

Agricultural Briefs

SACRAMENTO COUNTY

CORN PRODUCTION ON PEAT & MINERAL SOILS - 1975

Soil Requirements: Fertile, fairly deep and well-drained soils of organic or mineral type.

Planting Dates: April 1 - May 20.

Harvest Dates: Sept. 15 - Nov. 15.

Varieties: Have been single cross hybrids. Superior performance of single cross hybrids the past few years has caused the rapid change from the 4-way crosses. Top producers include early varieties-Funks G-4444, Pioneer 3780, Pioneer 3932A, Funks G-4404. Midseason varieties-Ferry Morse 767, PAG 520.

Seeding Rate: 10-15 lbs/acre depending on seed size, seed drop is usually 6-7 inches in the row resulting in stands 24,000 to 28,000 plants/acre. Populations of 28,000 plants/acre have resulted in higher yields, however, lodging may occur, depending on the variety and if weed pressure is high.

Row Spacing: Row spacing may vary from 30-40 inches. If sugar beets and tomatoes are part of the operation, 30 inch spacing is most economical.

Fertilizer Requirement: Organic soil, 200 lbs/ac 6-20-20; or 30 gallons 8-24-6+Zn. Wet soil increases need for N. Mineral soil: same starter fertilizer plus 100 lbs. of N pre-fertilized plus sidedress, 50 Lbs/ac if needed. If potash levels are low, 400 lbs/ac should be applied. This increases stalk strength of corn.

Irrigation: 2-1/2 to 3-1/2 acre feet of water. On peat, sub-irrigate 4 times; on mineral soil, 5-8 irrigations. Early irrigation is essential for high yields.

Weed Control: Timely cultivation for watergrass and broadleaved species. 2,4-D for escaped broadleaves or Atrazine pre-emergence or early post-emergence when weeds are less than 1-1/2 inches tall directed spray. Sutan plus gives excellent grass control. preplant incorporated. Lasso gives good grass and broadleaf control. applied preplant incorporated.

Insect Control: Mites, 1 lb/ac Kelthane when plants 3-4 ft. tall.

Disease Control:

Sugar Cane Mosaic - control Johnsongrass. It acts as a host for Sugar Cane Mosaic.

*Root and Stalk Rot - avoid plant stress, use adapted varieties.

*Fusarium Ear Rot - avoid irrigation during calm, hot, high humidity; weather during milk and dough stage; use adapted varieties.

*Head Smut - provide favorable seedbed conditions, use adapted varieties, rotation and good weed control.

*boil Smit - provide favorable growing conditions, use adapted varieties, rotation and good weed control.

New Developments: Roundup[®] for ditch bank and roadside Johnsongrass control.

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SAMPLE COSTS TO PRODUCE FIELD CORN
Sacramento County 1975

Cooperative Extension
University of Calif.

Yield: 4 tons/acre
Price: \$100/ton
Gross: \$400/acre

Net: Peat/ac Mineral/ac
\$75.40 \$29.56

OPERATION	DATE	MATERIALS	TOTAL COST ACRE	
			Organic soil	Mineral
Flood every 3rd yr.	Sept-Dec	Bulldoze levee \$8.00	\$ 2.66	\$ - -
Disk 1x	March		2.00	2.00
Plow	March		2.00	2.00
Disk 2x	March		4.00	4.00
Landplane	March		4.00	4.00
Rip	March		2.00	4.00
Springtooth-Float Ringroller	March		3.00	3.00
Pre Fertilizer Herbicide Preplant Disk 2x	April	150 lbs/ac Nitrogen+application Sutan, Lasso	18.00	14.00
Plant-Fert-Insect.	Apr-May	Seed 16# @ \$1.00/ac. Starter 40 gal 4-10-10	16.00 31.40	16.00 31.40
		Dyfonate 10 lbs/ac-42¢/lb.3" bed Application	0.35 5.00	0.35 5.00
Cultivate 2x	May-June	Sidedress 50 lbs/ac N + appli- cation.	- -	16.50
Spud ditch	May-June	\$25/mile 10¢/mi/ac	2.50	- -
Irrigate 3x peat 9x mineral	June-Aug		3.50	40.00
Acaracide		Kelthane \$7.01 3 pts+air appli- cation \$3.00	10.01	10.01
Cutworm Control		Sevin Bait 30/lbs/ac \$9.33 Air application 3.00	12.33	12.33
TOTAL CULTURAL COSTS			\$118.75	\$164.59
Harvest				
Harvest & Hauling 6 rows		* Custom Harvest \$30/ac		15.00
Drying & Handling		\$1.00/ton		4.15
TOTAL HARVEST COSTS				19.00
Cash Overhead				
Rent 33.3% of Gross				133.20
Taxes on Equipment				1.00
Misc., ofc., etc.				1.00
Workman's Comp				2.00
Soc. Security				1.50
TOTAL CASH OVERHEAD				\$139.20
Management 5% of Gross				20.00
Depreciation — Interest on equipment for 1000 acres; 10 year life. Corn, Wheat, Sugar Beet, Tomato (10% \$17.93/ac); Depreciation \$9.72 for corn.				27.65
TOTAL COST/ACRE			\$324.60	\$370.44
TOTAL COST/TON 4 tons/ac			81.15	92.61