

# GRAIN SORGHUM

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## **Sample Costs of Establishing Suggestions on Growing**

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A B O U T T H E S E C O S T D A T A - - -

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.

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# SUGGESTIONS ON GROWING GRAIN SORGHUM

By

Roy M. Barnes - Farm Advisor

## GENERAL:

Grain sorghum is an excellent crop to use in a double cropping program. It is often used following wheat, barley, oats, early potatoes, or any other crop that is harvested in mid-season.

## SOIL REQUIREMENTS:

Grain sorghum can be grown on any of Kern County's soils. It is moderately tolerant to alkali.

## VARIETY:

Varieties are grouped into maturity ranges as follows:

- 110-120 days - Early
- 120-130 days - Medium early
- 130-140 days - Medium late
- Over 140 days - Late

## SEED TREATMENT:

Most seed is sold pretreated.

COST ANALYSIS WORK SHEET

SAMPLE COSTS TO PRODUCE GRAIN SORGHUM IN KERN COUNTY (Single Crop) - 1970

Based on man labor at \$1.90 and \$2.10 per hour, including compensation insurance and Social Security;  
 Medium wheel tractor cash cost per hour \$1.40; Depreciation 70¢; Interest 30¢

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Operation	Hours Per Acre	Cash and Labor Cost Per Acre				Sample Costs	My Costs	
		Labor	Fuel and Repairs- Equipment	Materials and Other Costs				
<b>Cultural:</b>								
Land preparation	2.0	\$ 4.20	\$ 2.80			\$ 7.00		
Plant & Fertilize (2 men)	.5	2.00	.70	Seed 12 lbs. @ 25¢	\$ 3.00			
				Nitrogen: 90 lbs. @ 10¢	9.00	14.70		
Irrigate: 1 pre, 3 crop	6.0	11.40	3.00	Water: 1.6 ft. @ \$6.00	9.60	24.00		
Cultivate: 2 times	1.0	2.10	1.40			3.50		
Taxes					13.80	13.80		
Miscellaneous overhead		5.90	5.40		6.00	17.30		
<b>Total Cultural Costs</b>		<b>\$25.60</b>	<b>\$13.30</b>		<b>\$41.40</b>	<b>\$ 80.30</b>		
<b>Harvest:</b>								
Combine				Contract: \$6.00 + 10¢ cwt.	\$11.00	\$ 11.00		
Haul				2 1/2 tons @ \$2.00 hauling	5.00	5.00		
<b>Total Harvest Costs</b>						<b>\$ 16.00</b>		
<b>Total Cash and Labor Costs</b>						<b>\$ 96.30</b>		
				Cash and Labor Cost per cwt. @ 5,000 lbs. yield		<b>(\$ 1.93)</b>		
<b>Costs at Varying Yields</b>								
<u>Pounds Per Acre</u>	<u>Total Cost Per Cwt.</u>	<u>Investment</u>	<u>Per Acre</u>	<u>Annual Cost</u>				
				<u>Depreciation</u>	<u>Interest 7%</u>			
4,000	\$4.49	Land	\$800.00		\$56.00			
5,000	3.63	Irrigation System	200.00	\$15.00	7.00			
6,000	3.06	Tractor 4 1/2 hrs		3.15	1.35			
7,000	2.65	Equipment	20.00	2.00	.70			
		<b>Total</b>		<b>\$20.15</b>	<b>\$65.05</b>		<b>\$ 85.20</b>	
		<b>TOTAL COST PER ACRE</b>					<b>\$181.50</b>	
		<b>TOTAL COST PER CWT. @ 5,000 LBS. YIELD</b>					<b>\$ 3.63</b>	

*Blair*

## PREPARATION OF SOIL AND PLANTING:

Like all other crops, a firm, moist seedbed is required. Pre-irrigation is the best practice, however, planting dry, then irrigating up, is sometimes done successfully if weeds are not a serious problem. Grain sorghum may be broadcast, drilled or seeded in the row.

## PLANTING RATE:

Most hybrids require about 10 to 12 pounds of seed per acre. Some short seasoned varieties need 15 to 18 pounds per acre. Always plant seed of known quality.

## PLANTING TIME:

Grain sorghum may be seeded from April 15, to June 15. When seeding before other fields in the community, which would be first to head, birds are likely to concentrate, resulting in a great loss of grain. A majority of the fields in the county are planted about June 1.

## PLANTING DEPTH:

The planting depth need not exceed 2 1/2 inches.

## FERTILIZATION:

When following potatoes, where there is usually a large amount of carry-over, the application of nitrogen may be lighter. In any instance, probably 90 to 125 pounds of nitrogen is all that will be required. If nitrogen is to be applied, application should be made at seeding time, if possible.

## IRRIGATION:

Timing the irrigation of grain sorghum is very important. Since sorghums are usually planted in hot weather, a pre-irrigation is necessary. Then, on good permeable soil, the following schedule can be used for maximum yields: If water is available for only one irrigation, make sure this is applied when the crop is in the "boot stage". If water is available for two irrigations, apply in the "boot stage" and two weeks after heading. If three irrigations are possible, apply in the tiller stage, the "boot stage", and two weeks after heading.

On soils that are tight or very sandy, it may be necessary to water as frequently as every 7 to 10 days during the heat of the summer until the seed in the central or main stems is in the soft dough stage.

## CULTIVATION:

Since soil will usually dry out as deeply as it is tilled, cultivation should be done only to control weeds.

## HARVESTING:

Harvesting is done by combine. Any of the grain harvesters are good.

## YIELD:

From 4,000 to 7,000 pounds per acre can be expected. Yields as high as 9,000 pounds have been accomplished.