

1972

SACRAMENTO COUNTY

March 1972

Agriculture

• Notes from the Sacramento County Farm Advisor •

CORN PRODUCTION ON PEAT SOILS

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

Planting Dates: April 10 - May 20

Harvest Dates: October 1 - November 15 * Custom harvest usually costs \$5.50/ton

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 varieties G-4444, Pioneer 3567, Northrup King 1130 and Asgrow 70.

Seeding Rate: 10-15 lbs./acre depending on seed size, seed drop is usually 6-8 inches in the row resulting in stands 24,000 plants/acre. Populations of 28,000 plants/acre have resulted in higher yields, however, lodging may occur particularly if weed pressure is high.

Row Spacing: Generally 30 inches has resulted in the best economical spacing. 30 inch rows have out yielded 40 inch rows about 5%.

Fertilizer Requirement: Organic soil, 10-20 lbs. N with 13-26 lbs. P per acre (30-60 lbs. P₂O₅) under or 2 inches to one side of seed at planting, wet soil increases need for N; mineral soil, same starter fertilizer plus 100 lbs. of N pre-fertilized or sidedressed per acre.

Irrigation: 2½-3½ acre feet of water. On peat, sub-irrigate 4 times; on mineral soil, 5-8 irrigations.

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 1½ inches tall directed spray.

Insect Control: Mites, 1 lb. Kelthane when plants 3-4 ft. tall; aphids, natural enemies, insecticides not normally used.

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, good weed control.

*Boil Smut -- provide favorable growing conditions, use adapted varieties, rotation, good weed control.

New Developments:

*Potassium fertilizer need found in some Delta fields, high potassium decreases stalk rot susceptibility.

Prepared by Jack P. Orr and P. S. Parsons

UC Cooperative Extension

SAMPLE COSTS TO PRODUCE CORN ON PEAT SOILS

Sacramento County 1972

Yield: 7,000 lbs. = 3.5 tons/acre

Tractor

Labor

Price: \$2.60 per CWT = \$52/ton

50¢/hr. repair

Common \$2.00

70¢/hr. fuel

Skilled \$2.50

Operation	Date	Materials-Kind and Quantity	Total Cost/Ac/Yr
Flood every 3rd yr.	Sept-Dec	6.57/ac	\$ 2.19
Disk 1 x	March		1.21
Plow	March		2.00
Disk 2 x	March		2.42
Landplane	March		2.00
Springtooth - Float Ringroller	Mar-Apr		1.50
Plant-Fertilize- Insecticide	Apr-May	Seed 16# @ 62¢/lb. - \$9.92 Fert. 8-24-6 with Zinc - 30 gals. 14.10, Insect. 1.5# Aldrin \$4.00	28.02
Cultivation 3 x			3.00
Spud-Ditching		\$24/mi 0.08 mi/ac	1.92
Irrigation 4 x			2.50
Miticide		Kelthane 1 lb/ac	4.21
Herbicide		Atrazine 1 lb/ac Spray film B	3.25
		Air application	2.25
Drain cleaning		Every 2 yrs. \$2/ac. every 2 yrs.	1.00
Workmen's Compensation			1.72
Social Security 5.2%			1.24
TOTAL CULTURAL COSTS			60.43
<u>Harvest</u>			
Harvest & Hauling 4 rows - Grower	Oct-Nov		10.50
Drying & Handling \$1.00/ton			3.50
Workmen's Compensation			.15
Social Security 5.2%			.11
TOTAL HARVEST COSTS			14.26
<u>Cash Overhead</u>			
Rent 30% of gross			55.20
Taxes on Equipment			1.00
Misc., ofc., etc.			1.00
TOTAL CASH OVERHEAD			57.20
TOTAL CASH COST		\$37.68/ton	131.89
Management 5% of gross			9.10
Depreciation and interest on equipment for 750 acres \$124.00 per acre, 10 year life (\$13.64), 6% interest (\$4.09).			17.73
TOTAL COST/ACRE			158.72
TOTAL COST/TON			45.35