

Corn Silage, No-Till Establishment
Estimated Expenses per Acre

Item	Description	Unit	Quantity	Price	Amount (\$/acre)	Your Farm	
Variable Expenses							
Seed ¹	23 Thousand Seeds	bag	0.28	\$ 100.75	\$ 28.21	_____	
Soil Insecticide	Force	lb	4.00	\$ 4.57	\$ 18.28	_____	
Fertilizer	N	lb	150.00	\$ 0.48	\$ 72.00	_____	
	P2O5	lb	60.00	\$ 0.34	\$ 20.40	_____	
	K2O	lb	120.00	\$ 0.23	\$ 27.60	_____	
	Custom Application	acre	1.00	\$ 5.00	\$ 5.00	_____	
Lime ²	Custom Application	ton	0.50	\$ 21.00	\$ 10.50	_____	
Weed Control ³	Burndown	Gramoxone Max	pt	2.00	\$ 4.91	\$ 9.82	_____
		Surfactant	pt	0.50	\$ 1.63	\$ 0.82	_____
		Custom Application	acre	1.00	\$ 5.00	\$ 5.00	_____
Pre-Emerge	Atrazine, 4L	Bicep II Magnum	pt	0.80	\$ 1.26	\$ 1.01	_____
		Bicep II Magnum	pt	4.80	\$ 5.65	\$ 27.12	_____
Post-Emerge	Accent	Surfactant	pt	0.50	\$ 1.63	\$ 0.82	_____
		Surfactant	pt	0.50	\$ 1.63	\$ 0.82	_____
		Custom Application	acre	1.00	\$ 5.00	\$ 5.00	_____
Machinery							
Fuel		acre	1.00	\$ 11.63	\$ 11.63	_____	
Oil & Filter		acre	1.00	\$ 1.74	\$ 1.74	_____	
Repairs & Maintenance		acre	1.00	\$ 11.86	\$ 11.86	_____	
Interest on Operating Capital	6 Months	acre	\$ 280.21	8.0%	\$ 11.21	_____	
Total Variable Expenses					\$ 291.42	_____	
Fixed Expenses							
Machinery							
Depreciation		acre	1.00	\$ 10.04	\$ 10.04	_____	
Interest		acre	1.00	\$ 11.57	\$ 11.57	_____	
Housing & Insurance		acre	1.00	\$ 1.85	\$ 1.85	_____	
Total Fixed Expenses					\$ 23.47	_____	
Labor Expenses							
Labor ⁴		hour	1.81	\$ 8.50	\$ 15.43	_____	
Total Budgeted Expenses					\$ 330.31	_____	

Footnotes:

¹Plant population and rate of fertilization are directly related. A higher population probably should be fertilized at a higher rate.

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

³When other chemicals are used, calculate the appropriate costs for the chemical used. Rates are for medium-textured soils--use lower rates for sandy soils and higher rates for fine-textured or clay-type soils, check labels. Other herbicide combinations are available.

⁴Labor expense is \$8.50 per hour, including wages, Social Security and Medicaid taxes and payroll administration costs.

**Corn Silage, No-Till Establishment
Estimated Machinery and Labor Requirements per Acre**

Month	Operation	Power Unit	Implement	Hours per Acre	
				Machine	Labor
Mar	Burndown (Gramoxone Max)	Custom	Custom	---	---
Apr	Fertilize & Lime	Custom	Custom	---	---
Apr	Plant & Soil Insecticide	Tractor, 100 hp	No-Till Corn Planter, 4-row	0.26	0.33
Apr	Pre-Emerge (Atrazine & Bicep II)	Tractor, 70 hp	Boom Sprayer, 20'	0.07	0.08
May	Post-Emerge (Accent)	Custom	Custom	---	---
Sep	Harvest	Tractor, 100 hp	Forage Chopper Corn Header, 2-row Forage Wagon #1	0.56	0.70
Sep	Haul	Tractor, 70 hp	Forage Wagon #2	0.28	0.35
Sep	Store	Tractor, 70 hp	Forage Blower	0.28	0.35
Total				1.81	1.81

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	0.83	7.59	1.14	3.05	11.79	2.21	2.77	0.07	5.06
Tractor, 70 hp	0.63	4.03	0.60	1.33	5.97	0.80	0.96	0.06	1.82
Forage Chopper	0.56	0.00	0.00	3.03	3.03	1.50	1.72	0.21	3.43
Corn Header, 2-row	0.56	0.00	0.00	1.02	1.02	1.01	0.70	0.15	1.86
Boom Sprayer, 20'	0.07	0.00	0.00	0.05	0.05	0.06	0.07	0.08	0.22
No-Till Corn Planter, 4-row	0.26	0.00	0.00	0.87	0.87	0.77	1.27	0.35	2.38
Forage Wagon #1	0.56	0.00	0.00	1.52	1.52	2.27	2.52	0.45	5.25
Forage Wagon #2	0.28	0.00	0.00	0.76	0.76	1.14	1.26	0.40	2.80
Forage Blower	0.28	0.00	0.00	0.24	0.24	0.27	0.30	0.08	0.66
Total		\$ 11.63	\$ 1.74	\$ 11.86	\$ 25.23	\$ 10.04	\$ 11.57	\$ 1.85	\$ 23.47
Total Machinery Cost									\$ 48.70

Break-even Analysis

		<u>Yield/Acre</u>		<u>Break-even Price/Ton</u>
Break-even Price over Total Variable Expenses:	Below-Average Yield	12.0	tons	\$ 24.28
	Average Yield	15.0	tons	\$ 19.43
	Above-Average Yield	18.0	tons	\$ 16.19
Break-even Price over Total Budgeted Expenses:	Below-Average Yield	12.0	tons	\$ 27.53
	Average Yield	15.0	tons	\$ 22.02
	Above-Average Yield	18.0	tons	\$ 18.35