

SPRING TOMATOES

LOCATION AND ACREAGE: Both winter and early spring tomatoes are most successfully grown in the warmer areas of the valley. This factor is important because of occasional killing frosts during the winter.

VARIETIES: First Early, Early Pak, Pearson, and Pennheart are the varieties most commonly grown. Where fusarium wilt is a problem resistant varieties should be grown.

PLANTING: November 1st to January 1st is the usual planting period. About 1 1/2 pounds of seed per acre are planted on the north sides of rows running east to west and spaced six feet apart.

SOILS: Sands and sandy loams are the soil types most commonly used for tomato production. Relative temperature of the area (warm vs cool) is more important than soil characteristics in selecting suitable tomato acreages.

FERTILIZERS: Heavy applications of organic fertilizers are generally applied broadcast before planting and sidedressed after planting. Large quantities of commercial fertilizers (dry and liquid) are applied after the crop is up. Actual fertilizer needs of the crop in the area are unknown. Most growers feel that high rates of fertilizer use are warranted insurance towards greater yields.

IRRIGATION: Early irrigations should wet the soil to maximum root depth (4-6 feet). Later irrigations should be frequent enough to insure uniform growth. Insufficient irrigation can contribute to blossom-end rot and cracking of fruits.

PRUNING AND THINNING: Pruning, although commonly practiced, has not proved to be of value in gaining higher yields or better quality, and is an expensive operation. The amount of thinning done depends upon stand, temperature and variety. Indeterminate varieties are generally thinned to 10-12 inches between plants in rows, whereas determinate varieties are thinned to 18 inches.

BRUSHING: Frost protection shelters of heavy paper or palm fronds, or both, are generally needed in most areas of the valley. Shelters should be put up before the mean date of the first killing frost (December 4th) and left up until after the mean date of last killing frost (February 7th). They should be constructed so that they admit maximum amount of sunlight during the day and yet intercept and reflect radiated heat at night. The shelters also aid in preventing damage from winds and wind blown soil. Brushing generally offers protection for about 3-4°F. below freezing (32°F.).

INSECTS AND DISEASE PESTS: Various "worms" or caterpillars are the most common pests of tomatoes. Russet mites are sometimes serious. Fusarium wilt and various plant viruses are often severe. Contact your farm advisor for control measures. Tobacco mosaic is frequently spread to plants from commercial tobacco, Field sanitation consisting of washing the hands with strong soap and water after smoking and before handling fruits or plants again will help to reduce spread of infection.

HARVESTING AND PACKING: Harvest is generally done by local or Mexican National labor. Sorting, grading, and packing is generally done in growers' sheds. Various types and sizes of equipment are used, depending upon the size of operation and growers' needs. Uniformity and neatness of pack, high quality tomatoes, uniform fruit color, and attractive labels all help to bring higher prices on the market.

MARKETING: Most of the crop is either sold through field buyers of produce houses or is consigned to the houses at terminal markets (generally Los Angeles or San Francisco).

WHAT DOES IT COST TO GROW SPRING STAKED TOMATOES
IN THE COACHELLA VALLEY?

TM-SC-50-2

Yield of 1200 - 25% Flats, Staked and Brushed

ITEMS	SAMPLE COSTS		YOUR COSTS	
	Per Acre	Per Flat	Per Acre	Per Flat
<u>Land Preparation</u>				
Plow 2x, disc, landplane, harrow, furrow out, fertilize, shape beds, put in head ditches, and irrigation pipes	\$ 21.00	1.7¢		
<u>Planting</u>	2.60	.2¢		
<u>Cultural Labor and Field Power</u>				
Irrigation 40-60 x	65.00	.		
Fertilizing 3x (after original x) ...	12.00			
Cultivate 3x (1 man & mule)	10.00			
Hoeing 2x	40.00			
Put up frost shelters	34.00			
Frost protection: install front coverings, raise and lower avg. 6 x/winter	82.00			
Firing 2x	25.00			
Remove frost shelters, tie up fronts.	13.00			
Stake, wire, put up lath ..	51.00			
Tie plants 5x	168.00			
Thinning 3x	42.50			
Prune vines 3x	126.00			
Cut down vines, pull lath & posts, wind wire, shred & disc vines	40.00			
Pest control (10-20x)	17.00			
Miscellaneous	10.00			
<u>TOTAL CULTURAL LABOR & FIELD POWER</u>	\$ 735.50	61.3¢		
<u>Materials</u>				
Irrigation water 10 acre ft.....	\$ 22.50			
Fertilizer, organic & commercial	250.00			
Seed 1 1/2 pounds	11.70			
Pest control, DDT #5	40.00			
Shelter paper	55.00			
Lath, \$126/ac. depreciated over 7 yr.	18.00			
Wire	1.50			
Posts 300/ac @20¢/post, 5 yr. depreciate	12.00			
String & Miscellaneous	30.00			
<u>TOTAL MATERIALS</u>	\$ 440.70	36.7¢		
<u>Cash Overhead</u>				
General Expenses @ 5% of above.....	\$ 60.00			
Taxes 100% to tomato crop	15.00			
Insurance, vehicles, compensation, etc	20.00			
<u>TOTAL CASH OVERHEAD</u>	\$ 95.00	7.9¢		
<u>Land Rent 100% to tomatoes</u>	\$ 80.00	6.7¢		
<u>TOTAL CASH COSTS BEFORE HARVEST</u>	\$ 1374.80	\$ 1.14		

HARVESTING AND PACKING COSTS

TM-SC-50-2

ITEMS	SAMPLE COSTS			YOUR COSTS	
	Per Acre	Per Flat		Per Acre	Per Flat
Harvesting					
Load, haul to shed, unload @30¢.....	360.00				
Bring empty boxes to field @5¢/lug.....	60.00				
TOTAL HARVESTING.....	420.00	\$.35			
Packing					
Flats, lids, wrapping paper @34¢/flat....	408.00	.34			
Sorting @4¢/lug.....	48.00	.04			
Packing @17¢/flat.....	204.00	.17			
Lidding & Stacking @3/4¢/flat.....	9.00	.0075			
Miscellaneous @1¢/flat.....	12.00	.01			
TOTAL PACKING.....	681.00	.5675			
Transportation to Los Angeles @16¢/flat..	198.00	.165			
TOTAL HARVESTING, PACKING, & TRANSPORTATION	1299.00	1.08			
TOTAL PRE HARVEST COSTS.....	1377.80	1.11			
Brokerage Fee 15% @2.¢2/flat.....	473.03	.394			
TOTAL COST REPRESENTED AT LOS ANGELES MARKET.....	1850.83	\$2.73			
Average Price Received for Early Spring Tomatoes (32% lug) at Los Angeles Terminal Market.....	\$2.42	\$2.48	\$2.90	\$3.77	\$3.02
Total Desert Acreage of Early Spring Tomatoes - Coachella and Imperial Valleys.....	3500	3300	4600	3800	3500

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