

# SOME OBSERVATIONS ON THE COSTS OF PRODUCING DATES IN 1950

AGRIC REF SERVICE



COMPILED AND PREPARED

by

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## - I N T R O D U C T I O N -

At the request of the date growers in the Coachella Valley, Riverside County, California, this study of the costs of producing Deglet Noor dates in 1950 was undertaken.

Eight cooperators took part in this study with a total of 156 acres of palms ranging from 10 to 22 years in age. Cultural practices varied widely, but each garden was fairly representative of a common management method.

The yields in a few of the gardens are lower than they would normally average because the palms have not completely recovered from the cold winters of 1948 and 1949.

The purpose of this study was to get more accurate information concerning

the present day costs of the various operations so that the comprehensive data reported in the 1934-1939 study could be adjusted to present day operations.

It was not contemplated that the averages of the few records would truly portray the average cost of producing dates. Therefore, the reader should bear in mind that the averages in this report apply only to the records included and the period covered.

These figures are meant to serve only as a guide in studying your own management practices as they may relate to past seasons.

## SUMMARY AND GENERAL CONCLUSIONS

How are the various figures in Tables 1 and 2 determined? The average age of palms is the weighted average of all palms in each garden in the study. The yield in pounds per acre is the total yield divided by the acreage. Cultural labor costs are the sum of all operational labor and field power exclusive of the harvesting operation. Harvesting costs are the sum of picking and fruit hauling costs. The Sub-total Labor Costs are the sum of cultural labor and harvesting costs. Material costs refer to the costs of irrigation water, dusts, fertilizers, etcetera.

Cash overhead costs are those costs incurred for taxes, insurance, repairs and general expenses. Depreciation costs per acre are derived from dividing the original cost by number of years of life and then by the number of years for which item applies. Interest is computed as 5% of average investment which is 1/2 of original cost of item. The total of all costs is the sum of labor, material, cash overhead, depreciation and interest costs.

A glance at Table 1 shows that it is not the labor cost or any one single

item alone that has risen since the 1934-39 study, but all costs. However with these changes we have reached a higher average production per acre which would by necessity increase many labor and material factors.

On a per hundred weight basis, as shown in Table 2, these increased costs do not result in as great an increase as would be expected, due to the increased average production of the palms.

To give some idea of the efficiency of various types of methods of tree climbing, Table 3 was prepared. There appears to be no significant difference among any of the systems when comparable age palms are considered. This table does, however, give a fairly accurate picture of the costs incurred in performing the various cultural processes in producing dates.

In preparing these observations on the 1950 season no specific conclusions have been drawn or implied. It is hoped that the figures obtained give you a clearer picture of the present trend in costs of producing the date crop as well as provide you with a guide in studying the costs of your own operations.

Table 1

PRODUCTION COST OF DATES  
IN 1950 ON A PER ACRE BASIS

Serial Number	Av. Age of Palms	Yield in Pounds	Cultural Labor Cost	Harvesting Cost	Subtotal Labor Costs	Material Cost	Cash Overhead Cost	TOTAL CASH COST	Depreciation Cost	Interest on Investment	TOTAL OF ALL COST
1	10	12,749	199.97	181.35	281.32	103.66	75.05	460.03	88.46	71.87	620.36
2	17	14,348	246.27	261.81	508.08	134.16	85.34	727.58	103.41	80.03	911.01
3	16	7,864	154.49	98.65	253.14	63.69	33.27	350.10	92.12	76.59	518.81
4	16	16,782	333.86	350.81	684.67	199.15	54.24	938.56	102.29	72.13	1112.98
5	22	8,972	177.98	168.10	346.08	62.15	90.73	498.96	77.71	67.77	644.44
6	21	11,154	214.63	133.04	347.67	187.56	120.35	655.58	90.73	73.85	820.16
7	18	7,105	158.86	119.62	278.48	97.50	37.97	414.94	79.04	69.12	473.10
8	19	11,985	284.20	185.29	469.49	137.63	161.65	768.76	112.69	84.32	965.77
Av. of All	19	11,644	247.41	191.53	438.94	125.73	132.72	697.39	100.45	77.96	875.80
1934-39 Study	10	5,827	62.77	46.10	108.87	77.84	27.49	214.20	45.26	59.40	318.86

The above table shows the total of all costs of producing dates on a per acre basis in 1950 broken down into the major cost groups. Gardens are arranged in the above order based on their production costs per pound. The averages of each operation are weighted according to the acreages involved and are therefore not equal to the simple average

of the figures shown. For example: the item "average yield per acre to pounds" was obtained by adding the total yields of all acres in the study and dividing this total by the number of acres in the study. The last row of figures which are from the 1934-39 cost study summary is for comparison only.

Table 2

PRODUCTION COST OF DATES  
IN 1950 ON A PER HUNDREDWEIGHT BASIS

Serial Number	Yield, Pounds per Acre	Cultural Labor Cost	Harvesting Cost	Subtotal Labor Cost	Material Cost	Cash Overhead Cost	TOTAL CASH COST	Depreciation Cost	Interest on Investment	TOTAL OF ALL COST
1	12,749	1.57	1.43	3.00	.81	.59	4.40	.69	.56	5.65
2	14,348	1.72	1.82	3.54	.94	.59	5.07	.72	.56	6.35
3	7,864	1.96	1.26	3.22	.81	.42	4.45	1.17	.97	6.59
4	16,782	1.99	2.15	4.14	1.19	.32	5.65	.61	.43	6.69
5	8,972	1.98	1.88	3.86	.69	1.13	5.68	.87	.75	7.30
6	11,154	1.92	1.19	3.11	1.68	1.09	5.88	.81	.66	7.35
7	7,105	2.24	1.68	3.92	1.37	.53	5.82	1.11	.97	7.90
8	11,985	2.37	1.55	3.92	1.15	1.35	6.42	.94	.70	8.06
Av. of All	11,644	2.12	1.64	3.76	1.08	1.14	5.98	.86	.67	7.51
1934-39 Study	5,827	1.31	.79	2.10	1.10	.47	3.67	.78	1.02	5.47

The above table shows the total of all costs of producing dates on a per hundredweight basis in 1950 broken down into the major cost groups. As in

Table 1 the averages were weighted to give a truer picture of the unit costs. The figures from the 1934-39 cost study summary are shown for comparison only.

Table 3

- CULTURAL LABOR AND FIELD POWER COSTS PER ACRE -

A Comparison of Tree Climbing Methods and Selected Operations

Operation	Portable Ladder				Portable and Fixed Ladder		Mobile Service Platform	
	Serial No.	1	2	4	7	3	6	5
Age of Tree	10	17	16	18	16	21	22	19
Prun. & Dethorn.	14.07	21.00	31.56	9.28	23.04	34.05	19.35	3.34
Pollination	19.35	28.08	26.36	23.72	21.88	33.78	29.66	27.49
Thinning	} 9.27	25.17	} 13.76	} 17.41	15.40	5.22	11.46	23.59
Tying down		25.17			11.09	15.67	14.72	17.95
Bagging	13.16	31.67	16.14	20.89	10.35	20.03	21.12	15.38
Total	65.85	131.09	87.82	71.30	81.71	108.75	96.31	87.75
Picking per Cut	1.28	1.64	2.00	1.58	.85	1.04	1.56	1.41
Irrigation	7.31	25.20	9.00	24.58	17.14	6.15	16.20	3.53
Cult. & Furrow.	-	32.70	-	49.50	30.09	72.97	32.79	55.99
Weed Control	13.80	-	28.11	1.50	-	-	-	-
Fertilization	.62	1.67	2.57	-	-	.86	-	2.37
Brush disp.	8.82	-	22.37	-	8.93	10.20	20.74	11.58
Sulphur & Dust	3.58	2.33	28.11	-	2.85	3.88	2.58	6.46
Miscellaneous	110.00	53.29	155.88	10.00	13.77	11.82	9.32	16.54
Total	144.13	115.19	246.04	85.58	72.78	105.88	81.63	96.47

The above table shows the cultural operations grouped as "in tree operations" and "garden floor operations". The gardens in the study are arranged according to their methods of climbing the palms as follows: those using portable ladders entirely, those using a portable ladder to reach a fixed ladder on the tree and

those using some form of mobile service platform. This arrangement of per acre costs permits one to make a comparison of the efficiencies of various systems. It should be born in mind that the costs of the initial installation are not considered. The items included under "miscellaneous costs" vary so widely that the differences noted here are not a true picture.

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