

**GRAIN SORGHUM, IRRIGATED
SOUTH GEORGIA, 2009**

ESTIMATED COSTS AND RETURNS

Expected Yield 100 Bushels YIELD: YOUR FARM _____

Variable Costs:	Unit	Number of Units	\$/Unit	Cost/Acre	\$/Bushels	Your Farm
Seed with Treatment	Thous.	100.00	\$ 0.145	\$ 14.54	\$ 0.15	_____
Lime	Tons	0.25	\$ 43.00	\$ 10.75	\$ 0.11	_____
Fertilizer						
Nitrogen	Lbs	100.00	\$ 0.82	\$ 82.00	\$ 0.82	_____
Phosphate (P2O5)	Lbs	60.00	\$ 0.74	\$ 44.40	\$ 0.44	_____
Potash (K2O)	Lbs	60.00	\$ 0.80	\$ 48.00	\$ 0.48	_____
Weed Control						
Pre-emerge ¹ - Dual Magnum	Acre	1.00	\$ 11.13	\$ 11.13	\$ 0.11	_____
Post -emerge - Atrazine	Acre	1.00	\$ 6.00	\$ 6.00	\$ 0.06	_____
Insect Control	Acre	1.00	\$ -	\$ -	\$ -	_____
<i>Machinery: Preharvest²</i>						
Fuel	Gallon	3.87	\$ 2.85	\$ 11.04	\$ 0.11	_____
Repairs & Maintenance	Acre	1.00	\$ 8.04	\$ 8.04	\$ 0.08	_____
<i>Machinery: Harvest</i>						
Fuel	Gallon	2.65	\$ 2.85	\$ 7.55	\$ 0.08	_____
Repairs & Maintenance	Acre	1.00	\$ 3.66	\$ 3.66	\$ 0.04	_____
Irrigation ³	Inch	3.50	\$ 9.55	\$ 33.43	\$ 0.33	_____
Labor	Hrs	0.89	\$ 11.00	\$ 9.80	\$ 0.10	_____
Crop Insurance	Acre	1.00	\$ 15.00	\$ 15.00	\$ 0.15	_____
Land Rental	Acre	1.00	\$ -	\$ -	\$ -	_____
Interest on Operating capital	Percent	\$ 152.66	7.50%	\$ 11.45	\$ 0.11	_____
Drying - 8 points	Bushel	109.74	\$ 0.28	\$ 30.73	\$ 0.31	_____
Total Variable Costs				\$ 347.51	\$ 3.48	

Fixed Costs:

Machinery: Depreciation, Taxes, Insurance, and Housing						
Preharvest	Acre	1.00	\$ 22.04	\$ 22.04	\$ 0.22	_____
Harvest	Acre	1.00	\$ 23.75	\$ 23.75	\$ 0.24	_____
General Overhead	% of VC	\$ 347.51	5.00%	\$ 17.38	\$ 0.17	_____
Management	% of VC	\$ 347.51	5.00%	\$ 17.38	\$ 0.17	_____
Irrigation	Acre	1.00	\$ 100.00	\$ 100.00	\$ 1.00	_____
Owned Land Costs; Taxes, Cash Payment, Etc.						
Other _____	Acre	1.00	\$ -	\$ -	\$ -	_____
Total Fixed Costs				\$ 180.54	\$ 1.81	

TOTAL COSTS AND PROFIT GOAL

Total Costs Excluding Land	\$ 528.05	\$ 5.28
**** YOUR PROFIT GOAL ****	\$ _____/Bu.	
\$\$-PRICE NEEDED FOR PROFIT-\$\$	\$ _____/Bu.	

(1) Substituting mechanical cultivation for pre-emerge herbicide application would lower variable cost by \$10 per acre and in fixed costs by \$1.75 per acre.

(2) Planting may also be done with a grain drill in place of row crop planter. Substitution of a planter and rip and bed operation with field cultivation and 20' grain drill would lower variable cost by \$2.65 per acre and lower fixed cost by \$1.60

(3) Average of diesel and electric irrigation application costs. Electric is estimated to be \$6/application and diesel is estimated to be \$13.10/application at \$2.85/gallon diesel.

Sensitivity Analysis of GRAIN SORGHUM, IRRIGATED

NET RETURNS ABOVE VARIABLE COSTS PER ACRE					
Varying Prices and Yield (Bushels)					
Bu/Acre	-25%	-10%	Average	+10%	+25%
	75	90	100	110	125
\$3.00	\$ (122.51)	\$ (77.51)	\$ (47.51)	\$ (17.51)	\$ 27.49
\$3.25	\$ (103.76)	\$ (55.01)	\$ (22.51)	\$ 9.99	\$ 58.74
\$3.50	\$ (85.01)	\$ (32.51)	\$ 2.49	\$ 37.49	\$ 89.99
\$3.75	\$ (66.26)	\$ (10.01)	\$ 27.49	\$ 64.99	\$ 121.24
\$4.00	\$ (47.51)	\$ 12.49	\$ 52.49	\$ 92.49	\$ 152.49

ESTIMATED LABOR AND MACHINERY COSTS PER ACRE

PREHARVEST OPERATIONS						
Operation	Acres/Hour	Number Times Over	Labor Use (Hr.)	Fuel Use (Gal./Ac)	Machinery Repairs (\$/Ac)	Fixed Costs (\$/Ac)
Heavy Disk27' with Tractor (180-199 hp) MFWD 190	13.214	2.00	0.15	1.48	3.03	8.81
Disk & Incorporate32' with Tractor (180-199 hp)-MFWD 190	15.515	1.00	0.06	0.63	1.53	4.02
Disk Bed (Hipper)6R-36 with Tractor (180-199 hp)-MFWD 190	19.200	1.00	0.05	0.51	0.87	2.77
Plant - Rigid6R-36 with Tractor (120-139 hp)-2WD 130	9.573	1.00	0.10	0.70	1.43	3.98
Fert Appl (Liquid)6R-36 with Tractor (120-139 hp)-2WD 130	18.327	1.00	0.05	0.37	0.93	1.84
Spray (Broadcast)60' with Tractor (120-139 hp)-2WD 130	35.455	1.00	0.03	0.19	0.25	0.61
Total Preharvest Fuel, Repairs, Fixed Costs, & Labor			0.455	3.87	\$ 8.04	\$ 22.04

HARVEST OPERATIONS						
Operation	Acres/Hour	Number Times Over	Labor Use (Hr.)	Fuel Use (Gal./Ac)	Machinery Repairs (\$/Ac)	Fixed Costs (\$/Ac)
Header - Corn6R 36" with Combine (200-249 hp)-240hp	6.109	1.000	0.164	2.022	\$ 3.06	\$ 21.20
Corn Grain Cart 8R36500 bu with Tractor (120-139 hp)-2WD 130	10.642	1.000	0.094	0.629	\$ 0.60	\$ 2.55
Total Harvest Fuel, Repairs, Fixed Costs, and Labor			0.258	2.65	\$ 3.66	\$ 23.75

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Acknowledgements: The authors gratefully acknowledge the contributions of Dewey Lee, Glen Harris, Bob Kemerait and Georgia County Extension Agents.