

## 2017 Cotton, Conventional Tillage, Non-Irrigated Budget

	<u>Unit</u>	<u>Quantity</u>	<u>Price</u>	<u>Total</u>	<u>Your Farm</u>
<b>Revenue</b>					
Cotton <sup>1,2,3</sup>	lb	950	\$0.72	\$684.00	_____
			<b>Gross Revenue (\$/Acre)</b>		
			<b>Total Revenue</b>		_____
			<b>\$684.00</b>		_____
<b>Variable Expenses</b>					
Seed <sup>4*</sup>	Thous.	48.15	\$2.16	\$103.99	_____
Wrap <sup>5</sup>	lb	950	\$0.02	\$19.00	_____
Fertilizer & Lime (Table 1)	Acre	1	\$97.07	\$97.07	_____
Chemical (Table 2) <sup>6,7,8,9,10**</sup>	Acre	1	\$125.39	\$125.39	_____
Crop Scout	Acre	1	\$9.50	\$9.50	_____
Repair & Maintenance (Table 3) <sup>11</sup>	Acre	1	\$34.43	\$34.43	_____
Fuel, Oil & Filter (Table 3) <sup>11</sup>	Acre	1	\$18.57	\$18.57	_____
Operator Labor (Table 3) <sup>11</sup>	Acre	1	\$11.18	\$11.18	_____
Machinery Rental	Acre	1	\$0.00	\$0.00	_____
Custom Work	Acre	1	\$0.00	\$0.00	_____
Other Transportation Costs	Acre	1	\$0.00	\$0.00	_____
Cash Rent <sup>12</sup>	Acre	1	\$94.00	\$94.00	_____
Crop Insurance <sup>13</sup>	Acre	1	\$9.05	\$9.05	_____
Operating Interest <sup>14</sup>	%	\$522.19	6.00%	\$15.67	_____
Other Variable Costs	Acre	0	\$0.00	\$0.00	_____
			<b>Total Variable Expenses</b>		_____
			<b>\$537.85</b>		_____
			<b>Return Above Variable Expenses</b>		_____
			<b>\$146.15</b>		_____
<b>Fixed Expenses</b>					
Machinery <sup>11</sup>					
Capital Recovery (Table 3)	Acre	1	\$124.88	\$124.88	_____
Other Fixed Machinery Costs	Acre	1	\$0.00	\$0.00	_____
Property Taxes	Acre	1	\$0.00	\$0.00	_____
Insurance (Non-Machinery)	Acre	1	\$0.00	\$0.00	_____
Management Labor	Acre	1	\$15.00	\$15.00	_____
Other Fixed Costs	Acre	1	\$0.00	\$0.00	_____
			<b>Total Fixed Expenses</b>		_____
			<b>\$139.88</b>		_____
			<b>Return Above All Specified Expenses</b>		_____
			<b>\$6.27</b>		_____

### Breakeven Price For Selected Yield

Yield (lb)	Variable Cost (\$/lb)	Total Specified Cost (\$/lb)
700	\$0.77	\$0.97
750	\$0.72	\$0.90
800	\$0.67	\$0.85
850	\$0.63	\$0.80
900	\$0.60	\$0.75
<b>950</b>	<b>\$0.57</b>	<b>\$0.71</b>
1,000	\$0.54	\$0.68
1,050	\$0.51	\$0.65
1,100	\$0.49	\$0.62
1,150	\$0.47	\$0.59
1,200	\$0.45	\$0.56

### Breakeven Yield for Selected Price

Price (\$/lb)	Variable Cost (lb)	Total Specified Cost (lb)
\$0.47	1,442	1,442
\$0.52	1,034	1,303
\$0.57	944	1,189
\$0.62	868	1,093
\$0.67	803	1,012
<b>\$0.72</b>	<b>747</b>	<b>941</b>
\$0.77	699	880
\$0.82	656	827
\$0.87	618	779
\$0.92	585	737
\$0.97	554	699

Table 1. Fertilizer & Lime

Fertilizer	Description	Quantity (lbs)	Price (\$)	Total (\$/Acre)	Your Farm (\$/Acre)
Nitrogen	Urea	80	\$0.36	\$28.52	
Phosphorous	P <sub>2</sub> O <sub>5</sub>	60	\$0.34	\$20.44	
Potassium	K <sub>2</sub> O	90	\$0.26	\$23.70	
Sulfur <sup>15</sup>	Elemental	10	\$0.35	\$3.50	
Boron		0.5	\$5.33	\$2.67	
Lime	Limestone	1,000	\$36.50	\$18.25	
Other		0	\$0.00	\$0.00	
<b>Total</b>				<b>\$97.07</b>	

Table 2. Chemicals<sup>6,7,8,9,10\*\*</sup>

Chemical	Function	Description	Unit	Number of Apps.	Quantity	Price	Total (\$/Acre)	Your Farm (\$/Acre)
Herbicides	Pre-Emerge	Cotoran 4L	pt.	1	2	\$4.99	\$9.98	
		Liberty 280 SL	oz.	2	29	\$0.46	\$26.83	
	Post-Emerge	Roundup Power Max	qt.	1	1	\$4.49	\$4.49	
		Dual Magnum	pt.	1	1	\$12.50	\$12.50	
	Hooded Sprayer	Surfactant	pt.	1	0.2	\$3.52	\$0.70	
		Valor	oz.	1	1	\$6.11	\$6.11	
						\$0.00	\$0.00	
Growth Regulator		Mepex (Mepiquat Chloride)	pt.	1	2	\$1.00	\$2.00	
Defoliant			oz.	1	12	\$0.46	\$5.52	
Boll Opener		Ethephon	oz.	1	32	\$0.18	\$5.76	
Insecticides		Seed Treatment	acre	1	1	\$9.00	\$9.00	
		In-Season	acre	1	1	\$35.00	\$35.00	
Fungicides		Seed Treatment	acre	1	1	\$7.50	\$7.50	
<b>Total</b>							<b>\$125.39</b>	

Table 3. Machinery<sup>11</sup>

	Power Unit	Implement	Size	Capital Recovery	Repairs & Maintenance	Fuel, Oil & Filter	Labor	Total	Your Farm (\$/Acre)
Chop Stalks	Tractor, 215 hp	Rotary Mower	15'	\$3.50	\$3.68	\$1.65	\$1.23	\$10.06	
Chisel	Tractor, 215 hp	Chisel Plow	21'	\$1.90	\$2.38	\$1.55	\$1.16	\$6.98	
Disk	Tractor, 215 hp	Tandem Disk	29'	\$4.48	\$2.59	\$1.25	\$0.93	\$9.25	
Disk	Tractor, 215 hp	Tandem Disk	29'	\$4.48	\$2.59	\$1.25	\$0.93	\$9.25	
Prepare Seedbed	Tractor, 215 hp	Cultimulcher	20'	\$2.73	\$3.00	\$1.73	\$1.29	\$8.75	
Fertilize	Tractor, 215 hp	Fertilize Spreader	900#	\$1.65	\$2.03	\$1.13	\$0.84	\$5.66	
Plant	Tractor, 215 hp	Planter	12-row	\$7.25	\$3.76	\$1.42	\$1.06	\$13.50	
Weed Control	SP Boom Sprayer		90'	\$4.19	\$0.24	\$0.20	\$0.16	\$4.79	
Weed Control	SP Boom Sprayer		90'	\$4.19	\$0.24	\$0.20	\$0.16	\$4.79	
Weed Control	SP Boom Sprayer		90'	\$4.19	\$0.24	\$0.20	\$0.16	\$4.79	
Weed Control	Tractor, 215 hp	Hooded Sprayer		\$7.55	\$1.07	\$0.39	\$0.29	\$9.31	
Spray	SP Boom Sprayer		90'	\$4.19	\$0.24	\$0.20	\$0.16	\$4.79	
Spray	SP Boom Sprayer		90'	\$4.19	\$0.24	\$0.20	\$0.16	\$4.79	
Spray	SP Boom Sprayer		90'	\$4.19	\$0.24	\$0.20	\$0.16	\$4.79	
Spray	SP Boom Sprayer		90'	\$4.19	\$0.24	\$0.20	\$0.16	\$4.79	
Harvest	Picker/Module Builder (Round)		6-row	\$60.51	\$11.45	\$5.75	\$1.56	\$79.27	
Harvest	Tractor, 215 hp	Module Handler		\$1.46	\$0.17	\$1.05	\$0.78	\$3.46	
Other				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Other				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<b>Total</b>				<b>\$124.88</b>	<b>\$34.43</b>	<b>\$18.57</b>	<b>\$11.18</b>	<b>\$189.06</b>	

## **FOOTNOTES**

- 1) Most ginning arrangements provide producers cottonseed revenue net ginning costs.
  - 2) A second harvest may add as much as \$25/acre to variable costs.
  - 3) Cotton price estimate includes the loan rate plus an estimated loan equity payment and seed and hauling allowance.
  - 4) Assumes 3.5 seeds per foot. Tech fees have been included in seed cost. Seed and tech fees can be separated at the users discretion. Seed cost varies per variety and seed size. Tech fees had not been set at time of printing and are estimates. Check with farm suppliers for rebates, discounts, and incentives for seed and chemicals. Substantial cost savings may be available.
  - 5) Bale wrap is estimated at \$0.02 per lb of lint.
  - 6) Additional sprays may be necessary for specific insects.
  - 7) In-season per-acre cost includes boll weevil eradication fees and chemical expenses for control of plant bugs, bollworm, and other insect pests.
  - 8) Due to prevalence of Glyphosate resistant weeds, if weeds are not controlled, hand chopping may be necessary.
  - 9) Do not tank mix Dual Magnum and Liberty when applying on Widestrike cotton.
  - 10) Use alternative chemicals on non-Liberty tolerant cotton varieties.
  - 11) Machinery expenses will vary dramatically by operation, financial resources, and land base. The machinery cost estimates provided in Table 3 are provided as an estimate of cost of ownership and operation for specified pieces of machinery that would be available to a "representative" row-crop farm in Tennessee. To estimate machinery costs for a specific set of equipment, interested parties can utilize the Excel version of the budgets and modify the Machinery Assumptions Table.
  - 12) Cash rental rates are the 2016 USDA-NASS reported cash rental rates for cropland in Tennessee. Substantial differences may exist in cash rental rates reported by NASS and the prevailing rate in your location.
  - 13) Crop insurance is an estimate and will vary by policy, county, and coverage election. The estimate provided is the average premium paid per insured acre of wheat in Tennessee for the previous production year as reported by USDA RMA's Summary of Business Report.
  - 14) Operating interest is assumed to be charged on half of all variable expenses.
  - 15) Current University of Tennessee recommendations do not include sulfur. However, in west Tennessee, sulfur is commonly applied at a rate of 10-15 lbs/acre.
- \* For Xtend cotton seed prices may be \$6-15 per unit higher.
- \*\* Xtend cotton requires alternative chemical applications and should be used according to product specifications. Additional costs for applicator training may be required. Cost estimates are provided in the Preliminary 2017 Cotton, Roundup Ready 2 Xtend, No-Till, Non-Irrigated Budget.