

**GRAIN SORGHUM, IRRIGATED, STRIP-TILLAGE
SOUTH GEORGIA, 2010**

ESTIMATED COSTS AND RETURNS

Expected Yield 100 Bushels YIELD: YOUR FARM _____

Variable Costs:	Unit	Number of		\$/Unit	Cost/Acre	\$/Bushels	Your Farm
		Units					
Seed with Treatment	Thous.	100.00	\$	0.145	\$ 14.54	\$ 0.15	_____
Cover Crop Seed	Bushel	1.50	\$	11.000	\$ 16.50	\$ 0.17	_____
Lime	Tons	0.25	\$	33.30	\$ 8.33	\$ 0.08	_____
Fertilizer							
Nitrogen	Lbs	100.00	\$	0.45	\$ 45.00	\$ 0.45	_____
Phosphate (P2O5)	Lbs	60.00	\$	0.25	\$ 15.00	\$ 0.15	_____
Potash (K2O)	Lbs	60.00	\$	0.50	\$ 30.00	\$ 0.30	_____
Weed Control							
Pre-emerge ¹ - Dual Magnum	Acre	1.00	\$	11.55	\$ 11.55	\$ 0.12	_____
Post-emerge - Atrazine	Acre	1.00	\$	6.45	\$ 6.45	\$ 0.06	_____
Insect Control	Acre	1.00	\$	-	\$ -	\$ -	_____
<i>Machinery: Preharvest²</i>							
Fuel	Gallon	3.41	\$	2.50	\$ 8.53	\$ 0.09	_____
Repairs & Maintenance	Acre	1.00	\$	6.60	\$ 6.60	\$ 0.07	_____
<i>Machinery: Harvest</i>							
Fuel	Gallon	2.65	\$	2.50	\$ 6.63	\$ 0.07	_____
Repairs & Maintenance	Acre	1.00	\$	4.13	\$ 4.13	\$ 0.04	_____
Irrigation ³	Inch	2.50	\$	9.00	\$ 22.50	\$ 0.23	_____
Labor	Hrs	0.84	\$	11.00	\$ 9.24	\$ 0.09	_____
Crop Insurance	Acre	1.00	\$	13.00	\$ 13.00	\$ 0.13	_____
Land Rental	Acre	1.00	\$	-	\$ -	\$ -	_____
Interest on Operating capital	Percent	\$ 109.00		7.25%	\$ 7.90	\$ 0.08	_____
Drying - 8 points	Bushel	109.74	\$	0.28	\$ 30.73	\$ 0.31	_____
Total Variable Costs					\$ 256.63	\$ 2.57	_____

Fixed Costs:							
<i>Machinery: Depreciation, Taxes, Insurance, and Housing</i>							
Preharvest	Acre	1.00	\$	17.93	\$ 17.93	\$ 0.18	_____
Harvest	Acre	1.00	\$	26.73	\$ 26.73	\$ 0.27	_____
General Overhead	% of VC	\$ 256.63		5.00%	\$ 12.83	\$ 0.13	_____
Management	% of VC	\$ 256.63		5.00%	\$ 12.83	\$ 0.13	_____
Irrigation	Acre	1.00	\$	100.00	\$ 100.00	\$ 1.00	_____
<i>Owned Land Costs; Taxes, Cash Payment, Etc.</i>							
Other	Acre	1.00	\$	-	\$ -	\$ -	_____
Total Fixed Costs					\$ 170.32	\$ 1.70	_____

TOTAL COSTS AND PROFIT GOAL

Total Costs Excluding Land	\$ 426.95	\$ 4.27
**** YOUR PROFIT GOAL ****	\$ _____/Bu.	
\$\$-PRICE NEEDED FOR PROFIT-\$\$	\$ _____/Bu.	

- (1) Substituting mechanical cultivation for pre-emerge herbicide application would lower variable cost by \$11 per acre and increase 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 \$3.35 per acre and lower fixed cost by \$0.84 per acre.
- (3) Average of diesel and electric irrigation application costs. Electric is estimated to be \$6/application and diesel is estimated to be \$12/application at \$2.50/gallon diesel.

Sensitivity Analysis of GRAIN SORGHUM, IRRIGATED, STRIP-TILLAGE

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	\$ (31.63)	\$ 13.37	\$ 43.37	\$ 73.37	\$ 118.37
\$3.25	\$ (12.88)	\$ 35.87	\$ 68.37	\$ 100.87	\$ 149.62
\$3.50	\$ 5.87	\$ 58.37	\$ 93.37	\$ 128.37	\$ 180.87
\$3.75	\$ 24.62	\$ 80.87	\$ 118.37	\$ 155.87	\$ 212.12
\$4.00	\$ 43.37	\$ 103.37	\$ 143.37	\$ 183.37	\$ 243.37

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)
Spin Spreader5 ton with Tractor (120-139 hp)-2WD 130	23.758	1.00	0.04	0.28	0.50	1.42
Disk Harrow32' with Tractor (180-199 hp)-MFWD 190	16.291	1.00	0.06	0.60	1.30	3.78
Spray (Broadcast)60' with Tractor (120-139 hp)-2WD 130	35.455	1.00	0.03	0.19	0.25	0.61
ST Plant-Rigid6R-36 with Tractor (180-199 hp)-MFWD 190	6.873	1.00	0.15	1.42	2.80	8.38
Fert Appl (Liquid)6R-36 with Tractor (120-139 hp)-2WD 130	9.164	1.00	0.11	0.73	1.49	3.13
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			0.41	3.41	\$ 6.60	\$ 17.93

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	\$ 3.53	\$ 24.18
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			0.26	2.65	\$ 4.13	\$ 26.73

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