

CHILI PEPPERS FOR PROCESSING
IN ORANGE COUNTY

Introduction: Orange County is the nation's greatest producing area of chili peppers for processing. Chili peppers are usually grown on contracts made before planting, priced on dry weight, but delivered to the dehydrator fresh.

Varieties and Yields: There are two principal varieties. These are the "Mexican," which has wide shouldered, blunt fruit, and the "Anaheim," or "California," with long tapered fruit. Both varieties may vary from extremely pungent to mild, depending upon the type of line or selection desired. Very mild lines may be used for paprika. Color brightness and earliness of maturity are also highly variable. Therefore, to suit their own requirements, processors usually supply seed to the growers.

Yields, depending on variety selection and growing conditions, usually vary from one to two tons dry chili per acre.

Climate and Soils: Conditions desirable for growing chili peppers are a moderate long-season growing period. Optimum temperatures for growth are from 65° to 85° F. Temperatures exceeding 90° F. may cause poor blossom set or sunburned fruit. Well-drained soils in properly graded fields permit frequent moderate irrigations essential to good management. Well-fertilized loams and sandy loam soils are good for growing peppers.

Cultural Operations: Field seeding in March or April is common. Rows are spaced 30 to 36 inches. Seed is planted about two inches deep with at least one inch moist soil. As the slow-germinating seed start sprouting, a push-hoe is used to sweep aside one inch of top soil. This destroys weeds and allows seedlings to emerge rapidly.

Fertilization: Poultry or other barnyard manure can be spread before planting. This is usually followed by side dressing or applying in irrigation water a nitrogen-containing fertilizer during the growth of the crop. Sometimes two or more applications of fertilizer are made after planting. A total of 200 or more pounds nitrogen per acre should usually be applied for best results.

Irrigation: When plants are small, the soil should be kept moist by light irrigations. Later irrigations may be heavier and less frequent. Unless the soil is quite heavy and the weather cool, irrigations should be at least every two or three weeks.

Pest Control: Peppers may be attacked by insects from the time of seeding until harvest. Wireworms may attack the seed. Seedlings are attacked by wireworms, cutworms, beetles, thrips, and aphids. Older plants or fruit are attacked by aphids, thrips, earworms, and the pepper weevil.

Wireworms may be controlled by insecticidal soil or seed treatment. Young seedlings are protected by lightly dusting or spraying with a recommended insecticide.

Garden nematodes can be serious at times, particularly in sandy soils in warm growing areas. Soil fumigants will control them.

Diseases most severe to peppers are tobacco and cucumber mosaic. Weeds and ornamental plants are alternate hosts. Tobacco and cucumber mosaic are spread by aphids. Tobacco mosaic is also spread by equipment and handling plants. No satisfactory control is known.

CHILI PEPPERS
SAMPLE PRODUCTION COSTS
Orange County - April 1962

Based on yield of 3000 pounds per acre dry chili, a 60 acre operation on a 200 acre farm.

Operation, Crew, & Equipment	Hrs. Per Acre	Cash Costs Per Acre				Total Cost
		Hired Labor	Tractor & Equip.*	Material Kind and Amount	Value	
Disc 1x	1/3	\$.41	\$ 1.22		\$	\$ 1.63
Plow 1x	3/4	.94	2.78			3.72
Land plane 2x	2/3	.84	2.48			3.32
Fertilize - manure				300 cu. ft. @ 7¢	21.00	21.00
In irrigation and side dress	1	1.25	1.50	Commercial mix and nitrogen	20.00	22.75
Chisel 2x	2/3	.84	2.48			3.32
Swede harrow 1x	1/6	.21	.63			.84
Soil fumigate (biannually)				Nematocide @ \$20.00 applied	10.00	10.00
Seed plant (2 men)	1	2.50	1.50	5 pounds seed @ \$2.00	10.00	14.00
Push hoe	1/2	.63	.75			1.38
Thin plants (\$10.00 - \$20.00)	15	15.00				15.00
Irrigate 8x	8	8.80		27 inches @ \$1.50	40.50	49.30
Hoe weeds 2x (\$10.00 - \$40.00)	15	15.00				15.00
Cultivate 7x	3 1/2	4.38	5.25			9.63
Pest control (\$7.00 - \$50.00)				Miscellaneous - applied	25.00	25.00
TOTAL CULTURAL COSTS		50.80	18.59			195.89
Labor @ \$1.00 per hour				Pick, haul to dehydrator @ 5¢/lb. (dry wt.) - includes field conveyor belt, hauler, tractor, and trailer		150.00
Tractor driver @ \$1.25 per hour				Miscellaneous overhead		25.00
40 HP track and equipment @ \$3.70 per hour				Rent - one year		150.00
20 HP wheel @ \$1.50 per hour						
Irrigator @ \$1.10 per hour						
				TOTAL COST PER ACRE		520.89

*Includes interest and depreciation @ 1/2 total cost.