FIELD CORN

costs of production

suggestions on growing

University of California
Agricultural Extension Service
Kern County
Revised July, 1956

UC Cooperative Extension
PLANTING TIME:

Late March or early April plantings have produced best yields of grain. For ensilage, plantings may be made as late as June 15.

PLANTING DEPTH:

Planting depth should be governed by soil moisture, but should not exceed 2 1/2 inches.

FERTILIZATION:

Nitrogen is essential for high yields. Unless following potatoes or alfalfa or other vegetable crops where there is usually a large amount of nitrogen carry-over, 100-150 lbs. of actual nitrogen is recommended. Phosphate should be applied, if used on cotton or other crops. Application of fertilizer should be made at seeding time, if possible, to avoid pruning the important shallow roots.

IRRIGATION:

Corn requires ample moisture throughout its entire growth. Frequency of irrigation will depend upon the kind of soil. Usually an irrigation every 10 to 12 days is required. Water may be withheld after ears have dented.

CULTIVATION:

Cultivation is needed only for weed control. Shallow cultivation is best to avoid disturbing the important shallow roots; also, the soil will dry out as deeply as it is stirred.

HARVESTING:

Corn may be mechanically picked. There are many makes of mechanical pickers. Shelling may be accomplished simultaneously with picking. Corn is safe to store when the moisture is 15%. Normally corn will shell about 80%.

SUGGESTIONS ON GROWING FIELD CORN

Roy M. Barnes - Farm Advisor

SOIL REQUIREMENTS:

Corn can be grown on soils that grow good cotton, potatoes, or alfalfa. Soils that contain medium to strong alkali will produce poor crops.

VARIETY:

<table>
<thead>
<tr>
<th>Very Early</th>
<th>Medium Early</th>
<th>Medium Late</th>
<th>Late</th>
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</thead>
<tbody>
<tr>
<td>Kingscross KS6</td>
<td>Pfister 347</td>
<td>Pfister 381</td>
<td>Dekalb 1002</td>
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<td>Pioneer 352</td>
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SEED TREATMENT:

Certain seed and soil-borne diseases can be adequately controlled by seed treatment. Three and one-half ounces of Semesan Jr. per 100 lbs. of seed is recommended.

PREPARATION OF SOIL AND PLANTING:

Like all crops, a well prepared seed bed is essential for a good stand. Row width may be 36 in. to 40 in. Corn, being a large seed, requires ample moisture during the 7 to 10 day germination period. Pre-irrigation is necessary to provide the correct amount of moisture at planting time. A cotton planter with corn plates may be used. Plants spaced 9" in-the-row have given best yields of grain.

PLANTING RATE:

<table>
<thead>
<tr>
<th>36 in. row</th>
<th>9&quot; spacing</th>
<th>13.6#/A</th>
<th>19,360 plants/acre</th>
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<tr>
<td>38 in. row</td>
<td>9&quot; spacing</td>
<td>12.9#/A</td>
<td>18,338 plants/acre</td>
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<td>40 in. row</td>
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<td>12.2#/A</td>
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When growing for ensilage, planting rate may be 15# per acre.
WHAT IT COSTS TO GROW FIELD CORN
WITH A YIELD OF 5,000 LBS. PER ACRE
(BULK HANDLED)

Roy M. Barnes* Burt B. Burlingame**

Costs - Man Labor at 95¢ Per Hour; Medium Tractor at $1.60 Per Hour

<table>
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<tr>
<th>Sample Costs</th>
<th>My Costs</th>
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<td>Per Acre</td>
<td>Per Cwt.</td>
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### Pre-Harvest Labor and Material Costs:
- **Land Preparation: Man and Tractor 2 Hrs.** $5.10
- Plant & Fertilize, 2 Men & Light Tractor, 1/4 Hr. $1.40
- Seed - 13 Pounds @ 26¢ 3.38
- Fertilizer to furnish 120 lbs. of nitrogen 18.00
- Irrigation, 1 Pre and 6 Crop, 1 1/2 man Hrs. 13.30
- Irrigation Water, 3 Acre Feet @ $5.00 15.00
- Hoeing, none to 4 Hrs., Average 2 1.90
- Cultivate and Furrow Twice; 1 1/2 Hrs., Man & Tractor 3.83
- Miscellaneous Labor and Material 2.00

**Total Pre-Harvest Labor and Material Costs:** 63.91 $1.28

### Harvesting Costs:
- Pick and Haul: Contract @ $10.00/A. 10.00
- Shelling: Contract @ $3.00 per Ton 7.50
- Hauling @ $2.00 per Ton 5.00

**Total Harvesting Costs:** 22.50 .45

### Cash Overhead Costs:
- General Expense, Office, Phone, Etc. 4.32
- County Taxes 8.25
- Repairs, Insurance and Misc. Cash Cost 4.00

**Total Cash Overhead Costs:** 14.57 .29

### Total Cash Labor and Field Power Costs:

**Total Cost of Production:** $147.86 $2.96

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* Farm Advisor

** Extension Economist,
FARM MANAGEMENT
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When growing for ensilage, planting rate may be 15#/per acre.
YIELDS:

With proper care and management, yields of 6,000 to 8,000 lbs. of grain may be expected.

The stalk and root system of a corn plant at different stages of growth at the Nebraska Experiment Station. The roots do most of their spreading during early growth. After 6 weeks they move down to about 6 feet.