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Second Annual Summary of WALNUT EFFICIENCY STUDY for Stanislaus County

1932

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Compiled by
AGRICULTURAL EXTENSION SERVICE
University of California

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INTRODUCTION

The second annual summary of the Stanislaus County Walnut Enterprise Study is herewith presented. It includes thirteen bearing walnut orchards on which costs have been analyzed for the year 1932. This year's study represents 334 acres, covering six commercial varieties. This report should be considered a progress report of the varieties and the acreage covered, and may reveal to some extent certain facts and information valuable to growers and the walnut industry. However, for final conclusions, the study should be continued for a period of at least five years so that the information will be more reliable and representative of the district.

The purpose of this study is to furnish Stanislaus County walnut growers with an economic study of walnut production under local conditions, with a view of increasing profits to growers and to assist individual growers whose records are summarized in analyzing their own walnut enterprise.

The 1932 year records show that most of the growers had increased yields over 1931. This was due in part to the fact that many of the orchards are in the stage of increasing production and are a year older than in 1931. The average yield in 1931 was 1006 pounds per acre, while for 1932 it was 1107 pounds per acre. The average cost of producing walnuts per pound was 7.21 cents while in 1931 it was 8.49 cents, or a decreased cost of 1.28 cents per pound. This will partly compensate for the lower returns received by growers during 1932. However, these returns are based on 80 per cent of the opening price of the California Walnut Growers' Association minus the packing house charges, and final returns may be greater.

As to varieties, the Mayette shows the lowest yield, as it did in 1931, but again led the varieties as to quality. Concords produced the greatest yield per acre but quality was lower than the other varieties. El Monte, Franquette and Payne varieties showed the greatest returns per acre, and Mayettes least.

The 1932 study shows that the average investment per acre in walnuts in Stanislaus County was $656.34; the total income per acre was $102.37; and total costs were $79.79, leaving a net profit above all costs of $22.58 per acre. While the last two years' study shows a profit in Stanislaus County, a large non-bearing and partial-bearing walnut acreage in California would indicate that future walnut production will increase.

Quoting a portion of the Outlook report for California for 1933, it reads, "The potential production of walnuts from the acreage already planted is so large that heavy additional plantings at this time are very likely to be disastrous both to those who make the plantings and to the owners of the present orchards". Therefore no new plantings at this time are advisable, and probable lower future prices make it necessary for growers to take all necessary steps to reduce costs. Cost of production per pound of walnuts is lowered by increasing the yield per acre and cutting expenses where possible. This increases profits and affects income per acre. Improvement of quality and maintaining size of nuts are two other factors affecting income and profits.

GENERAL SUMMARY

In order to determine the most important factors responsible for high profit, the fourteen records in the study were divided into two groups. The seven orchards with the highest net profit per acre constitute the high profit group as represented in the first column of Table 1. The other seven lower net profit records make up the low profit group. Averages of all fourteen records appear in column 3. The blank column is for entering the individual cooperator's figures for comparison. For further comparison, the average of all records for 1931 is given in the last column.

In comparing the two groups, it is noted that the one of high profit averaged two years older in age than the low one. This factor, no doubt, is responsible for a portion of the difference in total yield between the two groups, since the trees are in the stage of increasing production.

The high profit group obtained an income over all costs of a net profit of $50.49 per acre, as compared to a net loss of $3.38 per acre incurred by the low profit group. All orchards in the study averaged a net profit of $22.58 per acre.

Table 1.

	High Profit Group	Low Profit Group	Av. All Records 1932	Your Record 1932	Av. All Records 1931
Number of records	7	7	14		14
Number acres reporting	160.85	173.00	333.85		415.85
Average age of trees	15	13	14		11.7
Av. number trees per acre	18	19	18		17.9
Yield--lbs. merchantable nuts per a	1366.0	603.0	971.0		864.8
Total yield--lbs. per acre	1567.0	679.0	1107.0		1006.5
Per cent of nuts merchantable	87.1	88.9	87.7		85.9
Av. net price per cwt. all nuts	$ 9.22	$ 9.32	$ 9.25		$ 13.58
Total cost of production per cwt.	6.00	9.82	7.21		8.49
Net profit per cwt.	3.22	-.50	2.04		5.09
Cultural labor cost per acre	9.56	7.17	8.32		11.49
Harvesting labor cost per acre	18.41	7.52	12.77		15.52
Total labor cost per acre	27.97	14.69	21.09		27.01
Material cost per acre	4.86	1.92	3.33		2.90
Cash overhead cost per acre	5.70	4.97	5.33		5.75
Total cash and labor cost per a.	38.53	21.58	29.75		35.66
Depreciation cost per acre	14.73	6.89	10.66		8.99
Sub-total	53.26	28.47	40.41		44.65
Interest on investment per acre	40.67	38.18	39.38		40.81
Total all costs per acre	93.93	66.65	79.79		85.46
Total income per acre	144.42	63.27	102.37		136.65
Income above cash costs per acre	105.89	41.69	72.62		100.99
Capital and mgt. income per acre	91.16	34.80	61.96		92.00
Net profit above all costs per a.	50.49	-3.38	22.58		51.19
Investment per acre	677.83	636.35	656.34		680.31
Per cent earned on investment	13.4%	5.5%	9.4%		13.5%

GRADES AND INCOME PER HUNDRED-WEIGHT

Table 2 shows the per cent of grades and average net price received by the two groups and the average for all. The high orchards, although they did not have quite the percentage of Diamonds of the lows, had a combined total of 72.8 per cent Diamonds and Emeralds as compared to 58.7 per cent for the lows. However, the lows had a high percentage of third grade nuts (Californias) which brought their total of merchantable nuts slightly above that of the high group. The average net price received by all records for all merchantable nuts was $10.21 per cwt., as compared to $15.35 per cwt. in 1931. Returns for 1932 were estimated at 80% of the opening prices minus packing house charges.

Table 2.

	High Profit Group	Low Profit Group	Av. All Records 1932	Your Record 1932	Av. All Records 1931
Per cent of nuts Diamond grade	31.7	37.1	33.4		43.1
Per cent of nuts Emerald grade	41.1	21.6	34.9		13.3
Per cent of nuts California grade	14.3	30.2	19.4		29.5
Total per cent merchantable	87.1	88.9	87.7		85.9
Per cent culls	10.7	9.7	10.4		9.9
Per cent blows	2.1	1.4	1.9		4.2
Total per cent	100.0	100.0	100.0		100.0
Av. price all Diamonds per cwt.	$12.34	$12.47	$12.39		$18.42
Av. price all Emeralds per cwt.	9.51	9.47	9.50		14.30
Av. price all Californias per cwt.	7.64	7.85	7.74		11.35
Av. price all merchantable nuts	10.23	10.17	10.21		15.35
Average price culls	2.91	2.96	2.93		3.70
Average price blows (loss)	-.59	-.59	-.59		- -

COSTS PER HUNDRED-WEIGHT OF NUTS

Cultural and overhead costs per acre remain fairly fixed regardless of the yield. These costs, as a rule, constitute over 80% of the total cost of production of walnuts. Thus it is easy to understand the importance of high yields per acre in obtaining low cost production. It is noted in Table 3 that the high orchards produced over twice as many nuts per acre as the lows, which accounts for most of the difference in costs per cwt. between the two groups. The high profit records produced walnuts for $6.00 per cwt. or 6¢ per pound while it cost the others $9.82 per cwt. or nearly 10¢ per pound. Average of all costs for all walnuts in the 1932 study was $7.21 per cwt. This is $1.28 per cwt. less than in 1931 when average costs per cwt. were $8.49.

Table 3.

Av. yield--lbs. per acre	1567.0	679.0	1107.0		1006.5
Cultural labor cost per cwt.	$ .61	$ 1.06	$ .75		$ 1.14
Picking	.84	.99	.89		
Haul out of orchard	.17	.05	.14		1.38
Hulling and drying	.26	.16	.24		
Delivery to market	.11	.07	.09		.16
Total all harvesting per cwt.	1.17	1.10	1.16		1.38
Total labor cost per cwt.	1.78	2.16	1.91		2.68
Material cost per cwt.	.31	.28	.30		.29
Cash overhead cost per cwt.	.37	.74	.48		.57
Total cash and labor cost	2.46	3.18	2.69		3.54
Depreciation	.94	1.01	.96		.89
Total cash and depreciation	3.40	4.19	3.65		4.43
Interest on investment	2.60	5.63	3.56		4.06
Total all costs per cwt.	6.00	9.82	7.21		8.49
Income or average price per cwt.	9.22	9.32	9.25		13.58
Income above cash and labor costs	6.76	6.14	6.56		10.04
Income above cash, labor and deprec.	5.82	5.13	5.60		4.95
Net profit per cwt.	3.22	-.50	2.04		5.09

MATERIAL COSTS PER ACRE

Material costs per acre in this year's study averaged only 4.2 per cent of the total cost of production and therefore are of less importance than most other costs. Although in most cases little opportunity exists for reducing any of the items in Table 5, orchardists having extreme such costs should give some attention to this. Since not all acreages reported each item of expense, the average totals are considerably less than a sum of the item costs.

Table 5.

	High Profit Group	Low Profit Group	Av. All Records 1932	Your Record 1932	Av. All Records 1931
Irrigation taxes or water cost	$ 2.45	$ 1.92	$ 2.12		$ 2.08
Fertilizer	- -	.04	.04		- -
Cover crop seed	- -	.50	.50		.81
Pest control	4.19	.32	2.04		.43
Disease control	- -	.12	.12		.49
Harvesting	1.75	.35	1.09		.77
Miscellaneous	.19	.63	.23		.65
Av. total material costs	4.86	1.92	3.33		2.90
Comparative total					

CASH OVERHEAD COSTS PER ACRE

Cash overhead expenses are all cash outlays other than for labor, material, and capital expenditures. The latter is entered in the inventory, and interest and depreciation charged according to the length of life of the article.

County taxes are the largest item in cash overhead as observed in Table 6. This year they averaged $3.60 per acre for all orchards. The item of general expense is computed at five per cent of the total labor and material costs and is included to cover unreported miscellaneous costs such as use of telephone or family car in connection with the enterprise.

Table 6.

	High Profit Group	Low Profit Group	Av. All Records 1932	Your Record 1932	Av. All Records 1931
General expense	$ 1.64	$ .83	$ 1.22		$ 1.50
County taxes	3.32	3.85	3.60		3.53
Machinery repairs	1.00	- -	1.00		.71
Compensation and other insurance	.52	.32	.42		.63
Other cash costs	.33	.20	.30		- -
Average total cash overhead cost	5.70	4.97	5.33		5.75

INVESTMENT PER ACRE

Average investments in trees, improvements, equipment and land for orchards in the study are given in Table 7. It should be borne in mind, however, that those figures in no way represent the amount of capital necessary to establish such an enterprise. They are merely present depreciated values upon which a legitimate interest rate of six per cent is charged.

Tree values are based upon a cost of $440.00 per acre by the twelfth year and a total length of life of 55 years, depreciation being charged to write off the cost of the trees by the end of this period.

Table 7.

	High Profit Group	Low Profit Group	Av. All Records 1932	Your Record 1932	Av. All Records 1931
Investment in trees	$401.53	$387.02	$394.02		$402.86
Investment in improvements	27.53	5.22	15.97		21.09
Investment in equipment	22.33	26.48	24.48		33.28
Investment in land	226.44	217.63	221.87		223.08
Total investment per acre	677.83	636.35	656.34		680.31
Horses, tractors, trucks	1.63	11.85	6.93		8.69
Grand total	679.46	648.20	663.27		689.00

INVESTMENT OVERHEAD PER ACRE

Investment overhead, often termed "hidden overhead", consists of interest and depreciation on the capital invested in the enterprise. As stated in Table 7, interest is charged at the rate of six per cent. Depreciation is based upon the cost and expected life of each item in the inventory.

Investment overhead costs this year averaged 62.7 per cent of the total costs per acre, interest being responsible for about four-fifths of the average total of $50.04 per acre.

Interest for the two groups was about the same but depreciation charges for the high orchards were twice that of the lows due mainly to differences in depreciation on trees. All orchards in the high group were 12 years of age or older and carried a depreciation of $10.00 per acre on trees, whereas four records in the low group were under 12 and were not charged, thus reducing the average for that group.

Table 8.

	High Profit Group	Low Profit Group	Av. All Records 1932	Your Record 1932	Av. All Records 1931
Interest on investment in trees	$24.09	$23.22	$23.64		$24.17
Int. on investment in improvements	1.65	.31	.96		1.26
Int. on investment in equipment	1.34	1.59	1.47		2.00
Interest on investment in land	13.59	13.06	13.31		13.38
Total interest per acre	40.67	38.18	39.38		40.81
Depreciation on trees	10.00	3.76	6.76		4.65
Depreciation on improvements	1.16	.22	.67		.79
Depreciation on equipment	3.57	2.91	3.23		3.55
Total depreciation per acre	14.73	6.89	10.66		8.99
Total investment overhead	55.40	45.07	50.04		49.80

INDIVIDUAL COSTS AND RETURNS PER ACRE

Important factors influencing profits per acre on the individual orchards in the study are shown in Table 9. The records are arranged downward in order of decreasing net profit per acre. Thus the first seven orchards comprise the high group and the remaining seven the low group.

The columns of "Labor Income" and "Farm Income" are for those operators who reported their own labor separate from the hired labor. The first figure shows the value of the operator's labor as reported, added to the net profit. Farm Income consists of the labor income plus interest charged on investment, and represents the amount received for wages and skill in management, and earnings on his invested capital. The greater amount of labor an operator does himself in a given orchard, the larger will be his labor and farm income.

Table 9.

Serial No.	No. of Acres	Principal Varieties	Ave. Age of Trees	Total Cash and Labor	Depreciation	Interest	Total All Costs	Total Income	Net Profit	Income Above Cash Costs	Income Above Cash and Deprec.	Labor Income	Farm Income
6	26.45	F.E.C.*	16	$28.01	$10.33	$38.95	$77.29	$175.66	$98.37	$147.65	$137.32	$103.46	$142.41
10	45.80	FEPElM	15	32.66	16.12	38.75	87.53	135.54	48.01	102.88	86.76	49.78	88.53
13	14.00	M.E.F.	17	61.67	17.71	41.69	121.07	168.93	47.86	107.26	89.55	- -	- -
5	30.00	F.	18	53.75	13.36	36.23	103.34	141.64	38.30	87.89	74.53	- -	- -
2	7.00	M.	17	18.34	12.35	40.01	70.70	106.27	35.57	87.93	75.58	- -	- -
12	35.60	E.	12	36.95	16.87	47.95	101.77	135.38	33.61	98.43	81.56	- -	- -
1B	2.00	F.	17	20.44	11.34	39.39	71.17	99.16	27.99	78.72	67.38	30.80	70.19
4	10.00	F.M.	13	43.30	15.74	43.18	102.22	121.82	19.60	78.52	62.78	- -	- -
7	10.00	F.M.	11	32.40	.84	41.72	74.96	92.40	17.44	60.00	59.16	- -	- -
15	20.00	E.	10	19.17	.64	41.46	61.27	68.31	7.04	49.14	48.50	13.58	55.05
14	70.00	P.E.	8	20.05	4.83	38.98	63.86	57.43	-6.43	37.38	32.55	- -	- -
11	42.00	M.	22	17.79	12.29	33.05	63.13	55.31	-7.82	37.52	25.23	- -	- -
3	8.00	P.F.M.	7	25.43	1.45	37.29	64.17	49.09	-15.08	23.66	22.21	-13.28	24.01
1A	13.00	M.	17	18.34	11.34	39.39	69.07	53.95	-15.12	35.61	24.27	-13.15	26.24
Av. High	160.85	All	15	38.53	14.73	40.67	93.93	144.42	50.49	105.89	91.16	51.87	92.54
Av. Low	173.00	All	13	21.58	6.89	38.18	66.65	63.27	-3.38	41.69	34.80	-2.39	35.79
Av. All	333.85	All	14	29.75	10.66	39.38	79.79	102.37	22.58	72.62	61.96	23.76	63.14

*F = Franquette; E = Eureka; M = Mayette; C = Concord; P = Payne; El = El Monte.

IMPORTANT INDIVIDUAL CASH AND LABOR COSTS PER ACRE

Table 10 is presented for the convenience of the individual cooperators in comparing their various cash and labor costs with others in the study. Although in most cases there is little opportunity for much further savings by reduced costs, there still exists quite a wide variation between individuals in some items. It would be advisable that orchards with any extreme costs be given thoughtful consideration.

A few items of interest in Table 10 are: Only one orchard reported the planting of a cover crop. Irrigation labor ranged from .11¢ to $5.58 per acre, while cultivation ran from $1.04 to $9.62. Orchardists in the high group having pest control spent much more than those in the low group.

Table 10.

Serial No.	Pruning and Brush Disposal	*Cover Crop Cost	*Fertilizer Cost	*Spray or Dust	Cultivation Cost	Irrigation Labor	Irrigation Water Cost	Total Cultural Labor Cost	Harvesting Labor	Total All Labor	Total All Material	Cash Overhead	Total Cash and Labor
6	$1.08	- -	- -	- -	$4.72	$ .19	$2.19	$ 5.99	$14.74	$20.73	$2.19	$5.09	$28.01
10	1.89	- -	- -	$2.16	3.98	- -	- -	6.22	19.67	25.89	3.28	3.49	32.66
13	2.91	- -	.20	4.96	8.10	1.09	3.77	13.29	32.63	45.92	7.82	7.93	61.67
5	5.25	- -	- -	8.65	7.52	2.41	1.75	16.24	20.28	36.52	10.64	6.59	53.75
2	- -	- -	- -	- -	- -	.11	3.75	.11	8.75	8.86	3.75	5.73	18.34
12	1.69	- -	- -	- -	4.21	5.58	- -	11.48	14.89	26.37	3.18	7.40	36.95
1B	1.40	- -	- -	- -	1.50	2.80	2.48	5.70	7.18	12.88	2.48	5.08	20.44
4	2.89	- -	- -	- -	9.62	2.26	.80	14.77	21.67	36.44	.80	6.06	43.30
7	3.46	- -	- -	- -	6.70	- -	3.54	10.16	11.96	22.12	4.57	5.72	32.40
15	.93	- -	- -	- -	4.39	.56	3.00	5.88	5.25	11.13	3.20	4.84	19.17
14	1.38	- -	.64	.50	2.27	1.99	1.37	7.80	5.62	13.42	1.95	4.68	20.05
11	.39	- -	- -	.39	3.98	- -	- -	4.39	7.98	12.37	.37	5.05	17.79
3	.26	.88	1.27	.28	5.22	3.27	2.50	10.99	5.87	16.86	3.79	4.78	25.43
1A	1.20	- -	- -	- -	1.04	1.97	2.48	4.21	6.42	10.63	2.48	5.23	18.34
Av.High	2.44	- -	.20	4.75	5.20	1.85	2.45	9.56	18.41	27.97	4.86	5.70	38.53
Av.Low	1.23	.88	.74	.44	3.66	1.86	1.92	7.17	7.52	14.69	1.92	4.97	21.58
Av.All	1.80	.88	.67	2.29	4.38	1.86	2.12	8.32	12.77	21.09	3.33	5.33	29.75

* These figures include both labor and material costs.

INDIVIDUAL COSTS AND RETURNS PER HUNDREDWEIGHT

Factors influencing costs and returns per cwt. are shown in Table 11, for all orchards in the study. Yield and price are the two most important factors affecting costs and net profit per cwt. The average price received depends mainly upon the quality of the walnuts.

Upon analysis of the table many interesting comparisons can be made. For example, orchard No. 6, which had the highest net profit per acre, also is first in net profit per cwt. with $6.43. This was due to a good yield of high quality nuts. Record No. 2 obtained the highest average price of all nuts sold ($11.71) which is accounted for by having the largest percentage of Diamonds and Emeralds of any in the study. A relatively low yield, however, was responsible for it being only fifth high in net profit per acre and second in net profit per cwt. Two orchards in the low group produced over 1000 pounds per acre but had a very low percentage of Diamonds and Emeralds.

Table 11.

Serial No.	Total Yield Lbs. per Acre	% Diamond and Emerald	% Merchantable	Picking Labor	Hulling and Drying Labor	Hauling to Market	*Total Harvesting	Total Cash and Labor	Investment Overhead	Total All Costs	Average Price All Nuts	Net Profit	Income Over Cash & Labor
6	1533	90.0	94.6	.73	- -	.14	.96	1.82	3.21	5.03	11.46	6.43	9.64
10	1616	57.2	81.3	.71	.29	- -	1.29	2.02	3.40	5.42	8.39	2.97	6.37
13	1904	71.9	88.4	1.39	.28	.04	1.71	3.24	3.12	6.36	8.87	2.51	5.63
5	1569	88.0	89.2	.83	.21	.10	1.35	3.43	3.16	6.59	9.03	2.44	5.60
2	907	95.5	95.5	.81	- -	.16	.97	2.02	5.77	7.79	11.71	3.92	9.69
12	1553	65.1	85.9	.85	- -	.11	1.16	2.38	4.17	6.55	8.72	2.17	6.34
1B	1081	92.7	92.7	.54	- -	.05	.66	1.89	4.70	6.59	9.18	2.59	7.29
4	1468	50.2	90.2	1.13	.26	- -	1.47	2.95	4.01	6.96	8.30	1.34	5.35
7	1121	46.8	88.8	.92	.01	.10	1.16	2.89	3.79	6.68	8.24	1.56	5.35
15	835	29.2	87.7	.56	- -	.06	.65	2.29	5.05	7.34	8.18	.84	5.89
14	596	68.9	88.0	.90	- -	.04	.99	3.37	7.36	10.73	9.64	-1.09	6.27
11	561	61.0	89.8	1.32	- -	.11	1.43	3.17	8.09	11.26	9.87	-1.39	6.70
3	447	79.7	87.8	.95	.22	.14	1.31	5.69	8.65	14.34	10.97	-3.37	5.28
1A	462	92.4	92.4	1.30	- -	.04	1.39	3.97	10.97	14.94	11.67	-3.27	7.70
Av. High	1567	72.8	87.1	.84	.26	.11	1.25	2.46	3.54	6.00	9.22	3.22	6.76
Av. Low	679	58.7	88.9	.99	.16	.07	1.13	3.18	6.64	9.82	9.32	-.50	6.14
Av. All	1107	68.3	87.7	.89	.24	.09	1.22	2.69	4.52	7.21	9.25	2.04	6.56

*Total harvesting includes both labor and material costs.

GENERAL SUMMARY COMPARING VARIETIES

Table 12 shows a general summary comparing six principal walnut varieties included in this study. The varieties are listed from left to right in order of decreasing net profit per acre.

This being only the second year of the study, care should be taken in drawing any definite conclusions. Final decisions should not be made until the close of this study, at which time five years of records will be available.

Paynes were at the top and Mayettes at the bottom of the list again this year. Mayettes on the average showed the highest quality and therefore the best average price but at the same time were characteristically low in production, thus accounting for low returns per acre. Concords averaged a very high yield but had poor quality in the 1932 records. Eureka orchards in the study are much younger than the others and probably not in full production but appeared close to Franquettes in net profit per acre. Future results of Eurekas should prove interesting.

Although there was but one record of the Payne variety for 1932, this variety has shown its ability to produce good yields of high quality. A number of records included Paynes under mixed varieties. Although the acreage was small, grades and yield of Paynes were above the average of varieties studied. El Monte showed the second largest yields in the study and was second in net profit per acre for 1932. Acreage of this variety is small, and there are but two records from which to draw conclusions.

Table 12.

	Payne	El Monte	Franquette	Eureka	Concord	Mayette
Number of records	1	2	7	6	3	6
Acres reporting	7.0	11.7	54.32	74.73	5.0	71.3
Average age of trees	15.0	13.5	17.0	13.0	17.0	19.0
Number of trees per acre	10.0	11.3	22.7	16.0	19.6	17.6
Total yield--lbs. per acre	1832	2297	1615	1552	2318	501
Av. net price received per cwt.	8.43	7.10	9.78	9.14	6.32	11.17
Total all costs per cwt.	4.77	4.23	5.96	5.62	4.84	13.87
Net profit per cwt.	3.66	2.87	3.82	3.52	1.48	-2.70
Cultural labor cost per acre	6.22	7.12	12.29	7.95	9.07	5.25
Harvesting labor cost per a.	19.68	25.76	19.41	16.77	36.98	6.72
Total labor cost per acre	25.90	32.88	31.70	24.72	46.05	11.97
Material cost per acre	3.28	3.26	7.23	3.30	4.73	1.95
Cash overhead cost per acre	3.50	4.51	6.09	5.54	6.57	5.30
Total cash and labor per a.	32.68	40.65	45.02	33.56	57.35	19.22
Depreciation cost per acre	16.12	16.25	13.44	11.53	16.01	13.07
Sub-total	48.80	56.90	58.46	45.09	73.36	32.29
Interest on investment per a.	38.75	40.32	37.86	42.15	38.85	37.09
Total all costs	87.55	97.22	96.32	87.24	112.21	69.38
Total income per acre	154.52	163.11	157.92	141.93	146.39	55.96
Income above cash costs per a.	121.84	122.45	112.90	108.37	89.04	36.75
Capital and mgt. income per a.	105.72	106.21	99.46	96.84	73.03	23.69
Net profit over all costs " "	66.97	65.89	61.60	54.69	34.18	-13.42

PER CENT OF NUTS IN EACH SIZE AND QUALITY GRADE

Too much emphasis cannot be put on obtaining the best possible quality and sizes of nuts. As stated in Table 12, though, no definite conclusions should be made from one year's comparison of varieties as to their ability regarding these factors.

Mayettes and Franquettes both had over 90 per cent merchantable nuts this season. Concords classified only as Californias, although they showed quite a few Diamonds and Emeralds in the 1931 crop year.

Table 13.

	Payne	El Monte	Franquette	Eureka	Concord	Mayette
Diamond Large	28.8	- -	27.6	14.6	- -	65.2
Diamond Fancy	5.9	- -	26.5	3.2	- -	2.8
Total per cent Diamond	34.7	- -	54.1	17.8	- -	68.0
Emerald Large	26.3	17.0	4.1	32.5	- -	16.9
Emerald Fancy	3.9	1.4	10.0	13.2	- -	4.8
Emerald Babies	5.4	.7	22.1	3.0	- -	4.0
Total per cent Emerald	35.6	19.1	36.2	48.7	- -	25.7
California Large	3.1	52.3	.8	15.2	73.1	.1
California Fancy	.3	2.4	.6	5.6	4.6	.1
California Babies	- -	1.4	- -	- -	1.3	- -
Total per cent California	3.4	56.1	1.4	20.8	79.0	.2
Total per cent merchantable	73.7	75.2	91.7	87.3	79.0	93.9
Culls	16.4	22.4	6.9	11.3	15.2	5.5
Blows	9.9	2.4	1.4	1.4	5.8	.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

NET PRICES RECEIVED PER HUNDRED-WEIGHT FOR EACH GRADE BY VARIETIES

Net prices per cwt. for each grade by varieties are listed in Table 14. These net prices are based upon the central association paying 80 per cent of the opening prices and from which house charges are deducted. Blows were allowed no return and therefore appear as a net cost to the amount of packing house handling expenses.

Table 14.

	Payne	El Monte	Franquette	Eureka	Concord	Mayette
Diamond Large	$12.74	- -	$12.74	$13.54	- -	$12.50
Diamond Fancy	11.13	- -	11.14	11.94	- -	10.90
Average all Diamonds	12.46	- -	11.95	13.25	- -	12.44
Emerald Large	10.08	10.49	10.85	10.70	- -	10.85
Emerald Fancy	8.88	8.48	9.65	9.01	- -	9.46
Emerald Babies	7.28	3.19	7.29	7.29	- -	6.58
Average all Emeralds	9.53	10.20	8.35	10.03	- -	9.92
California Large	8.73	8.25	7.46	7.95	7.59	6.49
California Fancy	7.42	6.68	7.10	6.56	6.32	5.30
California Babies	- -	4.89	4.84	- -	4.88	4.90
Average all Californias	8.60	8.05	7.25	7.58	7.48	5.84
Average price all merchantable	10.87	8.59	10.45	10.10	7.48	11.73
Culls (estimate)	2.91	2.91	2.91	2.95	2.91	2.91
Blows - net cost	-.59	-.59	-.59	-.59	-.59	-.59
Average price all nuts	8.43	7.10	9.78	9.14	6.32	11.17