

SAMPLE COSTS TO ESTABLISH AND PRODUCE  
RIBIER OR CARDINAL TABLE GRAPES  
CORDON TRAINED, SPUR PRUNED

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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**CORDON TRAINED, SPUR-PRUNED TABLE GRAPES**  
**Emperor, Flame Seedless, Ruby Seedless, Ribier, etc.**  
**Sample Costs to Establish a Vineyard - 1986**

**Cost Analysis Worksheet**

Costs are based on a 120 acre unit, vines spaced at 8' x 12'.  
 Costs include Social Security, Workmen's Compensation and insurance.  
 Yield of 300, 23-pound lugs (87/ton), 3.4 tons packed, and 1.6 tons culled.

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
<b>YIELD: tons fruit / acre</b>	—	—	5
<b>PRE-HARVEST COSTS:</b>			
Fumigate	460		
Land Preparation: contract			
4 hrs chisel and labor and			
4 hrs disc and float and labor	150		
Rootings: 454 at \$0.37 (+20, 2nd yr)	168	7	
Trim and store @ \$0.08 per rooting	36	2	
Machine planting: \$0.11/vine			
(+1 1/2 hrs labor 2nd year)	50	7	
Stakes (treated): 454 7-ft @ \$1		454	
End posts (treated): 11 8-ft @ \$4.50		50	
Make and set end posts: \$0.18 stakes			
\$4.50 end posts		131	
Wire: #13 high tensile, 2nd yr 82 lbs;			
3rd yr 164 lbs at \$.34/lb.		28	56
String wire and staple: one, 2nd yr;			
two, 3rd yr		25	50
Attach crossarms and braces: 32 hrs labor			155
Crossarms: 3 ft. at \$.31, braces at \$.04			
+ staples, nails, tire wires at \$.04			177
Training and suckering: 40 hrs labor,			
2nd yr; 10 hrs labor, 3rd yr		194	49
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	29	29	29
Water power and/or district tax:			
60 ft pumping 1, 2, 3 1/2 ac. ft.			
@ \$32.70	33	65	114
Cultivation & irrigation preparation			
6 hrs labor + 4 hrs tractor, 1st yr;			
8 hrs labor + 4 hrs tractor after	60	72	72
Fertilizer: \$.30/lb (25 lbs N, 2nd yr			
and 40 lbs N, 3rd yr + \$5/acre for			
application		13	17
Pest management and disease control			
includes mildew	17	27	206
Fungicides: materials and application	35	32	32
Some hand work: 18 hrs			87
Misc. Labor, materials, 1 hr tractor	34	29	34
<b>TOTAL PRE-HARVEST COSTS</b>	<b>1086</b>	<b>1196</b>	<b>1136</b>

**Harvest Costs**

Price of fruit to grower is net value after harvest

**OVERHEAD COSTS:**

Property taxes	39	39	39
Office and Business Costs	30	30	30
<b>TOTAL OVERHEAD COSTS</b>	<b>69</b>	<b>69</b>	<b>69</b>

<b>TOTAL CASH COSTS</b>	<b>1155</b>	<b>1265</b>	<b>1204</b>
<b>ACCUMULATED CASH COSTS</b>	<b>1155</b>	<b>2420</b>	<b>3624</b>

**DEPRECIATION:**

Building, equipment and irrigation	65	65	65
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**INTEREST ON INVESTMENT @ 12.5%:**

Building, equipment and irrigation	55	55	55
Land \$3000	375	375	375
Interest in accum. cash cost	144	302	453
<b>TOTAL INTEREST ON INVESTMENT</b>	<b>574</b>	<b>732</b>	<b>883</b>

<b>TOTAL COST FOR THE YEAR</b>	<b>1794</b>	<b>2062</b>	<b>2152</b>
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**CREDIT FOR PRODUCTION \***  
at \$125/ton for 5 tons

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<b>NET COST FOR THE YEAR</b>	<b>1794</b>	<b>2062</b>	<b>1527</b>
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<b>ACCUMULATED NET COST</b>	<b>1794</b>	<b>3857</b>	<b>5384</b>
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\* Fruit credit will vary widely by variety and year

RIBIER OR CARDINAL GRAPES

Sample Costs for a Mature Vineyard - 1986

Based on a 120-acre unit, vines spaced at 8'x12'. Wages include Social Security Workmen's compensation and insurance. Yield of 522, 23-pound lugs (87/ton), 6.0 tons shipped, 2.0 tons culls.

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	Labor Costs per Acre		Total Cost	Your Cost
				Kind and Quantity	Materials Cost		
<b>Pre-harvest Cash Costs:</b>							
Pruning: contract				\$ .20/vine, 454 vine/acre	98.80	98.80	
Brush Disposal: contract				alternate middles	7.00	7.00	
Fertilizer				50 lbs N @ \$.30/lb + \$5/acre application	20.00	20.00	
Zinc					3.50	3.50	
Disease & pest control including mildew				Bayleton, Kryocide Thiodan and fungicide	94.05	94.05	
Disease, pest and zinc application costs					68.00	68.00	
Herbicides				Materials and appl 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 4 ac ft @ \$32.70						130.80	
Shoot, fruit and leaf manipulation	80	388.00				388.00	
Girdling	14	67.90				67.90	
Misc.	8	38.80	12.96	materials	32.00	83.76	
Interest on operating capital @ 12.5%						133.21	
<b>TOTAL PRE-HARVEST COSTS</b>	<b>111</b>	<b>541.75</b>	<b>38.88</b>		<b>354.27</b>	<b>1198.91</b>	
<b>Cash overhead:</b>							
Office and business costs						30.00	
County Taxes						38.75	
<b>TOTAL CASH OVERHEAD COSTS</b>						<b>68.75</b>	
<b>TOTAL CASH COSTS</b>						<b>1267.67</b>	
<b>TOTAL CASH COST PER LUG - 522 lugs/acre</b>							<b>2.43</b>
<b>Investment</b>							
	<b>Per Acre</b>			<b>Annual Cost</b>			
				<b>Depreciation</b>	<b>Interest @ 12.5%</b>		
Equipment, buildings & irrigation	875.40			65.23	54.71	119.94	
Vines, stakes, trellis	5384.00			269.20	336.50	605.70	
Land	3000.00				375.00	375.00	
<b>TOTAL INVESTMENT COSTS</b>	<b>9259.40</b>			<b>334.43</b>	<b>766.21</b>	<b>1100.64</b>	
<b>TOTAL COSTS PER ACRE</b>						<b>2368.31</b>	
<b>Cost per lug - 522 lugs/acre</b>							<b>4.54</b>

## Cost Per Lug of Packed Fruit

House Packed		Field Packed	
Pre-harvest cost	4.54	Pre-harvest cost	4.54
Harvest costs	3.40	Harvest costs	3.30
Pick and haul	.90	Pick, pack and supervision	1.40
Packinghouse cost, including	2.50	Boxes, etc	1.55
cold storage		Spread Boxes, swamp, haul	.35
TOTAL	7.94	TOTAL	7.84

\* Selling commission, Table Grape Commission assessment, inspection and costs of special packing are not included

GRAPES  
TABLE VARIETY

EQUIPMENT AND BUILDING LIST

ITEM	ORIGINAL COST	ANNUAL USE (ACRES)	COST PER ACRE	LIFE (YEARS)	OVERHEAD		REPAIR COST PER HR	FUEL PER HOUR	REPAIR AND FUEL COST PER HOUR
					DEPREC- IATION	INTEREST AT 12.5%			
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 gallons)	1100	120	9.17	10	.92	.57	.92		.92
Mower	4000	120	33.33	10	3.33	2.08			
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	10	.50	.31			
Irrigation System	81600	120	680.00	20	34.00	42.50			
Buildings	12000	120	100.00	30	3.33	6.25			
TOTAL COST	175079		1458.99		108.72	91.19	10.26	5.85	16.11
60% OF NEW COSTS	105047		875.40		65.23	54.71	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
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	
				<hr/> 24.92	

PESTICIDE COST - RIBIER AND CARDINALS

For a Mature vineyard - 1986

Time	Purpose	Material	Amount	Material Cost	Application Cost
Mid April	Powdery Mildew	Bayleton*	4 oz	11.75	8.00
Early	Powdery Mildew	Bayleton*	4 oz	11.75	12.50
	Basic Zinc	Zinc 52%	5 lb	3.50	
Bloom	OLR, and BLS	Kryocide*	8 lb	8.00	12.50
Bloom + 14-21 days	Powdery Mildew	Bayleton*	4 oz	11.75	12.50
July-Aug	Leafhopper***	Thiodan*	2.5 lb	10.00	12.50
Pre-harvest	Bunch Rot or stem mildew	Fungicide Dust	2 appl	40.00	10.00
				<hr/> 97.55	<hr/> 68.00

\* 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  
(OLR and GLS)

2nd Year:

Kryocide 8lbs      Cost = \$8.00  
(OLR 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