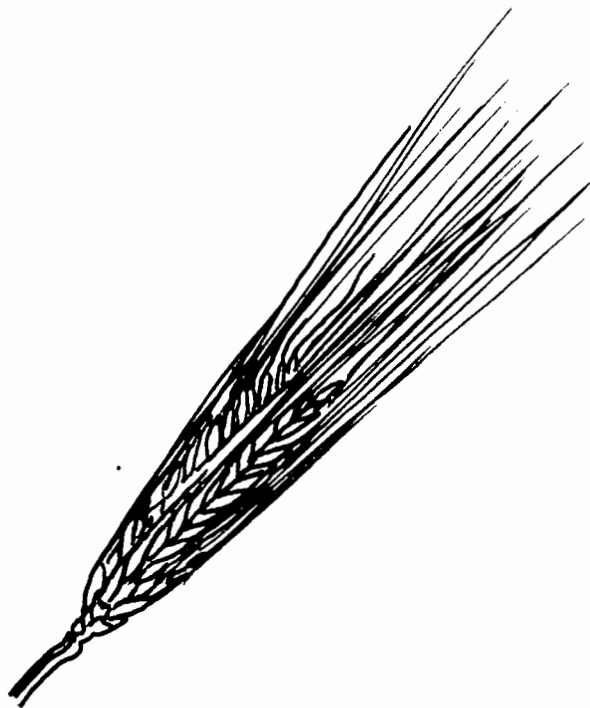


BARLEY

COSTS & GENERAL HINTS ON PRODUCTION



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The costs of production in any agricultural enterprise will vary considerably from ranch to ranch. The input and cost data in this booklet are sample costs. They are intended to be used only as educational guides in assisting you to appraise and plan your own crop and livestock program.

These cost data do not represent industry averages.

Revised January 1975

The University of California's Agricultural Extension Programs are available to all without regard to race, color or national origin.

SUGGESTIONS ON GROWING BARLEY

By
David R. Woodruff

SOIL REQUIREMENTS

Barley may be grown on most Kern County soils. Barley is one of the most tolerant crops available to alkali soils and fits well into reclamation projects. One can expect a reduction in yield when planted on high alkali soils.

VARIETIES

Numar, CM 67, UC 566, and Briggs are the current varieties recommended for Kern County. Each variety has characteristics that should be considered before a choice is made. Check with the Farm Advisor's Office for your individual case. It is best to plant certified seed to ensure purity, high germination and freedom from weed seeds. There are new varieties that are currently being tested which may supersede the present varieties.

LAND PREPARATION AND PLANTING

A good firm seedbed is preferred. If possible pre-irrigate so that ample moisture will be present during the seeding and tillering stages. If you do pre-irrigate, check your soil during the tillering stage to be sure that the surface six inches does have ample moisture, otherwise tillering may be reduced

COST ANALYSIS WORK SHEET

SAMPLE COSTS TO PRODUCE BARLEY IN KERN COUNTY - (Single Crop) - 1975

Based on man labor at \$3.00 and \$3.60 per hour; including compensation insurance and Social Security;
80 h.p. wheel tractor cash cost per hour \$3.60; Depreciation \$1.45; Interest \$.65

David R. Woodruff, Farm Advisor

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	2.0	\$ 7.20	\$ 7.20			\$ 14.40	
Plant	.4	1.45	2.60	Seed: 90 lbs. @ \$11 cwt.	\$ 9.90	13.95	
Irrigate: 1 pre, 2 crop	4.0	12.00	3.00	Water: 1 1/2 ft. @ \$10.00	15.00	30.00	
Fertilize	.2	.70	.70	Nitrogen: 90 lbs. @ \$.25	22.50	23.90	
Taxes					13.80	13.80	
Miscellaneous overhead		3.30	2.80		3.75	9.85	
Total Cultural Costs		\$24.65	\$16.30		\$64.95	\$105.90	
Harvest:							
Combine			Contract \$8.00 + \$.25/cwt.		\$18.00	\$ 18.00	
Haul			2 Tons @ \$2.50/ton		5.00	5.00	
Total Harvest Costs						\$ 23.00	
Total Cash and Labor Costs						\$128.90	
					Cash and Labor Cost Per Ton @ 4,000 lbs. Yield	\$ 64.45	
Costs at Varying Yields					<u>Investment</u>	<u>Per Acre</u>	<u>Annual Cost</u> <u>Depreciation Interest 9%</u>
<u>Pounds Per Acre</u>	<u>Total Cost Per Ton</u>		Land	\$800.00		\$72.00	
			Irrigation System	250.00	\$18.75	11.25	
			Tractor 3 hrs.		4.35	1.95	
			Equipment	16.50	1.65	.75	
2,000	\$232.00		Total		\$24.75	\$85.95	\$110.70
3,000	156.00						
4,000	120.00						
5,000	98.00						
6,000	82.00						
			TOTAL COST PER ACRE				\$239.60
			TOTAL COST PER TON @ 4,000 LBS. YIELD				\$120.00

and consequently yield. The same type of land preparation is needed for dry land barley which is usually planted after one year of summer fallow. Broadcast or a grain drill may be used to plant barley. A grain drill offers depth control and therefore greater crop uniformity.

PLANTING RATE

On irrigated land: November and early December plantings by drill, 70 to 80 pounds per acre are sufficient. Late December and January planting by drill, 90 to 100 pounds per acre should be used. If broadcasting seed, add about 20 percent to the drilled amount.

PLANTING TIME

Optimum planting time is November 15 to December 15.

PLANTING DEPTH

Planting depth will vary depending on soil moisture but generally, one and a half to two inches is best. Delayed and reduced emergence will occur when the planting depth is deeper than three inches.

FERTILIZATION

Most barley crops will need nitrogen fertilizer unless there is a high residual from a previous crop. Fertilization depends upon the soil's capability to produce and the amount of water available. With good soil potential and ample water, 100 to 125 pounds of nitrogen should be used. With less productive soil, reduce the rate accordingly. If

water is short also reduce the rate of fertilizer. If phosphate is being used on other crops in the area, then 80 pounds of phosphate per acre would be sufficient.

IRRIGATION

There are three times when adequate moisture is important for cereal grains.

1. When plants are about six 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 are 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 the critical level at blooming and is not improved shortly thereafter, it is possible there would not be enough moisture to fill the seed. This could result in reduction in quality from shriveled seed.

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