

# Cotton, Strip-Till -2021

NC STATE  
UNIVERSITY

ESTIMATED COSTS AND RETURNS PER ACRE, 2021  
900 POUND YIELD

	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	YOUR FARM
<b>1. GROSS RECEIPTS</b>					
COTTON LINT	LBS	900.00	\$0.69	\$621.00	_____
COTTON SEED	LBS	1503.00	\$0.08	\$120.24	_____
TOTAL RECEIPTS:				<b>\$741.24</b>	_____
<b>2. VARIABLE COSTS</b>					
SEED	THOU.	42.00	\$2.11	\$88.62	_____
FERTILIZER****					
NITROGEN (30% solution)	LBS	150.00	\$0.14	\$21.00	_____
DAP (18-46-0)	LBS	100.00	\$0.25	\$25.00	_____
POTASH (0-0-60)	LBS	50.00	\$0.21	\$10.50	_____
BORON	LBS	3.00	\$1.35	\$4.05	_____
SULFUR	LBS	10.00	\$0.28	\$2.80	_____
LIME (PRORATED)	TON	0.33	\$54.50	\$17.99	_____
HERBICIDES	ACRE	1.00	\$91.55	\$91.55	_____
INSECTICIDES	ACRE	1.00	\$36.54	\$36.54	_____
GROWTH REG. & DEFOLIANTS	ACRE	1.00	\$21.30	\$21.30	_____
SURFACTANT	ACRE	1.00	\$7.48	\$7.48	_____
SCOUTING	ACRE	1.00	\$16.00	\$16.00	_____
GINNING	LBS	900.00	\$0.12	\$108.00	_____
CROP INSURANCE	ACRE	1.00	\$30.00	\$30.00	_____
TRACTOR/MACHINERY	ACRE	1.00	\$55.65	\$55.65	_____
LABOR	HRS	3.22	\$12.67	\$40.80	_____
INTEREST ON OP. CAP.	DOL.	\$211.64	2.7%	\$5.76	_____
TOTAL VARIABLE COSTS:				<b>\$583.04</b>	_____
<b>3. INCOME ABOVE VARIABLE COSTS:</b>				<b>\$158.20</b>	_____
<b>4. FIXED COSTS</b>					
TRACTOR/MACHINERY	ACRE	1.00	\$138.32	\$138.32	_____
TOTAL FIXED COSTS:				<b>\$138.32</b>	_____
<b>5. OTHER COSTS</b>					
GENERAL OVERHEAD	DOL.	\$583.04	7.0%	\$40.81	_____
TOTAL OTHER COSTS:				<b>\$40.81</b>	_____
<b>6. TOTAL COSTS:</b>				<b>\$762.17</b>	_____
<b>7. NET RETURNS TO LAND, RISK, AND MANAGEMENT:</b>				<b>-\$20.93</b>	_____

## **BREAK-EVEN YIELD**

VARIABLE COSTS	675	LBS	<b><u>BREAK-EVEN PRICE</u></b>	VARIABLE COSTS	\$0.51
TOTAL COSTS	930	LBS	TOTAL COSTS	TOTAL COSTS	\$0.71

\* This budget was developed for planning purposes only and does not include storage cost, land rent, or government payments

\*Prices paid to farmers are subject to change based on global, national, and local market conditions, budget represents futures + or - local basis

\*Fertilization rates are not a recommendation but a estimate of realized cost based on: <https://articles.extension.org/sites/default/files/fertilization.pdf>

\*Machinery fixed and variable cost include cost for a cotton picker, cotton module builder, and bale hauler

\*Herbicide cost represent three sprays at retail pricing, many cotton acres are sprayed four times over depending on year, soil type, and location

COTTON - STRIP TILL						
PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR 830 LBS COTTON - CONV. TILLAGE						
MONTH	OPERATION	TIMES OVER	LABOR HOURS	MACHINE HOURS	VARIABLE COSTS	FIXED COSTS
3	*STRIP TILL RIG	1.00	0.00	0.00	\$4.11	\$9.57
3	PLANTER 8-ROW	1.00	0.15	0.14	\$6.03	\$19.12
3 thru 9	TRACTOR MTD SPRAYER 90FT	10.00	0.33	0.30	\$11.10	\$38.80
10	COTTON PICKER 6-ROW MODULE	1.00	0.29	0.26	\$10.69	\$26.96
10	COTTON PICKER 6-ROW	1.00	0.29	0.26	\$13.64	\$34.40
10	BALE HAULER	1.00	0.37	0.34	\$10.08	\$9.47
PER ACRE TOTALS FOR SELECTED OPERATIONS			1.43	1.30	\$55.65	\$138.32
UNALLOCATED LABOR(HRS./AC.)			1.79			

\*The strip till rig is being pulled in tandem with the planter therefore we assume the strip till rig does not incur the additional cost or the \*additional\* fixed and variable cost associated with a tractor

INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES						
YIELD		PRICE (\$/lbs.)				
LINT	SEED	\$0.55	\$0.62	\$0.69	\$0.76	\$0.83
		\$0.060	\$0.070	\$0.080	\$0.090	\$0.100
720	1202	-\$93.32	-\$30.90	\$31.52	\$93.94	\$156.36
810	1353	-\$45.56	\$24.67	\$94.90	\$165.13	\$235.36
900	1503	\$2.14	\$80.17	\$158.20	\$236.23	\$314.26
1035	1728	\$73.69	\$163.42	\$253.15	\$342.88	\$432.61
1125	1879	\$121.45	\$218.99	\$316.53	\$414.07	\$511.61

\*NC STATE DOES NOT ENDORSE ANY COMPANY OR CHEMICAL NAMES ASSOCIATED TO ACTIVE INGREDIENTS

\*\*CHEMICALS LISTED ARE NOT A RECOMMENDATION FOR CHEMICAL USE BUT A REPRESENTATION OF COST ASSUMPTIONS ONLY

CHEMICAL USE ASSUMPTIONS FOR 900 LBS COTTON - STRIP TILLAGE						
	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	MONTH	
<b>**HERBICIDES</b>						
flumioxazin (Valor)	OZ	2.00	\$4.50	\$9.00		MAY
2,4-D	PT	4.00	\$1.82	\$7.29		MAY
glyphosate (Roundup ultra)	QT	2.00	\$4.19	\$8.38	2X	MAY/JUN
Diuron (Direx)	PT	1.00	\$5.00	\$5.00		APR
Fomasafen (Reflex)	PT	1.50	\$8.88	\$13.32		APR
s-metolachlor (Dual Magnum EC)	PT	2.00	\$7.75	\$15.50		JUN
glufosinate (Liberty)	OZ	29.00	\$0.46	\$13.48		JUN
dicamba (Banvel)	PT	2.00	\$9.79	\$19.58		JUN
<b>**INSECTICIDES</b>						
imidacloprid (Admire Pro)	OZ	9.00	\$1.00	\$9.00		MAY
bifenthrin	OZ	6.40	\$0.82	\$5.27		JUN
acephate (Orthene)	OZ	16.00	\$0.37	\$5.86		JUN
Chlorantraniliprole (Prevathon)	OZ	14.00	\$1.17	\$16.41		JUL
<b>**GROWTH REGULATOR &amp; DEFOLIANTS</b>						
mepiquat chloride (Pix)	OZ	16.00	\$0.29	\$4.69	2X	JUN, JUL
ethephon+cyclanilide (Finish6)	QT	0.75	\$13.38	\$10.03		SEP
tribufos (Folex)	PT	1.00	\$6.58	\$6.58		SEP
TOTAL:				\$149.39		

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