

**Soybeans, Irrigated, Strip Tillage  
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	_____
Cover Crop Seed	bushel	1.5	\$ 16.50	\$ 24.75	\$ 0.45	_____
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	\$ 39.75	\$ 39.75	\$ 0.72	_____
Insect Control	acre	1	\$ 4.50	\$ 4.50	\$ 0.08	_____
Disease Control <sup>a</sup>	acre	1	\$ 30.00	\$ 30.00	\$ 0.55	_____
Preharvest Machinery						
<i>Fuel</i>	gallon	3.1	\$ 2.85	\$ 8.72	\$ 0.16	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 5.62	\$ 5.62	\$ 0.10	_____
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	0.7	\$ 11.25	\$ 8.40	\$ 0.15	_____
Irrigation <sup>b</sup>	acre	4	\$ 10.00	\$ 40.00	\$ 0.73	_____
Crop Insurance <sup>c</sup>	acre	1	\$ 14.50	\$ 14.50	\$ 0.26	_____
Land Rent	acre	1	\$ -	\$ -	\$ -	_____
Interest on Operating Capital	percent	\$ 155.40	6.5%	\$ 10.10	\$ 0.18	_____
Drying - 8 points		60	\$ -	\$ -	\$ -	_____
<b>Total Variable Costs:</b>				<b>\$ 320.90</b>	<b>\$ 5.83</b>	
<b>Fixed Costs</b>						
Machinery Depreciation, Taxes, Insurance and Housing						
<i>Preharvest Machinery</i>	acre	1	\$ 15.91	\$ 15.91	\$ 0.29	_____
<i>Harvest Machinery</i>	acre	1	\$ 24.39	\$ 24.39	\$ 0.44	_____
<i>Irrigation</i> <sup>b</sup>	acre	1	\$ 110.00	\$ 110.00	\$ 2.00	_____
General Overhead	% of VC	\$ 320.90	5%	\$ 16.05	\$ 0.29	_____
Management	% of VC	\$ 320.90	5%	\$ 16.05	\$ 0.29	_____
Owned Land Cost, Taxes, Cash Payment, etc.	acre	1	\$ -	\$ -	\$ -	_____
Other _____	acre	1	\$ -	\$ -	\$ -	_____
<b>Total Fixed Costs</b>				<b>\$ 182.38</b>	<b>\$ 3.32</b>	
<b>Total Costs Excluding Land</b>				<b>\$ 503.29</b>	<b>\$ 9.15</b>	
<b>Your Profit Goal</b>				\$ _____	/Bushel	
<b>Price Needed for Profit</b>				\$ _____	/Bushel	

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

<sup>b</sup> 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.

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

### Sensitivity Analysis of Soybeans, Irrigated, Strip Tillage

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	-\$32.15	\$25.60	\$64.10	\$102.60	\$160.35
\$8.00	\$9.10	\$75.10	\$119.10	\$163.10	\$229.10
\$9.00	\$50.35	\$124.60	\$174.10	\$223.60	\$297.85
\$10.00	\$91.60	\$174.10	\$229.10	\$284.10	\$366.60
\$11.00	\$132.85	\$223.60	\$284.10	\$344.60	\$435.35

### Estimated Labor and Machinery Costs per Acre

#### Preharvest Operations

Operation	Acres/ Hour	Number of Times Over	Labor Use <sup>d</sup> (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
Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130	35.5	3	0.11	0.57	\$ 0.90	\$ 2.14
<b>Total Preharvest Values</b>			<b>0.45</b>	<b>3.06</b>	<b>\$ 5.62</b>	<b>\$ 15.91</b>

#### Harvest Operations

Operation	Acres/ Hour	Number of Times Over	Labor Use <sup>d</sup> (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
<b>Total Harvest Values</b>			<b>0.29</b>	<b>2.38</b>	<b>\$ 5.08</b>	<b>\$ 24.39</b>

<sup>d</sup> 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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