

Tobacco, Machine Harvest & Machine Top-2023

NC STATE
UNIVERSITY

ESTIMATED COSTS AND RETURNS PER ACRE, 2023

| | UNIT | QUANTITY | PRICE OR COST/UNIT | TOTAL PER ACRE | YOUR FARM |
|--|-------------------|------------|-----------------------|-------------------|--------------|
| 1. GROSS RECEIPTS | | | | | |
| Stalk Position | | | | | |
| | Lugs LBS | 0.00 | \$0.00 | \$0.00 | _____ |
| | Cutter LBS | 0.00 | \$0.00 | \$0.00 | _____ |
| | Leaf and Tips LBS | 0.00 | \$0.00 | \$0.00 | _____ |
| TOTAL RECEIPTS: | | 0.00 | | \$0.00 | _____ |
| 2. VARIABLE COSTS | | | | | |
| PLANTS (GREENHOUSE) | THOU. | 6.00 | \$45.00 | \$270.00 | _____ |
| MULTIPURPOSE FUMIGATION FERTILIZER | GAL | 8.00 | \$30.00 | \$240.00 | _____ |
| 30% NITROGEN SOLUTION | CWT | 2.30 | \$36.00 | \$82.80 | _____ |
| 0-0-50 POTASSIUM SULFATE | CWT | 2.60 | \$51.25 | \$133.25 | _____ |
| 9-45-15 TRANSPLANT STARTER | LBS | 11.00 | \$2.13 | \$23.43 | _____ |
| LIME (PRORATED) | TON | 0.33 | \$57.00 | \$18.81 | _____ |
| HERBICIDES | ACRE | 1.00 | \$77.29 | \$77.29 | _____ |
| INSECTICIDES | ACRE | 1.00 | \$67.60 | \$67.60 | _____ |
| FUNGICIDES | ACRE | 1.00 | \$52.25 | \$52.25 | _____ |
| SUCKER CONTROL | ACRE | 1.00 | \$218.09 | \$218.09 | _____ |
| SURFACTANT | ACRE | 1.00 | \$20.76 | \$20.76 | _____ |
| SCOUTING | ACRE | 1.00 | \$50.00 | \$50.00 | _____ |
| CURING FUEL | GAL | 390.00 | \$1.73 | \$674.70 | _____ |
| ELECTRICITY | KWH | 1580.00 | \$0.10 | \$158.00 | _____ |
| HAULING | LBS | 2400.00 | \$0.050 | \$120.00 | _____ |
| COVER CROP | ACRE | 1.00 | \$50.00 | \$50.00 | _____ |
| BAILING SUPPLIES | LBS | 2400.00 | \$0.003 | \$7.20 | _____ |
| CROP INSURANCE | ACRE | 1.00 | \$120.00 | \$120.00 | _____ |
| TRACTOR/MACHINERY LABOR | ACRE | 1.00 | \$403.03 | \$403.03 | _____ |
| Pre-Harvest | HRS | 27.00 | \$14.16 | \$382.32 | _____ |
| Harvest/Bailing | HRS | 16.00 | \$14.16 | \$226.56 | _____ |
| Post Harvest | HRS | 5.00 | \$14.16 | \$70.80 | _____ |
| INTEREST ON OP. CAP. | DOL. | \$1,168.50 | 8.0% | \$93.48 | _____ |
| TOTAL VARIABLE COSTS: | | | | \$3,560.37 | _____ |
| 3. INCOME ABOVE VARIABLE COSTS: | | | | | |
| 4. FIXED COSTS | | | | | |
| TRACTOR/MACHINERY | ACRE | 1.00 | \$468.08 | \$468.08 | _____ |
| BULK BARN | ACRE | 1.00 | \$132.58 | \$132.58 | _____ |
| TOBACCO BOX LOADING SYSTEM | ACRE | 1.00 | \$38.75 | \$38.75 | _____ |
| BAILER | ACRE | 1.00 | \$7.50 | \$7.50 | _____ |
| H2A OVERHEAD | ACRE | 1.00 | \$206.00 | \$206.00 | _____ |
| TOTAL FIXED COSTS: | | | | \$852.91 | _____ |
| 5. TOTAL COSTS: | | | | \$4,413.28 | _____ |
| 6. NET RETURNS TO LAND, RISK, AND MANAGEMENT: | | | | | |

* CROP INSURANCE: 65% BASED PREMIUM. NO DISASTER SUBSIDIES.

* PLEASE NOTE: THIS BUDGET IS FOR PLANNING PURPOSES ONLY, IT DOES NOT INCLUDE LAND RENT

| TOBACCO - MACHINE HARVEST MACHINE TOP | | | | | | |
|---|---|------------|-------------|---------------|----------------|-------------|
| PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR MACHINE HARVEST TOBACCO | | | | | | |
| MONTH | OPERATION | TIMES OVER | LABOR HOURS | MACHINE HOURS | VARIABLE COSTS | FIXED COSTS |
| 11,3 | HEAVY DISK 20' | 2.00 | 0.24 | 0.20 | \$9.22 | \$16.00 |
| 3 | FUMIGATION UNIT | 1.00 | 0.52 | 0.43 | \$11.46 | \$30.89 |
| 3 | TOBACCO BEDDER 4-ROW | 1.00 | 0.19 | 0.16 | \$1.94 | \$2.03 |
| 4 | TOBACCO BED SHAPER 4-ROW | 1.00 | 0.19 | 0.16 | \$1.84 | \$1.85 |
| 4 | TOBACCO TRANSPLANTER 4-ROW | 1.00 | 1.06 | 0.88 | \$26.50 | \$32.15 |
| 4,5 | CULTIVATOR 4-ROW | 2.00 | 0.55 | 0.46 | \$7.24 | \$8.72 |
| 5 thru 8 | HIBOY 90' | 6.00 | 0.22 | 0.18 | \$36.66 | \$43.20 |
| 5 | TOBACCO TOPPER 2-ROW | 6.00 | 6.19 | 5.16 | \$73.80 | \$85.44 |
| | PRE-HARVEST TOTAL | | 9.16 | | | |
| 7,8,9 | TOBACCO PICKER 2-ROW | 4.00 | 4.42 | 3.68 | \$169.04 | \$162.24 |
| 7,8,9 | TOBACCO TRAILER | 3.00 | 9.29 | 7.74 | \$63.54 | \$83.04 |
| 9 | BUSHHOG 14' | 1.00 | 0.18 | 0.15 | \$1.79 | \$2.52 |
| | PER-ACRE HARVEST TOTAL | | 13.89 | | | |
| | PER ACRE TOTALS FOR SELECTED OPERATIONS | | 23.05 | 19.20 | \$403.03 | \$468.08 |

| CHEMICAL USE ASSUMPTIONS FOR MACHINE HARVEST TOBACCO | | | | | |
|--|------|----------|--------------------|----------------|-------|
| | UNIT | QUANTITY | PRICE OR COST/UNIT | TOTAL PER ACRE | MONTH |
| HERBICIDES: | | | | | |
| clomazone (Command) | PT | 2.00 | \$14.13 | \$28.25 | MAR |
| Sulfentrazone (Spartan) | OZ | 5.00 | \$1.71 | \$8.54 | MAR |
| napropamide (Devrinol) | QT | 3.00 | \$13.50 | \$40.50 | MAR |
| SUCKER CONTROL: | | | | | |
| octanol and 1 decanol | GAL | 7.00 | \$24.73 | \$173.08 | JUL |
| Prime + | QT | 2.00 | \$15.31 | \$30.63 | JUL |
| maleic hydrazide | GAL | 1.00 | \$14.38 | \$14.38 | JUL |
| INSECTICIDES: | | | | | |
| imidacloprid (Admire Pro) | OZ | 6.00 | \$1.31 | \$7.88 | APRIL |
| spinosad (Blackhawk) | OZ | 5.50 | \$7.03 | \$38.67 | JUNE |
| indoxacarb (Steward) | OZ | 11.00 | \$1.91 | \$21.05 | JUNE |
| FUNGICIDES: | | | | | |
| mefenoxam + oxathiapoprolin (4+4) | OZ | 8.00 | \$5.50 | \$44.00 | JUNE |
| Fluopicolide (Presidio) | OZ | 4.00 | \$2.06 | \$8.25 | JUNE |
| TOTAL: | | | | \$415.23 | |

Prepared by: Gary Bullen, Derek Washburn, Matthew Vann
North Carolina State University, Dept. Agricultural and Resource Economics