



# Sorghum 2023

**NC STATE UNIVERSITY**

ESTIMATED COSTS AND RETURNS PER ACRE  
100 BUSHEL YIELD

	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	YOUR FARM
<b>1. GROSS RECEIPTS</b>					
SORGHUM	BU.	100.00	\$6.46	\$646.00	_____
TOTAL RECEIPTS:				<b>\$646.00</b>	_____
<b>2. VARIABLE COSTS</b>					
SEED	THOU.	100.00	\$0.16	\$16.00	_____
FERTILIZER					
NITROGEN 30%	LBS	300.00	\$0.36	\$108.00	_____
PHOSPHATE (0-46-0)	LBS	62.00	\$0.46	\$28.52	_____
POTASH (0-0-60)	LBS	40.00	\$0.51	\$20.40	_____
LIME (PRORATED)	TON	0.33	\$57.00	\$18.81	_____
HERBICIDES	ACRE	1.00	\$23.63	\$23.63	_____
INSECTICIDES	ACRE	1.00	\$3.42	\$3.42	_____
DRYING (3 POINTS)	BU.	105.83	\$0.20	\$21.17	_____
HAULING	BU.	100.00	\$0.15	\$15.00	_____
TRACTOR/MACHINERY	ACRE	1.00	\$56.47	\$56.47	_____
LABOR	HRS	1.31	\$14.16	\$18.55	_____
INTEREST ON OP. CAP.	DOL.	\$137.63	8.0%	\$11.01	_____
TOTAL VARIABLE COSTS:				<b>\$340.98</b>	_____
<b>3. INCOME ABOVE VARIABLE COSTS:</b>				<b>\$305.02</b>	_____
<b>4. FIXED COSTS</b>					
TRACTOR/MACHINERY	ACRE	1.00	\$67.28	\$67.28	_____
TOTAL FIXED COSTS:				<b>\$67.28</b>	_____
<b>5. OTHER COSTS</b>					
GENERAL OVERHEAD	DOL.	\$340.98	7.0%	\$23.87	_____
TOTAL OTHER COSTS:				<b>\$23.87</b>	_____
<b>6. TOTAL COSTS:</b>				<b>\$432.13</b>	_____
<b>7. NET RETURNS TO LAND, RISK, AND MANAGEMENT:</b>				<b>\$213.87</b>	_____

<u>BREAK-EVEN YIELD</u>		<u>BREAK-EVEN PRICE</u>		
VARIABLE COSTS	50	BU.	VARIABLE COSTS	\$3.41
TOTAL COSTS	65	BU.	TOTAL COSTS	\$4.32

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



<b>SORGHUM FOR GRAIN</b>						
<b>PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR SORGHUM</b>						
MONTH	OPERATION	TIMES OVER	LABOR HOURS	MACHINE HOURS	VARIABLE COSTS	FIXED COSTS
4	TANDOM LIGHT DISK 20'	1.00	0.14	0.12	\$3.80	\$5.02
4	PLANTER 16-ROW	1.00	0.14	0.12	\$7.13	\$21.50
9	COMBINE LARGE W/ HEADER 30'	1.00	0.14	0.12	\$38.47	\$36.88
9	GRAIN CART 1100	1.00	0.16	0.13	\$7.07	\$3.88
PER ACRE TOTALS FOR SELECTED OPERATIONS			0.58	0.49	\$56.47	\$67.28
UNALLOCATED LABOR(HRS./AC.)			0.73			

<b>INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES</b>						
YIELD	PRICE (\$/bu.)					
BU.	\$5.81	\$6.14	\$6.46	\$6.78	\$7.11	
90	\$185.54	\$215.24	\$244.04	\$272.84	\$302.54	
95	\$212.78	\$244.13	\$274.53	\$304.93	\$336.28	
100	\$240.02	\$273.02	\$305.02	\$337.02	\$370.02	
105	\$267.27	\$301.92	\$335.52	\$369.12	\$403.77	
110	\$294.51	\$330.81	\$366.01	\$401.21	\$437.51	

Prepared by: Derek Washburn  
 North Carolina State University, Dept. Agricultural and Resource Economics