

**Non-Irrigated Corn, Strip Tillage  
South Georgia, 2013**

**Estimated Costs and Returns**

Expected Yield: **85 bushel**      Your Yield \_\_\_\_\_

<b>Variable Costs</b>	<b>Unit</b>	<b>Amount</b>	<b>\$/Unit</b>	<b>Cost/Acre</b>	<b>\$/bushel</b>	<b>Your Farm</b>
Seed	thousand	20	\$ 2.50	\$ 50.00	\$ 0.59	_____
Cover Crop Seed	bushel	1.5	\$ 15.00	\$ 22.50	\$ 0.26	_____
Lime	ton	0.25	\$ 42.00	\$ 10.50	\$ 0.12	_____
Fertilizer						
<i>Nitrogen</i>	pounds	100	\$ 0.70	\$ 70.00	\$ 0.82	_____
<i>Phosphate</i>	pounds	40	\$ 0.55	\$ 22.00	\$ 0.26	_____
<i>Potash</i>	pounds	60	\$ 0.50	\$ 30.00	\$ 0.35	_____
Weed Control	acre	1	\$ 18.50	\$ 18.50	\$ 0.22	_____
Insect Control	acre	1	\$ -	\$ -	\$ -	_____
Disease Control	acre	1	\$ -	\$ -	\$ -	_____
Preharvest Machinery *						
<i>Fuel</i>	gallon	3.4	\$ 3.75	\$ 12.80	\$ 0.15	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 7.74	\$ 7.74	\$ 0.09	_____
Harvest Machinery						
<i>Fuel</i>	gallon	2.5	\$ 3.75	\$ 9.49	\$ 0.11	_____
<i>Repairs and Maintenance</i>	acre	1	\$ 6.77	\$ 6.77	\$ 0.08	_____
Labor	hours	0.8	\$ 12.00	\$ 9.94	\$ 0.12	_____
Crop Insurance	acre	1	\$ 28.00	\$ 28.00	\$ 0.33	_____
Land Rent	acre	1	\$ -	\$ -	\$ -	_____
Interest on Operating Capital	percent	\$ 149.12	6.5%	\$ 9.69	\$ 0.11	_____
Drying - 8 Points	bushel	93	\$ 0.28	\$ 26.12	\$ 0.31	_____
<b>Total Variable Costs:</b>				<b>\$ 334.05</b>	<b>\$ 3.93</b>	
<b>Fixed Costs</b>						
Machinery Depreciation, Taxes, Insurance and Housing						
<i>Preharvest Machinery *</i>	acre	1	\$ 20.83	\$ 20.83	\$ 0.25	_____
<i>Harvest Machinery</i>	acre	1	\$ 32.22	\$ 32.22	\$ 0.38	_____
General Overhead	% of VC	\$ 334.05	5%	\$ 16.70	\$ 0.20	_____
Management	% of VC	\$ 334.05	5%	\$ 16.70	\$ 0.20	_____
Owned Land Cost, Taxes, Cash Payment, etc.	acre	1	\$ -	\$ -	\$ -	_____
Other _____	acre	1	\$ -	\$ -	\$ -	_____
<b>Total Fixed Costs</b>				<b>\$ 86.45</b>	<b>\$ 1.02</b>	
<b>Total Costs Excluding Land</b>				<b>\$ 420.51</b>	<b>\$ 4.95</b>	
<b>Your Profit Goal</b>				\$ _____	/bushel	
<b>Price Needed for Profit</b>				\$ _____	/bushel	

\* Rip, strip and plant in one pass. Performing rip, strip and plant as separate operations increases preharvest fuel use by 0.6 gal (\$2.13/ac), labor costs by \$0.77/ac, and repairs by \$0.80/ac. Fixed costs would increase by \$2.30/ac.

Developed by Amanda Smith and Nathan Smith. Data may be modified by the user to more closely reflect their operation. UGA estimates are available online at <http://www.ces.uga.edu/Agriculture/agecon/agecon.html>.

### Sensitivity Analysis of Non-Irrigated Corn, Strip Tillage

Net Returns Above Variable Costs Per Acre

Varying Prices and Yields (bushel)

Price \ bushel/Acre	-25%	-10%	Expected	+10%	+25%
	64	77	85	94	106
\$5.00	<b>-\$15.30</b>	<b>\$48.45</b>	<b>\$90.95</b>	<b>\$133.45</b>	<b>\$197.20</b>
\$5.50	<b>\$16.57</b>	<b>\$86.70</b>	<b>\$133.45</b>	<b>\$180.20</b>	<b>\$250.32</b>
\$6.00	<b>\$48.45</b>	<b>\$124.95</b>	<b>\$175.95</b>	<b>\$226.95</b>	<b>\$303.45</b>
\$6.50	<b>\$80.32</b>	<b>\$163.20</b>	<b>\$218.45</b>	<b>\$273.70</b>	<b>\$356.57</b>
\$7.00	<b>\$112.20</b>	<b>\$201.45</b>	<b>\$260.95</b>	<b>\$320.45</b>	<b>\$409.70</b>

### 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)
Spin Spreader 5 ton with Tractor (120-139 hp) 2WD 130	23.8	1	0.05	0.28	\$ 0.59	\$ 1.67
Disk Harrow 32' with Tractor (180-199 hp) MFWD 190	16.3	1	0.08	0.60	\$ 1.48	\$ 4.29
Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130	35.5	1	0.04	0.19	\$ 0.36	\$ 0.86
ST Plant Rigid 6R-36 with Tractor (180-199 hp) MFWD 190	6.9	1	0.18	1.42	\$ 3.03	\$ 9.07
Fert Appl (Liquid) 6R-36 with Tractor (120-139 hp) 2WD 130	9.2	1	0.14	0.73	\$ 1.92	\$ 4.08
Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130	35.5	1	0.04	0.19	\$ 0.36	\$ 0.86
<b>Total Preharvest Values</b>			<b>0.52</b>	<b>3.41</b>	<b>\$ 7.74</b>	<b>\$ 20.83</b>

#### 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	\$ 5.49	\$ 28.77
Grain Cart Corn 500 bu with Tractor (120-139 hp) 2WD 130	10.6	1	0.12	0.63	\$ 1.28	\$ 3.46
<b>Total Harvest Values</b>			<b>0.31</b>	<b>2.53</b>	<b>\$ 6.77</b>	<b>\$ 32.22</b>

\*\* 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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