



GRAPES — 1991



THOMPSON SEEDLESS FOR RAISINS AND WINE

San Joaquin Valley

by

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Sample Costs for Establishing and Producing Thompson Seedless Grapes for Raisin and Wine in the San Joaquin Valley - 1991

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Introduction

This publication is one of a series on sample costs of producing grapes in the San Joaquin Valley. The data is to be used only as a guide to help analyze costs and practices that might increase production efficiency. The data is based on what are considered good management practices and 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 industry average, some vineyards do better.

Irrigation

Sample costs for irrigation, labor and water costs are based on a pumping system with pipeline, and access to water from an irrigation district. These costs vary widely depending on pumping depth, efficiency, and irrigation district taxes. Labor cost per acre is affected by the number of irrigations, quantity applied, and size of head.

Pest Management and Growth Regulators

Pest management costs include materials and application for control of insect, mite, and disease pest problems, including powdery mildew. Pest management programs and costs vary widely depending on pest pressure, vineyard location, pesticides selected, and many other factors. Sample costs shown on this sheet are based on average conditions and a well-managed integrated pest management program. Some growth regulators are combined with pesticide applications.

	Costs / Acre		
	1st Year	2nd Year	3rd Year
Overhead Costs			
County taxes	\$44	\$44	\$44
Office and business costs	\$52	\$71	\$19
Total Overhead Costs	\$96	\$115	\$63
Total Cash Costs	\$1,389	\$1,891	\$912
Accumulated Cash Costs	\$1,389	\$3,280	\$4,192
DEPRECIATION			
Building, equipment and irrigation	\$69	\$69	\$69
INTEREST ON INVESTMENT @ 9%			
Building, equipment and irrigation	\$42	\$42	\$42
Land \$3000	\$135	\$135	\$135
Interest on accumulated cash cost	\$62	\$148	\$189
Total Interest On Investment	\$239	\$324	\$366
TOTAL COST FOR THE YEAR	\$1,698	\$2,285	\$1,347
CREDIT FOR PRODUCTION			
@ \$840/ton for RAISINS (minus \$40 assessment)			(\$1,200)
NET COST FOR THE YEAR	\$1,698	\$2,285	\$147
ACCUMULATED NET COST	\$1,698	\$3,983	\$4,130

COSTS / TON

HARVESTING COSTS

**RAISINS
SAMPLE
COSTS**

**WINERY
SAMPLE
COSTS**

Pick and haul for winery - contract		\$40.00
Terracing & pulling back .75 hr labor .75 hr tractor	\$10.05	
Pick for raisins - 450 trays/ton @ \$0.20/tray	\$90.00	
Turn and roll - contract \$60/1000 trays	\$27.00	
Box and shake - 4.75 hrs labor + .5 hrs tractor	\$29.43	
Haul to processor (includes picking up bins)	\$12.00	
Paper trays - 460 trays @ \$40/1000	\$18.40	
Forklift cost (rent)	\$10.00	
Raisin rain insurance \$455/ton coverage	\$27.00	
Bin rental (2 bins per ton)	\$15.00	
Misc- Toilets, water	\$2.00	
Total Harvest Cost/Ton	\$240.88	\$40.00
Total Harvest Cost /Acre (2 tons raisins or 9 tons wine)	\$481.75	\$360.00
Total Cost Per Ton @ 2 Tons Raisins or 9 Tons Wine	\$815.18	\$167.62
Total Cost Per Acre @ 2 Tons Raisins or 9 Tons Wine	\$1,630.36	\$1,508.61

Sample Costs for Establishing and Producing Wine Grape Varieties in the San Joaquin Valley - 1991



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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 industry average, some vineyards do better.

Irrigation

Sample costs for irrigation, labor and water costs are based on a pumping system with pipeline, and access to water from an irrigation district. These costs vary widely depending on pumping depth, efficiency, and irrigation district taxes. Labor cost per acre is affected by the number of irrigations, quantity applied.

Pest Management and Growth Regulators

Pest management costs include materials and application for control of insect, mite, and disease pest problems, including powdery mildew. Pest management programs and costs vary widely depending on pest pressure, vineyard location, pesticides selected, and many other factors. Sample costs shown on this sheet are based on average conditions and a well-managed integrated pest management program. Some growth regulators are combined with pesticide applications.

WINE VARIETIES

Sample Costs to Establish a Vineyard - 1991

Costs are based on a 120 acre unit, vines spaced at 7' x 11'. Wages and piece work include social security, worker's compensation and insurance. Yield of 6 tons for winery during year 3. Tractor and supervisory labor \$6.80 per hour, field labor \$5.50 per hour. Tractor costs 6.60 per hour. Sales tax is included in per item expense.

Costs / Acre

	1st Year	2nd Year	3rd Year
YIELD: Tons Fruit/Acre	---	---	6
PREHARVEST CASH COSTS			
Fumigate	\$525		
Land preparation: contract 8 hrs, chisel, float, disc	\$150		
Rootings: 565 at \$0.48 (+25, 2nd year) *	\$271	\$12	
Trim and store @ \$0.13 per rooting	\$73	\$3	
Machine planting: \$0.11/vine (+2hrs labor 2nd year)	\$62	\$11	
Metal Stakes: 565 7-ft, 16 gauge @ \$1.55		\$876	
End posts (treated): 12 8-ft @ \$7.14		\$86	
Stake and set end posts: \$0.10 stakes + \$4.50 end posts		\$111	
Wire: #13 high tensile @ \$0.41 per lb, 180 lbs		\$74	
String two wires and attach to metal stakes		\$70	
Training and suckering: 40 hrs labor 2nd year 10 hrs labor 3rd year		\$220	\$55
Tying materials		\$12	\$6
Prune and tie: 5 hrs labor 2nd year, 12 hrs 3rd year		\$28	\$66
Rabbit Control	\$15	\$8	
Irrigation: 5 hrs labor @ \$6.80 per hr	\$34	\$34	\$34
Water power: pumping costs and/or district tax @18.00 1, 2, 3.5 ac ft (.5, 1.0, 1.75 ac ft pumped) **	\$26	\$33	\$41
Cultivation and irrigation preparation 6 hrs labor + 4 hrs tractor 1st year	\$67		
8 hrs labor + 4 hrs tractor 2nd year and after		\$81	\$81
Fertilizer: \$0.25/lb. (30 lbs. N 2nd year, and 50 lbs 3rd year + \$5/ac for application)		\$13	\$18
Pest Management and disease control, includes powdery mildew ***	\$18	\$18	\$115
Herbicides: materials and application	\$30	\$30	\$39
Misc. labor (suckering etc.) materials, 1hr tractor	\$35	\$35	\$35
Misc. repairs and fuel other than tractor	\$20	\$20	\$20
TOTAL PREHARVEST CASH COSTS	\$1,326	\$1,773	\$509
Total Harvesting Costs - see production costs for raisins or wine			\$240
Overhead Costs			
County taxes	\$44	\$44	\$44
Office and business costs	\$53	\$71	\$20
Total Overhead Costs	\$97	\$115	\$64
TOTAL CASH COSTS	\$1,441	\$1,888	\$814
ACCUMULATED CASH COSTS	\$1,441	\$3,329	\$4,143
DEPRECIATION			
Building, equipment and irrigation	\$72	\$72	\$72
INTEREST ON INVESTMENT @ 11%			
Building, equipment and irrigation	\$50	\$50	\$50
Land \$3000	\$330	\$330	\$330
Interest in accumulated cash cost	\$130	\$300	\$373
Total Interest on Investment	\$510	\$679	\$753
TOTAL COST FOR THE YEAR	\$2,023	\$2,639	\$1,638
Credit for Production @ \$145/ton			(\$870)
NET COST FOR THE YEAR	\$2,023	\$2,639	\$768
ACCUMULATED NET COST	\$2,023	\$4,662	\$5,430

* The cost is \$1375 if rootstocks or grafted vines are used.

** During drought years pumping requirements and irrigation costs will increase significantly.

*** Pest management practices and costs vary widely

WINE VARIETIES

Sample Costs for a Mature Vineyard - 1991

Based on a 120-acre unit, vines spaced at 7' x 12'. Wages include social security, workers compensation and insurance. Yield of 10 tons/acre. Tractor and supervisory labor \$6.80/hour, field labor \$5.50/hour. Tractor costs \$6.60/hour. Sales tax included in per item cost.

Operation	Labor Hrs/AC	Labor Rate	Labor Cost	Fuel & Repairs	Material Type and Quantity per Acre	COST	TOTAL COST
Preharvest Cash Costs							
Pruning -- Contract					\$0.20/vine, 519 vines/acre	\$104	\$104
Brush Disposal -- Contract					Every middle	\$10	\$10
Fertilizer					50 lbs N @ \$0.25/lb + \$5.00/Ac application	\$13 \$5	\$13 \$5
Disease & Pest Control (including mildew)							\$115
Application costs for Pest Management							\$28
Herbicides					Materials and Application	\$37	\$39
Cultivation & Irrigation Preparation	4	\$6.80	\$27	\$26			\$53
Irrigation	5	\$5.50	\$28				\$28
Water Power and / or District tax @ 18.00						\$56	\$56
2.5 ac ft (1.75 ac ft pumped)							\$45
Miscellaneous	3	\$5.50	\$17	\$7	Materials: trellis repair etc.	\$28	\$52
Misc repairs & fuel (not tractor)							\$20
Interest on Operating Capital @ 9%							\$51
Total Preharvest Costs	12		\$71	\$33			\$617
HARVESTING COSTS							
Pick and Haul to Winery -- Contract					\$40.00/ton (use \$22.00 / ton machine picked)		\$400

Cash Overhead							
Office & Business Costs							\$30
County Taxes							\$39
Total Cash Overhead Costs							\$69
TOTAL CASH COSTS							\$1,086
TOTAL CASH COSTS/TON @ 10 TONS / ACRE							\$109

INVESTMENT	Per Acre	Depreciation	Interest @ 11%	TOTAL
Equipment, buildings, irrigation	\$930	\$72	\$50	\$122
Vines, stakes and trellis	\$4,192	\$210	\$189	\$398
Land	\$3,000		\$330	\$330
Total Investment Costs	\$8,122	\$282	\$568	\$850
TOTAL COSTS PER ACRE				\$1,936
TOTAL COSTS/TON @ 10 TONS/ ACRE				\$194

Wine Variety - Equipment List

ITEM	NEW COST	ANNUAL USE (ACRES)	COST/ACRE	LIFE (YEARS)	DEPRECI- ATION	INTEREST @ 11%	REPAIR COST/HOUR	FUEL COST/HOUR
30 HP 4WD Diesel Tractor	\$13,000	120	\$108	10	\$10.83	\$5.96	\$1.43	\$1.95
60 HP 4WD Diesel Tractor	\$31,000	120	\$258	10	\$25.83	\$14.21	\$2.84	\$3.90
Disc, Tandem 8 ft	\$7,500	120	\$63	15	\$4.17	\$3.44	\$3.96	
Border Disc	\$2,000	120	\$17	15	\$1.11	\$0.92	\$1.05	
Springtooth 8 ft	\$1,500	120	\$13	20	\$0.63	\$0.69	\$1.00	
Flat Frower	\$2,800	120	\$23	20	\$1.17	\$1.28		
Weed Sprayer (100 gal)	\$1,100	120	\$9	10	\$0.92	\$0.50	\$1.00	
Sulfur Duster	\$2,650	120	\$22	10	\$2.21	\$1.21		
Cane Cutters	\$2,679	120	\$22	10	\$2.23	\$1.23		
Misc Tools	\$5,000	120	\$42	10	\$4.17	\$2.29		
2 Tool Bars	\$800	120	\$7	10	\$0.67	\$0.37		
ATV	\$3,000	120	\$25	5	\$5.00	\$1.38		
Pick-up Truck	\$14,000	120	\$117	5	\$23.33	\$6.42		
Air Compressor	\$600	120	\$5	20	\$0.25	\$0.28		
Irrigation System	\$81,600	120	\$680	20	\$34.00	\$37.40		
Buildings	\$12,000	120	\$100	30	\$3.33	\$5.50		
TOTAL COSTS	\$181,229.00		\$1,510.24		\$119.84	\$83.06		
60% OF NEW COSTS	\$108,737.40		\$906.14		\$71.91	\$49.84		

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