

SAMPLE COSTS TO ESTABLISH AND PRODUCE
WINE VARIETIES

San Joaquin Valley - 1986

This sheet is one of a series on sample costs of producing grapes in the San Joaquin Valley. This series includes: Thompson Seedless for Raisins and Wine, Thompson Seedless for Table Use, Wine Varieties, Emperor, Cardinal or Ribier and Flame Seedless table grapes. The input and cost data are to be used only as guides in determining the production costs for a specific vineyard and to help growers analyze costs and practices that would increase production efficiency. The figures shown are based on what are considered good management practices in many vineyards. They do not represent industry averages.

YIELD - Yield is the most important factor affecting costs per ton and profit per acre. The yield per acre used in this sample is average over a period of years for a typical, well-managed vineyard. Although this figure is higher than the industry average, some vineyards do better.

IRRIGATION - Sample costs for irrigation, labor and water costs are based on a pumping system with pipeline. Labor cost per acre is affected by the number of irrigations, quantity applied, and size of head. Large heads of water may lower the labor costs. When all the water is from an irrigation district, the investment overhead costs of depreciation and interest on irrigation facilities are normally lower.

PEST AND DISEASE CONTROL - Dusting and spraying costs may vary considerably from year to year. Control measures required also vary between vineyards. The sample costs shown on this sheet are based on average conditions. Pesticides, herbicides and fungicides listed are used to depict typical costs. Other materials may be equally effective and no specific recommendations are made for the products listed.

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WINE VARIETIES

Sample Costs To Establish a Vineyard - 1986

Cost Analysis Work Sheet

Costs are based on a 120 acre unit, vines spaced at 8' x 11'.
 Costs include Social Security, Workmen's Compensation
 and insurance. Yield of 5 tons.

Tractor and	
Supervisory Labor \$	5.70 per hour
Field labor \$	4.85 per hour
Tractor \$	6.48 per hour

Costs Per Acre

	1st Year	2nd Year	3rd Year
YIELD: tons / acre	—	—	5

PRE-HARVEST COSTS:

Fumigate	460		
Land Preparation: Contract			
4 hrs chisel and labor			
4 hrs disc and float and labor	150		
Rootings: 495 at \$0.37 (+25, 2nd yr)	183	9	
Trim and store @ \$0.08 per rooting	40	2	
Machine planting: \$0.11/vine (+2 hrs labor 2nd year)	54	10	
Metal stakes: 495 7-ft, 16 gauge @ \$1.23 + tax		645	
posts (treated): 12 8-ft @ \$4.50		54	
Make and set end posts: \$0.18 stakes + \$4.50 end posts		139	
Wire: 100 lbs. #13 high tensile, \$.34/lb		61	
String two wires and attach metal stake		60	
Training and suckering: 40 hrs labor, 2nd yr; 10 hrs labor, 3rd yr		194	49
Tying materials		12	6
Prune and Tie: 5 hrs labor, 2nd yr; 12 hrs labor, 3rd yr		24	58
Rabbit control	15	8	
Irrigation: 5 hrs labor each year	24	24	24
Water power and/or district tax: 60 ft pumping 1, 2, 3 1/2 ac. ft. @ \$16	16	32	56
Cultivation and Irrigation preparation			
6 hrs labor + 4 hrs tractor, 1st yr; 8 hrs labor + 4 hrs tractor after	60	72	72
Fertilizer: \$.30/lb (30 lbs N, 2nd yr and 50 lbs N, 3rd yr + \$5/acre for application		14	20
Pest management and disease control includes mildew	17	27	142
Herbicides: materials and application	35	32	32
Misc. Labor, materials, 1 hr tractor	34	29	34
CULTURAL COSTS	1088	1448	493

TOTAL HARVESTING COSTS - contract - \$45/ton pick and haul 225

OVERHEAD COSTS:

County taxes	39	39	39
Office and Business Costs	30	30	30
TOTAL OVERHEAD COSTS	69	69	69

TOTAL CASH COSTS	1157	1517	786
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ACCUMULATED CASH COSTS	1157	2674	3460
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DEPRECIATION:

Building, equipment and irrigation	63	63	63
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INTEREST ON INVESTMENT @ 12.5%

Building, equipment and irrigation	53	53	53
Land \$3000	375	375	375
Interest in accum. cash cost	145	334	432

TOTAL INTEREST ON INVESTMENT	573	762	860
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TOTAL COST FOR THE YEAR	1793	2342	1710
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CREDIT FOR PRODUCTION

\$75/ton for fruit			-375
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NET COST FOR THE YEAR	1793	2342	1335
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ACCUMULATED NET COST	1793	4134	5469
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WINE VARIETIES

Sample costs for a Mature Vineyard -1986

Based on a 120-acre unit, vines spaced 8'x11'. Wages include Social Security, Workmen's Compensation, and insurance. Yield of 10 tons/acre

Tractor and Supervisory Labor \$	5.78 per hour
Field labor \$	4.85 per hour
Tractor \$	6.48 per hour

Operation	Labor Hours per Acre	Labor	Cash and Fuel & Repairs	Labor Costs per Acre		Total Cost	Your Cost
				Kind and Quantity	Materials Cost		
Pre-harvest Cash Costs:							
Pruning: contract				\$.19/vine, 495 vine/acre	94.05	94.05	
Brush Disposal: contract				Every middle	10.00	10.00	
Fertilizer				60 lbs N @ \$.30/lb + \$5/acre application	23.00	23.00	
Disease & pest control including mildew				Bayleton, kryocide, omite thiodan and fungicide	105.60	105.60	
Disease & pest control application costs						32.00	
Herbicides				Materials & \$14 app cost	38.92	38.92	
Cultivation and irrigation preparation	4	22.80	25.92			48.72	
Irrigate	5	24.25				24.25	
Water power and/or district tax 3 1/2 ac ft @ \$16					56.00	56.00	
Misc.	3	14.55	6.48	materials	28.00	49.03	
Interest on operating capital @ 12.5%						60.20	
TOTAL PRE-HARVEST COSTS	12	61.60	32.40		355.57	541.77	
HARVESTING COSTS							
Hand pick and haul to winery - contract \$45/ton						450.00	
Cash overhead:							
Office and business costs						30.00	
County Taxes						38.55	
TOTAL CASH OVERHEAD COSTS						68.55	
TOTAL CASH COSTS						1060.32	
TOTAL CASH COST PER TON - 10 tons/acre						106.03	
Investment							
		Per Acre	Annual Cost				
			Depreciation	Interest @ 12.5%			
Equipment, buildings & irrigation		855.39	63.08	53.46		116.54	
Vines, stakes, trellis: 20 yr life		5469.00	273.45	341.81		615.26	
Land		3000.00		375.00		375.00	
TOTAL INVESTMENT COSTS		9324.39	336.53	770.27		1106.80	
TOTAL COSTS PER ACRE						2167.12	
COST PER TON - 10 tons/acre						216.71	

GRAPES
WINE VARIETY

EQUIPMENT AND BUILDING LIST

ITEM	ORIGINAL COST	ANNUAL USE (ACRES)	COST PER ACRE	LIFE (YEARS)	OVERHEAD DEPRECIATION	INTEREST AT 12.5%	REPAIR COST PER HOUR	FUEL PER HOUR	REPAIR AND FUEL COST PER HOUR
Tractors:									
30 HP wheel diesel	13000	120	108.33	10	10.83	6.77	1.30	1.95	3.25
60 HP wheel diesel	31000	120	258.33	10	25.83	16.15	2.58	3.90	6.48
Disk, tandem 8'	7500	120	62.50	15	4.17	3.91	3.60		3.60
Border disc	2000	120	16.67	15	1.11	1.04	.96		.96
Springtooth - 8'	1500	120	12.50	20	.63	.78	.90		.90
Flat furrower	2800	120	23.33	20	1.17	1.46			
Three-point hitch sprayer (100 gallon)	1100	120	9.17	10	.92	.57	.92		.92
3-Wheel Motorcycle	1500	120	12.50	5	2.50	.78			
Pickup	8000	120	66.67	5	13.33	4.17			
Misc. Tools	5000	120	41.67	10	4.17	2.60			
Cane cutters	2679	120	22.33	10	2.23	1.40			
2 tool bars	800	120	6.67	10	.67	.42			
Air compressor	600	120	5.00	20	.25	.31			
Irrigation System	81600	120	680.00	20	34.00	42.50			
Buildings	12000	120	100.00	30	3.33	6.25			
TOTAL COST	171079		1425.66		105.14	89.10	10.26	5.85	16.11
80% OF NEW COSTS	102647		855.39		63.08	53.46	6.16	3.51	9.67

HERBICIDE COSTS FOR GRAPES

Mature Vineyards of all Varieties - 1986

Date	Problem	Material	Amount per Vineyard Acre	Cost/Acre \$	Application Cost
Mar	Weeds, Preenmergence and clean-up	Karmex*	.5 lb	1.65	8.00
		Simazine	.5 lb	1.65	
		Paraquat*	1.0 pt	6.00	
		Surfactant	.2 gal	2.81	
May-June	Maintenance	Roundup*	1 pt	10.00	6.00
		Surfactant	.2 gal	2.81	
				24.92	14.00

PESTICIDE COST - WINE VARIETIES

For a Mature vineyard - 1986

Time	Purpose	Material	Amount	Material Cost	Application Cost
Mid April	Powdery Mildew	Bayleton*	4 oz	11.75	8.00
Bloom	Powdery Mildew	Bayleton*	4 oz	11.75	
	OLR, and GLS	Kryocide*	8 lb	8.00	
	Bunchrot	Fungicide	****	25.00	8.00
2-3 weeks	Powdery Mildew	Bayleton*	4 oz	11.75	
	Spider mites **	Omite*	5 lb	17.75	8.00
July 15 to Aug 1	Leaf hopper ***	Thiodan*	2.5 lb	10.00	
	OLR and GLS	Kryocide*	8 lb	8.00	8.00
				105.60	32.00

* Registered Trademark

** May be combined with leafhopper spray

*** Some growers may put on a second leafhopper spray

**** Materials and rates are not included because of wide variation among growers

PESTICIDE ESTABLISHMENT COSTS

ALL Varieties

1st Year:

Kryocide 8lbs Cost = \$8.00 + \$8.00 application
(DLR and GLS)

2nd Year:

Kryocide 8lbs Cost = \$8.00
(DLR and GLS)

Plus \$8.00 application cost

Thiodan 2.5 lbs Cost = \$10.00
(Leafhopper)

3rd Year:

Same as pesticide production cost for that particular variety