

AGRICULTURAL EXTENSION SERVICE
UNIVERSITY OF CALIFORNIA,
SOLANO COUNTY

SAMPLE COSTS TO PRODUCE TOMATOES
DIXON AREA - SOLANO COUNTY - 1964
YIELD - 20 TONS PER ACRE

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CULTURAL	HRS. PER ACRE	LABOR	CASH AND LABOR COSTS PER ACRE		
			EQUIP. REP. & FUEL	MATERIALS	TOTAL
SEED BED PREPARATION					
Disc 2 times (fall)	0.4	0.56	1.64	--	2.20
Landplane 2 times (fall)	0.5	0.70	2.01	--	2.71
Subsoil or chisel (fall)					
2 times	1.3	1.82	5.49	--	7.31
Springtooth 2 times	0.4	0.56	1.70	--	2.26
Harrow & Roll 2 times	0.3	0.42	1.07	--	1.49
Move equipment, set up and service @ 10% of time	0.3	0.42	--	--	0.42
PLANTING					
Sled plant & fertilize					
2 men	0.3	0.84	0.44	--	1.28
Seed 1/2 lb. at \$15./lb.	--	--	--	7.50	7.50
Fertilizer 8-24-0 10 gal./A					
40¢/gal. Tag-a-long 50¢	--	--	--	4.50	4.50
GROWING COSTS					
Thinning	10.0	11.5	--	--	11.50
Hoeing 2½ times	16.5	18.97	--	--	18.97
Cultivate-sled and implements 2 times	0.6	0.84	1.46	--	2.30
Cultivate & furrow 3 times	0.9	1.26	2.24	--	3.50
Ditch 5 times	0.2	0.28	0.87	--	1.15
Irrigate 7 times					
Labor	10.5	13.12	(Water 5'-\$4.90)	24.50	37.62
Irrigation equipment (Siphons, Canvas Dams, Shovels, etc.)				0.25	0.25
Fertilize (side-dress)					
Tractor -N, at 75 lbs.	0.3	0.42	0.57	(9½¢) 7.12	8.11
Rent Tag-a-long 50¢				.50	.50
Insect Control					
Seedling stage & 1st worm	0.5	0.70	0.71	--	1.41
Control-ground rig spray				3.90	3.90
Worm & mite control (air 2 times at \$2.00)				4.00	4.00
Materials (Sevin-spray \$4.40 - Sulphur dust 40 lbs at 5½¢)				6.60	6.60
Move equipment (service & set up at 10% of time)	0.2	0.34	--	--	0.34
TOTAL CULTURAL	43.0	52.75	18.20	58.87	129.82

(Continued)

MISCELLANEOUS OPERATING AND GROWING COSTS

Pickup, phone, postage, cut roadways, miscellaneous weed control, etc.	9.10
Foreman's transportation, vacation, bonuses, etc. @ 25¢/hour	4.12
Additional charges for seasonal labor	
Camp charges @ 50¢/day/man	1.75
Crew supervision @ \$12.50/day	.50
Crew transportation to and from field @ 10¢/hr./man	3.70
Additional board @ 50¢/day/man--12 men	1.75
Recruit and transport men from center @ \$41./man (1 man/15 A.)	3.21
Taxes	12.00
Total Miscellaneous	36.13
TOTAL CULTURAL COSTS	165.95

HARVEST

Harvesting Costs

Picking - 20 tons - 106.0 hours - 42 boxes/ton - 840 boxes @ 13¢/box	109.20
Box rent at 1¢/box	3.40
Loading - includes scattering empties @ 2¢/box	16.80
Inspection @ 17¢/ton	3.40
Drinking water, equipment, cleanup after harvest @ 2¢/box	16.80
Labor supervisor @ 3¢/box - includes transportation to field, checkers, bookkeepers, swamper, camp supervision	25.20
Association dues at 10¢/ton	2.00
Additional board at 50¢/day/man	5.00
Recruiting and transport of harvest labor at \$41./man (1 man / 2½A)	15.00
Delivery of over-tolerance tomatoes (10% tomatoes on 5% contract)	
Growers receives \$1./ton for over-tolerant fruit	10.72
Rejected loads 1-3/4% of loads delivered plus sorting	4.00
Camp upkeep - 50¢/man/day	5.00
Total Harvest Costs	221.52
TOTAL CASH COSTS (Cultural plus Harvest)	387.47

MANAGEMENT 5% of 20 T @ 25.00 25.00

INVESTMENT COSTS

DEPRECIATION

INTEREST

Land	\$850.	--	51.00
Buildings	\$ 10.	.50	.30
Irrigation system*	\$ 10.	1.00	.30
Tractors & equipment	\$130.	12.88	3.90
TOTAL		14.38	55.50
			69.88

Total All Costs (cultural, harvest, management, investment) \$482.35
Costs Per Ton (at 20 T/A) 24.12

*(Water is from Irrigation District. Irrigation wells and well equipment are not included in this study)

COSTS OF PRODUCTION OF THE SHARE-RENT OR CASH-RENT TOMATO GROWER

Using a 13¢ per box picking charge, the share rent grower would have to figure his costs as follows:

	<u>20 Tons at \$25.00</u>			<u>15 Tons at \$25.00</u>
	<u>At 20% Rent</u> (1)	<u>At 17% Rent</u> (2)	<u>At 15% Rent</u> (3)	<u>At 17% Rent</u> (4)
Growing Costs To Harvest	165.95	165.95	165.95	165.95
Less Land Tax	<u>12.00</u>	<u>12.00</u>	<u>12.00</u>	<u>12.00</u>
	153.95	153.95	153.95	153.95
Plus Tractor & Equipment	16.78	16.78	16.78	16.78
Plus Harvest Cost	221.52	221.52	221.52	176.07
Plus Rent	<u>100.00</u>	<u>85.00</u>	<u>75.00</u>	<u>63.75</u>
TOTAL	492.25	477.25	467.25	410.55
Cost Per Ton	24.61	23.86	23.36	27.37

MANAGEMENT FACTORS

1. Field selection - Choose a field that can be irrigated, is free of nematodes and will drain. A good deep soil that drains well is best.
2. Variety choice - Several varieties should be grown to prevent having all early or all late tomatoes. There are many to choose from. Select those that have done well in the district in question. Many of the popular varieties are early.
3. Planting dates - Several dates of planting should be used to help avoid harvest gluts. For use in scheduled planting use dependable varieties. Use varieties that will set fruit under a wide range of conditions.
4. Seed selection - A good source of seed is a must. The whole crop depends on the quality of seed.
5. Thinning - Thin to the proper spacing for the variety. The smaller vine varieties should be closer than the larger vined varieties. Plants are usually set wider because of the cost of plants. Thin early to develop a better plant.
6. Weed Control - Weeds should be controlled mechanically as much as possible. Weedy fields at harvest can increase picking costs considerably.
7. Fertilizing - Fertilize early, at or shortly after thinning and avoid excessive quantities. Rates of 60 to 90 lbs. of N/A is usually sufficient but some growers use up to 150 lbs.
8. Irrigation - This is perhaps the most important item in production and the one most frequently abused, (either too much or too little water). Growth must be continuous or there will be a yield loss.
9. Insect control - Should be timely and before an insect problem develops. Pest control for worms and mites is a preventative measure. Sprays should be used. Sprays are as effective as dust and may be more so. Sprays drift less. Sulfur dust should be used for mite control. Drifts onto forage crops such as alfalfa are creating problems on insect control in tomatoes.
10. Late irrigation - Avoid excessive use of water late. Moisture under the vine creates mold problems. Moldy fruit is difficult to separate during picking operations. Irrigations should continue close to picking to carry the vine to the second or third pick, but should be managed carefully.
11. Start of harvest - Arrange for labor soon enough. Don't get behind at the start. Late starts mean problems before the field is completed.