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UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics

FLORIDA HAMLIN ORANGES

Production and Tree Numbers
by Ages and Rootstocks
1942-43 to 1946-47 Seasons

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History:

The Hamlin Orange was found in a grove planted in 1879 near Glenwood, Volusia County, Florida, by Isaac Stone for Mrs. Mary H. Payne. This grove later came to be owned by A. G. Hamlin, of DeLand. The value of the variety was recognized, and following the great freeze of 1894-95 it was extensively planted in the DeLand section. Some of the trees were distributed under the name of Norris, but the name Hamlin has priority. 1/

Tree Numbers:

There were 2,457,000 Hamlin orange trees in Florida at the end of the year 1946, according to estimates based on a survey made in the spring of 1947. This is an equivalent of about 38,000 acres or about 9 percent of the total Florida Citrus acreage. Hamlins comprised about 21 percent of the early and midseason orange acreage and about 12 percent of the acreage of all oranges and tangerines. In 1946 about 20 percent of the Hamlin trees were less than 4 years old and about 68 percent were less than 11 years old. Only 8 percent were more than 15 years old. With 68 percent of the trees less than 11 years old, it appears that production can be expected to increase for several years at least. Orange and Polk Counties each had more than a fifth of the total Hamlin trees in 1946. The five leading counties of Orange, Polk, Lake, Hillsborough and Pasco combined had almost three-fourths of the State total Hamlin trees.

YIELDS:

For the five seasons 1942-43 to 1946-47 the average yields per tree by age groups varied from less than one box per tree for the group 4 and 5 years old to almost five boxes per tree for the group over 15 years old. The 5 year average yields were derived from the sample by computing the total production for the 5 seasons and dividing by the total trees picked

1/ History from The Citrus Industry, by Webber & Batchler, page 505.

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in the 5 seasons. Even though there are differences in total numbers of trees in different seasons and different age groups, there appears to be little, if any, undue weight given to any season or age group. A comparison of the 5 year averages with the season 1946-47 averages, in age groups, is shown in Table 2. It did not seem feasible to carry the breakdown by ages further than 16 years and older since only 8 percent of the trees were in this older group. From available data, it appears that Hamlin trees on both types of rootstock are approaching maximum bearing capacity at about 15 years of age. The average yield per tree for all trees 4 years and older increased from 2.20 boxes in 1942-43 to 4.23 boxes in 1946-47. Yields for each age group also show a consistent increase from 1942-43 to 1946-47. These increased yields for trees of the same age were the result of several causes but especially better cultural practices and more complete utilization. Better cultural practices refer especially to greater and more efficient use of better fertilizers and to more irrigation of groves in dry periods.

Rootstocks:

The survey indicates that about 68 percent of Hamlin trees are on lemon rootstocks and 32 percent on sour orange and other rootstocks. Yields per tree have averaged consistently higher on lemon rootstocks than on sour orange stocks. The average yields by ages as indicated by the sample are shown in Table No.5 for the two types of rootstocks.

Survey Methods:

The survey was made in the spring of 1947 and comprised a sample enumeration of tree numbers, acres, and production of Hamlin oranges by ages of trees and rootstocks for the five seasons 1942-43 to 1946-47. Grower and shipper firms located throughout the citrus area provided most of the information. A personal visit was made to each firm in the sample and the information was furnished on a questionnaire form similar to the one shown on the next page.

Name or No. of Grove	Loca- tion Sec- Twn- Rgn.	County	No. of trees	Age 1947	Root- stock	Production (Field Boxes)				
						1942-43	43-44	44-45	45-46	46-47

The sample comprised about 15 percent of the total Hamlin acreage in Florida. Estimates of numbers of Hamlin trees by ages and counties were made from the survey indications and other available data such as the State Plant Board records of movement of trees out of nurseries and the Florida Citrus Tree Survey of 1934.

Table 1 - Hamlin Oranges: Estimated Trees, Production and Average Yields per Bearing Age Tree, by Seasons, 1942-43 through 1946-47.

Season	Bearing Trees 4 Years Plus	Production Boxes	Yield per Tree Boxes
1942 - 43	1,480,000	3,300,000	2.20
1943 - 44	1,570,000	4,300,000	2.74
1944 - 45	1,720,000	5,200,000	3.02
1945 - 46	1,840,000	5,500,000	2.99
1946 - 47	1,966,000	8,300,000	4.23

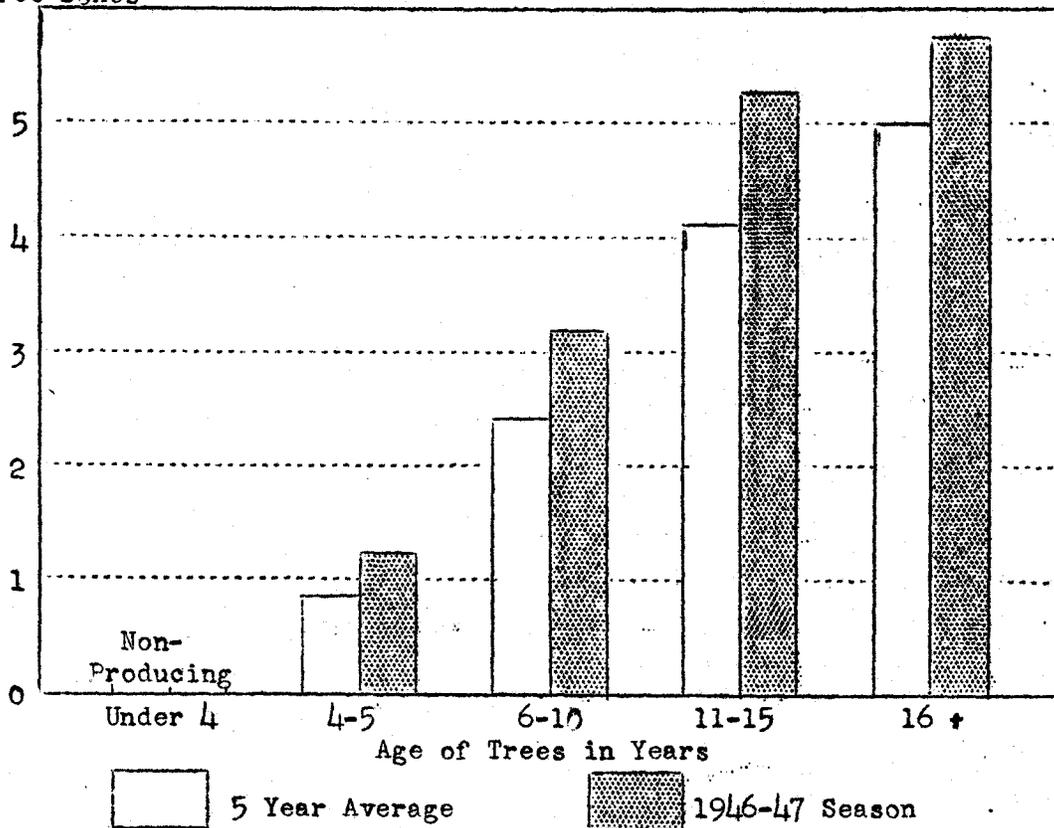


Table 2 - Hamlin Tree Survey: Data on Trees, Production and Average Yields by Age Groups

Ages of Trees Years	1946 - 47 Season			5 Year Average 1942-43 through 1946-47 Season		
	Trees Number	Production Boxes	Yield per Tree-Boxes	Trees Number	Production Boxes	Yield per Tree-Boxes
Under 4	Non - Producing			Non - Producing		
4 - 5	21,191	26,975	1.27	80,495	69,158	.86
6 - 10	137,157	439,442	3.20	432,744	1,052,321	2.43
11 - 15	101,146	531,651	5.26	334,141	1,375,555	4.12
16 & over	65,524	378,198	5.77	183,357	912,354	4.98
All Ages	325,018	1,376,266	4.23	1,030,737	3,409,388	3.31

Chart 1 - Hamlin Orange Survey: Average Yields per Tree by Age Groups, 1946-47 Season and 5 Season Average (1942-43 through 1946-47)

Yield per Tree-Boxes



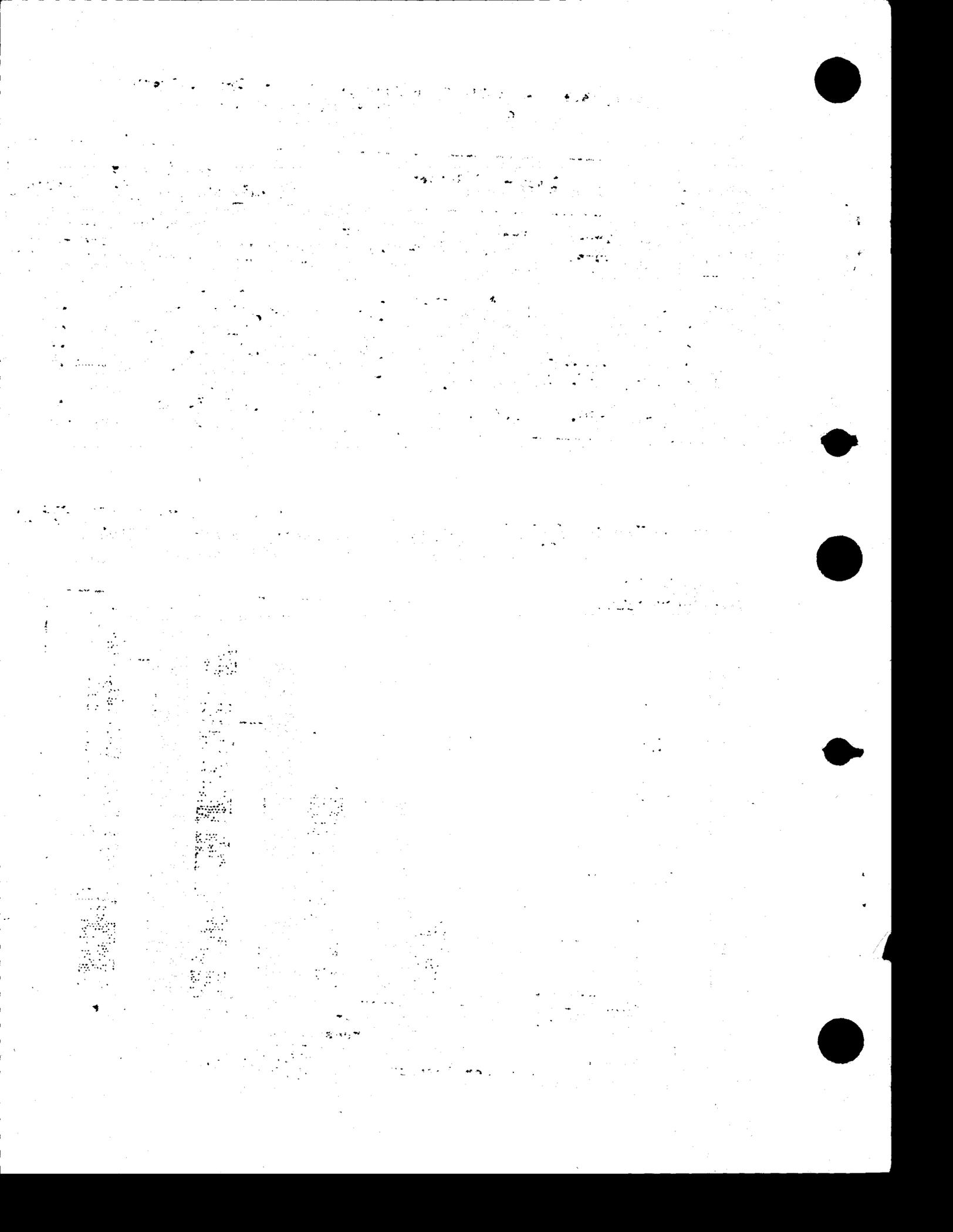
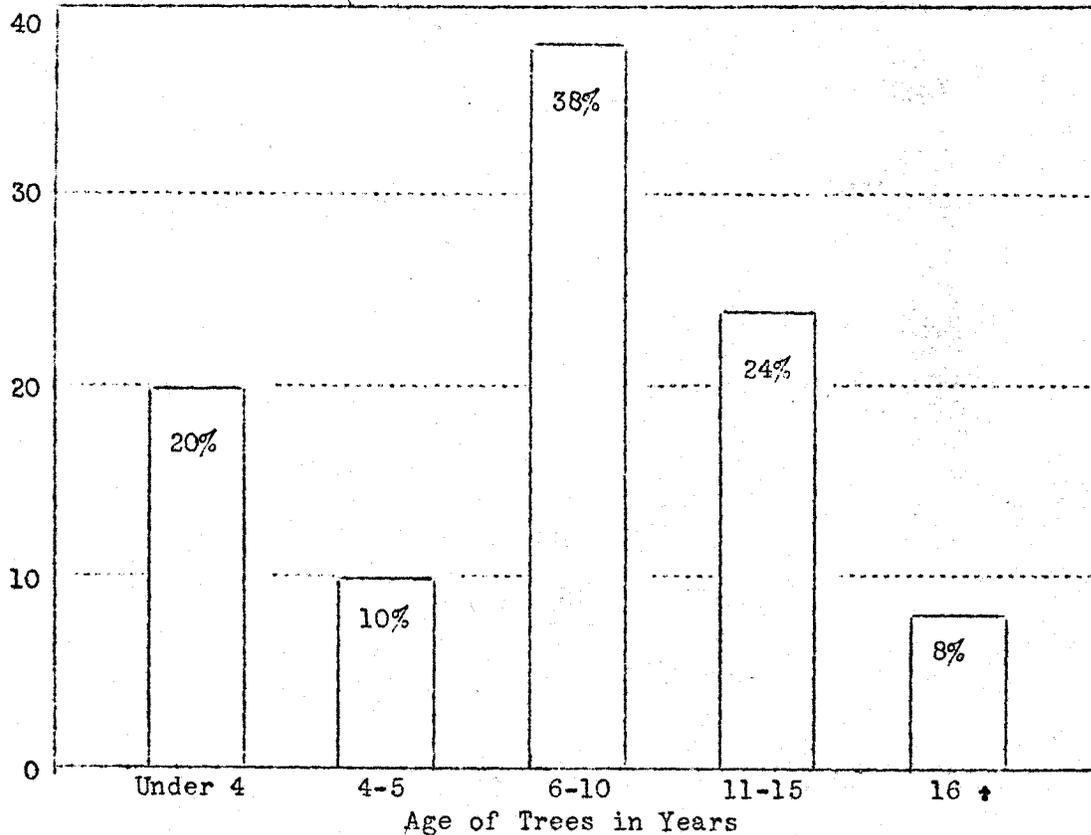


Table 3 - Hamlin Oranges: Estimated Trees by Age Groups - 1946 - 47 Season

Age Group Years	Trees Number	Acres 65 Trees per Acre	Percent of Total Trees or Acres
Under 4	501,000	7,700	20
4 - 5	249,000	3,800	10
6 - 10	923,000	14,200	38
11 - 15	586,000	9,000	24
16 & older	208,000	3,200	8
Total	2,467,000	37,900	100

Chart 2 - Hamlin Oranges: Trees and Acres, Percent of Total by Age Groups, 1946-47 Season.

Percent of
Total

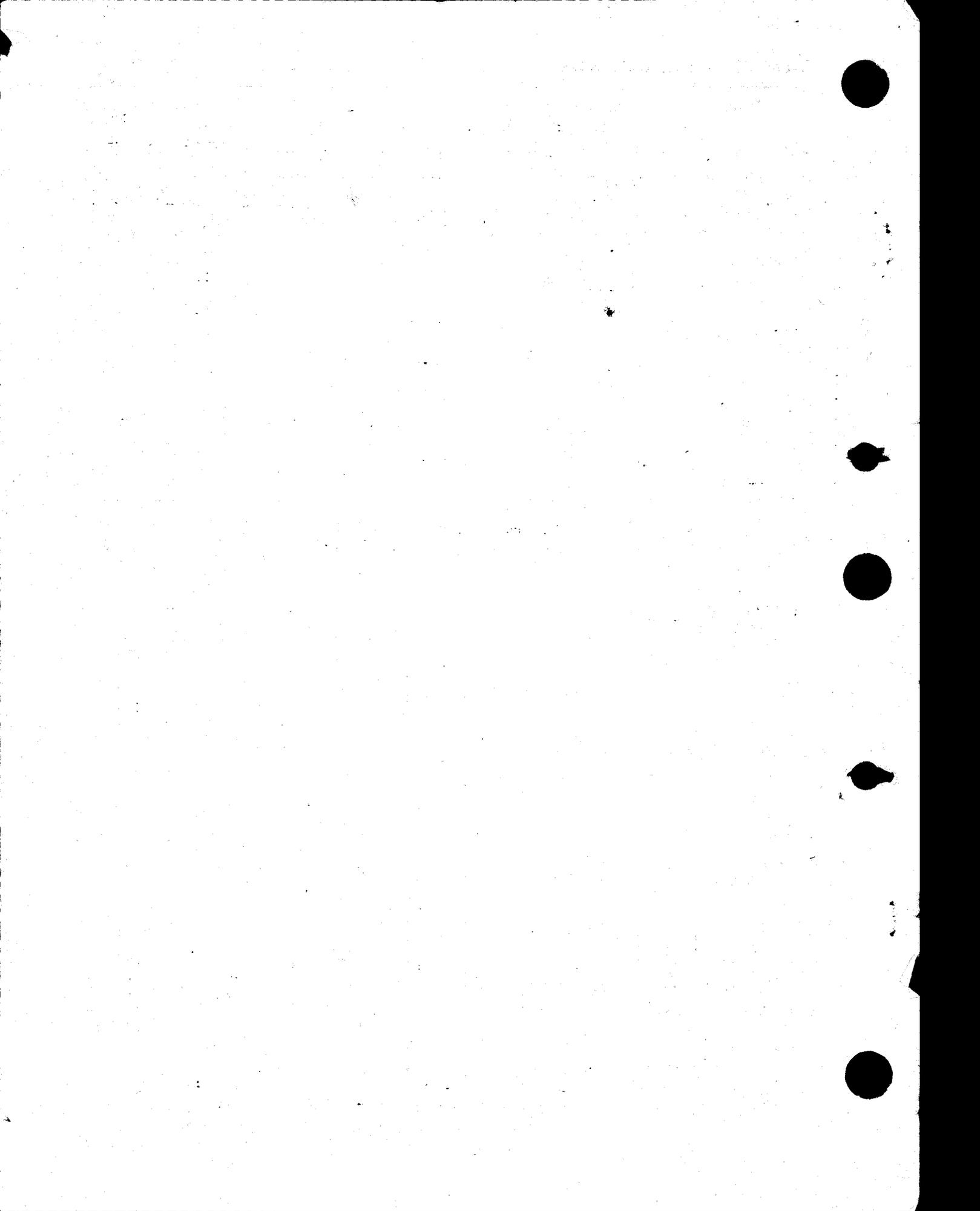


TABLE NO. 4, ESTIMATED HAMLIN TREES - By Counties and Age Groups. (1946) 1/

No.	County	Number of trees	Percent under 4 years	Percent 4-5 years	Percent 6-10 years	Percent 11-15 years	Percent 16 and older
1	Orange	561,000	19	6	40	26	9
2	Polk	547,000	25	10	37	21	7
3	Lake	355,000	20	16	29	27	8
4	Hillsborough	191,000	20	11	44	21	4
5	Pasco	138,000	10	18	54	10	8
6	Hardee	87,000	25	16	26	27	6
7	Volusia	78,000	11	8	19	42	20
8	Highlands	61,000	40	8	37	11	4
9	Seminole	54,000	14	7	34	20	25
10	St. Lucie	46,000	52	3	41	2	2
11	Brevard	43,000	5	2	58	18	17
12	Pinellas	42,000	18	9	44	11	18
13	Marion	35,000	21	2	22	49	6
14	Osceola	35,000	18	6	38	33	5
15	Indian River	33,000	5	4	56	24	11
16	Putnam	30,000	9	6	40	41	4
17	Hernando	17,000	30	9	34	17	10
18	DeSoto	16,000	19	11	37	29	4
19	Broward	16,000	26	15	33	13	13
20	Citrus	14,000	22	7	32	29	10
2/	Other Counties	68,000	8	12	35	27	18
TOTAL - STATE		2,467,000	20	10	38	24	8

1/ Compiled from State Plant Board records of movements of trees out of nurseries 1928-29 through 1945-46, adjusted for replacements by the Bureau of Agricultural Economics, University of Florida; with allowances made for trees planted prior to 1928-29, based on the Florida Citrus Tree Survey, USDA 1934.

2/ Mostly non-commercial counties.

