

**GRAIN SORGHUM, NON-IRRIGATED STRIP-TILLAGE  
SOUTH GEORGIA, 2008**

**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	\$ 0.092	\$ 4.60	\$ 0.07	_____
Seed Treatment - Concep	Acre	50.00	\$ 0.021	\$ 1.05	\$ 0.02	_____
Cover Crop Seed	Bushel	1.50	\$ 11.00	\$ 16.50	\$ 0.25	_____
Lime	Tons	0.25	\$ 40.00	\$ 10.00	\$ 0.15	_____
Fertilizer						
Nitrogen	Lbs	80.00	\$ 0.53	\$ 42.40	\$ 0.65	_____
Phospate (P2O5)	Lbs	60.00	\$ 0.40	\$ 24.00	\$ 0.37	_____
Potash (K2O)	Lbs	60.00	\$ 0.30	\$ 18.00	\$ 0.28	_____
Weed Control						
Pre-emerge <sup>1</sup> - Dual Magnum	Acre	1.00	\$ 11.50	\$ 11.50	\$ 0.18	_____
Post -emerge - Atrazine	Acre	1.00	\$ 3.09	\$ 3.09	\$ 0.05	_____
Insect Control	Acre	1.00	\$ -	\$ -	\$ -	_____
<i>Machinery: Preharvest<sup>2</sup></i>						
Fuel	Gallon	3.41	\$ 3.00	\$ 10.24	\$ 0.16	_____
Repairs & Maintenance	Acre	1.00	\$ 6.04	\$ 6.04	\$ 0.09	_____
<i>Machinery: Harvest</i>						
Fuel	Gallon	2.65	\$ 3.00	\$ 7.95	\$ 0.12	_____
Repairs & Maintenance	Acre	1.00	\$ 3.66	\$ 3.66	\$ 0.06	_____
Labor	Hrs	0.84	\$ 10.50	\$ 8.82	\$ 0.14	_____
Crop Insurance	Acre	1.00	\$ 8.00	\$ 8.00	\$ 0.12	_____
Land Rental	Acre	1.00	\$ -	\$ -	\$ -	_____
Interest on Operating capital	Percent	\$ 87.92	8.50%	\$ 7.47	\$ 0.11	_____
Drying - 8 points	Bushel	71.33	\$ 0.28	\$ 19.97	\$ 0.31	_____
<b>Total Variable Costs</b>				<b>\$ 203.30</b>	<b>\$ 3.13</b>	

<b>Fixed Costs:</b>						
<i>Machinery: Depreciation, Taxes, Insurance, and Housing</i>						
Preharvest	Acre	1.00	\$ 16.32	\$ 16.32	\$ 0.25	_____
Harvest	Acre	1.00	\$ 23.56	\$ 23.56	\$ 0.36	_____
General Overhead	% of VC	\$ 203.30	5.00%	\$ 10.16	\$ 0.16	_____
Management	% of VC	\$ 203.30	5.00%	\$ 10.16	\$ 0.16	_____
<i>Owned Land Costs; Taxes, Cash Payment, Etc.</i>						
Other	Acre	1.00	\$ -	\$ -	\$ -	_____
<b>Total Fixed Costs</b>				<b>\$ 60.22</b>	<b>\$ 0.93</b>	

<b>TOTAL COSTS AND PROFIT GOAL</b>						
<b>Total Costs Excluding Land</b>				<b>\$ 263.51</b>	<b>\$ 4.05</b>	
**** YOUR PROFIT GOAL ****				\$ _____/Bu.		
\$\$-PRICE NEEDED FOR PROFIT-\$\$				\$ _____/Bu.		

**FOOTNOTES**

- (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 acre.

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

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	\$ (57.05)	\$ (27.80)	\$ (8.30)	\$ 11.20	\$ 40.45	
\$3.25	\$ (44.86)	\$ (13.17)	\$ 7.95	\$ 29.08	\$ 60.77	
\$3.50	\$ (32.67)	\$ 1.45	\$ 24.20	\$ 46.95	\$ 81.08	
\$3.75	\$ (20.48)	\$ 16.08	\$ 40.45	\$ 64.83	\$ 101.39	
\$4.00	\$ (8.30)	\$ 30.70	\$ 56.70	\$ 82.70	\$ 121.70	

**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	1.41
Disk Harrow32' with Tractor (180-199 hp)-MFWD 190	16.291	1.00	0.06	0.60	1.12	3.26
Spray (Broadcast)60' with Tractor (120-139 hp)-2WD 130	35.455	1.00	0.03	0.19	0.26	0.63
ST Plant-Rigid6R-36 with Tractor (180-199 hp)-MFWD 190	6.873	1.00	0.15	1.42	2.43	7.28
Fert Appl (Liquid)6R-36 with Tractor (120-139 hp)-2WD 130	9.164	1.00	0.11	0.73	1.47	3.11
Spray (Broadcast)60' with Tractor (120-139 hp)-2WD 130	35.455	1.00	0.03	0.19	0.26	0.63
<b>Total Preharvest Fuel, Repairs, Fixed Costs, &amp; Labor</b>			<b>0.41</b>	<b>3.41</b>	<b>\$ 6.04</b>	<b>\$ 16.32</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	\$ 3.06	\$ 21.11
Corn Grain Cart 8R36500 bu with Tractor (120-139 hp)-2WD 130	10.642	1.000	0.094	0.63	\$ 0.60	\$ 2.46
<b>Total Harvest Fuel, Repairs, Fixed Costs, and Labor</b>			<b>0.26</b>	<b>2.65</b>	<b>\$ 3.66</b>	<b>\$ 23.56</b>

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