

**Corn, Irrigated, Strip Tillage
South Georgia, 2011**

Estimated Costs and Returns

Expected Yield: **185 Bushel** Yield on your farm: _____

Variable Costs	Unit	Amount	\$/Unit	Cost/Acre	\$/Bushel	Your Farm
Seed	thousand	30	\$ 3.00	\$ 90.00	\$ 0.49	_____
Cover Crop Seed	bushel	1.5	\$ 16.50	\$ 24.75	\$ 0.13	_____
Lime	ton	0.5	\$ 32.00	\$ 16.00	\$ 0.09	_____
Fertilizer						
<i>Nitrogen</i>	pounds	225	\$ 0.60	\$ 135.00	\$ 0.73	_____
<i>Phosphate</i>	pounds	90	\$ 0.45	\$ 40.50	\$ 0.22	_____
<i>Potash</i>	pounds	125	\$ 0.50	\$ 62.50	\$ 0.34	_____
Weed Control	acre	1	\$ 36.60	\$ 36.60	\$ 0.20	_____
Insect Control	acre	1	\$ -	\$ -	\$ -	_____
Disease Control	acre	1	\$ -	\$ -	\$ -	_____
Preharvest Machinery ^a						
<i>Fuel</i>	gallon	3.4	\$ 2.85	\$ 9.73	\$ 0.05	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 6.73	\$ 6.73	\$ 0.04	_____
Harvest Machinery						
<i>Fuel</i>	gallon	2.4	\$ 2.85	\$ 6.79	\$ 0.04	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 5.55	\$ 5.55	\$ 0.03	_____
Labor	hours	0.8	\$ 11.25	\$ 9.14	\$ 0.05	_____
Irrigation ^b	acre	7	\$ 10.00	\$ 70.00	\$ 0.38	_____
Crop Insurance ^c	acre	1	\$ 14.00	\$ 14.00	\$ 0.08	_____
Land Rent	acre	1	\$ -	\$ -	\$ -	_____
Interest on Operating Capital	percent	\$ 263.65	6.5%	\$ 17.14	\$ 0.09	_____
Drying - 8 points	bushel	203	\$ 0.28	\$ 56.85	\$ 0.31	_____
Total Variable Costs:				\$ 601.27	\$ 3.25	
Fixed Costs						
Machinery Depreciation, Taxes, Insurance and Housing						
<i>Preharvest Machinery</i> ^a	acre	1	\$ 18.04	\$ 18.04	\$ 0.10	_____
<i>Harvest Machinery</i>	acre	1	\$ 25.36	\$ 25.36	\$ 0.14	_____
<i>Irrigation</i> ^b	acre	1	\$ 110.00	\$ 110.00	\$ 0.59	_____
General Overhead	% of VC	\$ 601.27	5%	\$ 30.06	\$ 0.16	_____
Management	% of VC	\$ 601.27	5%	\$ 30.06	\$ 0.16	_____
Owned Land Cost, Taxes, Cash Payment, etc.	acre	1	\$ -	\$ -	\$ -	_____
Other _____	acre	1	\$ -	\$ -	\$ -	_____
Total Fixed Costs				\$ 213.53	\$ 1.15	
Total Costs Excluding Land				\$ 814.80	\$ 4.40	
Your Profit Goal				\$ _____	/Bushel	
Price Needed for Profit				\$ _____	/Bushel	

^a Rip-strip and plant in one pass. Performing rip-strip and plant as separate operations increases preharvest fuel use by 0.6 gal (\$1.71/ac), labor costs by \$0.77/ac, and repairs by \$0.73/ac. Fixed costs would increase by \$2.10/ac.

^b Average of diesel and electric irrigation application costs. Electric is estimated at \$7/appl and diesel is estimated at \$13/appl when diesel costs \$2.85/gal.

^c Assumes Yield Protection at 70% coverage. Revenue Protection at 70% coverage adds \$4-9/ac.

Sensitivity Analysis of Corn, Irrigated, Strip Tillage

Net Returns Above Variable Costs Per Acre					
Varying Prices and Yields (Bushel)					
Price \ Bushel/Acre	-25%	-10%	Expected	+10%	+25%
	139	167	185	204	231
\$3.50	-\$115.65	-\$18.52	\$46.23	\$110.98	\$208.10
\$4.00	-\$46.27	\$64.73	\$138.73	\$212.73	\$323.73
\$4.50	\$23.10	\$147.98	\$231.23	\$314.48	\$439.35
\$5.00	\$92.48	\$231.23	\$323.73	\$416.23	\$554.98
\$5.50	\$161.85	\$314.48	\$416.23	\$517.98	\$670.60

Estimated Labor and Machinery Costs per Acre

Preharvest Operations

Operation	Acres/ Hour	Number of Times Over	Labor Use ^d (hrs/ac)	Fuel Use (gal/ac)	Repairs (\$/ac)	Fixed Costs (\$/ac)
Spin Spreader 5 ton with Tractor (120-139 hp) 2WD 130	23.8	1	0.05	0.28	\$ 0.51	\$ 1.44
Disk Harrow 32' with Tractor (180-199 hp) MFWD 190	16.3	1	0.08	0.60	\$ 1.32	\$ 3.84
Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130	35.5	1	0.04	0.19	\$ 0.30	\$ 0.71
ST Plant Rigid 6R-36 with Tractor (180-199 hp) MFWD 190	6.9	1	0.18	1.42	\$ 2.60	\$ 7.77
Fert Appl (Liquid) 6R-36 with Tractor (120-139 hp) 2WD 130	9.2	1	0.14	0.73	\$ 1.71	\$ 3.56
Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130	35.5	1	0.04	0.19	\$ 0.30	\$ 0.71
Total Preharvest Values			0.52	3.41	\$ 6.73	\$ 18.04

Harvest Operations

Operation	Acres/ Hour	Number of Times Over	Labor Use ^d (hrs/ac)	Fuel Use (gal/ac)	Repairs (\$/ac)	Fixed Costs (\$/ac)
Header - Corn 6R-36 with Combine (200-249 hp) 240 hp	7.0	1	0.18	1.75	\$ 4.44	\$ 22.35
Grain Cart Corn 500 bu with Tractor (120-139 hp) 2WD 130	10.6	1	0.12	0.63	\$ 1.12	\$ 3.01
Total Harvest Values			0.29	2.38	\$ 5.55	\$ 25.36

^d Includes unallocated labor factor of 0.25. Unallocated labor factor is percentage allowance for additional labor required to move equipment and hook/unhook implements, etc.

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