

BL-VS-60-5

# BARLEY

---

costs of production  
suggestions on growing

UNIVERSITY OF CALIFORNIA  
FARM AND HOME ADVISORS' OFFICE  
KERN COUNTY  
REVISED JANUARY, 1960  
UC COOPERATIVE EXTENSION

# SUGGESTIONS ON GROWING BARLEY

By

ROY M. BARNES - FARM ADVISOR

## SOIL REQUIREMENTS:

BARLEY IS ADAPTED TO MOST KERN COUNTY SOILS AND IS A GOOD CROP TO GROW ON ALKALI LAND. ALSO, BARLEY CAN BE DOUBLE CROPPED WITH MILO.

## VARIETY:

ATLAS 46, ARIVAT, CALIFORNIA MARIOUT, AND CLUB MARIOUT ARE THE VARIETIES RECOMMENDED FOR KERN COUNTY. ATLAS 46 IS A VARIETY WELL SUITED FOR MALTING PURPOSES AND IS RESISTANT TO MILDEW AND SCALD. ARIVAT, CALIFORNIA MARIOUT, AND CLUB MARIOUT ARE GROWN FOR FEED. ATLAS 46 AND CLUB MARIOUT MATURE AT MID-SEASON AND ARE SUITED TO EARLY PLANTING. ARIVAT AND CALIFORNIA MARIOUT MATURE 5 TO 12 DAYS EARLIER AND ARE SUITED FOR LATE PLANTINGS. CALIFORNIA MARIOUT WILL DO WELL ON ALKALI SOILS. ALWAYS PLANT CERTIFIED SEED TO GIVE THE CROP ALL THE ADVANTAGES AT THE BEGINNING.

## SEED TREATMENT:

SEED SHOULD BE TREATED TO GUARD AGAINST SMUT AND STRIPE. ONE OUNCE PER 100 LBS. OF GRAIN OF NEW IMPROVED CERESAN IS RECOMMENDED.

## PREPARATION OF SOIL AND PLANTING:

ON IRRIGATED LAND, THE SOIL SHOULD BE WORKED TO BE FIRM--MUCH THE SAME AS ALFALFA. PRE-IRRIGATION IS ALWAYS BEST TO INSURE AMPLE MOISTURE DURING GERMINATION AND THROUGH THE STOOING PERIOD. THE SAME PREPARATION IS MADE TO THE LAND WHICH IS NON-IRRIGATED, EXCEPT PLANTING USUALLY FOLLOWS ONE YEAR OF SUMMER FALLOW. IN EITHER CASE, PLANTING MAY BE DONE WITH A GRAIN DRILL OR BROADCAST.

*Barley*  
COSTS TO PRODUCE BARLEY IN KERN COUNTY - (SINGLE CROP)

*Art Reed*

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
		FUEL AND REPAIRS- LABOR	EQUIPMENT	MATERIAL AND OTHER COSTS		
<b>CULTURAL:</b>						
LAND PREPARATION	2.0	\$ 2.60	\$ 2.00		\$ 4.60	
PLANT	.4	.52	.40	SEED: 90 LBS. @ \$4.00 CWT \$ 3.60	4.52	
IRRIGATE: 1 PRE 2 CROP	4.0	4.00	2.50	WATER: 1 1/2 FT. @ \$6.00 9.00	15.50	
FERTILIZE	.2	.26	.20	NITROGEN: 60 LBS. @ 12¢ 7.20	7.66	
TAXES				12.50	12.50	
MISCELLANEOUS OVERHEAD		1.00	1.00	2.20	4.20	
<b>TOTAL CULTURAL COSTS</b>		<b>\$ 8.38</b>	<b>\$ 6.10</b>	<b>\$34.50</b>	<b>\$ 48.98</b>	
<b>HARVEST:</b>						
COMBINE				CONTRACT \$6.00 + .10/CWT OVER 2,000 LBS. \$ 8.00		
HAUL				2 TONS @ \$2.00 4.00		
<b>TOTAL HARVEST COSTS</b>					<b>\$ 12.00</b>	
<b>TOTAL CASH AND LABOR COSTS</b>					<b>\$ 60.98</b>	
<b>COSTS AT VARYING YIELDS</b>						
<u>POUNDS PER ACRE</u>	<u>COST PER CWT</u>	<u>INVESTMENT</u>	<u>PER ACRE</u>	<u>ANNUAL COST</u> <u>DEPRECIATION</u>	<u>INTEREST</u>	
2,000	\$ 6.49	LAND	\$800.00		\$ 48.00	
3,000	4.39	IRRIGATION FACILITIES	200.00	\$ 15.00	6.00	
4,000	3.34	TRACTOR 3 HRS.		1.23	.57	
5,000	2.71	EQUIPMENT	15.00	1.50	.45	
		<b>TOTAL</b>		<b>\$ 17.73</b>	<b>\$ 55.02</b>	<b>\$ 72.75</b>
				<b>TOTAL COST PER ACRE</b>		<b>\$133.73</b>
				<b>COST PER CWT @ 4,000 LBS. YIELD</b>		<b>\$ 3.34</b>

\*FARM ADVISOR

\*\*EXTENSION ECONOMIST  
IN FARM MANAGEMENT

## PLANTING RATE:

ON IRRIGATED LAND; EARLY PLANTING CLOSE DRILLED, 80 TO 90 LBS. PER ACRE IS SUFFICIENT. ON IRRIGATED LAND; LATE PLANTING CLOSE DRILLED, 90 TO 100 LBS. PER ACRE. ON NON-IRRIGATED LAND; CLOSE DRILLED, 50 LBS. PER ACRE. USUALLY ONE-FOURTH MORE SEED IS REQUIRED WHEN BROADCAST.

## PLANTING TIME:

BETWEEN NOVEMBER 15 AND DECEMBER 15 IS THE BEST TIME TO SEED. CALIFORNIA MARIOUT, BEING AN EARLY MATURING VARIETY, SHOULD NOT BE PLANTED BEFORE DECEMBER 1.

## PLANTING DEPTH:

THE DEPTH OF PLANTING SHOULD BE GOVERNED BY TYPE OF SOIL AND SOIL MOISTURE. IN MOST CASES, 2 INCHES IS SUFFICIENT.

## FERTILIZATION:

UNLESS BARLEY IS TO FOLLOW ALFALFA OR OTHER TRUCK CROPS WHERE THERE IS A LARGE AMOUNT OF NITROGEN LEFT IN THE SOIL, NITROGEN FERTILIZER IS NEEDED IN MOST SOILS IN THE COUNTY TO PRODUCE MAXIMUM YIELDS. SIXTY LBS. OF NITROGEN (300 LBS. OF AMMONIUM SULFATE OR ITS EQUIVALENT) IS RECOMMENDED. IF PHOSPHATE IS NOW BEING USED ON OTHER CROPS IN THE AREA, THEN 80 LBS. OF ACTUAL PHOSPHATE (200 LBS. TREBLE SUPER PHOSPHATE) WOULD BE SUFFICIENT.

## IRRIGATION:

THERE ARE THREE TIMES WHEN ADEQUATE MOISTURE IS IMPORTANT FOR CEREAL GRAINS.

1. WHEN PLANTS ARE ABOUT 6 INCHES TALL. AT THIS STAGE THEY ARE COMPLETING TILLERING

AND STARTING ELONGATION. ALSO, AT THIS TIME THE TOTAL NUMBER OF HEADS AND THE NUMBER OF POTENTIAL FLORETS PER HEAD IS BEING DETERMINED.

2. A SECOND CRITICAL PERIOD IS JUST AS THE PLANTS ARE IN THE BOOT AND BEGINNING TO EMERGE FROM THE BOOT. THE FLOWERING BEGINS. IF MOISTURE IS SHORT AT THIS STAGE THE PLANT GREATLY REDUCES THE NUMBER OF FLORETS POLLINATED, THUS ADJUSTING PRODUCTION TO THE CURRENT OUTLOOK FOR MOISTURE.
3. IF THE SOIL MOISTURE IS NEAR A CRITICAL LEVEL AT BLOOMING AND IS NOT IMPROVED SHORTLY THEREAFTER, IT IS POSSIBLE THAT THERE WOULD NOT BE ENOUGH MOISTURE TO FILL THE SEED. THIS COULD RESULT IN REDUCTION IN QUALITY FROM SHRIVELED SEED.

#### HARVESTING:

GRAIN CAN BE SAFELY STORED WHEN THE MOISTURE CONTENT REACHES 15% OR UNDER.

#### YIELDS:

WITH PROPER CARE, A YIELD OF 4,000 LBS. PER ACRE, OR BETTER, MAY BE OBTAINED.