

HYBRID FIELD CORN FOR SILAGE
WESTERN RIVERSIDE COUNTY
SAMPLE COSTS OF PRODUCTION - 1974

Based on yield of 27 tons/acre chopped. Field labor at \$2.50/hr, equipment labor at \$3.00/hr including social security and workmen's compensation. 65 hp wheel diesel tractor at \$1.90/hr, 30 hp wheel gas tractor at \$1.22/hr.

Operations	Hrs/ Acre	Labor Cost	Equip Cost	Material Kind	Amount	Cost/ Acre	Total
Plow or Chisel 1X	0.70	\$ 2.10	\$ 1.70				\$ 3.80
Disc 2X	0.68	2.04	2.07				4.11
Pre-irrigate	0.90	2.25		Water	½AcFt	3.75	} 45.69
Plant & Fertilize 1X	0.60	1.80	1.89	Seed	18 lb	12.00	
				Nitrogen	80 lb	26.25	
Furrow & Cultivate 1X	0.40	1.20	0.68				1.88
Cultivate & Side-dress Fertilizer	0.40	1.20	1.07	Nitrogen	80 lb	26.25	28.52
Irrigate 10X	10.00	25.00		Water	3.5AcFt	52.50	77.50
TOTAL CULTURAL COSTS							161.50
Chop, Haul to pit (5 mi) & Pack - Contract @ \$3.25/ton, 27 tons							87.75
TOTAL HARVEST COST							87.75
Cash Overhead (office, phone, auto, insurance, etc.)							12.50
County taxes (on equipment only)							3.40
Cash rent (½ year basis)							15.00
TOTAL CASH OVERHEAD AND RENT							30.90

	Investment per Acre	Depreciation	Interest on Investment (7% of ½ cost)
Buildings	\$15.00	\$0.50	\$0.52
Tractor & Field Equipment	38.25	3.82	1.33
	<u>\$53.25</u>	<u>\$4.32</u>	<u>\$1.85</u>
TOTAL DEPRECIATION & INTEREST ON INVESTMENT			6.17
TOTAL COST PER ACRE			\$286.32
TOTAL COST PER TON			\$ 10.60
COST PER ACRE, "STANDING" (Before Harvest)			\$198.82
COST PER TON, "STANDING"			\$ 7.36

Prices for silage corn "standing" have varied from a low of \$7.00 (1967) to a high of \$12.75 per ton (1973) since 1967.

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**HYBRID FIELD CORN PRODUCTION FOR SILAGE
WESTERN RIVERSIDE COUNTY**

Hybrid corn for ensilage has ranged from 2,500 to 5,500 acres in western Riverside County over the past few years with annual yields ranging from 27 to 33 tons per acre.

SOILS: Sandy loam or heavier soil is preferred. It is difficult to maintain a constant moisture supply for corn on sandy soils. Alkali soils should be avoided.

VARIETIES: A large number of varieties have proven satisfactory for silage production and have shown good yields in Agricultural Extension tests. The variety selected by growers, however, is dependent to a large extent upon those desired by livestock men to whom the grower plans to sell the crop.

LAND PREPARATION AND PLANTING: The land should be pre-irrigated and to retain moisture, should be worked into final seedbed preparation as soon as possible. Planting should begin May 1. Poor ear production has been secured from plantings made after the 15th of June, especially with long season corns. Seed should be planted 2 to 3 inches deep into moist soil. Some plantings are made in a lister furrow and irrigated several times before re-furrowing. Plant about 20,000 to 25,000 seeds per acre. The pounds of seed necessary to do this depend on the grade, and will vary from 12 to 18 pounds per acre. An expected mortality of 15 to 20 percent will usually reduce the total plants per acre. Although row spacings of from 30 to 40 inches are used, the actual spacing chosen will depend upon the cultivation and harvesting equipment which will be used. In western Riverside County 32 inches is a popular spacing. Be sure to check with your commercial harvest contractor before planting to make certain your row spacing is compatible with his harvest machinery.

FERTILIZER: A 30 ton corn silage crop will use about 180 pounds of nitrogen per acre. This much nitrogen is rarely in the soil, even following a crop of alfalfa, and only a portion of the total fertilizer requirement is available after a heavily fertilized vegetable crop. Fertilizer should be applied at planting or soon thereafter. On sandy soils, the second half of the total fertilizer requirement may be side-dressed previous to or shortly after the first irrigation.

IRRIGATION: AN IMPORTANT RULE IS: Never let corn run short on water. On many soils irrigation may be needed every 7 to 10 days, especially from tasseling until the corn kernels begin to dent. Flat irrigation runs are often useful in this regard. Under an ideal irrigation design, 2 to 2½ acre feet per acre may be adequate, but on many soils 3 or more acre feet may be necessary. Furrow irrigation is used almost exclusively, especially after corn becomes too tall to sprinkle irrigate easily.

HARVESTING: Silage corn is harvested with row field chopping equipment. The recommended stage of harvesting is during the dent stage, but to complete harvesting of a large field, it may sometimes be necessary to begin in the early dent stage. Also, the stage of harvest may be established at any given time by the market requirements (i.e., the livestock feeder).