

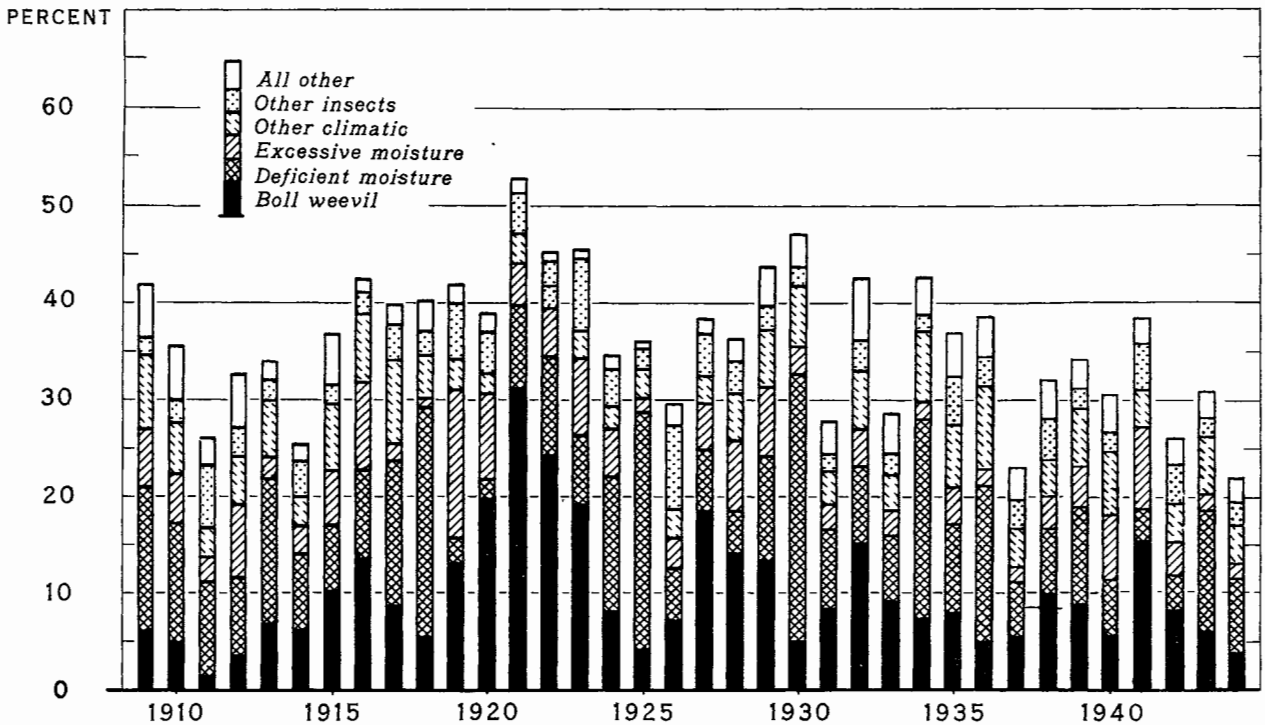
BUREAU OF AGRICULTURAL ECONOMICS
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COTTON: FACTORS ACCOUNTING FOR REDUCTION FROM FULL YIELD, 13 STATES, 1909-44*



* ALA., ARK., FLA., GA., LA., MISS., MO., N.C., OKLA., S.C., TENN., TEX., AND VA.

Boll weevil survivals and estimates of boll weevil population made earlier this spring indicated a situation rather similar to that in early 1941 - numbers large enough to cause severe damage if weather is cool and damp. Hot and exceptionally dry weather held weevil in check in 1944 and the reduction from full yield from that cause in the 13 old cotton-producing States was only 3.9 percent, the lowest since 1912.

Should the weather between now and the end of the fruiting season be cool and damp, it would mean that greater than usual effort would have to be employed to hold the boll weevil in check if damage to the crop is to be held to a minimum.

THE COTTON SITUATION

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THE DOMESTIC COTTON SITUATION

1945 Loan Premiums and
Discounts Announced

On June 2 the premiums and discounts which will be applicable in the 1945 cotton loan program were announced by the War Food Administration. Certain other information also was released. As announced last November, nonrecourse loans at 92.5 percent of parity as of August 1, 1945, will, in accordance with current legislation, be made available to farmers on American upland cotton produced in 1945 and stored on farms or in warehouses. The basic loan rate will apply to Middling 7/8 inch cotton. Loans will be available until May 1, 1946, and will mature July 31, 1946, or earlier upon demand.

Since the schedule of quality differentials, like current market quotations, is based on Middling 15/16 inch cotton, the spread between Middling 7/8 and Middling 15/16 inch cotton will be added to the basis loan rate for Middling 7/8 inch cotton to arrive at the base loan rate for Middling 15/16 inch cotton at average location. With respect to these items, there is no difference in the procedure which will be followed in the 1945 program from that which has been in effect in recent seasons. The current schedule of premiums and discounts, however, reflected the average grade and staple differences that prevailed in the 10 spot markets from August 1, 1944 to April 18, 1945 counting that part of April as a full month, rounded to the nearest 5/100's of a cent. Consequently, the spread between Middling 7/8 and 15/16 for the 1945 program is announced at 125 points. This compares with 105 points for 1944, with 85 points for 1943, and 20 points for 1942. Whereas in past years loans were made on a net-weight basis, the loans this season will be made on a gross weight of the bale, and 7 pounds will be added to the weight of each bale wrapped in cotton bagging, to compensate for the lighter weight bagging. Loan rates will vary with the freight rate to the Group B mill area of the Carolinas, except in Alabama, Georgia, Eastern Texas, Florida, South Carolina, North Carolina, and Virginia, where a zone system will be in effect as in the past.

"Previously (on May 4) the CCC issued a press release which stated that: The Commodity Credit Corporation has been studying cotton prices with a view to establishing appropriate premiums and discounts for the various qualities of cotton under its loan program for cotton grown in the various areas of the United States. A special committee has been conducting this study. While considerable information has been developed it is felt that the study should be continued for an additional period before any change is made from the method used in the 1943 and 1944 loan programs.

"It will be the policy of the CCC to establish premiums and discounts for the 1946 and subsequent loan programs on the basis of official quotations of the War Food Administration for the 10 spot markets and the quoted markets and other official market information, including El Paso, Phoenix, and Bakersfield. In the meantime only one schedule will be established for upland cotton for the 1945 crop."

Details of the 1945 Interim
Loan Program Announced

An interim loan program applicable to 1945 crop cotton ginned prior to the effective date of the regular loan program was also announced June 2. The purpose of the interim loan, as stated in the announcement, is to provide a support for early harvested 1945 crop cotton. This applies almost entirely to South Texas. The basic loan rate for Middling 15/16 inch cotton, gross weight, under the interim program, will be 20.85 cents per pound with the same adjustments for location and quality as will be effective under the regular program.

Statement Issued by Marvin Jones on
1945 Crop Cotton Purchase Program

On June 16, 1945, War Food Administrator, Marvin Jones, acting in response to requests from various quarters, announced that:

"In the event the Stabilization Act is extended for a year, and the Bankhead-Brown amendment is included in its present form, a cotton purchase program, in compliance with such amendment, similar to the 1944 program will be continued by the Commodity Credit Corporation for the 1945 crop.

"That amendment, in my judgment, will be substantially comolled with by an offer to purchase on the basis of 22.15 cents per pound for middling fifteen-sixteenths staple length cotton, gross weight, Memphis basis, for the month of August with increases of five points for each successive month until the purchase price reaches parity (on the basis of parity calculations for August 1, 1945). An appropriate differential should be calculated upon the basis of different grades and locations. If the purchase price reached the August 1, 1945 parity equivalent before June 30, 1946, the purchases at this parity figure should then be continued through June 30, 1946.

"Beginning July 1, 1945, the Commodity Credit Corporation will offer its owned and pooled stocks of cotton at twenty-five points above parity. In other respects the cotton price stabilization agreement announced on August 26, 1944, as amended on September 29, 1944, will be continued through June 30, 1946, with appropriate changes of dates.

"I recommend that not later than June 30, 1946, consideration be given to a new cotton program that would take into consideration competition in cotton grown by other countries, as well as domestic and foreign competition in synthetic fabrics."

Inasmuch as the last published parity price of cotton was 21.45 cents (as of May 15), the parity equivalent of Middling 15/16 inch cotton at Memphis is 22.50 cents, using the 1944 spread between Middling 7/8 and Middling 15/16 of 105 points. Next season the parity equivalent based on the same parity price would be 22.70 cents, using the newly announced spread of 125 points which will be applicable under the 1945 loan program. Should parity remain unchanged or advance in June and July, the purchase price would advance 5 points per month until it reached 22.65 cents in June 1946, the last month the program is in operation. In other words, the purchase price would be continuously

below the parity equivalent either at the beginning of the marketing season or at any time thereafter by at least some 5 to 55 points per month. Only if the parity price declines is there any possibility of the purchase price advancing as high as the parity equivalent within the period of time in which the program is in operation.

The 1945 purchase program would not become effective until August even though the 1944 program extends only through June 30. Consequently, during the month of July, no Government purchase program will be operative.

A program such as indicated in the June 16 announcement would widen the spread between the purchase price and sales price, thereby making it more acceptable to cotton merchants generally than the 1944 program. The June 1945 purchase price under the 1944 program is 22.25 cents per pound and the sales price is 22.65 cents per pound giving a spread of 40 points. Under the program outlined by the War Food Administration, the price at which the Commodity Credit Corporation would buy cotton from farmers in August is rolled back 10 points or to 22.15 cents, whereas the price at which the Corporation will sell cotton is advanced from 22.65 cents to 22.95 cents, an advance of 30 points. The resulting spread between the purchase and the sales prices would be, therefore, 80 points in August as compared with 40 points at present and 50 points in October 1944, the month in which the 1944 purchase program was announced. As the new season progresses, this spread of 80 points will narrow as a result of the provision for the purchase price advancing 5 points a month with no corresponding provision for the sales price to advance, except as it changes with changes in parity.

Another feature of the War Food Administrator's announcement is presented in the final paragraph. It contains a recommendation that during the forthcoming year consideration be given to a new cotton program which would take into account various features of the growing competition with which American cotton is confronted.

Spot Market Prices Continue to Advance

During the month ended June 18, the price of Middling 15/16 inch cotton at the 10 markets averaged 22.72 cents per pound. This was 28 points higher than a month earlier and 144 points higher than during the comparable period last season. The daily prices fluctuated between 22.53 and 22.82 cents per pound, and compared with an average parity equivalent for the 10 markets as of May 15 of 22.61 cents per pound. The average Government purchase price on the same date was 22.36 cents, and the Government domestic sales price was 22.76 cents per pound.

The U. S. average farm price of cotton in May was 20.51 cents per pound, or 31 points higher than in mid-April. This was equivalent to 96 percent of the U. S. parity price in May of 21.45 cents a pound.

Domestic Consumption per Working Day Lowest Since October 1944

In May, domestic mills consumed nearly 831,000 bales of cotton, which is equivalent to an annual rate of almost 9.5 million bales. This level is slightly lower than either the corresponding rate in April or the average for the season to date. In fact it is the lowest since last October. For

the season to date (August-May), consumption totaled 8.1 million bales, 300,000 bales or 3.5 percent less than during the corresponding period last season. Should consumption continue in June and July at the same level as in May, the total for the season would be about 9.7 million bales.

Majority of Southern Cotton Mill
Workers to Received Wage Increase

An estimated 350,000 to 400,000 southern workers will receive wage increases of at least 5 cents an hour, as the result of approval by the fourth regional War Labor Board of voluntary applications for wage adjustments covering 321 southeastern textile firms. The announcement, which was made on June 10, stated that the 321 applications were those approved by the War Labor Board during May. In addition, similar requests from 100 additional textile mills were being processed by the regional War Labor Board. It is also possible that wage increases have been approved for many mills located in the territory of other regional War Labor offices.

All of the 321 textile applicants, which were scattered over Alabama, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia, requested authority to grant a 5-cent across-the-board wage increase to all production employees; 75 percent requested permission to establish a 55-cent minimum wage; and at least 50 percent requested authority to pay a 5-cent third shift differential. A number of mills also requested authority to institute a paid vacation plan, although the majority indicated they already had some vacation provision in effect. In addition, some of the mills have filed advance applications for permission to adopt the balance textile wage structure, now being evolved in negotiations between a number of textile firms and the Textile Workers Union of America (CIO) with the aid of the recently created WLB Southern Textile Commission. This balanced wage structure will involve the distribution of another maximum of 5 cents per employee to widen the tightly compressed differentials between job classifications. The Southern Textile Commission, the announcement said, was expected to issue its first decision in late June.

The volume of voluntary requests is the result of the February 20 cotton textile decision in which the National War Labor Board set an industry-wide wage pattern in a dispute case involving 23 southern mills and the Textile Workers Union of America (CIO). 1/

Many of the applications were filed before WLB regulation were changed to permit increases up to 55 cents an hour without prior approval where no price ceilings of products were involved.

Many of the 321 applications already approved are made under one firm name, but cover plants in several different locations. The applications already approved by WLB are estimated to cover 80 percent of the spindles in operations in the Southeast.

1/ See the February 1945 issue of The Cotton Situation.

Although wage increases, such as these, should make it easier for cotton mills to recruit and retain any given number of workers that they desire, the fact remains, nevertheless, that wages in cotton textile mills are among the lowest of any major industry. Consequently, the granting of this wage increase is unlikely to bring about any appreciable alleviation of the tight labor situation with which cotton mills generally have been faced during the past 2 or 3 years.

Deficient Moisture and Boll Weevil Most
Important Factors Reducing Cotton Yields

Reductions from full yield caused by various factors for the 13 old cotton-producing States are available on a comparable basis for a 36-year period -- from 1909 to 1944. Over the most recent 10 years of this period, the average reduction from full yield from all causes was 31.3 percent. In 6 of the 10 years, of 6 specified causes or groups of causes, excessive moisture accounted for the greatest reduction. The average reduction from full yield caused by boll weevil was 7.7 percent--it was the most important cause in 3 of the years, and tied with other causes in the other year. Excessive moisture ^{1/} caused a reduction from full yield of only 3.7 percent.

The third most important reason for reduction from full yield is "other climatic" which accounted for 5.3 percent. "Other insects" ranked sixth with 3.2 percent average reduction over the 10-year period, while "all other" ranked fifth with 3.4 percent.

In 1944, deficient moisture was the dominant cause for reduction from full yield, accounting for 7.5 percent out of a total from all causes of 22.2 percent. Boll weevil accounted for only 3.9 percent reduction, the lowest since 1912; other climatic, 3.9 percent; all other, 2.9 percent; other insects, 2.3 percent; and excessive moisture, 1.7 percent.

Lateness of Crop Increases Potential
Damage from Boll Weevil and Need
For Control Measures

Unfavorable weather delayed planting this spring and caused much replanting. Consequently, the 1945 cotton crop is somewhat later than normal in much of the Belt. Nevertheless, the new crop appears to have improved materially in early June. Since late-planted cotton is more likely to be damaged by boll weevil and other insects than that planted earlier, it is especially desirable that the weather be favorable this summer for holding weevils and other insects in check during the period of heavy fruiting. Of course, farmers can't make the weather; they can only prepare for

^{1/} One reason for excessive moisture accounting for a significantly smaller reduction from full yield than deficient moisture is the fact that the inundation of the area may kill the plants outright, in which case it would appear in the statistics as acreage abandoned rather than as harvested acreage; that is, if the inundation occurred prior to harvest time. Another factor may be the inter-relationship between excessive moisture and boll weevil damage which may result in the reduction attributable to boll weevil being overstated and the reduction from excessive moisture being understated.

the possibility of cool, cloudy, and damp weather conditions favorable for insect injury. This means having dusting equipment in good condition, adequate poison on hand or readily available, and keeping a close check on the degree of infestation.

Calcium arsenate is a rather bulky material and the movement of large supplies in a short period of time requires considerable transportation equipment, which in view of the existing conditions would be harder than usual to provide this year. Furthermore, calcium arsenate manufacturers, like fertilizer mixers, tend to have both limited storage space and a tight labor situation. This makes it virtually necessary, if the manufacturers are to be sure of being able to produce enough and on time, that the distributors and farmers cooperate to the extent of anticipating their needs well in advance, placing their orders as soon as possible, and accepting delivery as it becomes available.

The price of calcium arsenate in wholesale lots at New York is now about 7.75 cents per pound compared with about 7.50 cents per pound for the past 2 years. Compared with present prices of cotton, this is so cheap as to leave no doubt as to the advisability of its use under a wider range of conditions than would be the case with less favorable price relationships. Calcium arsenate can be stored from season to season without deterioration, and the investment it represents is comparatively small, particularly in relation to current cotton prices. In no sense is this intended to encourage unnecessary hoarding, but officials of the Department of Agriculture and the War Food Administration are urging farmers to anticipate their needs well in advance of the time such products are needed and accept delivery whenever the materials are available.

Given reasonable cooperation of this sort, the overall supply picture for calcium arsenate is entirely satisfactory. The only shortage which might develop would be of a local nature which can be prevented if orders are placed early.

Production data for calcium arsenate have been available only since 1941 in which year totaled about 59 million pounds. Production totaled about 77 million pounds in 1942, about 69 million in 1943 and about 44 million in 1944. Since normally from about 1/2 to 3/4 of the total production is used on cotton the responsibility for staggering their purchases so as to prevent local shortages rests with cotton producers, their distributors, and the manufacturers.

Table 1: Premiums and discounts for all qualities of American upland cotton,
1945 Cotton Loan Program

Grade	Staple Length (inches)														Longer
	13/16:	7/8:	29/32:	15/16:	31/32:	1:	1-1/32:	1-1/16:	1-3/32:	1-1/8:	1-5/32:	1-3/16:	1-7/32:	1-1/4 &	
	"pts":	"pts":	"pts":	"pts":	"pts":	"pts":	"pts":	"pts":	"pts":	"pts":	"pts":	"pts":	"pts":	"pts":	
<u>WHITE & EXTRA WHITE</u>	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Good Mid. & Better:	-225:	-90:	-30:	35:	50:	70:	95:	165:	325:	585:	765:	945:	1,045:	1,170:	
Strict Middling :	-235:	-100:	-40:	25:	40:	55:	85:	155:	305:	560:	740:	920:	1,020:	1,145:	
Middling :	-260:	-125:	-65:	Base:	15:	30:	50:	120:	225:	460:	635:	795:	895:	1,020:	
St. Low Middling :	-390:	-245:	-190:	-130:	-115:	-100:	-80:	-45:	45:	190:	335:	460:	535:	635:	
Low Middling :	-625:	-485:	-430:	-370:	-365:	-350:	-345:	-335:	-280:	-230:	-205:	-180:	-165:	-155:	
St. G. Ordinary :	-745:	-610:	-565:	-505:	-505:	-500:	-495:	-495:	-495:	-495:	-495:	-495:	-495:	-495:	
Good Ordinary :	-855:	-715:	-670:	-610:	-605:	-600:	-595:	-595:	-595:	-595:	-595:	-595:	-595:	-595:	
<u>SPOTTED</u>	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
Good Middling :	-270:	-135:	-95:	-25:	-15:	Even:	15:	40:	105:	205:	330:	430:	505:	605:	
Strict Middling :	-285:	-155:	-110:	-40:	-35:	-20:	-5:	20:	80:	180:	305:	405:	480:	580:	
Middling :	-440:	-300:	-255:	-185:	-180:	-170:	-155:	-135:	-80:	5:	80:	150:	225:	300:	
St. Low Middling :	-650:	-520:	-485:	-425:	-425:	-415:	-415:	-410:	-395:	-370:	-345:	-325:	-325:	-325:	
Low Middling :	-820:	-680:	-645:	-580:	-580:	-575:	-575:	-570:	-555:	-555:	-555:	-555:	-555:	-555:	
<u>TINGED</u>	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
Good Middling :	-485:	-350:	-315:	-255:	-250:	-240:	-240:	-235:	-215:	-175:	-140:	-100:	-65:	-30:	
Strict Middling :	-500:	-375:	-345:	-280:	-275:	-265:	-265:	-260:	-240:	-200:	-165:	-125:	-90:	-55:	
Middling :	-730:	-590:	-555:	-500:	-500:	-495:	-495:	-495:	-445:	-430:	-420:	-420:	-420:	-420:	
St. Low Middling :	-855:	-730:	-695:	-645:	-645:	-640:	-640:	-640:	-615:	-610:	-610:	-610:	-610:	-610:	
Low Middling :	-950:	-830:	-800:	-745:	-745:	-745:	-745:	-745:	-720:	-720:	-720:	-720:	-720:	-720:	
<u>YELLOW STAINED</u>	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
Good Middling :	-730:	-595:	-565:	-520:	-515:	-515:	-515:	-510:	-460:	-450:	-445:	-445:	-445:	-445:	
Strict Middling :	-750:	-620:	-590:	-540:	-540:	-540:	-540:	-535:	-485:	-475:	-470:	-470:	-470:	-470:	
Middling :	-860:	-730:	-700:	-650:	-650:	-650:	-650:	-650:	-630:	-630:	-630:	-630:	-630:	-630:	
<u>GRAY</u>	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
Good Middling :	-375:	-255:	-215:	-155:	-145:	-135:	-115:	-95:	-35:	90:	140:	215:	265:	340:	
Strict Middling :	-430:	-310:	-270:	-210:	-200:	-190:	-170:	-150:	-60:	65:	115:	190:	240:	315:	
Middling :	-550:	-425:	-390:	-330:	-325:	-315:	-304:	-300:	-225:	-185:	-160:	-135:	-110:	-85:	

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Table 2.- Cotton: Factors accounting for reduction from full yield,
13 old cotton-growing States, 1909-44 1/

Crop year	Boll weevil	Deficient moisture	Excessive moisture	Other climatic	Other insects	All other	Total
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
1909	6.1	14.9	6.0	7.7	1.8	5.5	42.0
1910	5.3	12.2	5.1	5.3	2.2	5.5	35.6
1911	1.3	9.8	2.6	3.0	6.6	2.8	26.1
1912	3.3	8.1	7.6	5.0	3.2	5.5	32.7
1913	6.7	15.2	2.0	5.9	2.2	1.7	33.7
1914	5.9	7.9	2.9	3.0	3.9	1.8	25.4
1915	9.9	6.8	5.7	6.9	2.3	5.2	36.8
1916	13.4	9.2	9.1	7.0	2.4	1.3	42.4
1917	9.3	15.1	1.7	8.8	2.9	2.1	39.9
1918	5.8	23.8	0.9	4.6	2.1	3.1	40.3
1919	13.2	2.7	15.3	3.2	5.6	1.9	41.9
1920	19.9	2.2	8.8	2.2	4.0	1.9	39.0
1921	31.0	8.6	4.3	3.1	4.5	1.4	52.9
1922	24.2	10.3	4.9	2.3	2.4	1.1	45.2
1923	19.5	7.2	8.0	2.8	7.1	0.9	45.5
1924	8.0	14.0	5.0	2.3	4.0	1.4	34.7
1925	4.1	24.6	1.4	3.0	2.2	0.7	36.0
1926	7.1	5.3	3.2	2.9	8.9	2.1	29.5
1927	18.5	6.4	4.9	2.8	4.4	1.5	38.5
1928	14.1	4.4	7.3	4.9	3.4	2.3	36.4
1929	13.3	10.8	7.2	6.0	2.5	4.0	43.8
1930	5.0	27.7	2.8	6.3	1.9	3.4	47.1
1931	8.3	8.3	2.6	3.5	1.8	3.3	27.8
1932	15.2	8.0	3.9	6.1	3.1	6.1	42.4
1933	9.1	6.8	2.6	3.7	2.2	4.2	28.6
1934	7.3	20.7	1.9	7.3	1.6	3.8	42.6
1935	8.1	9.2	3.7	6.5	5.0	4.3	36.8
1936	4.9	16.2	1.9	8.4	3.0	4.1	38.5
1937	5.3	5.7	1.5	4.1	3.0	3.5	23.1
1938	9.9	6.8	3.3	4.0	4.2	4.0	32.2
1939	8.7	10.1	4.2	5.9	2.2	3.1	34.2
1940	6.5	5.5	6.5	6.5	1.9	3.7	30.6
1941	15.4	3.3	8.6	3.8	4.8	2.7	38.6
1942	8.0	3.6	3.5	4.0	4.0	2.9	26.0
1943	6.1	12.5	1.7	5.9	2.0	2.8	31.0
1944	3.9	7.5	1.7	3.9	2.3	2.9	22.2

1/ Includes Ala., Ark., Ga., Fla., La., Miss., Mo., N. C., Okla., S.C., Tenn.,
., and Va. Data for cover page chart, Neg. 29270.
Compiled from reports of the Crop Reporting Board.