

Sweet Potato - 2020

ESTIMATED COSTS PER ACRE Variety: Covington
Yield (BU./Ac): 500

	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	YOUR FARM
1. GROSS RECEIPTS					
		Yield	Price/BU		
Sweet Potato GRADE	BU. 50lbs				
# 1's	BU.	335.00	\$10.00	\$3,350.00	
Lower Grade	BU.	150.00	\$5.00	\$750.00	
Average Price per Bushel	BU		\$8.20		
TOTAL RECEIPTS:				\$4,100.00	
2. VARIABLE COSTS					
PLANTS / SLIPS	THOU.	12.50	\$40.00	\$500.00	
FERTILIZER					
24S LIQUID	LBS	80.00	\$0.68	\$54.40	
PHOSPHATE (0-46-0)	LBS	57.50	\$0.32	\$18.40	
POTASH (0-0-60)	LBS	160.00	\$0.20	\$32.00	
LIME (PRORATED)	TON	0.33	\$46.00	\$15.18	
PESTICIDE					
MULTIPURPOSE FUMIGATION	PER ACRE	1.00	\$147.06	\$147.06	
HERBICIDES	PER ACRE	1.00	\$51.00	\$51.00	
NEMATACIDES	PER ACRE	1.00	\$54.14	\$54.14	
INSECTICIDES	PER ACRE	1.00	\$43.88	\$43.88	
TRACTOR/MACHINERY	PER ACRE	1.00	\$88.53	\$88.53	
SCOUTING	PER ACRE	1.00	\$20.00	\$20.00	
LABOR					
TRANSPLANT	HRS	10.00	\$12.67	\$126.70	
HAND WEEDING	HRS	2.00	\$12.67	\$25.34	
TRACTOR/MACHINERY	HRS	7.13	\$12.67	\$90.34	
HARVEST COST	BUSHEL	500.00	\$1.50	\$750.00	
STORAGE	BUSHEL	500.00	\$1.00	\$500.00	
COVER CROP	PER ACRE	1.00	\$50.00	\$50.00	
INTEREST ON OP. CAP.	DOL.	\$1,283.49	5.0%	\$64.17	
TOTAL VARIABLE COSTS:				\$2,631.14	
3. INCOME ABOVE VARIABLE COSTS:				\$1,468.86	
4. FIXED COSTS					
TRACTOR/MACHINERY	PER ACRE	1.00	\$88.53	\$88.53	
TOTAL FIXED COSTS:				\$88.53	
5. OTHER COSTS					
GENERAL OVERHEAD	DOL.	\$2,631.14	7.0%	\$184.18	
TOTAL OTHER COSTS:				\$184.18	
6. TOTAL COSTS:				\$2,903.85	
7. NET RETURNS TO LAND, RISK, AND MANAGEMENT:				\$1,196.15	

<u>BREAK-EVEN YIELD</u>			<u>BREAK-EVEN PRICE</u>		
VARIABLE COSTS	311 BU.	15.6 Bins	VARIABLE COSTS	\$5.43 per BU.	\$108.50 / Bin
TOTAL COSTS	344 BU.	17.2 Bins	TOTAL COSTS	\$5.99 per BU.	\$119.75 / Bin

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

Notes: N based on 2019 SE Vegetable Handbook. P & K based on Eastern NC removal rates. Assuming 500/lb acre yield with packout of 67% #1 Grade, 30% Lower Grade, and 3% Culls. Interest on operating capital assumes an average loan length of 6 months. Storage bins included in harvest and storage cost

PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR SWEET POTATOES

MONTH	OPERATION	TIMES OVER	LABOR HOURS	MACHINE HOURS	VARIABLE COSTS	FIXED COSTS
APR, SEP	HEAVY DISK 16'	3.00	0.40	0.36	\$10.41	\$15.06
MAY	DISK W/ SPRAYER 21'	1.00	0.13	0.12	\$3.02	\$4.12
MAY	SUBSOILER-BEDDER 8-ROW	1.00	0.13	0.12	\$4.51	\$5.04
MAY	BED SHAPER 4-ROW	1.00	0.18	0.16	\$1.80	\$2.12
MAY	POTATO PLANTER (SWEET)	1.00	0.43	0.39	\$6.06	\$11.02
MAY(2), JUN	CULTIVATOR 4-ROW	3.00	0.76	0.69	\$10.38	\$12.03
JUN	TRACTOR MTD SPRAYER 90FT	3.00	0.10	0.09	\$3.33	\$11.64
AUG	ROTARY MOWER 14'	1.00	0.17	0.15	\$1.66	\$2.48
AUG	POTATO DIGGER (SWEET)	1.00	0.87	0.79	\$11.87	\$25.02
PER ACRE TOTALS FOR SELECTED OPERATIONS			3.17	2.87	\$53.04	\$88.53
UNALLOCATED LABOR(HRS./AC.)			3.96			

INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES

YIELD BU. / Ac.	PRICE (\$/BU.)			YIELD Bins / Ac.	PRICE (\$/Bin)		
	\$4.00	\$8.00	\$12.00		\$80.00	\$160.00	\$240.00
300	-\$1,431.14	-\$231.14	\$968.86	15	-\$1,431.14	-\$231.14	\$968.86
400	-\$1,031.14	\$568.86	\$2,168.86	20	-\$1,031.14	\$568.86	\$2,168.86
500	-\$631.14	\$1,368.86	\$3,368.86	25	-\$631.14	\$1,368.86	\$3,368.86
600	-\$231.14	\$2,168.86	\$4,568.86	30	-\$231.14	\$2,168.86	\$4,568.86
700	\$168.86	\$2,968.86	\$5,768.86	35	\$168.86	\$2,968.86	\$5,768.86

Note: 1 Bin = 20 Bushels

CHEMICAL USE ASSUMPTIONS FOR SWEET POTATOES

	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	MONTH
MULTIPURPOSE FUMIGATION:					
dichloropropene (Telone II)	GAL	9.00	\$16.34	\$147.06	MAY
HERBICIDES:					
flumioxazin (Valor)	OZ	3.00	\$4.50	\$13.50	MAY
clomazone (Command)	PT	2.50	\$15.00	\$37.50	MAY
metolachlor (Dual II)	PT	0.75	\$15.77	\$11.82	MAY
INSECTICIDES					
bifenthrin	OZ	28.00	\$0.82	\$23.07	MAY, JUNE
chlorpyrifos (Lorsban)	QT	2.00	\$10.41	\$20.81	MAY
NEMATOCIDES					
fluopyram (Velum Prime)	OZ	6.00	\$9.02	\$54.14	JUNE
TOTAL:				\$160.84	

Notes: Use of Telone II and Velum Prime assumes that the field has a high rate of nematodes and/or *M. enterlobii* has been detected.