

CLEMSON COOPERATIVE EXTENSION

Last revised: 1/15/2016

SORGHUM FOR SILAGE

ESTIMATED COSTS AND RETURNS PER ACRE
12 TON YIELD

	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	YOUR FARM
1. GROSS RECEIPTS					
SORGHUM	TON	12.00	\$35.00	\$420.00	_____
TOTAL RECEIPTS:				\$420.00	\$0.00
2. VARIABLE COSTS					
SEED	LBS	8.00	\$1.10	\$8.80	_____
FERTILIZER					
NITROGEN	LBS	25.00	\$0.77	\$19.25	_____
PHOSPHATE	LBS	50.00	\$0.49	\$24.50	_____
POTASH	LBS	50.00	\$0.33	\$16.50	_____
LIQ. NITROGEN (SPREAD)	LBS	100.00	\$0.40	\$40.00	_____
LIME (PRORATED)	TON	0.33	\$45.00	\$14.85	_____
HERBICIDES	ACRE	1.00	\$18.28	\$18.28	_____
CUSTOM SPREAD	ACRE	1.00	\$10.00	\$10.00	_____
TRACTOR/MACHINERY	ACRE	1.00	\$51.81	\$51.81	_____
LABOR	HRS	6.75	\$9.50	\$64.13	_____
INTEREST ON OP. CAP.	DOL.	\$134.06	5.0%	\$6.70	_____
TOTAL VARIABLE COSTS:				\$274.82	\$0.00
3. INCOME ABOVE VARIABLE COSTS:				\$145.18	\$0.00
4. FIXED COSTS					
TRACTOR/MACHINERY	ACRE	1.00	\$64.23	\$64.23	_____
TOTAL FIXED COSTS:				\$64.23	\$0.00
5. OTHER COSTS					
LAND RENT	ACRE	1.00	\$40.00	\$40.00	_____
GENERAL OVERHEAD	DOL.	\$274.82	7.0%	\$19.24	_____
TOTAL OTHER COSTS:				\$59.24	\$0.00
6. TOTAL COSTS:				\$398.29	\$0.00
7. NET RETURNS TO RISK AND MANAGEMENT:				\$21.71	\$0.00

<u>BREAK-EVEN YIELD</u>		<u>BREAK-EVEN PRICE</u>	
VARIABLE COSTS	7.85 TON	VARIABLE COSTS	\$22.90
TOTAL COSTS	11.38 TON	TOTAL COSTS	\$33.19

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

** THIS BUDGET DOES NOT INCLUDE THE COST OF STORAGE AND HANDLING REQUIRED TO MAKE SILAGE.

*** LIME, PHOSPHATE AND POTASH RATES SHOULD BE BASED ON A SOIL TEST.

SORGHUM FOR SILAGE

PER ACRE MACHINERY AND LABOR REQUIREMENTS FOR SORGHUM SILAGE

MONTH	OPERATION	TIMES OVER	LABOR HOURS	MACHINE HOURS	VARIABLE COSTS	FIXED COSTS
2	HEAVY DISK 14'	1.00	0.17	0.15	\$3.17	\$3.78
3	SUBSOILER-PLANTER 6-ROW	2.00	0.40	0.36	\$12.70	\$15.84
3	TRACTOR MTD SPRAYER	1.00	0.18	0.16	\$1.35	\$1.57
8	FORAGE HARVESTER	1.00	0.62	0.56	\$17.10	\$21.36
8	SILAGE WAGON	1.00	0.63	0.57	\$9.46	\$11.42
8	SILAGE BLOWER	1.00	0.52	0.47	\$3.86	\$4.22
8	DUMP TRUCK 12 TON	1.00	0.48	0.44	\$4.17	\$6.04
PER ACRE TOTALS FOR SELECTED OPERATIONS			3.00	2.71	\$51.81	\$64.23
UNALLOCATED LABOR(HRS./AC.)			3.75			

INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES						
YIELD	PRICE (\$/ton)					
TON	\$31.50	\$33.25	\$35.00	\$36.75	\$38.50	
10.80	\$65.38	\$84.28	\$103.18	\$122.08	\$140.98	
11.40	\$84.28	\$104.23	\$124.18	\$144.13	\$164.08	
12.00	\$103.18	\$124.18	\$145.18	\$166.18	\$187.18	
12.60	\$122.08	\$144.13	\$166.18	\$188.23	\$210.28	
13.20	\$140.98	\$164.08	\$187.18	\$210.28	\$233.38	

CHEMICAL USE ASSUMPTIONS FOR SORGHUM SILAGE						
	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	MONTH	
HERBICIDES:						
s-metolachlor+atrazine (Bicep)	QT	1.30	\$10.63	\$13.81		MAR
atrazine (Aatrex)	QT	1.00	\$4.47	\$4.47		MAR
TOTAL:				\$18.28		

The above listed chemicals are examples and do not imply exclusive recommendations by Clemson University. The "Pest Management Handbook" must be consulted. Production assumptions provided by Jay Crouch, Extension Agent, 803-276-1091 ext. 113, alfredc@clemson.edu

THE CLEMSON UNIVERSITY COOPERATIVE EXTENSION SERVICE OFFERS ITS PROGRAMS TO PEOPLE OF ALL AGES, REGARDLESS OF RACE, COLOR, SEX, RELIGION, NATIONAL ORIGIN, OR HANDICAP AND IS AN EQUAL OPPORTUNITY EMPLOYER. COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS--STATE OF SOUTH CAROLINA, CLEMSON UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE, AND SOUTH CAROLINA COUNTIES COOPERATING.