

COST & RETURNS SUMMARY FOR GRAPES, TABLE
 SAMPLE PRODUCTIONS COSTS & RETURNS FOR
 CORDON-TRAINED, SPUR-PRUNED TABLE GRAPES
 SOUTHERN SAN JOAQUIN VALLEY 1980

BY ED YEARY, FARM ADVISOR
 LYNN HOREL, SRA

GR-VS-80-11

	UNIT	PRICE OR COST/UNIT	QUANTITY	VALUE OR COST PER ACRE	YOUR COST
GROSS RECEIPTS FROM PRODUCTION:					
GRAPES, TABLE	BOX	6.000	456.000	2736.00	
CULL GRAPES	TON	75.000	1.750	131.25	
TOTAL RECEIPTS:				2867.25	
2. VARIABLE COSTS:					
PREHARVEST:					
PRUNING	VINE	0.200	450.000	90.00	
BRUSH REMOVAL	ACRE	8.000	1.000	8.00	
NITROGEN	LBS.	0.350	50.000	17.50	
PWDRY MILDEW CTL	APLC	2.000	6.000	12.00	
INSECTICIDE	ACRE	98.000	1.000	98.00	
SEASONAL LABOR	HOURL	4.500	17.000	76.50	
MISCL SUPPLIES	ACRE	50.000	1.000	50.00	
IRRIG DIST WATER	ACIN	2.080	48.000	99.84	
HERBICIDE	ACRE	30.000	1.000	30.00	
TRACTOR (FUEL-LUBE-REPAIRS)	ACRE			20.53	
EQUIPMENT (FUEL-LUBE-REPAIRS)	ACRE			24.73	
BUILDINGS (FUEL-LUBE-REPAIRS)	ACRE			3.83	
IRRIGATION (SYSTEM MAINT.)	ACIN	0.235	48.000	11.26	
MACHINERY LABOR	HOURL	4.500	9.820	44.19	
IRRIGATION LABOR	HOURL	5.500	9.000	49.50	
INTEREST ON OPERATING CAP.	DOL.	0.14000	289.596	39.31	
TOTAL PREHARVEST COSTS:				675.19	
PREHARVEST COST PER BOX				1.4807	
HARVEST:					
HARVEST & HAUL	TON	56.550	7.000	395.85	
PACKING HSE COST	TON	191.400	5.250	1004.85	
TOTAL HARVEST COSTS:				1400.70	
HARVEST COST PER BOX				3.0712	
TOTAL VARIABLE COSTS:				2075.89	
VARIABLE COST PER BOX				4.5524	
INCOME ABOVE VARIABLE COSTS:					
INCOME PER BOX				791.36	
				1.7354	
4. OVERHEAD:					
PERSONAL PROPERTY TAXES:				9.40	
REAL PROPERTY TAXES:				65.00	
TOTAL OVERHEAD:				74.40	
OVERHEAD COST PER BOX				0.1632	
TOTAL CASH COSTS:				2150.29	
TOTAL CASH COST PER BOX				4.7156	
5. INCOME ABOVE ALL CASH COSTS:					
INCOME PER BOX				716.96	
				1.5723	
6. OWNERSHIP COSTS:					
DEPRECIATION:					
MACHINERY & EQUIPMENT	ACRE			27.24	
IRRIGATION SYSTEM	ACRE			15.52	
BUILDINGS	ACRE			19.50	
TREES, VINES OR STAND	ACRE			201.20	
TOTAL DEPRECIATION:				263.46	
CAPITAL & INTEREST:					
MACHINERY & EQUIPMENT		0.14000	243.516	34.09	
IRRIGATION SYSTEM		0.14000	142.700	19.98	
BUILDINGS		0.10670	383.370	40.91	
TREES, VINES OR STAND		0.10670	5030.000	268.35	
LAND		0.10670	3500.000	373.45	
TOTAL INTEREST CHARGE:				736.78	
TOTAL FIXED COSTS:				1000.23	
FIXED COST PER BOX				2.1935	
7. TOTAL OF ABOVE COSTS:					
TOTAL COST PER BOX				3150.53	
				6.9090	
8. NET RETURNS:					
NET RETURNS PER BOX				-283.28	
				-0.6212	

Historical Budget - 1980

BASED ON A 120 ACRE VINEYARD YIELD: 456 23 LB BOXES
 8' X 12' SPACING - 450 VINES/ACRE
 HOUSE PACKED FRUIT
 DATE PRINTED: 10/02/81 HARVEST MONTH: 10

UPDATED 10/02/81
 BUDGET RECORD NUMBER 343

UC Cooperative Extension

CASH FLOW & INVESTMENT SUMMARY FOR GRAPES, TABLE
 SAMPLE PRODUCTIONS COSTS & RETURNS FOR
 CORDON-TRAINED, SPUR-PRUNED TABLE GRAPES
 SOUTHERN SAN JOAQUIN VALLEY 1980

BY ED YEARY, FARM ADVISOR
 LYNN HOREL, SRA

BUDGET RECORD NUMBER 343

CATEGORY	UNIT	MONTHLY SUMMARY OF RECEIPTS AND EXPENSES												TOTAL	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
L RECEIPTS	\$/AC												2867.25		2867.25
OPERATING EXPENSES															
PRUNING	\$/AC	45.00	45.00												90.00
BRUSH REMOVAL	\$/AC		8.00												8.00
NITROGEN	\$/AC	17.50													17.50
PWDY MILDEW CTL	\$/AC				2.00	2.00	2.00	2.00	2.00	2.00					12.00
INSECTICIDE	\$/AC				24.50	24.50	24.50	24.50							98.00
SEASONAL LABOR	\$/AC						76.50								76.50
HARVEST & HAUL	\$/AC										395.85				395.85
PACKING HSE COST	\$/AC										1004.85				1004.85
MISCL SUPPLIES	\$/AC				50.00										50.00
IRRIG DIST WATER	\$/AC				12.48	12.48	24.96	24.96	12.48					12.48	99.84
HERBICIDE	\$/AC						30.00								30.00
MACHINE LABOR COST	\$/AC	3.05	2.32	8.91	4.86	4.91	8.82	3.06	1.35	1.35	1.35	1.35	2.86		44.19
INTEREST ON OPER. CAP.	\$/AC	7.12	5.31	1.39	7.17	3.45	8.47	2.41	0.55	0.06	0.01	0.38	2.98		39.31
TRACTOR COST	\$/AC	1.25	0.71	5.54	2.57	2.61	5.48	1.25					1.11		20.53
EQUIPMENT COST	\$/AC	1.75	1.74	2.60	2.19	2.19	3.20	2.19	1.59	1.59	1.59	1.59	2.51		24.73
BLDG OPER. COST	\$/AC	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32		3.83
IRRIGATION COST	\$/AC				1.41	1.41	2.82	2.82	1.41				1.41		11.26
IRRIG LABOR COST	\$/AC				5.50	11.00	11.00	11.00	5.50				5.50		49.50
TOTAL EXPENSES	\$/AC	75.99	63.40	18.75	113.00	64.88	198.07	74.51	25.20	5.32	1403.96	3.64	29.17	2075.89	

MONTHLY IRRIGATION AND LABOR REQUIREMENTS														
MACHINE LABOR	HR/AC	0.68	0.52	1.98	1.08	1.09	1.96	0.68	0.30	0.30	0.30	0.30	0.64	9.82
IRRIGATION LABOR	HR/AC				1.00	2.00	2.00	2.00	1.00				1.00	9.00
IRRIG. WATER APPLIED	ACIN				6.00	6.00	12.00	12.00	6.00				6.00	48.00

MACHINERY FIXED AND VARIABLE COSTS PER ACRE														
MACHINE	CODE	SIZE	PURCHASE PRICE	YEARS OWNED	ANN HOURS USED	FIXED COST PER ACRE			VARIABLE COST PER ACRE				HRS PER ACRE	
						DEPR.	INTER.	TAX & INS	TOTAL	FUEL	LUBE	REPAIRS		TOTAL
TRACTOR 35 HP	3	35.0	9960.	15.	300.	10.08	15.70	4.22	30.00	14.25	2.14	4.14	20.53	5.655
PICKUP 3/4 TON	15	0.8	10200.	7.	435.	7.49	6.18	1.58	15.25	14.40	2.16	2.49	19.05	3.000
SURFACE IRR SYS*	53	2.0	45900.	10.	5000.	15.52	19.98	4.96	40.46	0.00	0.22	11.04	11.26	24.000
CHISEL	66	6.0	2160.	15.	65.	0.36	0.45	0.13	0.94	0.00	0.00	0.15	0.16	0.178
DISC-HYO OFFSET	79	9.0	7200.	15.	75.	1.61	2.05	0.60	4.25	0.00	0.02	0.91	0.92	0.278
DRY FERT APPLIC.	85	10.0	960.	15.	60.	0.30	0.38	0.11	0.80	0.00	0.00	0.16	0.16	0.313
DUSTING RIG	87	10.0	3850.	15.	50.	5.88	7.38	2.18	15.44	0.00	0.05	2.36	2.41	1.257
SPRINGTOOTH	98	4.0	1680.	15.	140.	1.53	1.95	0.57	4.05	0.00	0.04	1.99	2.03	2.115
FARM SHOP	2		42120.	35.		9.03	20.60	3.51	33.13	3.51		0.15	3.66	
TOOLS-SHOP EQUIP	4		12285.	15.		4.78	7.10	1.02	12.90	0.00		0.14	0.14	
STORAGE SHED	8		26325.	35.		5.64	12.87	2.19	20.71	0.00		0.03	0.03	
FUELTANK 550 GAL	18		468.	30.		0.05	0.33	0.04	0.42	0.00		0.00	0.00	
MACHINERY & EQUIPMENT			1359.			62.26	94.98	21.13	178.36	32.16	4.63	23.56	60.35	

INVESTMENT & COSTS PER ACRE
 TOTAL INVESTMENT 163108.

BASED ON A 120 ACRE VINEYARD YIELD: 456 23 LB BOXES
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 HOUSE PACKED FRUIT
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UPDATED 10/02/81

MACHINERY OPERATIONS SUMMARY
 SAMPLE PRODUCTIONS COSTS & RETURNS FOR
 CORDON-TRAINED, SPUR-PRUNED TABLE GRAPES
 SOUTHERN SAN JOAQUIN VALLEY 1980

BUDGET RECORD NUMBER 343
 BY ED YEARY, FARM ADVISOR
 LYNN HOREL, SRA

OPERATION	ITEM NO.	DATE	TIMES OVER	LABOR HOURS	MACHINE HOURS	FUEL, OIL, LUB., REP. PER ACRE	FIXED COSTS PER ACRE
PICKUP 3/4 TON		15 NOV	5.00	0.300	0.250	1.59	1.27
DISC-HYD OFFSET	3,	79 DEC	0.50	0.336	0.278	2.03	5.87
PICKUP 3/4 TON		15 DEC	5.00	0.300	0.250	1.59	1.27
PICKUP 3/4 TON		15 JAN	5.00	0.300	0.250	1.59	1.27
DRY FERT APPLIC.	3,	85 JAN	1.00	0.378	0.313	1.41	2.62
CHISEL	3,	66 FEB	0.33	0.215	0.178	0.87	1.98
PICKUP 3/4 TON		15 FEB	5.00	0.300	0.250	1.59	1.27
TRACTOR 35 HP	3	MAR	0.33	0.396	0.330	1.20	1.75
SPRINGTOOTH	3,	98 MAR	1.00	1.280	1.058	5.24	8.20
PICKUP 3/4 TON		15 MAR	5.00	0.300	0.250	1.59	1.27
TRACTOR 35 HP	3	APR	0.33	0.396	0.330	1.20	1.75
DUSTING RIG	3,	87 APR	1.00	0.380	0.314	1.86	5.69
PICKUP 3/4 TON		15 APR	5.00	0.300	0.250	1.59	1.27
TRACTOR 35 HP	3	MAY	0.34	0.408	0.340	1.23	1.80
DUSTING RIG	3,	87 MAY	1.00	0.380	0.314	1.86	5.69
PICKUP 3/4 TON		15 MAY	5.00	0.300	0.250	1.59	1.27
SPRINGTOOTH	3,	98 JUNE	1.00	1.280	1.058	5.24	8.20
DUSTING RIG	3,	87 JUNE	1.00	0.380	0.314	1.86	5.69
PICKUP 3/4 TON		15 JUNE	5.00	0.300	0.250	1.59	1.27
DUSTING RIG	3,	87 JULY	1.00	0.380	0.314	1.86	5.69
PICKUP 3/4 TON		15 JULY	5.00	0.300	0.250	1.59	1.27
PICKUP 3/4 TON		15 AUG	5.00	0.300	0.250	1.59	1.27
PICKUP 3/4 TON		15 SEPT	5.00	0.300	0.250	1.59	1.27
PICKUP 3/4 TON		15 OCT	5.00	0.300	0.250	1.59	1.27
TOTALS				9.810	8.141	44.90	70.20

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FUEL USE SUMMARY FOR BUDGET RECORD NUMBER 343
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FUEL USED IN GALLONS PER HOUR

TRACTOR 35 HP	2.100
PICKUP 3/4 TON	4.000

FUEL ALLOCATED TO OPERATIONS IN GALLONS PER ACRE COVERED

MACHINE	GALLONS	POWER UNIT
PICKUP 3/4 TON	0.200	
SPRINGTOOTH	2.443	TRACTOR 35 HP
DISC-HYD OFFSET	1.283	TRACTOR 35 HP
CHISEL	1.246	TRACTOR 35 HP
DUSTING RIG	0.726	TRACTOR 35 HP
DRY FERT APPLIC.	0.722	TRACTOR 35 HP

FUEL ALLOCATED TO OPERATIONS FOR THE BUDGET UNIT

	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	FUEL TYPE
TRACTOR 35 HP	0.000	0.000	0.693	0.693	0.714	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.100	GAS
SPRINGTOOTH	0.000	0.000	2.443	0.000	0.000	2.443	0.000	0.000	0.000	0.000	0.000	0.000	4.887	GAS
DISC-HYD OFFSET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.642	0.642	GAS
CHISEL	0.000	0.411	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.411	GAS
DUSTING RIG	0.000	0.000	0.000	0.726	0.726	0.726	0.726	0.000	0.000	0.000	0.000	0.000	2.904	GAS
PICKUP 3/4 TON	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	12.000	GAS
DRY FERT APPLIC.	0.722	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.722	GAS
TOTALS	1.722	1.411	4.136	2.419	2.440	4.169	1.726	1.000	1.000	1.000	1.000	1.642	23.665	

GALLONS FUEL BY TYPE

23.67 GAS
 0.00 LP
 0.00 DIESEL
 0.00 N. GAS
 0.00 KWRS

FUEL TYPES
 1=GAS
 2=L.P.
 3=DIESEL
 4=N. GAS
 5=ELEC.

UC Cooperative Extension

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 8' X 12' SPACING - 450 VINES/ACRE
 HOUSE PACKED FRUIT

UPDATED 10/02/81

STORED DATA PAGE (NO CALCULATIONS) FOR GRAPES, TABLE

BUDGET RECORD NUMBER 343



SAMPLE PRODUCTIONS COSTS & RETURNS FOR
CORDON-TRAINED, SPUR-PRUNED TABLE GRAPES
SOUTHERN SAN JOAQUIN VALLEY 1980

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COSTS AND RETURNS WILL BE
DIVIDED BY 456.0 BOX
TO OBTAIN PER BOX COSTS

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PRODUCTION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	PRICE	SHARE	UNIT	ITEM	TYPE	XXXX
1 GRAPES, TABLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	456.00	0.00	0.00	6.000	0.000	26.	46.	2.	0.
2 CULL GRAPES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75	0.00	0.00	75.000	0.000	3.	379.	2.	0.
OPERATING INPUTS																		
	RATE/UNIT												PRICE	SHARE	UNIT	ITEM	TYPE	HARV
													RENT	CODE	CODE	CODE	CODE	
7 PRUNING	225.00	225.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.200	0.000	25.	340.	3.	0.
8 BRUSH REMOVAL	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.000	0.000	7.	313.	3.	0.
9 NITROGEN	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.350	0.000	12.	211.	3.	0.
10 POWDRY MILDEW CTL	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	2.000	0.000	34.	239.	3.	0.
11 INSECTICIDE	0.00	0.00	0.00	0.25	0.25	0.25	0.25	0.00	0.00	0.00	0.00	0.00	98.000	0.000	7.	240.	3.	0.
12 SEASONAL LABOR	0.00	0.00	0.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	4.500	0.000	8.	330.	3.	0.
13 HARVEST & HAUL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	56.550	0.000	3.	318.	3.	9.
14 PACKING HSE COST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.25	0.00	0.00	191.400	0.000	3.	433.	3.	9.
15 MISCL SUPPLIES	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.000	0.000	7.	423.	3.	0.
16 IRRIG DIST WATER	0.00	0.00	0.00	6.00	6.00	12.00	12.00	6.00	0.00	0.00	0.00	6.00	2.080	0.000	11.	323.	3.	0.
17 HERBICIDE	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	30.000	0.000	7.	250.	3.	0.
MACHINERY REQUIREMENTS																		
	IMPLEMENTS = TIMES OVER, TRUCKS = # MILES/ACRE, TRACTORS = HRS/ACRE												A CREW		POWER	MACH	TYPE	HARV
													LABOR	UNIT	CODE	CODE	CODE	
26 TRACTOR 35 HP	0.00	0.00	0.33	0.33	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.	3.	4.	0.
27 SPRINGTOOTH	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	3.	98.	4.	0.
28 DISC-HYO OFFSET	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.000	0.000	3.	79.	4.	0.
29 CHISEL	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	3.	66.	4.	0.
30 DUSTING RIG	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	3.	87.	4.	0.
31 PICKUP 3/4 TON	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	0.000	0.000	0.	15.	4.	0.
32 DRY FERT APPLIC.	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	3.	85.	4.	0.
IN IRRIG WATER																		
	0.00	0.00	0.00	6.00	6.00	12.00	12.00	6.00	0.00	0.00	0.00	6.00	0.00	0.00	0.	53.	0.	
. TIRES IRRIG																		
	0.00	0.00	0.00	1.00	2.00	2.00	2.00	1.00	0.00	0.00	0.00	1.00						

EQUIPMENT REQUIREMENTS	NUMBER	PROPERT	XXX	EQUIP	TYPE	XXXX
	UNITS	OF COST	CODE	CODE	CODE	CODE
51 FARM SHOP	1.000	1.000	0.	2.	5.	0.
52 TOOLS-SHOP EQUIP	1.000	1.000	0.	4.	5.	0.
53 STORAGE SHED	1.000	1.000	0.	8.	5.	0.
54 FUELTANK 550 GAL	1.000	1.000	0.	18.	5.	0.

LAND REQUIREMENTS	2	3	4	5	6	7	8
	CHARGE	NUMBER	VALUE OR	TAXES	PERENNIAL CROPS	PER ACRES	PER ACRES
	METHOD	OF ACRES	COST/ACRE	PER ACRE	YRS LIFE	COST/ACRE	
71	1.	120.00	3500.00	65.00	25.0	5030.00	

ENTERPRISE 2-46 REGION/COUNTY 64 UNASSIGNED 00000 MACH COMP 7 IRRIG SYST 6 UNASSIGNED 0 EQUIP SET 1 HARVEST MONTH 10

BASED ON A 120 ACRE VINEYARD YIELD: 456 23 LB BOXES
8' X 12' SPACING - 450 VINES/ACRE

MACHINERY COMPLEMENT 7

HOUSE PACKED FRUIT

UPDATED 10/02/81

EQUIPMENT COMPLEMENT 1

GENERAL NAME CHANGE->	LINE CHANGE	VALUE	RW CL	LINE CHANGE	VALUE	RW CL	LINE CHANGE	VALUE	RW CL	LINE CHANGE	VALUE	RW CL
MACHNRY NAME CHANGE->	90	15.000000	90.	379	4000.000000	90.	90	4000.000000	90.	12	5.500000	10.

Sample production costs and returns for Cordon-trained, Spur-pruned table grapes
Southern San Joaquin Valley 1980

Additional Notes and Assumptions:

1. 87 boxes/ton (23 lbs/box)
5.25 ton yield = 456 boxes
2. Harvest and haul to packing house:
5.25 ton yield + 1.75 ton cull grapes = 7.0 ton total
Cost is \$.65/box or \$56.55/ton
3. Packing house costs include cost of boxes and packing:
\$2.20/box or \$191.40/ton
4. There is a tendency to pick more culls if go through house pack operation.