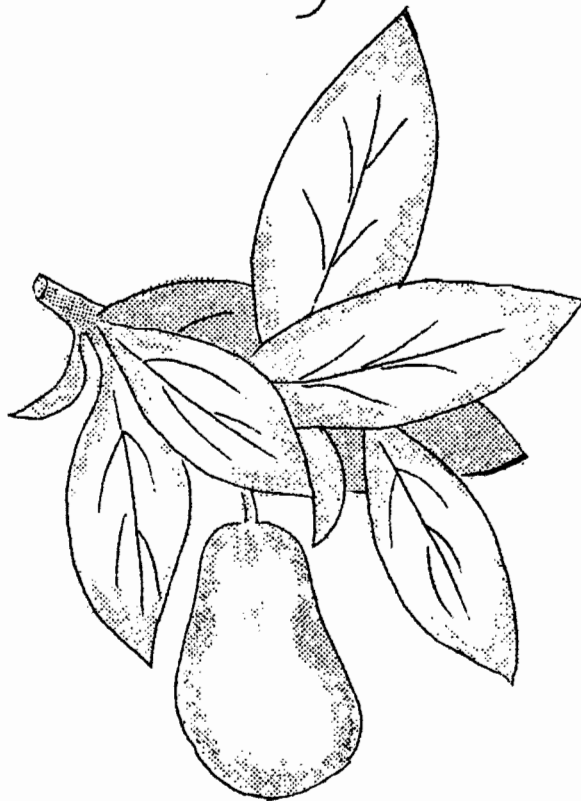


AV-SC-53

Orange County Avocado Management Study



1953

Agricultural Extension Service
University of California
County of Orange

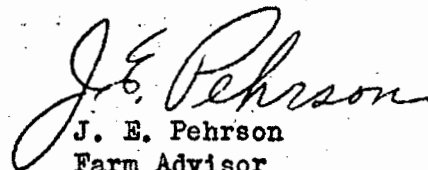
INTRODUCTION

The Avocado Management Study for 1953 is an analysis of yields, costs, income and practices of 11 growers in Orange County. The study includes 121 acres.

Average figures from this study cannot be taken as representative for the County. They are significant in showing trends or for use in comparing avocados with other enterprises.

Acknowledgment and appreciation is expressed to cooperating growers for use of their figures. All information is supplied by them. We thank them for their interest and assistance in making this report.

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DEFINITION OF TERMS

LABOR COSTS include hired labor, the value of the owner's labor, field power costs plus the costs for any rented equipment.

MATERIAL COSTS include water, fertilizer, disease and pest control material, heating fuel and other materials purchased.

CASH OVERHEAD COST includes all cash costs not recorded under labor and materials, such as taxes, machinery repairs, compensation insurance, and general expenses for miscellaneous items.

CAPITAL AND MANAGEMENT INCOME is the amount by which income exceeds cash costs and depreciation. As the name implies, it is the amount available to reimburse management and invested capital after all other costs have been met. It is probably the figure most closely comparable to the growers own profit figure where he lists his own wages as an expense and where there is no interest or indebtedness.

MANAGEMENT INCOME is the amount by which income exceeds all cost of production, including interest on investment. It is the amount available to reimburse the operator for supervision of the farm.

TABLE 1 - SUMMARY of YIELD, INCOME, & COSTS - 10 Years - 1944-1953

Yield, Income, Cost per Acre

	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	10-year Average
Yield - Pounds	8006	2365	6210	3092	2109	3641	2201	3422	7348	4378	4277
Total Income	877.35	640.78	905.51	593.77	458.80	693.15	511.06	564.77	955.57	819.75	702.06
Costs - Total	284.14	266.43	321.89	320.95	263.82	344.38	326.13	319.39	436.81	406.06	329.01
Management Income	593.21	374.35	583.62	272.82	194.98	348.77	184.93	245.38	518.76	413.69	373.05

Per Hundredweight

Total Income	10.96	27.09	14.58	19.20	21.76	19.04	23.21	16.51	13.01	18.72	16.41
Costs - Total	3.55	11.26	5.18	10.36	12.51	9.46	14.81	9.34	5.95	9.27	7.69
Management Income	7.41	15.83	9.40	8.82	9.25	9.58	8.40	7.17	7.06	9.45	8.72

Costs per Acre Breakdown:

Cultural Labor	52.82	64.54	61.73	65.69	57.65	65.78	72.29	71.30	82.30	100.82	69.49
Harvest Labor	66.58	34.26	67.77	44.37	28.25	60.70	36.68	56.40	105.76	72.14	57.29
Total Labor	119.40	98.80	129.50	110.06	85.90	126.48	108.97	127.70	188.06	172.96	126.78
Material	43.53	50.66	65.73	86.03	55.57	76.33	77.83	53.31	65.80	62.03	63.68
Cash Overhead	24.86	22.29	29.29	29.25	26.69	41.41	41.11	39.53	54.64	52.66	36.18
Total Cash Costs	187.79	171.75	224.52	225.34	168.16	244.22	227.91	220.54	308.50	287.65	226.64
Depreciation	7.23	7.70	8.34	7.47	8.21	9.40	8.54	8.87	21.32	17.78	10.49
Interest on Investment	89.12	86.98	89.03	88.14	87.45	90.76	89.68	89.98	106.99	100.63	91.88
Total All Costs	284.14	266.43	321.89	320.95	263.82	344.38	326.13	319.39	436.81	406.06	329.01

A summary of the past 10 years of records are shown above. The average yield for the 11 records in the 1953 study was 4378 slightly higher than the 10 year average.

TABLE 2 - MAIN PROFIT DETERMINING FACTORS IN INDIVIDUAL ORCHARDS

Orchard number	Acres	* * Variety and age	Yield pounds per acre	Average return per cwt	Total income per acre	Total labor costs per A.	Material costs per acre	Cash over-head per A.	Depre-ciation per acre	Interest on invest-ment	Total all costs per A.	Capital & mgt. income per A.	Mgt. income per acre
18	20.0	31FH	8,950	20.98	1,878.04	211.10	81.97	45.44	2.20	102.20	442.91	1,537.33	1,435.13
4	3.5	23F	7,291	19.83	1,445.72	133.99	74.96	38.05	12.28	94.50	353.78	1,186.44	1,091.94
9	3.5	29F	8,570	18.29	1,567.40	200.96	74.00	75.01	27.46	110.39	487.82	1,189.97	1,079.58
16	2.0	22FHR	7,534	18.64	1,404.02	133.37	112.00	36.84	14.75	91.25	388.21	1,107.06	1,015.81
25	2.5	21F	4,411	22.06	973.23	228.02	83.14	45.39	3.00	103.00	462.55	613.68	510.68
23	2.0	15F	3,510	16.96	595.33	133.68	64.75	59.92	8.13	103.27	369.75	328.85	225.58
10	3.5	29F	3,452	17.27	596.22	112.51	86.00	71.95	11.43	90.89	372.78	314.33	223.44
26	10.0	6F	3,010	17.94	539.84	98.77	106.93	46.28	19.69	106.07	377.74	268.17	162.10
1	70.0	23F	3,018	16.82	507.72	180.54	45.52	55.69	22.21	100.00	403.96	203.76	103.76
15	2.0	18FL	2,178	19.43	423.12	89.72	51.24	36.03	39.00	112.00	327.99	207.13	95.13
17	2.0	16F	2,184	17.84	389.58	115.41	62.00	37.62	23.01	83.05	321.09	151.54	68.49
* Av.			4,378	18.72	819.75	172.96	62.03	52.66	17.78	100.63	406.06	514.32	413.69

This table shows a summary of the individual records for 1953. The orchards are arranged in descending order of management income.

Labor and Material costs are for all cultural practices reported.

Cash Overhead costs are mainly taxes and insurance. Average taxes were \$35.27 per acre with several groves reporting over \$60.00 per acre.

* - Average of total cost divided by total acres.

** - Variety abbreviations: F - Fuerte; L - Lyon; H - Hass; R - Ryan

TABLE 3 - YIELDS, INCOME AND COSTS PER HUNDREDWEIGHT

Orchard number	Yield pounds Per A.	Average returns per cwt.	Yield 13-lb flats per A.	Average returns per flat	Cultural labor costs per Cwt	Harvest labor costs per cwt	Material costs per cwt	Cash over-head costs	Depre- ciation costs per cwt	Interest on invest- ment	Total all costs per cwt	Capital & mgt. income per cwt	Manage- ment income per cwt
18	8,950	20.98	688	2.72	.91	1.45	.92	.51	.02	1.14	4.95	17.17	16.03
4	7,291	19.83	561	2.58	.58	1.25	1.03	.52	.17	1.30	4.85	16.27	14.98
9	8,570	18.29	659	2.38	.35	2.00	.86	.87	.32	1.29	5.69	13.89	12.60
16	7,534	18.63	580	2.42	.62	1.15	1.49	.49	.19	1.21	5.15	14.69	13.48
25	4,411	22.06	339	2.87	3.57	1.60	1.88	1.03	.07	2.33	10.48	13.91	11.58
23	3,510	16.96	270	2.20	2.55	1.26	1.84	1.71	.23	2.94	10.53	9.37	6.43
10	3,452	17.27	265	2.25	1.70	1.56	2.49	2.09	.33	2.63	10.80	9.10	6.47
26	3,010	17.94	232	2.33	2.28	1.00	3.55	1.54	.66	3.52	12.55	8.91	5.39
1	3,018	16.83	232	2.19	4.00	1.98	1.51	1.85	.74	3.31	13.39	6.75	3.44
15	2,178	19.43	168	2.53	2.87	1.25	2.35	1.66	1.79	5.14	15.06	9.51	4.37
17	2,184	17.84	168	2.32	4.04	1.25	2.84	1.72	1.05	3.80	14.70	6.94	3.14
Av.	4,378	18.72	337	2.43	2.30	1.65	1.42	1.20	.40	2.30	9.27	11.75	9.45

This table is similar to the summary on the opposite page. Costs and returns are calculated on a hundredweight basis. Total costs ranged from \$4.85 to \$15.06 per hundredweight, depending on yield. The average of \$9.27 is higher than the 10 year study average of \$7.69, and considerably higher than last year's average of \$5.95. All factors making up the total cost were considerably higher in 1953.

TABLE 4 - AN ANALYSIS OF IRRIGATION AND FERTILIZER COSTS AND PRACTICES

Orch. No.	Number appli-cations	Ac. in. per applic.	Irrigation					Fertilizer				Total pounds N. per acre
			Total ac. in. per A.	Cost per acre				Kind & Amount per acre	Cost per acre			
				Labor	Water	Int. & Deprec.	Total		Labor	Material	Total	
18	6	4.2	24.9	9.34	31.32	4.40	45.06	Dr. 859ft., CalN-190#, NH ₃ 60#	-	50.65	50.65	294
4	6	5.8	34.5	25.14	33.47	5.00	63.61	Dr. 846ft., AmN 171#	1.71	41.49	43.20	268
9	10	2.7	26.9	8.57	40.00	26.70	75.27	Poul. 4571#, AmS 343#	1.57	29.71	31.28	145
16	5	2.8	14.0	25.00	42.92	6.00	73.92	Dr. 921ft, CalN-350#, AmS 400#	7.12	69.08	76.20	371
25	5	-	-	16.00	25.66	6.00	47.66	Dr. 480ft. Fshgr. 100#, 16-20-360#	1.60	45.00	46.60	180
23	7	3.6	25.0	12.50	20.95	.20	33.65	NH ₃ . 150# 10-10-5-120# 12-15-0-120#	-	43.80	43.80	148
10	5	2.6	12.8	21.43	25.00	3.42	49.85	Dr. 1525 Cuft	-	61.00	61.00	381
26	6	3.0	18.0	12.70	34.93	2.59	50.22	Dr. 420ft. CalN-210#, NH ₃ -35#	2.20	47.30	49.50	167
1	-	-	-	33.86	21.05	-	54.91	CalN 857#	3.20	24.04	27.24	137
15	3	1.7	5.2	12.00	14.16	6.00	32.16	NH ₃ - 68#	-	7.08	7.08	55
17	6	-	-	17.50	8.50	3.59	29.59	AmP - 1000#	2.50	41.00	43.50	160
*Av	6	3.5	21.4	25.21	25.06	5.55	55.82	-	2.32	33.60	35.92	180

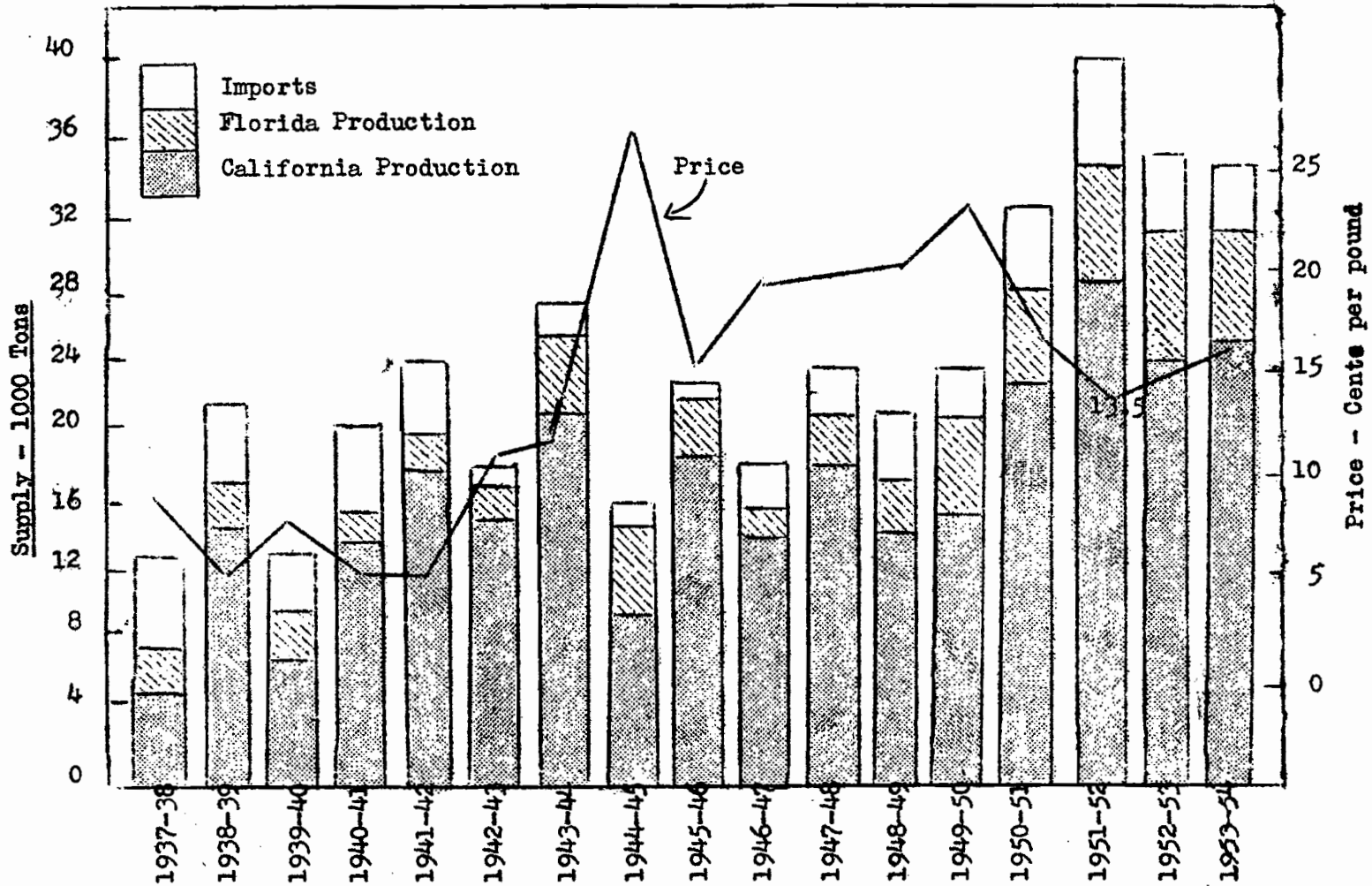
Irrigation practices included sprinklers, but furrow method is one mainly used. Average cost of water alone was over \$21.00 per acre foot. Some groves received small applications of water to minimize danger of disease.

* Average of total cost divided by total acres

Fertilizer practices were varied. The cost range was from \$7.08 per acre to \$76.20. The average of \$35.92 is higher than last year's average of \$30.97.

Fertilizer abbreviations: CalN - Calcium Nitrate; NH₃ - Ammonia; AmN - Ammonium Nitrate; AmS - Ammonium Sulfate; AmP - Ammonium Phosphate; Dr. - Dairy.

AVOCADOS: United States Supply and California Farm Price



California bearing acreage has steadily increased from 690 acres in 1927 to 15,100 acres in 1953. 5736 acres had not reached bearing age in 1952, 238 acres were planted in 1952.