

COTTON- Conventional Tillage, Irrigated
2017 ESTIMATED PER ACRE COSTS AND RETURNS, SOUTH AND EAST GEORGIA

Seed Technology:	*B2RF, B2XF, WRF, GLT, or GLB2	Row Spacing:	36
Tillage:	Conventional	Seed Per Foot:	2.50
Production:	Irrigated	Seed Per Acre:	36,300

EXPECTED INCOME	Lbs/Acre	Avg Price**	Income/Ac	Cents/Lb
	1200	0.725	\$870.00	72.50

VARIABLE COST	Unit	No. Units	Price/Unit	Cost/Acre	Cents/Lb
Land Rent	Acre	1	0.00	0.00	0.00
Crop Insurance (Excluding STAX)	Acre	1	8.00	8.00	0.67
Seed (Including Tech Fees and Seed Treatments)	1,000 seed	36.3	2.76	100.19	8.35
Lime- Custom Spread	Ton	0.33	42.00	13.86	1.16
Fertilizers					
Nitrogen	Lbs	90	0.42	37.80	3.15
Phosphate (P2O5)	Lbs	70	0.39	27.30	2.28
Potash (K2O)	Lbs	70	0.28	19.60	1.63
Chicken Litter- Custom Spread	Tons	0	44.00	0.00	0.00
Boron, Sulfur, and Others	Acre	1	5.50	5.50	0.46
Weed Control					
Pre-Plant Broadcast or PPI	Acre	1	0.00	0.00	0.00
At Planting or PRE	Acre	1	6.21	6.21	0.52
POST	Acre	1	42.25	42.25	3.52
Layby	Acre	1	15.20	15.20	1.27
Hand Weeding	Acre	1	10.00	10.00	0.83
Insect Control					
Scouting	Acre	1	10.00	10.00	0.83
In-Furrow (If no seed treatment used)	Lbs	0	0.00	0.00	0.00
Spray- Caterpillar Pests	Applications	0	0.00	0.00	0.00
Spray- Stink Bugs, Other Pests	Applications	2	4.98	9.96	0.83
Nematicide (If no seed treatment used)	Acre	1	0.00	0.00	0.00
Fungicide (If no seed treatment used)	Acre	1	0.00	0.00	0.00
PGR	Ounces	36	0.055	1.98	0.17
Defoliant and Boll Opener	Acre	1	12.01	12.01	1.00
Irrigation	Applications	8	8.25	66.00	5.50
Machinery and Equipment					
Fuel and Lube	Gal	12.96	1.90	24.62	2.05
Repairs and Maintenance	Acre	1	28.58	28.58	2.38
Custom Spray Applications	Applications	0	0.00	0.00	0.00
Custom Picking	Acre	1	0.00	0.00	0.00
Labor	LT/MT	1.65			
Interest on Operating	Months	6			
Interest on Operating	Months	6	\$463.92	0.50	6.50%
Interest on Operating	Months	6		15.08	1.26
Ginning and Warehousing					
Ginning	Lbs	1200	0.080	96.00	8.00
Other (Hauling, Etc.)	Bale	2.42	0.00	0.00	0.00
Storage and Warehousing	Bale	2.42	10.50	25.40	2.12
Promotions, Boards, Classing	Bale	2.42	5.95	14.39	1.20
Cottonseed Credit	Gin T/O	40%	0.75	-175.00	-10.94
BWEF	Bale	2.42	0.75	1.81	0.15

TOTAL VARIABLE COSTS				\$485.35	40.45
-----------------------------	--	--	--	-----------------	--------------

NET RETURN ABOVE VARIABLE COST				\$384.65	32.05
---------------------------------------	--	--	--	-----------------	--------------

Tractors and Sprayer	Acre	1	47.57	47.57	3.96
Equipment/Implements	Acre	1	16.71	16.71	1.39
Irrigation	Acre	1	125.00	125.00	10.42
Picker/BB/MB	Acre	1	72.06	72.06	6.00
Owned Land Charge	Acre	1	0.00	0.00	0.00
Misc Overhead	% of Var Costs	\$485.35	5.0%	24.27	2.02
Management	% of Var Costs	\$485.35	5.0%	24.27	2.02

TOTAL FIXED COSTS				\$309.87	25.82
--------------------------	--	--	--	-----------------	--------------

TOTAL COST				\$795.22	66.27
-------------------	--	--	--	-----------------	--------------

NET RETURN				\$74.78	6.23
-------------------	--	--	--	----------------	-------------

* This does not constitute a recommendation of technologies. These were the technologies most widely planted in GA in 2016.

** Planning or budget price based on futures prices and outlook as of February 2017. Includes adjustments for fiber quality.

Developed by Don Shurley and Amanda Smith
 February 2017

Funding support provided by the Georgia Cotton Commission



Department of Agricultural
 and Applied Economics
 College of Agricultural & Environmental Sciences
 UNIVERSITY OF GEORGIA

COTTON- Conventional Tillage, Irrigated
2017 ESTIMATED PER ACRE COSTS AND RETURNS, SOUTH AND EAST GEORGIA

PER ACRE NET RETURN ABOVE VARIABLE COST AT VARIOUS PRICES, YIELD, and RENT

Rent/Ac	0.675			0.725			0.775		
	1000	1200	1400	1000	1200	1400	1000	1200	1400
150	35.83	169.77	303.71	85.83	229.77	373.71	135.83	289.77	443.71
175	10.02	143.96	277.90	60.02	203.96	347.90	110.02	263.96	417.90
200	-15.79	118.15	252.09	34.21	178.15	322.09	84.21	238.15	392.09
225	-41.60	92.34	226.28	8.40	152.34	296.28	58.40	212.34	366.28
250	-67.42	66.52	200.46	-17.42	126.52	270.46	32.58	186.52	340.46

Acres of This Crop	1,000	Fixed Costs Per Year			Fixed Costs Share For This Crop				Repairs and Maintenance			
		New Price	% FC	Total FC	Hrs Use	FC/Hr	% Use	Hrs Use	Hrs/Ac	FC/Acre	Est RM	This Crop
Tractors												
230 HP	223000	11.61	25890	600	43.15	55	330	0.330	14.24	6000	3300	3.30
190 HP	186000	11.61	21595	600	35.99	65	390	0.390	14.04	4900	3185	3.19
110 HP	78000	11.61	9056	500	18.11	30	150	0.150	2.72	2000	600	0.60
Hi-clearance sprayer												
	195000	14.17	27632	250	110.53	60	150	0.150	16.58	5300	3180	3.18
Picker												
	465000	13.81	64217	170	377.74	100	170	0.170	64.22	12800	12800	12.80
Totals			148389				111788		111.79	31000	23065	23.07

Fuel Cost Per Gallon	\$1.90	Total Farm		Fixed Costs Per Year			Fixed Costs This Crop		Repairs and Maintenance			Fuel and Lube		
		Job or Implement- Size	Acres/Yr*	HP Used	Acres/Hr	New Price	% FC	Total FC	% Use	FC/Acre	Est RM	This Crop	Per Acre	Hrs/Ac
Disk- 30ft	4000	230	17.0	52000	12.25	6370	50	3.19	1300	650	0.65	0.059	10.12	1.30
Disk- 30ft	4000	230	17.0	52000	12.25	6370	50	3.19	1300	650	0.65	0.059	10.12	1.30
Rip and bed- 8-row	2000	230	11.5	32000	12.25	3920	50	1.96	800	400	0.40	0.087	10.12	1.92
Plant- 8 row w/PRE	2000	190	11.5	41000	12.25	5023	50	2.51	1100	550	0.55	0.087	8.36	1.59
Spray 60 ft POST 1	9800	200	40.0			0		0.00		0	0.00	0.025	8.80	0.48
Spray 60 ft POST 2	9800	200	40.0			0		0.00		0	0.00	0.025	8.80	0.48
Side dress	1400	190	12.5	17000	12.25	2083	70	1.46	425	298	0.30	0.080	8.36	1.46
Spray- Layby Directed 8 row	1400	190	12.5	12500	12.25	1531	70	0.00	315	221	0.22	0.080	8.36	1.46
Spray 60 ft- pgr	9800	200	40.0			0		0.00		0	0.00	0.025	8.80	0.48
Spray 60 ft- insecticide+pgr	9800	200	40.0			0		0.00		0	0.00	0.025	8.80	0.48
Spray 60 ft- insecticide+pgr	9800	200	40.0			0		0.00		0	0.00	0.025	8.80	0.48
Spray 60 ft- defoliate	9800	200	40.0			0		0.00		0	0.00	0.025	8.80	0.48
						0		0.00		0	0.00		0.00	
						0		0.00		0	0.00		0.00	
Picker- 6 row	1000	350	5.9									0.169	15.40	5.70
Boll Buggy	1000	190	5.9	30000	12.25	3675	100	3.68	800	800	0.80	0.169	8.36	3.10
Module Builder	1000	110	5.9	34000	12.25	4165	100	4.17	950	950	0.95	0.169	4.84	1.79
Stalk puller/chopper- 6 row	1000	230	10.5	36000	12.25	4410	100	4.41	1000	1000	1.00	0.095	10.12	2.11
						0		0.00		0	0.00		0.00	
Totals						25621		24.55	7990	5518	5.52	1.205		24.62

* All acres for the implement including multiple trips over the field. Disking 1,500 acres 2 times would be 3,000 acres total. Spraying 1,500 acres 6 times would be 9,000 acres.

Developed by Don Shurley and Amanda Smith, Department of Agricultural and Applied Economics, University of Georgia.

February 2017

ACKNOWLEDGEMENT

Thanks to County Extension Agents, UGA Cotton Team, and industry representatives for providing data, input, and review/suggestions.
 Thanks to the Georgia Cotton Commission for funding support.

