

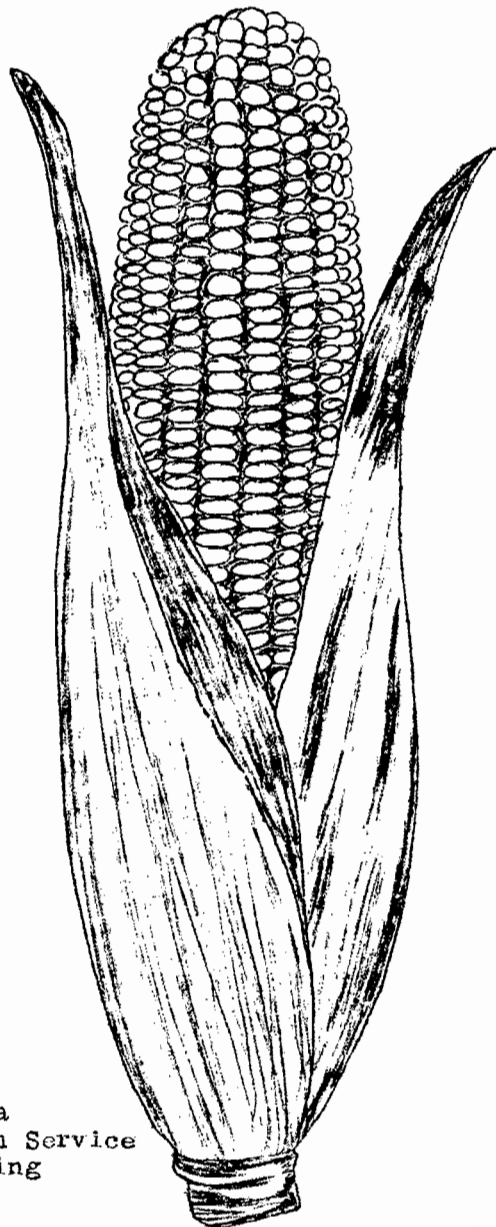
# GROWING FIELD CORN

IN

SACRAMENTO COUNTY

ON

PEAT SOIL



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6/54

GROWING FIELD CORN ON PEAT SOIL

In The

DELTA REGION OF SACRAMENTO COUNTY

Field corn is especially well adapted to the peat soil of Sacramento County. It competes with weeds better than most crops. Corn can be grown where water grass or nut grass make milo production impractical. The peat soil usually supplies the high amount of nitrogen required for the crop, saving considerable cost compared to other corn producing areas. The high moisture supplying capacity of peat soil, and the low cost of irrigating in the Delta, makes irrigation much cheaper than in many other areas. The problems on peat soil are slow drying at harvest time, and pink rot of ears. The first problem is met by good planning, including early planting and adequate harvest and drying facilities. Avoiding pink rot susceptible varieties and excess soil moisture, holds pink rot loss to a minimum. Early planting also appears to reduce pink rot.

Far more corn is fed to livestock and poultry than we produce in the State, therefore, the price and the outlook is good. However, farm storage may be necessary in order to realize a good price. Information on farm storage is available at your Farm Advisor's office.

VARIETY:

A number of reliable varieties are available. The main consideration is time required for maturity. Best yield is obtained if the maturity time of the variety matches the growing season remaining after planting. However, harvesting equipment, drying facilities, labor requirements and efficiency of the over-all ranch operation must be considered. By his choice of variety, or varieties, and the dates of planting, a grower can bring on his harvest early or late. He can also cause his acreage to be ready for harvest at approximately the same time, or to ripen a little at a time. The following table gives the planting dates which are usually most practical for the various maturity groups:

Planting Date:	Before Apr.15	Apr.15-Apr.25	Apr.25-May 5	May 5-May 20
Maturity Time:	Late	Medium Late	Medium Early	Early
	Pioneer 302 De Kalb 1002 De Kalb 1022	De Kalb 666 Pfister 381 Vinton K22 Pioneer 300	Pfister 347 Pfister 383 Pioneer 352 Kingscrot K3A Kingscrot KY4 De Kalb 459	Kingscrot KS6

SEED TREATMENT:

In the Delta, corn seed should be treated with both an insecticide and a fungicide. Nearly all hybrid corn seed is already treated with a fungicide, (Arasan, Phygon or Spergon). Therefore, further fungicide treatment is unnecessary. Usually the seed has not been treated with an insecticide when purchased. Use lindane, 25% at 3 ounces, or 75% at one ounce per 100 pounds of seed.

### FERTILIZER:

Although corn has a high nitrogen requirement, up to 200 pounds of nitrogen per acre, this nutrient has not been found necessary on peat soil. However, in most of the area below Walnut Grove, Phosphate pays large dividends. It should be drilled ahead of the planter, and the seed planted over the band of fertilizer. Best depth of fertilizer is three inches or more below the seed. When equipment is not available, apply the phosphate with the seed with a fertilizer attachment on the planter. Use treble super rather than single super to lessen the chance of burn or delay in emergence. Soil salinity and lack of moisture, increases the chance of burn. From 20 to 50 pounds of actual phosphate per acre is being used with excellent results. Trials are under way to determine the most profitable rate.

### LAND PREPARATION AND PLANTING:

A finely worked seed bed is not necessary. Listing out with shovels on the back tool bar ahead of the planter is a good idea: (1) It puts the seed down into better moisture. (2) Weeds in the row can be killed by throwing dirt back into the furrows with the cultivator. Row spacing is 40" so a 2 row corn picker can be used. Space seed in the row 7 to 8 inches apart. Nine to 12 pounds of seed per acre will be needed. Plant into good moisture at a depth of 2 to 4 inches.

### WEED CONTROL:

Timing of cultivations is important. Two or three cultivations are usually needed. Cultivate for weed control only; cultivation does not save moisture. A selective weed spray will probably be needed for broadleaf weed control. Use one pound of 2,4-D per acre when corn is 16-24 inches high. The best equipment is a ground rig with drop nozzles to avoid spraying down on top of corn plants. Air-plane spray can be used, but not in the 2,4-D "Hazardous Area" after March 15th. Check with your Agricultural Commissioner.

### IRRIGATION:

For full yield, corn must have a very good moisture supply up to the time the grain starts to harden. Most water is needed at tasseling time. Proper sub-irrigation works well on corn. Fast furrow irrigation which does not raise water table too high, is also effective, but may create weed problems. Furrow irrigating every other row reduces the water table problem. On well leveled fields, gopher plowing for better distribution of sub-irrigation water should be tried. When using gopher plow holes for irrigation, always run them perpendicular to the slope - not down the slope.

### HARVEST:

A picker-sheller is most efficient, however, an attachment for an ordinary grain combine has been proven possible. Other methods are picking with a corn picker and hauling to a crib or sheller. Harvest can be started at 25% moisture. Corn at this moisture can be cribbed, provided the crib is not over 8 feet wide, however, shelled corn can not be stored over 15% moisture. Shelled corn can be dried commercially, or it can be dried on the farm in a bin or building by forcing unheated air through the mass. The cost of the fan and air duct system is usually around 50 cents per hundred weight. Further information is available at your Farm Advisor's office.

WHAT WILL IT COST TO GROW FIELD CORN ON PEAT SOIL  
in the  
DELTA REGION OF SACRAMENTO COUNTY

Based on yield of 5000 lbs. per acre

Labor at \$1.25 per hour  
D-6 tractor @ \$3.00 per hr.  
30 H.P. wheel tractor @ \$2 per hr.

Operations

Cost per Acre

<u>Operations</u>	Sample Costs	My cost
<u>Land Preparation:</u>		
Plow man, D-6, 5 disc plow-7 hr. @ \$4.50 . . . . .	\$3.15	
Disc 2 times man, D-6, 10' disc-4 hr. @ \$4.50 . . . . .	1.80	
Float man, D-6 8' float- 7 Hr. @ \$4.50 . . . . .	3.15	
<u>Plant and Fertilize:</u>		
Man, tractor, 4 row planter-6 hr. @ \$3.50 . . . . .	2.10	
Seed - 9 lbs. @ 25¢ . . . . .	2.25	
Treble super phosphate-100 lbs. @ 95.00 per ton . . . . .	4.75	
<u>Cultivate, 2 times:</u>		
Man, tractor, 4-row cultivator- 1 hr. @ 3.50 . . . . .	3.50	
<u>Weed Spray:</u>		
2 men, tractor, sprayer - 2 hrs. @ 5.00 . . . . .	1.00	
2, 4-D . . . . .	1.00	
<u>Irrigation:</u>		
Spud ditch . . . . .	2.00	
Labor . . . . .	1.00	
Water . . . . .	.75	
Total Preharvest. . . . .	\$26.45	
<u>Harvest</u>		
Pick and shell . . . . .	10.00	
Haul-2½ tons @ \$2.00 . . . . .	5.00	
Dry-2½ tons @ \$3.50 . . . . .	8.75	
Total Harvest . . . . .	\$23.75	
Overhead, taxes, Intrest, Misc. . . . .	30.00	
<u>Total cost per acre</u>	<u>\$80.20</u>	
Cost per Cwt. (5000 lbs.)	1.60	