

SAMPLE PRODUCTION COSTS

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IRRIGATED GRAIN SORGHUM

Soils: Grain sorghum is grown on a wide variety of soils in Placer County. It is one of the few irrigated crops that can be grown successfully on shallow soils if carefully managed.

Varieties & Planting Dates: Grain sorghum should not be planted before the soil temperature is 60°- 65°F. This generally occurs in early May. Grain sorghum varieties range from "early" to "late" maturity. The medium maturing varieties usually yield more than the early varieties when planted before June in Placer County. Early or fast maturing varieties should be selected for plantings made after early June. Even fast maturing varieties planted after July 15 are often difficult to harvest because of rainy or foggy weather.

Seeding Rate: Hybrid grain sorghums should be seeded at 8 to 15 lbs. of seed per acre. Use lower seeding rates for wide row spacings and higher rates for close row spacings. Early maturing varieties should be planted at 20-25 lbs. per acre or more in close rows.

Irrigation: In general, sorghum crops require 2½ - 3 acre feet of water. Moisture stress early, before flowering, usually restricts yield more severely than moisture stress later in the season. Make certain there is ample soil moisture during the boot stage. On shallow soils irrigations should be light and frequent. Growers can produce very satisfactory yields on shallow soils by irrigating lightly every 10-14 days. High yields are more difficult to obtain on contour or rice checks.

Weed Control: Most growers achieve adequate weed control by pre-irrigation and cultivating to kill weeds before planting. Watergrass is a serious weed problem in many plantings. High seeding rates in close rows are used to reduce watergrass competition. Atrazine can control watergrass if applied before watergrass seedlings attain a height of 1½". If atrazine is used, do not plant treated fields to crops other than corn or sorghum for 18 months.

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SAMPLE COST TO PRODUCE IRRIGATED GRAIN SORGHUM

Production data: 200 acres \$2.25/hr. tractor driver
 Yield 4000 lbs/acre \$1.85 hr. irrigator

Operation	Hours		Cash & labor cost per acre		
	Per Acre	Labor	Fuel & repairs	Materials Kind & Quantity	Cost Total
Cultural costs					
Plow	.41	0.92	1.40		2.32
Disk 2X	.34	0.77	1.67		2.44
Land plane	.26	0.59	1.15		1.74
Survey borders	.25	0.56	0.22		.78
Construct borders	.17	0.38	0.48		.86
Fertilize	.10	0.23	1.65	Aqua 120N/A 10.80	12.68
Planting	.13	0.29	0.56	Seed 12 lbs/A 4.80	5.65
Irrigate 6X	6.00	11.10	0.28	Water 3.0 A/ft. 12.00	23.38
TOTAL CULTURAL COSTS	7.66	14.84	7.41	27.60	\$49.85

Harvest costs					
Combine	0.45	1.01	3.11		4.12
Haul (contract)			2.00	2 ton @ \$2.00	4.00
Dry (contract)			1.00	2 ton from 18% down to 14% H ₂ O	8.00
TOTAL HARVEST COSTS					\$16.12

Cash overhead					
Misc., office etc.		@ 6%			3.96
Taxes (Based on the Placer County rate under the Land Conservation Program)					5.25
TOTAL CASH OVERHEAD					\$ 9.21

TOTAL CASH-COST					\$75.18
Management 5% of 4000 lbs @ \$3.25/cwt.					6.50

INVESTMENT	Per Acre	Annual Cost		
		Depreciation	Interest 7%	
Land	500.00		35.00	
Equipment	111.00	9.88	3.32	
TOTAL	611.00	9.88	38.32	\$48.20
TOTAL COST PER ACRE	Yield	\$/cwt		\$129.88
	@ 3,000 lbs/acre	4.17		
	@ 4,000 " "	3.25		
	@ 5,000 " "	2.69		

The Sample Cost of Production is based on a 1,000 acre farm which produced 200 acres of rice, 200 acres of grain sorghum, 300 acres of dry-land grain in rotation with 300 acres of fallow land annually.

The interest and depreciation are based on \$78,100 investment for equipment, including a 60 hp track layer, plow, offset disk, border disk, land plane, two grain drills, harrow, 30 hp wheel tractor, pickup, truck and combine.

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