

PH-VS-90 **SAMPLE COSTS TO ESTABLISH & PRODUCE PISTACHIOS**
Southern San Joaquin Valley - 1990

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Costs are for an orchard planted 18' X 18', with 135 trees/acre. A pipeline irrigation system is used.

Skilled labor: \$8.00 per hour Interest rate: 11%
 Field labor: \$6.00 per hour

YEAR	Costs per Acre						
	1st	2nd	3rd	4th	5th	6th	7th
YIELD (Pounds/acre - dry in-shell)					200	400	800
Planting costs							
Land preparation: subsoil & level - contract	160						
Disk and Float: 4 hours - labor and tractor	76						
Trees: 135 @ \$7 (+2 2nd Yr. and 1 3rd Yr.)	945	14	7	7			
Survey, plant and stake	177	2	1	1			
TOTAL PLANTING COSTS	\$1,358	\$16	\$8	\$8			
Cultural costs:							
Suckering and training	\$4	\$8	\$15	\$23	\$55	\$83	\$54
Budding - re-budding	0	20	10	0	0	0	0
Irrigation labor: 2 hours	12	12	12	12	12	12	12
Water @ \$50/ac. ft.	60	60	90	90	120	120	180
Fertilizer: Nitrogen @ \$0.33/lb	8	12	12	17	21	21	45
Misc tree care	0	25	25	25	25	25	25
Tillage - 1.5 hours	28	28	28	28	28	28	28
Weed control sprays (material & application)	70	70	70	70	70	70	70
Miscellaneous labor and power - 1 hour	16	16	16	16	16	16	16
Pick-up truck costs	30	30	30	30	30	30	30
TOTAL CULTURAL COSTS	\$228	\$280	\$307	\$310	\$377	\$405	\$459
Harvesting Costs:							
Hand harvest					100	110	120
TOTAL HARVEST COSTS					\$100	\$110	\$120
Overhead Costs:							
Office and business costs	120	120	120	120	120	120	120
County Taxes	47	47	47	47	47	145	156
Insurance	26	26	26	26	26	26	26
TOTAL OVERHEAD COSTS	\$193	\$193	\$193	\$193	\$193	\$291	\$302
TOTAL CASH COSTS	\$1,779	\$489	\$508	\$511	\$670	\$806	\$882
ACCUMULATED CASH COSTS	\$1,779	\$2,269	\$2,777	\$3,289	\$3,959	\$4,765	\$5,646

UC COOPERATIVE EXTENSION

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Costs per Acre

YEAR	1st	2nd	3rd	4th	5th	6th	7th
Depreciation:							
Buildings, equipment and irrigation system	123	123	123	123	123	123	123
TOTAL DEPRECIATION	\$123	\$123	\$123	\$123	\$123	\$123	\$123
Interest on Investment							
Buildings, equipment and irrigation system	80	80	80	80	80	80	80
Land \$4000/acre	440	440	440	440	440	440	440
Interest on accumulated cash costs	196	250	305	362	435	524	621
TOTAL INTEREST ON INVESTMENT	\$716	\$770	\$826	\$882	\$956	\$1,044	\$1,141
TOTAL COST FOR THE YEAR	\$2,619	\$1,383	\$1,457	\$1,517	\$1,749	\$1,973	\$2,146
CREDIT FROM HARVEST @ \$1.20/POUND					\$240	\$480	\$960
NET COST FOR THE YEAR	\$2,619	\$1,383	\$1,457	\$1,517	\$1,509	\$1,493	\$1,186
TOTAL ACCUMULATED NET COST	\$2,619	\$4,001	\$5,459	\$6,975	\$8,485	\$9,978	\$11,164

SAMPLE COSTS TO PRODUCE PISTACHIOS
Southern San Joaquin Valley - 1990

Labor Rate: \$8.00/hr. skilled labor Interest Rate: 11%
\$6.00/hr. field labor Yield - dry (Tons/acre): 1.1

Operation	Tractor/Implement		Hours	Cash and Labor Costs per Acre					Your Cost
	No.	Implement No.		Labor Cost/A	Fuel & Repairs	Material Cost	Custom /Rent	Total Cost	
Cultural costs:									
Pruning @ \$0.40/tree							\$54.00	\$54	
Shake trees (for sanitation)							33.75	34	
Brush shredding	1	3	.5	4.40	\$4.76			9	
Fertilize (135# N @ \$.33)						\$44.55		45	
Spray: Pest Control 2X						28.00	28.00	56	
Disc 3X	1	2	1.5	13.20	15.13			28	
Irrigation (3.6' @ \$50/acft)		7				180.00		180	
Labor			2.0	12.00				12	
Weed Control: Pre-Emerge	1	4	1.5	13.20	21.70	35.00		70	
Spot Spray	1	4	.5	4.40	7.23	11.67		23	
Miscellaneous			1.0	8.00	7.50			16	
Costs for pick up truck					30.00			30	
Interest on operating capital @ 11%								30	
TOTAL CULTURAL COSTS			7	\$55	\$86	\$299	\$116	\$586	
Harvest Costs:									
Shake and catch							\$169	\$169	
TOTAL HARVEST COSTS							\$169	\$169	
Cash overhead:									
Office and business costs								\$120	
County Taxes								76	
Insurance								26	
TOTAL CASH OVERHEAD COSTS								\$221	
TOTAL CASH COSTS								\$976	
TOTAL CASH COST/TON:			1.1 tons/acre yield					\$888	
Investment									
			Per production Acre	Annual Cost					
				Depreciation	Interest @ 11%				
Land (bare)			\$4,000			\$440		\$440	
Equipment & buildings			1,459	\$123		80		204	
Trees (40 yr. depreciation)			5,646	141		311		452	
TOTAL INVESTMENT COSTS			\$ 11,105	\$264		\$831		\$1,095	
TOTAL COSTS PER ACRE								\$2,072	
TOTAL COST/TON:			1.1 tons/acre yield					\$1,883	

MONTHLY SUMMARY OF PER ACRE CASH COSTS TO PRODUCE PISTACHIOS

Production Year: October - September
Southern San Joaquin Valley - 1990

Operation	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOTAL
Cultural costs:													
Pruning @ \$0.40/tree				54.0									\$54
Shake trees												33.8	34
Brush shredding				9.2									9
Fertilize (135# N)								22.3			22.3		45
Spray: Pest Control 2X						21.0			8.8	8.8	17.5		56
Disc 3X											28.3		28
Irrigation (3.6')					10.0	10.0	20.0	20.0	40.0	40.0	40.0		180
Labor					1.5	1.5	1.5	1.5	1.5	2.3	2.3		12
Weed Control: Pre-Emerge		69.9											70
Spot Spray								23.3					23
Miscellaneous							7.8					7.8	16
Pick-up truck costs	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	30
Interest on operating capital @ 11%		.7	.7	1.3	1.5	1.8	2.1	2.8	3.3	3.8	4.9	6.9	30
TOTAL CULTURAL COSTS	\$3	\$73	\$3	\$67	\$15	\$37	\$34	\$72	\$56	\$57	\$118	\$51	\$586
Harvest cost:													
Shake and catch, \$1.25 per tree												168.8	169
TOTAL HARVEST COSTS												\$169	\$169
Cash overhead:													
Office and business	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	120
County Taxes			37.8				37.8						76
Insurance				25.8									26
TOTAL CASH OVERHEAD	\$10	\$10	\$48	\$36	\$10	\$10	\$48	\$10	\$10	\$10	\$10	\$10	\$221
TOTAL CASH COSTS	\$13	\$83	\$51	\$103	\$25	\$47	\$82	\$82	\$66	\$67	\$128	\$230	\$976

EQUIPMENT AND BUILDING LIST FOR PISTACHIOS
Southern San Joaquin Valley - 1990

Interest Rate: 11%

Fuel Cost per Gallon \$.80
\$.86

ITEM #	DESCRIPTION	NEW COST	ANNUAL USE (ACRES)	COST PER ACRE	LIFE (HRS)	YEARS TO TRADE	----OVERHEAD*----		--- HOURLY COSTS ---			
							DEPREC-	INTEREST*	TAR*	FUEL*	REPAIRS*	TOTAL
Tractors:												
1	65 HP wheel diesel	\$30,000	50	\$600	12,000	10	\$60.00	\$33.00	120%	\$3.48	\$3.00	\$6.48
2	Disc, tandem 12'	7,500	50	150	2,500	10	15.00	8.25	120		3.60	3.60
3	Brush shredder	7,600	50	152	2,500	10	15.20	8.36	100		3.04	3.04
4	Weed sprayer, SP	9,000	50	180	2,000	10	18.00	9.90	120	2.58	5.40	7.98
5	Brush rake	1,000	50	20	2,500	15	1.33	1.10	100		.40	.40
6	Pick-up, 1/2 ton	14,000	50	280	2,000	7	40.00	15.40	60			
7	Irrigation system	35,000	50	700	27,000	20	35.00	38.50	10		.13	.13
8	4 Wheel ATV	1,000	50	20	2,000	5	4.00	1.10	60			
	Miscellaneous shop tools	4,500	50	90		10	9.00	4.95				
	Buildings	12,000	50	240		30	8.00	13.20				
TOTAL COST		\$121,600		\$2,432			\$206	\$134				
60% OF NEW COSTS*		\$72,960		\$1,459			\$123	\$80				

* DEFINITIONS:

- YEARS TO TRADE----- The projected life of the machine in years adjusted for excessive annual use.
- OVERHEAD ----- Per acre per year.
- DEPRECIATION ----- "COST PER ACRE" divided by "YEARS TO TRADE"
- INTEREST----- ("COST PER ACRE" X "INTEREST RATE") divided by 2 = average interest cost per acre per year.
- TAR----- Total accumulated repairs. The total cost of repairs during the machine's life expressed as a percent of "NEW COST". Calculated from equations based on equipment type and annual use.
- HOURLY COST OF FUEL----- Diesel fuel, oil and lube costs per hour = HP x cost of diesel fuel/gal X 0.0667.
Gasoline fuel, oil and lube costs per hour = HP x cost of gasoline/gal X 0.0889.
- HOURLY COST OF REPAIRS-- ("NEW COST" X "TAR") divided by ("LIFE IN HOURS").
- 60% OF NEW COSTS ----- Used to reflect a mix of new and used equipment.

COST TO PRODUCE PISTACHIOS AT VARYING PRICES AND YIELDS

	YIELD (Dry In-shell Tons/acre)						
	.25	.50	.75	1.00	1.25	1.50	1.75
Cultural Costs	586	586	586	586	586	586	586
Harvest Costs	169	169	169	169	169	169	169
Cash Overhead	221	221	221	221	221	221	221
Cash cost/acre	976	976	976	976	976	976	976
Cash cost/ton	3,905	1,953	1,302	976	781	651	558
Investment cost	1,095	1,095	1,095	1,095	1,095	1,095	1,095
TOTAL COST/ACRE	2,072	2,072	2,072	2,072	2,072	2,072	2,072
TOTAL COST/TON	8,286	4,143	2,762	2,072	1,657	1,381	1,184

PER ACRE INCOME ABOVE CASH COSTS AT VARYING PRICES AND YIELDS

DOLLARS PER LB.	YIELD (Dry In-shell Tons/acre)						
	.25	.50	.75	1.00	1.25	1.50	1.75
.80	-576	-176	224	624	1,024	1,424	1,824
.90	-526	-76	374	824	1,274	1,724	2,174
1.00	-476	24	524	1,024	1,524	2,024	2,524
1.10	-426	124	674	1,224	1,774	2,324	2,874
1.20	-376	224	824	1,424	2,024	2,624	3,224
1.30	-326	324	974	1,624	2,274	2,924	3,574
1.40	-276	424	1,124	1,824	2,524	3,224	3,924
1.50	-226	524	1,274	2,024	2,774	3,524	4,274
1.60	-176	624	1,424	2,224	3,024	3,824	4,624

PER ACRE INCOME ABOVE TOTAL COSTS AT VARYING PRICES AND YIELDS

DOLLARS PER LB.	YIELD (Dry In-shell Tons/acre)						
	.25	.50	.75	1.00	1.25	1.50	1.75
.80	-1,672	-1,272	-872	-472	-72	328	728
.90	-1,622	-1,172	-722	-272	178	628	1,078
1.00	-1,572	-1,072	-572	-72	428	928	1,428
1.10	-1,522	-972	-422	128	678	1,228	1,778
1.20	-1,472	-872	-272	328	928	1,528	2,128
1.30	-1,422	-772	-122	528	1,178	1,828	2,478
1.40	-1,372	-672	28	728	1,428	2,128	2,828
1.50	-1,322	-572	178	928	1,678	2,428	3,178
1.60	-1,272	-472	328	1,128	1,928	2,728	3,528