

SAMPLE COSTS TO ESTABLISH AND PRODUCE
THOMPSON SEEDLESS FOR RAISINS OR WINE

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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Sample Costs To Establish a Vineyard - 1986

Cost Analysis Work Sheet

are based on a 120 acre unit, vines spaced at 7' x 12'.
 Wages include Social Security, Workmen's Compensation
 and insurance. Yield of 4.5 tons for winery or 1 ton for raisins.

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 dry fruit / acre	—	—	1

PRE-HARVEST COSTS:

Fumigate	460		
Land Preparation: contract			
4 hrs chisel and labor and			
4 hrs disc and float and labor	150		
Rootings: 519 at \$0.37 (+25, 2nd yr)	192	9	
Trim and score @ \$0.08 per rooting	42	2	
Machine planting: \$0.11/vine			
(+2 hrs labor 2nd year)	57	10	
Stakes (treated): 519 7-ft @ \$1		519	
Posts (treated): 11 8-ft @ \$4.50		50	
Stake and set end posts: \$0.18 stakes + \$4.50 end posts		143	
Wire: 175 lbs. #13 high tensile, \$.34/lb		60	
*String two wires and staple		50	
Training and suckering: 22 hrs labor, 2nd yr; 6 hrs labor, 3rd yr		107	29
Tying materials		6	4
Prune and Tie: 5 hrs labor, 2nd yr; 18 hrs labor, 3rd yr		24	87
Rabbit control	15	8	
Irrigation: 5 hrs labor each year	29	29	29
Water power and/or district tax: 60 ft pumping 1, 2, 3 1/2 ac. ft. @ \$13	13	26	39
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	117
Herbicides: materials and application	35	32	32
Misc. Labor, materials, 1 hr tractor	34	29	34
PRE-HARVEST COSTS	1103	1215	463

TOTAL HARVESTING COSTS - refer to production costs for raisins			223
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OVERHEAD COSTS:

County taxes	39	39	39
Office and Business Costs	30	30	30

TOTAL OVERHEAD COSTS	69	69	69
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TOTAL CASH COSTS	1172	1284	755
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ACCUMULATED CASH COSTS	1172	2456	3211
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DEPRECIATION:

Building, equipment and irrigation	68	68	68
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INTEREST ON INVESTMENT @ 12.5%:

Building, equipment and irrigation	57	57	57
Land \$3000	375	375	375
Interest in accum. cash cost	147	387	481

TOTAL INTEREST ON INVESTMENT	578	739	833
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TOTAL COST FOR THE YEAR	1818	2891	1656
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CREDIT FOR PRODUCTION \$500/ton raisins			-500
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NET COST FOR THE YEAR	1818	2891	1156
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ACCUMULATED NET COST	1818	3989	5865
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THOMPSON SEEDLESS GRAPES FOR RAISING OR WINE

Sample Costs for a Mature Vineyard - 1986

Based on a 120-acre unit, vines spaced at 7'x12'. Wages include Social Security Workmen's Compensation, and insurance. Yield of 2 tons raisins or 9 tons for winery.

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

Operation	Labor Hours per Acre	Labor	Cash and Fuel & Repairs	Cash and Labor Costs per Acre		Total Cost	Your Cost
				Kind and Quantity	Materials Cost		
Pre-harvest Cash Costs:							
Pruning: contract				\$.19/vine, 519 vine/acre	98.61	98.61	
Brush Disposal: contract				alternate middles	7.00	7.00	
Tying vines: contract				\$.83/vine	15.57	15.57	
Fertilizer				50 lbs N @ \$.30/lb + \$5/acre application	20.00	20.00	
Growth regulator				Gibberellin	4.50	4.50	
Disease & pest control including mildew				Bayleton, kryocide Dmite, thiodan	80.60	80.60	
Disease, pest, and growth regulator 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 @ \$13					45.50	45.50	
Misc.	3	14.55	6.48	materials	28.00	49.03	
Interest on operating capital @ 12.5%							58.09
TOTAL CULTURAL COSTS	12	61.60	32.40		338.70	522.79	
Cash overhead:							
Office and business costs							30.00
County Taxes							39.06
TOTAL CASH OVERHEAD COSTS							69.06
TOTAL CASH COSTS							591.85
TOTAL CASH COST PER TON - 2 tons raisins							295.92
TOTAL CASH COST PER TON - 9 tons winery							65.76
Investment							
	Per Acre			Annual Cost			Total
				Depreciation	Interest @ 12.5%		
Equipment, buildings & irrigation	906.36			68.18	56.65		124.83
Vines, stakes, trellis - 20 yr life	5065.00			253.25	316.56		569.81
Land	3000.00				375.00		375.00
TOTAL INVESTMENT COSTS	8971.36			321.43	748.21		1069.64
TOTAL COSTS PER ACRE							1661.49
Cost per ton	2 tons raisins						830.75
Cost per ton	9 tons winery						184.61

	Costs Per ton			
	Raisins		Winery Fruit	
	Sample Costs	My Costs	Sample Costs	My Costs
Harvesting and Total Costs				
Total cost except harvesting	830.75		184.61	
Pick and haul for winery - contract			40.00	
Terracing and pulling back				
3/4 hr labor + 3/4 hr tractor	9.14			
Pick for raisins - 450 trays/ton @ \$.17	76.50			
Turn & roll - contract, \$28/1000 trays each operation	32.00			
Box and shake - 4 3/4 hrs labor + 1/2 hr tractor	30.32			
Haul to processor (includes picking up bins)	12.00			
Paper trays - 460 trays @ \$.38/1000	17.48			
Forklift cost (rent)	9.00			
Raisin rain insurance \$435/ton coverage	30.00			
Bin rental (2 bins per ton)	15.00			
TOTAL HARVEST COST	1062.18		224.61	

Inspection and raisin advisory board are not included.

GRAPES
RAISIN VARIETY

EQUIPMENT AND BUILDING LIST
1986

ITEM	ORIGINAL COST	ANNUAL USE (ACRES)	COST PER ACRE	LIFE (YEARS)	OVERHEAD DEPREC-IATION	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	2.50	3.90	6.40
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			
Raisin dumper and shaker	7600	120	63.33	10	6.33	3.96			
2 bin trailers (4 bins each)	1640	120	13.67	10	1.37	.85			
Terracer	953	120	7.94	10	.79	.50			
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	181272		1510.60		113.63	94.41	10.18	5.85	16.03
60% OF NEW COSTS	108763		906.36		68.18	56.65	6.11	3.51	9.62

HERBICIDE COSTS FOR GRAPES
 Mature Vineyards of all Varieties - 1986

Date	Problem	Material	Amount per Vineyard Acre	Cost/Acre \$	Application Cost
Jan-Mar	Weeds, Preemergence 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 - THOMPSON SEEDLESS FOR RAISINS AND WINE
 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	8.80	
	Growth Regulator	Gibberellin	4 gm	4.50	8.00
3 + weeks	Powdery Mildew	Bayleton*	4 oz	11.75	
	Spider mites **	Omite*	5 lb	17.75	8.00
July 15 to Aug 1	Leafhopper ***	Thiodan*	2.5 lb	10.00	
	OLR and GLS	Kryocide*	8 lb	8.80	8.00
				85.10	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:

Dieldrin 8lbs Cost = \$8.80 + \$8.00 application
(DLR and GLS)

2nd Year:

Kryocide 8lbs Cost = \$8.80
(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