

Summer Annuals, Hay Crop Silage, No-Till Establishment
Estimated Expenses per Acre

Item	Description	Unit	Quantity	Price	Amount (\$/acre)	Your Farm
Variable Expenses						
Seed ¹	Sorghum-Sudan Hybrid	lb	35.00	\$ 0.35	\$ 12.25	_____
Fertilizer ²	N	lb	120.00	\$ 0.48	\$ 57.60	_____
	P2O5	lb	30.00	\$ 0.34	\$ 10.20	_____
	K2O	lb	60.00	\$ 0.23	\$ 13.80	_____
	Custom Application	acre	2.00	\$ 5.00	\$ 10.00	_____
Lime ³	Custom Application	ton	0.50	\$ 21.00	\$ 10.50	_____
Weed Control						
Burndown	Gramoxone Max	pt	1.50	\$ 4.91	\$ 7.37	_____
	Surfactant	pt	0.50	\$ 1.63	\$ 0.82	_____
	Custom Application	acre	1.00	\$ 5.00	\$ 5.00	_____
Post-Emerge	2,4-D Amine	pt	2.00	\$ 2.05	\$ 4.10	_____
	Custom Application	acre	1.00	\$ 5.00	\$ 5.00	_____
Machinery						
Fuel		acre	1.00	\$ 25.32	\$ 25.32	_____
Oil & Filter		acre	1.00	\$ 3.80	\$ 3.80	_____
Repairs & Maintenance		acre	1.00	\$ 29.72	\$ 29.72	_____
Interest on Operating Capital 6 months		acre	\$ 195.47	8.0%	\$ 7.82	_____
Total Variable Expenses					\$ 203.29	_____
Fixed Expenses						
Machinery						
Depreciation		acre	1.00	\$ 21.18	\$ 21.18	_____
Interest		acre	1.00	\$ 26.41	\$ 26.41	_____
Housing & Insurance		acre	1.00	\$ 2.86	\$ 2.86	_____
Total Fixed Expenses					\$ 50.46	_____
Labor Expenses						
Labor ⁴		hour	4.31	\$ 8.50	\$ 36.67	_____
Total Budgeted Expenses					\$ 290.42	_____

Footnotes:

¹Pearlmillet and forage sorghum may also be used for silage, but should be seeded at recommended rates.

²60 lbs of nitrogen applied at seeding, remainder applied following first silage cutting, assuming seed is planted before June 20.

³Lime is applied at the rate of 2 tons every 4 years.

⁴Labor cost is based on a cash wage for hired labor of \$8.50 equivalent per hour which includes social security and medicaid taxes, and payroll administration.

**Summer Annuals, Hay Crop Silage, No-Till Establishment
Estimated Machinery and Labor Requirements per Acre**

Month	Operation	Power Unit	Implement	Hours per Acre	
				Machine	Labor
May	Burndown (Gramoxone Max)	Custom	Custom	---	---
May	Fertilize & Lime	Custom	Custom	---	---
May	Plant	Tractor, 70 hp	No-Till Drill, 10'	0.47	0.59
Jun	Post-Emerge (2,4-D Amine)	Custom	Custom	---	---
Jul	Mow	Tractor, 70 hp	Mower-Conditioner, 9'	0.37	0.46
Jul	Chop	Tractor, 100 hp	Forage Chopper Windrow Header Forage Wagon #1	0.56	0.70
Jul	Stack & Move	Tractor, 70 hp	Forage Wagon #2	0.28	0.35
Jul	Store	Tractor, 70 hp	Forage Blower	0.28	0.35
Jul	Fertilize	Custom	Custom	---	---
Sep	Mow	Tractor, 70 hp	Mower-Conditioner, 9'	0.37	0.46
Sep	Chop	Tractor, 100 hp	Forage Chopper Windrow Header Forage Wagon #1	0.56	0.70
Sep	Stack & Move	Tractor, 70 hp	Forage Wagon #2	0.28	0.35
Sep	Store	Tractor, 70 hp	Forage Blower	0.28	0.35
Total				4.31	

Estimated Machinery Expenses per Acre

Machine	Hours per Acre	Variable Cost			Total Variable Costs	Fixed Cost			Total Fixed Costs
		Fuel	Oil & Filter	Repairs		Depreciation	Interest	Housing & Insurance	
Tractor, 100 hp	1.12	10.32	1.55	4.15	16.02	3.01	3.77	0.20	6.98
Tractor, 70 hp	2.33	15.00	2.25	4.94	22.19	2.99	3.55	0.27	6.81
Mower-Conditioner, 9'	0.74	0.00	0.00	3.76	3.76	2.03	3.31	0.31	5.65
Forage Chopper	1.12	0.00	0.00	6.05	6.05	3.00	3.44	0.31	6.75
Windrow Header	1.12	0.00	0.00	0.73	0.73	0.88	1.01	0.30	2.19
Forage Wagon #1	1.12	0.00	0.00	3.04	3.04	4.54	5.05	0.56	10.15
Forage Wagon #2	0.56	0.00	0.00	1.52	1.52	2.27	2.52	0.45	5.25
Forage Blower	0.56	0.00	0.00	0.47	0.47	0.54	0.61	0.10	1.25
No-Till Drill, 10'	0.47	0.00	0.00	5.05	5.05	1.91	3.15	0.36	5.43
Total		\$ 25.32	\$ 3.80	\$ 29.72	\$ 58.84	\$ 21.18	\$ 26.41	\$ 2.86	\$ 50.46
Total Machinery Cost									\$ 109.30

Break-even Analysis

		Yield/Acre		Break-even Price/Ton
Break-even Price over Total Variable Expenses:	Below-Average Yield	3.6	tons	\$ 56.47
	Average Yield	7.3	tons	\$ 27.85
	Above-Average Yield	11.0	tons	\$ 18.48
Break-even Price over Total Budgeted Expenses:	Below-Average Yield	3.6	tons	\$ 80.67
	Average Yield	7.3	tons	\$ 39.78
	Above-Average Yield	11.0	tons	\$ 26.40