

SOYBEANS

costs of production

suggestions on growing

UNIVERSITY OF CALIFORNIA
FARM AND HOME ADVISORS' OFFICE
KERN COUNTY

REVISED FEBRUARY, 1960
UC Cooperative Extension

SUGGESTIONS ON GROWING SOYBEANS

By

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SOIL REQUIREMENTS:

THE SOYBEAN WILL SUCCEED ON NEARLY ALL TYPES OF SOIL BUT BEST RESULTS ARE OBTAINED ON FERTILE LOAMS OR SANDY LOAMS. IN GENERAL, THE SOIL REQUIREMENTS ARE ABOUT THE SAME AS FOR CORN AND COTTON.

USE OF SOYBEANS:

SOYBEANS ARE GROWN FOR THREE PURPOSES; DRY BEAN PRODUCTION, FORAGE AND FOR A COVER CROP.

VARIETIES:

THERE ARE MORE THAN 100 NAMED VARIETIES NOW BEING HANDLED BY SEEDMEN, AND THEY ARE UNDER TEST BY USDA AND STATE EXPERIMENT STATIONS. SOYBEAN VARIETIES ARE GROUPED INTO EARLY OR LATE, DEPENDING UPON WHEN THEY RIPEN. IN KERN COUNTY TESTS HAVE SHOWN THAT CLARK, LINCOLN AND BLACKHAWK, IN THAT ORDER, WERE WELL SUITED FOR THIS CLIMATE. THEY ALL RIPEN AT THE SAME TIME.

BECAUSE OF SUPERIORITY IN YIELD AND OTHER OBSERVATIONS MADE DURING GROWTH AND HARVEST, CLARK VARIETY CAN BE RECOMMENDED FOR COMMERCIAL SEED PRODUCTION.

SEED TREATMENT:

FOR SEED DECAY, TREAT WITH ARASON SFX 1 1/3 oz. (SLURRY) PER 100 LBS. OF SEED, OR SPERGON 3 oz. (DUST) OR SPERGON SL 2 oz. (SLURRY).

READ BEFORE FOLLOWING PEST CONTROL RECOMMENDATIONS
IN THIS PUBLICATION.

The recommendations in this publication for the
use of any of the following types of chemicals--insecti-
cides, fungicides, herbicides, rodenticides, nematocides,
plant growth regulators, dessicants or defoliants--in
crop production or protection may no longer be valid.

Since this publication was originally issued, new infor-
mation has been developed and new regulations have been
put into effect in respect to the use of these chemicals.
This information is now available in the current Univer-
sity of California pest control recommendations distrib-
uted by the farm advisors' offices in each county or the
University Public Service Offices.

FOR WIREWORM AND SEED CORN MAGGOT, TREAT WITH LINDANE 0.66 OZS. OF THE 75% SPRAY OR DUST PER 100 LBS. OF SEED. FUNGICIDE AND INSECTICIDE SHOULD BE APPLIED TOGETHER.

PREPARATION OF SOIL AND PLANTING:

A WELL PREPARED SEEDBED IS ESSENTIAL FOR A GOOD STAND. PRE-IRRIGATION IS ESSENTIAL TO PROVIDE SUFFICIENT MOISTURE TO GERMINATE THE SEED AND TO PROMOTE NORMAL EARLY GROWTH.

ROWS ARE USUALLY SPACED 24 TO 32 INCHES APART. IN-THE-ROW SPACING SHOULD BE ABOUT 1 INCH (12 SEEDS TO THE FOOT). A TWO OR FOUR ROW PLATE-TYPE PLANTER IS COMMONLY USED.

PLANTING RATE:

SIXTY TO SEVENTY LBS. PER ACRE ARE SUFFICIENT WHEN PLANTED IN 24 OR 32 INCH ROWS.

PLANTING TIME:

IN KERN COUNTY, APRIL 15 TO MAY 20 IS A GOOD TIME TO PLANT SOYBEANS.

PLANTING DEPTH:

THE DEPTH OF PLANTING SHOULD NOT EXCEED 2 1/2 INCHES.

FERTILIZATION:

SOYBEANS ARE A LEGUME AND NORMALLY THE APPLICATION OF NITROGEN IS NOT NECESSARY. IF PHOSPHATE IS NOW BEING USED ON COTTON OR OTHER CROPS IN YOUR AREA, THE APPLICATION OF FROM 80 TO 100 LBS. OF P₂O₅

COSTS TO PRODUCE SOYBEANS 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

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OPERATION	HOURS PER ACRE	CASH AND LABOR COST PER ACRE			SAMPLE COSTS	MY COSTS
		LABOR	FUEL AND REPAIRS- EQUIPMENT	MATERIAL AND OTHER COSTS		
CULTURAL:						
LAND PREPARATION	2.5	\$ 3.25	\$ 2.50		\$ 5.75	
PLANT	.5	.65	.50	SEED: 70 LBS. @ 12¢	9.55	
IRRIGATE: 1 PRE 6 CROP	10.5	10.50	2.50	WATER: 3 FT. @ \$6.00	31.00	
CULTIVATE: 3 TIMES	1.5	1.95	1.50		3.45	
TAXES					12.50	
MISCELLANEOUS OVERHEAD		2.30	2.50		8.95	
TOTAL CULTURAL COSTS		\$18.65	\$ 9.50		\$ 71.20	
HARVEST:						
COMBINE				CONTRACT	\$ 8.00	
HAUL					2.50	
TOTAL HARVEST COSTS					\$ 10.50	
TOTAL CASH AND LABOR COSTS					\$ 81.70	
COSTS AT VARYING YIELDS						
<u>POUNDS PER ACRE</u>	<u>COST PER CWT</u>	<u>INVESTMENT</u>	<u>PER ACRE</u>	<u>ANNUAL COST</u>		
		LAND	\$300.00	<u>DEPRECIATION</u>	<u>INTEREST</u>	
		IRRIGATION FACILITIES	200.00	\$15.00	6.00	
		TRACTOR 5 1/2 HRS.		2.26	1.05	
		EQUIPMENT	20.00	<u>2.00</u>	<u>.60</u>	
1,500	\$10.37	TOTAL		\$19.26	\$55.65	\$ 74.91
2,000	7.81					
2,500	6.26					
3,000	5.25					
3,500	4.53					
				TOTAL COST PER ACRE		\$156.61
				COST PER CWT @ 2,500 LB. YIELD		6.26

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MAY BE PROFITABLE. PHOSPHATE SHOULD BE APPLIED ONLY IF IT HAS BEEN PROVEN DEFICIENT BY ACTUAL TESTS.

IRRIGATION:

THE PLANTS SHOULD BE FULLY SUPPLIED WITH WATER DURING GROWTH. IRRIGATION SHOULD NOT BE POSTPONED UNTIL THE PLANTS SUFFER. NORMALLY IT WILL REQUIRE ABOUT 8 CROP IRRIGATIONS.

CULTIVATION:

CULTIVATION IS TO DESTROY WEEDS ONLY. IF NO WEEDS GROW CULTIVATION IS OF NO MEASURABLE BENEFIT. UNNECESSARY CULTIVATION MAY DESTROY FEEDER ROOTS GROWING CLOSE TO THE SURFACE, THUS REDUCING YOUR CROP.

HARVESTING:

HARVESTING BEGINS SOON AFTER THE LEAVES DROP FROM PLANTS AND THE PODS HAVE TURNED BROWN. SHATTER MAY OCCUR IF HARVEST IS PROLONGED BEYOND THIS POINT. SOYBEANS CAN BE DIRECT COMBINED.

YIELDS:

ON GOOD SOIL AND WITH PROPER MANAGEMENT, SOYBEAN YIELDS OF FROM 2,000 TO 3,000 LBS. PER ACRE MAY BE EXPECTED IN A NORMAL SEASON.

DISEASES:

SOYBEANS ARE SUSCEPTIBLE TO THE ROOT ROTTS WHICH ARE COMMON TO OTHER BEANS.

INSECTS :

SOYBEANS SHOULD NOT BE PLANTED ON NEMATODE INFESTED LAND. IT MAY ALSO BE NECESSARY TO TREAT FOR SPIDER MITES IF THEY BECOME INFESTED IN EARLY GROWTH.

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