ALFALFA SEED

Calif. Univ. Agric. x . Serv. Kern co.

costs of production suggestions on growing

UNIVERSITY OF CALIFORNIA
FARM AND HOME ADVISORS! OFFICE
KERN COUNTY
REVISED JANUARY, 1960

UC Cooperative Extension

# CAUTION - - - - - CAUTION - - - - - CAUTION

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—insecticides, 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 information 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 University of California pest control recommendations distributed by the farm advisors' offices in each county or the University Public Service Offices.

# KFD)

SUGGESTIONS ON GROWING ALFALFA FOR SEED By Roy M. Barnes - Farm Advisor

#### LAND QUALIFICATIONS:

Ask for "Standards for Certified Seed in California", and "Can I Grow Certified Seed". These publications will furnish you with all the STAN-DARDS 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, DUPUITS AND MOAPA.

# 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.

COSTS TO PRODUCE JALFALFA S.\_. IN KERN COUNTY - Mature Stand

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

Cash and Labor Cost Per Acre   My   Material and   Sample   Costs   Material and   Costs   Material and   Mat	∜Roy M. BARNES		DEPRECIATION WOLLS INTEREST WOLL	**BURT B. BURLINGAME
Agre				
Dultural:	OPERATION			
IRRIGATE:		Acre_	LABOR REPAIRS-EQUIP. OTHER COSTS	Совтв Совтв
Pest Control: 3 times				
Meed Control:   16.0   16.00   17.00   16.00				
Need Control:   16.0   16.00   2.08   1.60   3.68   16.50   3.68   16.50   3.68   16.50   3.68   16.50   16.	PEST CONTROL:	3 TIMES		
Renovate & Cultivate: 4 times 1.6   2.08   1.60   3 hives @ \$5.50   16.50   12.50				
BEE RENTAL:   3 HIVES @ \$5.50   16.50   12.5				
TAXES:  Miscellaneous overhead:     Total Cultural Costs    2.30   1.00	RENOVATE & CULTIV	ATE: 4 TIMES 1.6		
Annual Cost	BEE RENTAL:			
Total Cultural Costs   \$28.38 \$5.10	Taxes:		12.	
Total Cultural Costs   \$28.38 \$5.10	Miscellaneous ove	RHEAD:	2.30 1.00 4.	.80 8.10
DefoLiant:   Q To Dinitro			\$28.38 \$5.10 \$65.	\$ 99.28
DefoLiant:   Q To Dinitro	J. D. V. C. T. A.			
Harvest:			DEFOLUNT: LOT DINITRO	
Harvest:	DEFORTATE.			00
Harvest:				
SEED CERTIFICATION, CLEANING AND BAGS:   500 LBS. @ \$3 PER TON   .75   9.25				
SEED CERTIFICATION, CLEANING AND BAGS: 79.25   \$32.00			500 LBS. @ 3¢ 15.	
TOTAL HARVEST COSTS   \$ 32.00				
Total Cash and Labor Costs   \$131.28			s:	
NVESTMENT   PER ACRE   DEPRECIATION   INTEREST	TOTAL MARVES	T COSTS	er en	\$ 32.00
NVESTMENT   PER ACRE   DEPRECIATION   INTEREST	TOTAL CASH A	ND LABOR COSTS		\$131.28
Pounds   Cost   Land   \$800.00   \$148.00		<u> </u>		
SEED PER ACRE	Costs at Vary	ING YIELDS	INVESTMENT PER ACRE DEPRECIATION INTER	<u>IEST</u>
SEEDH-PERMACRE	Pounda	Cost	LAND \$800.00 \$48.	.00
300 .64 TRACTORS 1.6 HRS.; .66 .30 600 .34 EQUIPMENT 10.00 1.00 30 900 .23 TOTAL \$20.66 \$54.96 \$75.62  1,200 .18  TOTAL COST PER ACRE CREDIT ON 3/4 TON HAY 9.00  NET COST OF SEED \$197.90	SEED PER ACRE		IRRIGATION SYSTEM 200.00 \$15.00 6.	.00
300 64 TRACTORS 1.6 HRS.; 66 30 600 34 EQUIPMENT 10.00 30 707 1.200 18  TOTAL COST PER ACRE CREDIT ON 3/4 TON HAY 9.00 NET COST OF SEED \$197.90				
600 .34 EQUIPMENT 10.00 1.00 30 \$20.66 \$54.96 \$75.62 1,200 .18  TOTAL COST PER ACRE \$206.90 CREDIT ON 3/4 TON HAY 9.00  NET COST OF SEED \$197.90	300	<b>.</b> 64		.30
900 .23 TOTAL \$20.66 \$54.96 \$75.62  1,200 .18  TOTAL COST PER ACRE \$206.90  CREDIT ON 3/4 TON HAY 9.00  NET COST OF SEED \$197.90				30
1,200 .18  TOTAL COST PER ACRE \$206.90  CREDIT ON 3/4 TON HAY 9.00  NET COST OF SEED \$197.90			TOTAL \$20.66 \$511.	.96 \$ 75.62
TOTAL COST PER ACRE \$206.90  CREDIT ON 3/4 TON HAY 9.00  NET COST OF SEED \$197.90	-			
CREDIT ON 3/4 TON HAY	. 9200	•. •	TOTAL COST PER ACRE	\$206,90
NET COST OF SEED \$197.90				
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\*FARM ADVISOR

\*\*Extension Economist IN FARM MANAGEMENT

Additional cost for spotted alfalfa aphid and/or mite control is \$5.00 to \$7.00 per application.

#### PLANTING TIME:

ALFALFA FOR SEED MAY BE SEEDED EITHER IN EARLY SPRING (FEBRUARY AND MARCH) OR IN THE FALL (NOVEMBER TO DECEMBER I). 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 I 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:

## 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 <u>necessary</u> 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.