SAMPLE COSTS TO ESTABLISH AND PRODUCE FLAME SEEDLESS 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.

<u>Prepared by:</u> Harry Andris, Farm Advisor, Fresno County; Robert Beede, Farm Advisor, Kings County; Peter Christensen, Extension Viticulturist, Parlier; Fred Jensen, Extension Viticulturist, Parlier; Donna Hirschfelt, Farm Advisor, Fresno County; Karen Klonsky, Area Farm Management Specialist, Davis; George Leavitt, Farm Advisor, Madera County; Don Luvisi, Farm Advisor, Kern County; Maxwell Norton, Farm Advisor, Merced County; William Peacock, Farm Advisor, Tulare County.

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

Cost Analysis Horksheet

, , , , , , , , , , , , , , , , , , ,	M		D1 121				
are based on a 120 acre unit, vines spaced at 8' x 12'. include Social Security, Workmen's Compensation and insurance.							
Yield of 300, 23-pound	lugs (87/ton), 3.	.4 tons packe	d, and 1.6 tons cu	lled.			
Tractor and							
Supervisory labor \$	5.70 per hour						
Field labor \$	4.85 per hour						
Tractor \$	6.48 per hour						
-			Costs Per Acre				
	-	lst Year	2nd Year	3rd Year			
YIELD: tons fruit / ac	ere	_		5			
PRE-HARVEST COSTS:							
Funigate		468					
Land Preparation: conf	ract						
4 hrs chisel and lat	or and		•				
4 hrs disc and float	and labor	150					
Rootings: 454 at \$0.37	7 (+20, 2nd yr)	168	7				
Trim and store @ \$0.00	per rooting	3 6	2				
Machine planting: \$8.1	1/vine						
(+1 1/2 hrs labor 2r	nd year)	50	7				
Stakes (treated): 454	7-ft @ \$1		454				
End posts (treated): 1	11 8-ft @ \$4.50		50				
we and set end post	s: \$0. 18 stakes						
34.50 end posts			131				
Wire: #13 high tensile	e, 2nd yr 82 lbs;						
3rd yr 164 lbs at \$.	34/1b.		28	56			
String wire and staple	e: one, 2nd yr;						
two, 3rd yr			25	50			
Attach crossarms and I	praces: 32 hrs lat	bor		155			
Crossarms: 3 ft. at 1	3.31, braces at \$.	. 84					
+ staples, mails, ti	ire wires at \$.04			177			
Training and suckering							
2nd yr; 18 hrs labor	r, 3rd yr		194	49			
Prune and Tie: 5 hrs 1	labor, 2nd yr;						
12 hrs labor, 3rd y	•		24	58			
Rabbit control		15	8				
Irrigation: 5 hrs lab		29	29	29			
Water power and/or dis	strict tax:						
60 ft pumping 1, 2,	3 1/2 ac. ft.						
9 \$32.7 8		33	65	114			
Cultivation & irrigati							
6 hrs labor + 4 hrs	tractor, 1st yr;						
			70	70			

TOTAL PRE-HARVEST COSTS

application

includes mildew

hand work: 18 hrs

8 hrs labor + 4 hrs tractor after Fertilizer: \$.30/lb (25 lbs N, 2nd yr and 40 lbs N, 3rd yr + \$5/acre for

Pest management and disease control

bicides: materials and application

Misc. Labor, materials, 1 hr tractor

1886

17

35

68

72

13

27

32

29

1196

72

17

286

32

1136

Harvest Costs			
Price of fruit to grower is net va	lue after harvesi	:	
OVERHEAD COSTS:			
ty taxes	39	39	39
Uce and Business Costs	39	30	38
TOTAL OVERHEAD COSTS	69	69	69
TOTAL CASH COSTS	1155	1265	1284
ACCUMULATED CASH COSTS	1155	2420	3624
DEPRECIATION:			
Building, equipment and irrigation	65	65	65
INTEREST ON INVESTMENT @ 12.5%:			
Building, equipment and irrigation	5 5	5 5	55
Land \$3000	375	37 5	375
Interest in accum. cash cost	144	38 2	453
TOTAL INTEREST ON INVESTMENT	574	732	883
TOTAL COST FOR THE YEAR	1794	2862	2152
CREDIT FOR PRODUCTION *	-		
at \$125/ton for 5 tons	-	-	-625
NET COST FOR THE YEAR	1794	2862	1527
ACCUMULATED NET COST	1794	3857	5384

^{*} Fruit credit will vary widely by variety and year

FLAME SEEDLES GRAPES

Sample Costs for a Mature Vineyard - 1986

Based on a 128 acre unit, vines spaced 8'x12'.

Wages include Social Security, Workmen's Compensation and insurance.

Yield of 522 lugs

Tractor and				
Supervisory	labor \$	5. 79	per	hou
Field Labor	\$	4.85	per	hou

Field Labor \$	4.85	per hour						
Tractor \$	6.4 8	per hour						
	Labor	Labor		Labor Costs p				
Operation	Hours per Acre	Labor	Fuel &	-	laterials	Cost	Total	Your Cost
operation	per acre		Repairs	Kind and Qua	ntity	LOST	LOST	LOST
Pre-harvest Cash Costs:					***************************************			
Pruning: contract				\$.20/vine, 45	4 vine/acre	98.88	90.80	
Brush Disposal: contract				every middle		19.00	10.00	
Fertilizer				50 lbs N 0 \$.	30/1b			
				+ \$5/acre app	lication	28.99	20.00	
Growth regulator				Bibberellin a		67.22	67.22	
Zinc					•	3.50	3.50	
Disease & pest control				Bayleton, Kry	ocide			
including mildew				and Thiodan		65.80	65.80	
Disease, pest, growth reg-								
ulator and zinc application	s						66.00	
Herbicides				materials and	appl. cost	38.9 2	38.92	
Cultivation and irrigation								
preparation	. 4	22.80	25.92				48.72	
Irrigate	5	24, 25					24.25	
Water power and/or district t	ax -							
3 ac ft @ \$30								
Shoot, fruit, & leaf								
manipulation	88	388.90					388.00	
Girdling	14	67.90					67.90	
Misc.	8	38.80	12.96	m aterials		32.88	83.76	
	-	00.00	121 30			52.50	557.15	
Interest on operating capital	e 12.5%						121 .8 6	
TOTAL PRE-HARVEST COSTS	111	541.75	38.88			328.24	1096.73	
Cash overhead:								
Office and business costs							38.80	
County Taxes							38.75	
TOTAL CASH OVERHEAD COSTS							68.75	
TUTHE CHOIL DVERHEND COSTS							66. 73	
TOTAL CASH COSTS							1165.48	
TOTAL CASH COST PER LUG				·			2.23	****
				Annual C	ost			
Investment	Pe	r Acre		Depreciation	Interest 6	12.5%		
Equipment, buildings & irriga	tion	875.40		65.23	54.71		119.94	
Vines, stakes, trellis - 20 y		5384.00		269.20	336.50		605.70	
Ariend assured sterring to he					200: 36	•		

Lounty laxes				<i>3</i> 8. /3	
TOTAL CASH OVERHEAD COSTS				68.75	
TOTAL CASH COSTS				1165.48	
TOTAL CASH COST PER LUG		· · · · · · · · · · · · · · · · · · ·	•	2.23	
	·	Annual Co	ost		
Investment	Per Acre	Depreciation	Interest @ 12.5	ix.	
Equipment, buildings & irrigation	875.40	65.23	54.71	119.94	
Vines, stakes, trellis - 20 yr life	5384 . 99	269.20	336.50	605.70	
Land	3000.00		375.90	375.00	
TOTAL INVESTMENT COSTS	9259.48	334.43	766.21	1100.64	
TOTAL COSTS PER ACRE				2266.12	
Cost per lug				4.34	
UC Cooperative Extension					

Cost Per Lug of Packed Fruit

House Packed			Field Packed		
Pre-harvest cost Harvest cost Pick and haul Packinghouse cost, incuding cold storage	1. 0 0 2.50	4. 34 3. 50	Pre-harvest cost Harvest costs Pick, pack and supervision Boxes, etc Spread Boxes, swamp, haul	1.59 1.55 .35	4.34 3.46
TOTAL 1,2		7.84	TOTAL 1,2		7.74

- 1 Selling commission, Table Grape Commission assessment, inspection and costs of special packing are not included
- 2 Does not include any credit received for culls

UC Cooperative Extension

GRAPES TABLE VARIETY

EDUIPMENT AND BUILDING LIST

		ANNUAL	COST		OVER	HEAD	REPAIR	FUEL	REPAIR AND
	ORIGINAL	USE	PER	LIFE	DEPREC-	INTEREST	COST	PER	FUEL COST
ITEI	COST	(ACRES)	ACRE	(YEARS)	IATION	AT 12.5%	PER HR	HDUR	PER HOUR
Tractors:									
30 HP wheel diesel	13000	120	108.33	19	10.83	6.77	1.38	1.9	3.2
60 HP wheel diesel	31000	120	258.33	19	25.83	15. 15	2.58	3.90	6.46
Disk,tandem 8'	7588	120	62.50	15	4.17	3.91	3.60		3.60
Border disc	2000	120	16.67	15	1.11	1.04	.96		.90
Springtooth - 81	1500	120	12.50	20	.63	.78	.90		.90
Flat furrower	2800	120	23.33	26	1.17	1.46			
Three-point hitch sprayer									
(100 gallons)	1100	120	9. 17	19	.92	.57	.92		.92
Mower	4808	120	33. 33	18	3. 33	2.98			
3-Wheel Motorcycle	1508	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	19	2.23 ·	1.48			
2 tool bars	800	120	5.67	10	.67	. 42			
Air compressor	608	120	5.00	10	.50	.31			
Irrigation System	81600	120	680.00	20	34.00	42.58			
Buildings	12000	120	100.00	30	3. 33	6.25			
TAL COST	175079		1458. 99		108.72	91.19	10.26	5.85	16.11
50% OF NEW COSTS	105047		875. 40		65.23	54.71	6. 16	3.51	9.67

HERBICIDE COSTS FOR GROPES

Mature Vineyards of all Varieties - 1986

havare vineyards or			Amount per		Application
"Date	Problem	Material	Vineyard Acre	Cost/Acre	Cost
				\$	
Mar	lieeds,	Karmex*	.5 lb	1.65	8.00
•	Preemergence	Simazine	.5 lb	1.65	
	and clean-up	Paraquat*	1.0 pt	5.00	
		Surfactant	.2 gal	2.81	
May-June	Maintenance	Roundup#	1 pt	10.00	6.00
		Surfactant	.2 gal	2.81	
				24.92	14.00

				Material	Application
Time	Purpose	Material	Amount	Cost	Cost
Mid April	Powdery Mildew	Bayleton*	4 Øz	11.75	8.00
Early	Powdery Mildew	Bayleton*	4 oz	11.75	
Bloom	Basic Zinc	Zinc 524	5 lb	3.50	12.50
	OLR and GLS	Kryocide*	8 lb	8.88	
.	Growth Regulator	Gibberellin	6 gm	6.72	12.50
Berry Set	Powdery Mildew	Bayleton*	4 oz	11.75	
	Growth Regulator	Gibberellin	24 gm	26.50	12.50
+5-10	Growth regulator	Gibberellin	24 gm	26.5 8	
days later	Leafhopper***	Thiodan#	2.5 lb	10.00	12.50
id June	Powdery Mildew	Bayleton*	4 oz	11.75	
	Growth Regulator	Ethephon	1 pt	7.50	8.00

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:

Maride 81bs Cost = \$8.88 + \$8.80 application (LS)

2nd Year:

Kryocide 81bs Cost = \$8.80 (DLR and GLS)

> . 5 lhe | Coet = \$19.90

Thiodan 2.5 lbs Cost = \$18.88 (Leafhopper)

3rd Year:

Same as pesticide production cost for that particular variety

UC Cooperative Extension

Plus \$8.00 application cost