

**GRAIN SORGHUM, NON-IRRIGATED  
SOUTH GEORGIA, 2010**

**ESTIMATED COSTS AND RETURNS**

Expected Yield                      **65 Bushels**                      YIELD: YOUR FARM \_\_\_\_\_

<b>Variable Costs:</b>	<b>Unit</b>	<b>Number of Units</b>	<b>\$/Unit</b>	<b>Cost/Acre</b>	<b>\$/Bushels</b>	<b>Your Farm</b>
Seed	Thous.	50.00	\$ 0.145	\$ 7.27	\$ 0.11	_____
Lime	Tons	0.25	\$ 33.30	\$ 8.33	\$ 0.13	_____
Fertilizer						
Nitrogen	Lbs	80.00	\$ 0.45	\$ 36.00	\$ 0.55	_____
Phosphate (P2O5)	Lbs	60.00	\$ 0.25	\$ 15.00	\$ 0.23	_____
Potash (K2O)	Lbs	60.00	\$ 0.50	\$ 30.00	\$ 0.46	_____
Weed Control						
Pre-emerge <sup>1</sup> - Dual Magnum	Acre	1.00	\$ 11.55	\$ 11.55	\$ 0.18	_____
Post -emerge - Atrazine	Acre	1.00	\$ 6.45	\$ 6.45	\$ 0.10	_____
Insect Control	Acre	1.00	\$ -	\$ -	\$ -	_____
<i>Machinery: Preharvest<sup>2</sup></i>						
Fuel	Gallon	4.75	\$ 2.50	\$ 11.87	\$ 0.18	_____
Repairs & Maintenance	Acre	1.00	\$ 9.15	\$ 9.15	\$ 0.14	_____
<i>Machinery: Harvest</i>						
Fuel	Gallon	2.65	\$ 2.50	\$ 6.63	\$ 0.10	_____
Repairs & Maintenance	Acre	1.00	\$ 4.13	\$ 4.13	\$ 0.06	_____
Labor	Hrs	1.02	\$ 11.00	\$ 11.27	\$ 0.17	_____
Crop Insurance	Acre	1.00	\$ 9.00	\$ 9.00	\$ 0.14	_____
Land Rental	Acre	1.00	\$ -	\$ -	\$ -	_____
Interest on Operating capital	Percent	\$ 83.32	7.25%	\$ 6.04	\$ 0.09	_____
Drying - 8 points	Bushel	71.33	\$ 0.28	\$ 19.97	\$ 0.31	_____
<b>Total Variable Costs</b>				<b>\$ 192.64</b>	<b>\$ 2.96</b>	_____
<b>Fixed Costs:</b>						
Machinery: Depreciation, Taxes, Insurance, and Housing						
Preharvest	Acre	1.00	\$ 24.91	\$ 24.91	\$ 0.38	_____
Harvest	Acre	1.00	\$ 26.73	\$ 26.73	\$ 0.41	_____
General Overhead	% of VC	\$ 192.64	5.00%	\$ 9.63	\$ 0.15	_____
Management	% of VC	\$ 192.64	5.00%	\$ 9.63	\$ 0.15	_____
Owned Land Costs; Taxes, Cash Payment, Etc.	Acre	1.00	\$ -	\$ -	\$ -	_____
Other _____						_____
<b>Total Fixed Costs</b>				<b>\$ 70.90</b>	<b>\$ 1.09</b>	_____
<b>TOTAL COSTS AND PROFIT GOAL</b>						
<b>Total Costs Excluding Land</b>				<b>\$ 263.55</b>	<b>\$ 4.05</b>	_____
**** 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.

**Sensitivity Analysis of GRAIN SORGHUM, NON-IRRIGATED**

NET RETURNS ABOVE VARIABLE COSTS PER ACRE					
Varying Prices and Yield (Bushels)					
Bu/Acre	-25%	-10%	Average	+10%	+25%
	48.75	58.5	65	71.5	81.25
\$3.00	\$ (46.39)	\$ (17.14)	\$ 2.36	\$ 21.86	\$ 51.11
\$3.25	\$ (34.21)	\$ (2.52)	\$ 18.61	\$ 39.73	\$ 71.42
\$3.50	\$ (22.02)	\$ 12.11	\$ 34.86	\$ 57.61	\$ 91.73
\$3.75	\$ (9.83)	\$ 26.73	\$ 51.11	\$ 75.48	\$ 112.04
\$4.00	\$ 2.36	\$ 41.36	\$ 67.36	\$ 93.36	\$ 132.36

**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	9.600	1.00	0.10	1.02	1.41	4.36
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	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
<b>Total Preharvest Fuel, Repairs, Fixed Costs, &amp; Labor</b>			<b>0.562</b>	<b>4.75</b>	<b>\$ 9.15</b>	<b>\$ 24.91</b>

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	2.02	\$ 3.53	\$ 24.18
Corn Grain Cart 8R36500 bu with Tractor (120-139 hp)-2WD 130	10.642	1.000	0.094	0.63	\$ 0.60	\$ 2.55
<b>Total Harvest Fuel, Repairs, Fixed Costs, and Labor</b>			<b>0.258</b>	<b>2.65</b>	<b>\$ 4.13</b>	<b>\$ 26.73</b>

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