

FIELD CORN

costs of production

suggestions on growing

UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE
KERN COUNTY
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UC Cooperative Extension

SUGGESTIONS ON GROWING FIELD CORN
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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:

<u>VERY EARLY</u>	<u>MEDIUM EARLY</u>	<u>MEDIUM LATE</u>	<u>LATE</u>
KINGSCROST KS6	PFISTER 347	PFISTER 381	DEKALB 1002
KINGSCROST KR2	PIONEER 352	PFISTER 484	DEKALB 1022
	KINGSCROST K3A	TEXAS 30	PIONEER 302
	KINGSCROST KY7		

SEED TREATMENT:

CERTAIN SEED AND SOIL-BORN 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:

36 IN. ROW - 9"	SPACING	13.6#/A	= 19,360	PLANTS/ACRE
38 IN. ROW - 9"	"	12.9#/A	= 18,338	PLANTS/ACRE
40 IN. ROW - 9"	"	12.2#/A	= 17,425	PLANTS/ACRE

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

	SAMPLE COSTS		MY COSTS	
	PER ACRE	PER CWT.	PER ACRE	PER CWT.
PRE-HARVEST LABOR AND MATERIAL COSTS:				
LAND PREPARATION - MAN AND TRACTOR 2 HRS.	\$ 5.10			
PLANT & FERTILIZE, 2 MEN & LIGHT TRACTOR, .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, 14 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 HR., MAN & TRACTOR	3.83			
MISCELLANEOUS LABOR AND MATERIAL	2.00			
TOTAL PRE-HARVEST LABOR AND MATERIAL	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	6.25			
REPAIRS, INSURANCE AND MISC. CASH COST	4.00			
TOTAL CASH OVERHEAD COSTS	14.57	.29		
TOTAL CASH LABOR AND FIELD POWER COSTS:	100.98	2.02		
DEPRECIATION:				
DEPRECIATION (EXCEPT TRACTORS, COVERED BY HR. RATE)				
IRRIGATION FACILITIES - \$200 ORIGINAL COST	15.00			
TILLAGE & OTHER EQUIPMENT \$15 COST, 10 YRS. LIFE	1.50			
TOTAL DEPRECIATION	16.50	.33		
INTEREST ON INVESTMENT @ 5%:				
IRRIGATION FACILITIES, TILLAGE & OTHER EQUIPMENT @ 1/2 ORIGINAL COST - \$107.50	5.38			
LAND @ \$500 PER ACRE	25.00			
TOTAL INTEREST ON INVESTMENT	30.38	.61		
TOTAL COST OF PRODUCTION	\$ 147.86	\$2.96		

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**EXTENSION ECONOMIST,
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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:

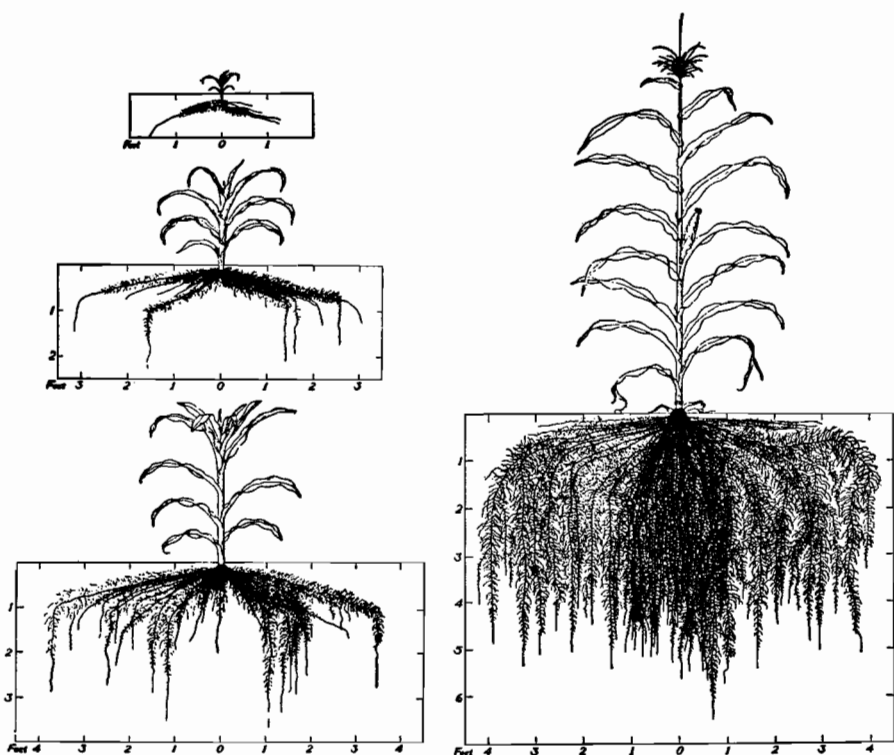
CULTIVATION IS NEEDED ONLY FOR WEED CONTROL. SHALLOW CULTIVATION IS BEST TO AVOID DISTURBING THE IMPORTANT SHALLOW ROOTS; ALSO, THE SOIL WILL DRY OUT AS DEEPLY AS IT IS STIRRED. 

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%.

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.