

**Irrigated Corn
South Georgia, 2012**

Estimated Costs and Returns

Expected 30 Acre Yield: **200 bushel** Yield on your farm _____

Variable Costs	Unit	Amount	\$/Unit	Cost/Acre	\$/bushel	Your Farm
Seed	thousand	30	\$ 3.25	\$ 97.50	\$ 0.49	_____
Lime	ton	0.5	\$ 35.00	\$ 17.50	\$ 0.09	_____
Fertilizer						
<i>Nitrogen</i>	pounds	240	\$ 0.68	\$ 163.20	\$ 0.82	_____
<i>Phosphate</i>	pounds	90	\$ 0.50	\$ 45.00	\$ 0.23	_____
<i>Potash</i>	pounds	125	\$ 0.58	\$ 72.50	\$ 0.36	_____
Weed Control	acre	1	\$ 12.40	\$ 12.40	\$ 0.06	_____
Insect Control	acre	1	-	-	-	_____
Disease Control	acre	1	-	-	-	_____
Preharvest Machinery						
<i>Fuel</i>	gallon	4.7	\$ 3.55	\$ 16.75	\$ 0.08	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 9.83	\$ 9.83	\$ 0.05	_____
Harvest Machinery						
<i>Fuel</i>	gallon	2.5	\$ 3.55	\$ 8.99	\$ 0.04	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 6.45	\$ 6.45	\$ 0.03	_____
Labor	hours	1.0	\$ 11.25	\$ 11.35	\$ 0.06	_____
Irrigation*	applications	8	\$ 11.60	\$ 92.80	\$ 0.46	_____
Crop Insurance	acre	1	\$ 23.00	\$ 23.00	\$ 0.12	_____
Land Rent	acre	1	-	-	-	_____
Interest on Operating Capital	percent	\$ 288.63	6.5%	\$ 18.76	\$ 0.09	_____
Drying - 8 Points	bushel	220	\$ 0.28	\$ 61.46	\$ 0.31	_____
Total Variable Costs:				\$ 657.49	\$ 3.29	_____
Fixed Costs						
Machinery Depreciation, Taxes, Insurance and Housing						
<i>Preharvest Machinery</i>	acre	1	\$ 27.01	\$ 27.01	\$ 0.14	_____
<i>Harvest Machinery</i>	acre	1	\$ 30.69	\$ 30.69	\$ 0.15	_____
<i>Irrigation</i>	acre	1	\$ 110.00	\$ 110.00	\$ 0.55	_____
General Overhead	% of VC	\$ 657.49	5%	\$ 32.87	\$ 0.16	_____
Management	% of VC	\$ 657.49	5%	\$ 32.87	\$ 0.16	_____
Owned Land Cost, Taxes, Cash Payment, etc.	acre	1	-	-	-	_____
Other _____	acre	1	-	-	-	_____
Total Fixed Costs				\$ 233.45	\$ 1.17	_____
Total Costs Excluding Land				\$ 890.94	\$ 4.45	_____
Your Profit Goal				\$ _____	/bushel	_____
Price Needed for Profit				\$ _____	/bushel	_____

*Average of diesel and electric irrigation application costs. Electric is estimated at \$7/appl and diesel is estimated at \$16.20/appl when diesel costs \$3.55/gal.

Budget developed by Nathan Smith and Amanda Smith. The authors would like to acknowledge contributions by Dewey Lee, Eric Prostko, Glen Harris and the Georgia County Extension Agents.

Sensitivity Analysis of Irrigated Corn

Net Returns Above Variable Costs Per Acre					
Varying Prices and Yields (bushel)					
Price \ bushel/Acre	-25%	-10%	Expected	+10%	+25%
	150	180	200	220	250
\$5.00	\$92.51	\$242.51	\$342.51	\$442.51	\$592.51
\$5.50	\$167.51	\$332.51	\$442.51	\$552.51	\$717.51
\$6.00	\$242.51	\$422.51	\$542.51	\$662.51	\$842.51
\$6.50	\$317.51	\$512.51	\$642.51	\$772.51	\$967.51
\$7.00	\$392.51	\$602.51	\$742.51	\$882.51	\$1,092.51

Estimated Labor and Machinery Costs per Acre Preharvest Operations

Operation	Acres/Hour	Number of Times Over	Labor Use** (hrs/ac)	Fuel Use (gal/ac)	Repairs (\$/ac)	Fixed Costs (\$/ac)
Heavy Disk 27' with Tractor (180-199 hp) MFWD 190	13.2	2	0.19	1.48	\$ 3.19	\$ 9.27
Disk Harrow 32' with Tractor (180-199 hp) MFWD 190	16.3	1	0.08	0.60	\$ 1.41	\$ 4.08
Bed-Disk (Hipper) 6R-36 with Tractor (180-199 hp) MFWD 190	9.6	1	0.13	1.02	\$ 1.39	\$ 4.30
Plant - Rigid 6R-36 with Tractor (120-139 hp) 2WD 130	9.5	1	0.13	0.70	\$ 1.67	\$ 4.66
Fert Appl (Liquid) 6R-36 with Tractor (120-139 hp) 2WD 130	9.2	1	0.14	0.73	\$ 1.83	\$ 3.88
Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130	35.5	1	0.04	0.19	\$ 0.34	\$ 0.82
Total Preharvest Values			0.70	4.72	\$ 9.83	\$ 27.01

Harvest Operations

Operation	Acres/Hour	Number of Times Over	Labor Use** (hrs/ac)	Fuel Use (gal/ac)	Repairs (\$/ac)	Fixed Costs (\$/ac)
Header - Corn 6R-36 with Combine (200-249 hp) 240 hp	6.5	1	0.19	1.90	\$ 5.23	\$ 27.40
Grain Cart Corn 500 bu with Tractor (120-139 hp) 2WD 130	10.6	1	0.12	0.63	\$ 1.22	\$ 3.29
Total Harvest Values			0.31	2.53	\$ 6.45	\$ 30.69

** 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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