

Tomato, Budget - 2021

NC STATE
UNIVERSITY

ESTIMATED COSTS AND RETURNS PER ACRE, 2021

Yield 42,000 lbs per acre, 5' rows on center and 18" plant spacing
1 box of Tomatoes = 25lbs

	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	YOUR FARM
1. GROSS RECEIPTS					
Projected Yields =%80 base yield:					
Jumbo and XL Fruit (40%)	LBS	16800.00	\$0.48	\$8,064.00	_____
Large (40%)	LBS	16800.00	\$0.46	\$7,728.00	_____
Medium and Small (20%)	LBS	8400.00	\$0.44	\$3,696.00	_____
AVERAGE:					
TOTAL RECEIPTS:		42,000.00	\$0.46	\$19,488.00	_____
2. VARIABLE COSTS					
TOMATO TRANSPLANTS (FLAT OF 72)	EACH	67.00	\$10.35	\$693.45	_____
FERTILIZER					
6-3-18	LBS	800.00	\$0.13	\$104.00	_____
13-0-44 POTASSIUM NITRATE	LBS	275.00	\$0.51	\$140.25	_____
CN-9 9-0-0	GAL	40.00	\$1.78	\$71.20	_____
LIME SPREAD	TON	1.50	\$54.50	\$81.75	_____
HERBICIDES	ACRE	1.00	\$159.25	\$159.25	_____
INSECTICIDES	ACRE	1.00	\$76.88	\$76.88	_____
FUNGICIDES	ACRE	1.00	\$568.67	\$568.67	_____
HAULING	LBS	0.00	\$0.00	\$0.00	_____
COVER CROP- RYE	BU.	1.50	\$19.50	\$29.25	_____
PLASTIC WITH IRRIGATION	FOOT	8405.00	\$0.09	\$756.45	_____
REPLACEMENT STAKES*	STAKE	550.00	\$0.66	\$363.00	_____
STRING/TWINE	BOX	2.00	\$5.90	\$11.80	_____
TOMATO 25 LB. BOX*	BOX	1680.00	\$1.50	\$2,520.00	_____
CROP INSURANCE	ACRE	1.00	\$588.00	\$588.00	_____
GROWER INCOME INSURANCE	ACRE	1.00	\$30.00	\$30.00	_____
TRACTOR/MACHINERY	ACRE	1.00	\$84.42	\$84.42	_____
LABOR					
Drip Irrigation	HRS	3.00	\$12.67	\$38.01	_____
Planting	HRS	16.00	\$12.67	\$202.72	_____
Staking	HRS	14.00	\$12.67	\$177.38	_____
Stringing	HRS	25.00	\$12.67	\$316.75	_____
Backpack spraying	HRS	6.00	\$12.67	\$76.02	_____
Pruning/Suckering	HRS	15.00	\$12.67	\$190.05	_____
Picking	BOX	1680.00	\$2.50	\$4,200.00	_____
Packing	HRS	170.00	\$12.67	\$2,153.90	_____
Post-Harvest Clean Up	CONTRACT	1.00	\$400.00	\$400.00	_____
INTEREST ON OP. CAP.	DOL.	\$5,042.16	2.7%	\$137.15	_____
TOTAL VARIABLE COSTS:				\$14,170.35	_____
3. INCOME ABOVE VARIABLE COSTS:				\$5,317.65	_____
4. FIXED COSTS					
TRACTOR/MACHINERY	ACRE	1.00	\$131.11	\$131.11	_____
IRRIGATION	ACRE	1.00	\$63.50	\$63.50	_____
H2A OVERHEAD	ACRE	1.00	\$206.00	\$206.00	_____
GENERAL OVERHEAD	DOL.	\$14,170.35	7.0%	\$991.92	_____
TOTAL FIXED COSTS:				\$1,392.53	_____
6. TOTAL COSTS:				\$15,562.88	_____
7. NET RETURNS TO LAND, RISK, AND MANAGEMENT:				\$3,925.12	_____
BREAK-EVEN YIELD		BREAK-EVEN PRICE			
VARIABLE COSTS		30539.55	VARIABLE COSTS		\$0.34
TOTAL COSTS		33540.69	TOTAL COSTS		\$0.37

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

*Stake cost does not include initial fixed cost of stakes

* Tomatoes will be packaged in 25 lb. box. Cannot reuse old boxes.

INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES										
PRICES RECEIVED		\$0.32	\$0.39	\$0.46	\$0.53	\$0.60				
LBS TOMATOS PER ACRE										
29400.00	\$	(1,959.06)	\$	87.18	\$	2,133.42	\$	4,179.66	\$	6,225.90
35700.00	\$	(1,243.91)	\$	1,240.82	\$	3,725.54	\$	6,210.26	\$	8,694.98
42000.00	\$	(528.75)	\$	2,394.45	\$	5,317.65	\$	8,240.85	\$	11,164.05
48300.00	\$	186.40	\$	3,548.09	\$	6,909.77	\$	10,271.45	\$	13,633.13
54600.00	\$	901.56	\$	4,701.72	\$	8,501.88	\$	12,302.04	\$	16,102.20

TOMATO - HAND HARVEST						
PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR HAND HARVEST TOMATO						
MONTH	OPERATION	TIMES OVER	LABOR HOURS	MACHINE HOURS	VARIABLE COSTS	FIXED COSTS
3,11	HEAVY DISK 13'	3.00	0.56	0.51	\$11.91	\$14.28
3	1-BOTTOM PLOW	1.00	0.55	0.50	\$7.43	\$7.02
3	MULCH BEDDER-LAYER W/ FUMIGANT	1.00	0.57	0.52	\$10.50	\$13.59
3 thru 8	TRACTOR MTD SPRAYER PROD 3-ROW	16.00	1.36	2.40	\$39.68	\$73.76
3	TRACTOR MTD SPRAYER 30 FT	1.00	1.36	0.08	\$2.41	\$6.64
3 thru 8	24 FOOT BOX TRUCK	1.00	0.48	0.44	\$3.92	\$6.18
9	MULCH LIFTER	1.00	0.57	0.52	\$6.65	\$7.54
9	SPREADER/SEEDER 3PH	2.00	0.22	0.20	\$1.92	\$2.10
PER ACRE TOTALS FOR SELECTED OPERATIONS			5.67	5.17	\$84.42	\$131.11

CHEMICAL USE ASSUMPTIONS FOR HAND HARVEST TOMATO					
	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	MONTH
HERBICIDES					
metribuzin (Sencor)	LB	2.00	\$66.48	\$132.96	MAR
Fomasafen (Reflex)	PT	1.00	\$8.88	\$8.88	MAR
metolachlor (Dual)	PT	1.33	\$13.09	\$17.41	MAR
INSECTICIDES:					
imidacloprid (Admire Pro)	OZ	9.00	\$1.00	\$9.00	2 X (MAR & MAY)
dicofof	PT	1.50	\$4.56	\$6.83	MAY
spinetoram (Radiant)	OZ	5.00	\$5.90	\$29.49	JUNE
rynaxapyr (Coragen)	OZ	3.50	\$7.84	\$27.44	JUNE
pyrethroid (bifenthrin)	OZ	5.00	\$0.82	\$4.12	JULY
FUNGICIDES:					
copper diammonia diacetate (copper)	PT	15.00	\$2.50	\$37.50	5 X (MAR-JUL)
mancozeb (Manzate)	LB	12.00	\$3.04	\$36.48	8 X (MAR-JUL)
acibenzolar (actiguard)	OZ	2.00	\$55.00	\$110.00	4 X (MAR-JUL)
azoxystrobin (Quadris)	OZ	18.60	\$3.01	\$55.96	3 X (MAR-SEP)
difenoconazole, cyprodinil (Inspire Super)	OZ	54.00	\$2.48	\$133.73	3 X (MAR-SEP)
penthiopyrad (Fontelis)	OZ	48.00	\$1.86	\$89.25	3 X (MAR-SEP)
cyazofamid (ranman)	OZ	7.50	\$10.00	\$75.00	3 X (JUN- SEP)
chlorothalonil (Bravo)	PT	6.00	\$5.13	\$30.75	3 X (JUN- SEP)
FUMIGANTS:					
chloropicrin (Chlor-O-Pic)	LB	264.00	\$1.87	\$493.68	MAR
TOTAL:				\$1,298.48	

Prepared by:
North Carolina State University, Dept. Agricultural and Resource Economics