

CO-VS-60

FIELD CORN

costs of production

suggestions on growing

UNIVERSITY OF CALIFORNIA
FARM AND HOME ADVISORS' OFFICE
KERN COUNTY

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UC Cooperative Extension

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:

<u>VERY EARLY</u> (120-130 DAYS)	<u>MEDIUM EARLY</u> (135-140 DAYS)	<u>MEDIUM LATE</u> (140-145 DAYS)	<u>LATE</u> (150-160 DAYS)
KINGSCROST KS6	PFISTER 347	PFISTER 381	DEKALB 1002
KINGSCROST KR2	PIONEER 352	PFISTER 484	DEKALB 1022
	KINGSCROST K3A	KINGSCROST KY7	PIONEER 302
	DEKALB 459		TEXAS 30
			PFISTER 485

SEED TREATMENT:

CERTAIN SEED AND SOIL-BORN DISEASES CAN BE ADEQUATELY CONTROLLED BY SEED TREATMENT. THREE AND ONE-HALF OZS. 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 POUNDS PER ACRE.

COSTS TO PRODUCE FIELD CORN IN KERN COUNTY

BASED ON MAN LABOR AT \$1.00 AND \$1.30 PER HOUR; 30 H.P. WHEEL TRACTOR CASH COST PER HOUR \$1.00;
DEPRECIATION \$.41; INTEREST \$.19

* ROY M. BARNES

** BURT B. BURLINGAME

OPERATION	HOURS PER ACRE	CASH AND LABOR COST PER ACRE			SAMPLE COSTS	MY COSTS
		LABOR	FUEL AND REPAIRS-EQUIPMENT	MATERIALS AND OTHER COSTS		
CULTURAL:						
LAND PREPARATION	2.0	\$ 2.60	\$ 2.00		\$ 4.60	
PLANT AND FERTILIZE (2 MEN)	.5	1.15	.50	SEED: 13 LBS. @ 26¢ \$ 3.38		
IRRIGATION: 1 PRE 6 CROP	7.0	7.00	2.50	NITROGEN: 120 LBS. @ 12¢ 14.40	19.43	
HOE	2.0	2.00		WATER: 3 FT. @ \$6.00 18.00	27.50	
CULTIVATE: 2 TIMES	1.5	1.95	1.50		2.00	
TAXES					3.45	
MISCELLANEOUS OVERHEAD		2.80	3.00		12.50	
					4.50	
					10.30	
TOTAL CULTURAL COSTS		\$17.50	\$ 9.50	\$52.78	\$ 79.78	
HARVEST:						
PICK				CONTRACT: \$10.00/A + 10¢/cwt \$15.00		
HAUL				5,000 LBS. @ \$2.00/TON 5.00		
TOTAL HARVEST COSTS					\$ 20.00	
TOTAL CASH AND LABOR COSTS					\$99.78	
COSTS AT VARYING YIELDS						
		<u>INVESTMENT</u>		<u>ANNUAL COST</u>		
		<u>PER ACRE</u>		<u>DEPRECIATION</u>	<u>INTEREST</u>	
<u>POUNDS PER ACRE</u>	<u>COST PER CWT</u>	LAND	\$800.00		\$48.00	
		IRRIGATION FACILITIES	200.00	\$15.00	6.00	
		TRACTOR: 5 HRS.		2.05	.95	
		EQUIPMENT	20.00	2.00	.60	
		TOTAL		\$19.05	\$55.55	\$74.60
2,000	\$8.42					
3,000	5.68					
4,000	4.31					
5,000	3.49					
6,000	2.94					
		TOTAL COST PER ACRE			\$174.38	
		COST PER CWT @ 5,000 LBS. YIELD			\$ 3.49	

* FARM ADVISOR

** EXTENSION ECONOMIST
IN FARM MANAGEMENT


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. UN-LESS 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:

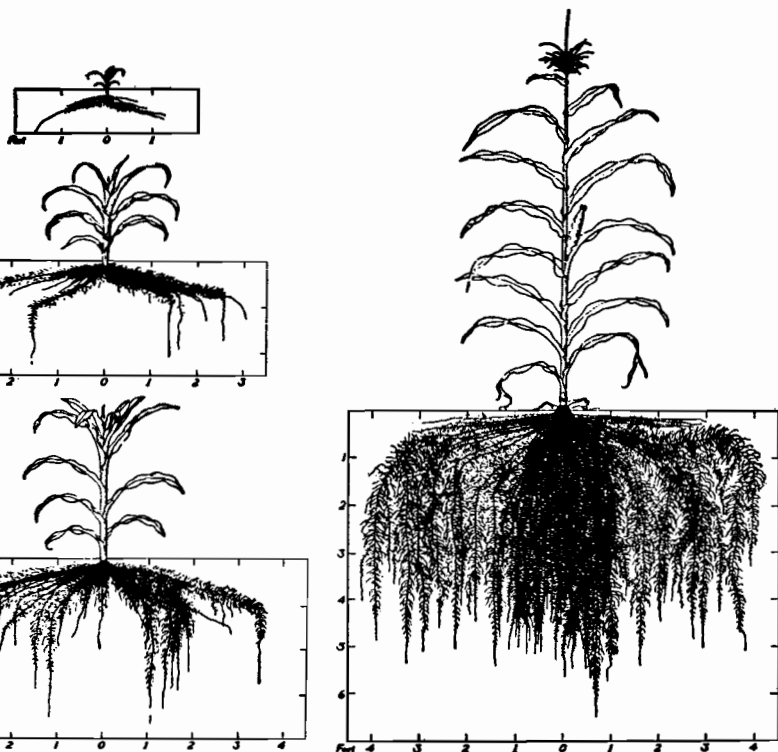
CULTIVATION IS NEEDED ONLY FOR WEED CONTROL SHALLOW CULTIVATION IS BEST TO AVOID DISTURBING THE IMPORTANT SHALLOW ROOTS; ALSO, THE SOIL WILL DRY OUT AS DEEPLY AS IT IS STIRRED.

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.