

Sample Costs for Establishing and Producing Thompson Seedless Grapes for Raisins or Wine - 1988



Prepared by: Donna Hirschfelt, Fresno County Farm Advisor
William Peacock, Tulare County Farm Advisor; Peter Christensen, Extension Viticulturist;
George Leavitt, Madera County Farm Advisor; Mary Bianchi, Staff Research Associate, Kearney Agricultural Center; Harry Andris, Fresno County Farm Advisor; Robert Beede, Kings County Farm Advisor; Don Luvisi, Kern County Farm Advisor; Maxwell Norton, Merced County Farm Advisor; Kathy Kelley, Stanislaus County Farm Advisor; Ed Yeary, Area Farm Management Specialist (Retired)

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.

THOMPSON SEEDLESS GRAPES FOR RAISINS OR WINE
Sample Costs to Establish a Vineyard - 1988

Costs are based on a 120 acre unit, vines spaced at 7' x 12'. Wages and piecework include social security, worker's compensation and insurance. Yield of 4.5 tons for winery or 1.5 ton for raisins. 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 cost.

	Cost / Acre		
	1st Year	2nd Year	3rd Year
YIELD: Tons Fruit/Acre	---	---	1.5
Preharvest Cash Costs			
Fumigate	\$465		
Land preparation: contract			
4 hrs chisel and labor			
4 hrs disc, float, and labor	\$150		
Rootings: 519 @ \$0.37 (+25, 2nd year)	\$192	\$9	
Trim and store @ \$0.08 per rooting	\$42	\$2	
Machine planting: \$0.11/vine (+2 hrs labor 2nd year)	\$57	\$11	
Stakes (treated): 519 6-ft @ \$1.00 ea		\$519	
End posts (treated): 11 8-ft @ \$6.50		\$72	
Wire: #13 high tensile @ \$0.36 per lb, 180 lbs		\$65	
Crossarms: 2 ft wood 519 @ \$.25, braces, staples, nails @ \$.08		\$171	
Stake and set end posts: \$0.18 stakes + \$4.50 end posts		\$143	
Install crossarms: \$.28 per stake		\$145	
String two wires and staple		\$50	
Training and suckering: 22 hrs labor 2nd year 6 hrs labor 3rd year		\$121	
Prune and tie: 5 hrs labor 2nd yr + \$6.00 materials 18 hrs 3rd yr + \$4.00 materials		\$34	\$33
Rabbit Control	\$15	\$8	\$103
Irrigation: 5 hrs labor @ \$6.80 per hr	\$34	\$34	\$34
Water power: 55 ft pumping and/or district tax: \$15.00 1, 2, 3.5 ac. ft. (.5, 1, 1.75 ac ft pumped)	\$19	\$22	\$26
Cultivation and irrigation preparation 6 hrs labor + 4 hrs tractor 1st yr.	\$67		
8 hrs labor + 4 hrs tractor 2nd yr and after		\$81	\$81
Fertilizer: \$0.30/lb (20 lbs N 2nd yr 40 lbs 3rd yr + \$5/ac for application)		\$11	\$17
Pest management and disease control	\$18	\$30	\$109
Herbicides: materials and application	\$30	\$30	\$37
Misc. Repairs and Fuel other than tractor	\$20	\$20	\$20
Misc (trellis repair, etc.) labor, materials, 1hr tractor	\$35	\$35	\$35
Total Preharvest Cash Costs	\$1,143	\$1,613	\$495
Total Harvest Costs - Refer to Raisin production costs			\$241

THOMPSON SEEDLESS GRAPES FOR RAISINS OR WINE
Sample Costs for a Mature Vineyard - 1988

Based on 120-acre unit, vines spaced at 7' x 12'. Wages and piecework rates include social security, worker's compensation and insurance. Yield of 2 tons raisins or 9 tons for winery. Tractor and supervisory labor \$6.80/hour, field labor \$5.50/hour. Tractor costs \$6.60/hour. Sales tax is included in per item cost.

OPERATION	Labor Hrs/A	Labor Rate	Labor Cost	Fuel and Repairs	Material and Quantity Per Acre	COST	TOTAL COST
Preharvest Cash Costs							
Pruning -- Contract					\$0.22/vine, 519 vine/acre	\$114	\$114
Brush Disposal -- Contract					Alternate middles	\$6	\$6
Tying Vines -- Contract					\$0.05/vine	\$26	\$26
Fertilizer					50 lbs N @ \$0.30/lb	\$15	\$15
					+ \$5.00/Ac application	\$5	\$5
Growth Regulator, Pest and Disease Control (including powdery mildew)					Gibberellin and all other materials	\$71	\$71
Application Costs for Growth Regulator & Pest Control						\$38	\$38
Herbicides					Materials & application	\$37	\$37
Cultivation & Irrigation Preparation	4	\$6.80	\$27	\$26			\$54
Irrigation	5	\$5.50	\$28				\$28
Water Power and/or District tax @ \$15.00							\$26
3.5 ac ft (1.75 acre ft pumped)							\$26
Misc. (Trellis, pipeline repair, and suckering) 1 hr tractor	4	\$5.50	\$22	\$7	Materials (trellis)	\$30	\$59
Misc. repairs & fuel other than tractor						\$20	\$20
Interest on Operating Capital @11.5%							\$36
Total Preharvest Costs							\$533

Cash Overhead		
Office & Business Costs		\$30
County Taxes		\$39
Total Cash Overhead Costs		\$69
Total Cash Costs		\$602
Total Cash Costs/Ton @ 2 Tons Raisins		\$301
Total Cash Costs/Ton @ 9 Tons Winery		\$67

Investment	Per Acre	Depreciation	Interest @12.5%	TOTAL
Equipment, buildings, irrigation	\$930	\$73	58	\$131
Vines, stakes and trellis	\$5,100	\$253	319	\$572
Land	\$3,000		375	\$375
Total Investment Costs	\$9,030	\$326		\$1,078
Total Costs Per Acre				\$1,680
Total Cash Costs/Ton @ 2 Tons Raisins				\$840
Total Cash Costs/Ton @ 9 Tons Winery				\$187

Costs/Acre

	1st Year	2nd Year	3rd Year
Overhead Costs			
County taxes	\$39	\$39	\$39
Office and business costs	\$30	\$30	\$30
Total Overhead Costs	\$69	\$69	\$69
Total Cash Costs	\$1,212	\$1,682	\$805
Accumulated Cash Costs	\$1,212	\$2,894	\$3,698
DEPRECIATION			
Building, equipment and irrigation	\$73	\$73	\$73
INTEREST ON INVESTMENT @ 12.5%			
Building, equipment, and irrigation	\$58	\$58	\$58
Land \$3,000	\$375	\$375	\$375
Interest on accumulated cash cost	\$152	\$362	\$462
Total Interest On Investment	\$585	\$795	\$895
TOTAL COST FOR THE YEAR	\$1,870	\$2,549	\$1,773
CREDIT FOR PRODUCTION			
@ \$800/ton for RAISINS			(\$1,200)
NET COST FOR THE YEAR	\$1,870	\$2,549	\$573
ACCUMULATED NET COST	\$1,870	\$4,419	\$4,992

COSTS / TON		
HARVESTING COSTS	RAISINS	WINERY
	SAMPLE COSTS	SAMPLE COSTS
Pick and haul for winery - contract		\$40.00
Terracing & pulling back .75 hr labor .75 hr tractor	\$10	
Pick for raisins - 450 trays/ton @ \$0.20/tray	\$90	
Turn and roll - contract \$60/1,000 trays	\$27	
Box and shake - 4.75 hrs labor + .5 hrs tractor	\$29	
Haul to processor (includes picking up bins)	\$12	
Paper trays - 460 trays @ \$40/1,000	\$18	
Forklift cost (rent)	\$10	
Raisin rain insurance \$455/ton coverage	\$27	
Bin rental (2 bins per ton)	\$15	
Misc- Toilets, water	\$2	
Total Harvest Cost/Ton	\$241	\$40
Total Harvest Cost/Acre (2 tons raisins or 9 tons wine)	\$482	\$360
Total Cost/Ton @ 2 Tons Raisins or 9 Tons Winery	\$1,081	\$227
Total Cost/Acre @ 2 Tons Raisins or 9 Tons Winery	\$2,162	\$2,040

EQUIPMENT AND BUILDING LIST

ITEM	ORIGINAL COST	ANNUAL USE (ACRES)	COST/ACRE	LIFE (YEARS)	DEPRECIATION	INTEREST @ 12.5%	REPAIR COSTS/HR	FUEL COSTS/HR
TRACTORS								
30 hp Wheel Diesel	\$13,000	120	\$108	10	\$11	\$6.77	\$1.30	\$1.95
60 HP Wheel Diesel	\$31,000	120	\$258	10	\$26	\$16.15	\$2.70	\$3.90
Disk, tandem 8'	\$7,500	120	\$63	15	\$4	\$3.91	\$3.60	
Border disc	\$2,000	120	\$17	15	\$1	\$1.04	\$0.96	
Springtooth 8'	\$1,500	120	\$13	20	\$1	\$0.78	\$0.90	
Flat furrower	\$2,800	120	\$23	20	\$1	\$1.46		
Three-point hitch	\$1,100	120	\$9	10	\$1	\$0.57	\$0.92	
Power Sprayer (100 gals)								
ATV	\$2,200	120	\$18	5	\$4	\$1.15		
Pickup	\$12,000	120	\$100	5	\$20	\$6.25		
Sulfur Duster	\$2,650	120	\$22	10	\$2			
Misc tools	\$5,000	120	\$42	10	\$4	\$2.60		
Raisin dumper & shake	\$7,600	120	\$63	10	\$6	\$3.96		
2 bin trailers (4 bins ea)	\$1,640	120	\$14	10	\$1	\$0.85		
Terracer	\$953	120	\$8	10	\$1	\$0.50		
Cane cutters	\$2,679	120	\$22	10	\$2	\$1.40		
2 Tool bars	\$800	120	\$7	10	\$1	\$0.42		
Air Compressor	\$600	120	\$5	20	\$0	\$0.31		
Irrigation System	\$81,600	120	\$680	20	\$34	\$42.50		
Buildings	\$12,000	120	\$100	30	\$3	\$6.25		
Total Cost	\$185,972		\$1,550		\$121	\$96.86	\$10.38	\$5.85
60% Of New Costs	\$111,583		\$930		\$73	\$58.12	\$6.23	\$3.51