

**Grain Sorghum, Non Irrigated, Strip Tillage
South Georgia, 2011**

Estimated Costs and Returns

Expected Yield: **65 Bushel** Yield on your farm: _____

Variable Costs	Unit	Amount	\$/Unit	Cost/Acre	\$/Bushel	Your Farm
Seed	thousand	50	\$ 0.145	\$ 7.25	\$ 0.11	_____
Cover Crop Seed	bushel	1.5	\$ 16.50	\$ 24.75	\$ 0.38	_____
Lime	ton	0.25	\$ 32.00	\$ 8.00	\$ 0.12	_____
Fertilizer						
<i>Nitrogen</i>	pound	80	\$ 0.60	\$ 48.00	\$ 0.74	_____
<i>Phosphate</i>	pound	60	\$ 0.45	\$ 27.00	\$ 0.42	_____
<i>Potash</i>	pound	60	\$ 0.50	\$ 30.00	\$ 0.46	_____
Weed Control ^a	acre	1	\$ 15.10	\$ 15.10	\$ 0.23	_____
Insect Control	acre	1	\$ -	\$ -	\$ -	_____
Disease Control	acre	1	\$ -	\$ -	\$ -	_____
Preharvest Machinery ^b						
<i>Fuel</i>	gallon	3.4	\$ 2.85	\$ 9.73	\$ 0.15	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 6.73	\$ 6.73	\$ 0.10	_____
Harvest Machinery						
<i>Fuel</i>	gallon	2.4	\$ 2.85	\$ 6.79	\$ 0.10	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 4.99	\$ 4.99	\$ 0.08	_____
Labor	hour	0.8	\$ 11.25	\$ 9.14	\$ 0.14	_____
Crop Insurance ^c	acre	1	\$ 12.50	\$ 12.50	\$ 0.19	_____
Land Rent	acre	1	\$ -	\$ -	\$ -	_____
Interest on Operating Capital	percent	\$104.99	6.5%	\$ 6.82	\$ 0.10	_____
Drying - 8 points		72	\$ 0.28	\$ 20.03	\$ 0.31	_____
Total Variable Costs:				\$ 236.84	\$ 3.64	
Fixed Costs						
Machinery Depreciation, Taxes, Insurance and Housing						
<i>Preharvest Machinery</i> ^b	acre	1	\$ 18.04	\$ 18.04	\$ 0.28	_____
<i>Harvest Machinery</i>	acre	1	\$ 24.20	\$ 24.20	\$ 0.37	_____
General Overhead	% of VC	\$236.84	5%	\$ 11.84	\$ 0.18	_____
Management	% of VC	\$236.84	5%	\$ 11.84	\$ 0.18	_____
Owned Land Cost, Taxes, Cash Payment, etc.	acre	1	\$ -	\$ -	\$ -	_____
Other _____	acre	1	\$ -	\$ -	\$ -	_____
Total Fixed Costs				\$ 65.93	\$ 1.01	
Total Costs Excluding Land				\$ 302.77	\$ 4.66	
Your Profit Goal				\$ _____	/Bushel	
Price Needed for Profit				\$ _____	/Bushel	

^a Substituting mechanical cultivation for pre-emerge herbicide application would lower variable cost by \$9/ac and increase fixed costs by \$1/ac.

^b Planting may also be done with a grain drill. Substitution of a planter and rip & bed operation with field cultivation and 20' grain drill would lower variable cost by \$2.50/ac and fixed cost by 0.25/ac.

^c Assumes Yield Protection at 70% coverage. Revenue Protection at 70% coverage adds \$4-9/ac.

Sensitivity Analysis of Grain Sorghum, Non Irrigated, Strip Tillage

Net Returns Above Variable Costs Per Acre					
Varying Prices and Yields (Bushel)					
Price \ Bushel/Acre	-25%	-10%	Expected	+10%	+25%
	49	59	65	72	81
\$2.50	-\$114.96	-\$90.59	-\$74.34	-\$58.09	-\$33.71
\$3.00	-\$90.59	-\$61.34	-\$41.84	-\$22.34	\$6.91
\$3.50	-\$66.21	-\$32.09	-\$9.34	\$13.41	\$47.54
\$4.00	-\$41.84	-\$2.84	\$23.16	\$49.16	\$88.16
\$4.50	-\$17.46	\$26.41	\$55.66	\$84.91	\$128.79

Estimated Labor and Machinery Costs per Acre

Preharvest Operations

Operation	Acres/ Hour	Number of Times Over	Labor Use ^d (hrs/ac)	Fuel Use (gal/ac)	Repairs (\$/ac)	Fixed Costs (\$/ac)
Spin Spreader 5 ton with Tractor (120-139 hp) 2WD 130	23.8	1	0.05	0.28	\$ 0.51	\$ 1.44
Disk Harrow 32' with Tractor (180-199 hp) MFWD 190	16.3	1	0.08	0.60	\$ 1.32	\$ 3.84
Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130	35.5	1	0.04	0.19	\$ 0.30	\$ 0.71
ST Plant Rigid 6R-36 with Tractor (180-199 hp) MFWD 190	6.9	1	0.18	1.42	\$ 2.60	\$ 7.77
Fert Appl (Liquid) 6R-36 with Tractor (120-139 hp) 2WD 130	9.2	1	0.14	0.73	\$ 1.71	\$ 3.56
Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130	35.5	1	0.04	0.19	\$ 0.30	\$ 0.71
Total Preharvest Values			0.52	3.41	\$ 6.73	\$ 18.04

Harvest Operations

Operation	Acres/ Hour	Number of Times Over	Labor Use ^d (hrs/ac)	Fuel Use (gal/ac)	Repairs (\$/ac)	Fixed Costs (\$/ac)
Header Wheat/Sorghum 18' Rigid with Combine (200-249 hp) 240 hp	7.0	1	0.18	1.75	\$ 3.88	\$ 21.20
Grain Cart Wht/Sor 500 bu with Tractor (120-139 hp) 2WD 130	10.6	1	0.12	0.63	\$ 1.12	\$ 3.01
Total Harvest Values			0.29	2.38	\$ 4.99	\$ 24.20

^d Includes unallocated labor factor of 0.25. Unallocated labor factor is percentage allowance for additional labor required to move equipment and hook/unhook implements, etc.

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