

LEMON PRODUCTION COSTS

Santa Barbara County 1971

PRE-HARVEST COSTS FOR MATURE ORCHARD

	Dollars per Acre
Labor, Equipment and Materials	
Cultural Operations	
Irrigation Labor, 1 1/2 hr/ac/irrig., 6 irrigations, pulling	\$ 23
Irrigation Water, 15 ac-in/ac @ \$60/ac-ft	75
Pest Control, 2 oil sprays, spring and fall, contracted	64
Disease Control, 1 Bordeaux skirt spray, contracted	16
Rodent, snail, and other pest and disease control	8
Fertilization, 200 lbs. N @ 14¢/lb broadcast, plus lab.	32
Micronutrient spray, Zinc & Manganese, contracted	12
Weed Control, 2 chemical sprays, plus spotting with oil	38
Pruning & Brush Disposal, machine top \$17, hand \$36, chip \$12	65
Frost Protection, 50 hours windmachine & stand-by	21
Tree Care and Replacement	18
Miscellaneous, roads, storm drains, windbreaks	23
Total Cultural Costs	\$ 395
Cash Overhead	
County Taxes	\$ 110
Maintenance & Repairs, irrigation, frost & Buildings	28
General Expenses, office, accounting, insurance	41
Management Charge	36
Total Cash Overhead Costs	\$ 215
Total Pre-Harvest Cash Costs	\$ 610
Investment Overhead	
Depreciation, see schedule below	\$ 180
Interest on Investment 7%, see schedule below	385
Total Investment Overhead Costs	\$ 565
Total Pre-Harvest Costs	\$ 1,175

INVESTMENT SCHEDULE PER ACRE

Items	Original Cost	Years Life	Depre- ciation	Average Value	7% Interest
Land, appraised value	\$ 4,000		\$ --	\$ 4,000	\$ 280
Trees, 110 per acre	1,750	20	88	875	61
Irrigation Pipelines	200	25	8	100	7
Sprinklers & Hoses	200	10	20	100	7
Windmachine, other frost	600	15	40	300	21
Weed sprayer	50	10	5	25	2
Pick-up truck	50	5	10	25	2
Building, shop, shed	50	25	2	25	2
Other Equipment & tools	100	15	7	50	3
Totals	\$ 7,000		\$ 180	\$ 5,500	\$ 385

See reverse side for explanations.

LEMON PRODUCTION COSTS

1970 Santa Barbara County 1971

These sample costs to produce lemons in mature orchards on the South Coast of Santa Barbara County are based on records from cooperating growers and local packinghouses. Costs vary considerably from grove to grove, so growers should substitute actual costs where available, using this method of analysis.

Assumptions: Alluvial soil in canyons between foothills, Eureka nucellar lemon on C. Macrophylla rootstock, 10 years old, trees planted 18 ft. by 22 ft. or 110 trees per acre, 40 acre orchard, average yield 650 field boxes per acre, irrigation by dragline sprinklers, water from Cachuma Dam furnished by District under pressure, frost protection by windmachine only, non-tillage with weed control by chemical and oil sprays. Costs are per acre and are the sum of labor charges, equipment expenses at custom rates, supplies, and materials, except as noted otherwise. Owner operated with occasional extra labor figured at \$2.50 per hour.

Harvesting Costs: Most picking and hauling of lemons is performed by picking crews operated by packing houses and charged to the growers account at cost. Based on a 50-pound net weight standard field box, the costs reported during the 1969-1970 season were:

Picking Labor	64¢ per field box
Harvesting Labor Overhead	14¢ " " "
Hauling	11¢ " " "
Total	89¢ per field box

Yields and Costs: Yields in local lemon orchards vary widely depending on growing conditions, tree parentage and age, and management practices. The average of all orchards is about 400 field boxes per acre. Well cared for groves using the practices listed in this study should average about 650 field boxes per acre. Outstanding orchards may average as high as 900 field boxes per acre. The different costs per field box can be illustrated by using these three levels of yields.

	Cost per Acre	Cost per 50-lb. field box		
		Average 400 f. b./a.	Good 650 f. b./a.	Excellent 900 f. b./a.
Cultural Practices	\$ 395	\$ 0.99	\$ 0.61	\$ 0.44
Cash overhead	215	.54	.33	.24
Total Pre-Harvest Cash	610	1.53	.94	.68
Depreciation	180	.45	.28	.20
Interest on Investment	385	.96	.59	.43
Total Pre-Harvest	\$ 1,175	\$ 2.94	\$ 1.81	\$ 1.31

Recent California - Arizona lemon industry average on-tree prices per field box as reported by the USDA were: 1966-67 \$1.48, 1967-68 \$1.88, 1968-69 \$2.36, 1969-70 \$2.21, 1970-71 estimated \$2.50.

Prepared by George E. Goodall, Farm Advisor, University of California, Santa Barbara County, January 25, 1972

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CASH FLOW SCHEDULE OF LEMON PRODUCTION COSTS

Santa Barbara County 1971

Operation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Irrigation					15	16	18	18	16	15			98
Pest Control				32						32			64
Disease Control											16		16
Rodent & Snail		1	1		1	1	1	1	1		1		8
Fertilization		32											32
Micronutrient						12							12
Weed Control		6			10		6		6		10		38
Pruning & Brush				17	12			6		30			65
Frost Protection	6	5	2								4	4	21
Tree Care		3		5		2		2		2		4	18
Miscellaneous	1	1	1	1	1	1	1	1	1	1	9	4	23
Total Cultural	7	48	4	55	39	32	26	28	24	80	40	12	395
County Taxes		55									55		110
Majnt. & Repairs	3	2	4	2	2	2	2	2	2	2	2	3	28
General Expenses	3	2	3	10	2	3	3	3	3	3	3	3	41
Management	3	3	3	3	3	3	3	3	3	3	3	3	36
Total Overhead	9	62	10	15	7	8	8	8	8	8	63	9	215
Total	16	110	14	70	46	40	34	36	32	88	103	21	610

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