

Cottonseed

3.112b

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service
Cotton Division

COTTONSEED QUALITY IN THE UNITED STATES
1952

HOW COTTONSEED SERVES YOU

COTTONSEED PRODUCTS FROM COTTONSEED OIL MILLS MAKE THESE PRODUCTS

COTTONSEED OIL
COTTONSEED OIL IS USED PRIMARILY FOR MAKING SUCH FOOD AS: BUTTER, SHORTENING, MARGARIN, SALAD OIL, COOKING OIL, MAYONNAISE, SALAD DRESSING, E. MANY OTHERS - IT IS USED ALSO IN: MEDICAL OIL, GLYCERINE, SOAP MAKING POWDER, PAINT, LINOLEUM, OILCLOTH, ARTIFICIAL LEATHER, "NICHO" MARK RECORDS, & OTHER PRODUCTS.

COTTONSEED MEAL & CAKE
MEAL & CAKE ARE USED LARGELY IN LIVESTOCK FEEDS TO PRODUCE: WHEAT - 10% FEED - OTHER FEEDS - 10% FEED - MEAL - 10% FEED - FLOUR FOR ANIMAL FEED & SOY BEAN FEED FROM COTTONSEED MEAL & CAKE ARE USED IN FEEDS FOR CATTLE, HORSES, PIGS, & POULTRY. MEAL & CAKE ARE ALSO USED FOR FEEDS FOR CAPS, LIGHT FLUMES, & OTHER PLANTS.

COTTON LINTERS
LINTERS ARE USED IN CHEMICAL PLANTS IN MAKING: CELLULOSE, CELLULOSE PAPER, OTHER CHEMICALS, CELLULOSE ESTERS, CELLULOSE DERIVATIVES, CELLULOSE PAPER, ETC. LINTERS ARE ALSO USED IN MAKING: ADVANCED COTTON METEOROLOGICAL INSTRUMENTS, ETC.

Memphis, Tennessee
December 1953

CONTENTS

<u>Table No.</u>		<u>Page No.</u>
	Introduction.....	1-3
1.	Cottonseed: Production, deliveries to oil mills, and official certificates issued, by States and United States, 1951-1952.....	3
2.	Cottonseed: Quality factors, indexes, and grades, by States and United States, 1951-1952.....	5
3.	Quality factors, indexes, and grades for American-Egyptian cottonseed by States and United States, 1952.....	6
4.	Quality factors, indexes, and grades for American-Egyptian cottonseed by specified periods and States, 1952.....	6
5.	Cottonseed: Quality factors, indexes, and grades, by specified periods and States, 1951-1952.....	7-15
6.	Cottonseed: Quality factors, indexes, and grades, by crop-reporting districts and States, 1951-1952.....	16-20
7.	Percentage distribution of quantity indexes by specified frequencies, by States and United States, 1951-1952.....	21
8.	Percentage distribution of quality indexes by specified frequencies, by States and United States, 1951-1952.....	22
9.	Percentage distribution of grades by specified frequencies, by States and United States, 1951-1952.....	23
10.	Percentage of oil by specified frequencies, by States and United States, 1951-1952.....	24
11.	Percentage of ammonia by specified frequencies, by States and United States, 1951-1952.....	25
12.	Percentage of moisture in cottonseed samples by specified frequencies, by States and United States, 1951.....	26
13.	Percentage of moisture in cottonseed samples by specified frequencies, by States and United States, 1952.....	26
14.	Percentage of free fatty acid in cottonseed samples, by specified frequencies, by States and United States, 1951.....	27
15.	Percentage of free fatty acid in cottonseed samples, by specified frequencies, by States and United States, 1952.....	27
16.	Percentage of foreign matter in cottonseed samples by specified frequencies, by States and United States, 1951.....	28
17.	Percentage of foreign matter in cottonseed samples by specified frequencies, by States and United States, 1952.....	28
18.	Number of cottonseed samples by specified groups, by qualities, and number reduced in grade for specified causes, by States and United States, 1951-1952...	29

COTTONSEED QUALITY IN THE UNITED STATES
CROP OF 1952

Presented herein are quality data for cottonseed produced from the 1952 crop. Averages of cottonseed grade and quality factors are shown by states, districts, months, and specified frequencies with comparative data for the preceding season. These data were compiled from official cottonseed grade certificates issued by licensed chemists. During the year ended July 31, 1953, licensed chemists under the supervision of the Department of Agriculture issued official certificates covering 145,146 samples of cottonseed. These samples were drawn from cottonseed delivered to crushing mills throughout the season. Quality data for cottonseed crushed in Arizona and California are included in this report for the first time. Moreover, quality data for American-Egyptian cottonseed were obtained and averages are shown separately.

The bulk of the cottonseed produced in the United States is sold for crushing. The principal products of crushed cottonseed are oil, meal and cake, linters, and hulls. Ordinarily, oil constitutes over one-half the value of all cottonseed products sold by oil mills; meal and cake usually accounts for about one-fourth to as much as one-third of the total; and linters and hulls combined accounts for roughly 10 to 20 percent of the total value.

The oil and the meal and cake constitute such a large proportion of the value of cottonseed products that the grading system for cottonseed is based largely on the measurement of the quantity and quality of these two constituents in the seed. There are five basic factors presently used in determining the grade of cottonseed in accordance with the United States Official Standards for Grades. These factors are oil, ammonia or protein (meal and cake), moisture, free fatty acids in the oil (indicator of oil deterioration), and foreign matter (trash in the seed). Of these five factors, the first two are combined to form an index for quantity and the last three an index for quality, and these in turn are used to determine the grade of cottonseed. In a few areas, linters have been included in determining the grade of cottonseed. A complete outline of the method of calculating the grade of cottonseed is presented in, "The Grading of Cottonseed," Agriculture Information Bulletin No. 39, May 1951.

Cottonseed quality factors, indexes, and grades,
United States, 1944-52

Year beginning August 1	Cottonseed quality factors					Quantity	Quality	Average grade
	Oil	Ammonia	Moisture	Free fatty acids	Foreign matter			
	Percent	Percent	Percent	Percent	Percent	Index	Index	
1944	18.5	3.88	11.2	1.4	0.8	102.33	96.8	99.0
1945	18.6	3.62	12.2	2.6	1.1	101.02	93.0	93.5
1946	18.7	3.61	12.4	1.0	.8	101.29	98.0	99.5
1947	18.3	3.88	11.3	1.4	.8	101.38	96.9	98.0
1948	18.7	3.72	11.3	1.4	.9	102.12	96.5	98.5
1949	19.1	3.68	11.6	1.9	1.1	103.12	95.1	98.0
1950	18.7	3.64	12.8	1.9	1.1	101.02	95.0	96.0
1951	18.5	3.88	11.0	1.5	1.0	101.56	96.5	98.0
1952	18.6	4.04	9.5	1.0	.9	102.95	98.1	101.0

The data in the above table reveal that cottonseed produced from the 1952 crop was the highest in grade for any season since cottonseed quality data became available in 1944. The percentage of oil was above the 1951 average but well below the record high set in 1949. Percentages of moisture, free fatty acids, and foreign matter in 1952-53 averaged below the percentages prescribed for prime quality cottonseed in the United States Official Standards for Grades.

The average quality factors of cottonseed are shown by states in Table 2. These averages as well as all others in this report are arithmetic means of quality factors, indexes, and grades for individual certificates. This table contains average quality factors, averages of quantity and quality indexes, and average grades (shown to actual tenths) for each of the major cotton-producing states and the United States. Similar information is shown by specified periods for each state in Table 5 and by crop reporting districts in Table 6.

Quantity Index Second Highest on Record

The average quantity index for the United States in 1952-53 was 102.95. This average is exceeded only by the 1949 quantity index of 103.12 and compares with 101.56 for 1951-52. The average quantity index was above the previous season in all major cotton-producing states except Oklahoma and Texas. A distribution of quantity indexes by specified frequencies is shown in Table 7, page 21. The quantity index measures the oil and cake or meal in the cottonseed, taking into account variations in the quantity of oil and protein.

Quality Index Record High

The average quality index of cottonseed in 1952-53 was 98.1, the highest average on record. The 1951-52 average was 96.5. The index was higher than a year earlier in all states with the exception of North Carolina and South Carolina. The sharpest increase occurred in Missouri. A distribution of quality indexes by specified frequencies is shown in Table 8, page 22. The quality index measures the deterioration in oil and cake or meal and takes into account the excesses of moisture, free fatty acids, and foreign matter.

Average Grade Highest on Record

The average grade of cottonseed as indicated by the official certificates issued in 1952-53 was 101.0. This is the highest average on record and compares with 98.0 in 1951-52 and the five year 1947-51 average of 97.5. The average grade was higher than a year earlier in every major cotton-producing state with the exception of Oklahoma, South Carolina, and Texas. The greatest improvement occurred in Missouri. A distribution of cottonseed grades by specified frequencies and by states and the United States is shown in Table 9, page 23. The grade of cottonseed is obtained by multiplying the quantity index by the quality index and dividing the result by 100. The result is rounded to the nearest whole or half number.

Oil Content Slightly Higher

The average percentage of oil in the samples graded during 1952-53 was slightly above that of a year earlier. The 1952-53 average was 18.6 against 18.5 in 1951-52. The percentage of oil decreased from the previous year's average in Arkansas, Oklahoma, South Carolina, and Texas, but was higher in all other major cotton-producing states. The sharpest increases were in North Carolina and New Mexico. A distribution of percentages of oil, by specified frequencies and by states and the United States is shown in Table 10, page 24.

Ammonia Content Up

The percentage of ammonia in cottonseed graded in 1952-53 averaged 4.04, a record high. This compares with 3.88 percent in the preceding season and 3.76 in the five years 1947-51. The percentage of ammonia was up in every major cotton-producing state except New Mexico. A distribution of percentages of ammonia by specified frequencies and by states is shown in Table 11, page 25.

Moisture Content a Record Low

The average moisture content in cottonseed produced in 1952-53 was 9.5 percent, as indicated from official cottonseed certificates. This is the lowest average since quality data for cottonseed became available in 1944. The percentage of moisture averaged lower than a year earlier in all major cotton-producing states with the exception of Alabama. A distribution of percentages of moisture by specified frequencies and by states is shown in Tables 12 and 13, page 26. The moisture content of seed has an important bearing on the recovery of oil as well as on the quality of all cottonseed products and the keeping quality of the seed. Better extraction of oil is possible from seed with a moisture content of between 10.5 and 12.0 percent than from seed of any other moisture content. If the seed contains less than 10.0 percent moisture, additional moisture must be added before cooking and extraction. Cottonseed containing moisture in excess of 12.0 percent is subject to deterioration in storage, and the higher the moisture content the more rapid the deterioration, particularly if storage facilities are inadequate.

Free Fatty Acid Content a Record Low

The percentage of free fatty acids in the oil averaged 1.0 percent. This equals the record low which was set in 1946 and compares with 1.5 percent in 1951. The percentage of free fatty acids decreased in each state with the exception of North Carolina and South Carolina. A distribution of percentages of free fatty acids, by specified frequencies and by states, is shown in Tables 14 and 15, page 27. The percentage of free fatty acids in the oil indicates the extent to which

the oil has broken down or deteriorated, or the extent to which it is subject to deterioration. Deterioration in the oil is usually accompanied by deterioration in the quality of the other products. Free fatty acid content and moisture content of cottonseed are rather closely associated. Deterioration due to excessive moisture is frequently accompanied by a rise in temperature, even to the point of charring the seed, and the accompanying increase in free fatty acids is often very rapid.

Foreign Matter Content Slightly Lower

The average percentage of foreign matter in cottonseed in 1952-53 was 0.9 against 1.0 in the preceding season. The tolerance for prime quality cottonseed is 1.0 percent of foreign matter. A distribution of percentages of foreign matter, by specified frequencies and by states, is shown in Tables 16 and 17, page 28. When foreign matter is found in cottonseed, it is there usually as a result of careless harvesting or incomplete cleaning of seed at the gin. The presence of foreign matter increases the hazards of storage, reduces the efficiency of crushing, and frequently lowers the quality of products. The removal of foreign matter at oil mills is costly and difficult, and complete removal is practically impossible if the moisture content of the seed is high or excessively low.

Number of Certificates by Qualities and Reductions

The total number of official cottonseed quality certificates issued in 1952-53 are stratified by specified quality groups and by states in Table 18, page 29. Included in this table is the number of samples reduced in grade due to excessive percentages of moisture, free fatty acids, or foreign matter. 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 1. Cottonseed: Production, deliveries to oil mills, and official certificates issued, by States and United States, 1951 and 1952

State	Production of cottonseed		Deliveries to oil mills		Certificates issued	
	1951	1952	1951	1952	1951	1952 1/
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Number	Number
Alabama	371	356	325	315	11,087	11,475
Arizona	345	394	330	380	-	4,664
Arkansas	524	543	455	475	20,309	20,641
California	704	741	655	705	-	7,861
Florida	14	13	13	12	97	241
Georgia	382	297	355	270	5,361	7,374
Illinois	2/	2/	2/	2/	2/	34
Kentucky	2/	2/	2/	2/	2/	101
Louisiana	308	297	280	265	9,672	9,377
Mississippi	656	755	545	640	21,853	23,854
Missouri	136	168	125	155	5,964	6,139
N. Mexico	116	132	110	125	1,462	1,468
N. Carolina	228	239	205	215	6,551	7,605
Oklahoma	191	104	165	85	5,526	3,395
S. Carolina	374	289	320	250	5,305	7,439
Tennessee	218	254	190	220	7,956	9,164
Texas	1,710	1,594	1,465	1,410	22,908	23,976
Virginia	6	10	5	9	256	338
Other States 3/	3	4	3	3	91	-
U. S.	6,286	6,190	5,546	5,534	124,398	145,146

1/ Includes 497 certificates for American-Egyptian cotton in Arizona, 56 in New Mexico, and 309 in Texas.

2/ Included in all other States.

3/ Illinois, Kansas, and Kentucky.

Table 3. Quality factors, indexes, and grades for American-Egyptian cottonseed by States and United States, 1952.

State	Cottonseed analysis					Average index		Average grade
	Oil	Ammonia	Moisture	Free fatty acids	Foreign matter	Quantity	Quality	
	1952	1952	1952	1952	1952	1952	1952	1952
	Pct.	Pct.	Pct.	Pct.	Pct.			
Arizona	22.0	3.88	8.9	0.7	4.2	93.30	96.7	90.3
New Mexico	21.9	3.86	7.3	.8	1.4	99.41	99.3	98.7
Texas	23.1	3.83	8.1	.9	2.2	99.83	98.5	98.4
U. S.	22.4	3.86	8.6	0.8	3.3	96.04	97.5	93.7

Table 4. Quality factors, indexes, and grades for American-Egyptian cottonseed by specified periods and States, 1952.

ARIZONA

Month	Cottonseed analysis					Average index		Average grade	Samples
	Oil	Ammonia	Moisture	Free fatty acids	Foreign matter	Quantity	Quality		
	1952	1952	1952	1952	1952	1952	1952	1952	
	Pct.	Pct.	Pct.	Pct.	Pct.			No.	
Sept.	20.9	4.06	8.3	1.0	2.2	90.41	98.7	89.3	5
Oct.	21.8	4.08	6.8	.9	3.8	94.55	97.2	91.9	38
Nov.	22.6	3.97	6.8	.7	3.5	97.93	97.3	95.0	107
Dec.	21.7	3.84	10.2	.6	4.1	90.98	96.7	88.0	134
Jan.	21.8	3.82	10.4	.7	4.5	91.95	96.6	88.7	100
Feb.	22.1	3.81	9.1	.9	5.0	92.34	95.7	89.0	103
Mar.-July	22.6	3.88	8.4	1.2	3.0	95.33	97.6	93.0	10
Season	22.0	3.88	8.9	0.7	4.2	93.30	96.7	90.3	497

NEW MEXICO

Oct.	23.9	4.06	6.8	1.1	0.5	100.26	100.0	100.4	4
Nov.	20.2	3.93	6.7	.7	1.4	102.26	99.3	101.5	22
Dec.	22.1	3.75	8.1	.8	1.3	96.36	99.3	95.7	17
Jan.	23.9	3.80	7.9	.7	1.2	98.61	99.5	98.1	11
Feb.	23.5	3.79	6.1	.8	3.9	96.71	97.1	94.0	2
Season	21.9	3.86	7.3	0.8	1.4	99.41	99.3	98.7	56

TEXAS

Sept.	23.4	3.97	7.7	0.6	-	100.92	100.0	101.0	1
Oct.	23.9	3.99	8.1	1.0	1.6	101.40	98.9	100.4	58
Nov.	24.0	3.97	7.7	.9	1.6	101.58	98.9	100.5	72
Dec.	23.8	3.78	8.8	.8	2.3	98.11	98.4	96.6	68
Jan.	21.6	3.68	8.1	.8	2.9	99.31	98.0	97.4	101
Feb.	22.8	3.70	6.8	.8	1.7	94.25	99.2	93.5	9
Season	23.1	3.83	8.1	0.9	2.2	99.83	98.5	98.4	309

Table 5. Cottonseed: Quality factors, indexes, and grades, by specified periods and States, 1951-1952.

ALABAMA

Month	Cottonseed analysis														Average index		Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1951	1952	1951	1952	1951	1952
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	1951	1952	1951	1952			No.	No.		
Aug.	17.3	16.3	3.91	3.93	11.1	14.8	0.9	1.3	0.4	0.4	97.66	93.36	99.1	96.7	97.1	90.4	1,085	1,268		
Sept.	17.9	17.7	4.00	4.16	10.1	11.8	.8	1.1	.5	.5	100.55	100.77	99.7	99.1	100.3	99.8	3,349	3,353		
Oct.	17.5	18.5	4.00	4.13	11.3	10.5	2.1	1.1	.6	.5	99.14	103.75	95.6	98.9	94.9	102.7	3,598	3,573		
Nov.	17.8	18.7	4.01	4.12	11.5	9.0	2.3	1.2	.8	.7	100.25	104.59	94.9	98.8	95.4	103.4	1,499	1,945		
Dec.	18.0	18.4	3.98	4.13	11.8	10.2	2.1	1.5	.8	.8	100.83	103.19	95.8	98.0	96.6	101.2	885	908		
Jan.	17.7	18.2	3.95	4.07	12.0	11.1	2.7	1.8	1.0	1.0	99.56	102.01	94.1	96.7	93.3	99.7	344	234		
Feb.	17.8	18.3	3.98	4.14	11.4	10.4	2.2	1.5	1.4	.8	100.15	103.03	95.8	97.7	96.2	100.8	152	111		
Mar.-July	17.8	18.1	4.04	4.12	10.5	10.5	2.9	1.8	1.4	2.1	100.02	101.70	93.1	96.2	93.3	98.2	175	83		
Season	17.7	18.0	3.99	4.11	11.0	11.1	1.7	1.2	0.6	0.6	99.75	101.77	97.0	98.6	96.9	100.4	11,087	11,475		

ARIZONA (Upland only) 1/

Aug.	-	19.3	-	3.71	-	8.9	-	0.6	-	0.1	-	104.59	-	100.0	-	104.7	-	3
Sept.	-	18.9	-	3.99	-	7.7	-	1.2	-	.5	-	104.72	-	99.5	-	104.2	-	313
Oct.	-	19.6	-	3.99	-	6.9	-	1.0	-	.8	-	106.47	-	99.6	-	106.1	-	814
Nov.	-	19.8	-	3.99	-	6.9	-	.7	-	1.1	-	108.02	-	99.6	-	107.7	-	704
Dec.	-	19.3	-	3.93	-	8.7	-	.8	-	1.0	-	105.92	-	99.6	-	105.5	-	885
Jan.	-	19.2	-	3.96	-	8.8	-	.8	-	1.5	-	105.54	-	99.3	-	104.8	-	688
Feb.	-	19.0	-	3.97	-	7.5	-	1.4	-	2.4	-	104.57	-	97.6	-	102.1	-	630
Mar.-July	-	18.8	-	3.90	-	8.0	-	1.6	-	3.2	-	102.77	-	96.7	-	99.5	-	130
Season	-	19.3	-	3.97	-	7.8	-	1.0	-	1.3	-	105.93	-	99.2	-	105.0	-	4,167

1/ Quality data for 1951 published in the report, "Cottonseed Quality in the Far West, 1951-1952."

Table 5. Cottonseed: Quality factors, indexes, and grades, by specified periods and States, 1951-1952.

ARKANSAS

Month	Cottonseed analysis										Average index				Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality					
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	No.	No.
Aug.	18.4	18.4	3.67	3.89	11.3	10.9	3.0	3.3	1.3	1.0	100.47	101.79	91.6	91.8	91.7	89.7	91	266
Sept.	18.9	18.6	3.66	4.09	12.8	10.7	.7	.5	.5	.4	102.73	104.13	98.3	99.7	100.8	103.7	3,610	5,482
Oct.	19.1	19.2	3.74	4.15	11.8	8.6	.6	.4	.5	.5	103.72	106.78	99.2	99.9	103.0	106.7	7,214	6,913
Nov.	18.9	18.9	3.74	4.02	12.0	7.8	.8	.4	.9	1.2	103.08	104.84	99.2	99.5	102.3	104.4	3,588	4,515
Dec.	18.1	17.9	3.61	3.74	14.9	11.4	1.3	.6	1.7	2.2	99.18	98.63	95.9	98.4	95.3	97.1	2,371	1,463
Jan.	18.2	17.6	3.59	3.69	14.9	11.9	3.5	.8	2.3	2.5	99.34	97.45	88.9	97.9	88.4	95.5	1,844	1,066
Feb.	18.7	17.5	3.62	3.68	13.3	12.2	6.2	1.2	3.2	2.9	101.46	96.81	78.6	97.0	79.5	93.9	799	464
Mar.-July	18.9	17.8	3.67	3.77	11.9	11.0	9.2	1.7	3.9	2.8	102.48	98.73	67.4	95.6	64.4	94.5	792	472
Season	18.8	18.7	3.69	4.03	12.7	9.5	1.6	0.6	1.1	1.0	102.35	104.12	95.7	99.3	97.8	103.4	20,309	20,641

CALIFORNIA 1/

Aug.	-	17.8	-	4.05	-	8.9	-	0.4	-	0.2	-	100.68	-	100.0	-	100.7	-	5
Sept.	-	19.2	-	4.09	-	8.0	-	.4	-	.2	-	106.09	-	100.0	-	106.1	-	168
Oct.	-	19.3	-	3.90	-	8.2	-	.4	-	.4	-	105.72	-	99.9	-	105.7	-	2,049
Nov.	-	19.1	-	3.85	-	9.3	-	.4	-	.5	-	104.61	-	99.8	-	104.5	-	1,850
Dec.	-	18.2	-	3.71	-	12.5	-	.5	-	.9	-	99.94	-	98.9	-	98.6	-	1,680
Jan.	-	17.4	-	3.66	-	14.5	-	.9	-	1.3	-	96.35	-	96.3	-	93.0	-	1,120
Feb.	-	18.0	-	3.81	-	11.5	-	1.8	-	1.5	-	100.05	-	97.0	-	96.9	-	772
Mar.-July	-	18.2	-	3.92	-	9.4	-	3.4	-	2.5	-	101.66	-	91.4	-	93.0	-	217
Season	-	18.6	-	3.81	-	10.6	-	0.7	-	0.8	-	102.23	-	98.5	-	100.9	-	7,861

1/ Quality data for 1951 published in the report, "Cottonseed Quality in the Far West, 1951-1952."

Table 5. Cottonseed: Quality factors, indexes, and grades, by specified periods and States, 1951-1952.

FLORIDA

Month	Cottonseed analysis														Average index		Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1951	1952	1951	1952	1951	1952
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952						
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.	No.					
Aug.	16.3	16.2	3.60	3.91	14.2	15.8	1.4	1.4	0.4	0.4	91.24	92.48	97.6	95.4	89.1	88.4	24	105		
Sept.	16.8	17.0	3.73	4.05	12.1	12.6	2.3	2.6	.4	.6	94.04	97.03	95.9	94.9	90.3	92.2	39	87		
Oct.	16.7	17.3	3.75	4.13	12.2	10.6	12.4	5.0	.8	.9	93.59	99.00	60.1	86.7	53.1	85.7	9	20		
Nov.	17.5	17.7	3.70	4.14	14.6	9.7	2.4	5.8	1.3	.7	97.40	99.73	90.6	83.8	87.7	84.3	21	16		
Dec.	17.5	17.0	4.10	3.93	12.0	11.1	26.0	4.7	.1	1.1	99.60	96.31	3.2	87.8	3.2	84.5	1	8		
Jan.	-	15.8	-	3.72	-	12.3	-	5.0	-	1.8	-	88.79	-	85.7	-	76.2	-	.3		
Feb.	14.4	-	3.84	-	10.2	-	16.5	-	3.5	-	81.44	-	38.7	-	31.5	-	1	-		
Mar.-July	19.8	17.1	3.87	3.88	10.5	17.3	3.7	4.6	0.3	1.0	107.19	96.45	92.6	80.9	99.3	77.8	2	2		
Season	16.9	16.7	3.70	3.99	13.1	13.6	3.5	2.6	0.7	0.6	94.23	95.26	90.2	93.2	84.7	88.9	97	241		

GEORGIA

Aug.	16.8	17.0	3.78	3.98	13.5	13.3	0.9	1.1	0.5	0.5	94.43	96.60	98.0	98.0	92.7	94.7	725	1,127
Sept.	18.3	17.9	3.95	4.16	10.3	11.1	.8	1.2	.4	.5	101.73	101.29	99.6	99.1	101.3	100.4	1,725	2,419
Oct.	18.0	18.3	3.94	4.17	11.4	10.6	2.9	2.1	.6	.6	100.58	103.39	93.1	95.9	93.6	99.3	1,535	1,898
Nov.	18.0	18.6	3.90	4.19	11.9	9.2	4.1	3.2	.8	.8	100.36	104.36	88.7	92.3	88.8	96.7	667	1,020
Dec.	18.1	18.4	3.87	4.13	11.7	10.2	4.4	3.1	.8	.8	100.44	103.41	87.9	93.0	87.9	96.1	297	466
Jan.	17.9	18.5	3.88	4.16	11.3	10.7	6.1	2.7	1.1	.9	99.97	103.75	81.5	93.6	79.5	98.0	140	257
Feb.	18.2	18.2	3.90	4.15	10.3	10.7	4.0	2.8	1.1	.7	101.33	102.63	89.7	94.0	90.7	96.7	116	91
Mar.-July	18.5	18.1	3.90	4.19	11.1	10.1	3.5	3.9	1.2	.9	102.38	102.60	91.8	90.5	93.9	92.7	156	96
Season	17.9	18.0	3.91	4.14	11.3	11.0	2.3	1.9	0.6	0.6	100.14	101.79	94.6	96.4	94.6	98.2	5,361	7,374

Table 5. Cottonseed: Quality factors, indexes, and grades, by specified periods and States, 1951-1952.

LOUISIANA

Month	Cottonseed analysis												Average index		Average grade		Samples			
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1951	1952	1951	1952	No.	No.
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952						
Aug.	17.7	17.3	3.88	3.91	11.9	14.9	0.8	1.5	0.6	0.6	97.36	98.6	95.0	97.6	92.4	1,248	984			
Sept.	18.1	18.2	3.93	4.06	11.1	10.1	.9	.8	.6	.5	101.04	99.0	99.4	100.1	101.4	3,111	3,798			
Oct.	18.0	18.7	3.98	4.18	11.3	7.8	4.6	.7	.9	.7	100.82	87.3	99.7	87.5	104.7	3,239	2,893			
Nov.	17.7	18.6	3.97	4.15	11.8	7.5	5.1	.6	1.1	.9	99.71	104.42	99.5	84.3	104.3	1,291	1,047			
Dec.	17.7	18.2	3.99	4.08	11.6	9.7	4.5	.5	1.4	.9	99.87	102.09	99.7	87.3	101.8	496	399			
Jan.	17.4	17.8	3.96	4.05	12.8	10.1	6.3	.7	1.8	1.2	98.53	80.7	99.3	78.7	99.9	181	143			
Feb.	17.3	17.4	3.99	4.01	12.2	10.9	5.8	1.0	1.6	1.7	97.83	97.95	98.4	80.0	96.6	44	52			
Mar.-July	17.8	17.7	4.13	4.07	10.3	9.8	6.2	1.2	1.6	1.8	100.83	99.96	97.7	81.0	97.6	62	61			

Season	17.9	18.3	3.95	4.09	11.4	9.6	3.0	0.8	0.8	0.7	100.39	102.62	92.2	98.0	92.2	9,672	9,377
--------	------	------	------	------	------	-----	-----	-----	-----	-----	--------	--------	------	------	------	-------	-------

MISSISSIPPI

Aug.	18.2	17.7	3.85	3.93	10.4	12.1	1.0	0.8	0.6	0.5	100.95	98.7	98.5	99.6	97.9	1,160	1,532
Sept.	18.4	18.5	3.93	4.09	10.2	9.9	.6	.5	.5	.4	102.37	99.7	99.8	102.1	103.3	6,991	9,391
Oct.	18.2	19.0	3.98	4.18	10.5	8.1	1.4	.5	.6	.5	101.86	97.5	99.9	99.4	105.8	8,062	6,965
Nov.	18.2	19.0	3.98	4.16	11.3	7.7	1.7	.5	.8	.7	101.58	96.9	99.8	98.4	106.0	3,257	3,797
Dec.	18.0	18.6	3.94	4.02	11.9	9.6	1.9	.6	1.1	1.0	100.65	96.4	99.3	97.0	103.0	1,281	1,096
Jan.	17.8	18.4	3.08	3.93	13.0	10.8	2.9	.7	1.6	1.3	99.00	92.5	99.2	91.4	101.6	547	496
Feb.	17.9	18.3	3.94	3.92	12.4	11.2	3.4	1.0	1.9	1.7	100.35	90.7	98.4	91.2	99.9	197	185
Mar.-July	18.5	18.6	3.94	4.06	10.7	9.6	3.5	1.0	1.5	1.3	102.70	91.3	98.4	93.2	101.9	358	392

Season	18.3	18.7	3.95	4.11	10.7	9.2	1.3	0.5	0.7	0.6	101.79	97.8	99.7	99.6	104.0	21,853	23,854
--------	------	------	------	------	------	-----	-----	-----	-----	-----	--------	------	------	------	-------	--------	--------

Table 5. Cottonseed: Quality factors, indexes, and grades, by specified periods and States, 1951-1952.

MISSOURI

Month	Cottonseed analysis												Average index		Average grade		Samples			
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1951	1952	1951	1952	1951	1952
	1951	1952	Pct.	Pct.	1951	1952	Pct.	Pct.	1951	1952	1951	1952	1951	1952						
Aug.	17.5	18.4	3.55	3.80	10.7	10.0	10.2	10.1	3.7	3.1	95.33	102.60	71.5	80.3	56.6	64.6	15	22		
Sept.	18.3	18.3	3.59	3.93	14.1	12.1	1.1	.8	.7	.6	99.86	101.96	96.4	98.7	95.9	99.9	916	1,548		
Oct.	18.6	19.3	3.70	4.06	12.3	8.8	.6	.4	.5	.5	101.62	106.52	98.9	99.9	100.6	106.4	2,004	2,269		
Nov.	18.3	18.5	3.69	3.86	13.3	7.9	.6	.5	1.1	1.8	100.47	102.34	98.2	99.1	98.8	101.4	1,019	1,338		
Dec.	17.1	17.0	3.44	3.52	18.2	12.1	1.4	.7	2.5	2.8	93.72	93.82	92.0	97.5	86.3	91.3	687	414		
Jan.	17.6	16.5	3.47	3.43	16.6	12.9	5.6	1.0	3.3	3.4	95.99	90.80	77.8	96.5	74.7	87.7	493	276		
Feb.	18.2	16.1	3.52	3.39	14.7	13.2	9.9	1.5	4.2	4.8	98.82	88.64	61.9	94.3	59.6	83.3	385	111		
Mar.-July	18.6	17.0	3.61	3.54	12.2	11.7	14.3	1.8	5.3	3.8	100.79	93.46	49.9	94.2	36.4	88.2	445	161		
Season	18.2	18.5	3.61	3.89	13.9	10.0	2.8	0.7	1.7	1.3	99.52	102.21	89.7	98.8	88.2	100.8	5,964	6,139		

NEW MEXICO (Upland only)

Aug.	20.1	21.0	3.96	3.83	7.7	8.3	0.7	0.6	0.7	0.6	109.29	110.82	100.0	99.8	109.2	111.5	76	96
Sept.	20.4	21.5	3.92	3.80	7.1	7.4	.6	.5	.7	.5	109.69	113.59	99.9	100.0	109.6	113.6	493	526
Oct.	19.9	21.1	3.83	3.74	7.9	6.7	.5	.5	1.0	.9	107.69	111.74	99.8	99.8	107.5	111.3	382	365
Nov.	19.2	18.9	3.78	3.62	7.6	7.7	.8	.6	2.9	2.5	104.48	102.26	98.1	98.5	102.5	100.9	234	216
Dec.	18.7	18.0	3.70	3.58	7.8	8.0	1.2	.8	4.2	3.3	100.79	97.27	96.7	97.6	97.5	94.8	187	162
Jan.	18.3	18.3	3.67	3.62	7.0	7.4	1.2	.8	4.7	5.1	98.85	98.30	96.2	95.8	95.1	94.2	78	37
Feb.	18.9	18.8	3.82	3.61	7.4	7.9	1.6	1.2	5.6	5.0	102.31	102.04	94.8	95.1	97.0	97.0	12	10
Mar.-July	19.7	20.4	3.83	3.73	7.5	7.4	0.7	0.6	1.8	1.4	106.54	108.84	99.0	99.3	105.5	108.1	1,462	1,412

Table 5. Cottonseed: Quality factors, indexes, and grades, by specified periods and States, 1951-1952.

NORTH CAROLINA

Month	Cottonseed analysis														Average Index		Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Average Index				Average grade		Samples			
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	Quantity		Quality		1951	1952	1951	1952	No.	No.
Aug.	19.0	17.2	4.02	3.64	11.5	15.9	0.9	3.2	0.3	0.4	105.12	95.58	98.7	92.6	103.8	85.5	11	22		
Sept.	18.3	18.7	3.56	3.72	12.3	13.0	.7	1.1	.5	.5	99.48	102.35	99.1	98.2	98.6	100.6	1,346	1,022		
Oct.	18.4	19.1	3.57	3.75	11.6	11.5	1.1	1.6	.5	.6	100.05	104.07	99.0	97.5	98.8	101.5	2,558	2,280		
Nov.	18.4	19.5	3.55	3.85	12.1	9.1	1.8	2.4	.6	.7	99.81	106.16	97.7	95.4	97.5	101.4	1,564	2,166		
Dec.	18.4	19.0	3.55	3.75	12.1	11.2	2.8	2.9	.7	.8	99.75	103.54	94.6	93.6	94.3	97.1	665	1,222		
Jan.	18.3	18.9	3.57	3.74	12.2	11.3	3.5	3.5	.7	1.2	99.17	103.05	91.7	91.7	90.8	94.4	249	455		
Feb.	18.3	18.8	3.62	3.75	11.6	11.2	4.7	4.3	.8	1.2	99.99	102.87	87.6	88.8	86.7	90.8	119	250		
Mar.-July	18.5	18.9	3.64	3.76	10.8	10.5	3.7	3.6	1.2	1.3	100.69	102.77	91.1	91.2	91.8	93.9	39	188		
Season	18.4	19.1	3.56	3.77	11.9	10.9	1.5	2.2	0.6	0.7	99.82	104.19	97.7	95.6	97.4	99.6	6,551	7,605		

OKLAHOMA

Aug.	15.8	-	4.36	-	7.2	-	0.5	.5	0.9	.6	98.98	98.15	-	98.0	-	96.1	-	4		
Sept.	17.2	17.1	4.19	4.22	9.7	7.8	0.5	.5	0.9	.6	98.98	99.91	99.7	99.9	98.7	99.4	430	445		
Oct.	17.7	18.0	4.19	4.29	9.6	6.7	.4	.4	.5	.8	101.43	103.47	99.8	99.9	101.2	103.4	1,987	1,469		
Nov.	18.3	17.9	4.17	4.23	9.9	6.9	.4	.5	.7	1.1	103.20	101.95	99.8	99.7	102.9	101.4	1,311	866		
Dec.	18.0	17.2	4.03	4.14	9.9	7.8	.7	.6	1.3	1.2	101.82	98.26	99.4	99.7	101.2	97.9	1,090	396		
Jan.	17.7	16.9	3.96	4.11	9.5	8.2	1.1	.8	1.7	1.7	102.49	96.48	99.0	98.8	101.3	95.8	476	143		
Feb.	17.7	16.9	3.98	4.20	9.3	8.2	1.2	.9	2.7	1.3	102.56	96.80	97.8	99.1	100.3	96.0	183	56		
Mar.-July	17.9	16.8	4.04	4.28	9.6	7.7	1.4	.7	2.9	2.0	101.88	97.41	97.1	98.9	99.0	96.4	49	16		
Season	17.9	17.7	4.13	4.24	9.7	7.1	0.6	0.5	0.9	0.9	101.87	101.57	99.6	99.8	101.4	101.2	5,526	3,395		

Table 5. Cottonseed: Quality factors, indexes, and grades, by specified periods and States, 1951-1952.

SOUTH CAROLINA

Month	Cottonseed analysis												Average grade		Samples			
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Average index							
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	Quantity	Quality	1951	1952				
	<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>	<u>No.</u>	<u>No.</u>			
Aug.	17.9	17.1	3.62	3.78	15.4	14.0	1.0	1.0	0.4	0.4	98.29	95.70	96.4	97.7	94.9	93.5	521	399
Sept.	18.9	18.0	3.76	3.91	11.0	11.9	.7	1.4	.3	.5	103.05	100.56	99.7	98.4	102.7	99.0	2,143	1,725
Oct.	18.7	18.5	3.77	3.99	10.7	10.7	2.1	4.9	.5	.6	102.59	103.11	96.9	86.2	99.5	89.0	1,470	2,065
Nov.	18.6	18.8	3.80	4.08	11.2	9.0	3.4	7.7	.6	.8	102.02	104.86	92.6	75.2	94.1	78.3	618	1,515
Dec.	18.4	18.4	3.82	4.03	11.2	10.4	4.9	8.5	1.0	.7	101.52	102.71	86.7	72.1	87.3	71.1	248	936
Jan.	18.1	18.2	3.87	4.05	11.3	10.5	5.5	8.3	1.1	.8	100.71	101.91	84.0	72.8	84.4	71.4	114	408
Feb.	18.6	18.1	3.81	4.04	10.4	10.3	4.6	8.2	.9	.8	102.50	101.23	87.9	74.4	89.6	71.6	173	246
Mar.-July	18.7	18.4	3.77	4.03	10.0	10.2	3.4	6.7	1.1	.7	102.47	102.65	92.7	79.7	95.1	80.6	18	145
Season	18.6	18.3	3.76	3.99	11.4	10.7	1.9	5.2	0.5	0.6	102.19	102.29	96.4	84.4	98.5	85.4	5,305	7,439

TENNESSEE

Aug.	18.7	18.7	3.64	3.87	12.0	12.4	9.7	6.4	2.0	0.8	101.76	101.09	66.1	78.8	66.8	78.0	6	26
Sept.	18.9	18.7	3.69	4.06	13.0	12.4	.6	.5	.3	.4	102.92	104.24	98.6	99.0	101.4	103.3	1,246	2,427
Oct.	18.5	19.1	3.74	4.11	12.5	9.5	.6	.4	.4	.4	101.69	106.09	98.8	99.9	100.4	106.0	3,294	3,561
Nov.	18.4	18.9	3.75	4.01	12.8	8.1	.6	.5	1.0	1.2	101.28	104.48	98.7	99.6	100.0	104.1	1,592	2,060
Dec.	17.6	18.0	3.57	3.77	16.5	11.2	1.2	.6	2.0	2.0	96.55	99.38	94.2	98.6	91.1	98.1	963	706
Jan.	17.8	17.4	3.58	3.69	15.5	12.0	3.7	.8	2.9	2.6	97.81	96.59	87.1	97.7	84.9	94.4	618	224
Feb.	18.1	17.2	3.51	3.61	14.9	12.4	7.9	1.1	3.4	2.8	97.69	95.12	70.2	97.0	68.0	92.4	125	82
Mar.-July	18.5	18.1	3.69	3.88	12.4	10.9	10.2	1.4	3.2	2.5	101.05	100.72	63.7	96.8	58.9	97.7	112	78
Season	18.4	18.8	3.70	4.03	13.4	10.2	1.2	0.5	1.0	0.8	100.80	104.33	96.3	99.3	97.0	103.7	7,956	9,164

Table 5. Cottonseed: Quality factors, indexes, and grades, by specified periods and States, 1951-52.

TEXAS (Upland only)

Month	Cottonseed analysis												Average index		Average grade		Samples			
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1951	1952	1951	1952	No.	No.
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952						
Aug.	18.1	18.0	4.06	4.16	8.3	9.1	0.7	0.6	0.7	0.5	101.64	101.69	99.8	99.6	101.3	101.6	278	2,661		
Sept.	17.5	17.2	4.11	4.17	8.5	7.4	.7	.6	.8	.8	99.01	97.66	99.5	99.6	98.6	97.4	1,970	3,631		
Oct.	18.9	19.1	4.18	4.21	8.1	7.0	.9	.6	.7	.9	103.35	103.84	98.6	99.7	101.9	103.5	5,536	5,893		
Nov.	19.8	19.6	4.11	4.11	8.4	6.8	.5	.5	1.0	1.4	104.87	103.63	99.7	99.4	104.6	103.0	5,913	5,203		
Dec.	19.8	18.6	4.05	4.01	7.7	7.6	.7	.6	1.8	2.1	104.28	97.98	99.1	98.7	103.3	96.8	5,204	3,432		
Jan.	19.1	18.1	3.96	3.99	7.8	7.8	1.0	.8	2.6	2.9	101.28	96.54	98.1	97.6	99.5	94.6	2,462	1,410		
Feb.	18.8	17.9	3.92	4.02	7.6	7.5	1.0	.8	3.6	3.7	101.13	97.13	97.2	97.1	98.4	94.7	876	428		
Mar.-July	19.8	18.2	3.93	4.04	7.7	11.4	1.6	.8	4.5	1.4	101.83	100.91	95.2	97.8	97.1	98.9	669	1,009		
Season	19.3	18.6	4.09	4.12	8.1	7.6	0.8	0.6	1.5	1.3	103.21	101.07	98.9	99.2	102.1	100.4	22,908	23,667		
----- VIRGINIA -----																				
Aug.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sept.	16.8	18.0	3.37	3.80	17.9	13.3	1.5	1.1	0.7	0.6	91.39	99.92	92.8	98.0	85.1	98.0	17	69		
Oct.	17.8	19.0	3.44	3.51	15.7	12.5	1.7	.8	.6	.5	96.70	101.95	94.3	98.9	91.5	100.9	97	100		
Nov.	18.3	19.2	3.49	3.61	14.2	9.3	1.4	.8	.5	.6	98.74	103.54	96.9	99.9	94.9	103.4	84	88		
Dec.	18.6	18.4	3.53	3.50	13.0	11.7	1.5	1.2	.5	.9	100.68	99.79	97.5	98.7	98.3	98.5	36	38		
Jan.	18.8	18.4	3.61	3.54	12.6	12.0	2.1	1.3	.5	1.2	101.66	99.87	95.3	97.9	98.3	97.9	16	20		
Feb.	18.5	18.0	3.60	3.48	13.0	11.7	3.2	2.6	1.1	1.2	100.56	98.10	91.7	95.7	92.2	94.0	5	6		
Mar.-July	18.2	18.6	3.50	3.51	10.7	11.2	8.9	3.1	1.7	1.3	98.80	100.50	90.9	93.3	90.0	93.8	1	17		
Season	18.1	18.7	3.48	3.59	14.7	11.6	1.6	1.1	0.6	0.7	97.97	101.44	95.5	98.6	93.6	100.0	256	338		

Table 6. Cottonseed: Quality factors, indexes, and grades, by crop-reporting districts and States, 1951-1952.

ALABAMA

Dist. No.	Cottonseed analysis												Average Index		Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Average Index		Quantity	Quality	1951	1952	No.	No.
	1951	1952	Pct.	Pct.	1951	1952	Pct.	Pct.	1951	1952	Pct.	Pct.						
1	18.0	18.5	4.02	4.20	10.3	9.7	0.8	0.6	0.7	0.7	100.91	104.38	99.5	99.9	100.6	104.5	673	584
2	18.2	18.8	3.96	4.12	11.4	10.3	1.0	.7	.6	.6	101.36	105.14	99.1	99.7	100.5	104.8	3,736	3,766
3	18.1	19.1	3.88	4.03	12.6	10.7	.9	.7	.7	.5	100.67	105.79	98.6	99.6	99.3	105.4	827	1,139
4	17.6	17.5	4.11	4.21	10.0	10.2	1.6	.7	.6	.5	100.22	100.45	98.0	99.9	98.2	100.4	1,101	920
5	17.2	17.5	4.17	4.25	10.3	10.6	2.6	1.5	.6	.6	98.80	100.60	94.5	98.8	93.4	99.5	1,343	1,097
6	17.5	18.0	4.02	4.14	11.1	11.1	1.9	1.4	.4	.3	99.10	101.82	96.5	98.5	96.0	100.4	1,011	790
7	17.1	17.1	3.96	4.05	10.2	11.5	2.1	1.3	.5	.5	97.21	97.56	95.6	98.7	93.0	96.4	155	171
8	17.3	16.9	3.84	4.05	11.0	12.5	3.0	1.7	.6	.5	97.23	96.57	91.9	97.5	89.4	94.2	1,167	1,304
9	17.2	16.9	3.94	4.02	11.0	13.3	2.3	2.3	.5	.5	97.10	96.58	95.3	94.8	92.6	91.5	1,074	1,704
State	17.7	18.0	3.99	4.11	11.0	11.1	1.7	1.2	0.6	0.6	99.75	101.77	97.0	98.6	96.9	100.4	11,087	11,475

ARKANSAS

1	15.7	-	3.61	-	11.1	-	0.9	-	3.0	-	87.60	-	97.4	-	85.3	-	-	7
2	18.6	18.6	3.59	4.21	13.6	9.2	2.5	.5	1.6	1.1	100.79	104.75	91.7	99.6	92.1	104.4	120	43
3	18.8	18.6	3.59	3.98	13.5	9.9	2.0	.6	1.4	1.2	101.57	103.09	93.3	98.9	94.5	102.0	9,030	8,847
4	18.9	18.9	3.71	4.01	12.3	9.1	1.2	.4	.8	.8	102.84	104.92	98.3	99.8	101.1	104.7	270	254
5	19.0	18.8	3.73	4.12	12.0	9.2	1.1	.5	1.0	1.1	103.22	104.96	98.1	99.3	101.1	104.3	483	401
6	18.9	18.9	3.75	4.04	12.3	9.4	1.2	.5	.9	.9	103.27	104.79	97.3	99.5	100.5	104.3	7,362	7,668
7	17.7	18.8	3.95	4.12	11.5	8.3	1.4	.5	.6	.5	99.49	104.82	97.5	99.7	97.0	104.4	357	476
8	17.7	18.3	3.84	4.13	11.2	8.3	.9	.4	.7	.6	98.90	103.11	99.5	99.9	98.3	102.7	392	395
9	18.9	19.0	3.80	4.12	11.4	9.0	1.3	.4	.7	.7	103.34	105.52	98.0	99.8	101.1	105.3	2,295	2,550
State	18.8	18.7	3.69	4.03	12.7	9.5	1.6	0.6	1.1	1.0	102.35	104.12	95.7	99.3	97.8	103.4	20,309	20,641

Table 6. Cottonseed: Quality factors, indexes, and grades, by crop-reporting districts and States, 1951-1952.

GEORGIA

Dist. No.	Cottonseed analysis												Average index			Average grade		Samples			
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity			Quality		1951	1952	1951	1952	No.	No.
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	No.	No.	
1	18.7	19.5	3.82	4.00	12.9	10.9	1.0	0.7	0.6	0.7	102.92	106.89	98.5	99.5	101.2	106.2	428	733			
2	18.3	18.9	4.05	4.22	11.0	10.5	.8	.8	.2	.4	102.35	105.74	99.6	99.5	101.4	105.8	156	377			
3	18.4	18.7	4.07	4.24	9.9	10.1	.6	.6	.2	.2	103.24	105.32	99.7	99.9	102.2	105.0	226	407			
4	18.2	18.6	3.98	4.24	11.5	10.6	1.9	1.2	.4	.3	101.48	104.96	96.2	98.9	97.8	103.9	668	707			
5	17.9	17.9	3.90	4.19	11.1	10.5	2.2	1.9	.6	.6	99.94	101.96	95.1	97.0	95.1	98.9	1,373	1,248			
6	18.1	17.7	3.83	4.08	10.9	10.5	3.1	2.5	.9	.9	100.34	100.22	92.0	94.9	92.1	95.22	1,186	1,427			
7	17.3	17.2	4.03	4.16	11.5	12.1	2.7	2.5	.4	.6	98.11	98.66	94.0	94.6	92.2	93.4	235	750			
8	17.2	17.4	3.97	4.13	11.8	11.9	2.5	2.4	.5	.6	97.37	99.37	94.3	94.9	91.6	94.3	729	1,261			
9	17.6	17.3	3.85	4.05	11.6	11.2	3.9	3.3	.5	.6	98.46	98.63	89.2	92.3	87.6	91.0	360	464			
State	17.9	18.0	3.91	4.14	11.3	11.0	2.3	1.9	0.6	0.6	100.14	101.79	94.6	96.4	94.6	98.2	5,361	7,374			

LOUISIANA

1	17.5	18.5	4.10	4.18	11.0	8.7	1.7	0.6	0.5	0.5	99.65	103.82	97.0	99.6	96.7	103.4	1,492	1,688		
2	17.5	17.7	3.98	4.22	11.4	8.5	2.0	.5	.9	.8	99.00	101.20	96.2	99.7	95.3	101.0	673	596		
3	18.2	18.4	3.96	4.18	10.9	8.2	2.1	.4	1.0	.6	101.61	103.30	96.0	98.8	97.7	103.2	3,525	3,004		
4	17.7	18.4	4.03	4.14	10.8	8.5	4.7	.7	1.4	1.0	100.75	103.39	85.0	99.4	86.2	102.6	546	668		
5	18.0	18.4	3.88	3.95	12.1	11.3	4.7	1.1	.7	.8	100.38	102.38	85.8	98.4	84.4	100.9	2,516	2,497		
6	17.6	17.5	3.72	3.86	12.3	12.1	3.5	1.1	.7	.7	97.90	98.30	90.9	98.4	88.7	96.8	463	390		
7	16.9	17.5	3.94	3.89	12.8	13.5	4.3	1.9	.7	.7	95.87	98.21	86.8	95.9	81.9	94.3	175	171		
8	17.5	17.9	3.91	3.99	12.7	13.1	4.2	2.3	.5	.6	98.66	100.56	87.1	94.6	84.6	95.4	273	322		
9	17.6	18.4	3.87	3.83	14.5	11.2	6.1	1.7	2.3	.7	98.30	102.38	79.8	97.9	78.9	100.2	9	41		
State	17.9	18.3	3.95	4.09	11.4	9.6	3.0	0.8	0.8	0.7	100.39	102.62	92.2	99.0	92.2	101.7	9,672	9,377		

Table 6. Cottonseed: Quality factors, indexes, and grades, by crop-reporting districts and States, 1951-1952.

MISSISSIPPI

Dist. No.	Cottonseed analysis												Average Index				Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1951	1952	1951	1952	No.	No.
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	1951	1952	1951	1952	1951	1952	1951	1952	No.	No.
1	18.4	19.0	3.98	4.08	10.9	9.1	0.9	0.5	0.7	0.8	102.41	105.24	98.8	99.6	101.2	105.0	4,578	5,079		
2	18.5	19.0	3.87	4.09	11.4	8.8	.8	.5	.7	.5	102.37	105.33	99.0	99.8	101.4	105.2	2,968	3,133		
3	18.6	19.1	3.90	4.12	11.0	9.3	.5	.4	.5	.4	102.63	106.14	99.7	99.9	102.4	106.0	1,479	1,895		
4	18.5	19.0	3.91	4.13	10.5	8.4	1.0	.5	.6	.6	102.56	105.67	98.9	99.7	101.4	105.5	4,623	5,396		
5	18.1	18.3	4.01	4.19	10.2	9.1	1.1	.5	.6	.5	101.34	103.41	99.0	99.9	100.3	103.2	2,585	2,748		
6	17.9	18.2	4.11	4.24	10.0	9.1	.9	.4	.6	.5	101.33	102.80	99.6	99.9	100.7	102.6	1,271	1,357		
7	18.0	18.0	3.91	4.07	11.1	9.8	2.7	.6	.8	.6	100.56	101.40	93.9	99.7	94.4	101.1	1,376	1,423		
8	17.9	17.8	3.93	4.02	10.4	10.6	3.1	.7	1.1	.6	100.10	100.38	91.7	99.3	91.6	99.7	2,013	2,012		
9	17.5	17.7	4.03	4.08	10.3	10.8	2.3	.8	.8	.5	99.24	100.13	94.8	99.4	94.1	99.5	960	811		
State	18.3	18.7	3.95	4.11	10.7	9.2	1.3	0.5	0.7	0.6	101.79	104.26	97.8	99.7	99.6	104.0	21,853	23,854		

NORTH CAROLINA

1	18.7	19.4	3.52	3.58	12.2	11.1	0.9	1.1	0.5	0.6	100.77	104.00	99.2	99.1	98.6	103.0	511	521		
2	18.2	19.4	3.46	3.59	12.9	11.2	1.9	1.4	.6	.8	98.42	104.15	96.5	98.5	95.0	102.6	1,847	1,706		
3	18.9	19.5	3.79	3.82	11.0	10.1	.5	.6	.4	.3	103.34	105.74	99.8	99.5	103.1	105.3	37	138		
4	18.2	19.0	3.80	3.82	11.6	10.7	.7	1.0	.3	.5	100.81	104.14	99.4	99.2	100.3	103.4	300	610		
5	18.3	19.1	3.45	3.76	11.6	10.8	1.6	2.1	.6	1.0	98.90	104.16	98.0	96.9	96.9	101.1	1,376	1,086		
6	18.1	19.0	3.95	3.90	11.8	11.1	.7	1.1	.4	.5	101.17	104.47	99.2	98.5	100.3	102.9	649	1,648		
7	18.6	18.9	3.58	3.87	11.2	10.6	1.7	4.7	.6	.9	100.97	103.96	97.5	87.3	98.3	90.7	1,831	1,896		
State	18.4	19.1	3.56	3.77	11.9	10.9	1.5	2.2	0.6	0.7	99.82	104.19	97.7	95.6	97.4	99.6	6,551	7,605		

Table 6. Cottonseed: Quality factors, indexes, and grades, by crop-reporting districts and States, 1951-1952.

OKLAHOMA

Dist. No.	Cottonseed analysis												Average index		Average grade		Samples			
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Quantity		Quality		1951	1952	1951	1952	No.	No.
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952						
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.		
1	17.8	17.8	4.01	4.29	11.6	7.4	0.9	0.6	1.7	1.7	100.05	101.82	98.8	99.3	98.8	101.1	33	13		
2	17.5	18.5	3.98	4.24	12.2	7.3	1.1	.5	1.3	.9	98.85	104.32	98.7	99.7	97.5	104.1	119	108		
3	18.0	17.9	4.10	4.30	9.5	6.9	.6	.5	1.2	1.2	102.65	102.80	99.5	99.6	101.5	102.3	1,326	706		
4	17.6	17.5	4.17	4.32	10.4	6.9	.6	.6	1.1	1.1	100.30	101.25	99.5	99.7	99.5	100.9	619	342		
5	17.1	18.1	3.89	4.15	12.7	8.5	1.0	.4	.9	.8	96.51	102.22	98.4	99.8	94.9	101.9	463	467		
6	18.1	17.3	4.19	4.22	8.9	6.9	.5	.5	.8	.9	103.63	100.61	99.8	99.8	103.5	100.4	2,555	1,505		
7	17.5	17.5	4.11	4.31	9.3	6.7	.5	.7	.9	.7	99.60	100.87	99.6	99.4	99.2	100.7	310	164		
8	18.0	18.6	3.85	4.08	11.6	8.2	.8	.4	.8	.8	100.15	103.73	99.4	99.9	99.5	102.6	101	90		
State	17.9	17.7	4.13	4.24	9.7	7.1	0.6	0.5	0.9	0.9	101.87	101.57	99.6	99.8	101.4	101.2	5,526	3,395		

SOUTH CAROLINA

1	18.5	19.0	3.94	4.02	10.9	9.9	0.6	0.7	0.3	0.3	102.86	105.29	99.6	99.7	102.4	104.9	346	863
2	18.3	18.9	3.86	3.91	10.8	11.0	.7	1.9	.4	.4	100.94	104.26	99.8	97.2	100.7	101.2	229	659
3	18.7	18.5	3.79	3.95	11.1	10.6	2.7	7.3	.6	.7	102.79	102.91	94.1	76.9	96.7	77.6	1,437	2,225
4	18.7	18.3	3.84	4.17	10.5	10.4	.9	1.7	.5	.5	102.89	103.18	99.2	97.6	102.2	101.1	479	477
5	18.8	18.1	3.70	3.99	11.5	10.9	1.8	7.1	.5	.7	102.40	101.34	96.7	77.7	99.0	77.4	1,926	2,392
6	18.3	17.3	3.72	4.00	12.3	11.4	2.0	3.6	.5	.8	100.45	98.13	95.7	90.1	96.2	87.5	888	823
State	18.6	18.3	3.76	3.99	11.4	10.7	1.9	5.2	0.5	0.6	102.19	102.29	96.4	84.4	98.5	85.4	5,305	7,439

Table 6. Cottonseed: Quality factors, indexes, and grades, by crop-reporting districts and States, 1951-1952.

TENNESSEE

Dist. No.	Cottonseed analysis												Average index				Average grade		Samples	
	Oil		Ammonia		Moisture		Free fatty acids		Foreign matter		Average index				Average grade		Samples			
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	Quantity	Quality	1951	1952	1951	1952	1951	1952		
1	18.3	18.6	3.64	3.95	13.9	10.4	1.4	0.5	1.0	0.8	100.16	103.22	95.1	99.2	95.2	102.4	3,526	3,839		
2	18.5	19.0	3.72	4.06	13.1	10.0	1.0	.5	.9	.8	101.29	105.31	97.2	99.4	96.4	104.8	4,013	4,554		
3	18.3	18.7	3.93	4.19	12.1	10.0	1.0	.6	1.0	.7	102.20	104.94	98.0	99.8	99.7	104.7	233	389		
4	18.1	18.2	3.97	4.19	11.9	10.3	1.0	.6	.9	.7	101.06	103.24	98.0	99.9	98.9	102.8	157	295		
5	17.9	18.4	3.99	4.08	11.8	10.4	.7	.6	.5	.7	100.55	102.80	99.6	98.3	100.2	101.0	19	67		
6	17.7	18.4	3.87	3.99	13.2	10.3	1.4	.7	.7	.9	98.72	102.68	97.7	99.7	96.5	102.1	8	20		
State	18.4	18.8	3.70	4.03	13.4	10.2	1.2	0.5	1.0	0.8	100.80	104.33	96.3	99.3	97.0	103.7	7,956	9,164		

TEXAS (Upland only)

1	20.2	19.8	4.06	4.06	7.8	7.2	0.7	0.6	1.9	2.1	104.45	101.43	98.9	98.8	103.3	100.3	11,742	9,254
2	18.6	18.1	4.18	4.23	8.2	7.2	.5	.5	1.1	1.1	103.55	102.24	99.6	99.6	103.1	101.9	5,238	2,616
3	17.6	17.3	4.20	4.20	8.4	7.5	.5	.5	.6	.8	100.32	99.77	99.8	99.9	100.1	99.6	293	99
4	16.7	17.0	4.09	4.27	8.6	6.7	.6	.5	.9	1.0	96.15	97.33	99.6	99.7	95.8	97.0	2,506	3,897
5	17.2	17.7	4.03	4.16	9.6	7.2	1.4	.5	.8	.9	97.83	100.56	97.4	99.7	95.1	100.3	844	1,324
6	20.6	20.8	3.92	3.80	6.8	7.0	.6	.6	1.0	1.2	109.04	110.39	99.5	99.1	108.5	109.7	1,328	1,255
7	17.7	16.7	4.28	4.28	8.1	7.6	.9	.7	.5	.9	102.79	100.10	99.4	99.6	102.8	99.7	174	109
8	17.4	16.8	4.03	4.20	8.6	7.9	3.6	.8	.6	.6	98.79	97.27	92.0	99.5	90.6	97.0	39	621
9	18.1	17.8	4.02	4.10	9.8	9.0	3.7	.8	.8	.6	101.44	100.77	88.7	99.2	90.6	100.4	559	1,262
10	18.8	17.9	4.04	4.14	9.4	9.7	1.0	.6	1.0	.6	104.41	101.15	99.3	99.5	103.9	100.8	185	3,230
State	19.3	18.6	4.09	4.12	8.1	7.6	0.8	0.6	1.5	1.3	103.21	101.07	98.9	99.2	102.1	100.4	22,908	23,667

Table 7. Percentage distribution of quantity indexes by specified frequencies, by States and United States, 1951-1952 1/

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			
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952		
<u>Upland</u>	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Ala.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Ariz. 2/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ark.	0.1	0.1	•	•	•	•	0.1	.4	.3	1.1	2.6	3.7	18.6	9.6	55.9	32.6	22.4	52.4	100	100	100	
Calif. 2/	-	-	-	-	0.1	-	-	-	.1	1.3	-	6.8	-	20.6	-	37.7	-	33.3	-	100	100	
Fla.	-	-	-	-	-	-	1.0	.4	4.1	1.7	21.6	10.0	19.6	31.9	44.4	43.1	4.1	10.8	5.2	2.1	100	
Ga.	•	•	•	•	•	•	•	•	.3	.1	2.4	.7	7.6	4.5	31.6	27.7	49.5	40.7	8.6	26.2	100	
Ill.	-	-	-	-	-	-	-	-	-	2.9	3.4	2.9	13.8	17.6	27.6	11.8	44.9	26.5	10.3	29.5	100	
Ky.	-	-	-	-	-	-	-	-	1.0	4.8	-	11.3	9.9	17.7	10.9	53.3	32.7	12.9	38.6	-	6.9	
La.	.1	.1	•	•	•	•	•	•	.2	.2	.7	.6	5.6	2.7	36.7	18.5	46.2	48.9	10.5	28.9	100	
Miss.	•	•	•	•	•	•	•	•	•	•	.1	.1	1.0	1.3	24.1	10.2	61.6	40.6	13.1	47.6	100	
Mo.	.1	•	•	•	•	•	.1	.3	.5	1.4	2.6	3.5	10.8	7.5	34.2	14.9	43.8	35.3	7.9	36.9	100	
N. Mex.	-	-	-	-	-	-	-	-	-	1.1	-	1.0	.3	1.2	1.1	3.7	9.8	5.9	18.4	6.8	70.4	
N. C.	•	•	•	•	•	•	•	•	.1	-	.3	.4	4.8	.4	45.1	6.3	46.5	53.1	3.2	40.2	100	
Okla.	-	-	-	-	-	-	-	-	.4	.4	1.5	4.9	4.9	25.0	23.8	47.4	47.5	22.3	21.7	100	100	
S. C.	•	•	•	•	•	•	•	•	.2	.1	.6	.3	2.6	3.7	15.0	20.2	64.4	50.5	17.1	25.1	100	
Tenn.	•	•	•	•	•	•	•	•	.1	.1	.3	.2	1.0	.6	5.4	2.1	28.6	8.4	54.1	37.6	10.4	
Tex.	.1	.1	•	•	•	•	.1	.3	.1	.6	.7	2.6	5.4	11.0	18.3	26.0	35.1	33.6	40.2	25.7	100	
Va.	.4	-	-	-	-	-	-	-	2.3	-	3.9	-	10.2	3.0	49.2	30.8	32.4	53.5	1.6	12.7	100	
<u>American-Egyptian</u>																						
Ariz.	-	.2	-	-	-	-	-	-	-	1.0	-	15.9	-	53.2	-	23.9	-	4.0	-	1.8	-	100
Tex.-New Mex.	-	-	-	-	-	-	-	.3	-	.3	-	1.6	-	9.9	-	41.3	-	37.0	-	9.6	-	100
U. S.	0.1	0.1	•	•	•	•	•	•	0.1	0.2	0.3	0.7	1.2	4.5	5.0	26.4	16.4	49.1	38.6	18.9	38.3	100

1/ United States averages for 1952 includes American-Egyptian seed.

2/ Cottonseed data for 1951 for Arizona and California published in the report, "Cottonseed Quality in the Far West, 1951-1952." • Less than 0.05 percent.

Table 8. Percentage distribution of quality indexes by specified frequencies, by States and United States, 1951-1952 ^{1/}

State	Quality index																			
	Below grade		Below prime quality																Prime quality	
	1951	1952	40.0-49.9	50.0-59.9	70.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100	1951	1952	1951	1952	1951	1952	1951	1952	Total	
Upland	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Ala.	0.2	0	0.3	0	2.2	0.2	2.1	0.7	1.4	0.7	2.9	1.3	4.4	4.6	31.4	34.5	55.1	58.0	100	
Ariz. ^{2/}	-	-	-	-	-	-	.2	.1	-	.1	-	.4	-	3.3	-	40.7	-	55.3	100	
Ark.	.7	0.1	.5	0	1.9	.1	2.7	.1	2.3	.2	3.6	.3	7.9	1.6	45.7	29.1	34.7	68.5	100	
Calif. ^{2/}	-	.1	-	0	-	.1	.4	-	-	.5	-	1.1	-	5.7	-	32.4	-	59.7	100	
Fla.	5.2	-	1.0	-	4.1	2.1	3.1	1.7	2.1	5.4	2.1	12.9	10.3	23.2	51.5	46.0	20.6	8.7	100	
Ga.	.4	.1	.8	0.2	3.5	1.5	4.6	2.7	3.1	2.8	4.8	4.9	7.1	7.3	33.2	33.6	42.5	46.9	100	
Ill.	6.9	-	10.3	-	13.8	-	13.8	-	-	-	-	-	6.9	5.9	38.0	55.9	10.3	38.2	100	
Ky.	1.6	-	1.6	-	9.7	-	16.1	1.0	9.7	-	1.6	-	-	5.0	51.6	51.4	8.1	42.6	100	
La.	1.7	.1	1.8	-	5.1	.1	4.5	.2	3.5	.3	5.1	1.0	10.4	3.8	29.6	24.1	38.3	70.4	100	
Miss.	.1	.1	.2	0	1.4	0	1.6	.1	1.4	0	2.0	.1	3.2	.5	24.6	16.0	65.5	83.2	100	
Mo.	3.7	.2	2.2	.1	6.9	0	5.0	.2	2.2	.1	3.7	.4	9.4	3.2	48.2	44.0	18.7	51.8	100	
N. Mex.	-	-	-	-	-	-	.1	.1	-	-	.1	.5	4.1	2.9	43.5	31.5	52.2	65.0	100	
N. C.	0	.2	0	.5	.7	2.9	1.0	3.3	1.3	1.9	2.9	4.1	7.0	7.9	41.9	37.7	45.1	41.5	100	
Okla.	0	0	-	-	0	-	.1	-	0	-	.2	0	.6	.2	31.0	30.3	68.1	69.5	100	
S. C.	.2	3.0	.2	5.1	1.0	16.6	1.7	8.7	2.6	3.3	5.9	5.4	11.4	6.1	27.3	21.7	49.7	30.1	100	
Tenn.	.3	.1	.3	0	1.5	0	1.9	0	1.7	.1	3.0	.1	9.3	.9	53.2	37.6	28.8	61.1	100	
Tex.	.2	0	.1	0	.2	.1	.3	.1	.3	.1	.4	.3	1.7	1.4	44.2	45.4	52.6	52.5	100	
Va.	-	-	.4	-	1.2	-	.8	1.2	2.3	.9	9.0	.6	14.1	3.0	65.2	54.4	7.0	39.9	100	
American-Egyptian																				
Ariz.	-	.2	-	-	-	-	.2	-	.8	-	3.4	-	10.3	-	82.3	-	2.8	-	100	
Tex.-New Mex.	-	-	-	-	-	-	-	-	.3	-	-	-	3.8	-	50.7	-	45.2	-	100	
U. S.	0.5	0.2	0.5	0.3	1.9	1.2	2.0	0.9	1.6	0.6	2.7	1.1	5.7	3.0	37.6	32.1	47.5	60.6	100	

^{1/} United States averages for 1952 includes American-Egyptian seed.

^{2/} Cottonseed data for 1951 for Arizona and California published in the report, "Cottonseed Quality in the Far West, 1951-1952."

0 = Less than 0.05 percent.

Table 10. Percentage of oil by specified frequencies, by States and United States, 1951-1952 1/

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					
	1951	Pct.	1951	Pct.	1951	Pct.	1951	Pct.	1951	Pct.	1951	Pct.	1951	Pct.	1951	Pct.	1951	Pct.	1951	Pct.	1951	Pct.	1951	Pct.		
Upland	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.		
Ala.	0.3	0.4	1.7	3.1	4.4	5.5	11.8	9.3	19.0	13.2	23.1	14.1	19.6	13.7	12.5	15.8	7.4	23.0	0.3	1.9	-	-	-	100	100	
Ariz. 2/	-	.1	-	*	-	.1	-	.2	-	.8	-	2.7	-	8.5	-	17.5	-	50.2	-	17.2	-	2.7	-	-	100	100
Ark.	.2	.4	.2	1.0	.5	1.4	1.2	2.3	3.4	3.9	8.1	7.2	15.5	13.9	25.5	23.8	38.9	40.4	6.3	5.6	0.2	.1	100	100	100	100
Calif. 2/	-	.2	-	.9	-	2.3	-	4.2	-	7.6	-	10.2	-	14.4	-	18.4	-	33.8	-	7.7	-	.3	-	-	100	100
Fla.	5.2	.8	17.5	17.0	11.3	21.6	21.6	26.6	16.5	18.3	18.6	8.7	3.1	4.6	2.1	.8	1.0	1.2	2.1	-	1.0	.4	100	100	100	100
Ga.	.4	.2	2.9	1.2	3.8	2.9	6.5	8.7	11.7	16.8	20.6	21.3	24.4	16.6	17.6	13.9	11.6	16.0	.5	2.4	-	-	-	100	100	100
Ill.	-	8.8	-	2.9	3.4	14.7	6.9	2.9	-	2.9	17.2	11.8	6.9	-	31.1	11.6	24.2	32.4	10.3	11.8	-	-	-	100	100	100
Ky.	1.6	1.0	12.9	8.9	6.5	9.9	12.9	3.0	14.5	16.8	27.5	18.8	16.1	13.9	3.2	15.8	4.8	11.9	-	-	-	-	-	100	100	100
La.	.9	.4	1.2	.7	3.2	1.5	8.6	4.4	17.6	10.6	21.2	18.0	18.5	21.9	14.5	18.9	12.4	20.7	1.8	2.8	.1	.1	100	100	100	100
Missg.	.2	.2	.2	.2	.5	.7	3.0	2.3	9.2	4.9	19.2	10.0	26.9	17.8	23.6	23.8	15.5	36.8	1.5	3.1	.2	.2	100	100	100	100
Mo.	.3	.7	1.9	3.1	2.4	3.2	5.7	4.3	9.1	7.2	14.4	10.4	21.0	15.8	22.8	17.2	20.5	27.8	1.8	9.6	.1	.7	100	100	100	100
N. Mex.	.1	2.7	-	1.3	.1	1.8	.7	1.6	1.7	2.3	4.2	2.1	6.2	2.5	7.6	3.0	31.3	8.8	42.1	21.0	6.0	52.9	100	100	100	100
N. C.	.1	.1	.1	.1	.5	.1	1.9	.3	6.2	.9	15.5	3.1	28.8	10.5	28.7	21.1	17.7	53.2	.4	10.3	.4	100	100	100	100	100
Okla.	.1	1.6	1.5	4.2	3.5	5.3	8.4	10.1	14.6	17.6	22.1	20.4	25.5	19.4	16.3	12.4	7.4	8.2	.5	.7	.1	.1	100	100	100	100
S. C.	.2	.3	.5	.7	.7	1.7	1.7	4.3	3.5	8.4	9.3	14.6	20.0	21.1	26.5	23.2	35.1	23.7	2.5	1.9	-	.1	100	100	100	100
Tenn.	.3	.2	.7	.5	1.1	.9	2.9	1.3	6.5	2.9	14.0	6.0	23.0	14.6	26.3	26.8	23.5	42.8	1.7	4.0	.4	.4	100	100	100	100
Tex.	.2	1.0	1.4	4.9	3.6	6.6	6.0	8.2	6.5	9.5	6.5	10.2	6.9	10.0	7.5	8.7	19.6	14.9	27.7	12.7	14.1	13.3	100	100	100	100
Va.	.4	-	3.5	.3	4.7	1.5	2.7	4.4	7.0	3.3	14.1	5.9	29.7	15.4	25.8	24.6	11.7	39.6	.4	5.0	-	-	100	100	100	100
American-Egyptian																										
Arizona	-	.2	-	-	-	-	-	-	-	-	-	-	-	-	-	.2	-	1.4	-	13.9	-	84.3	-	100	100	
Tex.-New Mex.	-	.3	-	.5	-	.8	-	.3	-	1.4	-	.5	-	1.6	-	1.9	-	3.8	-	4.4	-	84.5	-	100	100	
U. S.	0.3	0.4	1.0	1.7	2.1	2.7	4.9	4.5	9.0	7.4	14.4	10.6	18.9	14.7	19.0	18.5	20.3	29.8	7.4	6.3	2.7	3.4	100	100	100	

1/ United States averages for 1952 includes American-Egyptian seed.

2/ Cottonseed data for 1951 for Arizona and California published in the report, "Cottonseed Quality in the Far West, 1951-1952." Less than 0.05 percent.

Table 12. Percentage of moisture in cottonseed samples by specified frequencies, by States and United States, 1951.

State	Moisture														20.1 and over	Total
	Prime quality 0-12.0	Below prime quality 12.1-20.0	Off quality 20.1 and over	0.0-5.0	5.1-7.0	7.1-9.0	9.1-10.0	10.1-11.0	11.1-12.0	12.1-14.0	14.1-16.0	16.1-18.0	18.1-20.0			
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Ala.	74.0	25.9	0.1	*	0.1	13.6	17.9	22.1	20.3	21.6	3.5	0.5	0.3	0.1	100	
Ark.	42.4	57.2	.4	*	*	2.2	7.1	13.0	20.1	34.1	14.9	6.2	2.0	.4	100	
Fla.	41.3	58.7	-	-	-	-	5.2	17.5	18.6	15.5	35.0	7.2	1.0	-	100	
Ga.	67.3	32.6	.1	0.1	*	11.2	17.1	21.0	17.9	22.8	7.6	1.9	.3	.1	100	
Ill.	10.3	89.7	-	-	-	-	-	6.9	3.4	38.0	38.0	10.3	3.4	-	100	
Ky.	9.7	83.8	6.5	-	-	-	-	-	9.7	25.8	30.6	19.3	8.1	6.5	100	
La.	68.2	31.5	.3	.2	.1	9.7	14.5	21.0	22.7	23.5	5.3	1.8	.9	.3	100	
Miss.	82.2	17.8	*	.1	.1	14.9	22.4	25.4	19.3	14.5	2.9	.3	.1	*	100	
Mo.	23.7	73.2	3.1	*	-	.2	2.9	8.9	11.7	37.0	20.1	10.0	6.1	3.1	100	
N. Mex.	99.7	.3	-	.3	31.7	61.8	4.9	1.0	-	.1	.1	.1	-	-	100	
N. C.	58.9	40.9	.2	.1	-	1.4	8.5	20.7	28.2	31.8	7.2	1.3	.6	.2	100	
Okla.	89.9	10.1	*	.1	.3	40.9	27.7	13.4	7.5	8.1	1.6	.3	.1	*	100	
S. C.	77.0	22.1	.9	-	-	4.1	18.9	30.1	23.9	15.8	3.0	1.8	1.5	.9	100	
Tenn.	33.0	65.5	1.5	-	-	1.2	5.5	10.9	15.4	32.0	20.8	9.1	3.6	1.5	100	
Tex.	99.3	.7	*	.3	15.9	66.8	10.7	4.3	1.3	.6	.1	*	*	*	100	
Va.	8.6	84.0	7.4	-	-	-	.4	2.0	6.2	43.4	24.6	12.5	3.5	7.4	100	
U. S.	69.3	30.3	0.4	0.1	3.3	20.6	13.6	16.0	15.7	19.6	7.0	2.6	1.1	0.4	100	

* Less than 0.05 percent.

Table 13. Percentage of moisture in cottonseed samples by specified frequencies, by States and United States, 1952.

State	Moisture														20.1 and over	Total
	Prime quality 0-12.0	Below prime quality 12.1-20.0	Off quality 20.1 and over	0.0-5.0	5.1-7.0	7.1-9.0	9.1-10.0	10.1-11.0	11.1-12.0	12.1-14.0	14.1-16.0	16.1-18.0	18.1-20.0			
<u>Upland</u>	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Ala.	73.4	26.5	0.1	0.1	0.1	15.6	19.4	21.4	16.8	16.5	6.8	2.7	0.5	0.1	100	
Ariz. 1/	99.7	.3	*	.5	33.9	47.1	12.6	4.3	1.3	.3	-	-	-	*	100	
Ark.	87.2	12.7	.1	*	9.2	37.4	17.8	11.9	10.9	11.4	1.3	*	*	.1	100	
Calif. 1/	70.4	29.3	.3	.1	3.4	38.2	13.0	7.2	8.5	14.5	9.2	4.4	1.2	.3	100	
Fla.	32.4	66.8	.8	-	-	2.1	7.5	7.9	14.9	24.5	22.0	16.2	4.1	.8	100	
Ga.	78.1	21.8	.1	-	.1	10.5	22.3	26.9	18.3	15.5	4.6	1.5	.2	.1	100	
Ill.	64.7	35.3	-	-	-	14.7	23.5	11.8	14.7	32.4	2.9	-	-	-	100	
Ky.	60.3	38.7	1.0	-	-	19.8	10.9	22.7	6.9	22.8	14.9	-	1.0	1.0	100	
La.	84.7	14.3	1.0	.3	13.7	40.9	12.9	10.0	6.9	6.5	3.7	2.6	1.5	1.0	100	
Miss.	93.0	7.0	*	.1	11.0	42.0	20.4	12.0	7.5	5.4	1.3	.2	.1	*	100	
Mo.	77.0	23.0	*	.1	7.5	34.5	14.1	9.7	11.1	19.5	3.1	.3	.1	*	100	
N. Mex.	99.8	.2	-	.1	45.0	46.2	6.9	1.3	.3	-	.1	.1	-	-	100	
N. C.	75.9	24.0	.1	.1	.2	19.2	13.6	20.3	22.5	18.4	4.0	1.4	.2	.1	100	
Okla.	99.8	.2	*	.1	54.7	39.1	4.0	1.3	.6	.2	-	-	-	*	100	
S. C.	82.4	17.5	.1	.1	.2	15.9	19.3	26.5	20.4	12.3	4.1	.9	.2	.1	100	
Tenn.	79.6	20.4	*	.1	5.3	26.7	19.6	15.7	12.2	15.1	5.0	.3	*	*	100	
Tex.	97.2	2.8	*	.4	44.3	42.3	5.6	2.9	1.7	1.7	.7	.3	.1	*	100	
Va.	55.7	44.3	-	-	.3	16.0	10.4	10.4	18.6	33.0	8.9	2.4	-	-	100	
<u>American-Egyptian</u>																
Arizona	96.8	3.2	-	.8	20.5	26.3	20.9	20.7	7.6	2.8	.2	.2	-	-	100	
Tex-N. Mex.	100.0	-	-	-	24.4	55.1	15.3	4.1	1.1	-	-	-	-	-	100	
U. S.	86.0	13.9	0.1	0.2	14.9	33.5	15.2	12.3	9.9	9.6	3.0	1.0	0.3	0.1	100	

* Less than 0.05 percent.

1/ Cottonseed data for 1951 for Arizona and California published in the report, "Cottonseed Quality in the Far West, 1951-1952."

Table 9. Percentage distribution of grades by specified frequencies, by States and United States, 1951-1952 1/

State	Below Grade		40.0-74.9		75.0-79.9		80.0-84.9		85.0-89.9		90.0-94.9		95.0-99.9		100.0		105.0		110.0 and over		Total	
	00.0-39.9		1951		1952		1951		1952		1951		1952		1951		1952		1951		1952	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Upland																						
Ala.	0.2	*	3.7	0.5	1.5	0.8	2.5	1.6	3.9	5.2	9.7	10.2	32.1	17.7	39.3	33.4	7.0	29.3	0.1	1.3	100	100
Ariz. 2/	-	*	-	.1	-	.1	-	.1	-	.4	-	1.5	-	7.0	-	30.2	-	51.9	-	8.7	-	100
Ark.	.8	0.2	3.7	.4	1.6	.4	2.6	.9	4.5	2.1	8.0	3.8	17.1	9.5	41.1	29.5	20.1	48.6	.5	4.6	100	100
Calif. 2/	-	.1	-	.4	-	.6	-	1.5	-	4.7	-	10.1	-	15.8	-	32.5	-	31.9	-	2.4	-	100
Fla.	5.2	-	11.3	3.7	2.1	6.2	8.2	12.4	13.4	29.6	27.9	28.2	26.8	16.2	4.1	2.5	1.0	.8	-	.4	100	100
Ga.	.6	.1	6.5	2.4	3.1	1.8	4.3	3.4	7.8	5.9	10.0	11.0	22.4	23.1	36.7	27.2	8.4	23.9	.2	1.2	100	100
Ill.	10.3	-	34.6	5.9	3.4	2.9	3.4	5.9	-	8.8	3.4	14.7	13.8	5.9	20.8	29.4	10.3	26.5	-	-	100	100
Ky.	1.6	-	32.3	1.0	1.6	-	4.8	5.9	3.2	8.9	21.0	13.9	29.0	24.8	6.5	38.6	-	6.9	-	-	100	100
La.	1.8	.1	9.0	.5	2.7	.4	3.8	.9	6.1	1.9	11.9	4.3	27.5	17.0	30.3	45.0	6.6	27.7	.3	2.2	100	100
Miss.	.2	.1	2.3	.1	1.0	.1	1.5	.1	2.2	.5	4.1	2.1	20.5	9.4	54.3	38.2	13.5	45.8	.4	3.6	100	100
Mo.	4.1	.5	12.8	.8	3.6	1.0	4.5	2.6	6.0	4.5	9.4	7.2	24.8	14.9	28.3	31.3	6.4	30.8	.1	6.4	100	100
N. Mex.	-	.1	-	1.3	.1	1.6	.1	1.2	.8	1.9	6.4	4.5	11.2	5.5	14.2	6.1	44.4	14.7	22.8	63.1	100	100
N. C.	.2	.3	1.4	3.8	1.0	1.6	2.0	1.9	4.3	2.9	11.6	5.8	36.5	13.3	39.8	39.4	3.2	29.7	*	1.3	100	100
Okla.	.1	.1	.1	.1	.2	.2	.2	.4	1.0	1.4	6.0	5.0	24.4	23.4	45.5	47.2	20.9	20.9	1.8	1.3	100	100
S. C.	.3	2.9	2.0	23.9	1.2	4.1	2.7	4.4	5.4	5.6	8.6	8.9	17.8	15.6	47.4	22.1	14.3	12.2	.1	.3	100	100
Tenn.	.4	.1	3.4	.1	1.5	.2	2.7	.5	5.2	1.2	12.0	3.3	24.6	9.3	39.8	34.5	10.3	47.4	.1	3.4	100	100
Tex.	.3	.1	.6	.4	.3	.5	.4	1.0	1.2	3.5	6.4	12.1	19.5	25.2	33.8	31.7	30.5	19.0	7.0	6.5	100	100
Va.	.4	-	4.7	-	3.5	.6	3.5	1.5	9.0	.6	19.9	8.0	36.3	32.2	20.7	43.8	2.0	13.0	-	.3	100	100
American-Egyptian																						
Ariz.	-	.2	-	.4	-	2.4	-	7.0	-	33.8	-	40.1	-	12.9	-	1.4	-	1.6	-	.2	-	100
Tex.-New Mex.	-	-	-	-	-	.8	-	1.1	-	3.8	-	14.5	-	40.1	-	30.4	-	6.0	-	3.3	-	100
U. S.	0.6	0.3	3.5	1.9	1.4	0.7	2.1	1.3	3.7	3.0	8.1	6.8	22.7	15.3	40.1	33.3	16.0	33.2	1.8	4.2	100	100

1/ United States averages for 1952 includes American-Egyptian seed.

2/ Cottonseed data for 1951 for Arizona and California published in the report, "Cottonseed Quality in the Far West, 1951-1952." * Less than 0.05 percent.

Table 11. Percentage of ammonia by specified frequencies, by States and United States, 1951-1952. 1/

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					
	1951	Pct.	1952	Pct.	1951	Pct.	1952	Pct.	1951	Pct.	1952	Pct.	1951	Pct.	1952	Pct.	1951	Pct.	1952	Pct.	1951	Pct.	1952	Pct.
Upland	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Ala.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Ariz. 2/	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Ark.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Calif. 2/	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Fla.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Ga.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Ill.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Ky.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
La.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Miss.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Mo.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
N. Mex.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
N. O.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Okla.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
S. O.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Tenn.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Tex.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Va.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
American-Egyptian	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Ariz.	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2
Tex.-New Mex.	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2
U. S.	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1

1/ United States averages for 1952 includes American-Egyptian seed.

2/ Cottonseed data for 1951 for Arizona and California published in the report, "Cottonseed Quality in the Far West, 1951-1952."

* Less than 0.05 percent.

Table 14. Percentage of free fatty acid in cottonseed samples, by specified frequencies, by States and United States, 1951.

State	Free fatty acids														Total
	Prime quality 0-1.8	Below prime quality 1.9-12.4	Off quality 12.5 and over	0 - 0.4	0.5 - 0.9	1.0 - 1.4	1.5 - 1.8	1.9 - 2.9	3.0 - 4.9	5.0 - 6.9	7.0 - 8.9	9.0 - 10.9	11.0 - 12.4	12.5 and over	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Ala.	80.9	18.1	1.0	6.8	50.9	17.4	5.8	6.1	5.7	2.7	1.7	1.1	0.8	1.0	100
Ark.	82.7	15.9	1.4	16.2	51.0	11.1	4.4	4.4	5.7	2.6	1.8	.9	.5	1.4	100
Fla.	63.8	30.0	6.2	1.0	23.6	19.6	19.6	12.4	7.2	3.1	3.1	2.1	2.1	6.2	100
Ga.	68.7	29.3	2.0	3.6	43.3	16.5	5.3	8.3	8.7	5.3	3.6	2.5	.9	2.0	100
Ill.	44.9	34.3	20.8	-	38.1	3.4	3.4	3.4	3.4	10.3	10.3	6.9	-	20.8	100
Ky.	58.1	38.7	3.2	9.7	45.2	3.2	-	1.6	12.9	12.9	8.1	3.2	-	3.2	100
La.	58.1	37.0	4.9	19.1	22.2	10.9	5.9	11.2	12.5	5.4	3.6	2.9	1.4	4.9	100
Miss.	85.4	14.1	.5	26.0	47.0	9.0	3.4	5.1	4.2	2.2	1.3	.9	.4	.5	100
Mo.	75.5	17.7	6.8	14.3	50.7	8.0	2.5	3.0	2.7	3.7	3.8	2.7	1.8	6.8	100
N. Mex.	98.4	1.6	-	30.0	49.2	16.1	3.1	1.4	.1	-	-	.1	-	-	100
N. C.	76.8	23.0	.2	7.8	36.7	22.8	9.5	12.2	7.6	1.9	.7	.5	.1	.2	100
Okla.	99.1	.9	-	50.1	37.0	10.3	1.7	.6	.2	*	.1	*	-	-	100
S. C.	68.3	31.1	.6	16.8	31.7	13.7	6.1	11.3	12.1	5.2	1.5	.6	.4	.6	100
Tenn.	89.6	9.7	.7	14.6	62.2	10.1	2.7	2.7	3.3	1.6	1.1	.7	.3	.7	100
Tex.	97.3	2.3	.4	33.8	51.4	9.9	2.2	1.2	.5	.2	.2	.1	.1	.4	100
Va.	75.7	24.3	-	1.2	33.9	28.5	12.1	12.9	9.0	-	1.6	.8	-	-	100
U. S.	83.2	15.4	1.4	21.0	46.3	11.9	4.1	5.1	4.9	2.3	1.5	1.0	0.5	1.4	100

* Less than 0.05 percent.

Table 15. Percentage of free fatty acid in cottonseed samples, by specified frequencies, by States and United States, 1952.

State	Free fatty acids														Total
	Prime quality 0-1.8	Below prime quality 1.9-12.4	Off quality 12.5 and over	0 - 0.4	0.5 - 0.9	1.0 - 1.4	1.5 - 1.8	1.9 - 2.9	3.0 - 4.9	5.0 - 6.9	7.0 - 8.9	9.0 - 10.9	11.0 - 12.4	12.5 and over	
<u>Upland</u>	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Ala.	86.9	13.0	0.1	9.5	50.9	17.9	8.6	7.5	3.5	1.2	0.6	0.2	*	0.1	100
Ariz. 1/	90.6	9.4	*	20.6	38.9	22.1	9.0	7.1	2.1	.1	.1	*	-	*	100
Ark.	98.6	1.2	.2	64.4	30.1	3.3	.8	.6	.4	.1	.1	*	*	.2	100
Calif. 1/	93.4	6.5	.1	58.8	24.7	7.2	2.7	3.5	2.1	.5	.2	.1	0.1	.1	100
Fla.	47.7	52.3	-	-	13.7	23.2	10.8	22.4	16.2	10.0	1.7	1.2	.8	-	100
Ga.	70.7	28.8	.5	5.4	36.4	21.0	7.9	10.7	9.2	5.1	2.3	1.2	.3	.5	100
Ill.	82.4	17.6	-	17.6	50.1	11.8	2.9	14.7	2.9	-	-	-	-	-	100
Ky.	98.0	1.0	1.0	38.6	52.5	5.9	1.0	-	1.0	-	-	-	-	1.0	100
La.	93.2	6.7	.1	55.0	23.0	10.3	4.9	4.7	1.5	.2	.1	.1	.1	.1	100
Miss.	98.9	1.1	*	63.1	32.8	2.4	.6	.5	.3	.1	.1	.1	*	*	100
Mo.	97.9	1.7	.4	46.9	45.4	4.3	1.4	.8	.5	.2	.1	*	*	.4	100
N. Mex.	99.6	.4	-	41.0	52.5	5.5	.6	.2	.1	.1	-	-	-	-	100
N. C.	67.5	31.0	1.5	6.5	29.1	23.0	8.9	12.7	9.5	3.6	2.6	1.7	.9	1.5	100
Okla.	99.7	.2	.1	52.0	46.5	1.0	.2	.1	.1	-	-	-	-	.1	100
S. C.	44.0	42.7	13.3	5.5	18.9	13.2	6.4	7.7	8.6	6.2	6.9	7.4	5.9	13.3	100
Tenn.	99.1	.8	.1	55.7	41.3	1.7	.4	.5	.2	.1	*	-	-	.1	100
Tex.	99.0	1.0	*	31.8	59.9	6.2	1.1	.7	.2	.1	*	*	*	*	100
Va.	91.7	8.3	-	11.5	44.7	28.7	6.8	3.8	2.7	.9	.9	-	-	-	100
<u>American-Egyptian</u>															
Ariz.	99.0	1.0	-	10.3	70.0	17.5	1.2	1.0	-	-	-	-	-	-	100
Tex-N. Mex.	98.4	1.6	-	6.0	68.9	19.7	3.8	1.6	-	-	-	-	-	-	100
U. S.	90.9	8.2	0.9	40.8	38.5	8.5	3.1	3.3	2.2	1.0	0.7	0.6	0.4	0.9	100

* Less than 0.05 percent. 1/ Cottonseed data for 1951 for Arizona and California published in the report, "Cottonseed Quality in the Far West, 1951-1952."

Table 16. Percentage of foreign matter in cottonseed samples by specified frequencies, by States and United States, 1951.

State	Foreign Matter														Total
	Prime quality 0-1.0	Below prime quality 1.1-10.0	Off quality 10.1 and over	0 - 0.5	0.6 - 1.0	1.1 - 2.0	2.1 - 3.0	3.1 - 4.0	4.1 - 5.5	5.6 - 7.0	7.1 - 8.5	8.6 - 10.0	10.1 and over		
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Ala.	88.5	11.4	0.1	60.5	28.0	9.0	1.7	0.4	0.2	0.1	*	*	0.1	100	
Ark.	71.7	27.9	.4	41.6	30.1	15.3	5.8	2.9	2.1	1.0	0.5	0.3	.4	100	
Fla.	79.4	20.6	-	54.7	24.7	15.5	4.1	1.0	-	-	-	-	-	100	
Ga.	85.7	14.3	*	65.5	20.2	9.7	3.0	1.0	.4	.2	*	*	*	100	
Ill.	48.4	51.6	-	41.5	6.9	6.9	10.3	3.4	13.8	6.9	6.9	3.4	-	100	
Ky.	61.4	37.0	1.6	51.7	9.7	-	4.8	6.5	17.7	4.8	1.6	1.6	1.6	100	
La.	81.0	18.8	.2	45.4	35.6	13.5	3.3	.9	.6	.2	.1	.2	.2	100	
Miss.	84.3	15.6	.1	54.9	29.4	11.9	2.2	.8	.4	.2	.1	*	.1	100	
Mo.	57.7	40.9	1.4	38.4	19.3	17.2	9.2	5.1	4.6	2.4	1.5	.9	1.4	100	
N. Mex.	52.2	47.6	.2	16.2	36.0	18.7	8.0	7.7	8.1	3.2	1.5	.4	.2	100	
N. C.	88.8	11.1	.1	65.9	22.9	9.2	1.3	.5	.1	*	*	-	.1	100	
Okla.	75.5	24.2	.3	42.2	33.3	17.3	4.5	1.3	.5	.3	.2	.1	.3	100	
S. C.	91.2	8.8	*	69.0	22.2	7.2	1.1	.2	.2	-	.1	-	*	100	
Tenn.	71.9	27.9	.2	54.4	17.5	15.1	6.5	3.2	1.8	.9	.3	.1	.2	100	
Tex.	53.9	45.5	.6	26.1	27.8	26.6	9.6	4.7	2.9	1.0	.4	.3	.6	100	
Va.	89.9	10.1	-	69.6	20.3	6.6	3.1	.4	-	-	-	-	-	100	
U. S.	74.5	25.2	0.3	47.1	27.5	15.3	4.9	2.3	1.5	0.6	0.3	0.2	0.3	100	

* Less than 0.05 percent.

Table 17. Percentage of foreign matter in cottonseed samples by specified frequencies, by States and United States, 1952.

State	Foreign Matter														Total
	Prime quality 0-1.0	Below prime quality 1.1-10.0	Off quality 10.1 and over	0 - 0.5	0.6 - 1.0	1.1 - 2.0	2.1 - 3.0	3.1 - 4.0	4.1 - 5.5	5.6 - 7.0	7.1 - 8.5	8.6 - 10.0	10.1 and over		
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Upland															
Ala.	91.1	8.8	0.1	61.6	29.5	7.4	0.9	0.3	0.1	*	*	*	0.1	100	
Ariz. 1/	58.8	41.1	.1	28.2	30.6	24.7	8.7	3.3	2.7	1.3	0.3	0.1	.1	100	
Ark.	74.8	25.0	.2	44.9	29.9	13.6	5.9	2.7	1.7	.7	.3	.1	.2	100	
Calif. 1/	81.1	18.7	.2	50.9	30.2	12.4	3.6	1.1	.9	.4	.2	.1	.2	100	
Fla.	91.4	8.2	.4	70.7	20.7	6.2	.8	.4	.4	-	.4	-	.4	100	
Ga.	85.4	14.5	.1	65.3	20.1	10.9	1.9	.8	.6	.1	.1	.1	.1	100	
Ill.	50.0	50.0	-	26.5	23.5	20.6	17.6	5.9	5.9	-	-	-	-	100	
Ky.	68.3	30.7	1.0	53.4	14.9	9.9	5.0	5.9	5.9	2.0	2.0	-	1.0	100	
La.	85.3	14.6	.1	51.8	33.5	12.0	1.7	.4	.3	.1	*	.1	.1	100	
Miss.	89.7	10.2	.1	61.9	27.8	7.9	1.5	.5	.2	.1	*	*	.1	100	
Mo.	64.3	35.3	.4	40.8	23.5	16.5	8.6	4.8	3.1	1.4	.6	.3	.4	100	
N. Mex.	65.1	34.4	.5	37.2	27.9	15.2	7.8	4.0	4.0	2.1	.9	.4	.5	100	
N. C.	78.1	21.9	*	57.0	21.1	15.9	4.9	.8	.2	*	*	-	*	100	
Okla.	69.9	30.0	.1	30.3	39.6	24.4	4.4	.7	.3	.1	.1	-	.1	100	
S. C.	85.8	14.2	*	55.9	29.9	10.8	2.1	.8	.4	.1	*	*	*	100	
Tenn.	77.1	22.9	*	53.0	24.1	14.7	4.9	1.9	1.0	.2	.1	.1	*	100	
Tex.	55.5	44.1	.4	30.2	25.3	27.1	9.1	4.3	2.3	.8	.3	.2	.4	100	
Va.	77.6	22.4	-	61.3	16.3	18.3	3.8	.3	-	-	-	-	-	100	
American-Egyptian															
Arizona	3.6	91.2	5.2	.6	3.0	10.5	23.7	29.9	16.3	6.0	3.2	1.6	5.2	100	
Tex-N. Mex.	46.2	53.5	.3	32.2	14.0	13.2	13.2	11.2	10.4	3.6	.5	1.4	.3	100	
U. S.	76.4	23.4	0.2	48.9	27.5	14.8	4.7	2.0	1.2	0.4	0.2	0.1	0.2	100	

* Less than 0.05 percent.

1/ Cottonseed data for 1951 for Arizona and California published in the report, "Cottonseed Quality in the Far West, 1951-1952."

Table 18. Number of cottonseed samples by specified groups, by qualities, and number reduced in grade for specified causes, by States and United States, 1951-1952.

State	Quality						Reduced due to excess							
	Prime		Below prime and off quality		Below grade		Total samples graded		Moisture		Free fatty acids		Foreign matter	
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952
Upland	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Ala.	6,119	6,652	4,947	4,822	21	1	11,087	11,475	2,888	3,068	2,108	1,507	1,282	1,024
Ariz. 1/	-	2,301	-	1,866	-	-	-	4,167	-	14	-	393	-	1,720
Ark.	7,043	14,147	13,125	6,472	141	22	20,309	20,641	11,698	2,645	3,511	304	5,749	5,210
Calif. 1/	-	4,692	-	3,161	-	8	-	7,861	-	2,331	-	513	-	1,485
Fla.	20	21	72	220	5	-	97	241	57	163	35	126	20	21
Ga.	2,277	3,462	3,061	3,901	23	11	5,361	7,374	1,754	1,612	1,679	2,167	773	1,077
Ill.	3	13	24	21	2	-	29	34	26	12	16	6	15	17
Ky:	5	43	56	58	1	-	62	101	56	40	26	2	24	32
La.	3,712	6,600	5,797	2,768	163	9	9,672	9,377	3,076	1,436	4,054	634	1,840	1,374
Miss.	14,296	19,843	7,533	3,997	24	14	21,853	23,854	3,874	1,690	3,201	244	3,423	2,475
Mo.	1,113	3,172	4,629	2,954	222	13	5,964	6,139	4,550	1,413	1,462	130	2,525	2,188
N. Mex.	764	918	698	494	-	-	1,462	1,412	3	2	23	5	698	494
N. C.	2,953	3,149	3,596	4,438	2	18	6,551	7,605	2,690	1,841	1,520	2,472	738	1,665
Okla.	3,761	2,359	1,764	1,035	1	1	5,526	3,395	556	9	51	7	1,344	1,022
S. C.	2,635	2,237	2,660	4,979	10	223	5,305	7,439	1,223	1,304	1,683	4,159	463	1,059
Tenn.	2,295	5,600	5,638	3,556	23	8	7,956	9,164	5,329	1,871	820	75	2,236	2,103
Tex.	12,041	12,434	10,810	11,226	57	7	22,908	23,667	171	651	604	247	10,560	10,542
Va.	18	135	238	203	-	-	256	338	234	150	62	28	26	76
American-Egyptian														
Arizona	-	14	-	482	-	1	-	497	-	2	-	5	-	479
Tex.-New Mex.	-	165	-	200	-	-	-	365	-	-	-	6	-	196
U. S.	59,055	87,957	64,648	56,853	695	336	124,398	145,146	38,185	20,254	20,855	13,030	31,716	34,259

1/ Cottonseed data for 1951 for Arizona and California published in the report, "Cottonseed Quality in the Far West, 1951-1952."