

UNITED STATES DEPARTMENT OF AGRICULTURE  
Production and Marketing Administration  
Cotton Branch

3. 112a

---

COTTONSEED QUALITY IN THE UNITED STATES  
1950

---

Washington, D. C.  
November 1951

## CONTENTS

	<u>Table</u>	<u>Page</u>
Quality determination.....		2
Grade.....		2
Quantity index.....		2
Quality index.....		2
Oil.....		4
Ammonia.....		4
Moisture.....		4
Free fatty acids.....		4
Foreign matter.....		4
Number of samples by qualities and reductions.....		4

## Tables

Cottonseed: Production, deliveries to oil mills, samples graded, and deliveries per sample graded, by States and United States, 1949 and 1950.....	1	1
Average qualities of cottonseed, by States and United States, 1949 and 1950.....	2	5
Average qualities of cottonseed, by specified periods and States, 1949 and 1950.....	3	6-13
Average qualities of cottonseed, by crop-reporting districts, and States, 1949 and 1950.....	4	14-18
Proportions of total cottonseed samples having specified quantity indices, by States and United States, 1949 and 1950	5	19
Proportions of total cottonseed samples having specified quality indices, by States and United States, 1949 and 1950	6	20
Proportions of total cottonseed samples having specified grades, by States and United States, 1949 and 1950.....	7	21
Proportions of total cottonseed samples containing specified percentages of oil, by States and United States, 1949.....	8	22
Proportions of total cottonseed samples containing specified percentages of oil, by States and United States, 1950.....	9	22
Proportions of total cottonseed samples containing specified percentages of ammonia, by States and United States, 1949 and 1950.....	10	23
Proportions of total cottonseed samples containing specified percentages of moisture, by States and United States, 1949	11	24
Proportions of total cottonseed samples containing specified percentages of moisture, by States and United States, 1950	12	25
Proportions of total cottonseed samples containing specified percentages of free fatty acids, by States and United States, 1949.....	13	26
Proportions of total cottonseed samples containing specified percentages of free fatty acids, by States and United States, 1950.....	14	27
Proportions of total cottonseed samples containing specified percentages of foreign matter, by States and United States, 1949.....	15	28
Proportions of total cottonseed samples containing specified percentages of foreign matter, by States and United States, 1950.....	16	29
Number of samples graded by qualities and number reduced in grade for specified causes, by States and United States, 1949 and 1950.....	17	30

COTTONSEED QUALITY IN THE UNITED STATES  
CROP OF 1950

This publication contains information on the quality of cottonseed graded from the 1950 crop. The quality information was obtained from cottonseed grade certificates issued by approved testing laboratories and is broken down to show the detailed quality information by states, crop reporting districts and by months. To facilitate comparison, the data for the 1949 crop are included. During the year ending July 31, 1951, licensed chemists under the supervision of the Department of Agriculture, issued certificates covering 87,663 samples of cottonseed. These samples were drawn at random from most of the cottonseed delivered to crushing mills during the season except in Arizona, California and a portion of Texas south of Austin. Although the sample data may not fully represent the quality of cottonseed produced in every district, the sample for the most part adequately reflects the quality of cottonseed sold to oil mills in the major portion of the Cotton Belt. The production of cottonseed, deliveries to oil mills, number of samples graded, and the tons delivered per sample graded, by states, are shown in table 1.

Table 1. Cottonseed: Production, deliveries to oil mills, and certificates included, by States and United States, 1949 and 1950 1/

State	Production of		Deliveries to		Certificates	
	cottonseed		oil mills		included	
	1949	1950	1949	1950	1949	1950
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Number	Number
Alabama	351	226	305	200	10,126	6,724
Arizona	220	190	190	170	-	-
Arkansas	674	448	590	380	24,583	17,323
California	479	374	430	340	-	-
Florida	7	6	6	5	54	26
Georgia	252	205	230	185	6,854	2,133
Illinois	2/	2/	2/	2/	2/	2/
Kentucky	2/	2/	2/	2/	2/	2/
Louisiana	264	169	240	140	7,404	6,039
Mississippi	612	534	525	445	20,100	19,048
Missouri	201	110	185	95	7,676	4,782
N. Mexico	109	76	100	70	1,253	852
N. Carolina	197	75	180	65	8,105	3,478
Oklahoma	246	98	220	85	5,978	2,504
S. Carolina	233	165	210	140	9,509	6,024
Tennessee	261	165	235	145	8,978	6,278
Texas	2,438	1,232	2,175	1,050	25,137	12,214
Virginia	9	2	8	1	326	94
Other States <u>3/</u>	6	3	5	2	252	144
U. S.	6,559	4,078	5,834	3,518	136,335	87,663

1/ Season beginning August 1.

2/ Included in all other States.

3/ Illinois, Kansas, and Kentucky.

### Quality Determination

There are five basic quality factors involved in the determination of the quality of cottonseed in accordance with the United States Official Standards for Grades. These factors are (1) oil; (2) ammonia or protein (meal and cake); (3) moisture; (4) free fatty acids in the oil (indicator of oil deterioration); and (5) foreign matter (trash, shale, sand, etc., in the seed). These five basic factors are combined to form indices of quantity and quality which in turn are used to determine the official grade of cottonseed.

A complete outline of the method of calculating the grade of cottonseed was published in COTTONSEED QUALITY IN THE UNITED STATES, CROPS OF 1944 AND 1945, issued in March 1947. This outline includes a discussion of the quality factor tolerances and the description of the various qualities of cottonseed.

The average quality factors 1/ of cottonseed by states and for the United States for 1949 and 1950 are shown in table 2. Average percentages of oil and ammonia are shown along with the average percentages of moisture, free fatty acids in the oil, and foreign matter. In addition to these basic elements of quality the table also shows the average quantity and quality indices and the average grade for the United States and for each state except Arizona and California. This information is also shown by specified periods for each state in table 3 and by districts within each state as shown in table 4. The regular crop reporting districts are used and figure 1 shows these districts for each state.

#### GRADE LOWER

The average grade of cottonseed for the samples included was 96.0 in 1950 compared with 98.0 in 1949. The average grade in 1950 was higher than in 1949 in Florida, Georgia, Louisiana, New Mexico, North Carolina, Oklahoma, South Carolina and Texas, but lower in all other states. The greatest improvement occurred in Louisiana, South Carolina and Georgia.

#### QUANTITY INDEX LOWER

The average quantity index for the United States for 1950 is 2.10 percent lower than in 1949. The average quantity index for the United States was 101.02 in 1950 compared with 103.12 in 1949. The index was lower in 1950 than in 1949 in all states except for Florida, New Mexico, Oklahoma and Texas. The proportions of all cottonseed samples graded having specified quantity indices are shown in table 5 page 19.

#### QUALITY INDEX SLIGHTLY LOWER

The average quality index was slightly lower in 1950 than in 1949. The quality index for the United States was 95.0 in 1950 as compared with 95.1 in 1949. The sharpest decline in the quality indices occurred in Missouri, Mississippi and Tennessee. The proportion of prime quality seed was substantially lower in 1950 compared with a year earlier. About 17.7 percent of the samples graded in 1950 were prime seed against 30.9 in 1949. The proportions of all cottonseed samples graded containing specified quality indices are shown in table 6 page 20.

---

1/ Averages for quality index, quantity index, and grade are not calculated on the basis of average quality factors and the formulas for computing indices and grades for individual certificates. In each case averages are the arithmetic means of indices and grades for individual certificates.

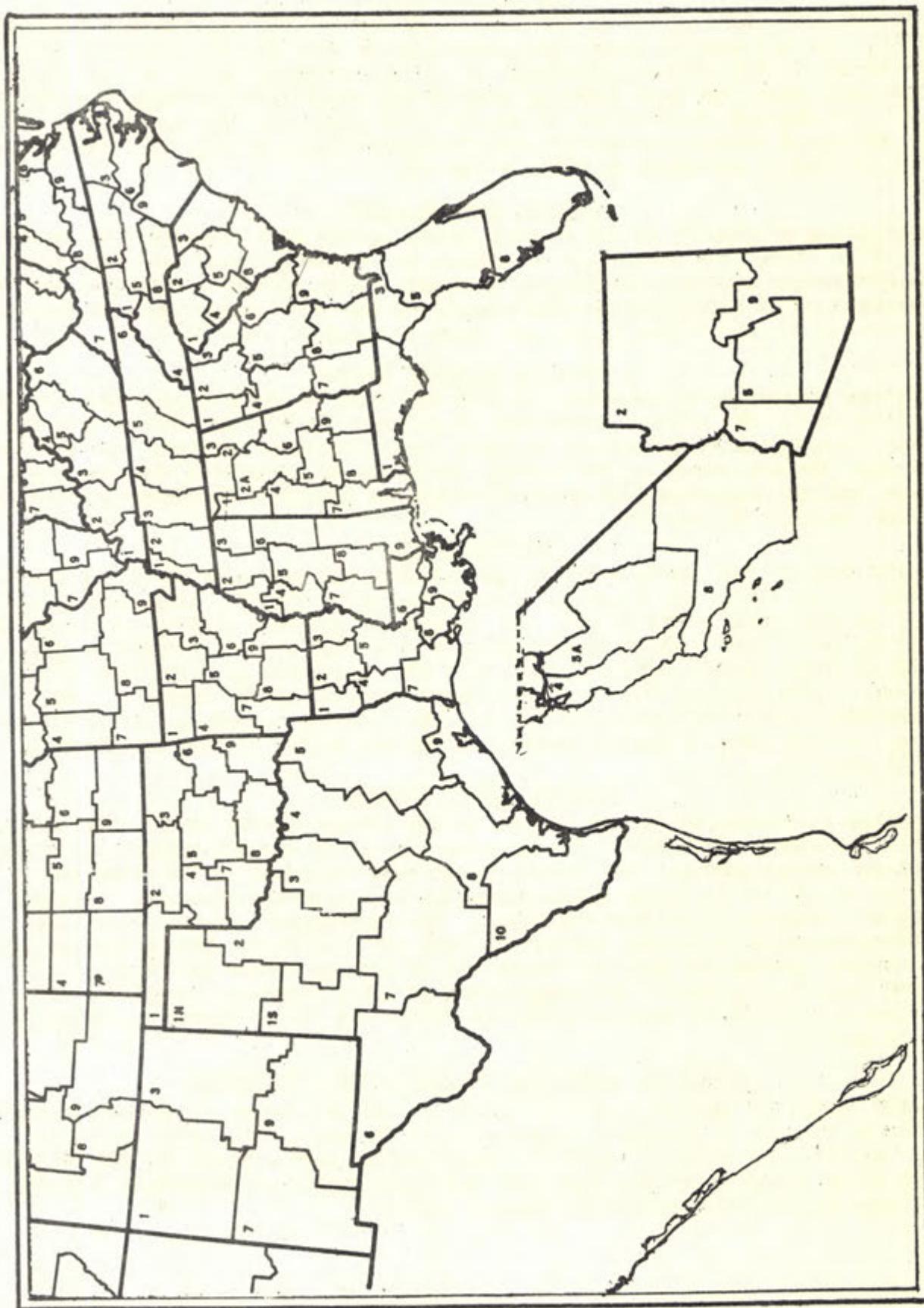


Figure 1.—Crop-reporting districts of the U. S. Department of Agriculture for the cotton-producing States.

Oil Content Down

The average percentage of oil in the samples graded in 1950 was slightly lower than for 1949. For all samples graded the percentage in 1950 was 18.7 compared with 19.1 a year earlier. The average percentage of oil was slightly higher in New Mexico, Oklahoma and Texas, but much lower in most of the other major cottonseed producing states. The sharpest decline was in Missouri and Arkansas. The proportions of total cottonseed samples containing specified percentages of oil, by States and for the United States, are shown in table 9 page 22.

Ammonia Content Lower

The percentage of ammonia in all samples graded during 1950 averaged 3.64 compared with 3.68 in 1949. The percentage of ammonia was slightly lower than last year in all states except Arkansas, Louisiana, Missouri, South Carolina, Tennessee and Texas. The proportions of cottonseed samples containing specified percentages of ammonia, by states and for the United States are shown in table 10 page 23.

Moisture Slightly Higher

The average percentage of moisture for 1950 was 12.8, slightly higher than the 11.6 percent in 1949. The average percentage of moisture in 1950 was larger than the previous year in all states except Georgia, North Carolina, Oklahoma, South Carolina and Texas. The percentage of the various qualities of cottonseed with respect to moisture and the proportions of samples containing specified percentages of moisture are shown in table 12 page 25.

Free Fatty Acid

The percentage of free fatty acids in the oil from the 1950 crop was 1.9 percent, the same as for 1949. The tolerance allowed for prime quality cottonseed is 1.8 percent of free fatty acids in oil. The percentage of prime quality cottonseed with respect to free fatty acids decreased sharply from 74.6 percent in 1949 to 65.9 percent in 1950. Sample data indicate that the percentage of free fatty acids was lower than a year earlier in all states except Georgia, North Carolina, South Carolina and Texas. The percentage of the total samples containing specified percentages of free fatty acids, by states and for the United States, are shown in table 14 page 27.

Foreign Matter Content

The average percentage of foreign matter in the samples tested during 1950 was 1.1 percent, the same as for 1949. The tolerance for prime quality cottonseed is one percent of foreign matter. The average percentage was equal to less than the tolerance in all of the major cotton-producing states except Arkansas, Missouri, New Mexico, Oklahoma, Tennessee and Texas. The Southeastern states showed the smallest percentage of foreign matter for both 1949 and 1950. The percentages of prime quality cottonseed from the standpoint of foreign matter was 71.5 in 1950 compared with 75.3 in 1949. The proportions of total cottonseed samples containing specified percentages of foreign matter by states and United States are shown in table 16 page 29.

Number of Samples by Qualities and Reductions

The total number of samples graded by qualities and the number of samples reduced in grade on account of excessive percentages of moisture, free fatty acids, or foreign matter, are shown in table 17. Some samples were reduced for two or more reasons which accounts for the fact that the total number of reductions for some states exceeds the total number of samples tested.

Table 2. Average qualities of cottonseed, by States and United States  $\frac{1}{4}$ , 1949 and 1950 / - 5 -

State	Cottonseed analysis												Average grade	
	Oil	Ammonia	Moisture	Fatty acids	Foreign matter	Quantity	Quality	Average index						
Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Ala.	18.8	3.55	3.56	12.8	13.3	1.1	1.6	0.6	0.7	102.84	101.78	97.5	99.0	
Ark.	18.4	3.54	3.44	11.6	14.2	1.7	1.6	1.1	1.3	104.24	99.18	96.3	95.0	
Fla.	17.2	3.36	3.78	16.3	16.3	4.0	3.0	4	2.2	92.18	96.02	86.7	92.0	
Ge.	18.2	3.64	3.75	13.2	13.0	3.6	1.9	5	8	101.85	100.31	89.7	96.0	
Ill.	18.0	3.35	3.27	12.7	15.0	1.7	4.6	1.6	3.1	101.60	96.63	94.2	95.0	
Ky.	17.5	3.53	3.29	13.1	17.0	1.6	2.1	1.3	2.9	99.75	94.63	91.4	94.5	
La.	18.7	3.65	3.60	12.2	13.5	4.7	2.4	.8	.7	104.23	101.68	86.0	86.5	
Miss.	18.7	3.63	3.70	12.3	13.8	1.8	2.9	.7	.8	104.04	101.84	96.1	100.0	
Mo.	17.1	3.44	3.31	12.3	15.3	1.3	1.9	1.3	2.0	102.53	92.80	96.1	94.0	
N. Mex.	19.1	19.4	3.87	3.91	8.0	8.2	.5	.6	2.0	1.8	104.59	105.92	98.8	85.0
N. C.	18.6	3.50	3.67	12.3	12.2	2.5	1.8	.5	.5	103.45	101.41	94.7	98.0	
Okla.	19.6	3.93	3.94	10.4	8.8	.5	.8	1.3	1.3	101.43	105.73	99.6	105.0	
S. C.	18.6	18.4	3.76	3.77	12.8	12.7	5.2	3.5	.5	101.89	101.12	84.5	98.5	
Tenn.	18.7	3.49	3.40	12.9	15.3	.8	1.2	.8	1.1	103.08	99.77	98.0	95.5	
Tex.	19.8	4.04	3.96	8.9	7.9	.8	.7	2.2	2.0	102.40	104.19	98.0	101.0	
Va.	18.8	3.28	3.59	13.2	13.5	1.3	3.0	.4	1.1	102.52	101.41	97.7	103.0	
U. S. 1/	19.1	18.7	3.68	3.64	11.6	12.8	1.9	1.9	1.1	103.12	101.02	95.1	96.0	

1/ Quality information not available for cottonseed produced in Arizona and California.

2/ Season beginning August 1.

Table 3. Average qualities of cottonseed, by specified periods and States, 1949 and 1950

ALABAMA

Month	Cottonseed analysis						Average index						Samples	
	Oil	Ammonia	Moisture	Fatty acids	Foreign matter	Quality	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Average grade	No.
Aug.	17.0	19.9	19.50	19.9	19.50	19.9	13.3	3.0	0.9	0.5	92.03	98.71	82.0	96.5
Sept.	18.7	17.5	19.42	19.56	19.39	19.56	15.6	1.6	1.9	.6	100.29	96.44	97.0	91.0
Oct.	19.4	18.9	19.57	19.54	19.24	19.31	1.2	1.5	.5	.5	103.97	101.84	98.1	102.0
Nov.	19.4	19.6	19.65	19.60	19.20	19.23	1.2	1.4	.6	.7	104.46	104.80	98.6	103.0
Dec.	19.4	19.7	19.67	19.58	19.15	19.22	1.4	1.4	.8	.8	104.61	105.18	98.8	103.5
Jan.	19.2	19.4	19.64	19.56	19.24	19.28	1.9	1.6	1.0	1.3	103.62	104.03	96.9	101.0
Feb.	19.1	19.4	19.65	19.49	19.27	19.22	2.7	2.0	1.2	1.6	103.18	103.43	94.1	97.0
Mar.-Jul.	19.2	19.0	19.67	19.65	19.12	11.7	2.7	3.5	1.4	1.5	103.66	102.97	91.8	98.5
Season	19.1	18.8	18.8	18.8	18.8	18.8	13.3	1.4	1.6	0.6	102.84	101.78	97.5	97.0
Season	19.1	18.8	18.8	18.8	18.8	18.8	13.3	1.4	1.6	0.6	102.84	101.78	97.5	97.0
Aug.	19.0	19.4	17.6	17.6	17.6	17.6	12.4	7.3	7.7	2.5	101.82	-	73.5	-
Sept.	19.4	19.7	18.6	18.6	18.6	18.6	13.1	18.8	14.7	.5	103.06	95.10	98.2	84.5
Oct.	19.6	19.6	18.9	18.9	18.9	18.9	10.6	12.9	2.1	.6	105.04	99.64	99.2	95.5
Nov.	19.4	19.4	18.3	18.3	18.3	18.3	9.9	12.7	2.5	1.2	105.32	101.38	96.1	101.0
Dec.	18.5	18.5	18.0	18.0	18.0	18.0	14.6	13.4	3.5	2.0	104.58	99.09	94.4	97.4
Jan.	18.2	18.2	17.8	17.8	17.8	17.8	14.2	13.8	5.7	2.9	100.32	97.63	89.2	95.3
Feb.	19.0	19.0	17.8	17.8	17.8	17.8	11.6	12.6	5.7	3.4	98.68	96.59	79.7	91.9
Mar.-Jul.	17.8	17.8	17.8	17.8	17.8	17.8	11.6	12.6	5.7	3.1	102.34	96.81	81.3	85.8
Season	19.5	18.4	3.54	3.44	11.6	14.2	1.7	1.6	1.1	1.3	104.24	99.18	96.3	95.4

Table 3. Average qualities of cottonseed, by specified periods and States, 1949 and 1950—continued

## FLORIDA

Month	041	Cottonseed analysis												Average index No.	Samples No.		
		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality					
		Pct.	Pot.	Pct.	Pot.	Pct.	Pot.	Pct.	Pot.	Pct.	Pot.	Pct.	Pot.				
Aug.	16.1	17.1	3.17	3.61	19.8	16.2	3.1	0.9	0.4	0.3	87.16	94.90	86.9	95.8	80.0	91.0	
Sept.	17.1	16.8	3.39	3.76	15.2	24.7	4.2	2.4	.2	.3	93.70	94.33	87.0	94.8	81.5	89.5	
Oct.	18.0	19.2	3.69	4.26	12.0	21.3	4.3	10.2	.8	1.3	99.21	103.88	89.3	100.0	88.5	103.5	
Nov.	17.8	-	3.54	-	11.7	-	6.5	-	.5	-	97.44	-	81.2	-	79.0	8	
Dec.	18.4	-	3.74	-	10.6	-	11.5	-	.9	-	101.40	-	61.2	-	62.0	1	
Jan.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Feb.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mar.-Jul.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Season	16.9	17.2	3.36	3.78	16.3	16.3	4.0	3.0	0.4	2.2	92.18	96.02	86.7	96.0	80.0	92.0	

## GEORGIA

Aug.	17.4	17.5	3.38	3.68	16.7	14.0	2.8	1.0	0.5	0.5	94.58	97.07	90.7	97.4	85.5	94.5	723	238
Sept.	18.3	17.3	3.60	3.72	13.7	14.8	4.4	1.9	.5	.8	99.84	96.60	86.9	94.4	87.0	91.0	1,891	576
Oct.	19.1	18.6	3.65	3.77	12.7	12.1	3.4	1.9	.5	.7	103.16	102.09	90.0	95.9	93.0	98.0	1,723	690
Nov.	19.2	18.9	3.73	3.77	12.3	12.1	2.7	1.8	.5	.8	104.50	103.03	92.1	96.6	97.0	99.5	1,160	378
Deo.	19.3	19.0	3.76	3.83	11.6	11.5	3.7	2.6	.6	.8	104.90	104.07	90.9	94.8	94.5	99.0	757	157
Jan.	19.1	18.5	3.74	3.84	12.3	10.9	4.0	3.2	.8	1.0	103.82	101.83	89.6	93.2	92.0	94.5	267	56
Feb.	19.3	18.0	3.73	3.74	12.2	12.1	3.9	4.4	.7	2.0	104.47	99.47	90.5	87.6	94.5	86.0	156	22
Mar.-Jul.	19.3	18.0	3.73	3.88	11.3	11.3	4.1	4.4	.9	1.2	104.54	100.23	89.9	89.1	93.5	89.5	177	14
Season	18.7	18.2	3.64	3.75	13.2	13.0	3.6	1.9	0.5	0.8	101.85	100.31	89.7	95.5	91.5	96.0	6,854	2,133

Table 3. Average qualities of cottonseed, by specified periods and States, 1949 and 1950—continued

## ILLINOIS

Month	Cottonseed analysis												No.				
	Ammonia			Moisture			Foreign matter			Pet.							
	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	No.
Aug.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sept.	19.5	20.8	3.23	3.38	14.7	10.2	2.1	3.5	1.4	1.5	102.45	108.45	91.9	91.1	94.0	99.0	5
Oct.	19.8	18.8	3.29	3.23	14.0	16.9	.5	2.1	6.2	.5	103.81	99.74	97.9	92.1	101.5	92.0	17
Nov.	19.7	18.6	3.41	3.26	11.0	16.4	.5	.6	.8	.5	104.45	98.96	99.8	95.6	104.0	94.5	19
Dec.	18.6	18.1	3.44	3.19	10.7	18.0	.7	1.1	1.9	2.1	100.07	96.49	98.7	92.9	98.5	89.5	11
Jan.	17.1	17.9	3.20	3.22	16.6	15.7	1.7	1.4	3.1	4.4	91.91	95.75	92.8	92.5	85.5	88.5	3
Feb.	16.4	17.7	3.22	3.06	16.9	16.7	2.4	5.1	4.9	5.9	89.42	94.23	88.3	77.3	79.0	73.0	2
Mar.-Jul.	18.1	17.3	3.35	3.39	13.4	12.3	9.9	9.7	4.6	4.4	97.32	94.15	62.5	64.2	53.5	54.5	6
Season	19.1	18.0	3.35	3.27	12.7	15.0	1.7	4.6	1.6	3.1	101.60	96.63	94.2	82.0	95.0	77.5	47

## KENTUCKY

Month	Cottonseed analysis												No.				
	Ammonia			Moisture			Foreign matter			Pet.							
	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	No.
Aug.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sept.	18.5	-	3.33	-	16.0	-	2.5	-	0.5	-	98.84	-	93.1	-	91.0	-	26
Oct.	18.8	17.8	3.52	3.12	13.9	17.7	.8	1.2	.7	.5	101.45	94.75	97.5	93.8	99.0	89.0	50
Nov.	18.6	18.0	3.59	3.32	12.0	16.4	.6	.7	.8	.6	100.88	97.17	99.2	95.8	100.0	92.5	59
Dec.	18.0	17.5	3.62	3.35	11.0	16.4	.7	1.0	2.3	2.7	98.60	94.77	98.5	93.9	97.0	89.0	33
Jan.	17.3	16.8	3.45	3.31	15.2	16.1	1.8	2.4	3.0	4.6	95.03	91.79	93.4	89.2	88.5	82.0	20
Feb.	17.2	16.1	3.49	3.24	15.1	16.6	5.3	4.3	3.6	8.8	94.31	87.76	80.4	77.6	76.0	68.0	13
Mar.-Jul.	17.5	18.1	3.54	3.68	12.8	20.7	11.1	12.2	6.0	13.4	96.31	96.77	56.5	73.9	49.5	70.5	10
Season	18.4	17.5	3.53	3.29	13.1	17.0	1.6	2.1	1.3	2.9	99.75	94.9	91.4	94.5	86.5	189	97

Table 3. Average qualities of cottonseed, by specified periods and States, 1949 and 1950 - continued

LOUISIANA

MISSISSIPPI

Table 3. Average qualities of cottonseed, by specified periods and States, 1949 and 1950 - continued

MISSOURI

Month	Cottonseed analysis												No.	No.		
	Oil	Ammonia	Moisture	Free fatty acids			Foreign matter			Average index						
				Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.				
Aug.	18.3	19.2	3.84	3.50	10.6	10.7	8.6	7.7	3.1	1.8	101.31	102.94	69.2	87.7		
Sept.	19.1	17.0	3.32	3.13	14.3	19.5	1.0	4.6	.5	1.5	101.16	91.29	96.3	80.2		
Oct.	19.5	17.4	3.44	3.23	12.8	16.8	.5	1.0	.5	.6	103.73	93.66	98.8	94.9		
Nov.	19.5	17.5	3.52	3.38	10.7	14.3	.6	.6	1.1	.8	104.20	94.74	99.5	103.5		
Dec.	18.9	16.7	3.50	3.34	10.2	15.0	.8	.9	2.6	2.8	101.44	91.03	98.1	95.1		
Jan.	17.7	16.9	3.31	3.34	15.1	14.4	1.7	1.7	1.5	3.5	95.48	91.92	92.7	93.7		
Feb.	17.7	16.9	3.28	3.32	16.2	14.4	4.6	2.7	4.4	4.4	95.53	91.89	80.9	90.2		
Mar.-Jul.	18.6	16.8	3.41	3.38	12.7	13.4	9.4	7.9	5.1	4.1	99.83	91.40	64.6	71.7		
Season	19.2	17.1	3.44	3.31	12.3	15.3	1.3	1.9	1.3	2.0	102.53	92.80	96.1	92.0		

NEW MEXICO

Aug.	Cottonseed analysis												No.	No.		
	Oil	Ammonia	Moisture	Free fatty acids			Foreign matter			Average index						
				Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.				
Sept.	18.9	19.4	3.75	3.77	12.6	12.2	0.6	0.8	0.7	0.7	103.86	105.32	99.1	99.3		
Oct.	20.2	19.8	3.86	3.88	9.0	9.9	.5	.4	.7	.5	109.15	107.13	99.9	99.7		
Nov.	20.1	19.7	3.98	3.99	7.5	7.0	.4	.5	.9	1.2	109.31	107.65	99.7	99.6		
Dec.	18.3	18.7	3.82	3.91	7.6	6.7	.5	.8	2.4	3.7	101.07	102.99	98.5	97.3		
Jan.	17.4	17.8	3.70	3.83	8.1	7.4	.6	.9	3.8	6.0	96.03	99.15	97.2	94.9		
Feb.	17.7	18.0	3.81	3.89	7.4	6.7	.7	.8	4.5	6.0	97.74	100.28	96.4	95.0		
Mar.-Jul.	17.5	17.7	3.83	3.58	7.4	7.8	.9	2.8	4.9	11.7	97.52	102.20	96.1	87.2		
Season	19.1	19.4	3.87	3.91	8.0	8.2	0.5	0.6	2.0	1.8	104.59	105.92	98.7	98.8		

Avg.	103.0	104.5	21	18
Sept.	109.0	107.0	269	317
Oct.	109.0	107.0	438	292
Nov.	109.0	107.0	172	160
Dec.	96.0	100.5	172	160
Jan.	93.5	93.5	137	153
Feb.	94.0	95.5	113	15
Mar.-Jul.	93.5	93.5	103	7
Season	103.0	104.5	1,253	852

Table 3. Average qualities of cottonseed, by specified periods and States, 1949 and 1950--continued

NORTH CAROLINA

Month	011	Cottonseed analysis						Foreign matter	Average index	Average grade	Samples No.
		Ammonia	Moisture	Free fatty acids	Quantity	Quality	Pot.				
		Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	No.
Aug.	18.1	3.63	3.55	14.3	14.7	4.1	5.6	0.8	0.7	94.25	98.38
Sept.	18.3	3.48	3.54	14.7	14.0	2.9	1.9	5	4	99.08	99.76
Oct.	19.3	3.45	3.63	12.9	12.5	2.3	1.6	5	4	102.72	100.39
Nov.	19.7	18.8	3.51	3.72	11.6	11.8	2.5	1.8	5	104.68	102.40
Dec.	19.8	18.8	3.57	3.77	11.0	11.3	2.4	1.7	6	105.46	102.94
Jan.	19.5	18.9	3.53	3.75	12.2	11.5	2.3	2.0	8	104.09	103.34
Feb.	19.3	18.7	3.49	3.68	12.5	11.6	2.7	2.1	1.1	103.16	101.83
Mar.-Jul.	19.6	18.8	3.59	3.73	10.9	10.2	3.6	3.2	1.0	9	105.08
Season	19.4	18.6	3.50	3.67	12.3	12.2	2.5	1.8	0.5	103.45	101.11

Season 1949-1950

Month	011	Cottonseed analysis						Foreign matter	Average index	Average grade	Samples No.
		Ammonia	Moisture	Free fatty acids	Quantity	Quality	Pot.				
		Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	No.
Aug.	17.3	18.9	4.10	3.85	9.0	9.9	0.7	1.8	1.5	1.4	98.67
Sept.	14.6	18.1	3.98	3.77	12.2	14.1	6	9	6	7	99.00
Oct.	18.3	19.8	3.98	3.87	11.0	10.0	5	4	5	7	102.00
Nov.	16.8	19.8	3.94	3.97	10.2	8.2	5	4	6	103.71	106.38
Dec.	18.0	19.3	3.89	3.99	9.0	7.9	5	6	1.0	1.9	100.35
Jan.	16.9	18.9	3.76	3.96	10.4	8.5	7	1.0	1.3	2.5	94.78
Feb.	16.6	18.7	3.68	3.96	10.1	8.5	9	1.0	1.8	2.4	92.26
Mar.-Jul.	17.2	17.9	3.75	3.88	9.5	9.2	9	1.3	1.9	3.4	95.47
Season	18.2	19.6	3.93	3.94	10.4	8.8	0.5	0.5	1.3	1.3	101.43

Season 1949-1950

OKLAHOMA

Month	011	Cottonseed analysis						Foreign matter	Average index	Average grade	Samples No.
		Ammonia	Moisture	Free fatty acids	Quantity	Quality	Pot.				
		Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	Pot.	No.
Aug.	17.3	18.9	4.10	3.85	9.0	9.9	0.7	1.8	1.5	1.4	98.67
Sept.	14.6	18.1	3.98	3.77	12.2	14.1	6	9	6	7	99.00
Oct.	18.3	19.8	3.98	3.87	11.0	10.0	5	4	5	7	102.00
Nov.	16.8	19.8	3.94	3.97	10.2	8.2	5	4	6	1.0	103.71
Dec.	18.0	19.3	3.89	3.99	9.0	7.9	5	6	1.0	1.9	104.91
Jan.	16.9	18.9	3.76	3.96	10.4	8.5	7	1.0	1.3	2.5	94.78
Feb.	16.6	18.7	3.68	3.96	10.1	8.5	9	1.0	1.8	2.4	92.26
Mar.-Jul.	17.2	17.9	3.75	3.88	9.5	9.2	9	1.3	1.9	3.4	95.47
Season	18.2	19.6	3.93	3.94	10.4	8.8	0.5	0.5	1.3	1.3	101.43

Season 1949-1950

Table 3. Average qualities of cottonseed, by specified periods and States, 1949 and 1950 - continued

SOUTH CAROLINA

TENNESSEE

	Aug.	18.0	18.6	3.71	3.63	10.6	10.9	8.9	4.6	6.3	1.8	99.15	101.13	65.3	86.6	63.5	87.5	3	
	Sept.	19.3	17.6	3.34	3.16	14.7	20.3	8	2.1	.5	.8	102.17	94.49	96.5	88.2	98.5	83.5	1,933	385
	Oct.	19.6	18.8	3.48	3.32	13.2	16.2	6	1.0	.4	.5	104.19	99.53	98.5	95.5	102.5	95.5	2,930	2,569
	Nov.	19.3	19.1	3.57	3.49	11.9	13.8	6	.7	.7	.6	103.56	102.31	99.2	97.8	103.0	100.0	2,683	1,533
	Dec.	18.9	18.5	3.60	3.51	10.7	14.0	8	.9	1.8	1.8	102.34	99.95	98.9	96.9	101.5	97.0	1,012	994
	Jan.	18.0	18.1	3.44	3.47	13.9	14.5	1.6	1.5	2.3	2.9	97.82	97.92	95.9	94.9	94.0	93.0	210	470
	Feb.	18.1	18.3	3.46	3.44	14.3	14.7	2.7	2.5	2.4	3.1	98.08	98.47	91.7	91.6	90.0	90.5	77	126
	Mar-Jul.	18.4	18.1	3.53	3.49	12.2	13.3	4.6	6.9	3.0	3.8	99.22	97.73	85.2	76.2	83.5	74.5	129	198
Season	19.3	18.7	3.49	3.40	12.9	15.3	0.8	1.2	0.8	1.1	1.1	103.08	99.77	98.0	95.1	101.0	95.5	8,978	6,278

Table 3. Average qualities of cottonseed; by specified periods and States, 1949 and 1950 - continued

TEXIS

Cottonseed analysis												Cottonseed analysis											
Month	Oil	Ammonia		Moisture		Free fatty acids		Foreign matter		Average index grade		Samples No.											
		Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.												
Aug.	18.8	19.2	3.96	4.13	9.2	8.8	0.9	1.7	0.6	2.1	103.76	103.70	99.2	97.2	103.0	100.5	309	100					
Sept.	18.2	18.2	4.00	3.99	9.9	11.2	.6	1.0	.6	1.4	101.46	100.17	99.6	98.3	101.5	98.5	2,506	331					
Oct.	18.8	19.6	4.08	3.97	9.6	9.7	.6	.6	.6	.8	103.47	104.98	99.6	99.6	103.0	104.5	5,265	3,129					
Nov.	19.7	20.5	4.08	3.98	9.0	7.3	.8	.6	.7	1.2	106.07	106.22	98.7	99.6	104.5	106.5	4,259	4,284					
Dec.	19.1	19.7	4.02	3.95	8.0	6.7	1.2	.7	.7	1.5	103.36	103.34	97.1	98.1	100.0	101.5	1,658	2,758					
Jan.	18.6	18.6	3.99	3.86	8.7	7.4	.8	1.0	2.0	4.0	101.03	99.51	97.9	96.9	99.0	96.5	1,067	847					
Feb.	18.9	18.5	4.02	3.84	8.4	7.3	.8	1.0	3.9	5.2	102.07	99.74	96.9	95.7	99.0	95.5	1,913	321					
Mar-Jul.	18.5	18.5	4.02	3.86	8.5	8.4	1.0	1.6	4.2	5.9	100.10	99.38	96.4	94.6	96.5	94.0	8,160	444					
Season	18.8	19.8	4.04	3.96	8.9	7.9	0.8	0.7	2.2	2.0	102.40	104.19	98.0	98.7	100.5	103.0	25,137	12,214					
VIRGINIA																							
Aug.	-	17.8	18.6	3.08	3.41	18.9	13.6	1.9	8.5	0.5	0.8	94.45	99.80	90.5	70.7	86.0	71.5	12					
Sept.	19.1	16.9	3.16	3.30	15.3	18.4	1.3	3.9	3.9	.7	100.15	92.11	96.2	85.3	96.5	74.5	121	16					
Oct.	19.8	18.9	3.33	3.61	11.9	12.7	1.1	3.0	4	.6	104.07	102.04	99.3	97.3	103.5	99.5	107	30					
Nov.	20.0	19.3	3.43	3.62	10.9	11.7	1.2	1.6	5	.6	105.57	104.00	99.5	99.0	105.0	103.0	52	24					
Dec.	19.7	19.1	3.42	3.70	11.7	12.1	2.1	1.9	5	.5	104.42	103.30	97.2	98.6	101.5	102.0	20	4					
Jan.	19.6	19.4	3.42	3.66	11.9	11.4	1.7	1.1	6	.5	103.78	104.64	98.8	100.0	102.5	104.5	7	8					
Feb.	Mar-Jul.	19.6	3.49	3.83	11.5	14.3	2.3	6.0	.7	5.7	104.26	105.12	96.8	96.4	101.0	101.5	7	10					
Season	19.5	18.8	3.28	3.59	13.2	13.5	1.3	3.0	0.4	1.1	102.52	101.41	97.7	95.3	100.0	96.0	326	94					

Table 4. Average qualities of cottonseed, by crop-reporting districts, 1949 and 1950 1/

ALABAMA

Dist.	Oil	Cottonseed analysis						Foreign matter	Average index	Average grade	Samples
		Pct.	Pct.	Pct.	Pct.	Pct.	Pct.				
No.		Ammonia	Moisture	Free fatty acids	Acids	Quantities	Quality				
1949-1950	1949-1950	1949-1950	1949-1950	1949-1950	1949-1950	1949-1950	1949-1950				
1	19.8	3.48	3.51	12.5	14.0	1.0	1.2	0.6	104.88	102.16	98.6
2	19.6	3.53	3.45	12.6	13.3	.9	1.1	.7	104.59	104.06	98.6
3	19.5	3.63	3.41	13.0	13.7	.9	1.2	.7	104.63	103.75	98.4
4	18.3	3.66	3.70	12.7	13.7	2.0	3.0	.4	100.09	100.03	97.5
5	18.6	3.58	3.78	12.2	12.6	2.4	1.8	.4	100.97	98.36	95.8
6	18.8	3.62	3.63	12.1	12.7	1.0	1.4	.3	102.04	99.92	99.1
7	18.2	3.41	3.76	13.6	13.2	2.8	2.6	.4	98.08	96.47	93.8
8	18.0	3.42	3.77	14.5	13.3	3.4	1.8	.5	97.60	96.21	90.9
9	17.8	3.34	3.76	13.9	13.1	2.9	1.6	.5	96.59	95.67	94.6
State	18.8	3.55	3.56	12.8	13.3	1.4	1.6	0.6	102.84	101.78	97.5

ARKANSAS

Dist.	Oil	Cottonseed analysis						Foreign matter	Average index	Average grade	Samples
		Pct.	Pct.	Pct.	Pct.	Pct.	Pct.				
No.		Ammonia	Moisture	Free fatty acids	Acids	Quantities	Quality				
1949-1950	1949-1950	1949-1950	1949-1950	1949-1950	1949-1950	1949-1950	1949-1950				
1	19.1	3.69	3.51	10.9	13.3	1.2	1.1	1.1	103.79	103.38	99.2
2	19.3	3.50	3.31	11.9	14.7	1.2	1.2	1.6	103.35	96.19	97.3
3	19.4	20.3	3.59	10.4	12.3	1.5	1.8	1.0	104.35	106.10	98.3
4	19.7	19.6	3.60	3.40	10.6	12.7	2.4	1.4	105.41	103.75	94.9
5	19.5	18.5	3.55	3.52	11.6	14.1	1.6	.9	104.63	99.88	96.8
6	19.2	19.2	3.77	3.59	10.4	12.9	2.8	1.1	104.68	103.19	93.2
7	19.3	19.0	3.51	3.50	11.1	13.3	2.1	1.1	103.32	102.20	95.7
8	19.0	3.55	3.56	11.5	13.6	3.2	2.7	1.0	106.15	102.73	91.3
9	20.0	19.1									
State	18.4	3.54	3.44	11.6	14.2	1.7	1.6	1.1	104.24	99.18	96.3

1/ Season beginning August 1,

Table 4. Average qualities of cottonseed, by crop-reporting districts, 1949 and 1950 1/

## GEORGIA

Dist. No.	Cottonseed analysis										Average index				Samples No.	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Grade			
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.	No.		
1	19.7	19.6	3.60	3.41	12.9	14.1	1.3	0.8	0.7	105.43	103.81	97.7	96.8	103.0	100.5	868
2	19.3	18.7	3.72	3.73	13.0	13.0	1.6	1.1	.5	104.96	102.13	97.2	98.2	102.0	100.5	596
3	19.6	18.8	3.65	3.81	12.7	12.8	1.3	1.0	.2	105.44	103.25	96.2	98.4	103.5	101.5	570
4	19.3	18.6	3.66	3.76	12.5	12.9	1.6	1.4	.4	104.15	101.84	97.0	98.3	101.0	100.0	800
5	18.6	17.9	3.62	3.79	13.4	12.9	1.4	1.6	.5	101.01	99.27	87.2	96.7	87.5	96.0	1,505
6	18.0	17.6	3.73	3.82	13.0	12.7	1.6	2.9	.6	99.46	98.31	86.9	92.0	86.0	90.5	1,450
7	17.3	18.0	3.49	4.02	15.6	12.1	4.4	2.0	.3	94.73	101.00	85.5	96.8	80.5	98.0	67
8	18.1	17.9	3.52	3.71	14.0	12.3	7.2	8	.6	98.41	98.79	76.1	99.1	74.0	98.0	707
9	17.8	17.4	3.56	3.68	14.2	13.9	6.6	2.8	.5	97.64	96.64	78.2	91.4	75.5	88.0	291
State	18.7	18.2	3.64	3.75	13.2	13.0	3.6	1.9	0.5	101.85	100.31	89.7	95.5	91.5	96.0	6,854
LOUISIANA																
1	19.3	18.7	3.82	3.75	11.4	12.8	6.9	3.3	0.7	105.56	102.82	77.9	92.8	80.0	95.0	1,584
2	19.1	18.8	3.55	3.50	12.1	13.6	2.7	2.5	.8	103.19	100.82	92.7	95.1	96.0	96.0	1,057
3	19.3	19.1	3.64	3.58	11.8	13.6	3.0	2.5	.6	104.56	103.06	92.1	94.8	96.5	97.5	3,056
4	19.1	18.2	3.68	3.78	12.5	12.7	6.3	2.2	.8	104.30	100.62	80.0	95.1	82.0	95.5	4,88
5	19.0	18.5	3.60	3.52	13.6	14.0	7.0	1.8	.7	103.47	100.18	77.4	96.2	78.5	96.5	1,256
6	18.8	17.7	3.40	3.69	14.3	13.8	6.9	1.6	.7	101.21	97.94	77.0	97.3	76.5	95.5	115
7	18.1	17.4	3.43	3.57	16.7	14.0	4.8	1.5	.6	97.71	95.89	83.2	97.2	81.5	93.5	71
8	18.3	17.7	3.40	3.50	16.7	15.5	5.3	2.0	.7	98.51	95.85	81.2	94.5	79.5	91.5	90
9	17.5	16.8	3.87	3.94	14.6	14.9	11.3	1.9	1.5	102.02	95.20	59.1	95.3	60.0	91.0	2
State	19.2	18.7	3.65	3.60	12.2	13.5	4.7	2.4	0.8	104.23	101.68	86.0	84.9	89.0	96.5	7,401

1/ Season beginning August 1.

Table 4. Average qualities of cottonseed, by crop-reporting districts, 1949 and 1950 1/

## MISSISSIPPI

Dist. No.	Oil Pct.	Ammonia Pct.	Cottonseed analysis			Foreign matter	Average index	Average grade	Samples No.	
			1949: 1950: 1949: 1950: 1949: 1950: 1949: 1950: 1949: 1950:							
			Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
1	19.4	3.74	3.75	3.6	14.0	1.5	2.9	0.9	1.0	105.04
2	19.3	3.64	3.57	11.9	14.1	0.9	1.5	.6	.7	103.90
3	19.6	3.55	3.44	12.4	14.3	.7	1.3	.5	.5	104.78
4	19.5	3.69	3.76	12.1	13.5	2.5	4.4	.8	.8	105.22
5	18.8	3.59	3.70	12.8	13.6	1.8	3.4	.7	.8	102.39
6	18.7	3.61	3.65	12.6	13.9	1.4	2.7	.5	.7	101.83
7	18.9	3.52	3.69	13.2	13.5	2.7	1.7	.6	.7	102.43
8	19.1	17.9	3.25	3.80	13.3	13.7	3.0	1.8	.7	102.26
9	18.8	18.0	3.41	3.70	13.3	13.9	2.5	2.5	.6	101.04
State	19.3	18.7	3.63	3.70	12.3	13.8	1.8	2.9	0.7	104.04
										101.84
										96.1
										92.4
										100.0
										94.0
										90.0
										87.5
										86.2
										80.0
										80.0
										79.0
										75.0
										70.0

## NORTH CAROLINA

Dist. No.	Oil Pct.	Ammonia Pct.	Cottonseed analysis			Foreign matter	Average index	Average grade	Samples No.	
			1949: 1950: 1949: 1950: 1949: 1950: 1949: 1950: 1949: 1950:							
			Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
1	20.2	19.1	3.34	3.64	11.9	11.7	1.4	0.4	0.5	105.72
2	19.7	18.5	3.36	3.50	12.0	12.7	2.3	.9	.6	103.82
3	19.4	19.6	3.55	3.67	12.9	11.9	1.4	.7	.3	104.94
4	19.6	18.9	3.44	3.73	12.5	12.2	1.2	1.0	.5	103.93
5	19.3	18.1	3.40	3.58	11.7	12.1	3.4	1.7	.7	102.75
6	19.3	18.7	3.57	3.85	13.1	12.3	1.4	1.0	.5	103.70
7	18.7	18.6	3.64	3.61	11.7	11.9	5.1	2.4	.7	101.77
8	19.4	18.6	3.50	3.67	12.3	12.2	2.5	1.8	0.5	103.45
9	18.7	18.6	3.64	3.61	11.7	11.9	5.1	2.4	.7	101.41
State	19.4	18.6	3.50	3.67	12.3	12.2	2.5	1.8	0.5	101.41
										97.1
										98.0
										98.5
										8,105
										3,478

1/ Season beginning August 1.

Table 4. Average qualities of cottonseed, by crop-reporting districts, 1949 and 1950 1/

OKLAHOMA

Cottonseed analysis											
Dist.	No.	Oil	Ammonia	Moisture	Free fatty acids	Foreign matter	Quantity	Quality	Average index	Average grade	Samples
Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.	No.	No.
1		-	-	-	-	-	-	-	-	-	-
2	18.3	20.5	3.91	3.92	11.0	10.0	0.5	0.4	101.66	110.0	26
3	17.7	19.5	3.88	3.79	11.2	10.2	.6	.8	105.91	98.0	229
4	18.5	19.2	3.94	3.91	10.5	8.8	.5	.8	102.80	102.5	20
5	17.9	19.4	3.96	3.97	10.7	9.0	.5	.9	100.32	103.5	655
6	17.3	18.8	3.88	3.63	11.2	11.9	.7	.9	105.64	99.0	181
7	18.6	19.7	3.92	3.97	10.0	8.6	.5	.7	102.73	102.5	663
8	18.0	20.3	4.02	3.83	10.3	8.7	.5	.6	106.50	106.0	1,522
9	18.6	19.6	3.85	3.67	10.8	11.8	1.5	1.3	100.95	108.26	64
State	18.2	19.6	3.93	3.94	10.4	8.8	0.5	0.5	102.36	105.30	529
									97.6	99.5	139
									97.1	101.0	4
									100.0	107.5	
									102.5	102.5	
									100.0	105.0	
									101.0	105.0	
									99.6	99.4	
									105.73	105.0	
									99.6	99.4	
									101.0	105.0	
									105.0	5,978	
									2,504		

SOUTH CAROLINA

Cottonseed analysis											
Dist.	No.	No.	No.	No.							
Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.	No.	No.
1	19.5	19.1	3.60	3.72	12.8	12.2	1.5	0.9	0.4	104.51	103.61
2	19.1	18.7	3.66	3.83	12.8	12.5	2.2	1.4	.5	103.39	102.68
3	18.5	18.7	3.81	3.79	12.1	11.9	8.4	4.4	.6	101.85	102.52
4	18.8	18.3	3.75	3.75	12.7	13.0	2.7	2.1	.5	102.68	100.86
5	18.2	18.2	3.85	3.77	13.1	12.9	6.1	4.1	.5	100.85	100.55
8	17.8	17.4	3.75	3.76	13.2	13.9	5.4	4.1	.6	98.91	97.23
State	18.6	18.4	3.76	3.77	12.8	12.7	5.2	3.5	0.5	101.89	101.12
										90.8	85.5
										92.0	9,509
										6,024	

1/ Season beginning August 1.

Table 4. Average qualities of cottonseed, by crop-reporting districts, 1949 and 1950 1

TENNESSEE

TEXAS

Season beginning August 1.

Table 5. Proportions of total cottonseed samples having specified quantity indices, by States and United States 1/ , 1949 and 1950 2/

$\sqrt{}$  Quality information not available for cottonseed produced in Arizona and California.

2/ Season beginning August 1.

\* Less than 0.05 percent.

Table 6. Proportions of total cottonseed samples having specified quality indices, by States and United States 1/ , 1949 and 1950 2/

State	Prime quality		Below prime quality		Total		Grade		Below		Total	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Ala.	28.0	19.7	*	0.2	0.7	0.2	1.2	1.0	3.3	4.2	8.2	14.7
Ark.	32.6	12.7	0.2	0.1	1.3	0.5	2.8	1.4	2.0	3.8	7.3	6.5
Fla.	-	7.7	-	7.4	-	11.1	-	11.8	22.2	7.7	22.3	61.5
Ga.	12.2	22.4	1.2	.4	7.2	1.8	7.0	3.1	5.4	3.4	13.9	11.1
Ill.	19.0	-	-	2.1	1.6	17.0	3.2	8.5	-	4.3	6.4	12.7
Ky.	14.8	3.0	.5	1.0	2.1	3.0	2.6	3.0	.5	6.2	1.1	11.3
La.	20.4	6.9	3.1	.4	12.1	.6	8.5	.8	6.7	2.1	8.8	6.4
Miss.	25.5	8.0	.2	.2	1.4	1.8	2.1	5.0	2.1	7.0	3.8	12.7
Mo.	27.2	3.3	.6	1.8	2.7	4.0	2.1	2.8	.7	2.2	1.1	8.2
N. Mex.	48.6	50.9	-	-	-	-	-	-	-	1.1	1.1	4.7
N. C.	19.3	34.0	.3	.2	2.0	.3	3.5	1.0	2.9	1.1	6.9	3.4
Okla.	67.2	51.8	-	*	*.1	-	*.1	*.1	-	*.2	*.6	1.1
S. C.	7.5	14.8	3.2	.5	10.5	5.0	9.9	8.5	6.7	6.2	13.5	12.3
Tenn.	28.6	5.6	.1	.5	.3	1.0	.5	1.1	.3	1.4	.6	5.4
Tex.	48.3	42.6	.2	*	.5	*.1	.4	.3	.5	1.7	.6	4.2
Va.	36.5	41.5	-	-	-	2.1	.6	1.1	-	6.4	2.8	8.5
U. S. Y	30.9	17.7	0.6	0.3	2.6	1.3	2.8	2.4	2.3	2.9	4.2	7.0

**Y** Quality information not available for cottonseed produced in Arizona and California.

2/ Season beginning August 1.

\* Less than 0.05 percent.

Table 7. Proportions of total cottonseed samples, having specified grades, by States  
and United States 1/, 1949 and 1950 2/

State	Below Grade		Grade		Total	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Ala.	0.1	0.5	0.2	0.7	0.5	1.8
Ark.	0.3	0.8	2.2	2.6	1.3	7.5
Fla.	5.6	35.0	-	11.1	5.6	2.7
Ga.	1.5	12.1	3.6	4.8	1.9	11.5
Ill.	3.2	6.4	25.5	4.8	6.4	4.8
Ky.	9.5	1.0	4.2	12.4	1.6	8.2
La.	2.5	4.4	16.8	1.0	4.2	1.1
Miss.	4.1	1.8	3.2	0.9	3.4	1.5
Mo.	0.9	1.5	4.4	13.2	1.2	8.3
N. C.	2.2	1.1	3.0	1.0	2.0	0.8
N. Mex.	6	-	* 1	0.6	0.9	0.4
Okla.	1.1	* 2	1.2	0.1	0.3	*
S. C.	3.3	* 2	16.9	7.2	5.4	5.0
Tenn.	3	1.0	* 7	2.9	0.4	1.8
Tex.	2	* 2	1.2	0.6	0.5	1.2
Va.	1.8	1.0	0.6	4.3	1.2	5.3
U. S. 1/	0.7	0.2	4.1	3.0	1.6	2.6
U. S. 2/	0.7	0.2	4.1	3.0	1.6	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

1/ Quality information not available for cottonseed produced in Arizona and California.

2/ Season beginning August 1.

\* Less than 0.05 percent.

Table 8. Proportions of total cottonseed samples containing specified percentages of oil, by States and United States 1/ , 1949 2/

State	Oil												Total
	Under: 15.0	16.0	16.5	17.0	17.5	18.0	18.5	19.0	20.0	21.0	& over:		
: 15.0	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.9	20.9				
Ala.	0.2	0.3	0.4	1.1	2.7	6.1	12.4	17.8	38.3	19.8	0.9	100	
Ark.	.3	.1	.1	.3	.8	1.8	4.7	12.3	51.2	26.8	1.6	100	
Fla.	1.9	20.4	9.3	11.1	25.7	16.7	13.0	-	1.9	-	-	100	
Ga.	.1	.5	1.0	3.0	6.3	12.0	15.1	14.6	36.5	10.8	.1	100	
Ill.	-	1.6	1.6	7.9	3.2	4.8	4.8	12.7	33.2	25.4	4.8	100	
Ky.	-	.5	1.6	4.2	6.3	11.6	23.8	29.2	21.2	1.6	-	100	
La.	1.6	.1	.2	.4	.7	2.1	6.8	17.7	50.7	18.3	1.4	100	
Miss.	.7	.1	.1	.2	.6	2.0	7.9	19.0	50.0	17.9	1.5	100	
Mo.	.2	.2	.4	1.0	2.1	4.5	8.1	15.6	48.5	18.6	.8	100	
N. C.	.1	.2	.3	.5	1.1	2.6	6.3	14.7	50.6	22.7	.9	100	
N. Mex.	1.0	2.6	2.5	5.1	6.5	7.0	7.3	7.1	21.1	30.6	9.2	100	
Oklahoma	.8	2.6	3.6	5.5	11.1	13.9	16.7	16.7	23.2	5.8	.1	100	
S. C.	.1	.5	1.0	3.0	6.4	10.7	19.3	24.5	29.0	5.4	.1	100	
Tenn.	.3	*	.1	.3	1.2	2.5	7.9	17.9	49.7	18.8	1.3	100	
Tex.	.6	.7	1.0	2.5	5.9	10.5	13.8	17.0	34.4	12.1	1.5	100	
Va.	-	-	.6	.3	1.8	4.3	6.7	12.6	39.7	31.9	2.1	100	
U. S. 1/	0.5	0.4	0.6	1.4	3.2	5.8	10.1	16.7	42.7	17.4	1.2	100	

1/ Quality information not available for cottonseed produced in Arizona and Calif.

2/ Season beginning August 1. \* Less than 0.05 percent.

Table 9. Proportions of total cottonseed samples containing specified percentages of oil, by States and United States 1/ , 1950 2/

State	Oil												Total
	Under: 15.0	16.0	16.5	17.0	17.5	18.0	18.5	19.0	20.0	21.0	& over:		
: 15.0	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.9	20.9				
Ala.	0.1	0.3	1.5	4.9	9.0	11.2	11.5	11.4	27.8	20.0	2.3	100	
Ark.	.9	2.9	4.1	6.4	8.7	11.6	13.7	14.7	23.8	11.6	1.6	100	
Fla.	-	3.8	15.4	38.6	26.9	3.8	7.7	-	-	-	3.8	100	
Ga.	.2	.9	3.5	7.4	14.0	18.8	16.0	11.3	20.9	6.8	.2	100	
Ill.	-	2.1	8.5	8.5	8.5	19.2	19.2	19.2	10.6	2.1	2.1	100	
Ky.	-	6.2	13.4	9.3	9.3	26.8	24.7	7.2	2.1	-	1.0	100	
La.	.6	.3	.7	1.9	5.9	11.1	15.0	19.8	33.2	10.5	1.0	100	
Miss.	.3	.7	1.3	3.1	6.3	11.8	16.9	18.6	31.0	9.0	1.0	100	
Mo.	5.3	12.1	10.9	14.1	15.9	14.7	11.5	8.8	6.0	.6	.1	100	
N. C.	.2	.3	.2	.7	3.3	10.2	22.6	29.0	30.7	2.7	.1	100	
N. Mex.	.1	.7	.6	1.5	2.7	4.0	7.2	11.3	38.6	28.4	4.9	100	
Oklahoma	.2	.2	.2	.6	1.6	3.1	6.6	12.0	38.1	31.1	6.3	100	
S. C.	.1	1.2	2.8	5.1	6.7	11.7	19.2	24.9	26.6	1.6	.1	100	
Tenn.	.4	.4	1.2	3.2	7.1	11.2	16.4	18.6	31.5	9.6	.4	100	
Tex.	.3	.4	.6	1.4	2.8	4.4	7.0	9.5	24.9	28.3	20.4	100	
Va.	1.1	1.1	1.1	3.2	12.7	3.2	9.6	18.1	41.4	6.4	2.1	100	
U. S. 1/	0.7	1.7	2.3	4.2	7.0	10.5	14.0	16.0	27.0	12.7	3.9	100	

1/ Quality information not available for cottonseed produced in Arizona and Calif.

2/ Season beginning August 1. \* Less than 0.05 percent.

Table 10. Proportions of total cottonseed samples containing specified percentages of ammonia, by States and United States 1/, 1949 and 1950 2/

Ammonia										Total	
State	Under	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	Total
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Ala.	0.4	0.3	1.4	1.6	5.1	6.1	11.8	13.2	26.1	31.9	24.4
Ark.	.3	1.5	1.6	4.5	6.3	11.1	14.1	23.3	25.3	27.7	20.6
Fla.	1.9	-	9.3	-	24.0	-	22.2	11.5	13.0	38.6	7.4
Ge.	*	4.2	*3	*5	1.9	1.3	8.0	3.4	19.0	7.7	30.2
Ill.	-	2.1	1.6	4.3	19.0	40.4	39.8	31.9	31.7	19.1	26.1
Ky.	-	6.2	-	3.1	3.7	27.8	16.4	48.5	25.4	12.4	44.5
La.	-	3.2	1.1	3.2	4.9	9.8	11.6	18.5	20.8	24.8	26.1
Md.	2	1.1	1.1	1.3	4.6	1.7	9.9	5.5	17.7	14.3	25.5
Md.	2	3.1	1.8	7.0	8.9	20.0	24.7	38.5	38.5	21.6	4.6
N. J. C.	2	1	1.3	.7	7.8	1.2	23.5	5.6	29.8	19.3	21.0
N. Mex.	1	2	-	-	-	-	-	5	4	2.6	10.5
Okla.	1	-	1	-	*2	*2	2.1	2.1	7.0	7.0	6.0
S. C.	1	-	2.4	5.4	7.7	14.3	18.5	24.2	30.3	31.9	20.7
Tenn.	.7	2.4	*1	2.4	5.4	7.7	14.3	18.5	24.2	30.3	27.0
Tex.	1	3.1	*1	14.1	2.1	25.5	3.2	26.7	13.8	23.9	5.5
Va.	-	-	14.1	2.1	2.1	25.5	3.2	26.7	13.8	23.9	5.5
U. S. 1/	0.2	0.7	1.0	2.0	4.1	5.7	10.4	12.1	18.3	17.5	21.5

1/ Quality information not available for cottonseed produced in Arizona and California.

2/ Season beginning August 1.

\* Less than 0.05 percent.

Table 11. Proportions of total cottonseed samples containing specified percentages of moisture, by States and United States <sup>1/</sup>, 1949 <sup>2/</sup>

State	Moisture			Moisture			Moisture			Moisture			Moisture		
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Prime	Below	Off	Quality	0.0	5.1	7.1	9.1	10.1	11.1	12.1	14.1	16.1	18.1	20.1	Total
quality:	prime	prime	quality	20.1 and	5.0	7.0	9.0	10.0	11.0	12.0	14.0	16.0	18.0	20.0	and over
0-12.0	: quality	: quality	: 20.1	: 5.0	: 7.0	: 9.0	: 10.0	: 11.0	: 12.0	: 14.0	: 16.0	: 18.0	: 20.0	: over	:
12.1-20.0	: 12.1-20.0	: over	: 12.1-20.0	: Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	:
Ala.	40.0	59.3	0.7	*	*	0.1	2.1	12.4	25.4	41.5	13.3	3.3	1.2	0.7	100
Ark.	63.3	36.6	*.1	*	*	4.7	20.5	21.3	16.8	24.5	9.9	1.9	*.3	*.1	100
Fla.	11.1	66.7	22.2	-	-	-	-	3.7	7.4	24.1	16.7	14.8	11.1	22.2	100
Ga.	36.0	63.1	*.9	-	-	*.2	1.5	11.5	22.8	36.8	16.8	6.6	2.9	*.9	100
Ill.	44.4	55.6	*	*	*	3.2	12.7	19.0	9.5	22.3	22.2	9.5	1.6	*	100
Ky.	36.5	63.5	-	-	-	*.5	8.5	14.8	12.7	28.6	24.3	8.5	2.1	"	100
La.	52.3	46.8	.9	*	0.2	4.1	11.9	17.9	18.2	31.4	12.0	2.2	1.2	*.9	100
Miss.	46.4	53.5	*.1	*	*	2.3	11.1	16.4	16.6	36.3	14.5	2.3	*.1	*.1	100
Mo.	50.4	49.4	.2	*	.1	2.0	16.6	18.5	13.2	28.2	15.4	5.0	*.8	.2	100
N. Mex.	97.8	2.1	*.1	*	.2	26.4	56.4	9.8	4.2	.8	1.7	*.1	*.1	*.1	100
N. C.	53.9	45.7	.4	*	*	.4	6.1	23.1	24.3	28.0	12.3	4.3	1.1	*.4	100
Oklta.	85.4	14.6	-	*	*	.1	21.1	22.6	26.4	15.2	12.3	2.0	*.2	*	100
S. C.	50.1	49.2	.7	*	*	-	.6	2.9	18.2	28.4	27.3	11.7	7.3	*.7	100
Tenn.	41.7	57.9	.4	*	*	.5	6.8	17.6	16.8	30.6	18.8	6.8	1.7	*.4	100
Tex.	96.4	3.6	*	*	.2	9.4	48.0	22.5	11.1	5.2	2.8	*.1	*.1	*.1	100
Va.	42.5	54.7	2.8	-	-	-	3.4	18.7	20.4	27.0	16.6	7.4	3.7	2.8	100
U. S. 1/	60.8	38.9	0.3	*	0.1	2.0	11.9	13.4	16.5	24.7	10.4	2.9	0.9	0.3	100

1/ Quality information not available for cottonseed produced in Arizona and California.

2/ Season beginning August 1.

\* Less than 0.05 percent.

Table 12. Proportions of total cottonseed samples containing specified percentages of moisture, by States and United States 1/ , 1950 2/

State	Moisture						Moisture						Moisture					
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Prime	Below	Off	5.1	7.1	9.1	10.1	11.1	12.1	14.1	16.1	18.1	20.1	Total	Total	Total	Total	Total	Total
prime quality	quality : 0.0-	quality : 0.0-	quality : 5.0	quality : 7.0	quality : 9.0	quality : 10.0	quality : 11.0	quality : 12.0	quality : 14.0	quality : 16.0	quality : 18.0	and over						
0-12.0	: 12.1-20.0	: 20.0	: over	: over	: over	: over	: over	: over	: over	: over	: over	: over	: over	: over	: over	: over	: over	: over
Ala.	31.6	66.9	1.5	*	*	0.2	1.6	8.5	21.3	38.9	6.1	3.0	1.5	100	100	100	100	100
Ark.	26.2	67.4	6.4	*	*	0.1	1.6	7.7	16.8	34.9	17.3	8.7	6.5	6.4	100	100	100	100
Fla.	19.2	77.0	3.8	*	*	*	*	*	19.2	23.2	23.1	11.5	3.8	100	100	100	100	100
Ga.	41.8	57.8	6.4	*	*	*	*	*	22.4	29.7	18.8	7.8	1.5	4	100	100	100	100
Ill.	19.2	76.5	4.3	*	*	*	*	*	10.6	17.0	21.2	31.9	6.4	4.3	100	100	100	100
KY.	2.1	87.6	10.3	*	*	*	*	*	2.1	11.3	36.1	21.6	18.6	10.3	100	100	100	100
La.	33.2	65.5	1.3	*	0.1	1.1	4.7	11.0	16.3	28.1	22.0	11.4	4.0	1.3	100	100	100	100
Miss.	32.4	65.4	2.2	*	*	*	*	*	3.3	10.9	17.9	28.2	17.3	12.5	6.4	2.2	2.2	100
Mo.	9.0	81.2	9.8	*	*	*	*	*	1.7	6.9	31.2	31.1	12.5	6.4	9.8	100	100	100
N. Mex.	92.6	7.4	*	*	*	36.5	37.8	8.9	5.4	3.8	5.0	1.9	5.5	5.5	100	100	100	
N. C.	59.9	39.8	0.3	*	*	*	*	*	4.6	21.5	33.2	27.1	8.3	3.5	3.5	3	3	100
Okla.	94.6	5.4	*	*	*	5.4	62.9	16.8	7.0	2.4	3.6	1.4	2	2	*	*	100	
S. C.	55.1	43.4	1.5	*	*	*	*	*	6.5	23.8	24.5	20.5	12.3	7.4	3.2	1.5	1.5	100
Tenn.	9.1	82.2	8.7	*	*	*	*	*	1.2	7.8	33.6	25.3	14.5	8.8	8.7	100	100	100
Tex.	95.2	4.8	*	*	*	38.0	42.5	8.1	3.6	2.9	3.4	1.2	2	*	*	*	100	
Va.	55.4	39.3	5.3	*	1.1	*	*	*	3.2	17.0	34.1	19.1	4.3	13.8	2.1	5.3	5.3	100
U. S. 1/	42.1	54.6	3.3	*	*	5.8	8.3	3.9	9.1	15.0	26.0	15.5	8.6	4.5	3.3	3.3	3.3	100

1/ Quality information not available for cottonseed produced in Arizona and California.

2/ Season beginning August 1.

\* Less than 0.05 percent.

Table 15. Proportions of total cottonseed samples containing specified percentages of foreign matter, by States and United States 1/, 1949 2/

State	Prime quality:		Below prime quality:		Foreign matter		Total	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Ala.	90.5	9.4	0.1	62.6	27.9	7.9	0.2	0.1
Ark.	69.4	30.5	.1	38.2	31.2	7.0	3.1	0.1
Fla.	94.4	5.6	-	87.0	7.4	-	1.8	0.1
Ga.	90.2	9.8	*	69.4	20.8	8.0	1.2	.1
Ill.	55.6	44.4	*	27.0	28.6	19.0	11.1	-
Ky.	64.4	35.6	-	46.4	18.0	14.3	10.1	5.3
La.	81.9	18.0	.1	47.8	34.1	13.3	3.2	2.1
Miss.	83.3	16.6	.1	53.3	30.0	12.0	2.7	1.6
Mo.	66.9	32.5	.6	44.9	22.0	14.1	7.1	5.3
N. Mex.	50.3	49.4	.3	27.2	23.1	14.2	10.7	9.7
N. C.	91.6	8.4	*	66.4	25.2	6.7	1.0	0.5
Oklahoma	80.0	19.9	.1	48.5	31.5	16.0	2.6	1.6
S. C.	92.5	7.5	*	59.5	33.0	6.6	2.1	1.1
Tenn.	79.5	20.4	.1	57.4	22.1	12.7	4.7	3.2
Tex.	51.7	45.5	2.8	29.3	22.4	17.9	9.6	6.0
Va.	98.2	1.8	-	77.6	20.6	1.8	-	-
U. S. 1/	75.3	24.1	0.6	48.0	27.3	13.3	4.8	2.4
2/							1.7	0.9
							0.6	0.4
							0.6	0.6

1/ Quality information not available for cottonseed produced in Arizona and California.

2/ Season beginning August 1.

\* Less than 0.05 percent.

Table 16. Proportions of total cottonseed samples containing specified percentages of foreign matter,  
by States and United States 1/ , 1950 2/

State	Foreign matter										Total
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Prime quality	Off	0	0.6	1.1	2.1	3.1	4.1	5.6	7.1	8.6	10.1
Below prime quality	-	-	-	-	-	-	-	-	-	-	and over
Quality 10.1	10.1	0.5	1.0	2.0	3.0	4.0	5.5	7.0	8.5	10.0	over
Quality 0-1.0	1-10.0	and over	-	-	-	-	-	-	-	-	-
U. S. 1/	71.5	28.1	0.4	40.8	30.7	15.9	5.4	3.0	2.1	1.0	0.5
U. S. 2/	-	-	-	-	-	-	-	-	-	-	0.4
1/ Quality information not available for cottonseed produced in Arizona and California.											
2/ Season beginning August 1.											
*	Less than 0.05 percent.										

1/ Quality information not available for cottonseed produced in Arizona and California.

2/ Season beginning August 1.

\* Less than 0.05 percent.

Table 17. Number of samples graded, by qualities and number reduced in grade for specified causes, by States and United States 1/ 1949 and 1950 2/

State	Prime Number	Quality Below prime and of quality	Below grade Number	Total samples graded	Reduced for specified causes		Foreign matter Number
					1949 Number	1950 Number	
Ala.	2,839	1,327	7,280	5,396	1	10,126	6,724
Ark.	8,018	2,197	16,499	15,111	15	24,583	17,323
Fla.	-	2	54	24	-	54	26
Ga.	833	477	5,862	1,656	159	6,854	2,133
Ill.	12	-	49	45	2	63	47
Ky.	28	3	158	94	3	189	97
La.	1,513	418	5,691	5,621	200	-	7,404
Miss.	5,126	1,525	14,905	17,523	69	-	20,100
Mo.	2,089	1,157	5,538	4,621	49	4	7,676
N. Mex.	609	434	5,644	418	-	1,253	852
N. C.	1,561	1,181	6,534	2,296	10	1	8,105
Oklahoma	4,015	1,298	1,960	1,206	3	5,978	2,504
S. C.	714	889	8,465	5,126	330	9	9,509
Tenn.	2,569	349	6,399	5,929	10	-	8,978
Tex.	12,122	5,209	12,960	7,004	55	1	25,137
Va.	119	39	207	55	-	326	94
U. S.	42,167	15,505	93,205	72,125	963	33	136,335

1/ Quality information not available for cottonseed produced in Arizona and California.

2/ Season beginning August 1.