

GRAIN SORGHUM SILAGE, Minimum Tillage

ESTIMATED COSTS AND RETURNS PER ACRE
12 TON YIELD

Acres
1

	UNIT	QUANTITY PER ACRE	PRICE OR COST/UNIT	TOTAL PER ACRE	YOUR FARM
1. GROSS RECEIPTS					
CORN SILAGE	TON	12.00	\$25.00	\$300.00	_____
TOTAL RECEIPTS:				\$300.00	_____
2. PRE-HARVEST VARIABLE COSTS					
SEED: GRAIN SORGHUM	LBS.	7.00	\$1.30	\$9.10	_____
FERTILIZER*	Soil Test Recommendation				
NITROGEN	LBS	129.00	\$0.38	\$49.02	_____
PHOSPHATE	LBS	56.00	\$0.32	\$17.92	_____
POTASH	LBS	129.00	\$0.26	\$33.54	_____
FERTILIZER APPLICATION	ACRE	1.00	\$7.25	\$7.25	_____
LIME (PRORATED)	TON	0.33	\$32.50	\$10.73	_____
HERBICIDES	ACRE	1.00	\$30.78	\$30.78	_____
INSECTICIDES	ACRE	1.00	\$0.00	\$0.00	_____
FUNGICIDES	ACRE	1.00	\$0.00	\$0.00	_____
CHEMICAL APPLICATION	ACRE	0.00	\$7.00	\$0.00	_____
FUEL,OIL, LUBE	Eq Gallons	1.64	\$2.35	\$3.86	_____
REPAIRS	ACRE	1.00	\$5.68	\$5.68	_____
PRE-HARVEST LABOR	HRS	0.51	\$12.00	\$6.12	_____
CASH RENT OR LAND CHARGE	ACRE	1.00	\$0.00	\$0.00	_____
CROP INSURANCE	ACRE	1.00	\$9.56	\$9.56	_____
SCOUTING	ACRE	1.00	\$0.00	\$0.00	_____
OTHER COSTS	ACRE	1.00	\$0.00	\$0.00	_____
PRODUCTION INTEREST	6 MONTHS	\$91.78	7.0%	\$6.42	_____
TOTAL PRE-HARVEST COSTS		\$15.83 PER TON		\$189.98	_____
3. HARVEST VARIABLE COSTS					
FUEL,OIL, LUBE	Eq Gallons	7.21	\$2.35	\$16.94	_____
REPAIRS	ACRE	1.00	\$15.85	\$15.85	_____
HARVEST LABOR	HRS	2.35	\$12.00	\$28.20	_____
HAULING	TON	12.00	\$0.00	\$0.00	_____
STORAGE	TON	12.00	\$0.00	\$0.00	_____
DRYING	TON	12.00	\$0.00	\$0.00	_____
TOTAL HARVEST COSTS:		\$5.08 PER TON		\$60.99	_____
4. TOTAL VARIABLE COSTS	Breakeven Yield 10 TON		Breakeven Price \$20.91 PER TON	\$250.97	_____
5. RETURN OVER TOTAL VARIABLE COSTS				\$49.03	_____
6. MACHINERY FIXED COSTS (BASED ON NEW EQUIPMENT COST)					
TRACTOR & MACHINERY	ACRE	1.00	\$60.97	\$60.97	_____
7. OTHER FIXED COSTS					
GENERAL OVERHEAD	DOL.	\$250.97	8.0%	\$20.08	_____
8. TOTAL FIXED COSTS:				\$81.05	_____
9. TOTAL VARIABLE & FIXED COSTS		\$27.67 PER TON		\$332.02	_____
10. PROJECTED NET RETURNS TO LAND, RISK AND MANAGEMENT:				-\$32.02	_____

* This BUDGET is for PLANNING PURPOSES ONLY. Fertilizer rates are based on projected nutrient removal of harvested crop.

* Fertilizer requirements will vary with application method, manure use and/or residual nutrient levels in the soil.

GRAIN SORGHUM SILAGE, Minimum Tillage							
PER ACRE MACHINERY AND LABOR REQUIREMENTS							
MONTH	OPERATION	Times OVER	LABOR HOURS	MACHINE HOURS	FUEL, OIL, & LUBE	REPAIR COSTS	FIXED COSTS
PRE-HARVEST							
June	75HP+Boom Sprayer - 30Ft	2	0.20	0.18	\$1.60	\$1.16	\$3.86
June	100HP + Planter 6-Row	1	0.21	0.19	\$2.26	\$4.52	\$7.15
25%	UNALLOCATED LABOR(HRS./AC.)		0.10				
	SUB-TOTAL PRE-HARVEST		0.51	0.37	\$3.86	\$5.68	\$11.01
HARVEST							
Sept.	100MFWD + Forage Harvester 2R	1	0.63	0.57	\$6.78	\$8.23	\$21.48
Sept.	75HP + Silage Wagon	2	1.25	1.14	\$10.16	\$7.62	\$28.48
25%	UNALLOCATED LABOR(HRS./AC.)		0.47				
	SUB-TOTAL HARVEST		2.35	1.71	\$16.94	\$15.85	\$49.96

\$2.35 Fuel

INCOME ABOVE VARIABLE COSTS AT DIFFERING YIELDS AND PRICES						
FARM YIELD TON	TOTAL VARIABLE COSTS COST/ACRE	FARM PRICE (\$/ton)				
		\$20.00	\$22.50	\$25.00	\$27.50	\$30.00
10	\$242.39	(\$42.39)	(\$17.39)	\$7.61	\$32.61	\$57.61
11	\$246.68	(\$26.68)	\$0.82	\$28.32	\$55.82	\$83.32
12	\$250.97	(\$10.97)	\$19.03	\$49.03	\$79.03	\$109.03
13	\$255.26	\$4.74	\$37.24	\$69.74	\$102.24	\$134.74
14	\$259.55	\$20.45	\$55.45	\$90.45	\$125.45	\$160.45

10% Table Sensitivity

CHEMICAL USE ASSUMPTIONS						
TYPE	Trade Name	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL PER ACRE	MONTH
H	Gramoxone Inteon	PT	2.00	\$3.40	\$6.80	June
H	Surfactant	PT	0.50	\$0.98	\$0.49	June
H	Atrazine	QT	1.60	\$2.20	\$3.52	June
H	Dual II Magnum	PT	1.67	\$11.96	\$19.97	June

Notes Chemical Type: H = Herbicide; I = Insecticide; F = Fungicide

Trade and brand names are used only for the purpose of providing information. Virginia Cooperative Extension does not guarantee or warrant the standard of any product named to the exclusion of others which also may be suitable.