-	1.4	-	2.7	-	5.5	-	12.3	-	21.9	-	20.5	-	34.3	-	1.4	-	-	-	-	100.0	-			
AR	13.1	2.9	28.3	9.8	13.8	17.4	21.6	13.3	21.1	5.6	15.4	1.9	9.2	0.5	3.8	0.2	2.4	-	-	-	-	-	100.0	100.0			
GA	-	-	-	-	3.2	-	7.2	2.4	16.0	9.5	16.0	9.5	22.4	14.7	22.4	25.0	11.2	27.0	1.6	11.9	-	-	-	100.0	100.0		
LA	6.5	1.1	26.6	12.1	23.7	18.2	25.2	25.6	12.5	24.6	3.9	12.7	1.2	3.8	0.4	1.3	*	0.6	-	-	-	-	-	100.0	100.0		
MS	7.5	3.2	25.5	7.8	25.3	10.6	22.4	18.9	10.9	22.6	5.2	20.7	2.4	9.9	0.7	3.9	0.1	2.3	-	0.1	-	-	-	-	100.0	100.0	
MO	8.4	0.4	23.7	7.8	24.2	12.8	20.2	25.6	14.0	24.2	4.7	17.6	3.4	8.1	0.8	3.0	0.6	0.5	-	-	-	-	-	-	100.0	100.0	
NH	-	-	-	-	1.1	2.2	3.2	8.9	11.7	20.0	19.1	13.3	24.4	11.1	23.4	15.6	16.0	22.3	1.1	6.6	-	-	-	-	-	100.0	100.0
NC	-	-	-	-	-	-	0.8	0.2	2.8	0.2	2.0	8.0	7.5	5.8	13.5	33.5	53.9	48.6	19.5	3.5	-	-	-	-	-	100.0	100.0
OK	1.0	-	6.1	3.2	14.5	5.4	28.3	7.5	26.8	16.9	17.2	27.0	4.3	19.8	1.7	12.0	0.1	8.2	-	-	-	-	-	-	100.0	100.0	
SC	0.2	0.6	2.0	0.6	0.9	1.2	1.6	1.8	6.0	3.1	10.3	3.2	11.7	12.5	13.9	31.9	42.5	38.5	10.4	6.6	0.5	-	-	-	100.0	100.0	
TN	1.0	-	6.8	1.4	9.5	5.4	21.0	13.5	23.4	34.3	20.8	24.1	12.6	14.0	4.2	4.5	0.7	2.7	-	0.1	-	-	-	-	100.0	100.0	
TX	0.5	0.3	2.1	2.6	3.3	4.6	7.3	5.8	12.9	9.8	19.7	14.0	24.0	18.7	20.0	20.4	9.5	20.9	0.7	2.9	-	-	-	-	100.0	100.0	
Other	-	-	2.9	1.2	11.8	-	11.8	-	20.6	19.3	23.5	19.3	16.7	30.1	11.8	24.1	2.9	-	6.0	-	-	-	-	-	-	100.0	100.0
U. S.	3.6	1.4	11.6	6.0	11.5	9.1	14.3	14.6	13.8	18.3	14.0	17.0	13.7	12.7	10.6	10.2	6.2	9.5	0.7	1.2	*	*	*	*	100.0	100.0	

* Less than 0.05 percent.

Table 9. Percentage distribution of ammonia by specified frequencies, by states and United States, 1981 and 1982

State	Ammonia														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		4.15 and over	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
AL	-	-	-	0.1	2.5	0.4	5.7	2.8	20.9	10.7	31.8	21.6	23.5	32.6	12.6	31.8	3.0	100.0	100.0	
AZ	-	-	-	-	-	-	-	-	-	1.4	-	13.7	-	26.0	-	58.9	-	100.0	-	
AR	-	-	*	0.3	0.9	2.6	2.3	11.3	12.9	28.8	30.1	29.1	36.7	17.3	14.5	10.6	2.6	100.0	100.0	
GA	-	-	-	-	2.4	-	10.0	3.2	11.4	3.2	31.2	8.0	25.6	19.2	14.7	66.4	4.7	100.0	100.0	
LA	-	-	-	-	0.2	2.8	2.8	15.6	16.9	26.4	27.8	34.4	25.8	16.6	26.5	4.2	100.0	100.0		
MS	-	-	-	0.1	0.4	0.3	2.1	2.1	9.4	8.8	25.1	20.5	35.6	29.6	22.6	38.7	4.7	100.0	100.0	
MO	-	-	0.3	0.9	-	7.6	1.7	37.7	15.7	33.0	47.2	10.4	28.3	6.5	5.8	3.6	1.3	100.0	100.0	
NM	-	-	-	-	2.1	-	3.2	8.9	17.0	13.3	37.3	33.4	33.0	22.2	7.4	22.2	100.0	100.0		
NC	-	-	-	-	3.7	-	16.9	-	41.0	8.3	29.7	20.2	7.4	34.6	1.3	36.9	-	100.0	100.0	
OK	-	-	-	-	0.1	1.6	1.4	5.9	7.2	5.4	21.0	17.9	32.1	33.3	38.2	35.9	100.0	100.0		
SC	-	-	-	-	1.2	-	11.3	1.2	29.3	7.8	28.8	28.3	21.2	36.1	7.0	26.6	1.2	100.0	100.0	
TN	0.1	-	-	0.6	0.2	5.0	4.1	27.5	21.5	44.3	44.1	17.2	24.9	4.4	4.4	0.9	0.8	100.0	100.0	
TX	*	0.1	0.3	0.6	0.2	1.5	1.2	5.8	6.2	20.2	18.5	32.8	27.6	25.1	28.1	13.6	18.0	100.0	100.0	
Other	-	-	-	-	6.0	-	25.3	26.5	43.4	55.9	18.1	17.6	6.0	-	-	1.2	100.0	100.0		
U. S.	*	0.1	*	0.1	0.4	0.5	1.4	2.7	6.8	12.1	18.8	25.8	27.2	30.5	24.7	19.9	20.5	8.5	100.0	100.0

* Less than 0.05 percent.

Table 10. Percentage distribution of moisture in cottonseed samples by specified frequencies, by states and United States, 1981

State	Moisture											Total			
	Prime quality 0-12.0	Below prime quality 12.1-20.0	Off quality 20.1 and over	0	5.1	7.1	9.1	10.1	11.1	12.1	14.1		16.1	18.1	20.1 and over
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
AL	74.1	25.9	-	6.1	16.5	25.6	25.9	22.9	2.6	0.2	0.2	0.2	-	100.0	
AZ	100.0	-	-	47.9	41.1	9.6	1.4	-	-	-	-	-	-	100.0	
AR	54.9	45.0	0.1	-	2.4	8.5	17.5	26.5	33.7	10.0	1.1	0.2	0.1	100.0	
GA	84.8	15.2	-	-	16.8	27.2	21.6	19.2	13.6	1.6	-	-	-	100.0	
LA	53.2	46.8	*	-	3.3	11.8	18.2	19.9	31.8	12.9	1.9	0.2	*	100.0	
MS	60.4	39.6	*	-	3.4	13.1	21.1	22.8	28.3	9.5	1.6	0.2	*	100.0	
MO	56.3	43.6	0.1	-	1.7	8.1	23.2	23.3	33.6	8.6	1.4	-	0.1	100.0	
NM	93.6	6.4	-	-	27.7	54.3	7.4	2.1	2.1	6.4	-	-	-	100.0	
NC	95.2	4.8	-	-	25.4	42.0	22.6	5.2	4.8	-	-	-	-	100.0	
OK	95.3	4.7	-	-	4.6	35.7	29.5	17.0	8.5	4.4	0.1	0.2	-	100.0	
SC	96.6	3.4	-	-	0.2	35.4	35.9	18.9	6.2	3.2	0.2	-	-	100.0	
TN	63.9	36.1	-	-	1.8	11.1	26.3	24.7	30.2	5.3	0.4	0.2	-	100.0	
TX	95.7	4.3	*	13.0	59.6	11.9	7.1	4.1	3.3	0.7	0.2	0.1	*	100.0	
Other	67.7	32.3	-	-	-	17.6	26.6	23.5	32.3	-	-	-	-	100.0	
U. S.	78.8	21.2	*	6.3	31.4	13.4	14.4	13.3	15.8	4.6	0.7	0.1	*	100.0	

* Less than 0.05 percent.

Table 11. Percentage distribution of moisture in cottonseed samples by specified frequencies, by states and United States, 1982

State	Moisture											Total			
	Prime quality 0-12.0	Below prime quality 12.1-20.0	Off quality 20.1 and over	0	5.1	7.1	9.1	10.1	11.1	12.1	14.1		16.1	18.1	20.1 and over
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
AL	88.4	11.6	-	-	-	8.4	27.2	33.6	19.2	9.7	1.9	-	-	-	100.0
AR	57.4	42.5	0.1	-	-	1.1	9.2	21.4	25.7	30.3	9.6	2.4	0.2	0.1	100.0
GA	94.3	5.7	-	-	-	14.2	22.7	39.4	18.0	5.7	-	-	-	-	100.0
LA	68.1	31.8	0.1	-	-	2.6	9.5	24.8	31.2	25.9	4.7	1.1	0.1	0.1	100.0
MS	65.3	34.2	0.5	-	-	2.4	10.7	24.3	27.9	27.0	5.0	1.8	0.4	0.5	100.0
MO	34.4	65.6	-	-	-	0.3	1.3	10.2	22.6	47.5	15.9	2.2	-	-	100.0
NH	95.6	4.4	-	-	-	62.2	11.1	15.6	6.7	2.2	-	2.2	-	-	100.0
NC	65.2	34.8	-	-	-	1.5	4.3	26.2	33.2	33.7	1.1	-	-	-	100.0
OK	96.4	3.1	0.5	-	0.4	37.6	39.6	14.5	4.3	2.1	1.0	-	-	0.5	100.0
SC	75.1	24.9	-	-	-	0.6	13.2	30.8	30.5	18.9	5.4	0.6	-	-	100.0
TN	43.4	56.6	-	-	-	2.7	8.7	10.6	21.4	46.6	9.2	0.8	-	-	100.0
TX	95.5	4.4	0.1	-	5.1	52.2	21.5	12.1	4.6	3.5	0.6	0.2	0.1	0.1	100.0
Other	51.8	48.2	-	-	-	-	6.0	26.5	19.3	42.2	6.0	-	-	-	100.0
U. S.	73.1	26.7	0.2	-	1.4	17.7	14.5	19.7	19.8	20.8	4.6	1.1	0.2	0.2	100.0

Table 12. Percentage distribution of free fatty acids in cottonseed samples by specified frequencies, by states and United States, 1981

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.
AL	86.8	13.2	-	28.3	43.5	10.7	4.3	8.0	3.6	1.0	0.5	0.1	-	-	100.0
AZ	100.0	-	-	84.9	12.3	1.4	1.4	-	-	-	-	-	-	-	100.0
AR	95.9	4.1	-	27.5	45.5	16.7	6.2	2.9	1.1	0.1	-	-	*	-	100.0
GA	74.4	25.6	-	10.4	36.0	16.8	11.2	10.4	14.4	0.8	-	-	-	-	100.0
LA	76.8	23.2	*	8.8	36.4	20.9	10.7	13.1	7.2	2.1	0.4	0.3	0.1	*	100.0
MS	87.9	12.1	-	19.0	39.7	21.2	8.0	8.2	3.0	0.7	0.1	0.1	*	-	100.0
MO	98.5	1.5	-	54.1	42.6	1.5	0.3	1.2	0.2	-	-	0.1	-	-	100.0
NH	100.0	-	-	84.0	12.8	3.2	-	-	-	-	-	-	-	-	100.0
NC	98.8	1.2	-	61.9	32.9	3.2	0.8	0.8	0.4	-	-	-	-	-	100.0
OK	99.5	0.5	-	28.0	67.4	3.6	0.5	0.4	0.1	-	-	-	-	-	100.0
SC	97.5	2.5	-	18.0	60.3	16.0	3.2	1.8	0.5	-	-	0.2	-	-	100.0
TN	98.6	1.4	-	36.0	59.6	2.6	0.4	0.6	0.7	0.1	-	-	-	-	100.0
TX	95.9	4.0	0.1	62.8	28.2	3.4	1.5	1.6	1.1	0.6	0.4	0.2	0.1	0.1	100.0
Other	85.4	14.6	-	-	59.0	17.6	8.8	2.9	8.8	-	2.9	-	-	-	100.0
U. S.	92.8	7.1	0.1	42.0	37.1	9.8	3.9	4.0	2.0	0.6	0.2	0.2	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, 1982

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 over	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
AL	89.5	10.0	0.5	24.2	47.3	12.5	5.5	3.6	2.6	2.0	1.5	0.3	-	100.0
AR	85.4	14.4	0.2	30.5	35.4	12.1	7.4	6.9	4.6	1.6	0.7	0.6	-	100.0
GA	83.0	17.0	-	14.2	35.1	19.0	14.7	13.3	1.4	1.4	0.9	-	-	100.0
LA	74.0	25.7	0.3	21.2	28.0	14.0	10.8	16.6	7.1	0.7	1.1	0.2	-	100.0
MS	68.0	31.8	0.2	20.9	22.6	15.6	8.9	19.9	8.3	2.1	0.6	0.5	0.4	100.0
MO	99.5	0.5	-	61.2	36.6	1.1	0.6	0.2	0.1	0.2	-	-	-	100.0
NH	100.0	-	-	37.8	60.0	-	2.2	-	-	-	-	-	-	100.0
NC	97.3	2.7	-	18.8	68.1	6.7	3.7	1.5	0.4	0.6	-	0.2	-	100.0
OK	98.5	1.5	-	23.6	70.4	4.0	0.5	0.4	1.1	-	-	-	-	100.0
SC	70.6	29.4	-	5.9	32.8	19.2	12.7	16.6	9.9	2.8	0.1	-	-	100.0
TN	96.6	3.4	-	23.7	68.9	2.7	1.3	1.0	1.4	0.7	0.3	-	-	100.0
TX	99.1	0.8	0.1	49.4	47.9	1.6	0.2	0.4	0.3	0.1	-	-	-	100.0
Other	84.4	14.4	1.2	-	6.0	48.3	30.1	12.0	-	2.4	-	-	-	100.0
U. S.	84.8	15.1	0.1	31.5	38.4	9.4	5.5	9.1	4.1	1.1	0.5	0.2	0.1	100.0

Table 14. Percentage distribution of foreign matter in cottonseed samples by specified frequencies, by states and United States, 1981

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	10.1 and over	Total	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
AL	46.4	53.5	0.1	19.8	26.6	35.2	11.2	4.6	2.1	0.1	0.2	0.1	0.1	100.0	
AZ	43.8	56.2	-	24.6	19.2	27.4	12.3	11.0	5.5	-	-	-	-	100.0	
AR	70.1	29.9	*	34.4	35.7	21.8	5.4	1.2	0.8	0.4	0.1	0.2	*	100.0	
GA	54.4	45.6	-	24.0	30.4	33.6	8.0	3.2	-	0.8	-	-	-	100.0	
LA	55.5	44.5	-	15.8	39.7	32.7	8.6	2.0	0.8	0.1	0.2	0.1	-	100.0	
MS	49.7	50.3	*	11.2	38.5	35.2	9.7	2.9	1.6	0.6	0.2	0.1	*	100.0	
MO	65.0	34.9	0.1	25.8	39.2	27.7	5.8	0.9	0.3	0.1	0.1	-	0.1	100.0	
NH	9.6	90.4	-	-	9.6	31.9	30.8	18.1	8.5	1.1	-	-	-	100.0	
NC	63.9	36.1	-	19.9	44.0	24.6	6.7	2.8	1.6	0.4	-	-	-	100.0	
OK	10.3	89.7	-	2.4	7.9	24.0	30.2	18.4	13.1	3.5	0.2	0.3	-	100.0	
SC	66.1	33.9	-	26.6	39.5	23.6	4.8	2.5	1.4	0.9	0.5	0.2	-	100.0	
TN	43.6	55.8	0.6	19.3	24.3	30.6	13.6	6.7	3.0	1.2	0.5	0.2	0.6	100.0	
TX	15.1	84.6	0.3	4.6	10.5	27.5	24.3	15.6	11.7	3.7	1.4	0.4	0.3	100.0	
Other	70.6	29.4	-	8.8	61.8	26.5	2.9	-	-	-	-	-	-	100.0	
U. S.	35.1	64.7	0.2	11.9	23.2	29.1	16.7	9.3	6.6	2.0	0.7	0.3	0.2	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, 1982

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.
AL	50.5	49.5	-	20.8	29.7	34.7	11.8	0.8	1.7	0.5	-	-	-	100.0
AR	71.6	28.4	-	37.8	33.8	21.2	4.7	1.4	0.6	0.5	-	*	-	100.0
GA	75.8	24.2	-	18.5	57.3	19.0	5.2	-	-	-	-	-	-	100.0
LA	61.7	38.3	-	14.5	47.2	31.2	5.7	1.0	0.3	-	0.1	-	-	100.0
MS	58.7	41.2	0.1	15.2	43.5	41.2	-	-	-	-	-	-	0.1	100.0
MO	63.3	36.7	-	19.9	43.4	28.1	5.9	1.4	1.3	-	-	-	-	100.0
NM	28.8	71.2	-	4.4	24.4	51.2	15.6	2.2	-	-	2.2	-	-	100.0
NC	74.0	26.0	-	30.1	43.9	23.4	2.6	-	-	-	-	-	-	100.0
OK	23.6	76.4	-	11.3	12.3	23.1	26.8	11.6	11.8	0.5	0.5	2.1	-	100.0
SC	75.8	24.2	-	46.8	29.0	18.8	4.3	0.7	0.4	-	-	-	-	100.0
TN	50.6	49.4	-	23.6	27.0	21.7	14.4	6.8	5.1	0.6	0.5	0.3	-	100.0
TX	29.4	70.5	0.1	10.2	19.2	32.3	20.3	9.0	6.5	1.6	0.5	0.3	0.1	100.0
Other	79.5	20.5	-	36.1	43.4	14.5	6.0	-	-	-	-	-	-	100.0
U. S.	51.4	48.6	*	18.0	33.4	28.9	11.2	4.4	3.0	0.6	0.3	0.2	*	100.0

* Less than 0.05 percent.

Table 16. Number of cottonseed samples by specified groups, by qualities, and number reduced in grade for specified causes, by states and United States, 1981 and 1982

State	Quality				Total samples graded		Reduced due to excess							
	Prime		Below prime and off quality		Below grade		Moisture		Free fatty acids		Foreign matter			
	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982		
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number		
AL	632	1,458	878	-	-	2,090	1,497	540	173	276	158	1,120	740	
AZ	64	-	82	-	-	146	-	-	-	-	-	82	-	
AR	1,654	1,323	2,718	2,173	-	1	4,372	1,972	1,492	186	509	1,306	991	
GA	96	126	154	85	-	-	250	38	12	64	36	114	51	
LA	1,394	1,695	2,856	2,750	-	10	4,250	1,994	1,422	986	1,159	1,896	1,707	
MS	2,918	2,656	5,968	6,214	-	-	8,886	3,526	3,075	1,072	2,839	4,462	3,660	
MO	506	215	968	976	-	-	1,474	642	781	24	5	518	436	
MN	12	12	176	33	-	-	188	12	2	-	-	170	32	
NC	298	206	206	256	-	-	504	462	161	6	13	182	120	
OK	172	215	1,718	716	-	-	1,890	90	35	10	14	1,694	711	
SC	720	380	404	454	-	-	1,124	38	208	28	245	382	202	
TN	646	317	1,656	1,744	-	-	2,302	832	1,166	32	71	1,300	1,018	
TX	2,876	2,617	20,198	6,858	18	-	23,092	9,475	1,024	425	84	19,598	6,686	
Other	28	15	40	68	-	-	68	22	40	10	13	20	17	
U. S.	12,016	10,396	38,602	23,205	18	11	50,636	33,612	10,754	8,992	3,668	5,146	32,844	16,371