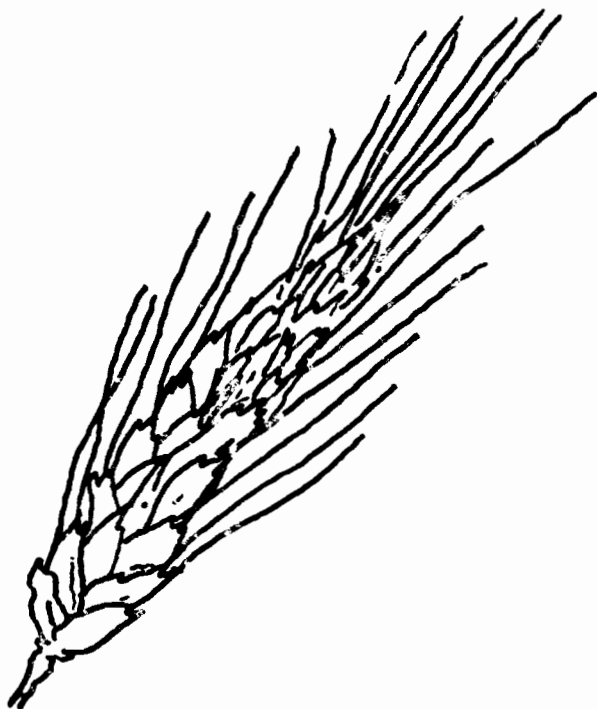


# W H E A T

## COSTS & GENERAL HINTS ON PRODUCTION



University of California  
Farm and home Advisor's Office  
P. O. Box 2509  
2610 'M' Street  
Bakersfield, California-93303

## SUGGESTIONS ON GROWING WHEAT

By

David R. Woodruff, Farm Advisor

### SOIL REQUIREMENTS

Wheat may be grown on most Kern County soils. It is not as tolerant as barley to alkali but slightly more so than grain sorghum. Wheat is best adapted to fertile medium textured soils that are slowly but completely drained. The silt and clay loams are preferred, but wheat can be grown successfully on either clay or fine sandy soils.

### VARIETIES

The most common varieties planted in Kern County are Inia 66R, Anza, Cajeme 71, Bluebird 2, and Siete Cerros 66. 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 insure purity, high germination, and freedom from weed seeds. There are new varieties being tested currently that may supercede the present varieties.

### LAND PREPARATION AND PLANTING

A good firm seedbed is preferred. If possible preirrigate so that ample moisture will be available during seed germination and tillering stage.

Even if you do preirrigate check soil moisture at tillering stage to be sure ample moisture is present in the top six inches, otherwise reduced

### COST ANALYSIS WORK SHEET

#### SAMPLE COSTS TO PRODUCE WHEAT 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		
<b>Cultural</b>						
Land preparation	2.0	\$ 7.20	\$ 7.20		\$ 14.40	
Plant	.4	1.45	2.60	Seed: 100 lbs. @ \$16.00 cwt \$16.00	20.05	
Irrigate: 1 pre, 4 crop	7.0	21.00	5.00	Water: 2 ft. @ \$10.00 20.00	46.00	
Fertilize	.2	.70	.70	Nitrogen: 100 lbs. @ \$25 25.00	26.40	
Taxes					13.80	
Miscellaneous overhead		3.50	3.00		4.00	10.50
<b>Total Cultural Costs</b>		<b>\$33.85</b>	<b>\$18.50</b>	<b>\$78.80</b>	<b>\$131.15</b>	
<b>Harvest</b>						
Combine			Contract: \$8.00 + .25/cwt.	\$23.00	\$ 23.00	
Haul			Three tons @ \$2.50/ton	7.50	7.50	
<b>Total Harvest Costs</b>					<b>\$ 30.50</b>	
<b>Total Cash and Labor Costs</b>					<b>\$161.65</b> ( 53.88)	
<b>Cash and Labor Cost Per Ton @ 30 Ton Yield</b>						
<u>Costs At Varying Yields</u>		<u>Investment</u>	<u>Per Acre</u>	<u>Annual Cost</u>		
<u>Pounds Per Acre</u>	<u>Total Cost Per Ton</u>			<u>Depreciation</u>	<u>Interest 9%</u>	
4,000	\$132.40	Land	\$800.00		\$72.00	
5,000	107.45	Irrigation system	250.00	\$18.75	11.25	
6,000	90.80	Tractor 3 hrs.		4.35	1.95	
7,000	78.90	Equipment	16.50	1.65	.75	
8,000	69.95	Total		\$24.75	\$85.95	\$110.70
<b>TOTAL COST PER ACRE</b>					<b>\$272.35</b>	
<b>TOTAL COST PER TON @ 6,000 LBS. YIELD</b>					<b>\$ 90.80</b>	

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. ABOUT THESE COST DATA -- 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.

tillering occurs and as a result yields will be less. Land preparation is done the same for dry land production as with irrigated land. Broadcast or a grain drill may be used to plant wheat. A grain drill is recommended because of the depth control of seed placement. If seed is broadcast and disked or harrowed in, extreme care must be taken not to get the seed too deep.

### PLANTING RATE

On irrigated land: November and early December plantings by drill, 70 to 80 pounds per acre are sufficient. Late December and January plantings by drill, 90 to 125 pounds per acre should be used. If broadcasting seed, add about 20 percent to the drilled amount. Under dry land conditions about one-half of the above rates should be used.

### PLANTING TIME

Optimum planting time is November 15 to December 15. Earlier planting dates are subject to frost and yellow dwarf virus disease. Later plantings are reduced in yield because of reduced tillering and hot weather late in the growing season.

### PLANTING DEPTH

Planting depth will vary depending on soil moisture but wheat should not be planted deeper than two inches. Reduced emergence will occur at depths greater than two inches.

### FERTILIZER

Most wheat crops will respond to nitrogen applications unless a high residual exists 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, 125 to 150 pounds of nitrogen should be used. With less productive soil, reduce the rate accordingly. If water is short also reduce the rate of fertilizer. Wheat generally will

respond to phosphorus but applications over 80 to 100 pounds of  $P_2O_5$  have not been economical.

## IRRIGATION

There are four times when adequate moisture is important for good wheat production.

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 potential florets per head are being determined.

2. A second critical period is when plants are in the boot and beginning to emerge from the boot. Shortly after this 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, reduced yield will result.

4. The fourth critical period occurs after the seed has begun to fill. At this time if water is not plentiful as much as 1000 pounds of yield may be lost. The most obvious sign is the many shriveled seed at harvest time. This irrigation is much more critical with the long maturing varieties.

## HARVEST

Harvest usually begins about the first of June. Prolonged delay of harvesting certain varieties will result in shattering and yield loss, especially if located in a windy location.

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