

**GRAIN SORGHUM, IRRIGATED, STRIP-TILLAGE
SOUTH GEORGIA, 2009**

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	\$	40.00	\$ 10.00	\$ 0.10	_____
Fertilizer							
Nitrogen	Lbs	100.00	\$	0.60	\$ 60.00	\$ 0.60	_____
Phosphate (P2O5)	Lbs	60.00	\$	0.30	\$ 18.00	\$ 0.18	_____
Potash (K2O)	Lbs	60.00	\$	0.70	\$ 42.00	\$ 0.42	_____
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	\$	-	\$ -	\$ -	_____
Machinery: Preharvest ²							
Fuel	Gallon	3.05	\$	2.25	\$ 6.86	\$ 0.07	_____
Repairs & Maintenance	Acre	1.00	\$	6.04	\$ 6.04	\$ 0.06	_____
Machinery: Harvest							
Fuel	Gallon	2.65	\$	2.25	\$ 5.96	\$ 0.06	_____
Repairs & Maintenance	Acre	1.00	\$	3.66	\$ 3.66	\$ 0.04	_____
Irrigation ³	Inch	2.50	\$	8.25	\$ 20.63	\$ 0.21	_____
Labor	Hrs	0.77	\$	11.00	\$ 8.49	\$ 0.08	_____
Crop Insurance	Acre	1.00	\$	15.00	\$ 15.00	\$ 0.15	_____
Land Rental	Acre	1.00	\$	-	\$ -	\$ -	_____
Interest on Operating capital	Percent	\$ 122.40		7.50%	\$ 9.18	\$ 0.09	_____
Drying - 8 points	Bushel	109.74	\$	0.28	\$ 30.73	\$ 0.31	_____
Total Variable Costs					\$ 284.71	\$ 2.85	_____

Fixed Costs:							
Machinery: Depreciation, Taxes, Insurance, and Housing							
Preharvest	Acre	1.00	\$	16.65	\$ 16.65	\$ 0.17	_____
Harvest	Acre	1.00	\$	23.75	\$ 23.75	\$ 0.24	_____
General Overhead	% of VC	\$ 284.71		5.00%	\$ 14.24	\$ 0.14	_____
Management	% of VC	\$ 284.71		5.00%	\$ 14.24	\$ 0.14	_____
Irrigation	Acre	1.00	\$	100.00	\$ 100.00	\$ 1.00	_____
Owned Land Costs; Taxes, Cash Payment, Etc.							
Other	Acre	1.00	\$	-	\$ -	\$ -	_____
Total Fixed Costs					\$ 168.87	\$ 1.69	_____

TOTAL COSTS AND PROFIT GOAL			
Total Costs Excluding Land		\$ 453.58	\$ 4.54
**** 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 per
- (3) Average of diesel and electric irrigation application costs. Electric is estimated to be \$6/application and diesel is estimated to be \$10.50/application at \$2.25/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	\$ (59.71)	\$ (14.71)	\$ 15.29	\$ 45.29	\$ 90.29
\$3.25	\$ (40.96)	\$ 7.79	\$ 40.29	\$ 72.79	\$ 121.54
\$3.50	\$ (22.21)	\$ 30.29	\$ 65.29	\$ 100.29	\$ 152.79
\$3.75	\$ (3.46)	\$ 52.79	\$ 90.29	\$ 127.79	\$ 184.04
\$4.00	\$ 15.29	\$ 75.29	\$ 115.29	\$ 155.29	\$ 215.29

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	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			0.36	3.05	\$ 6.04	\$ 16.65

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			0.26	2.65	\$ 3.66	\$ 23.75

Prepared By: Amanda R Smith and Nathan B Smith, UGA Extension Economists, Department of Agricultural & Applied Economics

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