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**CHAPTER VI**  
**CROPS**  
**FIELD CROPS, FRUITS, AND VEGETABLES**

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## CHAPTER VI.—CROPS—FIELD CROPS, FRUITS, AND VEGETABLES

**Introduction.**—Statistics for crops harvested in 1934 on farms in the continental United States are presented in this chapter as totals for the United States, geographic divisions, and States. Included are data for farms reporting, acreage, production, and value. Comparative figures, where available, are given by divisions and States for crops grown in 1929. Figures for all earlier census years, beginning with the first agricultural census in 1840, are presented in the United States summary tables, and for a few selected crops such data are presented by divisions and States.

The statistics presented are the result of compilations from the schedules secured for the individual farms in a personal canvass by census enumerators. The 1935 farm schedule included 47 questions relating to field crops, fruits, and vegetables, and 1 to forest products. In addition to the principal crops specified on the schedule, one question was included for "all other crops not listed on schedule." Under this question was to be entered the acreage of all crops not specifically included under the other questions either as to kind of crop or method of harvesting.

**Farms reporting.**—The term "farms reporting" indicates the farms for which a specified crop was reported and for all practical purposes is equivalent to the number of farms having such crop.

**Acreage.**—The number of acres harvested for the calendar year 1934 was secured for each specified crop, or group of crops, listed on the schedule except orchard fruits, nuts, grapes, and farm garden vegetables for home use. The aggregate acreage in fruit orchards, vineyards, and planted nut trees was secured as of January 1, 1935. Except for the acreage of fruit orchards, vineyards, planted nut trees, and strawberries, the acreage of crops represents only that harvested, which is often less than the acreage planted. Statistics for acreage of crop failure are presented in chapter I of this volume. If a crop were harvested, even though the yield was very low, the land from which the crop was actually harvested was included in the acreage reported for that crop. A crop hogged off or grazed was not considered as crop failure, but was to be reported as a harvested crop.

Unless the wording of the inquiry on the schedule was such as to include a crop hogged or grazed off, the acreage of such crop was entered under "all other crops not listed on schedule." For example, wheat hogged off was entered under "all other crops" and not under wheat threshed, but corn hogged off was entered under "corn for all purposes." Where two or more crops were harvested in 1934 from the same acreage, the acreage of the individual crops was reported separately. Thus, in some areas a total of the acreage of

individual crops may greatly exceed the acreage designated as "crop land harvested." Some examples of such duplications include grass seeds reported under "all other crops" harvested from the same land from which a hay crop was cut, two or more vegetables grown in succession, corn following potatoes, an annual legume or a hay crop following a small grain, various field crops and vegetables grown between the trees in an orchard, and a hay crop saved from a crop harvested primarily for some other purpose such as pea-vine hay saved where peas were harvested for canning.

Fractional acreages of tobacco, cotton, sugarcane, sugar beets, fruit orchards, vineyards, planted nut trees, strawberries, and the various vegetables were to be reported in eighths. The other crops were usually reported in whole acres. When reported in fractional acreages, the entries for these other crops were rounded to whole numbers, except when fractions of one-half or less standing alone appeared frequently, the fractions were accumulated.

**Production.**—The 1935 schedule called for the quantity of the principal field crops and fruits harvested in 1934. No production figures were secured for corn harvested other than for grain, for oats cut and fed unthreshed, for "all other crops", or for vegetables other than Irish potatoes or sweetpotatoes. Where production items were reported in fractions, the fractions were rounded to whole numbers, except bales of cotton which were to be reported in eighths.

**Value.**—The value of farm garden vegetables, except Irish potatoes and sweetpotatoes grown in 1934 for home use only, and the value of all forest products (of the farm) sold in 1934 were secured for the individual farms by the enumerators. The other values shown were obtained by multiplying the number of units of crops harvested in 1934 in each State by the average unit value for the State. The unit values were calculated, cooperatively, by the Bureau of the Census of the Department of Commerce, and the Bureau of Agricultural Economics of the Department of Agriculture. These unit values were based upon the average prices received by farmers, as reported by the regular price correspondents of the Bureau of Agricultural Economics.

**Appraisal of statistics.**—The statistics for 1934 were tabulated by minor civil divisions such as townships, beats, wards, militia districts, etc. This method of tabulation made possible an appraisal of the work of each enumerator to an extent not possible heretofore. Thus, detection and correction of errors resulting from a misunderstanding of the schedule were greatly facilitated. This was particularly true in regard to reports under wrong inquiries or reports of production in units other than specified on the schedule.

Undetected misplaced entries probably affected the results to some extent, particularly in areas where a crop listed on the schedule was of minor importance. Where evident, all such misplaced entries were corrected and it is believed the uncorrected errors resulting from the above and other causes *do not affect* the totals to any appreciable extent.

For the minor crops not specified on the schedule, the acreage of which was to be entered under "All other crops", the reports are probably much less complete than for the listed crops, except possibly where minor crops were of local importance.

**Crop statistics for 1934 affected by unusual conditions.**—The severe drought of 1934 seriously affected the acreage and production of crops, and many acres of crops failed completely. Emergency feed crops were grown to supplement the short crops. Large acreages of land from which hay would have been cut under normal conditions were used only for pasture. Considerable acreages of thistles, weeds, and other vegetation not ordinarily used for hay were cut for forage in some areas. Large acreages of crops were harvested in a form, or for a purpose, other than that for which they were intended at planting time. For example, many acres of corn intended for harvest as grain were grazed, used for silage, hogged off, or used only as fodder. Likewise, many acres of small grains intended for harvest as grain were cut for hay or grazed. Insufficient moisture at planting time resulted in a considerable acreage being left idle which otherwise would have been cropped. This was probably most pronounced in the case of wheat in the Great Plains. In much of this area insufficient moisture in 1933 precluded the planting of wheat for harvest in 1934 and if not planted to another crop, such land remained idle in 1934.

Economic conditions also materially affected crop statistics for 1934. Unemployment had forced many families to return to the land. Some of these produced agricultural products only for home consumption, while others engaged in commercial agriculture. Low farm prices and relatively high prices of other commodities encouraged the raising of crops to be used on the farm. The various agricultural programs also influenced the acreage used for many crops.

**Comparability of previous statistics.**—The comparability of the statistics for 1934 with those for previous censuses is affected by the wording of the specific inquiries, the inclusion or exclusion on the schedule of related items, the number of questions included, their relative position, the date of enumeration, and many other factors. Reference notes or comments in the text under the individual crops call attention to the more important differences resulting from changes in the schedule.

When comparing the statistics for 1934 with those for other years it is also necessary to take into account the unusual conditions existing in 1934. The data are

influenced to a much greater extent by the severe drought in 1934 than by general trends.

**Summary for all crops.**—In table 1 are assembled all crop data for 1934 as completely as possible with approximately comparable totals for 1929.

In considering the total acreage of crops shown in table 1 and in comparing the acreages of the specified crops, the principal points which must be noted are as follows:

Italics are used to designate crops which are duplicated and interplanted companion crops which should not be included in the acreage total. Thus, acreage figures for annual legumes saved for hay are italicized in table 1 as practically all the acreage is duplicated under the specified annual legumes. The acreage of annual legumes saved for hay is included in the total hay figure but omitted from the total acreage of crops. The acreage of annual legumes grown with other crops duplicates the acreage of the companion crops. Note that production and value figures are not duplicated even though the acreage may be duplicated. Some other instances occur where two or more crops were harvested from the same land, but it is not possible to segregate such duplications. Where two or more crops were grown in succession, the acreage is rightly included for each of the crops in securing a total acreage of crops. If, however, two or more crops were grown in a mixture, or interplanted, the acreage should not be duplicated in the total. For a further discussion of two or more crops harvested from the same acreage, see text discussion under "Acreage."

Attention is directed to the important distinction between the total acres of "crops harvested" and the "land from which crops were harvested." The total acres of "crops harvested" may exceed somewhat the "land from which crops were harvested" due to two or more crops being harvested from the same land in the same calendar year. Thus, for 1 acre of "land from which crops were harvested" there may be 2 or more acres of "harvested crops."

For 1934 the acreage of velvetbeans, vetches, Canada and other ripe field peas harvested for beans, peas, seed, or hay, or grazed was secured under one inquiry. Separate inquiries were included for velvetbeans and for Canada and other ripe field peas for 1929. No separate inquiry related to vetches. For these reasons, no closely comparable data for 1929 are available.

The acreage shown for 1934 under "all other crops" and that shown for 1929 under "other miscellaneous crops" are similar as to the crops included, except that velvetbeans, Canada and other ripe field peas, and vetches are included in the figure for 1929 but are not included in the 1934 figure. The two figures, however, are not otherwise strictly comparable. The 1934 figure is the total of the entries reported under "all other crops not listed on the schedule", which *catch-all* question was necessary with a restricted schedule. The 1929 figure represents a total of the crops in 1929 for which data are not shown elsewhere in the table. For many of these crops specific inquiries were included on the 1930 schedule. Insofar as the completeness of the returns may be influenced by the inclusion of specific questions on the schedule, the returns secured for 1934 might be expected to be somewhat less complete than those for 1929. In the 1930 Census, when a smaller number of crops were included under "other field crops", the enumerator specified them by name. This difference may have resulted in a tendency for the 1934 data to contain some acreage not included in the 1929 data.

The acreage of "all other vegetables" as shown for 1934 was reported under this inquiry on the 1935 farm schedule. The corresponding figure shown for 1929 is a total of the reports for vegetables other than those listed, for many of which specific inquiries were on the 1930 schedule.

For 1929 crimson clover was included with sweetclover and Lespedeza, while for 1934 it was included with timothy and clover. As the acreage of crimson clover is relatively small for the United States as a whole, the comparability of the figures is probably not influenced to any appreciable extent.

The figures for the other crops shown in table 1 probably do not differ to any material extent for the 2 years insofar as the composition of the data is concerned. A further discussion of the comparability of the data for the various crops for the various census years is given in the text under each crop.

**Changes in the acreage of crops.**—The total acreage of harvested crops was 298,642,348 acres in 1934, or 17.5 percent less than the 361,944,557 acres of crops

TABLE 1.—FARMS REPORTING, ACREAGE HARVESTED, PRODUCTION, AND VALUE OF CROPS IN THE UNITED STATES: 1934 AND 1929

[Figures in italics are not included in totals. Leaders indicate that data are not available. The total crop land harvested is less than the total acreage of crops due to instances of 2 or more crops harvested in the calendar year from the same land. See text discussion. Figures for divisions and States are shown in tables 6 to 64]

ITEM	FARMS REPORTING		ACREAGE		PRODUCTION			VALUE	
	1934	1929	1934	1929	Unit	1934	1929	1934	1929
Crop land harvested.....	6,369,188	5,961,692	295,624,176	359,242,091					
All crops.....			298,642,348	361,944,557					\$8,077,812,320
All crops for which 1934 values are shown.....								\$4,479,015,137	7,221,317,373
Cereals:									
Corn (all purposes).....	4,849,724	4,597,949	87,476,444	97,740,740					
Corn for grain.....	4,055,986	4,148,791	62,247,152	83,161,523	Bu.....	1,169,437,531	2,130,751,782	962,548,584	1,635,909,664
Wheat threshed.....	1,363,741	1,208,368	41,943,387	61,999,908	Bu.....	513,212,870	800,648,955	440,603,053	838,506,124
Winter wheat.....	1,150,863	940,721	34,062,385	40,430,355	Bu.....	431,078,583	569,703,588	369,477,561	601,979,365
Spring wheat (including durum).....	227,130		7,881,002	21,569,553	Bu.....	82,134,287	230,945,367	71,125,492	236,526,759
Oats threshed.....	1,234,231	1,518,893	24,588,766	33,466,025	Bu.....	458,779,570	992,746,912	215,906,935	410,167,331
Oats cut and fed unthreshed.....	544,626	454,975	4,032,010	3,059,939					
Barley threshed.....	344,626	542,710	6,193,095	12,890,772	Bu.....	110,041,546	263,589,965	74,071,360	140,982,106
Rye threshed.....	180,573	175,184	1,913,771	3,032,802	Bu.....	16,233,692	34,302,824	11,781,882	29,343,112
Rice (rough or paddy) threshed.....	14,234	8,945	705,858	740,588	Bu.....	32,957,745	33,468,983	25,530,155	32,932,931
Mixed grains threshed.....	79,061	130,232	1,272,493	2,438,078	Bu.....	25,431,967	70,830,831	16,269,031	39,461,360
Grain sorghums (for grain).....	159,897	167,723	2,370,191	3,521,993	Bu.....	18,598,785	49,080,233	17,360,241	32,640,336
Annual legumes: <sup>1</sup>									
Peanuts.....									
grown alone.....	576,985	326,253	2,016,291	1,558,865	Bu.....	44,259,977	36,587,996	38,592,738	28,433,245
<i>grown with other crops</i> .....			<i>1,225,231</i>	<i>837,839</i>	Bu.....				
Soybeans.....									
grown alone.....	694,830	302,842	5,692,236	1,961,549	Bu.....	23,014,703	8,661,188	23,210,120	14,446,066
<i>grown with other crops</i> .....			<i>885,243</i>	<i>949,430</i>	Bu.....				
Cowpeas.....									
grown alone.....	838,761	273,923	2,711,469	775,546	Bu.....	6,161,734	3,273,813	9,103,198	7,365,563
<i>grown with other crops</i> .....			<i>2,490,776</i>	<i>717,682</i>	Bu.....				
Velvetbeans, vetches, Canada and other ripe field peas (except cowpeas).....	211,294	(?)	651,768	(?)	Bu.....	10,253,723	(?)		?)
<i>grown with other crops</i> .....			<i>2,098,204</i>	<i>(?)</i>	Bu.....				
Navy, pinto, kidney, lima, and other ripe field beans (except soybeans and velvetbeans).....	139,753	128,561	1,488,376	1,746,262	Bu.....	18,696,615	20,353,579	39,418,609	77,097,864
<i>grown with other crops</i> .....			<i>15,294</i>	<i>180,393</i>	Bu.....				
Hay and sorghums for forage.....			76,533,779	72,183,818	Tons.....	69,537,244	91,680,149	935,495,126	1,043,179,855
Alfalfa hay.....	877,453	806,429	11,669,135	11,515,811	Tons.....	18,742,098	23,493,505	268,298,614	317,043,137
Timothy and clover hays.....	1,247,079		19,978,691	29,749,886	Tons.....	16,346,092	37,707,558	248,452,709	421,711,053
Sweetclover and Lespedeza hays.....	259,494	123,682	2,564,667	1,410,198	Tons.....	2,306,944	1,612,441	28,900,324	17,134,094
Annual legumes saved for hay <sup>4</sup> .....	1,222,266	434,472	9,500,346	5,067,710	Tons.....	7,970,423	2,935,402	114,380,565	45,464,629
Small grains cut for hay.....	516,228	249,674	6,980,258	3,204,965	Tons.....	4,920,725	3,433,253	52,322,272	46,674,267
All other tame and wild grasses cut for hay.....	994,619		17,930,813	18,879,329	Tons.....	11,798,065	16,098,605	149,709,794	140,409,695
Sorghums for forage (silage, hay, and fodder).....	743,174	421,712	7,909,269	4,355,919	Tons.....	7,452,897	6,399,385	73,430,848	54,742,980
Miscellaneous crops:									
Tobacco.....	422,166	432,975	1,237,117	1,888,365	Lb.....	1,021,448,870	1,456,510,003	216,671,975	265,886,604
Cotton (excluding cotton seed).....	1,920,123	1,986,726	26,753,697	43,227,488	Bales <sup>5</sup> .....	9,472,022	14,574,405	601,799,399	1,248,662,756
Sugarcane.....	248,441	203,140	413,937	302,259	Tons.....	4,839,008		19,190,475	23,332,508
Sugar beets.....	46,823	35,155	747,135	643,797	Tons.....	7,318,589	7,134,987	37,105,214	51,036,671
Flax threshed.....	46,998	87,002	998,031	2,965,635	Bu.....	5,598,054	15,046,097	9,531,145	43,104,631
Strawberries.....	198,977	358,104	226,996	242,829	Qt.....	253,719,183	330,872,326	22,717,391	43,167,174
All other crops <sup>6</sup> .....	829,204		3,633,061						
Other miscellaneous crops <sup>7</sup> .....				6,133,279					560,531,574
Land in fruit orchards, vineyards, and planted nut trees <sup>8</sup> .....	2,041,318	1,875,602	6,220,679	6,086,176					
Fruits:									
Apples.....	2,358,781	2,297,099			Bu.....	124,236,768	126,433,057	113,281,865	158,947,200
Cherries.....	1,096,217	867,944			Bu.....	5,442,115	4,067,041	9,778,576	17,003,841
Peaches.....	1,480,569	1,481,242			Bu.....	44,747,813	42,827,017	36,340,077	54,899,650
Pears.....	1,225,152	1,079,368			Bu.....	25,629,249	18,500,447	18,743,511	30,196,329
Plums and prunes.....	921,900	901,462			Bu.....	23,206,579	20,038,147	19,852,955	18,645,942
Grapes.....	1,114,233	953,447			Lb.....	3,730,285,954	3,883,897,110	38,115,350	56,168,987
Oranges.....	65,706	46,558			Boxes <sup>9</sup> .....	70,482,013	53,731,352	113,737,997	148,472,871
Grapefruit.....	28,150	20,598			Boxes <sup>9</sup> .....	19,495,340	8,722,429	19,693,166	22,731,632
Specified vegetables.....									
Irish potatoes (all varieties).....	3,102,231	2,982,677	8,322,707	6,405,644	Bu.....	403,419,580	322,415,914	192,468,946	414,833,638
Sweetpotatoes and yams.....	1,750,266	1,126,423	3,582,344	2,944,082	Bu.....	77,982,661	65,193,091	63,066,959	67,724,969
Vegetables harvested for sale (other than Irish or sweet potatoes).....									
Beans (snap or string).....	186,178	627,452	3,773,682	2,811,715					295,963,373
Cabbages.....	144,735	176,396	307,061	221,127					20,903,908
Corn (sweet).....	193,153	136,454	262,059	178,657					20,938,790
Tomatoes.....	265,741	155,740	549,519	433,053					21,928,856
Watermelons.....	199,367	234,328	631,886	454,696					53,247,599
All other vegetables <sup>10</sup> .....	482,297	109,123	417,353	290,879					14,190,256
Farm garden vegetables for home use (other than Irish or sweet potatoes).....	4,681,736	4,360,652	1,605,804	1,183,303					164,753,964

<sup>1</sup> Farms reporting and acreage figures are for annual legumes harvested for nuts, peas, beans, seed or hay, or grazed; production and value are for annual legumes harvested for nuts, peas, beans, or seed. Acreages of annual legumes grown with other crops are not included in total acreage of all crops. For farms reporting peanuts, soybeans, and cowpeas grown alone and for those reporting these annual legumes grown with other crops, see division and State tables for each respective annual legume.

<sup>2</sup> Available data for 1929 are not comparable with those for 1934 and, except for acreage grown with other crops, are included under "Other miscellaneous crops." For 1929 velvetbeans and Canada and other ripe field peas were reported separately and specific reports for vetch were limited to vetch seed written in under "Other field crops." For available data for 1929, see division and State table for velvetbeans, vetches, and Canada and other ripe field peas.

<sup>3</sup> In 1929 crimson clover was included with sweetclover and Lespedeza.

<sup>4</sup> Acreage of annual legumes saved for hay is included under the total for hay and sorghums for forage but not in the total acreage of all crops because of duplicated acreage under the separate annual legumes.

<sup>5</sup> Running square bales. Round bales counted as half bales.

<sup>6</sup> Reported on the 1934 farm schedule under the inquiry "All other crops."

<sup>7</sup> Crops reported for 1929, except nurseries and greenhouses, not included elsewhere in this table. Many of these crops had specific inquiries on the 1930 schedule.

<sup>8</sup> Figures do not include either farms or acreage where only a few trees or vines were reported without an acreage.

<sup>9</sup> Field boxes in 1934. Boxes, kind not specified for other years.

<sup>10</sup> Reported on the 1935 farm schedule under "All other vegetables." Figures for 1929 are a total of the reports for vegetables other than those listed, many of which had specific inquiries on the 1930 schedule.



harvested in 1929. In general, there was a net gain east of the Mississippi River and in the Pacific Coast States, with large decreases in the western Corn Belt, the Great Plains, and the Mountain States. These latter were the areas affected most severely by the drought of 1934. Largely on account of the drought, all crops failed on 63,681,777 acres in the United States in 1934, or on 17.7 percent of the 359,305,953 acres of land used for crops. Idle or fallow crop land was 14,741,762 acres more in 1934 than in 1929 with almost the entire increase in the drought areas. In South Dakota 83.3 percent of the farms reported some crop failure. Based on county figures, all crops were a complete failure on at least 24 percent of all farms in the State. Also for each acre of crops harvested, in South Dakota, there were approximately 2 acres from which no crops were harvested on account of failure and more than one-half acre of crop land left lying idle or in fallow. The acreage of crop land lying idle or fallow in South Dakota was nearly five times as great in 1934 as in 1929. Figures for crop failure and crop land lying idle or fallow are given in chapter I of this volume.

Although obscured somewhat by the effects of the drought in 1934, several significant changes are evident in the acreages used for the several crops in 1934 as compared with 1929. Particularly noteworthy is the increase in the acreage of annual legumes and of hay, and a tendency to replace a part of the acreage of the cash crops with crops for use on the farm. Also of significance is an increased acreage of vegetables for commercial use.

The total acreage of corn harvested for grain in 1934 was 20,914,371 acres less than in 1929, wheat acreage was smaller by 20,056,521, cotton by 16,473,791, and tobacco by 651,248 acres. However, both corn and wheat increased somewhat outside of the principal commercial areas. One of the major changes in agriculture in the United States in the 5-year period was a gain of 6,124,036 acres, or 142.6 percent, in soybeans, cowpeas, and peanuts grown alone, accompanied by a gain of 2,044,302 acres in these annual legumes planted with other crops. Phenomenal increases between 1929 and 1934 were indicated in the acreages planted to soybeans and cowpeas, and a substantial increase was reported for peanuts. The exact increase in the combined acreage of velvetbeans, vetches, and Canada and other ripe field peas cannot be determined, as no specific inquiry for vetches was included on the 1930 schedule. In the drought year of 1934, annual legumes were used widely as "catch" or late season crops after other crops had failed.

The expansion of the acreage of hay, including sorghums for forage, in the Southern States amounted to 5,265,845 acres and exceeded the increase of 4,349,961 acres in the Nation as a whole. Some increases in other States, particularly east of the Mississippi River, were

offset by decreases in the areas most seriously affected by the drought.

Reports for both Irish potatoes and sweetpotatoes in the noncommercial areas indicate the general tendency for a more self-sufficing agriculture. Except where obscured by the effects of the drought, increased acreage of crops for home use was rather general, although somewhat more pronounced in the eastern Cotton Belt than in most other areas. Here, corn, wheat, and hay acreages showed substantial increases.

The increase of 34 percent in the acreage of vegetables for sale, other than Irish potatoes and sweetpotatoes, between 1929 and 1934, indicates a change in the dietary habits of the American people. In 1934, vegetables for sale, other than Irish potatoes and sweetpotatoes, were harvested from 3,773,682 acres as compared with 2,811,715 acres in 1929.

**Changes in production of crops.**—Owing to the wide fluctuations due to seasonal variations, droughts, floods, etc., production offers a less valuable basis of comparison than acreage. The production of most of the important crops was much lower in 1934 than in 1929, largely on account of the severe drought. With fewer acres harvested and with lower yields per acre, the production of wheat in 1934 was only slightly more than five-eighths (64.1 percent) of the production in 1929, and for each of the other cereals, with the exception of rice, the production was only about one-half or less. Wheat production was 513,212,870 bushels in 1934, as compared with 800,648,955 bushels in 1929; corn for grain 1,169,437,531 bushels, as compared with 2,130,751,782 bushels; and oats threshed 458,779,570 bushels, as compared with 992,746,912 bushels. The production of rice, an irrigated crop, was 32,957,745 bushels in 1934, or a reduction of only 1.5 percent from the 33,468,983 bushels harvested in 1929.

Cotton production amounted to only 9,472,022 bales in 1934, or 35.0 percent less than the 14,574,405 bales harvested in 1929. Tobacco production in 1934 was 1,021,448,870 pounds, or a decrease of 29.9 percent from the 1,456,510,003 pounds reported in 1929. Although hay acreage was somewhat greater, the production was less with 69,537,244 tons of hay and sorghums for forage in 1934 as compared with 91,680,149 tons in 1929.

The production of annual legumes shows large increases, except for navy, kidney, lima and other ripe field beans, largely on account of phenomenal increases in acreage. The quantity of soybeans harvested in 1934 was nearly treble (265.7 percent), and cowpeas nearly twice (188.2 percent), the quantity harvested in 1929. The production of both Irish potatoes and sweetpotatoes increased somewhat along with the increased acreage.

**Changes in value of crops.**—Values are of particular importance in that they permit comparisons of dissimilar items on a common basis. For example, the relative importance of tobacco and wheat cannot be



satisfactorily compared on an acreage basis, as one represents an intensive and the other a rather extensive use of land. Value is the only common unit which measures their relative importance, but values are not satisfactory as a measure for comparing changes between census years unless changes in price level are taken into account.

A total value of crops is not shown for 1934 as production data were not secured for a number of items. The total value shown for 1929 lacks completeness in that no production or value figures were secured for "corn cut for fodder", "corn hogged or grazed off", or "oats cut and fed unthreshed."

A comparison of the 1934 and 1929 values for the various crops reveals the tremendous decrease in the 1934 values as compared with those for 1929. That a part of the decrease resulted from reduced acreages and yields is evident from the statistics for those two items. Drastic declines in prices have further reduced the value of crops. The unit values of crops in 1934 were, approximately, one-fourth below those for 1929. The total value of crops in 1934 for which values are shown in table 1 was \$4,479,015,137, or 38.0 percent less than the value of the same crops in 1929. In 1929 the value of these crops represented 89.4 percent of the value of all crops.

**Individual crops.**—Summary data for individual crops harvested in 1934 are presented for the United States in tables 2, 3, and 4 and by divisions and States in tables 5 to 65. In the summary tables, figures are given for each census year for which comparative data are available. In the tables for the individual crops, which present the statistics by divisions and States, comparative data are given for 1929. Historical tables by divisions and States are presented for a few selected crops.

In presenting the statistics, certain derived figures are shown to facilitate analysis of the data. Percentages and averages reduce the figures to a common basis and for many purposes are much more convenient to use than the basic data. In the United States summary tables it was desired that the relative importance of the various crops, insofar as their acreage is concerned, be shown for all census years for which acreages of individual crops were available. For 1934, 1929, and 1924 the relative importance of the various crops is shown by percent of crop land harvested represented by each crop. Since in some instances two or more crops were harvested from the same land, the total of these percentages may exceed 100 percent. As figures for crop land harvested were first secured for 1924, the percentages prior to that year are based on the total acreage of crops harvested for which figures are available. These totals are shown in table 1 of chapter I. The acreages of the principal crops included in these totals are given in tables 2 and 4 of this chapter.

The ranks of the divisions and States in the acreage, production, and value of the various crops are given in table 66 at the end of the chapter.

**Corn.**—The 1935 farm schedule contained two inquiries relative to corn harvested in 1934. One called for the total acreage of corn for all purposes and the other for the acreage and quantity harvested for grain. The acreage of corn for all other purposes (silage, fodder, grazing, or hogging off) was secured by subtracting the acreage of corn for grain from the acreage of corn for all purposes. The 1930 and 1925 farm schedules contained five inquiries relative to corn harvested in 1929 and 1924, respectively. These five questions called for, (1) the acreage of corn for all purposes, (2) the acreage and production of corn for grain, (3) the acreage of corn hogged or grazed off, (4) the acreage and tonnage of corn cut for silage, and (5) the acreage of corn cut for fodder. For years prior to 1925, the several inquiries on corn were not grouped together on the farm schedule; also, fewer inquiries were made concerning corn used for various purposes. This may have resulted in the enumerator reporting, in some instances, the total acreage of corn for all purposes as corn harvested for grain. In 1919, where corn was interplanted with other crops, the acreage was allotted to each crop, thus theoretically securing a smaller acreage of corn than an acreage obtained upon the present basis. The comparability of the 1934 statistics with those for 1929 may have been affected somewhat by limiting the questions to the total and one subgroup in 1934 instead of the total and subgroups which added to the total as in 1929.

The acreage of corn harvested for all purposes in the United States in 1934 was 87,476,444 acres, or 10.5 percent less than the 97,740,740 acres harvested in 1929. Decreases in the Corn Belt States amounted to much more than the reduction in the United States as a whole. In 26 States the acreage of corn was larger in 1934 than in 1929. A much more drastic reduction occurred in corn for grain than in corn harvested for all purposes. Because of the drought in 1934, large acreages of corn usually harvested for grain were cut for fodder, grazed or hogged off, or used for silage.

Farms reporting corn for all purposes, classified by number of acres harvested, are shown in table 7. Assuming that the average acreage for each frequency group is the same as the midpoint of the group, then about 21 percent of the farms had about 55 percent of the total corn acreage and 40 percent of the farms had 75 percent of the acreage. In 37 States, more than half the farms had less than 15 acres of corn each.

**Wheat.**—In 1935, 1925, and 1910 the farm schedules each contained two inquiries relating to wheat. One called for the acreage and production of winter wheat and the other for the acreage and production of spring wheat. In addition to winter wheat, the 1930 and the 1910 farm schedules called for separate reports of durum, or macaroni wheat, and spring wheat other than durum. Prior to 1910 there were no separate inquiries for winter and spring wheat. Where flax and wheat were grown together in 1934 the enumerators were instructed to report one-half the acreage under each crop.











The total acreage of wheat threshed in 1934 was 41,943,387 acres, or a reduction of 32.3 percent from the 61,999,908 acres threshed in 1929. Of this decrease, 95.1 percent occurred in six States, namely, North Dakota, Kansas, South Dakota, Montana, Nebraska, and Oklahoma. Drought played an important role in bringing about the reductions in all these States. The acreage of small grains for hay in these, and in other States affected by the drought, increased, indicating that a considerable acreage of wheat intended for grain was cut for hay. The acreage of wheat harvested in 1934 was larger than in 1929 in 21 States, of which all but 2 were east of the Mississippi River or bordered on it. The total number of farms harvesting wheat was greater in 1934 than in 1929, with the largest increases in the States south of the Ohio and Potomac Rivers, and east of the Mississippi.

**Oats.**—Two inquiries relating to oats were contained in the farm schedules for 1935, 1930, and 1925. One of these inquiries called for the acreage and production of oats cut for grain and threshed, and the other for the acreage of oats cut for grain when ripe or nearly ripe and fed unthreshed. The enumerators were instructed to report oats cut for hay under the inquiry relating to small grains cut for hay. Probably no uniform distinction was made by enumerators between oats cut for grain and fed unthreshed and oats cut for hay. Prior to 1925, the general farm schedules contained only one specific inquiry on oats, which called for the acreage and production of oats.

The combined acreage of oats threshed and oats cut when ripe or nearly ripe and fed unthreshed was 7,905,188 acres less in 1934 than in 1929. This represented a reduction of 21.6 percent. Oats are grown to a much greater extent in the northern Corn Belt than in other parts of the country. The unprecedented drought of 1934, which seriously affected much of this area, resulted in a drastic curtailment of the oat crop. Considerable acreages of oats completely failed, and large acreages intended for harvest as grain were cut and fed unthreshed, cut for hay, or pastured. The acreage cut and fed unthreshed was 31.8 percent greater in 1934 than in 1929.

**Barley.**—The 1935 farm schedule called for the acreage and production of barley cut for grain and threshed. The inquiries for other census years were practically the same. The acreage of barley in 1934 was less than one-half the acreage in 1929. The decreased acreage was greatest in the area seriously affected by the 1934 drought, where the acreage had increased at a phenomenal rate between 1924 and 1929.

**Rye.**—The 1935 farm schedule called for the acreage and production of rye cut for grain and threshed. In the other census years the inquiries relating to rye were practically the same. The acreage of rye harvested was 36.9 percent less in 1934 than in 1929, with practically the entire decrease in the areas most affected by the drought. Twenty-eight States reported

increased acreages, with Indiana reporting an increase of 39,767 acres, and Ohio, Illinois, Wisconsin, and North Carolina, each reporting an increase of more than 20,000 acres.

**Rice.**—The inquiry on the 1935 farm schedule relating to rice was for the acreage and production of rice (rough or paddy) cut for grain and threshed. The inquiries for other census years were practically the same, except that on the schedules prior to that for 1910 the inquiry was for pounds instead of bushels. Practically all the rice grown in 1934 was in Louisiana, Arkansas, Texas, and California. Rice production in other States is of little importance at the present time. Until 1869 the Carolinas and Georgia produced, approximately, 95 percent or more of the rice grown in the United States. By 1929 the production in these States had practically disappeared, representing less than one-fifth of 1 percent of the United States production. The acreage of rice in Louisiana and Arkansas decreased somewhat between 1929 and 1934, resulting in a reduction of 4.7 percent for the country as a whole. Over 5,000 more farmers reported rice in 1934 than in 1929, with most of the increase outside of the commercial-producing States.

**Mixed grains.**—The 1920 farm schedule was the first to contain an inquiry relating to mixed grains. This inquiry was omitted on the 1925 farm schedule but was included on the 1930 and the 1935 schedules. On the 1935 schedule the inquiry was as follows: "Mixed grains, other than flax and wheat mixture, cut for grain and threshed." In 1930 the inquiry read: "Other mixed grains not separated in harvesting (wheat and oats, oats and barley, etc.)." Both the 1935 and 1930 schedules bore the notation, "where flax and wheat were grown together, report one-half the acreage under each crop." In 1920 the inquiry was: "Mixed crops not separated in harvesting (oats and barley, oats and peas, etc.)", and the schedule contained no notation regarding the handling of wheat and flax grown together. For the years when this inquiry was omitted from the schedule the acreage and production were probably allocated and reported under the crops included in the mixture, reported under one of them, or possibly omitted entirely.

Mixed grains were harvested from 1,272,493 acres in 1934, a decrease of 47.8 percent from the 2,438,078 acres harvested in 1929. Most of this decrease occurred in the North Central States. Minnesota and Wisconsin were the leading States in the production of mixed grains, with 55.9 percent of the United States acreage in 1934.

**Sorghums.**—The 1935 farm schedule contained two inquiries relating to sorghums. One called for grain sorghums (kafir, milo maize, feterita, hegari, and "Egyptian corn") harvested for grain, either threshed or fed in the head after cutting from stalk. The other called for sweet and grain sorghums cut for silage, hay, or fodder (heads not cut off or threshed). Sweet sorghums for sirup were to be reported under "all other crops."

The inquiries for grain sorghums on the 1930 and 1925 farm schedules were similar to the inquiry on the 1935 schedule. On the 1920 farm schedule the inquiry was for "kafir, milo, feterita, and durra"; in 1910 it was "kafir corn and milo maize"; and in 1900, "kafir corn." No reports for grain sorghums were secured prior to the 1900 census. Sorghum seed, amounting to 106,963 acres and 1,567,716 bushels valued at \$2,303,250 reported for 9,341 farms in 1919 and to 72,497 acres and 833,707 bushels valued at \$544,322 reported for 3,584 farms in 1909, is not included in the totals for grain sorghums. Sorghum seed was not listed on the schedule for these years, and the reports are limited to those specified by the enumerators on the schedules. In 1930 and in 1925 the inquiries relating to sorghums for forage were practically the same as the inquiry in 1935. In 1920 one inquiry was for "kafir, milo, durra, sweet sorghum, and sugarcane cut for forage or fodder", with a separate inquiry for "crops cut for silage." Prior to the 1920 Census, sorghums for forage were included under the general inquiry for forage.

The acreage of sorghums harvested for grain and forage was 30.5 percent greater in 1934 than in 1929, a 32.7 percent decrease in the acreage harvested for grain being more than offset by an increase of 81.6 percent in the acreage for silage, hay, or fodder. Most of the reduction in acreage harvested for grain occurred in Texas, Kansas, Oklahoma, and New Mexico. In 1934 the total acreage of sorghums for grain or forage was 10,279,460 acres, of which 23.1 percent was harvested for grain and 76.9 percent as forage. Texas and Oklahoma were the leading States, their combined acreage representing well over half of the United States total. The planting of sorghums as emergency forage crops in the drought-stricken States accounts for a large part of the expansion in acreage. Although sorghums are primarily of importance in the Great Plains where the rainfall is scant, their importance in other sections is increasing.

**Annual legumes.**—The 1935 farm schedule called for five classes of annual legumes as follows: (1) Peanuts, (2) soybeans, (3) cowpeas, (4) velvetbeans, vetches, Canada and other ripe field peas, and (5) navy, pinto, kidney, lima, and other ripe field beans. The acreage includes that from which nuts, peas, beans, etc., were harvested, that from which hay was cut, and that which was hogged or grazed off. The acreage harvested does not include the acreage which was plowed under or used only as a soil-improving crop. Since the total acreage reported for each annual legume was to include the acreage hogged or grazed off, and that from which hay was saved without any peanuts, peas, beans, or seed being harvested, the quantity harvested does not represent the total production for the acreage reported, but only the production of that portion of the acreage which was harvested for peanuts, peas, beans, or seed. Annual legumes

saved for hay were reported under a separate inquiry. (See text under hay.)

Separate reports were secured for the acreage of each class of annual legumes grown alone and grown with other crops. Because of different planting practices, the interplanted acreage cannot be satisfactorily reduced to an equivalent solid acreage to obtain a total acreage for any particular legume. For example, cowpeas are grown in fields with corn alone, with both corn and velvetbeans, or with corn and soybeans. In each case a different acreage might need to be allocated to cowpeas.

For 1934, in addition to the count of farms reporting the annual legume crop—that is, acreage grown alone, acreage grown with other crops, or quantity of nuts, beans, or peas harvested—separate counts were obtained in the case of peanuts, soybeans, and cowpeas of the farms reporting acreage grown alone, of those reporting acreage grown with other crops, and of those reporting nuts, beans, or peas. Due to the method of handling fractions, farms reporting less than 1 acre were not included as farms reporting acres grown alone, nor as farms reporting acres grown with other crops. Only whole acres were entered on the punch cards, mixed numbers being converted to the nearest whole number and fractions of one-half or less standing alone being accumulated. Thus, some of the punch cards showing a quantity harvested had no entries for acreage.

For 1929 the inquiries for annual legumes were practically the same as for 1934, except that vetches were not included under the specified classes of annual legumes and Canada and other ripe field peas and velvetbeans were reported separately. The inquiry for 1929 was for the acreage of each specified annual legume for all purposes with instructions to the enumerator to exclude the acreage in annual legumes not harvested but turned under as green manure. The inclusion, for 1934, of vetches under the specified annual legumes may have resulted in a considerable acreage of vetch and small grain mixtures, formerly reported under small grains cut for hay, being reported under velvetbeans, vetches, Canada and other ripe field peas and also under annual legumes saved for hay.

Data for the various annual legumes for 1924 are omitted from the United States summary table as it is believed that for most items the available figures are not sufficiently comparable with those for other years. Lack of comparability results from the wording of the inquiries on the 1925 farm schedule.

For 1919 and 1909, where peanuts, cowpeas, soybeans, and navy, pinto, lima, and other ripe field beans were grown with other crops, the enumerator was instructed to allot, according to his best judgment, a part of the acreage to the annual legume crop and a part to the other crop. Theoretically, this resulted in securing the approximate total acreage of each annual







legume crop on the basis of an equivalent acreage of the annual legume grown alone. For 1919, the acreage of velvetbeans is the total acreage harvested, whether the velvetbeans were grown alone or were mixed with another crop. In 1919 and prior years the annual legumes for which data were secured, except velvetbeans in 1919, were listed on the schedule with crops harvested for grain, or seed, and nominally included only that portion of the crop harvested for nuts, beans, or peas. For these reasons, close comparisons of the 1934 and 1929 statistics with those for previous censuses are difficult.

A gain of 6,124,036, or 142.6 percent, in the acreage of soybeans, cowpeas, and peanuts grown alone, with a gain of 2,044,302 acres in these annual legumes grown with other crops is one of the major changes in agriculture in the United States between 1929 and 1934. Great increases occurred in the acreages planted to soybeans and cowpeas and a substantial increase was reported in peanuts. The exact increase in the combined acreage of velvetbeans, vetches, and Canada and other ripe field peas cannot be determined, as no specific inquiry for vetches was included on the 1930 farm schedule. All legumes fit well into a soil-improvement program. Not only are annual legumes valuable for forage purposes and their seed valuable for livestock, but they have many possible uses in industry and can be used for human food. With a short growing season most of them are adapted for planting after another crop. In the drought year of 1934, annual legumes were used widely as "catch" or late season crops.

**Hay.**—The inquiries on the 1935 farm schedule on annual legumes saved for hay, alfalfa, and small grains cut for hay were practically the same as those on the 1930 farm schedule. The inquiry for annual legume hay in 1934, however, did not name in the wording of the inquiry the specific hays to be included but did contain a notation that acres reported under the specified annual legumes which produced hay were to be included. On the reverse side of the schedule there was a statement that annual legumes saved for hay may include other annual legumes in addition to those specified, except annual varieties of *Melilotus* and *Lespedeza*.

Only one inquiry was made concerning timothy and clover, alone or mixed, including red, mammoth, alsike, and crimson clovers, cut for hay, on the 1935 schedule, while there were two inquiries on the 1930 farm schedule. One of these inquiries on the 1930 schedule called for timothy and timothy and clover mixed and the other for red, alsike, and mammoth clovers cut for hay. The comparative figures presented for 1929 for timothy and clover, alone or mixed, were obtained by adding the figures for the two classes for 1929. However, it should be pointed out that the figures for 1934 include crimson clover, while those for 1929 do not. Figures

for crimson clover were included with sweetclover and Japan clover in 1929. Probably the amount of crimson clover cut for hay is small, therefore the figures obtained for sweet, crimson, and Japan clovers in 1929 are presented in comparison with the figures for sweetclover and *Lespedeza* cut for hay in 1934.

Separate inquiries concerning other tame grasses and wild grasses cut for hay were carried on the 1930 schedule, whereas these two inquiries were combined on the 1935 farm schedule. The drought brought about such a shortage of feed in 1934 that many acres of weeds, thistles, and other vegetation, which in a normal year would not be used as hay, were cut and utilized. In most States, these weeds which were cut for hay were reported under all other tame and wild grasses.

Comparisons of the statistics for the several classes of hay with those for earlier census years are difficult because of the different groupings used at the various censuses, and to some extent, to differences in the wording of the inquiries. For example, annual legume hay in 1934 may include more peavines saved for hay where the peas were harvested for canning and more bean straw saved for hay than were included in other years. Also, the use of the word "saved" for hay in the inquiry for annual legume hay on the 1935 and 1930 schedules instead of "cut" for hay as in other years may have had a considerable effect, particularly as regards the acreage of peanuts included in the annual legume hay figures. In 1924 annual legume hay included only soybeans, cowpeas, and peanuts; and in 1919 it included soybeans, cowpeas, peanuts, and vetches. Prior to 1919 annual legumes for hay were reported with small grains for hay. (Also see text under annual legumes.)

In 1934 the acreage of all hay and sorghums for forage in the United States increased 6.0 percent over that reported in 1929. The production, however, was 24.2 percent less, largely due to the 1934 drought. In some States the drought resulted in an expansion of hay acreage by damaging the small grain crops so that a part of the acreage was cut for hay; by encouraging the planting of emergency hay or sorghum forage crops; and by making necessary the harvesting of weeds, thistles, and other vegetation not ordinarily used for hay. The expansion of the acreage of hay in the Southern States equaled the increase in the acreage in the Nation as a whole. Annual legumes saved for hay made the most noteworthy gain (209.7 percent) of any of the hay crops during the 5-year period. Sweetclover and *Lespedeza* hays increased 81.9 percent, due largely to the rapid increase of *Lespedeza* in Tennessee, Kentucky, Virginia, and North Carolina. Sorghums for forage also increased in importance, with a gain of 81.6 percent in acreage.

**Tobacco.**—The inquiry for tobacco on the farm schedule for the various census years has remained practically unchanged.

The 1934 tobacco acreage was 34.5 percent less than that of 1929 with 71.1 percent of the reduction occurring in the four largest tobacco-producing States—namely, North Carolina, Kentucky, Tennessee, and Virginia. Large decreases occurred in the States which produce cigar-type tobacco primarily. Maryland was the only important tobacco-producing State in which the acreage for 1934 was larger than for 1929. A detailed study of State and county figures is necessary to obtain a clear picture of the changes for each of the various types of tobacco.

**Cotton.**—The 1935 schedule called for the acreage and production of lint cotton in running square bales. Round bales were reported in equivalent square bales on the basis of two round bales equal to one square bale. No report was secured for cottonseed.

The acreage of cotton harvested was 26,753,697 acres, or 38.1 percent less than the 43,227,488 acres reported for 1929. One of the most significant features of the statistics is the reduction in cotton grown per farm, from 21.8 to 13.9 acres, coupled with an increase in yield per acre despite the havoc wrought by the drought west of the Mississippi.

**Sugarcane.**—Only one inquiry relative to sugarcane was made in 1935. This called for the acreage and production (in tons) of sugarcane for all purposes. In 1930 two inquiries were made concerning sugarcane. One called for the acreage and production (in tons) of cane for sugar, or for sale to mills, and the other for the acreage and production of sugarcane for sirup (in gallons). In order to present comparable figures for 1929, farms reporting sugarcane for sugar or for sale to mills, and farms reporting sugarcane for sirup have been added together to obtain farms reporting sugarcane. This addition does not result in any duplication in farms reporting, except in Louisiana. A tabulation by parishes in Louisiana of the farms reporting sugarcane for sugar or for sale to mills, and of farms reporting sugarcane for sirup indicates that not more than 1,217 out of the 6,717 farms reporting sugarcane for sugar or for sale to mills, also reported sugarcane for sirup. Thus, the sum of farms reporting sugarcane for sirup and farms reporting sugarcane for sugar or for sale to mills, gives a rather accurate indication of the number of farms reporting sugarcane in 1929, even in Louisiana. The acreage of sugarcane for 1929 was obtained by adding the acreage of sugarcane for sirup, the acreage of sugarcane for sugar or for sale to mills, and the acreage of sugarcane for seed or other purposes where specified under "other field crops."

In the summary table 2, the figures shown for years prior to 1929 are nominally sugarcane either for sugar or sirup, or both. Where production was reported in pounds of sugar and gallons of sirup, no attempt was made to convert the production to tons.

The sugarcane acreage in 1934 was 413,937 acres, or 36.9 percent greater than the 302,259 acres reported for

1929. Approximately four-sevenths (56.2 percent) of the increase in acreage occurred in Louisiana. Increases in States other than Louisiana and Florida reflect the attempts of farmers to produce more fully on the farm the products needed for human consumption.

**Sugar beets.**—The inquiry for sugar beets for sugar on the 1935 farm schedule was combined with the inquiry for sugarcane. The reports were separated on the basis of the geographic location of the farms reporting as these crops are grown in different regions. The 1935 schedule contained only the one inquiry for sugar crops. Sorghums for sirup were to be reported under "all other crops" and maple sugar and maple sirup under the value of forest products sold.

In the 19 States reporting sugar beets, 747,135 acres of sugar beets were harvested in 1934, or a gain of 16.1 percent over the 643,797 acres reported in 1929. Sugar beets were reported by, approximately, one-third (33.2 percent) more farms in 1934 than in 1929.

**Flax threshed.**—The 1935 farm schedule called for flax threshed. Where grown with wheat, one-half the acreage was to be reported for flax and one-half for wheat. Flax for fiber was to be reported under "All other crops." The acreage of flax harvested in the United States in 1934 was 998,031 acres, or only 33.6 percent of the 2,965,635 acres harvested in 1929. North Dakota, South Dakota, Minnesota, and Montana are nominally the leading States in production. Their combined acreage represented 97.2 percent of the total in 1929. The 1934 drought was responsible for drastic decreases in the Dakotas and in Montana. The decrease in these States was, approximately, equal to the reduction in the United States as a whole. Minnesota, Kansas, California, Michigan, and Iowa reported substantial increases.

**Strawberries.**—Strawberries were the only small fruit for which a specific inquiry was included on the 1935 farm schedule. The reports include some planted acreage from which no crop was harvested in 1934, due to the practice of planting strawberries in 1 year for harvest the following year and also because of failure to bear on account of the drought. When reported without a production, the acreage was retained in that the plants were considered as constituting a crop whether or not strawberries were harvested. The reports for other years may also contain some planted acreage from which no crops were harvested.

**All other crops.**—Crops not specifically listed elsewhere on the 1935 farm schedule were to be reported as all other crops. These include such crops as buckwheat, broomcorn, grass seeds, popcorn, hops, root crops for feed, sorghums for sirup, fiber flax, raspberries, cranberries, blackberries, nursery stock, flowers, etc. The enumerator was not requested to indicate the name of the crop reported, therefore very little checking was possible and the data were accepted very much as reported. Comparative data for 1929 are



not shown, as differences in the schedules for the 2 years are such that strictly comparable data for 1929 cannot be assembled. The data shown in table 1 under "Other miscellaneous crops" are similar as to the crops included, except that velvetbeans, Canada and other ripe field peas, and vetches are included in the figure for 1929 but are not included in the 1934 figure. For other reasons why the two figures are not strictly comparable, see the discussion on page 294 under "Summary for all crops."

Comparisons of the 1934 data with those for 1929 may be useful on a State or county basis provided the 1929 statistics for *all* crops represented in the 1934 figures are assembled, and provided the differences which may have resulted from changes in the schedule are taken into account.

**Land in fruit orchards, vineyards, and planted nut trees.**—This includes the acreage of land in fruit trees, planted nut trees, and vineyards on January 1, 1935. It includes not only the acreage occupied by the fruits for which a report was asked on the farm schedule, but also that occupied by planted pecans, apricots, walnuts, lemons, tung trees, etc. This acreage does not include that occupied by wild pecan trees nor that in nurseries. For many farms, on which there was a small number of trees reported, or on which the trees were scattered around the farmstead, the acreage in orchards, vineyards, and planted nut trees was not reported. For this reason, the farms reporting acreage in orchards is less in some areas than the number of farms having fruit or nut trees, or grapevines.

**Fruits.**—The 1935 farm schedule called for eight fruits as follows: (1) Apples, (2) cherries, (3) peaches, (4) pears, (5) plums and prunes, (6) grapes, (7) oranges, and (8) grapefruit. The number of trees or vines of bearing age and not of bearing age on January 1, 1935, and the quantity (on a fresh basis) of fruit harvested in 1934 were reported for each fruit. In California a special schedule was used, which differed slightly from that used in other States, requiring reports in tons for the quantities harvested of apples, cherries, peaches, pears, plums and prunes, and grapes; also giving conversion factors to be used in converting weights of dried fruits to a fresh basis. The inquiries on the 1930 farm schedule were similar to those on the 1935 but the schedule was more complete as to the fruits for which specified reports were secured. In 1930, special supplemental fruit and nut schedules were also used in California, Florida, and selected counties in eight other States. This permitted the securing of data in more detail than was possible where only the general farm schedule was used.

The 1935 schedule for oranges and grapefruit called for the production in "field boxes." At previous censuses, the production was to be reported in "boxes" (kind not specified). Data for oranges may not be entirely comparable for the 2 census years due to the

inquiry for 1935 being merely for "oranges", with instructions to include tangerines, satsumas, and mandarins carried as a supplemental instruction, while for 1930 separate reports were secured for the various kinds of oranges.

Comparable data for fruits, where available, are shown in the United States summary table 3 for earlier census years. In most instances, where the figures are not entirely comparable, explanations of the differences are given in the footnotes.

The outstanding changes in fruit trees and grapevines in the 5-year period from 1930 to 1935 were substantial increases in the number of cherry, grapefruit, and orange trees; marked decreases in the number of apple and peach trees; and moderate declines in the number of pear, plum and prune trees, and grapevines. On January 1, 1935, there were 13,161,101 grapefruit trees, or 42.5 percent more than on April 1, 1930. Most of the new plantings were in Texas which in 1935 had 1,856,735 nonbearing trees as compared with 493,438 of the same class in Florida. Declines in new plantings for each of the several fruits for which reports were secured were indicated by decreases in the number of nonbearing trees and vines.

**Tung trees.**—The tung tree, a comparatively new introduction from the Orient, bears a nut from which is expressed an oil used in the manufacture of paints, varnishes, and waterproofing materials, and which has various other uses in industry. Although no separate inquiry for tung trees was included on the 1935 farm schedule, the enumerators were requested in a supplemental instruction to report tung nuts on the margin of the schedule. The acreage was to be included under "land in fruit orchards, vineyards, and planted nut trees."

The data secured from the schedules and from supplemental inquiries are presented, by States, with comparative figures for 1930 in the accompanying table. The data for 1930 were entered by the enumerator under the inquiry for "other fruits and nuts."

TABLE 5.—TUNG TREES—FARMS REPORTING, ACREAGE, AND TREES, BY STATES: 1935 AND 1930

STATES	FARMS REPORTING		Acreage, 1935	TREES OF ALL AGES	
	1935	1930		1935	1930
United States.....	627	144	40,166	3,632,361	350,793
Alabama.....	104	23	794	63,364	8,687
Florida.....	174	85	13,478	1,064,511	300,834
Georgia.....	101	7	3,076	215,898	3,162
Louisiana.....	41	8	2,659	213,009	4,644
Mississippi.....	192	20	20,078	2,068,119	33,451
Texas.....	15	1	81	7,460	15

No separate reports were secured for other kinds of planted nuts in 1935; however, their acreage was required to be reported under "land in fruit orchards, vineyards, and planted nut trees."

**Irish potatoes (all varieties).**—The 1935 farm schedule called for the acreage and production of Irish potatoes, whether grown for home use or for sale. A special tabulation of the reports according to quantities harvested shows that 44.8 percent of the farms reporting Irish potatoes in 1934 produced less than 20 bushels per farm, and 65.3 percent less than 40 bushels. Production of Irish potatoes in commercial quantities is restricted to relatively few farms. In 1934, of the total quantity of Irish potatoes harvested, 56.1 percent was produced by 2.2 percent of the farms reporting Irish potatoes.

The inquiries on the schedules for the earlier census years were similar to that for 1935, except that the 1920 inquiry for Irish potatoes excluded those grown in the farm garden.

Probably the most significant change between 1929 and 1934 for Irish potatoes was the increase of farms reporting in the noncommercial areas. The total acreage increased 21.7 percent between 1929 and 1934, with the largest increases in Michigan, Wisconsin, New York, and Idaho.

**Sweetpotatoes.**—In 1919 sweetpotatoes grown in the farm garden were not included in the sweetpotato statistics. For other years the data are for sweetpotatoes grown for home use and for sale. In 1934 sweetpotatoes were grown on 966,681 acres, or an increase of 48.8 percent over 1929. Farms reporting increased 25.7 percent.

**Farm garden.**—The figures presented for 1934 and 1929 for the value of farm garden vegetables for home use do not include the value of Irish potatoes and sweetpotatoes, as was the case in 1919. No acreage report was secured for this item.

**Vegetables for sale.**—The 1935 farm schedule contained six inquiries relative to vegetables harvested for sale. Separate inquiries were included for beans (snap or string beans), cabbages, corn (sweet), tomatoes, and

watermelons. Other vegetables (except Irish potatoes and sweetpotatoes) were to be entered under "all other vegetables." The major difficulties encountered in the entries were a tendency to report vegetables for home use, and to report peas or beans harvested green under the inquiries for annual legumes rather than under vegetables for sale. No data for production or value were secured under the inquiries for vegetables for sale.

The figure for "all other vegetables" for 1929 is a total of the reports for vegetables other than those listed, many of which had a specific inquiry on the 1930 schedule. The figures for 1934 and 1929, therefore, may not be strictly comparable. For 1929, both acreage and value figures were secured, and for 1919, acreage, production, and values. The 1924 data were limited to the acreage of a few specified vegetables. Prior to 1919 no separate reports of vegetables for sale or for home use were secured.

In 1934 vegetables harvested for sale, other than Irish potatoes and sweetpotatoes, were harvested from 3,773,682 acres which represented an increase of 34.2 percent over the 2,811,715 acres harvested in 1929.

**Forest products.**—On the 1935 farm schedule the inquiry relating to forest products was as follows: "Value of all forest products of this farm sold in 1934 (include value of firewood)." This value was to include the value of lumber, poles, piling, logs, firewood, pulpwood, fence posts, railroad ties, mine timbers, maple sirup, and maple sugar actually sold from farms in 1934. Forest products cut or on hand, but unsold, were not to be included. The notation to include the value of firewood probably resulted, in some cases, in the reporting of the value of firewood used on the farm rather than the value of firewood sold. Data relating to forest products are not shown for previous census years as the figures for those years are not strictly comparable because of schedule differences.