

**Soybeans, Irrigated
Round Up Ready
South Georgia, 2011**

Estimated Costs and Returns

Expected Yield: **55 Bushel**

Yield on your farm: _____

Variable Costs	Unit	Amount	\$/Unit	Cost/Acre	\$/Bushel	Your Farm
Seed	bag	1	\$ 48.00	\$ 48.00	\$ 0.87	_____
Inoculant	acre	1	\$ 3.00	\$ 3.00	\$ 0.05	_____
Lime	ton	0.33	\$ 32.00	\$ 10.56	\$ 0.19	_____
Fertilizer						
<i>Phosphate</i>	pound	40	\$ 0.45	\$ 18.00	\$ 0.33	_____
<i>Potash</i>	pound	80	\$ 0.50	\$ 40.00	\$ 0.73	_____
<i>Boron</i>	pound	0.5	\$ 6.25	\$ 3.13	\$ 0.06	_____
Weed Control	acre	1	\$ 32.25	\$ 32.25	\$ 0.59	_____
Insect Control	acre	1	\$ 4.50	\$ 4.50	\$ 0.08	_____
Disease Control ^a	acre	1	\$ 30.00	\$ 30.00	\$ 0.55	_____
Preharvest Machinery						
<i>Fuel</i>	gallon	4.4	\$ 2.85	\$ 12.44	\$ 0.23	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 7.91	\$ 7.91	\$ 0.14	_____
Harvest Machinery						
<i>Fuel</i>	gallon	2.4	\$ 2.85	\$ 6.79	\$ 0.12	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 5.08	\$ 5.08	\$ 0.09	_____
Labor	hour	0.9	\$ 11.25	\$ 10.43	\$ 0.19	_____
Irrigation ^b	acre	5	\$ 10.00	\$ 50.00	\$ 0.91	_____
Crop Insurance ^c	acre	1	\$ 14.50	\$ 14.50	\$ 0.26	_____
Land Rent	acre	1	\$ -	\$ -	\$ -	_____
Interest on Operating Capital	percent	\$ 148.30	6.5%	\$ 9.64	\$ 0.18	_____
Drying - 8 points		60	\$ -	\$ -	\$ -	_____
Total Variable Costs:				\$ 306.24	\$ 5.57	
Fixed Costs						
Machinery Depreciation, Taxes, Insurance and Housing						
<i>Preharvest Machinery</i>	acre	1	\$ 22.57	\$ 22.57	\$ 0.41	_____
<i>Harvest Machinery</i>	acre	1	\$ 24.39	\$ 24.39	\$ 0.44	_____
<i>Irrigation</i> ^b	acre	1	\$ 110.00	\$ 110.00	\$ 2.00	_____
General Overhead	% of VC	\$ 306.24	5%	\$ 15.31	\$ 0.28	_____
Management	% of VC	\$ 306.24	5%	\$ 15.31	\$ 0.28	_____
Owned Land Cost, Taxes, Cash Payment, etc.	acre	1	\$ -	\$ -	\$ -	_____
Other _____	acre	1	\$ -	\$ -	\$ -	_____
Total Fixed Costs				\$ 187.58	\$ 3.41	
Total Costs Excluding Land				\$ 493.81	\$ 8.98	
Your Profit Goal				\$ _____	/Bushel	
Price Needed for Profit				\$ _____	/Bushel	

^a In the case of Asian Soybean Rust infection, add \$10-25/ac for fungicide sprays.

^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 Soybeans, Irrigated

Net Returns Above Variable Costs Per Acre					
Varying Prices and Yields (Bushel)					
Price \ Bushel/Acre	-25%	-10%	Expected	+10%	+25%
	41	50	55	61	69
\$7.00	-\$17.49	\$40.26	\$78.76	\$117.26	\$175.01
\$8.00	\$23.76	\$89.76	\$133.76	\$177.76	\$243.76
\$9.00	\$65.01	\$139.26	\$188.76	\$238.26	\$312.51
\$10.00	\$106.26	\$188.76	\$243.76	\$298.76	\$381.26
\$11.00	\$147.51	\$238.26	\$298.76	\$359.26	\$450.01

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)
Heavy Disk 27' with Tractor (180-199 hp) MFWD 190	13.2	2	0.19	1.48	\$ 2.89	\$ 8.40
Disk Harrow 32' with Tractor (180-199 hp) MFWD 190	16.3	1	0.08	0.60	\$ 1.32	\$ 3.84
Disk Bed (Hipper) 6R-36 with Tractor (180-199 hp) MFWD 190	9.6	1	0.13	1.02	\$ 1.24	\$ 3.83
Plant - Rigid 6R-36 with Tractor (120-139 hp) 2WD 130	9.5	1	0.13	0.70	\$ 1.56	\$ 4.36
Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130	35.5	3	0.11	0.57	\$ 0.90	\$ 2.14
Total Preharvest Values			0.63	4.37	\$ 7.91	\$ 22.57

Harvest Operations

Operation	Acres/ Hour	Number of Times Over	Labor Use ^d (hrs/ac)	Fuel Use (gal/ac)	Repairs (\$/ac)	Fixed Costs (\$/ac)
Header -Soybean 18' Flex with Combine (200- 249 hp) 240 hp	7.0	1	0.18	1.75	\$ 3.97	\$ 21.38
Grain Cart Soybean 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	\$ 5.08	\$ 24.39

^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.

Developed by Nathan Smith and Amanda Smith. The authors would like to acknowledge the contributions of John Woodruff, Eric Prostko, Bob Kemeraite, Glen Harris and the Georgia County Extension Agents.