## Cotton, Strip-Till -2024

NC STATE UNIVERSITY

ESTIMATED COSTS AND RETURNS PER ACRE, 2024 900 POUND YIELD

UNIT   QUANTITY   COST/UNIT   PER ACRE	YOUR
COTTON LINT COTTON SEED**** LBS 1503.00 \$0.09 \$135.27  TOTAL RECEIPTS:  ***  ***  ***  ***  ***  ***  ***	FARM
COTTON LINT COTTON SEED**** LBS 1503.00 \$0.09 \$135.27  TOTAL RECEIPTS:  ***  ***  ***  ***  ***  ***  ***	
COTTON SEED*****  TOTAL RECEIPTS:  \$846.27    Seed	
TOTAL RECEIPTS:  2. VARIABLE COSTS  SEED SEED SEED SEED SEED SEED SEED	
SEED	
SEED	
FERTILIZER****  NITROGEN (30% solution)  PHOSPHATE (DAP 18-46-0)  PHOSPHATE (DAP 18-46-0)  BORON  BORON  BULFUR  LBS  10.00  SULFUR  LBS  SULFUR  SU	
NITROGEN (30% solution) PHOSPHATE (DAP 18-46-0) PHOSPHATE (DAP 18-46-0) LBS 65.00 \$0.36 \$23.40 POTASH (10-0-60) LBS 50.00 \$0.46 \$23.00 BORON LBS 3.00 \$2.00 \$6.00 SULFUR LBS 10.00 \$0.40 \$4.00 LIME (PRORATED) TON 0.33 \$95.00 \$31.35 HERBICIDES ACRE 1.00 \$31.32 \$31.32 GROWTH REG. & DEFOLIANTS ACRE 1.00 \$27.05 \$27.05 SCOUTING ACRE 1.00 \$20.00 SULBS 90.00 \$1.15 \$27.00 \$20.00 \$20.00 GINNING***** LBS 90.00 \$0.150 \$135.00 CROP INSURANCE ACRE 1.00 \$30.00 \$30.00 \$30.00 \$30.00 \$30.00 \$146.76 \$146.76 LABOR HRS 3.71 SINCOME ABOVE VARIABLE COSTS:  \$794.47  TOTAL OTHER COSTS  GENERAL OVERHEAD DOL. \$794.47  7.0% \$55.61  TOTAL COSTS: \$55.61  \$1,099.56  \$1,099.56	
PHOSPHATE (DAP 18-46-0)	
POTASH (10-0-60) BORON BORON LBS 3.00 \$2.00 \$6.00 SULFUR LBS 10.00 \$0.40 \$4.00  LIME (PRORATED) TON 0.33 \$95.00 \$31.35 HERBICIDES ACRE 1.00 \$37.54 INSECTICIDES ACRE 1.00 \$37.54 S87.54 INSECTICIDES ACRE 1.00 \$31.32 \$31.32 GROWTH REG. & DEFOLIANTS ACRE 1.00 \$21.00 GINNING***** LBS 90.00 GINNING***** LBS 90.00 \$0.150 \$135.00 CROP INSURANCE ACRE 1.00 \$30.00 TRACTOR/MACHINERY ACRE 1.00 \$30.00 \$146.76 \$146.76 \$146.76 LABOR HRS 3.71 \$14.91 \$55.32 INTEREST ON OP. CAP. DOL. \$292.31 8.59  \$249.48  TOTAL VARIABLE COSTS:  \$51.80  TOTAL STRACTOR/MACHINERY ACRE 1.00 \$249.48 \$249.48  \$249.48  TOTAL OTHER COSTS: \$55.61  TOTAL OTHER COSTS: \$55.61  TOTAL OTHER COSTS: \$55.61	
POTASH (10-0-60) BORON BORON LBS 3.00 \$2.00 \$6.00 SULFUR LBS 10.00 \$0.40 \$4.00  LIME (PRORATED) TON 0.33 \$95.00 \$31.35 HERBICIDES ACRE 1.00 \$37.54 INSECTICIDES ACRE 1.00 \$37.54 S87.54 INSECTICIDES ACRE 1.00 \$31.32 \$31.32 GROWTH REG. & DEFOLIANTS ACRE 1.00 \$21.00 GINNING***** LBS 90.00 GINNING***** LBS 90.00 \$0.150 \$135.00 CROP INSURANCE ACRE 1.00 \$30.00 TRACTOR/MACHINERY ACRE 1.00 \$30.00 \$146.76 \$146.76 \$146.76 LABOR HRS 3.71 \$14.91 \$55.32 INTEREST ON OP. CAP. DOL. \$292.31 8.59  \$249.48  TOTAL VARIABLE COSTS:  \$51.80  TOTAL STRACTOR/MACHINERY ACRE 1.00 \$249.48 \$249.48  \$249.48  TOTAL OTHER COSTS: \$55.61  TOTAL OTHER COSTS: \$55.61  TOTAL OTHER COSTS: \$55.61	
BORON LBS 3.00 \$2.00 \$6.00 SULFUR LBS 10.00 \$0.40 \$4.00 LIME (PRORATED) TON 0.33 \$95.00 \$31.35 LIME (PRORATED) TON 0.33 \$95.00 \$32.00 \$22.00 LIME (PRORATED) TON 0.320.00 \$22.00 LIME (PRORATED) TON 0.320.00 \$20.00 LIME (PRORATED) TON 0.320.00 \$20.00 LIME (PRORATED) TON 0.320.00 \$30.00 LIME (PRORATED) TON 0.320.00 LIME (PRORATED) T	
SULFUR LBS 10.00 \$0.40 \$4.00   LIME (PRORATED) TON 0.33 \$95.00 \$31.35   HERBICIDES ACRE 1.00 \$87.54 \$87.54   INSECTICIDES ACRE 1.00 \$31.32 \$31.32   GROWTH REG. & DEFOLIANTS ACRE 1.00 \$20.00 \$20.00   GINNING***** LBS 900.00 \$0.150 \$135.00   CROP INSURANCE ACRE 1.00 \$30.00 \$30.00   TRACTOR/MACHINERY ACRE 1.00 \$146.76 \$146.76   LABOR HRS 3.71 \$14.91 \$55.32   INTEREST ON OP. CAP. DOL. \$292.31 8.5% \$24.85    TOTAL VARIABLE COSTS: \$794.47   TOTAL FIXED COSTS  GENERAL OVERHEAD DOL. \$794.47 7.0% \$55.61    TOTAL OTHER COSTS: \$55.61    TOTAL OTHER COSTS: \$55.61    \$5. TOTAL COSTS: \$1,099.56    S. TOTAL COSTS: \$55.61    S. TOTAL COSTS: \$55.61    S. TOTAL COSTS: \$51,099.56    S. TOTAL COSTS: \$1,099.56	
LIME (PRORATED) TON 0.33 \$95.00 \$31.35	
HERBICIDES   ACRE   1.00   \$87.54   \$87.54   INSECTICIDES   ACRE   1.00   \$31.32	
INSECTICIDES   ACRE   1.00   \$31.32   \$31.32   GROWTH REG. & DEFOLIANTS   ACRE   1.00   \$27.05   \$27	
GROWTH REG. & DEFOLIANTS ACRE 1.00 \$27.05 \$27.05 SCOUTING ACRE 1.00 \$20.00 \$20.00 SCOUTING SC	
SCOUTING   ACRE   1.00   \$20	
GINNING*****	
CROP INSURANCE ACRE 1.00 \$30.00 \$30.00 TRACTOR/MACHINERY ACRE 1.00 \$146.76 \$146.76 LABOR HRS 3.71 \$14.91 \$55.32 TOTAL VARIABLE COSTS: \$794.47 TOTAL FIXED COSTS  TOTAL FIXED COSTS  GENERAL OVERHEAD DOL. \$794.47 7.0% \$55.61 TOTAL OTHER COSTS: \$1,099.56 \$1,099.56 \$1,099.56 \$1,099.56 \$1,099.56 \$1,099.56 \$1.00 \$20	
TRACTOR/MACHINERY ACRE 1.00 \$146.76 \$146.76 LABOR HRS 3.71 \$14.91 \$55.32 INTEREST ON OP. CAP. DOL. \$292.31 8.5% \$24.85 INTEREST ON OP. CAP. DOL. \$794.47	
LABOR HRS 3.71 \$14.91 \$55.32	
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INTEREST ON OP. CAP. DOL. \$292.31 8.5% \$24.85	
S. INCOME ABOVE VARIABLE COSTS:   \$51.80	
### ACRE #### 1.00 \$249.48 \$249.48 ####################################	
### ACRE #### 1.00 \$249.48 \$249.48 ### TRACTOR/MACHINERY ACRE ####################################	
TRACTOR/MACHINERY ACRE 1.00 \$249.48 \$249.48  TOTAL FIXED COSTS: \$249.48  5. OTHER COSTS  GENERAL OVERHEAD DOL. \$794.47 7.0% \$55.61  TOTAL OTHER COSTS: \$1,099.56	
TOTAL FIXED COSTS:         \$249.48           5. OTHER COSTS         GENERAL OVERHEAD         DOL.         \$794.47         7.0%         \$55.61           TOTAL OTHER COSTS:         \$55.61         \$55.61         \$1,099.56	
5. OTHER COSTS  GENERAL OVERHEAD  DOL. \$794.47 7.0% \$55.61  TOTAL OTHER COSTS:  \$55.61  \$1,099.56	
GENERAL OVERHEAD         DOL.         \$794.47         7.0%         \$55.61           TOTAL OTHER COSTS:         \$55.61	
TOTAL OTHER COSTS: \$55.61  6. TOTAL COSTS: \$1,099.56	
6. TOTAL COSTS: \$1,099.56	
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7. NET RETURNS TO LAND, RISK, AND MANAGEMENT: -\$253.29	
BREAK-EVEN YIELD BREAK-EVEN PRICE	
VARIABLE COSTS 834 LBS VARIABLE COSTS	\$0.73
TOTAL COSTS 1225 LBS TOTAL COSTS	\$0.73 \$1.07

 $<sup>^{\</sup>star}$  THIS BUDGET WAS DEVELOPED FOR PLANNING PURPOSES ONLY AND DOES NOT INCLUDE LAND RENT

<sup>\*\*</sup>PRICES PAID TO FARMERS ARE SUBJECT TO CHANGE BASED ON MARKET CONDITIONS

<sup>\*\*\*</sup> LINT PRICE ASSUMES FUTURE PRICES IN DECEMBER OF THE FOLLOWING YEAR

<sup>\*\*\*\*</sup>FERTILIZATION RATES ARE AN ASSUMPTION OF REALIZED COST BASED ON REMOVAL RATES AND NC RECOMMENDATIONS OF .09 LBS N/LB LINT

<sup>\*\*\*\*\*</sup>GINNING COSTS ARE ASSUMED TO BE EQUIVILENT TO PAID MARKET PRICE FOR COTTON SEED

COTTON - CONSERVATION/STRIP TILLAGE							
PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR 900 LBS COTTON - STRIP TILLAGE							
MONTH	OPERATION	TIMES	LABOR	MACHINE	VARIABLE	FIXED	
		OVER	HOURS	HOURS	COSTS	COSTS	
4	STRIP TILL RIG	1.00	0.11	0.09	\$7.78	\$21.00	
3 thru 9	HIBOY 90'	10.00	0.24	0.20	\$44.40	\$80.00	
10	COTTON PICKER 6-ROW	1.00	0.19	0.16	\$79.62	\$120.61	
10	BALE HAULER	1.00	0.41	0.34	\$14.96	\$27.87	
PER ACRI	E TOTALS FOR						
SELECTE	D OPERATIONS		0.84	0.70	\$146.76	\$249.48	
UNALLOC	ATED LABOR(HRS./AC.)		1.05				

	INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES					
YIELD	_DPRICE (\$/lbs.)					
LINT	>>	\$0.63	\$0.71	\$0.79	\$0.87	\$0.95
	SEED>>	\$0.090	\$0.090	\$0.090	\$0.090	\$0.090
540	902	-\$319.09	-\$275.89	-\$232.69	-\$189.49	-\$146.29
720	1202	-\$205.69	-\$148.09	-\$90.49	-\$32.89	\$24.71
900	1503	-\$92.20	-\$20.20	\$51.80	\$123.80	\$195.80
1080	1804	\$21.29	\$107.69	\$194.09	\$280.49	\$366.89
1260	2104	\$134.69	\$235.49	\$336.29	\$437.09	\$537.89

<sup>\*</sup>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 REPRESENT MID RANGE COST IN NC PER ACRE

			PRICE OR	TOTAL	
	UNIT	QUANTITY	COST/UNIT	PER ACRE	MONT
HERBICIDES					
flumioxazin (Valor)	OZ	1.00	\$3.85	\$3.85	Α
2,4-D	PT	1.00	\$4.32	\$4.32	А
glyphosate (Roundup ultra)	QT	1.00	\$8.50	\$8.50	A
Fomasafen (Reflex)	PT	2.00	\$7.34	\$14.67	N
glyphosate (Roundup ultra)	QT	1.00	\$8.50	\$8.50	N
s-metolachlor (Dual Magnum EC)	PT	1.00	\$10.75	\$10.75	N
dicamba (Xtendimax)	OZ	22.00	\$0.43	\$9.45	N
glyphosate (Roundup ultra)	QT	1.00	\$8.50	\$8.50	J
glufosinate (Liberty)	OZ	32.00	\$0.59	\$19.00	J
INSECTICIDES					
imidacloprid (Admire Pro)	OZ	1.70	\$2.29	\$3.89	N
sulfoxaflor (Transform)	OZ	2.25	\$9.38	\$21.09	J
bifenthrin	OZ	2.50	\$0.94	\$2.34	Α
acephate (Orthene)	OZ	8.00	\$0.50	\$4.00	Α
GROWTH REGULATOR & DEFOLIANTS					
mepiquat chloride (Pix)	OZ	16.00	\$0.19	\$3.00	2X JUN, J
ethephon+cyclanilide (Finish6)	QT	0.75	\$17.00	\$12.75	s
tribufos (Folex)	OZ	12.00	\$0.68	\$8.20	S
thidiazuron (FreeFall)	OZ	3.20	\$0.97	\$3.10	S
TOTAL:				\$145.91	

Prepared by: Derek Washburn, Cassie Scanlan, Keith Edmiston, Wesley Everman, Guy Collins, and Dominic Reisig North Carolina State University, Dept. Agricultural and Resource Economics