

1984 SAMPLE COST TO PRODUCE CANNING TOMATOES

SOILS -- Tomatoes are grown on a wide variety of soil types. Generally, soils must be free of salts, diseases, at least four or more feet of root zone, have a good moisture holding capacity. Tomatoes should not be grown where rhizoctonia, fusarium, verticillium, phytophthora have been a problem.

PLANTING DATES -- February through May. Schedule planting to assure about the same acreage available for harvest each week. Plant when the true leaf is about 1/2 inch long in the seedlings of the previous planting.

HARVEST DATES -- August, September, or until stopped by rain in the fall, usually mid-october.

VARIETIES -- Cannery require that a percentage of the contracted acreage be planted to designated varieties. Growers are advised to consult their local UC Farm Advisor, seed company representative, and canner for varieties and cultural characteristics necessary for optimum production.

SEEDING RATES -- Open Pollinated varieties are usually planted at 0.75 to 1.0 lbs/ ac. Hybrid varieties are planted at 0.6 to 0.8 lbs/ ac. Growers are advised to maintain the same seeding rates on either single or double row plantings to insure uniform stand establishment.

FERTILIZER-- Preplant nitrogen applied at 100 to 150 lbs/ Ac. Starter fertilizer is applied 1 inch to the side and 1-2 inches below the seed. Research has shown that starter can be of benefit in stand establishment. Various products can be used either liquids or drys.

IRRIGATION -- Tomato plants must have adequate water at all times especially prior to and during bloom. Soil moisture should be depleted by harvest. Irrigation cut-off times are dependent upon soil type and environmental conditions. Normally tomatoes will use between 3 and 4 acrefeet of water. Over and/or excessive irrigation will cause root pruning and disease.

WEED CONTROL -- Tillam applied preplant incorporated will give good control of Y. nutsedge, and fair control of hairy nightshade. Devrinol and Trefmid will give good control of annual weeds when applied preplant incorporated in a band. Trefmid should not be used with early plants, as root pruning will occur under cool conditions. Treflan will give good control of annual weeds when applied layby after thinning. Tillam should be incorporated shallow (1.5 to 2 inches) for control of hairy nightshade; and deeper (3-4 inches) for control of yellow nutsedge. Fields with resistant weed problems should be planted last when temperatures are warmer. Tillam does not last long if used too early, and will not give control when weeds come later. Eptam (a short residual herbicide) may be used at layby; do not irrigate for 5 days after treatment. Several new materials are being investigated by UC Farm Advisors for selective control of problem weeds. When registered by the EPA and CDFA, consult your local UC Farm Advisor for details on proper usage.

INSECT CONTROL -- Many insect species are detrimental to tomatoes. These include fruit worms, mites, stink bugs, lygus and various leaf eating species. Root knot nematodes require rotation to non-host crops for adequate control. Fumigation is possible, but growers must consider the cost.

DISEASES-- Root diseases, especially damp-off and phytophthora root rot can be controlled with careful irrigation. Ridomil is currently registered for use. Irrigating every other row, shorter runs, etc., are good management practices. Powdery Mildew is a new disease that may have an economic impact on production. Currently, insufficient information is available to determine the extent of damage that can be expected.

RIPENING -- Ethrel can be applied at 5 to 20 percent pink to red fruit showing. Rates of 1.5 to 3.5 pints/acre are currently used to ripen fruit in 7 to 10 days. Ethrel can hasten maturity beyond expectations due to high temperatures and varietal sensitivity. Growers are advised to consult their PCA's or UC Farm Advisor for specific recommendations.

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