

GRAIN SORGHUM

Sample

Costs of Production

Suggestions on Growing

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Farm and Home Advisor's Office
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About These Cost Data---

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.

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. As a feed the crude protein content runs from 9% to 13%.

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 pre-treated.

COST ANALYSIS WORK SHEET

SAMPLE COSTS TO PRODUCE GRAIN/SORGHUM IN KERN COUNTY (Single Crop) - 1965

Based on man labor at \$1.20 and \$1.40 per hour; 35 H.P. wheel tractor cash cost per hour \$1.10; Depreciation \$.60; Interest \$.23

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Operation	Hours Per Acre	Cash and Labor Cost Per Acre				Sample Costs	My Costs
		Fuel and Repairs-Labor	Equipment	Materials and Other Costs			
Cultural:							
Land preparation	2.0	\$ 2.80	\$ 2.20			\$ 5.00	
Plant & Fertilize (2 men)	.5	1.30	.55	Seed: 12 lbs. @ 24¢	\$ 2.88		
				Nitrogen: 90 lbs. @ 12¢	10.80	15.53	
Irrigate: 1 pre 3 crop	6.0	7.20	2.50	Water: 1.6 ft. @ \$6.00	9.60	19.30	
Cultivate: 2 times	1.0	1.40	1.10			2.50	
Taxes					12.50	12.50	
Miscellaneous overhead		3.80	2.60		4.00	10.40	
Total Cultural Costs		\$16.50	\$ 8.95		\$39.78	\$ 65.23	
Harvest:							
Combine		Contract: \$6.00 + 10¢ cwt. over 2,000 lbs.			\$ 9.00	\$ 9.00	
Haul		2 1/2 tons @ \$2.00			5.00	5.00	
Total Harvest Costs						\$ 14.00	
Total Cash and Labor Costs						\$ 79.23	
		Cash and Labor Cost per cwt. @ 5,000 lbs. yield				(\$ 1.58)	
<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 Cwt.</u>			<u>Depreciation</u>	<u>Interest</u>		
4,000	\$3.96	Land	\$900.00		\$54.00		
5,000	3.21	Irrigation System	200.00	\$15.00	6.00		
6,000	2.71	Tractor 4 1/2 hrs.		2.70	1.04		
7,000	2.35	Equipment	20.00	2.00	.60		
		Total		\$19.70	\$61.64	\$ 81.34	
		TOTAL COST PER ACRE				\$160.57	
		TOTAL COST PER CWT. @ 5,000 LBS. YIELD				\$ 3.21	

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 row.

PLANTING RATE:

Most hybrids require about 10 to 12 lbs. of seed per acre. Some short seasoned ones need 15 to 25 lbs. Always plant seed of known quality.

PLANTING TIME:

Grain sorghum may be seeded from May 1 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 carryover, the application of nitrogen may not be necessary. In any instance, probably 100 to 125 lbs. 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 are 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 lbs. per acre can be expected. Yields as high as 9,000 lbs. have been accomplished.