

Corn, High Yield Threshold* - 2023

NC STATE
UNIVERSITY

ESTIMATED COSTS AND RETURNS PER ACRE, 2023
170 BUSHEL AVERAGE YIELD HISTORY

	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	YOUR FARM
1. GROSS RECEIPTS					
CORN***	BU.	170.00	\$6.75	\$1,147.50	_____
TOTAL RECEIPTS:				\$1,147.50	_____
2. VARIABLE COSTS					
SEED	THOU.	33.00	\$3.000	\$99.00	_____
FERTILIZER					
18-46-0	LBS	160.00	\$0.56	\$89.60	_____
NITROGEN 30%	LBS	425.00	\$0.36	\$153.00	_____
PHOSPHATE (0-46-0)	LBS	0.00	\$0.46	\$0.00	_____
POTASH (0-0-60)	LBS	75.00	\$0.51	\$38.25	_____
LIME (PRORATED)	TON	0.33	\$57.00	\$18.81	_____
HERBICIDES**	ACRE	1.00	\$53.40	\$53.40	_____
FUNGICIDES**	ACRE	1.00	\$17.11	\$17.11	_____
DRYING (3 POINTS)	BU.	170.00	\$0.20	\$34.00	_____
HAULING	BU.	170.00	\$0.60	\$102.00	_____
TRACTOR/MACHINERY	ACRE	1.00	\$84.70	\$84.70	_____
SCOUT	ACRE	1.00	\$16.00	\$16.00	_____
LABOR	HRS	1.67	\$14.16	\$23.65	_____
INTEREST ON OP. CAP.	DOL.	\$268.38	8.0%	\$21.47	_____
TOTAL VARIABLE COSTS:				\$750.99	_____
3. INCOME ABOVE VARIABLE COSTS:				\$396.51	_____
4. FIXED COSTS					
TRACTOR/MACHINERY	ACRE	1.00	\$106.84	\$106.84	_____
TOTAL FIXED COSTS:				\$106.84	_____
5. OTHER COSTS					
GENERAL OVERHEAD	DOL.	\$750.99	7.0%	\$52.57	_____
TOTAL OTHER COSTS:				\$52.57	_____
6. TOTAL COSTS:				\$910.40	_____
7. NET RETURNS TO LAND, RISK, AND MANAGEMENT:				\$237.10	_____

BREAK-EVEN YIELD

VARIABLE COSTS	111	BU.	<u>BREAK-EVEN PRICE</u>	VARIABLE COSTS	\$4.42
TOTAL COSTS	135	BU.	TOTAL COSTS	TOTAL COSTS	\$5.36

-THIS BUDGET WAS DEVELOPED FOR PLANNING PURPOSES ONLY AND DOES NOT INCLUDE LAND RENT, EACH GROWER SHOULD CALCULATE THEIR COST BASED ON THEIR PRICE OF INPUTS, LOCATION, AND MAINTENECE PRACTICES

- FERTILIZER AMOUNTS ARE BASED ON HISTORICAL DATA OF REMOVAL RATES FOR N, P2O5, K2O AND YEILD. GROWERS SHOULD SOIL SAMPLE TO DETERMINE RATES OF APPLICATION FOR NUTRIENTS IN CORN

CORN FOR GRAIN - CONVENTIONAL						
PER ACRE MACHINERY AND LABOR REQUIREMENTS						
MONTH	OPERATION	TIMES OVER	LABOR HOURS	MACHINE HOURS	VARIABLE COSTS	FIXED COSTS
2	HEAVY DISK 20'	1.00	0.12	0.10	\$4.61	\$8.00
2	TANDOM LIGHT DISK 30'	1.00	0.08	0.07	\$4.95	\$6.84
5	PLANTER 16-ROW	1.00	0.14	0.12	\$7.13	\$21.50
5	HIBOY 90'	4.00	0.14	0.12	\$24.44	\$28.80
5	COMBINE LARGE W/ HEADER 30'	1.00	0.14	0.12	\$38.47	\$36.88
5	GRAIN CART 2000	1.00	0.12	0.10	\$5.10	\$4.82
PER ACRE TOTALS FOR SELECTED OPERATIONS			0.74	0.63	\$84.70	\$106.84
UNALLOCATED LABOR(HRS./AC.)			0.93			

*EQUIPMENT SELECTION IN THESE BUDGETS VARY FOR COST REPRESENTATION OF VARIATION IN PRACTICES, ACTUAL EQUIPMENT SELECTION WILL VARY FROM TO FARM AND REGION TO REGION

INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES						
YIELD	PRICE (\$/bu.)					
BU.	\$6.08	\$6.41	\$6.75	\$7.09	\$7.43	
143	\$138.38	\$185.57	\$234.19	\$282.81	\$331.43	
156	\$206.87	\$258.35	\$311.39	\$364.43	\$417.47	
170	\$280.63	\$336.73	\$394.53	\$452.33	\$510.13	
184	\$354.38	\$415.10	\$477.66	\$540.22	\$602.78	
197	\$422.87	\$487.88	\$554.86	\$621.84	\$688.82	

*THE YEILD REPRESENTED IN THIS BUDGET IS NOT A FUNCTION OF THE MAINTENANCE PRACTICES LISTED. IT IS ASSUMED FARMERS WILL ADJUST THEIR MAINTENANCE PRACTICES BASED ON THEIR ABILITY TO MAXIMIZE PROFIT WITH THEIR GIVEN YEILD HISTORY.

**HERBICIDE COST ASSUME NO RESISTANCE MANAGEMENT, GROWERS SHOULD ONLY APPLY PESTICIDES AS NEEDED, SOME GROWER MAY APPLY AN INSECTICIDE ON SOME YEARS AT A COST OF \$3-5\$ PER ACRE

***CORN PRICES IN THIS BUDGET ARE BASED ON FUTURES PRICES + .80 BASIS FOR LOCAL CONTRACTS AS OF 12-15-2022

Prepared by:Derek Washburn, NC State Department of Agricultural and Resource Economics

Edited by: Ron Heiniger, Ryan Heiniger, Jenny Carleo, and Charles Cahoon, NC State Department of Crop and Soil Science