

# ALFALFA SEED

sample  
costs of production  
suggestions on growing

UNIVERSITY OF CALIFORNIA  
~~FARM AND HOME ADVISORS' OFFICE~~ *Figure 41-10*  
KERN COUNTY  
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# SUGGESTIONS ON GROWING ALFALFA FOR SEED

By

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## LAND QUALIFICATIONS:

ASK FOR "STANDARDS FOR CERTIFIED SEED IN CALIFORNIA", AND "CAN I GROW CERTIFIED SEED". THESE PUBLICATIONS WILL FURNISH ALL THE STANDARDS CONNECTED WITH PRODUCING CERTIFIED SEED.

## SOIL REQUIREMENTS:

SOILS THAT GROW OTHER CROPS WILL GROW GOOD ALFALFA FOR SEED.

## VARIETY:

THE MOST POPULAR VARIETIES FOR SEED PRODUCTION ARE: RANGER, BUFFALO, ATLANTIC, NARRAGANSETT, VERNAL, LAHONTAN, WILLIAMSBURG, DUPUIITS, CODY, MOAPA, CULVER AND SEVERAL FOREIGN VARIETIES.

## SEED TREATMENT:

ORDINARILY, SEED TREATMENT WILL NOT BE NECESSARY.

## PREPARATION OF SOIL AND PLANTING:

A WELL PREPARED SEED BED IS ESSENTIAL FOR A GOOD STAND. IT SHOULD BE FIRM AND MOIST. A RING ROLLER IS EXCELLENT TO FIRM A LOOSE AND OPEN SOIL. ROW PLANTING IS THE GENERAL PRACTICE. ANY CONVENIENT ROW WIDTH IS SATISFACTORY. PRE-IRRIGATION IS BEST TO PROVIDE THE DESIRED MOISTURE AT PLANTING TIME.

## PLANTING RATE:

ONE POUND PER ACRE IS SUFFICIENT WHEN PLANTING IN ROWS. FOR SOLID SEEDING USE ABOUT 10 POUNDS.

COST ANALYSIS WORK SHEET

SAMPLE COSTS TO PRODUCE ALFALFA SEED IN KERN COUNTY - MATURE STAND - 1962  
 BASED ON MAN LABOR AT \$1.10 AND \$1.30 PER HOUR; 30 H.P. WHEEL TRACTOR CASH COST PER HOUR \$1.10;  
 DEPRECIATION \$.48; INTEREST \$.22

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OPERATION	HOURS PER ACRE	CASH AND LABOR COST PER ACRE				SAMPLE COSTS	MY COSTS
		FUEL AND LABOR REPAIRS-EQUIP.		MATERIAL AND OTHER COSTS			
<b>CULTURAL:</b>							
1/3 - 1st YR. ADDED COSTS	1.7	\$ 2.22	\$1.10	SEED 25¢; WATER \$1.00	\$ 1.25	\$ 4.57	
IRRIGATE: 4 TIMES	8.0	8.80	2.50	WATER: 2 1/2 FT. @ \$6	15.00	26.30	
PEST CONTROL: 3 TIMES				MATERIAL:	11.00		
				APPLICATION:	6.00	17.00	
WEED CONTROL:	16.0	17.60				17.60	
RENOVATE & CULTIVATE: 4 TIMES	1.6	2.08	1.76			3.84	
BEE RENTAL:				3 HIVES @ \$5.50	16.50	16.50	
TAXES:					12.50	12.50	
MISCELLANEOUS OVERHEAD:		2.40	1.10		4.80	8.30	
TOTAL CULTURAL COSTS		33.10	6.47		67.05	\$106.61	
<b>HARVEST:</b>							
DEFOLIATE:				DEFOLIANT: 1 QT. DINITRO			
				+ 15 GAL. DIESEL FUEL	\$ 4.75		
				PLANE:	3.25		
HARVEST:				500 LBS. @ 3¢	15.00		
HAUL:				500 LBS. @ \$3 PER TON	.75		
SEED CERTIFICATION, CLEANING AND BAGS:					9.25		
TOTAL HARVEST COSTS						\$ 33.00	
TOTAL CASH AND LABOR COSTS						\$139.61	
CASH AND LABOR COST PER LB. @ 500 LBS. YIELD						( 27.9¢)	
<b>COSTS AT VARYING YIELDS</b>							
<u>POUNDS SEED PER ACRE</u>		<u>TOTAL COST PER POUND</u>		<u>INVESTMENT</u>	<u>PER ACRE</u>	<u>ANNUAL COST</u> <u>DEPRECIATION</u> <u>INTEREST</u>	
300	64.6¢	LAND	\$800.00			\$48.00	
600	34.8¢	IRRIGATION SYSTEM	200.00		\$15.00	6.00	
900	24.9¢	TRACTORS 3.0 HRS.			1.44	.66	
1,200	19.9¢	EQUIPMENT	15.00		1.50	.45	
		TOTAL			\$17.94	\$55.11	\$ 73.05
TOTAL COST PER ACRE						\$212.66	
CREDIT FOR HAY OR PASTURE						9.00	
NET COST OF SEED						\$203.66	
TOTAL COST PER LB. @ 500 LBS. YIELD						40.7¢	

\*FARM ADVISOR

\*\*EXTENSION ECONOMIST

ADDITIONAL COST FOR SPOTTED ALFALFA APHID AND/OR MITE CONTROL IS \$5.00 TO \$15.00 PER APPLICATION.

### PLANTING TIME:

ALFALFA FOR SEED MAY BE SEEDED EITHER IN EARLY SPRING (FEBRUARY AND MARCH) OR IN THE FALL (NOVEMBER TO DECEMBER 1). FALL PLANTING IS FAVORED OVER SPRING PLANTING. PLANTS SHOULD HAVE ABOUT SIX WEEKS GROWTH TO SUSTAIN HEAVY FROSTS.

### PLANTING DEPTH:

DEPTH OF SEEDING SHOULD NOT EXCEED 1 INCH IN THE LIGHT SOIL OR  $3/4$  INCH IN HEAVIER SOILS.

### FERTILIZATION:

GENERALLY, IN KERN COUNTY ALFALFA DOES NOT REQUIRE FERTILIZATION. IN TWO OR THREE AREAS IN THE COUNTY, HOWEVER, TESTS HAVE SHOWN A PHOSPHORUS DEFICIENCY. IF PHOSPHATE HAS PROVEN PROFITABLE ON OTHER CROPS, THEN THE APPLICATION OF PHOSPHATE WOULD BE PROFITABLE ON ALFALFA. 80 TO 100 POUNDS OF ACTUAL PHOSPHATE, IN MOST CASES, WILL BE SUFFICIENT.

### IRRIGATION:

IRRIGATIONS WILL DEPEND UPON THE KIND OF SOIL AND ITS ABILITY TO RETAIN MOISTURE. OVER-IRRIGATION WILL RESULT IN EXCESS VEGETATIVE GROWTH, WHICH USUALLY DOES NOT SET SEED. WATER SHOULD BE APPLIED OFTEN ENOUGH TO KEEP THE PLANTS IN A HEALTHY CONDITION. AVOID LATE IRRIGATION WHICH MAY SHATTER SEED FROM RIPENED PODS AND DARKEN SEED.

### WEED CONTROL:

THE PRESENCE OF PRIMARY NOXIOUS WEEDS OR AN ABUNDANCE OF OTHER WEEDS IS THE MOST COMMON CAUSE OF FIELD REJECTIONS. IT IS, THEREFORE, IMPORTANT TO KEEP FIELDS FREE FROM WEEDS BY

ANY METHOD CONVENIENT TO THE GROWER. PLANTING FIELDS FOR SEED PRODUCTION WHEN ANY NOXIOUS WEEDS ARE KNOWN TO BE PRESENT, OR WHEN THE FIELDS ARE BADLY INFESTED WITH WEEDS IN GENERAL, IS NOT RECOMMENDED.

### POLLINATORS:

DOMESTIC BEES ARE NECESSARY TO TRIP THE FLOWERS. A GOOD PLAN TO FOLLOW IS TO PLACE ONE STRONG HIVE PER ACRE WHEN THE FIELD IS ABOUT 25% BLOOM, THEN AN ADDITIONAL TWO STRONG HIVES PER ACRE WHEN THE FIELD IS APPROACHING 50% BLOOM. SPACE HIVES IN GROUPS OVER THE FIELD AS NEARLY AS POSSIBLE 500 TO 600 FEET APART.

### CONTROL OF HARMFUL INSECTS:

TO PRODUCE HIGH YIELDS, THE CONTROL OF HARMFUL INSECTS IS NECESSARY. FOR DETAILED RECOMMENDATIONS ON INSECT PEST CONTROL, CALL AT THE KERN COUNTY FARM AND HOME ADVISORS' OFFICE FOR THIS PUBLICATION.

### HARVESTING:

HARVESTING MAY BE DONE EITHER BY WINDROWING, THEN THRESHING, OR BY COMBINING DIRECT. EITHER METHOD IS EFFECTIVE. WHICH TO USE WILL DEPEND UPON THE RANKNESS OF GROWTH AND/OR THE AMOUNT OF UNRIPE PODS. MOST IMPORTANT IS THE PROPER ADJUSTMENT AND SPEED OF THE CYLINDER TO AVOID INJURING THE SEED. INJURED SEED WILL NOT GERMINATE. SUCH SPEEDS AND ADJUSTMENTS MAY BE OBTAINED AT THE KERN COUNTY FARM AND HOME ADVISORS' OFFICE, 2610 "M" STREET, BAKERSFIELD.