

2005 Summary Report for Corn/Grain Sorghum Promotion Board

Title: Economic Analysis of Corn and Grain Sorghum Production Practices.

Table 1. Estimated costs per acre and breakeven prices: 2005 Corn Research Verification Program.

	Ashley	Chicot	Clay	Greene	Lafayette	Little River	Miller	Poinsett	Woodruff	Wghted Average	Total Acres
Acres	67	52	36	18	43	36	60	33	50		395
Direct Exp.	(\$/acre)	(\$/acre)	(\$/acre)	(\$/acre)	(\$/acre)	(\$/acre)	(\$/acre)	(\$/acre)	(\$/acre)	(\$/acre)	
Custom Work	30.88	44.98	37.30	38.10	34.60	34.88	32.80	42.99	36.02	36.37	
Fertilizer	129.24	104.01	116.93	103.97	83.90	112.80	92.35	120.04	112.10	108.67	
Herbicides	17.28	4.92	38.96	20.67	24.30	17.90	20.67	10.92	19.44	18.86	
Insecticides		11.10								1.46	
Crop Seed	40.88	44.24	39.20	36.40	40.88	43.40	46.72	54.08	48.18	44.11	
Operator Labor	5.23	3.67	7.26	4.27	3.66	4.31	5.44	4.76	7.85	5.24	
Irrigation Labor	2.40	2.40	3.36	3.36		3.36	2.40	3.36	2.40	2.44	
Hand Labor	0.44	0.53	0.68	0.59	0.72	0.68	0.68	0.44	0.56	0.58	
Diesel Fuel ¹	51.49	46.98	70.53	63.42	10.44	63.30	51.18	67.24	56.18	51.65	
Repairs & Maint.	18.66	14.97	22.02	17.80	10.87	18.01	16.88	20.05	19.46	17.48	
Int. on Op. Cap.	7.43	7.01	8.77	6.81	5.90	7.90	7.02	7.68	7.01	7.25	
Total Direct Exp. ²	303.93	284.81	345.01	295.39	215.27	306.54	276.14	331.56	309.20	294.11	
Total Fixed Exp. ³	43.16	36.91	48.26	39.75	19.19	39.91	41.04	43.83	46.45	39.89	
Ttl Specified Exp. ⁴	347.09	321.72	393.27	335.14	234.46	346.45	317.18	375.39	355.65	334.00	
Per Acre Yield	193	203	180	160	85	193	155	189	197	174	
Breakeven Price Over:											
Direct Expenses ⁵	\$1.57	\$1.40	\$1.92	\$1.85	\$2.53	\$1.59	\$1.78	\$1.75	\$1.57	\$1.75	
Total Expenses ⁶	\$1.80	\$1.58	\$2.18	\$2.09	\$2.76	\$1.80	\$2.05	\$1.99	\$1.81	\$1.98	
Ttl Exp and Rent ⁷	\$2.40	\$2.11	\$2.91	\$2.79	\$3.68	\$2.39	\$2.73	\$2.65	\$2.41	\$2.64	

¹Price of diesel was taken to be \$2.43 per gallon.

²Specified out-of-pocket expenses, such as seed, fertilizer, herbicides, irrigation, interest on all machinery and irrigation equipment, etc.

³Total ownership costs which include charges for depreciation, taxes, and insurance.

⁴Total specified operating costs plus ownership costs.

⁵Price per bushel required by the farmer to equal total specified operating costs. Does not include land, overhead, risk, and management cost.

⁶Price per bushel required by the farmer to equal total specified operating and ownership costs. Does not include land, risk, and management costs.

⁷Price per bushel required by the farmer to equal total specified operating, ownership, and land costs. Does not include risk and management costs.

Table 2. Estimated returns per acre: 2005 Corn Research Verification Program

	Ashley	Chicot	Clay	Greene	Lafayette	Little River	Miller	Poinsett	Woodruff	W. Average	Total Acres
Acres	67	52	36	18	43	36	60	33	50		395
Per Acre Yield	193	203	180	160	85	193	155	189	197	174	
Sales Price ¹	\$2.09	\$2.09	\$2.09	\$2.09	\$2.09	\$2.09	\$2.09	\$2.09	\$2.09	\$2.09	
Sales Per Acre	\$403.37	\$424.27	\$376.20	\$334.40	\$177.65	\$403.37	\$323.95	\$395.01	\$411.73	\$364.23	
Total Direct Exp. ²	\$303.93	\$284.81	\$345.01	\$295.39	\$215.27	\$306.54	\$276.14	\$331.56	\$309.20	\$294.11	
Ret over Dir. Exp.	\$99.44	\$139.46	\$31.19	\$39.01	-\$37.62	\$96.83	\$47.81	\$63.45	\$102.53	\$70.12	
Ttl Spec Exp. ³	\$347.09	\$321.72	\$393.27	\$335.14	\$234.46	\$346.45	\$317.18	\$375.39	\$355.65	\$334.00	
Ret over Ttl Exp.	\$56.28	\$102.55	-\$17.07	-\$0.74	-\$56.81	\$56.92	\$6.77	\$19.62	\$56.08	\$30.23	
Rent (25% share) ⁴	\$100.84	\$106.07	\$94.05	\$83.60	\$44.41	\$100.84	\$80.99	\$98.75	\$102.93	\$91.06	
RetovrTtlExp&Rent	-\$44.56	-\$3.52	-\$111.12	-\$84.34	-\$101.22	-\$43.92	-\$74.22	-\$79.13	-\$46.85	-\$60.83	

¹Sales Price is the greater of average Arkansas market price August through October and CCC Loan Price plus LDP.

²Specified out-of-pocket expenses, such as seed, fertilizer, herbicides, irrigation, interest on all machinery and irrigation equipment, etc.

³Total specified operating costs plus ownership costs which include charges for depreciation, taxes, and insurance.

⁴A 25% crop share rent was assumed as a land charge for a renter situation. No cost sharing was assumed.

Table 3. Estimated costs per acre and breakeven prices: 2005 Grain Sorghum Research Verification Program.

	Prairie	Lincoln	W. Average	Total Acres
Acres	65	80		145
Direct Exp.	(\$/acre)	(\$/acre)	(\$/acre)	
Custom Work	23.20	14.24	18.26	
Fertilizer	44.57	77.32	62.64	
Herbicides	16.13	30.72	24.18	
Crop Seed	9.38	13.40	11.60	
Operator Labor	6.90	7.22	7.08	
Irrigation Labor	0.16	1.44	0.87	
Hand Labor	0.99	0.77	0.87	
Diesel Fuel ¹	33.57	41.56	37.98	
Repairs & Maint.	15.01	18.10	16.71	
Interest on Op. Cap.	3.58	4.65	4.17	
Total Direct Exp. ²	153.49	209.42	184.35	
Total Fixed Exp. ³	72.52	46.26	58.03	
Total Specified Exp. ⁴	226.01	255.68	242.38	
Per Acre Yield	145	89	114	
Breakeven Price Over:				
Direct Expenses ⁵	\$1.06	\$2.35	\$1.77	
Total Expenses ⁶	\$1.56	\$2.87	\$2.28	
Total Expenses and Rent ⁷	\$2.08	\$3.83	\$3.04	

¹Price of diesel was taken to be \$2.43 per gallon.²Specified out-of-pocket expenses, such as seed, fertilizer, herbicides, irrigation, interest on all machinery and irrigation equipment, etc.³Total ownership costs which include charges for depreciation, taxes, and insurance.⁴Total specified operating costs plus ownership costs.⁵Price per bushel required by the farmer to equal total specified operating costs. Does not include land, overhead, risk, and management cost.⁶Price per bushel required by the farmer to equal total specified operating and ownership costs. Does not include land, risk, and management costs.⁷Price per bushel required by the farmer to equal total specified operating, ownership, and land costs. Does not include risk and management costs.

Table 4. Estimated returns per acre: Grain Sorghum-2005 Corn/Grain Sorghum Research Verification Program

	Prairie	Lincoln	W. Average	Total Acres
Acres	65	80		145
Per Acre Yield	145	89	114	
Sales Price ¹	\$1.95	\$1.95	\$1.95	
Sales	\$282.75	\$173.55	\$222.50	
Total Direct Exp. ²	\$303.93	\$284.81	\$293.38	
Returns over Dir. Exp.	-\$21.18	-\$111.26	-\$70.88	
Total Specified Exp. ³	\$347.09	\$321.72	\$333.09	
Returns over Total Exp.	-\$64.34	-\$148.17	-\$110.59	
Rent (25% share) ⁴	\$70.69	\$43.39	\$55.63	
Returns over Total Exp. and Rent	-\$135.03	-\$191.56	-\$166.22	

¹Sales Price is the greater of average Arkansas market price August through October and CCC Loan Price plus LDP.

²Specified out-of-pocket expenses, such as seed, fertilizer, herbicides, irrigation, interest on all machinery and irrigation equipment, etc.

³Total specified operating costs plus ownership costs which include charges for depreciation, taxes, and insurance.

⁴A 25% crop share rent was assumed as a land charge for a renter situation. No cost sharing was assumed.