

Rec April '56

SWEET CORN IN THE COACHELLA VALLEY

GENERAL

Sweet corn is one of the Coachella Valley's million-dollar crops, being produced annually on several thousands of acres.

YIELDS

Yields range from 500 to 1800 dozen marketable ears per acre. Later varieties normally yield higher than the earlier maturing ones, but in past years have commanded lesser price returns per crate than the latter. Sound cultural practices result in greater yields and in return reduce the cost of production per unit.

SOIL REQUIREMENTS

Sandy loams to clay loams produce good yields. Lighter soils are desired for the early spring crop.

VARIETIES

Golden Cross Bantam strains are the preferred varieties in this area.

PLANTING

From 10-15 pounds of seed per acre are planted from 1 to 1 1/2 inches deep in rows 36 inches apart. Early plantings (January and February) are generally planted in the south side of beds running east to west by use of a side-hill planter. Later spring plantings are commonly planted on the flat. The fall crop is planted either on the flat or in the bottom of furrows. From 6-10 pounds of seed per acre are planted for the late spring and fall crops. When plants are 3 to 4 inches high they should be thinned to 9 to 12 inches between plants in the rows.

SUCKERING

Removal of suckers from the base of plants is not necessary on irrigated sweet corn. Suckering also reduces the amount of pollen available for pollination.

FERTILIZERS:

On most soils from 150 to 200 pounds of actual nitrogen per acre should be added. Apply 1/2 to 2/3 of this amount at planting time and the rest when plants are from 6 inches to 8 inches high. Where needed, phosphorus should be applied in amounts of 80 to 100 pounds of phosphoric acid to the acre. Both animal manures and commercial fertilizers are good sources of required nutrients.

IRRIGATION

Sweet corn has a shallow root system and needs frequent, but light irrigations. From 18 inches to 36 inches acre-inches of water are required, depending on soil type and time of planting. The frequency of irrigations is increased until during harvest time when the period is from 5 to 7 days. The most crucial stages apparently are the young growing period, during tasseling and at harvest.

DISEASES AND PEST CONTROL

The occurrence of soil borne diseases of corn are rare in the Coachella Valley, however, seed treatment with Arasan, Spergon, or Semesan Jr. aids in preventing seed decay.

The corn earworm is the major insect pest of the spring crop. When about 5 per cent of the silks have appeared, they should be dusted every 3 to 4 days, treating each ear at each dusting. Three to five applications of 5% D.D.T. at 30 to 40 pounds per acre may be necessary for good control. Keeping corn as worm free as possible is insurance in greater yields of marketable quality corn and the cost of treatment must be figured in estimating costs of growing the crop. The lesser corn stalk borer is the most serious pest of the fall crop. There is no control for this destructive insect pest to date. For other insect problems on your corn contact your farm advisor.

HARVESTING AND PACKING:

Harvesting period for the spring crop extends from late April to mid-June. The fall crop is harvested from late October to early December. The crop is hand-picked and the ears are tossed into high wheeled trailers, in which they are hauled to the shed. Harvesting should be done as early in the day as possible as this corn is much cooler and will require less cooling than corn harvested after mid-day. To slow down the change of sugars to starches in the kernels (maintain quality as long as possible) the corn should be cooled. It is cooled either loose or in crates in a water bath of 40° F. or less for from 15 to 20 minutes. Many packers also package ice the crates containing 4 to 6 dozen ears each, to insure maintainance of quality enroute. Top icing and body icing is also desirable where the load is being transported for 75 miles or more.

ACREAGE, YIELD, AND PRICE PER CRATE
FOR COACHELLA VALLEY SWEET CORN

YEAR	1949	1950	1951	1952	1953
TOTAL ACREAGE	4,568	5,684	5,168	6,401	5,360
TOTAL YIELD IN CRATES	606,900	700,000	898,050	1,049,764	938,000
PRICE PER CRATE	\$2.25	\$2.55	\$2.60	\$2.30	\$2.50

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WHAT DOES IT COST YOU TO GROW SWEET CORN
IN THE COACHELLA VALLEY?

Big Tractor @ \$2 per hour
Small Tractor @ \$1.25 per hour

Labor @ 90¢ per hour
Yield of 200 Crates Per Acre

ITEM	SAMPLE COSTS		YOUR COSTS	
	Per Acre	Per Crate	Per Acre	Per Crate
<u>Land Preparation and Planting</u>				
Disc 2x	\$ 4.00		.....	.....
Chisel or harrow 2x	4.35		.....	.....
Disc 2 x.	4.35		.....	.....
Level 2x.	2.20		.....	.....
Furrow out & shape bed (early crop) . .	1.65		.....	.....
Pre-irrigate	1.80		.....	.....
Planting - side hill.	2.15		.....	.....
LAND PREPARATION & PLANTING TOTAL	\$ 20.50	\$.10	.....	.....
<u>Cultural Labor & Field Power</u>				
Cultivate 3x	\$ 4.80		.....	.....
Thinning & hoeing 2x	13.00		.....	.....
Irrigate 15x	15.00		.....	.....
Fertilizer application.	2.50		.....	.....
Pest control (3-5x)	20.00		.....	.....
CULTURAL & FIELD POWER TOTAL	\$ 55.30	\$.28	.....	.....
<u>Materials</u>				
Irrigation water - 3' A/ft.	\$ 7.50		.....	.....
Fertilizer - 160%N	20.00		.....	.....
Seed 10-15# @ 37¢ per pound	5.55		.....	.....
Pest control - DDT, 120%/A	8.40		.....	.....
Crates - 200 @ 35¢ per crate	70.00		.....	.....
MATERIALS TOTAL	\$111.45	\$.56	.....	.....
<u>Cash overhead</u>				
General expense @ 5% above	\$ 9.58		.....	.....
Taxes - 50% to corn	7.50		.....	.....
Insurance	1.50		.....	.....
CASH OVERHEAD TOTAL	\$ 17.58	\$.09	.....	.....
<u>TOTAL CASH COST</u>	\$204.83	\$1.02	.....	.....
Land rent or interest - 50% corn.	\$ 25.00	\$.13	.....	.....
TOTAL COST BEFORE MARKETING	\$229.83	\$1.15	.....	.....
<u>Marketing</u>				
Picked and hauled to shed 12¢/crate . .	\$ 24.00		.....	.....
Packing, icing, loading - 38¢/crate . .	76.00		.....	.....
Transportation - truck to Los Angeles .	50.00		.....	.....
Selling cost - 15% commission	74.00		.....	.....
MARKETING COSTS TOTAL	\$224.00	\$1.12	.....	.....
TOTAL ALL COSTS	\$453.83	\$2.27	.....	.....