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Avocado Production Cost and Efficiency Analysis For 1941

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Sixth Annual Summary With Six Year Average San Diego County, California

An Analysis of Yield, Income and Costs on 15 Avocado Orchards Covering 46.48 Acres

Compiled by The Agricultural Extension Service University of California and U.S.D.A. Cooperating with The Avocado Department San Diego County Farm Bureau.

INTRODUCTION

This is the sixth annual summary of the San Diego County Avocado Enterprise Efficiency and Cost of Production Study conducted by the Agricultural Extension Service and the Avocado Department of the San Diego County Farm Bureau. The purpose of the study is to secure information on yield, income, costs and management practices and present them so that each cooperator can compare various items of cost and quantities of materials used with that of other growers. In this way he can compare the results of his management practices with those of others. He can also measure the results of changes in practices from year to year in his own grove. It is hoped that such studies will result in increased efficiency and higher net profits.

This study covers production costs and returns for the period October 1, 1940, to September 30, 1941. Records of 15 groves covering 46.93 acres are included. The groves average 3.3 acres. Since all groves in the study are not in full bearing, they are arranged in groups according to age of trees, 5-9, and 10 and over. Table 1 presents a general summary of each of the six annual studies and an average for the six-year period. Each record is given a serial number and arranged in order to highest net profit per acre and is kept in the same order in all tables so that it can be easily followed through the report.

Growers that are not now in the study but who would like to cooperate should get in touch with the Farm Advisor's Office, Room 404 U. S. Customs and Court House, in San Diego.

Jean C. Miller

Farm Advisor, San Diego County

Summarized and Analyzed by Wallace Sullivan, Extension Specialist in Farm Management, University of California. Berkeley.

DEFINITION OF TERMS USED IN STUDY

Yield in pounds per acre times average price per pound for fruit produced equals Total Income per acre. Income per acre less costs per acre equals net income or profit per acre. Costs, unfortunately, are not always computed in the same way or considered to cover the same things. Some individuals consider their own labor, depreciation on facilities, or interest on their investment. Such a figure is not shown in this report since to obtain significant operation costs, the value of the operator's actual labor had to be included along with hired labor. In this study labor costs, which are considered as cash costs, include the value of the operator's actual labor, the cost of hired labor, the cost or value of horse, truck, and tractor work, and the cost of contract work. The nearest earning figure for the grower who wishes to compare his net cash income would be the Income Above Cash Costs including as cash costs, labor, material, and cash overhead costs. It may be computed by subtracting labor, material, and cash overhead costs from income, or by adding depreciation to capital and management income.

The best net earning figure, from the individual grower's standpoint, is the Capital and Management Income. It is the amount by which income exceeds all costs except interest on investment. It is the difference between total income and "Cash Costs and Depreciation." It is the amount available to reimburse management and to pay for invested capital. It is the amount the grower receives over and above wages for actual work included in labor costs, provided he must pay no interest on borrowed capital. Interest on actual indebtedness is not compiled or recognized in this study, interest on the entire investment being assumed to cover interest on borrowed money and the grower's net investment or equity. No managerial salary for the grower is included as a cost, although it is considered in dividing capital and management income.

In obtaining cost of production from an economic standpoint, interest on the investment is widely recognized as an element of cost. To obtain such a total cost, the interest shown is added to cash and depreciation costs.

Management Income or Net Profit is the amount by which income exceeds all costs of production, including interest on investment as a cost. It is the amount available to reimburse the operator for his management. If his management and luck have been good, he will be rewarded by such an income, but where income is too small to cover costs, a loss or deficit will occur, which in this report is indicated by a minus sign (-) preceding the amount.

TABLE 1—General Summary
Showing San Diego records for 1936-1941 with Six-year average.

	1936	1937	1938	1939	1940	1941	6 year average
Number records in study	8	9	20	15	15	13	80*
Total acres	29.8	33.75	70.05	47.53	46.53	39.53	267.19*
Av. no. acres per record	3.7	3.7	3.5	3.2	3.1	3.0	3.3
Average age of trees	6	7	8	9	10	12	9
Av. number trees per acre	113	109	95	89	66	100	100
Average yield per acre	3085	2793	2525	8056	3639	8289	4731
Average price per cwt.	$ 9.59	$ 7.12	$ 8.14	$ 4.72	$ 7.30	$ 5.66	$ 6.33
Total income per acre	261.18	214.31	205.54	380.08	265.81	468.94	299.31
Cultural labor per acre	54.33	35.91	60.31	51.67	45.98	40.23	48.07
Harvest labor per acre	15.92	11.59	12.08	34.63	15.59	28.52	19.72
Total labor costs per acre	70.25	47.50	72.39	86.20	61.57	68.75	67.79
Material costs per acre	76.22	57.28	66.37	61.97	69.24	59.09	65.03
Cash overhead costs per acre.	16.13	16.15	20.77	25.38	23.47	23.76	20.94
Total cash costs per acre	162.60	120.93	159.53	173.65	154.28	151.60	153.76
Total deprec. costs per acre	6.08	9.37	10.07	11.27	13.01	11.66	10.24
Total cash and deprec. costs.	168.68	130.30	169.60	184.92	167.29	163.26	164.00
Int. on investment per acre	78.28	82.05	79.13	83.70	83.41	82.84	81.57
Total all costs per acre	246.96	212.35	248.73	268.62	250.70	246.10	245.57
Capital and Mgt. income per acre	92.50	84.01	35.94	195.16	98.52	305.68	135.31
Net profit per acre	14.22	1.96	—43.19	111.46	15.11	222.84	53.74

*Total.

Table 1 presents a general summary of the avocado cost of production studies made in San Diego County during the six-year period, 1936-1941, and an average of all records for that period. The records in this study are from orchards with trees five years of age and over. The average age of all trees during this period was 9 years. Many of the trees in these orchards have been topworked or replaced so that they have not had a fair chance to demonstrate their full productive capacity. This study, therefore, does not represent the full productive capacity of mature groves. The average yield per acre during this period has varied from a high of 8,289 pounds to a low of 2,525 pounds, with an average for the six-year period of 4,731. The average price received per hundredweight has varied from $4.72 in 1939 to $9.59 in 1936, with an average of $6.33 for the six-year period. Total costs per acre as averaged for the six-year period are $245.57, while the total income has averaged $299.31, making an average net profit per acre of $53.74. Without considering interest on investment as a cost, the capital and management income per acre has averaged $153.31.

TABLE 2

Serial Number	Acres	Age and variety trees	Yield, pounds per acre	Average return per cwt.	Total income per acre	Total labor costs per acre	Material cost per acre	Cash overhead per acre	Depreciation per acre	Interest on investment	Total all costs per acre	Capital and mgt. income per acre	Net profit or mgt. inc. per acre
Groves 10 years old and over.													
11	2.5	F.N. 10	16437	5.34	877.20	73.80	41.37	19.95	15.60	91.21	241.93	726.48	635.27
5	4.0	F 13	14742	5.92	872.10	58.82	97.00	23.04	19.02	89.47	287.35	674.21	584.74
14	6.0	F 13	8935	6.61	590.38	58.36	40.54	20.13	11.58	72.02	202.63	459.77	387.75
1	3.25	F 12	10246	5.74	588.15	42.82	82.70	19.20	10.27	82.37	237.36	433.16	350.79
9	5.5	F 10	9133	5.16	471.53	42.46	38.51	24.90	19.48	85.60	210.95	346.18	260.58
28	1.33	F 12	11465	5.29	606.23	146.92	116.83	54.10	7.56	93.87	419.28	280.82	186.95
57	3.5	F.N. 11	7599	4.68	355.93	60.15	24.31	15.36	8.89	83.41	192.12	247.22	163.81
22	.5	F 11	7020	5.35	375.92	43.00	69.18	20.60	21.96	64.71	219.45	221.18	156.47
23	3.35	F.N. All	3440	5.76	198.26	55.15	45.22	15.23	4.82	89.04	209.46	77.84	— 11.20
27	1.6	F 10	5507	5.26	289.94	71.55	108.78	37.16	13.41	85.44	316.34	59.04	— 26.40
2	1.5	F 10	2279	5.26	119.96	16.74	46.01	23.14	6.49	89.13	181.51	27.58	— 61.55
12	4.0	F 11	3958	5.91	233.80	129.37	78.65	33.44	5.50	89.12	336.08	—13.16	—102.28
24	2.5	F 15	2194	5.93	130.20	122.35	54.50	24.84	5.33	57.61	264.63	—76.82	—134.43
Av. 13 rec.	39.53*	12	8289	5.66	468.94	68.75	59.09	23.76	11.66	82.84	246.10	305.68	222.84
*Total.													
Young groves under 9 years old.													
3	5.	F 4	2883	5.97	172.13	32.89	46.39	9.27	4.47	53.95	146.97	79.11	25.16
29	2.0	F 6	1600	6.87	110.00	38.40	52.07	21.02	12.69	74.14	198.32	—14.18	— 88.32

TABLE 2—Main Profit-Determining Factors in Individual Orchards

This table presents the main profit-determining factors in individual orchards in the 1941 study. Two young orchards are listed below and are not included in the average. Each record is given a serial number and they are arrayed in order of descending net profit per acre. They are kept in this same order in all subsequent tables. Eight of the 13 orchards in the older tree group showed a very good net profit per acre while 5 showed a net loss. The average yield per acre was exceptionally high, 8289 pounds. Grove No. 11 averaged 16,437 pounds per acre which is the highest of any record in the six-year period. Four records, 11, 5, 1 and 28, averaged over 10,000 pounds of fruit per acre. Average net profits per acre ranged from a loss of $134.43 to a profit of $635.27 with an average of $222.84. These major cost items are analyzed in greater detail in subsequent tables.

TABLE 3—Yield, Income, and Costs per Hundredweight and per Flat

Table 3 presents an analysis of yield, income and costs per hundredweight. The general grouping of costs in this table is the same as in Table 2. It will be noted that the price per hundredweight received by growers ranged from $4.68 to a high of $6.87, with an average of all records of $5.66. The total cost per hundredweight varied from a low of $1.46 to a high of $12.40, with an average of all records of $2.97 per hundredweight. Net profit ranged from $4.34 to a loss of $6.12, an average net profit of $2.69 per hundredweight. The most important factor in reducing costs per hundredweight is yield per acre.

TABLE 3

Serial Number	Yield, pounds per acre	Average price per cwt.	Yield, 13 lb. flats per acre	Average price per flat	Cult. labor costs per cwt.	Harvest labor costs per cwt.	Material cost per cwt.	Cash overhead cost cwt.	Depreciation cost per cwt.	Int. cost per cwt.	Total all cost at cwt.	Capital and mgt income at cwt.	Net profit or mgt. inc. per cwt.
11	16437	5.34	1264	.69	.21	.24	.25	.12	.09	.55	1.46	4.43	3.88
5	14742	5.92	1134	.77	.18	.22	.66	.16	.13	.60	1.95	4.57	3.97
14	8935	6.61	687	.86	.21	.44	.45	.23	.13	.81	2.27	5.15	4.34
1	10246	5.74	788	.75	.19	.23	.81	.19	.10	.80	2.32	4.22	3.42
9	9133	5.16	703	.67	.19	.28	.42	.27	.21	.94	2.31	3.79	2.85
28	11465	5.29	882	.69	.91	.37	1.02	.47	.07	.82	3.66	2.45	1.63
57	7599	4.68	585	.61	.46	.33	.32	.20	.12	1.10	2.53	3.25	2.15
22	7020	5.35	540	.70	.13	.48	.99	.29	.31	.92	3.12	3.15	2.23
23	3440	5.76	265	.75	.65	.95	1.31	.45	.14	2.59	6.09	2.26	— .33
27	5517	5.26	424	.68	1.00	.70	1.97	.67	.24	1.55	5.73	1.08	— .47
2	2279	5.26	175	.68	.26	.48	2.01	1.02	.28	3.91	7.96	1.21	—2.70
12	3958	5.91	304	.77	2.81	.46	1.99	.84	.14	2.25	8.49	— .33	—2.58
24	2194	5.93	169	.77	4.43	1.14	2.43	1.13	.24	2.63	12.05	—3.49	—6.12
Av. 13 rec.	8289	5.66	638	.74	.49	.34	.71	.29	.14	1.00	2.97	3.69	2.69
Young groves under 9 years old.													
3	2883	5.97	222	.78	.68	.46	1.61	.32	.15	1.87	5.09	2.74	.87
29	1600	6.87	208	.53	1.74	.66	3.25	1.32	.79	4.64	12.40	— .88	—5.52

TABLE 4—Capital Investment and Overhead Costs per Acre

Table 4 presents an analysis of capital investment and overhead costs per acre. The average investment in land for the records in the study is $563.31 per acre; in trees, $1000.00; irrigation system $79.45; and equipment, $8.42, making a total of $1656.89. Interest on investment is calculated at 5%. No depreciation is figured on trees. Depreciation on equipment and improvements is based on the estimated length of useful life. General expense is 5% of the total labor and material costs and is entered as a charge to cover interest on operating capital and other small unreported items of expense.

TABLE 4

Serial Number	Capital Investment per Acre				Capital Overhead			Cash Overhead Costs			
	Land	Trees	Irrigation System	Equipment	Total Investment	Interest on Investment	Depreciation	General Expense	Taxes	Miscellaneous	Total Costs
11	750.00	1000.00	28.70	1.45	1824.15	91.21	15.60	5.76	12.00	2.19	19.95
5	600.00	1000.00	150.00	39.37	1789.37	89.47	19.02	7.79	15.25	.....	23.04
14	300.00	1000.00	133.81	1.23	1440.39	72.02	11.58	4.94	10.77	4.42	20.13
1	600.00	1000.00	35.00	12.23	1647.23	82.37	10.27	6.28	12.92	.....	19.20
9	600.00	1000.00	106.36	5.69	1712.05	85.60	19.48	4.05	17.27	3.58	24.90
28	800.00	1000.00	71.84	5.64	1877.44	93.87	8.31	13.19	40.91	.....	54.10
57	600.00	1000.00	62.71	5.53	1668.24	83.41	8.89	4.22	11.14	.....	15.36
22	150.00	1000.00	143.22	.92	1294.14	64.71	21.96	5.60	15.00	.....	20.60
23	725.00	1000.00	44.95	9.82	1780.82	89.04	4.82	5.02	10.21	.....	15.23
27	600.00	1000.00	50.00	8.75	1708.75	85.44	13.41	9.02	14.62	13.52	37.16
2	750.00	1000.00	30.00	2.50	1782.50	89.13	6.49	3.14	20.00	.....	23.14
12	735.00	1000.00	45.00	2.50	1782.50	89.12	5.50	10.40	22.71	.33	33.44
24	100.00	1000.00	50.00	2.25	1152.25	57.61	5.33	8.84	16.00	.....	24.84
Av. 13 rec	563.31	1000.00	79.45	8.42	1656.89	82.84	11.66	6.39	15.48	3.81	23.76
Young groves under 9 years.											
3	350.00	700.00	21.50	7.43	1078.93	53.95	4.47	3.96	4.19	1.12	9.27
29	500.00	870.00	88.00	6.03	1482.78	74.14	12.69	4.53	16.50	.....	21.02

TABLE 5

Serial Number	Yield, pounds per acre	Average number trees per acre	Average yield per tree pounds	Man Labor Hours per Acre*			Pruning costs per acre	Number cultivations	Cultivation costs per acre	Harvesting		
				Cultural	Harvest	Total				Picking per cwt.	Hauling per cwt.	Total
11	16437	122	131	73	77	150	4.50	..	7.20	.20	.04	.24
5	14742	81	182	58	72	130	9.67	0	....	.22	....	.22
14	8935	108	83	57	...	...	5.50	0	....	.40	.04	.44
1	10246	115	89	42	44	86	6.48	0	....	.17	.06	.23
9	9133	77	119	34	67	101	2.09	..	3.39	.26	.02	.28
28	11465	71	161	144	62	206	19.21	..	10.60	.33	.04	.37
57	7599	161	47	77	53	130	9.43	3	4.71	.33	....	.33
22	7020	90	78	22	...	...	....	0	....	.41	.07	.48
23	3440	74	46	...	...	...	.30	..	11.64	.75	.20	.95
27	5517	104	53	163	54	217	21.90	..	1.69	.30	....	.30
2	2279	77	30	16	...	...	....	0	....	.40	.08	.48
12	3958	88	45	...	...	...	1.50	..	79.48	.40	.06	.46
24	2194	86	26	151	27	178	1.92	..	11.76	1.11	.03	1.14
Average 13 rec	8289	100	83				5.89		18.79	.31	.04	.34
*Does not include contract labor. Young groves under 9 years.												
3	2883	68	42	41	27	68	....	1	4.90	.42	.04	.46
29	1600	112	14	68	22	90	....	0	3.20	.66	....	.66

TABLE 5—An Analysis of Cultural and Harvesting Costs and Other Factors

..... Indicates data not available.

Table 5 presents an analysis of cultural labor and harvesting costs and some other factors. It is interesting to note the wide variation in the total number of hours of man labor required per acre. This varies from 86 hours to 207 hours. It will be observed that six cooperators reported no cultivation costs. This indicates a considerable trend away from field power cultivation in avocado groves.

TABLE 6

Serial Number	Yield per acre	Av. age of trees	Soil Type	Method of Irrigation	Number of applications	Acre-in. per acre per application	Total acre inches per acre	Capital investment per acre	Costs per Acre: Application labor	Water	Int. & depr. cost	Total all ir. costs
11	16437	10	Fallbrook & MSL.	Underhead Spr.	10	1.6	16.2	28.70	14.80	29.91	7.18	51.89
5	14742	13	Fallbrook FSL...	Underhead Spr.	..	...	30.0	150.00	10.57	64.34	22.50	97.41
14	8935	13	Escondido Silt L.	Overhead Spr..	7	...	....	133.81	8.07	26.22	17.38	51.67
1	10246	12	Fallbrook Loam..	Underhead Spr.	..	...	14.0	35.00	5.66	19.97	8.75	34.38
9	9133	10	Fallbrook SL....	Underhead Spr.	7	2.3	16.6	106.36	6.78	12.29	23.66	42.73
28	11465	12	Vista SL.....	Spr. & Furrow.	8	2.3	18.5	71.84	30.38	73.98	10.77	115.13
57	7599	11	Ram.&Kimb.SL.	Low post. Spr..	6	1.8	10.9	62.71	20.84	24.31	9.40	54.55
22	7020	11	Fallbrook SL....	Underhead Spr.	6	2.3	13.5	143.22	8.00	60.00	28.20	96.20
23	3440	11	Los Posas Loam..	Furrow.....	8	1.8	14.6	44.95	9.25	22.61	5.83	37.69
27	5517	10	Vista SL.....	Underhead Spr.	8	2.8	22.1	50.00	17.91	57.94	9.15	85.01
2	2279	10	Vista SL.....	Underhead Spr.	6	2.0	12.0	30.00	5.87	46.01	7.50	59.38
12	3958	11	Fb. & M SL....	Furrow.....	7	2.2	15.2	45.00	13.95	22.38	6.75	43.08
24	2194	15	Vista SL.....	Furrow.....	7	1.9	13.1	50.00	43.92	42.02	7.50	93.44
Av. 13 rec.	8289	12					18.3	79.45	13.53	36.70	13.23	58.84
Young groves under 9 years.												
3	2883	4	Fb. & M SL....	Underhead Spr.	10	.9	9	21.50	8.72	18.13	5.31	32.16
29	1600	6	Altamont clay....	Basin, hose....	10	...	..	88.00	19.40	28.72	14.00	62.12

TABLE 6—An Analyses of Irrigation Costs and Practices

Table 6 presents an analysis of irrigation costs and irrigation practices. The amount of water used will depend upon the soil type and the age of the trees. It will be noted that all but three of the cooperators used the sprinkler system. Number of irrigations varied from 6 to 10, with an average of 7.3. Total acre inches per acre of water used varied from 39.6 acre inches to a low of 9.0, with an average of 18.3. Total irrigation costs per acre are made up of the cost of labor and water and interest and depreciation on the investment in the irrigation system. Cost of irrigation is one of the most important items in the production of avocados. It will be noted in the last column that total irrigation costs per acre varied from a high of $115.13 to a low of $34.38, with an average of $54.84. Irrigation is one of the most important problems in avocado production.

TABLE 7

Serial Number	Cover Crops: Kind	Cover Crops: Cost of seed per acre	Organic Fertilizer: Kind	Organic Fertilizer: Pounds per acre	Organic Fertilizer: Pounds O.M.* per acre	Organic Fertilizer: Pounds nitrogen per acre	Organic Fertilizer: Cost per acre	Commercial Fertilizer: Kind	Commercial Fertilizer: Pounds per acre	Commercial Fertilizer: Pounds nitrogen per acre	Commercial Fertilizer: Cost per acre	Total pounds nitro. per acre	Spreading cost per acre	Total fertilizer costs
11	..	...	Straw	6400	5120	38	4.18	Uramon	340	143	5.74	181	1.60	11.52
5	..	...	.....	none				6–9–6 16–20	1340	60	32.66	60	3.04	35.70
14	..	....		none				Uramon 8–8–4	542	17	13.04	17	1.17	14.21
1	..	...	Horse	1109	666	8	2.46		2031	166	52.32	174	2.95	57.73
9	..	...		none					1091	116	26.22	116	.32	26.54
28	..	...		none					1622	214	42.85	214	12.29	55.14
57	..	...		none					none					.....
22	..	...		none				Blood meal	328	...	9.18	...	.80	9.18
23	..	.97		none				6–9–6	896	54	20.15	54	.90	22.02
27	..	...		none					1567	307	47.18	307	5.66	52.84
2	..	...		none					none					.....
12	..	...		10221	5991	200	21.13		500	23	11.60	223	....	32.73
24	..	...	.....	....	....	...	....	Uramon	?	?	10.44	?	4.56	15.00
Average 13 rec.	..	.97	.....	1530*	985*	23	10.56	.....	807*	73*	23.59	96	1.89*	25.18*
Young groves under 9 years old.														
3	..	...	.....	43227	16146	307	22.55	.....	160	66	4.01	373	5.47	32.03
29	..	...	.....	5000	2000	125	8.00	.....	150	63	11.75	188	3.60	23.35

* O.M. = Organic matter.

TABLE 7—An Analysis of Fertilizer Costs and Practices

Table 7 presents an analysis of fertilizer costs and practices. Fertility of the soil may be improved by means of cover crops, organic fertilizers or commercial fertilizers. This table shows the quantities and kinds applied by each cooperator. Total pounds of organic matter are calculated and the total pounds of nitrogen applied per acre are shown. A wide variation in kinds and amounts used is indicated in this table. The total cost per acre varies from none to $57.73 per acre. Only two cooperators in the study applied organic fertilizers, while all but two cooperators in the study applied commercial fertilizers. The amount of nitrogen applied per acre varied from 17 pounds to a high of 307 pounds, with an average of 96 pounds. Considerably less fertilizer was used this year than usual.

TABLE 8—Orange and San Diego County Records Compared

Table 8 presents a summary of the avocado cost of production study in Orange County for 1941, in comparison with the San Diego study.

	Orange County Orchards	San Diego County Orchards
Number of records	14	13
Total acres	58.3	39.53
Average number of acres per record	2.2	3.0
Average age of trees	12.9	11.6
Average number of trees per acre	84	100
Yield, pounds per acre	3433	8289
Average return per cwt.	$ 5.58	$ 5.66
Total cost per cwt.	6.58	2.97
Management income per cwt.	—1.00	2.69
Cultural labor cost per acre	32.15	40.23
Harvesting and handling fruit	19.65	28.52
Total labor cost per acre	51.80	68.75
Material cost per acre	33.01	59.09
Cash overhead cost per acre	24.98	23.76
Total cash costs per acre	109.79	151.60
Total income per acre	191.65	468.94
Income above cash costs	81.86	317.34
Depreciation per acre	11.46	11.66
Capital and management income	70.40	305.68
Interest on investment at 5 per cent	104.55	82.84
Management income or net profit per acre	—34.15	222.84
Average total investment per acre	2091.01	1656.89
Average investment in land per acre	978.12	563.31

A Standard of Labor, Material, and other Costs of Producing Avocados in Southern California Orchards about 15 years of age, with an Average Annual Yield of 6000 Ibs. per acre.

This table is a computed standard of costs for a well managed mature avocado orchard with most of the work done by the owner. Investment, depreciation and rates for truck and tractor are based upon a 20-acre farm unit.

Labor costs per acre are computed at the following rates per hour: man labor, $.30, 12-drawbar horsepower tractor $1.30, 1½-ton truck, $1.50.

Costs per hundredweight shown above are based on a yield of 6000 pounds. Yields some years would be double this and some years they might fall as low as 2000 Ibs. Aside from harvesting, which may be computed at $.60 per hundredweight, costs per acre will not vary much for different yields. To obtain cost of production for any other yield, adjust the total cost per acre for the difference in harvesting cost and then divide by the yield. With the above yield total cost is $4.24 per hundredweight, with a yield of 2500 pounds. Cost per hundredweight would be $9.40.

TABLE 9

	Man Labor	12 hp. Tractor	1½ Ton Truck	Cost per acre	Cost per cwt.
	Hours per Acre			Dollars	
Pruning 75 Trees per Acre	10	..	..	3.00	....
Brush Disposal	1	..	1	1.80	....
Planting Cover Crop	1	..	..	.30	....
Applying Manure, 6 T at 50 cts.	Contract	..	..	3.00	....
Applying Commercial Fertilizer	2	..	1	2.10	....
Cultivation 5 times, furrow 3	6	6	..	9.60	....
Irrigation, 6 times	20	..	..	6.00	....
Miscellaneous other work	10	1	1	5.80	....
Total Cultural Labor	50	7	3	31.60	.52
Picking	90	..	..	27.00	.45
Hauling	6	..	4	7.80	.13
Total Labor Cost	146	7	7	66.40	1.10
Irrigation Water 20 inches at $1.50	..	..	..	30.00	....
Cover Crop Seed	..	..	..	1.00	....
Dairy Manure 6 Tns.at $2.50 a Tn.	..	..	..	15.00	....
Commercial Fertilizer 500 lbs. at $2.00	..	..	..	10.00	....
Miscellaneous Materials	..	..	..	4.00	....
Total Material Cost	..	..	..	60.00	1.00
General Expense, 5% of Above Costs	..	..	..	6.32	....
County Taxes, Assessed Value $400, rate $3.50	..	..	..	14.00	....
Repairs to Facilities	..	..	..	1.00	....
Compensation Insurance	..	..	..	.75	....
Total Cash Overhead Cost	..	..	..	22.07	.37
Total Cash Costs	..	..	..	148.47	2.47

	Original Cost	Average Investment	5% Interest on Inv.	Average Annual Deprec.		
		Dollars per Acre				
Trees	1000.00	1000.00	50.00	....		
Service Building	10.00	5.00	.25	.25		
Irrigation Pipe, etc	60.00	30.00	1.50	1.50		
Tillage Equipment	20.00	10.00	.50	1.00		
Small Tools and Miscl.	6.00	3.00	.15	.75		
Land	1000.00	1000.00	50.00	....		
Total Investment	2096.00	2048.00				
Total Depreciation	.....	.....	.....	3.50	3.50	.06
Total Cash and Depreciation	.....	.....	.....	.....	151.97	2.53
Total Interest on Investment	.....	.....	102.40	.....	102.40	1.71
Total All Costs	.....	.....	.....	.....	254.37	4.24