

POLE TOMATOESYields

Most pole tomatoes are picked pink, culled, and graded for size and color in a packing shed and packed in flats holding about 20 pounds. Yields range from less than 2000 to over 3000 flats (20 lb.) per acre. A yield of 2500 flats per acre is used in this sample.

Varieties and Seed

VF428F2 has become the leading variety. It has some resistance to verticillium and fusarium wilts. It has the same plant and fruit characteristics as Earlypak 7 and Pearson Shipper which it has replaced because these varieties are damaged by verticillium wilt on land with tomato history. For land not used for tomatoes within the past 10 years, Earlypak 7 and Pearson Shipper are used because they produce smoother fruit than VF428F2.

Acid-treated seed is advisable as a means of reducing the risk of tomato mosaic.

Soil and Climate

Most of the irrigated land in Ventura County is suitable for pole tomatoes. There are a few fields that should be avoided because of inadequate drainage.

When to Plant and Harvest

Attempts to have pole tomatoes ready for harvesting before July 15 are not usually successful. The earliest plantings are made in March for harvesting in August and September. Planting of most of the pole tomato acreage here is delayed until around June 1 so that the picking is from late September until around December 1. This is to take advantage of the climate which in most years is suitable for harvesting tomatoes throughout October and November when prices are usually higher than in September. Full production cannot be expected from plantings made later than June 15. Rain and cool weather which usually come together may terminate the pole tomato season before December 1.

Planting, Cultivation, and Weed Control

Almost all pole tomatoes here are direct seeded in rows 5 to 6 feet apart and thinned to about 18". Transplanting is not recommended because of repeated experiences of losses from tomato mosaic and other diseases in transplanted pole tomatoes.

With good cultural practices not much is gained by chemical weed control in pole tomatoes.

Seed may be planted in moist soil from which it will emerge without irrigation or it may be planted in dry soil and irrigated up with furrow or sprinkler irrigation.

Almost all pole tomatoes are planted on flat ground. Cultivating to control weeds should be no deeper than necessary and the field should be free of weeds before staking. One or two irrigation furrows in each row space are made just before irrigating which may not be necessary until near the beginning of harvest. For cultivation and furrowing after staking, a small narrow tractor is needed.

### Fertilizing

Land that has been intensively farmed with vegetable crops will usually supply all the phosphorous and potassium needed for a tomato crop. Nitrogen fertilization may not be necessary until two or three weeks before first pick. Then one or two applications of 100 lb/A of nitrogen may be required for a maximum yield. Decisions regarding when to apply nitrogen fertilizer may be aided by plant tissue analysis. Pole tomato plants allowed to become deficient in nitrogen to the extent that they lose their dark green color and form small leaves cannot be expected to recover and produce a full crop.

### Irrigation

Tomatoes have deep vigorous root systems, so the first irrigation may not be necessary until plants are well developed. Then it is a good practice to irrigate thoroughly before picking begins so that several picks can be made before irrigating again. In heavy soil there may be some advantage to irrigating alternate row spacings to avoid excessive soil moisture. Where there is much of a slope to the land, two small furrows in each row space are more effective than a single furrow.

### Pest and Disease Control

Nematodes, tomato fruit worms, and russet mites are the principal pests. Most fields here should be treated for control of root-knot nematode before planting pole tomatoes. Treating for control of the fruit worms should start before about 1% of the fruit is found to be damaged by worms. Russet mites are usually controlled by including a miticide with the worm control treatment. See "University of California Pest Control Program for Tomatoes" for specific recommendations.

Attempts to control verticillium wilt in tomatoes by soil fumigation here have been unsuccessful.

### Mechanical Harvesting?

Because of the market demand for pink tomatoes, this crop competes well today with bush tomato production which is mostly mature greens. Rapid progress in mechanical harvesting of bush tomatoes for pink and mature green fruit may soon make bush tomatoes more competitive with pole tomatoes.

POLE TOMATOES, 1969

Yield: 2500 2C-lb. Flats  
 Remarks: Field seeded late in May

Land Use: 7 Months  
 Harvested: September 15 to December 1

	Labor		Cash Costs per Acre		Total per Acre
	Per Hrs.	Acres Cost	Machinery	Contract & Materials	
<b>CULTURAL CASH COSTS</b>		\$	\$	\$	\$
Plow, deep	.68	1.67	2.38		4.05
Disc and roll 2 x	.52	1.27	1.82		3.09
Landplane	.52	1.27	1.82		3.09
Furrow	.30	.74	.60		1.34
Irrigate 5 x (1 pre-plant)	5.00	9.75	1.00	2 A-ft. wtr @ \$7 14.00	24.75
Drag harrow 3 x	.48	1.18	1.68		2.86
Springtooth 2 x	.32	.78	1.12		1.90
Fumigate & Fertilize		Contract		20 gal. DD, 100 lb. N applied 52.90	52.90
Plant in moisture (2 men)	.50	2.14	.75	Seed ½ lb. @ \$12 6.00	8.89
Cultivate 2 x pre-stake	1.00	2.45	1.50		3.95
Cultivate 2 x post-	2.00	4.90	1.00		5.90
Furrow 2 x post-	1.00	2.45	.50		2.95
Thin & hoe 1 x	12.00	23.40			23.40
Hoe 1 x	6.00	11.70			11.70
Set stakes 3 men	7.00	13.65	3.50	Stake charge \$50	67.15
Prune 2 x	35.00	68.25			68.25
String 6 x	45.00	87.75		Twine & Gloves 50.00	137.75
Pest Control 4 x		Contract		(Materials & Application) 50.00	50.00
Fertilize in water				100 lb. N, aqua NH <sub>3</sub> 11.50	11.50
Pull & store stakes	30.00	58.50	2.00		60.50
Disc and roll 2 x	.52	1.27	1.82		3.09
<b>Total Cultural Cash Costs</b>		<b>293.12</b>	<b>21.49</b>		<b>234.40</b>
<b>CASH OVERHEAD</b>					
Land rent	@	\$14.60 per acre-month x 7		102.20	
Taxes on Machinery	@	.30 per acre-month x 7		2.10	
Supervision	@	5.00 per acre-month x 7		35.00	
General Expense	@	2.00 per acre-month x 7		14.00	
<b>Total Cash Overhead</b>	@	<b>21.90 per acre-month x 7</b>			<b>153.30</b>
<b>Total Cash Costs except Harvesting and Selling</b>					<b>702.31</b>
<b>HARVESTING, PACKING AND SELLING</b>					
Picking 35¢/packed flat				875.00	
Hauling and loading				110.00	
Charge for field boxes				8.00	
Charge for picking carts				2.50	
Packing @ \$1.05/flat				2625.00	
Selling 10% of \$1.95 x 2500				487.50	
<b>Total Harvest, Packing and Selling Cost</b>					<b>4108.00</b>
<b>Total Cultural, Harvest, and Selling Cost</b>					<b>4810.31</b>
<b>INVESTMENT OVERHEAD</b>					
Depreciation	@	\$2.40 per acre-month x 7		16.80	
Interest	@	.72 per acre-month x 7		5.04	
<b>Total Investment Overhead @ \$3.12 per acre-month x 7</b>					<b>21.84</b>
<b>Total Cost per Acre</b>					<b>4832.15</b>
<b>Total Cost per Flat (20 lb.)</b>			<b>\$1.93</b>		

CASH FLOW - EXCLUDING LAND RENT AND TAXES

Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

Start  
\$125

Grow  
\$430

Harvest & Clean up  
\$1000

Acres and Prices not reported because this crop is not reported separately from other market tomatoes.

