



# Citrimation for Ventura County

## ECONOMICS

CITRUS COSTS  
VENTURA COUNTY 1984  
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The cost of citrus production varies greatly among individual groves; due, obviously to the variation in the components which make up the cost of production.

This sample cost sheet is just that - a sample. Review the following paragraphs to become familiar with the wide variations that can occur in the different farming operations.

### Irrigation

Water prices in Ventura County vary from as low as \$25/A-ft to over \$350/A-ft. One should consult water districts in his own area to provide a more precise figure. He should also be aware of additional fees i.e. lift charges, meter charges, taxes and other assessments.

The amount of water growers use will also vary. This will depend upon soil type, geographical location and tree size. Sandy soils, warmer areas (i.e. Piru, Ojai) and 30 year old trees will take much more water than 5 year old trees planted in a clay soil in Oxnard.

One must also consider method of application. Furrow irrigation may take approximately 2-3 A-ft while low volume (drip, mini-sprinkler) may take 1 1/2 - 2 A-ft.

(OVER)

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## Pest Control

Pest control is another cost which can vary greatly:

For Lemons - A typical minimal spray program may include one oil spray for citrus red mite and California red scale, one thrips spray and one spray for brown rot. This would cost approximately \$175. Additional sprays which may be needed include bud mite and silver mite. In addition more than one spray may be required for red scale, thrips and red mite.

For Oranges - A typical minimal spray program may include one oil spray for mites and scale. The cost of this would range from \$70 - \$130. An additional spray for thrips and brown rot control may also be needed.

*****			
* Bud mite	\$ 80 - 130	Red mite	\$ 80 - \$130 *
* Silver mite	130	Thrips	45 - 70 *
* Scale	70 - 125	Bordeaux, Brown rot	32 - 34 *
*****			

There is also an additional cost for parasite releases.

Snails, gophers, squirrels and rats may or may not be problems. If treatment is required, costs will vary with the extent of the control measures.

## Frost Protection

Frost protection will also vary widely according to the orchards location, slope and type of management used to combat the frost hazards. In some years cost can obviously be \$0, or a grower may decide to pay standby charges on windmachines of approximately \$75 per acre. Then, with the use of the windmachine the cost will rise between \$100 and \$225 per acre (depending upon the severity of the winter). During the past few years growers with electric powered wind machines have been given the option of selecting the rate schedule on which they are to be billed. Because of recent mild winters in many areas of the southwest, many users have found it more economical to pay the higher kilowatt cost of the GS-1 schedule and pay only for power actually used thus avoiding the fixed standby charges of the GS-2 and PA-1 rate schedules. The opposite would be true in more severe winters.

## Depreciation and Interest

Depreciation and interest on investment are included in this study. An annual charge for interest on investment is calculated on the money invested in land, trees, building and equipment. The charge is at a rate of 12 percent on assumed agricultural land value of \$7,000 per acre plus average cash invested (one-half value) on trees, equipment and buildings. Figures on the pickup, weed sprayer, buildings and hand tools are calculated assuming a 20 acre grove.

The method of depreciation scheduling which one chooses will cause considerable variation when deductions are taken in preparation of your tax return. Preference in the method of depreciation used is related to estimated revenue flows and tax considerations.

In this cost study I have included two types of depreciation; the accelerated cost recovery system (ACRS) which is the quickest allowable rate of depreciation, and the straight line method based on a 25 year depreciation schedule.

LEMON PRODUCTION COSTS PER ACRE  
VENTURA COUNTY 1984

<u>Item</u>	<u>Typical Cost</u>	<u>Cost Range</u>
<u>CULTURAL OPERATION COSTS</u>		
dollars per acre		
<u>(Labor + Material + Equipment)</u>		
Fertilization: Nitrogen	33	25 - 43
Minor Elements	32	32 - 32
Leaf Analysis	3	2 - 5
Irrigation: Labor	100	80 - 120
Water @ 2.0 A-ft/A	200	70 - 875
Pest Control	225	110 - 400
Snail Control (Baiting)	35	25 - 90
Disease: Bordeaux Spray, for Brown Rot	33	32 - 34
Weed Control: Fall Sterilant	30	28 - 35
2-3 Spot Sprays	38	30 - 45
Frost Protection	100	75 - 225
Tree Replacement @ 2 trees / A	38	35 - 40
Erosion Control	15	15 - 15
Pruning: Hand Pruning	250	200 - 290
Brush Removal	25	20 - 35
Machine Topping Alone*	40(1)	30 - 50(1)
Machine Topping Alternating With Hand Pruning*	170(1)	170 - 170(1)
Skirt Pruning & Brush Removal	130	130 - 130
Hedging Box Rows	4	3 - 5
* These methods can be alternatives to straight hand pruning.		
(1) Not included in totals		
Miscellaneous	35	35 - 35
<b>TOTAL CULTURAL COSTS</b>	<b>1326</b>	
<u>OVERHEAD COSTS</u>		
General Expenses:		
Office, Phone, Insurance, Legal Accounting, Auditing	70	50 - 120
Maintenance and Repair:		
Equipment, Irrigation System, Roads, Buildings	90	70 - 150
Management Charge @ \$7/Ac/Mo	84	72 - 150
Taxes	100	90 - 200
<b>TOTAL OVERHEAD COSTS</b>	<b>344</b>	
<b>TOTAL CULTURAL AND OVERHEAD COSTS</b>	<b>1670</b>	



**FOR GROWERS USING  
STRAIGHT LINE DEPRECIATION METHOD**

**INVESTMENT COSTS**

	<u>LEMONS</u>	<u>VALENCIA ORANGES</u>
Depreciation (Replacement Cost: See investment schedule)	959	1,185
Interest on Investment @ 12%	<u>2,019</u>	<u>2,357</u>
<b>TOTAL INVESTMENT COSTS</b>	<b><u>2,978</u></b>	<b><u>3,542</u></b>

**SUMMARY**

<u>TOTAL PREHARVEST COSTS</u>	<u>LEMONS</u>	<u>VALENCIA ORANGES</u>
Cultural	1,326	863
Overhead	344	344
Investment	2,978	3,542
<b>(Cultural + Overhead + Investment)</b>	<b><u>4,648</u></b>	<b><u>4,749</u></b>

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 .....  
 ACRS method for Federal Tax purposes will accelerate depreciation by \$3,038 for  
 the first 5 years for lemons and \$3,940 for Valencias.

INVESTMENT SCHEDULES

**1. USING ACRS DEPRECIATION METHOD**

LEMONS

Item	ACRS	Per-Acre Costs Over 5 Year Period		
		Investment	Depreciation	Interest
Land, assumed value	-	\$ 7,000	-	\$ 840
Trees (136/acre)	5 yrs	17,435	\$3,487	1,046
Irrigation System	5 "	1,270	254	76
Pickup (10,000)	3 "	500	166	30
Weed Sprayer (4,000)	5 "	200	40	12
Buildings (4,000)	5 "	200	40	12
Hand Tools (1,000)	5 "	50	10	3
Total Investment Schedule		\$26,655	\$3,997	\$2,019

VALENCIA ORANGES

Item	ACRS	Per-Acre Costs Over 5 Year Period		
		Investment	Depreciation	Interest
Land, assumed value	-	\$ 7,000	-	\$ 840
Trees (180/acre)	5 yrs	23,075	\$4,615	1,384
Irrigation System	5 "	1,270	254	76
Pickup (10,000)	3 "	500	166	30
Weed Sprayer (4,000)	5 "	200	40	12
Buildings (4,000)	5 "	200	40	12
Hand Tools (1,000)	5 "	50	10	3
Total Investment Schedule		\$32,295	\$5,125	\$2,357

**2. USING STRAIGHT LINE DEPRECIATION METHOD**

LEMONS

Item	Expected Life	Per-Acre Costs Over 25 Year Period		
		Investment	Depreciation	Interest
Land, assumed value	-	\$ 7,000	-	\$ 840
Trees (136/acre)	25 yrs	17,435	\$ 697	1,046
Irrigation System	10 "	1,270	127	76
Pickup (10,000)	5 "	500	100	30
Weed Sprayer (4,000)	10 "	200	20	12
Buildings (4,000)	20 "	200	10	12
Hand Tools (1,000)	10 "	50	5	3
Total Investment Schedule		\$26,655	\$959	\$2,019

VALENCIA ORANGES

Item	Expected Life	Per-Acre Costs Over 25 Year Period		
		Investment	Depreciation	Interest
Land, assumed value	-	\$ 7,000	-	\$ 840
Trees (180/acre)	25 yrs	23,075	\$ 923	1,384
Irrigation System	10 "	1,270	127	76
Pickup (10,000)	5 "	500	100	30
Weed Sprayer (4,000)	10 "	200	20	12
Buildings (4,000)	20 "	200	10	12
Hand Tools (1,000)	10 "	50	5	3
Total Investment Schedule		\$32,295	\$1,185	\$2,357

FRUIT AND NUT CROPS

ACREAGE, PRODUCTION AND VALUES 1983

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	\$ VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
AVOCADOS	1983	15,636	2.54	39,778	Tons	\$624.01	\$ 24,822,000
	1982	14,310	1.25	17,847	"	900.00	16,063,000
GRAPEFRUIT							
Total	1983	1,145	10.52	12,047	"	140.70	1,695,000
	1982	1,242	7.67	9,520	"	135.92	1,294,000
Fresh	1983	---	---	7,577	"	216.00	1,637,000
	1982	---	---	5,466	"	229.00	1,252,000
Processed	1983	---	---	4,470	"	12.98	58,000
	1982	---	---	4,054	"	10.36	42,000
LEMONS							
Total	1983	23,295	14.34	334,000	"	233.70	78,056,000
	1982	22,924	13.48	309,000	"	273.22	84,426,000
Fresh	1983	---	---	158,000	"	477.99	75,523,000
	1982	---	---	146,000	"	547.00	79,862,000
Processed	1983	---	---	176,000	"	14.39	2,533,000
	1982	---	---	163,000	"	28.00	4,564,000
ORANGES (NAVEL)							
Total	1983	1,289	7.29	9,395	"	177.43	1,667,000
	1982	1,228	10.45	12,838	"	148.78	1,910,000
Fresh	1983	---	---	6,795	"	236.94	1,610,000
	1982	---	---	4,763	"	337.18	1,606,000
Processed	1983	---	---	2,600	"	21.92	57,000
	1982	---	---	8,075	"	37.65	304,000
ORANGES (VALENCIA)							
Total	1983	14,204	18.30	260,000	"	136.26	35,427,000
	1982	11,819	7.76	91,684	"	432.47	39,651,000
Fresh	1983	---	---	109,000	"	241.53	26,327,000
	1982	---	---	73,411	"	520.52	38,212,000
Processed	1983	---	---	151,000	"	60.26	9,100,000
	1982	---	---	18,273	"	78.75	1,439,000

AGRICULTURAL WATER RATES - VENTURA COUNTY

<u>DISTRICT</u>	<u>1984 RATE/Ac-Ft</u>
Berylwood Heights MWC	\$120.00
Camrosa Water District	139.39
Casitas Mutual Water Dist.	
Prime (Ag. Pre.)	44.43
Non-prime	71.87
City of Camarillo	115.00
Del Norte           Zone 1)	81.07
2)	108.90
3)	128.26
Farmer's Irrigation	36.00
Fillmore Irrigation	25.00
Los Ranchitos	140.14
Meiners Oaks Co. W.D.	82.76
Oxnard MWC	35.00
Pleasant Valley Co.W.D.	27.00
Santa Paula Water Works	
1)gravity flow	29.17
2)pumped	73.93
Senior Canyon	156.82
Thermal Belt	58.84
Thermic	75.00
City of Ventura	289.24
Ventura Co. Water Works	
1) Moorpark	243.94
2) #19 +10 acres	268.33
-10 acres	306.66
Ventura River Co. W.D.	60.98
Zone Mutual           Zone 1)	100.00
2)	106.00
3)	114.00

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GROSS INCOME PER ACRE FOR VENTURA COUNTY CROPS\*

CROP	1979	1980	1981	1982	1983
Avocado	\$ 2,168	\$ 1,454	\$ 2,240	\$ 1,260	\$ 1,587
Grapefruit	2,005	1,171	1,865	1,042	1,480
Lemons	5,284	5,043	3,780	3,868	3,351
Valencia Oranges	1,596	2,808	2,235	3,355	2,494
Strawberries	13,077	16,639	18,955	18,352	23,006
Walnuts	394	253	258	368	114
Green Lima Beans	735	810	799	857	663
Snap Beans	1,983	2,023	1,988	2,326	2,623
Broccoli	1,344	1,374	1,853	2,202	1,517
Cabbage	3,171	2,321	2,362	2,831	2,623
Cauliflower	2,352	2,889	3,061	3,709	2,594
Celery	5,124	4,627	6,637	6,556	6,192
Cucumbers	3,148	2,549	3,900	2,065	2,819
Head Lettuce	1,311	3,387	2,621	2,520	3,129
Romaine Lettuce	2,239	2,563	3,146	4,425	4,079
Leaf Lettuce	2,598	2,083	2,623	3,820	4,599
Peppers	2,375	2,903	2,790	1,634	2,506
Spinach	2,475	1,917	2,144	2,463	2,321
Fresh Tomatoes				6,411	5,259
Cannery Tomatoes	1,406	1,200	1,200	1,342	1,220
Large Lima Beans	805	977	691	478	410
Alfalfa	424	700	728	770	665
Grain Hay	188	81	87	85	190
Grain	97	45	151	96	78
Seed	1,859	817	898	14,510**	11,690
Sugar Beets	465	1,233	925	897	942

\* From Ventura County Agricultural Commissioners Annual Report

These data represent money received for packed fresh produce or money received from processors for crops as they are provided to the processor.

Not reported. Fresh Market Bush and Pole Tomatoes were not reported Separately from each other.

\*\* High because of change in method of reporting.

