## Soybean/Wheat-2025

VARIABLE COSTS

TOTAL COSTS

NC STATE UNIVERSITY

ESTIMATED COSTS AND RETURNS PER ACRE, 2025 60 BUSHEL WHEAT YIELD AND 35 BUSHEL SOYBEANS YIELD

SOYBEAN SEED WHEAT BU. FERTILIZER UAN-32 LBS 46% SUPERPHOSPHATE 0-0-60 MURATE OF POTASH LIME SPREAD TON HERBICIDES* FUNGICIDES* INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:	35.00 60.00 130.00 1.50 235.00 66.00 37.00 0.33 1.00 1.00 1.00 1.00 60.00 1.00 1.00 3.40 \$267.78	\$11.34 \$7.01 \$0.55 \$22.50 \$0.42 \$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81 5.375%	\$23.10 \$8.51 \$27.06 \$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
SOYBEANS** WHEAT** BU.  TOTAL RECEIPTS:  2. VARIABLE COSTS  SOYBEAN SEED WHEAT FERTILIZER UAN-32 HBS 46% SUPERPHOSPHATE UAN-32 HBS LIME SPREAD TON HERBICIDES* FUNGICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:	130.00 1.50 235.00 66.00 37.00 0.33 1.00 1.00 1.00 1.00 60.00 1.00 1.00	\$0.55 \$22.50 \$0.42 \$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$420.60	
SOYBEANS** WHEAT** BU.  TOTAL RECEIPTS:  2. VARIABLE COSTS  SOYBEAN SEED WHEAT FERTILIZER UAN-32 HBS 46% SUPERPHOSPHATE UAN-32 HBS LIME SPREAD TON HERBICIDES* FUNGICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:	130.00 1.50 235.00 66.00 37.00 0.33 1.00 1.00 1.00 1.00 60.00 1.00 1.00	\$0.55 \$22.50 \$0.42 \$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$420.60	
WHEAT**  TOTAL RECEIPTS:  2. VARIABLE COSTS  SOYBEAN SEED THOU WHEAT BU. FERTILIZER UAN-32 LBS 46% SUPERPHOSPHATE LBS 0-0-60 MURATE OF POTASH LBS LIME SPREAD TON HERBICIDES* ACRE FUNGICIDES* ACRE INSECTICIDES* ACRE FERTILIZER SPREADING ACRE HAULING BU. TRACTOR/MACHINERY ACRE CONSULTING SERVICES**** ACRE LABOR HRS INTEREST ON OP. CAP. DOL.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:	130.00 1.50 235.00 66.00 37.00 0.33 1.00 1.00 1.00 1.00 60.00 1.00 1.00	\$0.55 \$22.50 \$0.42 \$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$420.60	
TOTAL RECEIPTS:  2. VARIABLE COSTS  SOYBEAN SEED THOU WHEAT BU. FERTILIZER UAN-32 LBS 46% SUPERPHOSPHATE LBS 0-0-60 MURATE OF POTASH LBS LIME SPREAD TON HERBICIDES* ACRE FUNGICIDES* ACRE INSECTICIDES* ACRE FERTILIZER SPREADING ACRE HAULING BU. TRACTOR/MACHINERY ACRE CONSULTING SERVICES**** ACRE LABOR HRS INTEREST ON OP. CAP. DOL.  TOTAL VARIABLE COSTS:  4. FIXED COSTS	130.00 1.50 235.00 66.00 37.00 0.33 1.00 1.00 1.00 60.00 1.00 1.00 3.40	\$0.55 \$22.50 \$0.42 \$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$817.50\$71.50\$33.75\$98.70\$23.10\$8.51\$27.06\$33.94\$4.14\$26.77\$12.00\$9.00\$154.33\$6.00\$53.75	
SOYBEAN SEED THOU WHEAT BU. FERTILIZER UAN-32 LBS 46% SUPERPHOSPHATE LBS 0-0-60 MURATE OF POTASH LBS LIME SPREAD TON HERBICIDES* ACRE FUNGICIDES* ACRE INSECTICIDES* ACRE FERTILIZER SPREADING BU. TRACTOR/MACHINERY ACRE CONSULTING SERVICES**** ACRE LABOR HRS INTEREST ON OP. CAP. DOL.  TOTAL VARIABLE COSTS:  4. FIXED COSTS	1.50 235.00 66.00 37.00 0.33 1.00 1.00 1.00 1.00 1.00 3.40	\$22.50 \$0.42 \$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$71.50 \$33.75 \$98.70 \$23.10 \$8.51 \$27.06 \$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
SOYBEAN SEED WHEAT BU. FERTILIZER UAN-32 LBS 46% SUPERPHOSPHATE D-0-60 MURATE OF POTASH LIME SPREAD TON HERBICIDES* FUNGICIDES* INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  4. FIXED COSTS	1.50 235.00 66.00 37.00 0.33 1.00 1.00 1.00 1.00 1.00 3.40	\$22.50 \$0.42 \$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$33.75 \$98.70 \$23.10 \$8.51 \$27.06 \$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
WHEAT FERTILIZER UAN-32 LBS 46% SUPERPHOSPHATE LBS 0-0-60 MURATE OF POTASH LIME SPREAD TON HERBICIDES* FUNGICIDES* INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** ACRE LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:	1.50 235.00 66.00 37.00 0.33 1.00 1.00 1.00 1.00 1.00 3.40	\$22.50 \$0.42 \$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$33.75 \$98.70 \$23.10 \$8.51 \$27.06 \$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
FERTILIZER  UAN-32  46% SUPERPHOSPHATE  0-0-60 MURATE OF POTASH  LIME SPREAD  TON  HERBICIDES*  FUNGICIDES*  ACRE  INSECTICIDES*  FERTILIZER SPREADING  HAULING  TRACTOR/MACHINERY  CONSULTING SERVICES****  ACRE  LABOR  INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  4. FIXED COSTS	235.00 66.00 37.00 0.33 1.00 1.00 1.00 60.00 1.00 1.00 3.40	\$0.42 \$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$33.75 \$98.70 \$23.10 \$8.51 \$27.06 \$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
UAN-32 46% SUPERPHOSPHATE 1BS 0-0-60 MURATE OF POTASH 1BS 1IME SPREAD 1TON HERBICIDES* FUNGICIDES* INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** ACRE 1ABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  4. FIXED COSTS	66.00 37.00 0.33 1.00 1.00 1.00 60.00 1.00 1.00 3.40	\$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$98.70 \$23.10 \$8.51 \$27.06 \$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
46% SUPERPHOSPHATE  0-0-60 MURATE OF POTASH LIME SPREAD TON HERBICIDES* FUNGICIDES* INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** ACRE LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  4. FIXED COSTS	66.00 37.00 0.33 1.00 1.00 1.00 60.00 1.00 1.00 3.40	\$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$23.10 \$8.51 \$27.06 \$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
0-0-60 MURATE OF POTASH LIME SPREAD TON HERBICIDES* FUNGICIDES* INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** ACRE LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  4. FIXED COSTS	66.00 37.00 0.33 1.00 1.00 1.00 60.00 1.00 1.00 3.40	\$0.35 \$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$23.10 \$8.51 \$27.06 \$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
0-0-60 MURATE OF POTASH LIME SPREAD TON HERBICIDES* FUNGICIDES* INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** ACRE LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  4. FIXED COSTS	37.00 0.33 1.00 1.00 1.00 1.00 60.00 1.00 1.00 3.40	\$0.23 \$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$8.51 \$27.06 \$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
LIME SPREAD  HERBICIDES* FUNGICIDES* INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:	0.33 1.00 1.00 1.00 1.00 60.00 1.00 1.00 3.40	\$82.00 \$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$27.06 \$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
HERBICIDES* FUNGICIDES* INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** ACRE LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  4. FIXED COSTS	1.00 1.00 1.00 1.00 60.00 1.00 1.00 3.40	\$33.94 \$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$33.94 \$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
FUNGICIDES* INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** ACRE LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:	1.00 1.00 1.00 60.00 1.00 1.00 3.40	\$4.14 \$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$4.14 \$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
INSECTICIDES* FERTILIZER SPREADING HAULING TRACTOR/MACHINERY CONSULTING SERVICES**** ACRE LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:	1.00 1.00 60.00 1.00 1.00 3.40	\$26.77 \$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$26.77 \$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
FERTILIZER SPREADING HAULING BU. TRACTOR/MACHINERY CONSULTING SERVICES**** ACRE LABOR HRS INTEREST ON OP. CAP. DOL.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:	1.00 60.00 1.00 1.00 3.40	\$12.00 \$0.15 \$154.33 \$6.00 \$15.81	\$12.00 \$9.00 \$154.33 \$6.00 \$53.75	
HAULING TRACTOR/MACHINERY ACRE CONSULTING SERVICES**** ACRE LABOR HRS INTEREST ON OP. CAP. DOL.  TOTAL VARIABLE COSTS:  4. FIXED COSTS	60.00 1.00 1.00 3.40	\$0.15 \$154.33 \$6.00 \$15.81	\$9.00 \$154.33 \$6.00 \$53.75	
TRACTOR/MACHINERY ACRE CONSULTING SERVICES**** ACRE LABOR HRS INTEREST ON OP. CAP. DOL.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:	1.00 1.00 3.40	\$154.33 \$6.00 \$15.81	\$154.33 \$6.00 \$53.75	
CONSULTING SERVICES**** ACRE LABOR HRS INTEREST ON OP. CAP. DOL.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:  4. FIXED COSTS	1.00 3.40	\$6.00 \$15.81	\$6.00 \$53.75	
LABOR INTEREST ON OP. CAP.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:  4. FIXED COSTS	3.40	\$15.81	\$53.75	
INTEREST ON OP. CAP. DOL.  TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:  4. FIXED COSTS		•	• —	
TOTAL VARIABLE COSTS:  3. INCOME ABOVE VARIABLE COSTS:  4. FIXED COSTS	\$267.78	5 375%		
3. INCOME ABOVE VARIABLE COSTS: 4. FIXED COSTS		0.01070	\$14.39 <u> </u>	
4. FIXED COSTS		=	\$576.94	
			\$240.56	
		<del></del>	<del></del>	
	1.00	\$166.31	\$166.31	
		Ψ.σε.σ.	Ψ.σσ.σ	
TOTAL FIXED COSTS:		_	\$166.31	
TOTAL FIXED COSTS.			φ100.51 <u> </u>	
5. OTHER COSTS				
GENERAL OVERHEAD DOL.	\$576.94	7.0%	\$40.39	
TOTAL OTHER COSTS:		=	\$40.39	
6. TOTAL COSTS:			\$783.64	
7. NET RETURNS TO LAND, RISK, AND MANAGEMENT:			\$33.86	
7. NET RETORNO TO LAND, MOR, AND MANAGEMENT.			Ψυυ.υυ	

<sup>-</sup>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 MAINTENANCE PRACTICES

83 BU.

113 BU.

VARIABLE COSTS

TOTAL COSTS

\$9.62

\$13.06

<sup>-</sup> FERTILIZER AMOUNTS ARE BASED ON HISTORICAL DATA OF REMOVAL RATES FOR N, P2O5, K20 AND YIELD. GROWERS SHOULD SOIL SAMPLE TO DETERMINE RATES OF APPLICATION FOR NUTRIENTS IN SOYBEANS AND WHEAT



WHEAT FOR GRAIN									
PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR 65 BUSHEL WHEAT									
OPERATION	TIMES	LABOR	MACHINE	VARIABLE	FIXED				
	OVER	HOURS	HOURS	COSTS	COSTS				
				•					
		0.18	0.15	·	\$7.54				
TANDOM LIGHT DISK 20'	1.00	0.14	0.12	\$3.80	\$5.02				
GRAIN DRILL 16'	1.00	0.16	0.13	\$3.40	\$4.76				
PLANTER 8-ROW	1.00	0.17	0.14	\$6.21	\$17.71				
HIBOY 90'	5.00	0.18	0.15	\$30.55	\$36.00				
COMBINE W/ HEADER 20'	2.00	0.43	0.36	\$91.30	\$87.52				
GRAIN CART 1100	2.00	0.31	0.26	\$14.14	\$7.76				
TOTALS FOR									
OPERATIONS		1.57	1.31	\$154.33	\$166.31				
ATED LABOR(HRS./AC.)		1.96							
	PER ACRE MACHINERY AND LABO OPERATION  HEAVY DISK 14' TANDOM LIGHT DISK 20' GRAIN DRILL 16' PLANTER 8-ROW HIBOY 90' COMBINE W/ HEADER 20' GRAIN CART 1100  TOTALS FOR OPERATIONS	PER ACRE MACHINERY AND LABOR REQUIREMENTS  OPERATION TIMES OVER  HEAVY DISK 14' 1.00 TANDOM LIGHT DISK 20' 1.00 GRAIN DRILL 16' PLANTER 8-ROW HIBOY 90' COMBINE W/ HEADER 20' GRAIN CART 1100  TOTALS FOR OPERATIONS	PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR 65 BUTOMERS           OPERATION         TIMES LABOR OVER HOURS           HEAVY DISK 14'         1.00         0.18           TANDOM LIGHT DISK 20'         1.00         0.14           GRAIN DRILL 16'         1.00         0.16           PLANTER 8-ROW         1.00         0.17           HIBOY 90'         5.00         0.18           COMBINE W/ HEADER 20'         2.00         0.43           GRAIN CART 1100         2.00         0.31           TOTALS FOR           OPERATIONS         1.57	PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR 65 BUSHEL WHEAT           OPERATION         TIMES OVER HOURS         LABOR HOURS         MACHINE HOURS           HEAVY DISK 14'         1.00         0.18         0.15           TANDOM LIGHT DISK 20'         1.00         0.14         0.12           GRAIN DRILL 16'         1.00         0.16         0.13           PLANTER 8-ROW         1.00         0.17         0.14           HIBOY 90'         5.00         0.18         0.15           COMBINE W/ HEADER 20'         2.00         0.43         0.36           GRAIN CART 1100         2.00         0.31         0.26   TOTALS FOR OPERATIONS  1.57  1.31	PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR 65 BUSHEL WHEAT           OPERATION         TIMES OVER HOURS         LABOR MACHINE HOURS         VARIABLE COSTS           HEAVY DISK 14'         1.00 0.18 0.15 \$4.93           TANDOM LIGHT DISK 20'         1.00 0.14 0.12 \$3.80           GRAIN DRILL 16'         1.00 0.16 0.13 \$3.40           PLANTER 8-ROW         1.00 0.17 0.14 \$6.21           HIBOY 90'         5.00 0.18 0.15 \$30.55           COMBINE W/ HEADER 20'         2.00 0.43 0.36 \$91.30           GRAIN CART 1100         2.00 0.31 0.26 \$14.14           TOTALS FOR OPERATIONS         1.57 1.31 \$154.33				

INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES								
YIELD		PRICE (\$/bu.)						
BU.	\$6.31	\$6.66	\$7.01	\$7.36	\$7.71			
54	-\$235.30	-\$216.40	-\$197.50	-\$178.60	-\$159.70			
57	-\$216.82	-\$196.87	-\$176.92	-\$156.97	-\$137.02			
60	-\$198.34	-\$177.34	-\$156.34	-\$135.34	-\$114.34			
63	-\$179.86	-\$157.81	-\$135.76	-\$113.71	-\$91.66			
66	-\$161.38	-\$138.28	-\$115.18	-\$92.08	-\$68.98			

<sup>\*</sup>NC STATE DOES NOT ENDORSE ANY COMPANY OR CHEMICAL NAMES ASSOCIATED TO ACTIVE INGREDIENTS, THEY ARE FOR RECOGNITION \*HERBICIDE COST DOES NOT ASSUME THE NEED FOR RESISTANCE MANAGEMENT

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

<sup>\*\*</sup>FEED SOYBEAN PRICES IN THIS BUDGET ARE BASED ON FUTURES PRICES + .30 BASIS FOR LOCAL CONTRACTS AS OF 12-5-2023, PRICE

<sup>\*\*</sup>FEED WHEAT PRICES IN THIS BUDGET ARE BASED ON FUTURES PRICES + .90 BASIS FOR LOCAL CONTRACTS AS OF 12-5-2023, PRICE

<sup>\*\*\*</sup>CHEMICALS LISTED ARE NOT A RECOMMENDATION FOR CHEMICAL USE BUT A REPRESENTATION OF COST ASSUMPTIONS ONLY

<sup>\*\*\*\*</sup>CONSULTING SERVICES INCLUDES SOIL SAMPLING ONLY