

Budget Record #48
Updated 5/11/81

1981

SAMPLE PRODUCTION COSTS

COSTS OF PRODUCING FANTASIA NECTARINES (MIDSEASON)

TULARE, FRESNO & KINGS COUNTIES

by

J. LaRue, Tulare Co., F. Yoshikawa, Fresno Co., & B. Beede, Kings Co., Farm Advisors
and

P. Thomas, Staff Research Associate, Farm Management, U. C. Davis

Costs given in this sample study are for those of a typical well managed orchard and are not intended to reflect an average of all orchards in Tulare, Fresno and Kings Counties.

It is assumed this study is based upon a 10 acre block out of a 40 acre total fruit orchard. The same machinery, pump and some other costs are shared on the whole orchard.

Practices listed are based on those considered typical production procedures. Sample costs given for labor, materials, equipment and contract services are based on 1981 figures. Interest and depreciation are based upon the cost of new equipment and a recent land purchase. Not all costs or practices may be incurred in your situation but should be used as a guide only.

Additional output is available upon your request, including machine operations summary, fuel use summary and a stored data page (input information).

Calculations used by the computer may be further explained by calling the Budget Generator Manager, University of California, Davis, California (916) 752-6705.

COST & RETURNS SUMMARY FOR NECTARINES
COSTS OF PRODUCING FANTASIA NECTARINES (MIDSEASON)
TULARE, FRESNO & KINGS COUNTIES
1981
BY J. LARUE, F. YOSHIKAWA & B. BEEDE, FARM ADVISORS - P. THOMAS, SRA

	UNIT	PRICE OR COST/UNIT	QUANTITY	SRA VALUE OR COST PER ACRE	YOUR COST
1. GROSS RECEIPTS FROM PRODUCTION:					
NECTARINES	LUGS	5.500	1300.000	7150.00	
TOTAL RECEIPTS:					7150.00
2. VARIABLE COSTS:					
PREHARVEST:					
PRUNING	HOURL	5.000	64.800	324.00	
BRUSH SHREDDING	ACRE	10.000	1.000	10.00	
PEST - DORMANT	ACRE	57.550	1.000	57.55	
TIE - MAT&LABOR	TREE	0.700	108.000	75.60	
FUNG - BROWN ROT	ACRE	31.500	1.000	31.50	
INSECT. - THRIPS	ACRE	38.760	1.000	38.76	
THINNING	HOURL	5.000	43.200	216.00	
NITROGEN	LBS.	0.350	135.000	47.25	
CONTRACT N APPL.	APLC	3.500	2.000	7.00	
DISTRICT WATER	ACRE	12.500	1.000	12.50	
WEED CONTROL	ACRE	10.000	1.000	10.00	
MITICIDE	LBS.	15.500	1.000	15.50	
PRE-EMERGE HERB	ACRE	11.000	1.000	11.00	
CONTR. HERB APPL	APLC	6.000	1.000	6.00	
MISC. LABOR	HOURL	5.000	4.000	20.00	
TRACTOR (FUEL-LUBE-REPAIRS)	ACRE			25.25	
EQUIPMENT (FUEL-LUBE-REPAIRS)	ACRE			105.12	
BUILDINGS (FUEL-LUBE-REPAIRS)	ACRE			5.10	
IRRIGATION (POWER-LUBE-REP)	ACIN	1.240	22.000	27.27	
MACHINERY LABOR	HOURL	5.650	24.012	135.67	
IRRIGATION LABOR	HOURL	5.650	9.000	50.85	
INTEREST ON OPERATING CAP.	DOL.	0.14000	474.618	64.44	
TOTAL PREHARVEST COSTS:					1296.36
PREHARVEST COST PER LUGS					0.9972
HARVEST:					
CONTRACT PICK	LUGS	0.750	1300.000	975.00	
CONTRACT HAUL	LUGS	0.100	1300.000	130.00	
PACKING CHARGES	LUGS	2.350	1300.000	3055.00	
SELLING CHARGES	LUGS	0.550	1300.000	715.00	
MISC HARV LABOR	HOURL	5.000	4.000	20.00	
TOTAL HARVEST COSTS:					4895.00
HARVEST COST PER LUGS					3.7654
TOTAL VARIABLE COSTS:					6191.36
VARIABLE COST PER LUGS					4.7626
3. INCOME ABOVE VARIABLE COSTS:					
INCOME PER LUGS					958.64
4. OVERHEAD:					
PERSONAL PROPERTY TAXES:					20.54
REAL PROPERTY TAXES:					50.00
MISC. OFFICE & BOOKKEEPING (2.50% OF TOTAL VARIABLE COSTS)					154.28
TOTAL OVERHEAD:					225.33
OVERHEAD COST PER LUGS					0.1733
TOTAL CASH COSTS:					
TOTAL CASH COST PER LUGS					6416.68
5. INCOME ABOVE ALL CASH COSTS:					
INCOME PER LUGS					733.32
6. OWNERSHIP COSTS:					
DEPRECIATION:					
MACHINERY & EQUIPMENT	ACRE				69.01
IRRIGATION SYSTEM	ACRE				4.94
BUILDINGS	ACRE				25.90
TREES, VINES OR STAND	ACRE				305.25
TOTAL DEPRECIATION:					405.11
CAPITAL & INTEREST:					
MACHINERY&EQUIPMENT		0.14000	542.114	75.90	
IRRIGATION SYSTEM		0.14000	50.020	7.00	
BUILDINGS		0.10670	447.131	47.71	
TREES, VINES OR STAND		0.10670	6105.000	325.70	
LAND		0.10670	5500.000	586.85	
TOTAL INTEREST CHARGE:					1043.16
TOTAL FIXED COSTS:					1440.27
FIXED COST PER LUGS					1.1141
7. TOTAL OF ABOVE COSTS:					
TOTAL COST PER LUGS					7864.95
8. NET RETURNS:					
NET RETURNS PER LUGS					-714.95
-0.5500					

BASED ON 10 ACRES OF 40 ACRE ORCHARD - 108 TREES/ACRE
 FURROW IRRIGATION: 44 AC.IN. TOTAL 50% DISTRICT WATER, 50% WELL WATER
 LAND OWNER BASIS YIELD: 1300 LUGS/ACRE (23 LBS/LUG) UPDATED 05/11/81
 DATE PRINTED: 05/11/81 HARVEST MONTH: 7 BUDGET RECORD NUMBER 48
 1980 default data

CASH FLOW & INVESTMENT SUMMARY FOR NECTARINES

BUDGET RECORD NUMBER 48

COSTS OF PRODUCING FANTASIA NECTARINES (MIDSEASON)
 TULARE, FRESNO & KINGS COUNTIES 1981
 BY J. LARUE, F. YOSHIKAWA & B. BEEDE, FARM ADVISORS - P. THOMAS, SRA

MONTHLY SUMMARY OF RECEIPTS AND EXPENSES

CATEGORY	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
TOTAL RECEIPTS	\$/AC							7150.00						7150.00
OPERATING EXPENSES														
PRUNING	\$/AC	324.00												324.00
BRUSH SHREDDING	\$/AC	10.00												10.00
PEST - DORMANT	\$/AC	57.55												57.55
TIE - MAT&LABOR	\$/AC		75.60											75.60
FUNG - BROWN ROT	\$/AC		15.75					15.75						31.50
INSECT. - THRIPS	\$/AC			19.38				19.38						38.76
THINNING	\$/AC					216.00								216.00
NITROGEN	\$/AC					18.90				28.35				47.25
CONTRACT N APPL.	\$/AC					3.50				3.50				7.00
DISTRICT WATER	\$/AC						6.25	6.25						12.50
WEED CONTROL	\$/AC					2.00	2.00	2.00	2.00	2.00				10.00
MITICIDE	\$/AC							15.50						15.50
PRE-EMERGE HERB	\$/AC												11.00	11.00
CONTR. HERB APPL	\$/AC												6.00	6.00
MISC. LABOR	\$/AC	1.65	1.65	1.70	1.65	1.65	1.70	1.65	1.65	1.70	1.65	1.65	1.70	20.00
CONTRACT PICK	\$/AC							975.00						975.00
CONTRACT HAUL	\$/AC							130.00						130.00
PACKING CHARGES	\$/AC							3055.00						3055.00
SELLING CHARGES	\$/AC							715.00						715.00
MISC HARV LABOR	\$/AC							20.00						20.00
MACHINE LABOR COST	\$/AC	10.04	10.04	13.96	8.48	16.66	8.48	21.36	8.48	8.48	12.75	8.48	8.48	135.67
INTEREST ON OPER. CAP.	\$/AC	28.05	6.40	2.20	0.99	6.31	0.44	0.02	5.60	7.23	2.74	1.65	2.79	64.44
TRACTOR COST	\$/AC	1.16	1.16	4.08		6.09		9.58			3.18			25.25
EQUIPMENT COST	\$/AC	9.05	9.05	9.20	7.92	9.01	7.92	12.42	7.92	7.92	8.96	7.92	7.92	105.12
BLDG OPER. COST	\$/AC	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	5.10
IRRIGATION COST	\$/AC				4.96	4.96			12.40	4.96				27.27
IRRIG. LABOR COST	\$/AC				5.65	5.65	11.30	11.30	11.30	5.65				50.85
TOTAL EXPENSES	\$/AC	441.94	120.09	50.95	30.07	291.16	38.51	5010.65	49.76	70.21	29.60	20.12	38.31	6191.36

MONTHLY IRRIGATION AND LABOR REQUIREMENTS

MACHINE LABOR	HR/AC	1.78	1.78	2.47	1.50	2.95	1.50	3.78	1.50	1.50	2.26	1.50	1.50	24.01
IRRIGATION LABOR	HR/AC				1.00	1.00	2.00	2.00	2.00	1.00				9.00
IRRIG. WATER APPLIED -well	ACIN				4.00	4.00			10.00	4.00				22.00

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 65HP	4	65.0	18000.	15.	300.	15.65	24.38	6.56	46.59	16.37	2.46	6.43	25.25	5.466
PICKUP 1/2 TON	14	0.5	10000.	7.	435.	36.69	30.30	7.76	74.75	72.00	10.80	12.22	95.02	15.000
IRRIG PUMP 15HP	21	1.0	6500.	25.	6400.	0.82	1.70	0.50	3.02	22.13	0.33	1.81	24.28	22.000
FURROW IRIG SYS*	53	1.0	13300.	10.	5000.	4.12	5.31	1.32	10.75	0.00	0.06	2.93	2.99	22.000
DISC-OFFSET	78	8.0	3000.	15.	100.	3.39	4.32	1.27	8.97	0.00	0.06	2.78	2.83	1.875
SPD SPRYR 500 6A	91	20.0	12500.	15.	80.	12.95	16.48	4.83	34.26	0.00	0.13	6.69	6.82	1.375
FURROWER 2SHOVEL	102	8.0	450.	15.	140.	0.33	0.42	0.12	0.88	0.00	0.01	0.44	0.45	1.719
FARM SHOP	1		4500.	35.		11.57	26.41	4.50	42.48	4.50		0.19	4.69	
TOOLS-SHOP EQUIP	4		3071.	15.		14.33	21.30	3.07	38.70	0.00		0.41	0.41	
MACHINERY & EQUIPMENT INVESTMENT & COSTS PER ACRE			6932.			99.86	130.61	29.93	260.40	115.00	13.84	33.89	162.74	
TOTAL INVESTMENT			69321.											

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FUEL USE SUMMARY FOR BUDGET RECORD NUMBER 48
 COSTS OF PRODUCING FANTASIA NECTARINES (MIDSEASON)
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 BY J. LARUE, F. YOSHIKAWA & B. BEEDE, FARM ADVISORS - P. THOMAS, SRA

FUEL USED IN GALLONS PER HOUR

TRACTOR 65HP	3.120	
PICKUP 1/2 TON	4.000	
IRRIG PUMP 15HP	9.190	(KWHRS)

FUEL ALLOCATED TO OPERATIONS IN GALLONS PER ACRE COVERED

MACHINE	GALLONS	POWER UNIT
PICKUP 1/2 TON	0.200	
DISC-OFFSET	2.145	TRACTOR 65HP
FURROWER 2SHOVEL	1.966	TRACTOR 65HP
SPD SPRYR 500 GA	0.787	TRACTOR 65HP
FURROW IRIG SYS	202.174 (KWHRS)	IRRIG PUMP 15HP

FUEL ALLOCATED TO OPERATIONS FOR THE BUDGET UNIT

	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	FUEL TYPE
DISC-OFFSET	0.000	0.000	0.000	0.000	2.145	0.000	2.145	0.000	0.000	2.145	0.000	0.000	6.435	DIESEL
FURROWER 2SHOVEL	0.000	0.000	1.966	0.000	1.966	0.000	1.966	0.000	0.000	0.000	0.000	0.000	5.899	DIESEL
SPD SPRYR 500 GA	0.787	0.787	0.787	0.000	0.000	0.000	2.360	0.000	0.000	0.000	0.000	0.000	4.719	DIESEL
PICKUP 1/2 TON	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	60.000	GAS
FURROW IRIG SYS	0.000	0.000	0.000	36.759	36.759	0.000	0.000	91.897	36.759	0.000	0.000	0.000	202.174	KWH
TOTALS	5.787	5.787	7.753	41.759	45.870	5.000	11.471	96.897	41.759	7.145	5.000	5.000	77.053	

GALLONS FUEL BY TYPE

60.00 GAS
 0.00 LP
 17.05 DIESEL
 0.00 N. GAS
 202.17 KWHRS

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

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MACHINERY OPERATIONS SUMMARY BUDGET RECORD NUMBER 48
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 BY J. LARUE, F. YOSHIKAWA & B. BEEDE, FARM ADVISORS - P. THOMAS, SRA

OPERATION	ITER NO.	DATE	TIMES OVER	LABOR HOUR S	MACHINE HOURS	FUEL, OIL, LUB., PER ACRE	FIXED REP. COSTS PER ACRE
PICKUP 1/2 TON		14 AUG	25.00	1.500	1.250	7.92	6.23
PICKUP 1/2 TON		14 SEPT	25.00	1.500	1.250	7.92	6.23
DISC-OFFSET	4,	78 OCT	1.00	0.756	0.625	4.12	8.85
PICKUP 1/2 TON		14 OCT	25.00	1.500	1.250	7.92	6.23
PICKUP 1/2 TON		14 NOV	25.00	1.500	1.250	7.92	6.23
PICKUP 1/2 TON		14 DEC	25.00	1.500	1.250	7.92	6.23
SPR YR 500 GA	4,	91 JAN	1.00	0.277	0.229	2.30	7.86
PICKUP 1/2 TON		14 JAN	25.00	1.500	1.250	7.92	6.23
SPD SPRYR 500 GA	4,	91 FEB	1.00	0.277	0.229	2.30	7.86
PICKUP 1/2 TON		14 FEB	25.00	1.500	1.250	7.92	6.23
FURROWER 2SHOVEL	4,102	MAR	1.00	0.693	0.573	3.06	5.67
SPD SPRYR 500 GA	4,	91 MAR	1.00	0.277	0.229	2.30	7.86
PICKUP 1/2 TON		14 MAR	25.00	1.500	1.250	7.92	6.23
PICKUP 1/2 TON		14 APR	25.00	1.500	1.250	7.92	6.23
DISC-OFFSET	4,	78 MAY	1.00	0.756	0.625	4.12	8.85
FURROWER 2SHOVEL	4,102	MAY	1.00	0.693	0.573	3.06	5.67
PICKUP 1/2 TON		14 MAY	25.00	1.500	1.250	7.92	6.23
PICKUP 1/2 TON		14 JUNE	25.00	1.500	1.250	7.92	6.23
DISC-OFFSET	4,	78 JULY	1.00	0.756	0.625	4.12	8.85
FURROWER 2SHOVEL	4,102	JULY	1.00	0.693	0.573	3.06	5.67
SPR YR 500 GA	4,	91 JULY	3.00	0.832	0.688	6.90	23.58
PICKUP 1/2 TON		14 JULY	25.00	1.500	1.250	7.92	6.23
TOTALS				24.012	19.969	165.45	

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RANGING ANALYSIS FOR BUDGET RECORD NUMBER 48
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INCOME ABOVE VARIABLE COSTS
 WHEN THE PRICE OF NECTARINES RANGES FROM 5.00 TO 6.00
 AND THE QUANTITY OF NECTARINES RANGES FROM 1040.00 TO 1560.00

QUANTITY OF NECTARINES	PRICE OF NECTARINES				
	5.00	5.25	5.50	5.75	6.00
1040.00	-991.36	-731.36	-471.36	-211.36	48.64
1170.00	-341.36	-48.86	243.64	536.14	828.64
1300.00	308.64	633.64	958.64	1283.64	1608.64
1430.00	958.64	1316.14	1673.64	2031.14	2388.64
1560.00	1608.64	1998.64	2388.64	2778.64	3168.64

INCOME ABOVE ALL CASH COSTS
 WHEN THE PRICE OF NECTARINES RANGES FROM 5.00 TO 6.00
 AND THE QUANTITY OF NECTARINES RANGES FROM 1040.00 TO 1560.00

QUANTITY OF NECTARINES	PRICE OF NECTARINES				
	5.00	5.25	5.50	5.75	6.00
1040.00	-1216.68	-956.68	-696.68	-436.68	-176.68
1170.00	-566.68	-274.18	18.32	310.82	603.32
1300.00	83.32	408.32	733.32	1058.32	1383.32
1430.00	733.32	1090.82	1448.32	1805.82	2163.32
1560.00	1383.32	1773.32	2163.32	2553.32	2943.32

INCOME ABOVE ALL COSTS
 WHEN THE PRICE OF NECTARINES RANGES FROM 5.00 TO 6.00
 AND THE QUANTITY OF NECTARINES RANGES FROM 1040.00 TO 1560.00

QUANTITY OF NECTARINES	PRICE OF NECTARINES				
	5.00	5.25	5.50	5.75	6.00
1040.00	-2664.95	-2404.95	-2144.95	-1884.95	-1624.95
1170.00	-2014.95	-1722.45	-1429.95	-1137.45	-844.95
1300.00	-1364.95	-1039.95	-714.95	-389.95	-64.95
1430.00	-714.95	-357.45	0.05	357.55	715.05
1560.00	-64.95	325.05	715.05	1105.05	1495.05

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INSUFFICIENT STORAGE FOR 0001GE 254 PRE-EMERGE HERB
INSUFFICIENT STORAGE FOR 0001GE 53 FURROW IRRIG SYS*

STORED DATA PAGE (NO CALCULATIONS) FOR NECTARINES

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COSTS AND RETURNS WILL BE
DIVIDED BY 1300.0 LUGS
TO OBTAIN PER LUGS COSTS

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	PRICE	SHARE	UNIT	ITER	TYPE	XXXX
PRODUCTION	NUMBER OF UNITS																	
1 NECTARINES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.500	0.000	27.	51.	2.	0.
OPERATING INPUTS	RATE/UNIT																	
6 PRUNING	64.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.000	0.000	8.	340.	3.	0.
7 BRUSH SHREDDING	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.000	0.000	7.	313.	3.	0.
8 PEST - DORMANT	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.550	0.000	7.	206.	3.	0.
9 TIE - MAT&LABOR	0.00	108.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.700	0.000	24.	342.	3.	0.
10 FUNG - BROWN ROT	0.00	0.50	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	31.500	0.000	7.	350.	3.	0.
11 INSECT. - THRIPS	0.00	0.00	0.50	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	38.760	0.000	7.	351.	3.	0.
13 THINNING	0.00	0.00	0.00	0.00	43.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.000	0.000	8.	339.	3.	0.
17 NITROGEN	0.00	0.00	0.00	0.00	54.00	0.00	0.00	0.00	81.00	0.00	0.00	0.00	0.350	0.000	12.	211.	3.	0.
18 CONTRACT N APPL.	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	3.500	0.000	34.	300.	3.	0.
DISTRICT WATER	0.00	0.00	0.00	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.00	0.00	12.500	0.000	7.	448.	3.	0.
WEED CONTROL	0.00	0.00	0.00	0.00	0.20	0.20	0.20	0.20	0.20	0.00	0.00	0.00	10.000	0.000	7.	269.	3.	0.
HERBICIDE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	15.500	0.000	12.	247.	3.	0.
PRE-EMERGE HERB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	11.000	0.000	7.	254.	3.	0.
CONTR. HERB APPL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	6.000	0.000	34.	361.	3.	0.
MISC. LABOR	0.33	0.33	0.34	0.33	0.33	0.34	0.33	0.33	0.34	0.33	0.33	0.34	5.000	0.000	8.	252.	3.	0.
CONTRACT PICK	0.00	0.00	0.00	0.00	0.00	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.750	0.000	27.	326.	3.	9.
CONTRACT HAUL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.100	0.000	27.	327.	3.	9.
PACKING CHARGES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.350	0.000	27.	150.	3.	9.
SELLING CHARGES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.550	0.000	27.	151.	3.	9.
MISC HARV LABOR	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	5.000	0.000	8.	152.	3.	9.

MACHINERY REQUIREMENTS	IMPLEMENTS =	TIMES OVER,	TRUCKS = #	MILES/ACRE,	TRACTORS =	HRS/ACRE	# CREW	POWER	MACH	TYPE	HARV
							LABOR	UNIT	CODE		CODE
MISC-OFFSET	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
FURROWER 2SHOVEL	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
SPD SPRYR 500 GA	1.00	1.00	1.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
PICKUP 1/2 TON	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
ACIN IRRIG WATER	0.00	0.00	0.00	4.00	4.00	0.00	0.00	10.00	4.00	0.00	0.00
NO. TIMES IRRIG	0.00	0.00	0.00	1.00	1.00	2.00	2.00	2.00	1.00	0.00	0.00

EQUIPMENT REQUIREMENTS	NUMBER	PROPORT	XXX	EQUIP	TYPE	XXXX
	UNITS	OF COST		CODE		
FARM SHOP	1.000	0.250	0.	1.	5.	0.
TOOLS-SHOP EQUIP	1.000	0.250	0.	4.	5.	0.
LAND REQUIREMENTS	2	3	4	5	6	7
	CHARGE	NUMBER	VALUE OR	TAXES	PERENNIAL CROPS	
	METHOD	OF ACRES	COST/ACRE	PER ACRE	YRS LIFE	COST/ACRE
71	1.	10.00	5500.00	50.00	20.0	6105.00

ENTERPRISE 2-51 REGION/COUNTY 64 UNASSIGNED 00000 MACH COMP 7 IRRIG SYST 6 UNASSIGNED 0 EQUIP SET 1 HARVEST MONTH 7

BASED ON 10 ACRES OF 40 ACRE ORCHARD - 108 TREES/ACRE
FURROW IRRIGATION: 44 AC.IN. TOTAL 50Z DISTRICT WATER, 50Z WELL WATER
LAND OWNER BASIS YIELD: 1300 LUGS/ACRE (23 LBS/LUG) UPDATED 05/11/81
MACHINERY COMPLEMENT 7
EQUIPMENT COMPLEMENT 1

GENERAL NAME CHANGE->	206	PEST - DORMANT	350	FUNG - BROWN ROT	351	INSECT. - THRIPS	342	TIE - MAT&LABOR	313	BRUSH SHREDDING
	339	THINNING	300	CONTRACT N APPL.	448	DISTRICT WATER	269	WEED CONTROL	361	CONTR. HERB APPL
	252	MISC. LABOR	326	CONTRACT PICK	327	CONTRACT HAUL	150	PACKING CHARGES	151	SELLING CHARGES
	152	MISC HARV LABOR								
MACHNRY NAME CHANGE->	4	TRACTOR 65HP	102	FURROWER 2SHOVEL	21	IRRIG PUMP 15HP				

MACH COMP CHGS->	78.	2.	8.000000	78.	3.	3000.000000	78.13.	3000.000000	4.	2.	65.000000	4.	3.	16000.000000	4.13.	16000.000000
		4.16.	65.000000	2.	8.000000	3.	450.000000	13.	450.000000	53.	2.	1.000000	53.	3.13300.000000		
		53.13.	13300.000000	91.	2.	20.000000	91.	3.12500.000000	91.	13.	12500.000000	14.	3.10000.000000	14.	13.10000.000000	
		21.	2.	1.000000	21.	3.	6500.000000	21.13.	6500.000000	21.16.	15.000000					
MACH COMP CHGS->	1.	5.18000.000000	1.	6.18000.000000												
METER CHGS->	10.	5.650000	12.	5.650000	18.	1.000000	28.	0.025000								

DATE PRINTED: 05/11/81
30 default data

Costs of Producing Fantasia Nectarines (mid season)

Tulare, Fresno and Kings Counties 1981

By J. LaRue, F. Yoshikawa & B. Beede, Farm Advisors - P. Thomas, SRA

10 acres of a 40 acre orchard - 108 trees/acre

Furrow Irrigation: 44 ac.in. total 50% district water, 50% well water

Land owner basis Yield: 1300 lugs/acre (23 lbs/lug)

Cost Estimate Assumptions:

1. Prune in January:

Labor - 36 min/tree x 108 trees/acre (+ 60 min/hr) = 64.8 hrs/acre

64.8 hrs/acre @ \$ 5.00/hr = \$324.00/acre

Brush shredding - contract \$10.00/acre

2. Pest control:

Total materials for 6 applications = \$143.31/acre

Jan: Basic zinc

3 lb/100 gal of water x 5 (for 500 gal/acre) = \$ 8.25/acre

Spray oil

1 gal/100 gal of water x 5 (for 500 gal/acre) = 12.50/acre

Parathion (25wp)

2 lb/100 gal of water x 5 (for 500 gal/acre) = 15.00/acre

Basic copper

4 lb/100 gal of water x 5 (for 500 gal/acre) = 21.80/acre

Total dormant materials (1 application) \$57.55/acre

Dormant spray to control San Jose scale, peach twig borer,
peach leaf curl, zinc deficiency and over wintering mite eggs.

Feb: Fungicide (benomyl) for brown rot 1.5 lb/ac @ \$10.50/lb = \$ 15.75/ac

Mar: Insecticide at petal fall for thrips 1.25 lb/ac @ \$15.50/lb = \$ 19.38/ac

Jul: Fungicide (benomyl) for brown rot 1.5 lb/ac @ \$10.50/lb = \$ 15.75/ac

Insecticide at pre-harv for thrips 1.25 lb/ac @ \$15.50/lb = 19.38/ac

Miticide 1 lb/acre @ 15.50/lb = 15.50/ac

Total materials for July (3 applications) \$ 50.63/ac

Application - speed sprayer, 500 gal pulled by 65hp diesel tractor

- 1 pass in orchard each application

3. Tie limbs in February:

Labor & materials 108 trees/acre @ \$.70/tree = \$75.60/acre

4. Furrow in March, May, July:

Furrower, 2 shovel pulled by 65hp diesel tractor - 1 pass in orchard each month

March prior to frost

May after thinning

July weed control

5. Thin fruit in May:

Labor - 43.2 hrs/acre @ \$5.00/hr = \$216.00/acre

6. Fertilize in May and September:

Materials May: .5 lbs N/tree x 108 trees/acre @ \$.35/lb = \$18.90/acre

Sept: .75 lbs N/tree x 108 trees/acre @ \$.35/lb = \$28.35/acre

Total materials \$47.25/acre

Application - contract \$3.50/acre x 2 applications = \$7.00/acre

7. Disc in May, July, October:

Offset disc pulled by 65hp diesel tractor - 1 pass in orchard each month

May before furrowing

July before furrowing

October before pruning

8. Irrigation:

Furrow irrigation system includes:

Pipeline	\$275/acre x 40 acres	\$11,000
Well, 120 ft, 10-12" casing		<u>2,300</u>
		\$13,300

Pump: 15hp, 70 ft lift, 450 gal/min = 1.0 acin/hr, \$6,500

Irrigation labor - 1 hr/application /acre

9 irrigations - 44 ac.in. total:	22 ac.in. district water
	22 ac.in. well water

District water cost: \$12.50/acre

First irrigation or two is well water, district water used until unavailable, then well water for balance of season.

		well	district
April	1x	4.0	
May	1x	4.0	
June	2x		11.0
July	2x		11.0
August	2x	10.0	
September	1x	4.0	
Total ac.in.		<u>22.0</u>	<u>22.0</u>

An irrigation in March is possible for frost protection.

9. Weed control in May-September and December:

May-Sept: Labor (hoeing and touch up spraying) 1 hr/ac @ \$5.00/hr = \$5.00/acre
 Materials - additional spray = \$5.00/acre
 \$10.00/ac (labor & mat.) divided by 5 months = \$ 2.00/ac each month

December: Materials pre-emergence herbicide \$11.00/acre
 Application - contract \$6.00/acre

10. Misc labor:

4 hrs/acre @ \$5.00/hr = \$20.00/acre
1/3 hour charged each month for 12 months

11. Pickup: 25 miles/acre/month

12. Harvest in July:

Yield: 1300 packed lugs/acre (23 lbs/lug)
 Price: \$5.50/lug (based on 1980 prices)
 Contract harvest
 Pick: \$.75/lug x 1300 lugs/acre = \$975.00/acre
 Haul: \$.10/lug x 1300 lugs/acre = \$130.00/acre
 Misc. harvest labor: 4 hrs/ac @ \$5.00/hr = \$20.00/acre
 Packing charges: \$2.35/lug
 Selling charges: 10% of gross sales price = \$.55/lug

13. Labor rates include benefits:

Machinery operators	\$5.65/hr
Irrigators	\$5.65/hr
Misc. Labor	\$5.00/hr

14. Buildings and equipment:

Farm shop	1500 sq. ft.	@\$12/sq.ft.	\$18,000
Tools and shop equipment		\$12,285	
Proportion allocated to Stone Fruit Orchard = 25% of above			

15. Land owned:

Land value	\$5500/acre	Land tax	\$50.00/acre
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16. Bookkeeping and misc office: 2.5% of total variable costs

17. Machinery costs calculated by computer:

For self-propelled machinery and implements, the width, speed, field efficiency and number of passes in the orchard are all used in determining the number of hours necessary to complete an operation. Tractor hours are then calculated by taking into consideration all implements pulled.

Per hour cost of depreciation, interest, taxes, insurance, repairs, fuel, and lube are calculated by the computer using purchase price, annual hours of usage, years of life, etc. and this rate is multiplied by the total hours of usage for each machine and equipment.

18. Total Cash costs per acre:

Establishment year 1	Budget Record #256	\$ 1432	
year 2	#257	558	
year 3	#258	709	
year 4	#259	2171	includes harvest costs
		<u>\$ 4870</u>	
Less gross receipts 4th year		1850	
Total cash costs for establishment years		<u>\$ 3020</u>	

19. Establishment costs per acre:

20 year life of trees assumed.

Establishment costs were calculated in the four budgets for establishing a stone fruit orchard:

Establishment year 1	Budget Record #256	\$ 2221	
year 2	#257	1340	
year 3	#258	1495	
year 4	#259	1049	adjusted
		<u>\$ 6105</u>	

The establishment costs are divided by 20 years and the depreciation and interest costs are shown in each of the production years.