

# Soybean, High Yield Threshold\*-2023

NC STATE  
UNIVERSITY

ESTIMATED COSTS AND RETURNS PER ACRE, 2023  
70 BUSHEL AVERAGE YIELD HISTORY\*

	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	YOUR FARM
<b>1. GROSS RECEIPTS</b>					
SOYBEANS***	BU.	70.00	\$14.22	\$995.40	_____
TOTAL RECEIPTS:				<b>\$995.40</b>	_____
<b>2. VARIABLE COSTS</b>					
SEED (CERTIFIED)	THOU.	130.00	\$0.42	\$54.60	_____
FERTILIZER					
PHOSPHATE (0-46-0)	LBS	120.00	\$0.46	\$55.20	_____
POTASH (0-0-60)	LBS	164.00	\$0.51	\$83.64	_____
LIME (PRORATED)	TON	0.33	\$57.00	\$18.81	_____
HERBICIDES**	ACRE	1.00	\$72.61	\$72.61	_____
FUNGICIDES**	ACRE	1.00	\$47.41	\$47.41	_____
INSECTICIDES**	ACRE	1.00	\$16.50	\$16.50	_____
HAULING	BU.	70.00	\$0.60	\$42.00	_____
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.	\$216.74	8.0%	\$17.34	_____
TOTAL VARIABLE COSTS:				<b>\$532.46</b>	_____
<b>3. INCOME ABOVE VARIABLE COSTS:</b>				<b>\$462.94</b>	_____
<b>4. FIXED COSTS</b>					
TRACTOR/MACHINERY	ACRE	1.00	\$106.84	\$106.84	_____
TOTAL FIXED COSTS:				<b>\$106.84</b>	_____
<b>5. OTHER COSTS</b>					
GENERAL OVERHEAD	DOL.	\$532.46	7.0%	\$37.27	_____
TOTAL OTHER COSTS:				<b>\$37.27</b>	_____
<b>6. TOTAL COSTS:</b>				<b>\$676.57</b>	_____
<b>7. NET RETURNS TO LAND, RISK, AND MANAGEMENT:</b>				<b>\$318.83</b>	_____

<u>BREAK-EVEN YIELD</u>		<u>BREAK-EVEN PRICE</u>	
VARIABLE COSTS	37 BU.	VARIABLE COSTS	\$7.61
TOTAL COSTS	48 BU.	TOTAL COSTS	\$9.67

-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 SOYBEANS

**SOYBEANS - FULL SEASON-CONVENTIONAL**

<b>PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR SOYBEANS</b>						
MONTH	OPERATION	TIMES	LABOR	MACHINE	VARIABLE	FIXED
		OVER	HOURS	HOURS	COSTS	COSTS
5	HEAVY DISK 20'	1.00	0.12	0.10	\$4.61	\$8.00
5	TANDOM LIGHT DISK 30'	1.00	0.08	0.07	\$4.95	\$6.84
5 or 6	PLANTER 16-ROW	1.00	0.14	0.12	\$7.13	\$21.50
5,6	HIBOY 90'	4.00	0.14	0.12	\$24.44	\$28.80
10	COMBINE LARGE W/ HEADER 30'	1.00	0.14	0.12	\$38.47	\$36.88
10	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.	\$12.80	\$13.51	\$14.22	\$14.93	\$15.64
59		\$229.34	\$271.23	\$313.12	\$355.01	\$396.90
64		\$290.34	\$335.78	\$381.22	\$426.66	\$472.10
70		\$363.54	\$413.24	\$462.94	\$512.64	\$562.34
76		\$436.74	\$490.70	\$544.66	\$598.62	\$652.58
81		\$497.74	\$555.25	\$612.76	\$670.27	\$727.78

\*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

\*\*\*SOYBEAN PRICES IN THIS BUDGET ARE BASED ON FUTURES PRICES + .15 BASIS FOR LOCAL CONTRACTS AS OF 12-15-2022, BASIS IN NORTH CAROINA IS RELATIVE TO THE DISTANCE FROM SOYBEAN PROCESSING FACILITIES IN FAYETTEVILLE, NC

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