

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

**ESTIMATED COSTS AND RETURNS**

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

Variable Costs:	Unit	Number of		\$/Unit	Cost/Acre	\$/Bushels	Your Farm
		Units					
Seed	Thous.	50.00	\$	0.092	\$ 4.60	\$ 0.07	_____
Seed Treatment - Concep	Acre	50.00	\$	0.021	\$ 1.05	\$ 0.02	_____
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	4.01	\$	3.00	\$ 12.02	\$ 0.18	_____
Repairs & Maintenance	Acre	1.00	\$	7.01	\$ 7.01	\$ 0.11	_____
<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	0.93	\$	10.50	\$ 9.76	\$ 0.15	_____
Crop Insurance	Acre	1.00	\$	8.00	\$ 8.00	\$ 0.12	_____
Land Rental	Acre	1.00	\$	-	\$ -	\$ -	_____
Interest on Operating capital	Percent	\$ 81.52		8.50%	\$ 6.93	\$ 0.11	_____
Drying - 8 points	Bushel	71.33	\$	0.28	\$ 19.97	\$ 0.31	_____
<b>Total Variable Costs</b>					<b>\$ 189.95</b>	<b>\$ 2.92</b>	

**Fixed Costs:**

Machinery: Depreciation, Taxes, Insurance, and Housing							
Preharvest	Acre	1.00	\$	18.77	\$ 18.77	\$ 0.29	_____
Harvest	Acre	1.00	\$	23.56	\$ 23.56	\$ 0.36	_____
General Overhead	% of VC	\$ 189.95		5.00%	\$ 9.50	\$ 0.15	_____
Management	% of VC	\$ 189.95		5.00%	\$ 9.50	\$ 0.15	_____
Owned Land Costs; Taxes, Cash Payment, Etc.	Acre	1.00	\$	-	\$ -	\$ -	_____
Other _____							
<b>Total Fixed Costs</b>					<b>\$ 61.33</b>	<b>\$ 0.94</b>	

**TOTAL COSTS AND PROFIT GOAL**

<b>Total Costs Excluding Land</b>					<b>\$ 251.28</b>	<b>\$ 3.87</b>	
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\*\*\*\* 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**

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	\$ (43.70)	\$ (14.45)	\$ 5.05	\$ 24.55	\$ 53.80
\$3.25	\$ (31.51)	\$ 0.18	\$ 21.30	\$ 42.43	\$ 74.12
\$3.50	\$ (19.32)	\$ 14.80	\$ 37.55	\$ 60.30	\$ 94.43
\$3.75	\$ (7.13)	\$ 29.43	\$ 53.80	\$ 78.18	\$ 114.74
\$4.00	\$ 5.05	\$ 44.05	\$ 70.05	\$ 96.05	\$ 135.05

**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	1.00	0.08	0.74	1.38	4.02	
Disk & Incorporate32' with Tractor (180-199 hp)-MFWD 190	15.515	1.00	0.06	0.63	1.33	3.49	
Disk Bed (Hipper)6R-36 with Tractor (180-199 hp)-MFWD 190	9.600	1.00	0.10	1.02	1.17	3.63	
Plant - Rigid6R-36 with Tractor (120-139 hp)-2WD 130	9.573	1.00	0.10	0.70	1.40	3.90	
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>0.486</b>	<b>4.01</b>	<b>\$ 7.01</b>	<b>\$ 18.77</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>0.258</b>	<b>2.65</b>	<b>\$ 3.66</b>	<b>\$ 23.56</b>	

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