

# CLEMSON

## EXTENSION

Department of Applied Economics and Statistics

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### TOMATOES - ON PLASTIC - DRIP IRRIGATION

ESTIMATED COSTS AND RETURNS PER ACRE, 2008/2009  
1500 BOXES (A BOX CONTAINS 25 LBS)

	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	YOUR FARM
<b>1. GROSS RECEIPTS</b>					
TOMATOES	BOX	1500.00	\$12.00	\$18,000.00	_____
TOTAL RECEIPTS:				<b>\$18,000.00</b>	_____
<b>2. VARIABLE COSTS</b>					
SEEDLINGS 1"	EACH	4200.00	\$0.10	\$420.00	_____
FERTILIZER					
10-8-20	CWT	14.00	\$17.13	\$239.82	_____
CALCIUM NITRATE	CWT	2.00	\$18.50	\$37.00	_____
LIME (PRORATED)	TON	0.50	\$52.50	\$26.25	_____
HERBICIDES	ACRE	1.00	\$12.36	\$12.36	_____
INSECTICIDES	ACRE	1.00	\$101.58	\$101.58	_____
FUNGICIDES	ACRE	1.00	\$66.89	\$66.89	_____
FUMIGANTS	ACRE	1.00	\$1,116.00	\$1,116.00	_____
HARVEST LABOR	HRS	130.00	\$7.50	\$975.00	_____
PLASTIC MULCH - 60 INCH	FT.	7200.00	\$0.05	\$360.00	_____
STAKES & TWINE	ACRE	1.00	\$350.00	\$350.00	_____
DRIP TAPE & ACCESSORIES	ACRE	1.00	\$250.00	\$250.00	_____
IRRIGATION, MACHINERY & LABOR	ACRE	1.00	\$186.81	\$186.81	_____
HARVEST BUCKETS	EACH	5.00	\$6.50	\$32.50	_____
HAND HARVEST	BOX	1500.00	\$1.10	\$1,650.00	_____
MARKETING	BOX	1500.00	\$0.55	\$825.00	_____
CUSTOM PACK & MARKET	BOX	1500.00	\$3.00	\$4,500.00	_____
BULK BINS	EACH	5.00	\$15.00	\$75.00	_____
TRACTOR/MACHINERY	ACRE	1.00	\$73.12	\$73.12	_____
LABOR	HRS	16.83	\$6.50	\$109.40	_____
INTEREST ON OP. CAP.	DOL.	\$2,107.42	9.0%	\$189.67	_____
TOTAL VARIABLE COSTS:				<b>\$11,596.40</b>	_____
<b>3. INCOME ABOVE VARIABLE COSTS:</b>				<b>\$6,403.60</b>	_____
<b>4. FIXED COSTS</b>					
TRACTOR/MACHINERY	ACRE	1.00	\$133.50	\$133.50	_____
IRRIGATION	ACRE	1.00	\$84.93	\$84.93	_____
TOTAL FIXED COSTS:				<b>\$218.43</b>	_____
<b>5. OTHER COSTS</b>					
LAND RENT	ACRE	1.00	\$25.00	\$25.00	_____
GENERAL OVERHEAD	DOL.	\$11,596.40	9.0%	\$1,043.68	_____
TOTAL OTHER COSTS:				<b>\$1,068.68</b>	_____
<b>6. TOTAL COSTS:</b>				<b>\$12,883.51</b>	_____
<b>7. NET RETURNS TO RISK AND MANAGEMENT:</b>				<b>\$5,116.49</b>	_____

#### BREAK-EVEN YIELD

VARIABLE COSTS 629 BOX  
TOTAL COSTS 762 BOX

#### BREAK-EVEN PRICE PER BOX

VARIABLE COSTS \$7.73  
TOTAL COSTS \$8.59

\* PLEASE NOTE: THIS BUDGET IS FOR PLANNING PURPOSES ONLY.

\*\* BASED ON IMPROVED PRODUCTION PRACTICES FOR COMMERCIAL PRODUCERS.

\*\*\* HARVEST: 80% JUNE AND 20% JULY

TOMATOES - ON PLASTIC - DRIP IRRIGATION						
PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR TOMATOES ON PLASTIC						
MONTH	OPERATION	TIMES OVER	LABOR HOURS	MACHINE HOURS	VARIABLE COSTS	FIXED COSTS
1	CHISEL PLOW 12'	1.00	0.22	0.20	\$2.43	\$3.10
1	HEAVY DISK 14'	1.00	0.17	0.15	\$2.67	\$3.92
2	SUBSOILER BEDDER 2-ROW	1.00	0.50	0.45	\$3.85	\$5.09
5	TRACTOR MTD SPRAYER	1.00	0.18	0.16	\$1.14	\$1.64
3	TOMATO TRANSPLANTER 3-ROW	1.00	2.27	2.06	\$19.22	\$42.66
3	MULCH BEDDER-LAYER	1.00	0.57	0.52	\$7.19	\$10.00
2	SIDEDRESSER 2-ROW	1.00	0.62	0.56	\$4.52	\$4.95
2	FERTILIZER SPREADER	1.00	0.13	0.12	\$1.38	\$4.12
4,5,6&7	HIBOY	11.00	0.73	0.66	\$17.49	\$37.84
10	GRAIN DRILL 8'	1.00	0.32	0.29	\$3.15	\$4.64
3,4,6,7&8	TRUCK 1.5 TON	7.00	1.77	1.61	\$10.08	\$15.54
PER ACRE TOTALS FOR SELECTED OPERATIONS			7.48	6.78	\$73.12	\$133.50
UNALLOCATED LABOR(HRS./AC.)			9.35			

Note: Seventeen inches of water is applied using a 10 acre drip irrigation system. The variable cost includes provisions for the annual replacement of 62,228 feet of 0.38 gpm drip tape at \$0.02 per foot and other items that are replaced annually. The fixed cost includes the well, a 36 gpm pump and other items that do not have to be replaced annually.

INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES					
YIELD	PRICE PER BOX				
BOXES	\$9.60	\$10.80	\$12.00	\$13.20	\$14.40
1200	\$1,318.60	\$2,758.60	\$4,198.60	\$5,638.60	\$7,078.60
1350	\$2,061.10	\$3,681.10	\$5,301.10	\$6,921.10	\$8,541.10
1500	\$2,803.60	\$4,603.60	\$6,403.60	\$8,203.60	\$10,003.60
1650	\$3,546.10	\$5,526.10	\$7,506.10	\$9,486.10	\$11,466.10
1800	\$4,288.60	\$6,448.60	\$8,608.60	\$10,768.60	\$12,928.60

CHEMICAL USE ASSUMPTIONS FOR TOMATOES ON PLASTIC					
	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	MONTH
HERBICIDES					
metribuzin (Lexone)	LB	0.67	\$18.45	\$12.36	1X APR
INSECTICIDES					
spinosad (Spintor)	OZ	12.00	\$4.32	\$51.89	1X APR, 1X MAY
esfenvalerate (Asana)	OZ	38.40	\$0.69	\$26.60	2X MAY, 2X JUN
lambda-cyhalothrin (Warrior T)	OZ	11.52	\$2.00	\$23.09	2X JUN, 1X JUL
FUNGICIDES					
cupric hydroxide (Kocide)	LB	8.00	\$2.84	\$22.72	2X MAY, 1X JUN
chlorothalonil (Bravo)	PT	3.00	\$3.56	\$10.69	2X JUN
mancozeb (Manzate)	LB	13.50	\$2.48	\$33.48	2X APR, 3X MAY, 2X JUN
FUMIGANTS					
methyl bromide+chloropicrin (Terr-O-Gas)	LB	400.00	\$2.79	\$1,116.00	1X FEB
TOTAL:				\$1,296.83	

The above listed chemicals are examples and do not imply exclusive recommendations by Clemson University. The "Vegetable Crop Guidelines for the Southeastern US" must be consulted. Production assumptions provided by Richard Hassel, (843) 402-5394, rhassel@clemson.edu.

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