## Cotton, No-Till -2024

NC STATE UNIVERSITY

ESTIMATED COSTS AND RETURNS PER ACRE, 2024 900 POUND YIELD

|                              |          |          | PRICE OR        | TOTAL          | YOUR |
|------------------------------|----------|----------|-----------------|----------------|------|
|                              | UNIT     | QUANTITY | COST/UNIT       | PER ACRE       | FARM |
| . GROSS RECEIPTS             |          |          |                 |                |      |
| COTTON LINT                  | LBS      | 900.00   | \$0.79          | \$711 00       |      |
| COTTON SEED*****             | LBS      | 1503.00  | \$0.09          | \$135.27       |      |
| COTTON SLED                  | LBS      | 1303.00  | φ0.09           | φ133.27        |      |
| TOTAL RECEIPTS:              |          |          |                 | \$846.27       |      |
| . VARIABLE COSTS             |          |          |                 |                |      |
| SEED                         | LBS      | 46.00    | \$2.77          | \$127.42       |      |
| FERTILIZER****               |          |          | ,               | ,              |      |
| NITROGEN (30% solution)      | LBS      | 180.00   | \$0.15          | \$27.00        |      |
| PHOSPHATE (DAP 18-46-0)      | LBS      | 65.00    | \$0.36          |                |      |
| POTASH (0-0-60)              | 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     | \$87.54         | \$87.54        |      |
| INSECTICIDES                 | ACRE     | 1.00     | \$31.32         | \$31.32        |      |
| GROWTH REG. & DEFOLIANTS     | ACRE     | 1.00     | \$27.05         | ψ31.32         |      |
| SCOUTING                     | ACRE     | 1.00     | \$20.00         | \$27.05        |      |
| GINNING****                  | LBS      |          |                 | φ20.00         |      |
|                              |          | 900.00   | \$0.150         | φ133.00        |      |
| CROP INSURANCE               | ACRE     | 1.00     | \$30.00         | \$30.00        |      |
| TRACTOR/MACHINERY            | ACRE     | 1.00     | \$145.29        | \$145.29       |      |
| LABOR                        | HRS      | 2.59     | \$14.91         | \$38.62        |      |
| INTEREST ON OP. CAP.         | DOL.     | 286.00   | 8.5%            | \$24.31        |      |
| TOTAL VARIABLE COSTS:        |          |          | _               | \$781.30       |      |
| INCOME ABOVE VARIABLE COSTS: |          |          |                 | \$64.97        |      |
|                              |          |          |                 | <del></del>    |      |
| FIXED COSTS                  | 4005     | 4.00     | <b>#</b> 040.70 | <b>#040.70</b> |      |
| TRACTOR/MACHINERY            | ACRE     | 1.00     | \$248.78        |                |      |
| TOTAL FIXED COSTS:           |          |          | =               | \$248.78       |      |
| OTHER COSTS                  |          |          |                 |                |      |
| GENERAL OVERHEAD             | DOL.     | 781.30   | 7.0%            | ¢54.60         |      |
| GENERAL OVERNEAD             | DOL.     | 701.30   | 1.070           |                |      |
| TOTAL OTHER COSTS:           |          |          | =               | \$54.69        |      |
| TOTAL COSTS:                 |          |          |                 | \$1,084.77     |      |
|                              | AGEMENT: |          |                 | -\$238.50      |      |

| BREAK-EVEN YIELD |      |     | BREAK-EVEN PRICE |        |
|------------------|------|-----|------------------|--------|
| VARIABLE COSTS   | 818  | LBS | VARIABLE COSTS   | \$0.72 |
| TOTAL COSTS      | 1206 | LBS | TOTAL COSTS      | \$1.06 |
|                  |      |     |                  |        |

<sup>\*</sup> THIS BUDGET WAS DEVELOPED FOR PLANNING PURPOSES ONLY AND DOES NOT INCLUDE LAND RENT

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

| COTTON - | NO-TILL          |                           |                |                 |          |       |
|----------|------------------|---------------------------|----------------|-----------------|----------|-------|
|          | PER ACRE MACHINE | RY AND LABOR REQUIREMENTS | FOR 900 LBS CO | TTON - NO TILLA | AGE      |       |
| MONTH    | OPERATION        | TIMES                     | LABOR          | MACHINE         | VARIABLE | FIXED |

<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

|  | OVER                          | HOURS                        | HOURS                        | COSTS                                   | COSTS                                     |
|--|-------------------------------|------------------------------|------------------------------|---|---|
| 4 PLANTER NO-TILL 8-ROW 3 thru 9 HIBOY 90' 10 COTTON PICKER 6-ROW 10 BALE HAULER | 1.00<br>10.00<br>1.00<br>1.00 | 0.11<br>0.24<br>0.19<br>0.41 | 0.09<br>0.20<br>0.16<br>0.34 | \$6.31<br>\$44.40<br>\$79.62<br>\$14.96 | \$20.30<br>\$80.00<br>\$120.61<br>\$27.87 |
| PER ACRE TOTALS FOR<br>SELECTED OPERATIONS<br>UNALLOCATED LABOR(HRS./AC.)        |                               | 0.95<br>1.19                 | 0.79                         | \$145.29                                | \$248.78                                  |

|       | INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES |           |           |           |           |           |  |  |
|-------|--|-----------|-----------|-----------|-----------|-----------|--|--|
| YIELD | PRICE (\$/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  | -\$305.92 | -\$262.72 | -\$219.52 | -\$176.32 | -\$133.12 |  |  |
| 720   | 1202   | -\$192.52 | -\$134.92 | -\$77.32  | -\$19.72  | \$37.88   |  |  |
| 900   | 1503   | -\$79.03  | -\$7.03   | \$64.97   | \$136.97  | \$208.97  |  |  |
| 1080  | 1804   | \$34.46   | \$120.86  | \$207.26  | \$293.66  | \$380.06  |  |  |
| 1260  | 2104   | \$147.86  | \$248.66  | \$349.46  | \$450.26  | \$551.06  |  |  |

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

<sup>\*\*</sup>CHEMICALS LISTED ARE NOT A RECOMMENDATION FOR CHEMICAL USE BUT A REPRESENT MID RANGE COST IN NC PER ACRE

| CHEMICAL USE ASSUMPTIONS FOR 900 LBS COTTON - NO TILLAGE |      |          |           |          |             |  |
|--|------|----------|-----------|----------|-------------|--|
|  |      |          | PRICE OR  | TOTAL    |             |  |
|  | UNIT | QUANTITY | COST/UNIT | PER ACRE | MONTH       |  |
| **HERBICIDES   |      |          |           |          |             |  |
| flumioxazin (Valor)                                      | OZ   | 1.00     | \$3.85    | \$3.85   | APF         |  |
| 2,4-D  | PT   | 1.00     | \$4.32    | \$4.32   | APF         |  |
| glyphosate (Roundup ultra)                               | QT   | 1.00     | \$8.50    | \$8.50   | APF         |  |
| Fomasafen (Reflex)                                       | PT   | 2.00     | \$7.34    | \$14.67  | MA          |  |
| glyphosate (Roundup ultra)                               | QT   | 1.00     | \$8.50    | \$8.50   | MA          |  |
| s-metolachlor (Dual Magnum EC)                           | PT   | 1.00     | \$10.75   | \$10.75  | MA          |  |
| dicamba (Xtendimax)                                      | OZ   | 22.00    | \$0.43    | \$9.45   | MA          |  |
| glyphosate (Roundup ultra)                               | QT   | 1.00     | \$8.50    | \$8.50   | JUL         |  |
| glufosinate (Liberty)                                    | OZ   | 32.00    | \$0.59    | \$19.00  | JUN         |  |
| **INSECTICIDES   |      |          |           |          |             |  |
| imidacloprid (Admire Pro)                                | OZ   | 1.70     | \$2.29    | \$3.89   | MA          |  |
| sulfoxaflor (Transform)                                  | OZ   | 2.25     | \$9.38    | \$21.09  | JUI         |  |
| bifenthrin   | OZ   | 2.50     | \$0.94    | \$2.34   | AUC         |  |
| acephate (Orthene)                                       | OZ   | 8.00     | \$0.50    | \$4.00   | AUC         |  |
| **GROWTH REGULATOR & DEFOLIANTS                          |      |          |           |          |             |  |
| mepiquat chloride (Pix)                                  | OZ   | 16.00    | \$0.19    | \$3.00   | 2X JUN, JUI |  |
| ethephon+cyclanilide (Finish6)                           | QT   | 0.75     | \$17.00   | \$12.75  | SEF         |  |
| tribufos (Folex)   | OZ   | 12.00    | \$0.68    | \$8.20   | SEI         |  |
| thidiazuron (FreeFall)                                   | OZ   | 3.20     | \$0.97    | \$3.10   | SEF         |  |
| TOTAL:   |      |          |           | \$145.91 |             |  |

## FERT:

NUM 7.0

34.0 38.0 36.0 44.0 37.1 40.0 https://www.extension.org/sites/default/files/fertilization.pdf

http://content.ces.ncsu.edu/20688.pdf

R.Y.E.- realistic yield expectations, best 3 of 5 year yielchttp://yiel

RATE: .09 X lbs of lint

| lbs of N | needed |    | lbs of P |
|----------|--------|----|----------|
| 54       |        | 81 |          |
| 11.7     | •      |    |          |
| 65.7     | •      |    |          |

| EQUIP |
|-------|
| NUM   |
| 65    |
| 7     |
| 6     |
| 124   |
|       |
|       |
|       |
|       |

 $https://www.clemson.edu/extension/county/hampton/programs/row\_crops/Cotton/mikemarshall.pdf \\ http://extension.uga.edu/publications/detail.cfm?number=C952$