

**Estimating 2004 Costs of Production**

**Grain Sorghum, Center Pivot Irrigated,  
Loamy Soils**

AG-799-12-03

**Tony E. Windham, Extension Economist - Management**  
**James Marshall, Extension Economist**

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CROP SEED</b>					
Grain sorg. safened	lb	1.18	7.0000	8.26	_____
<b>CUSTOM WORK</b>					
Cstm ap grd fert dry	acre	4.00	2.0000	8.00	_____
Custom haul	cwt	0.27	64.0000	17.28	_____
<b>FERTILIZER &amp; LIME</b>					
0-40-80	lb	0.17	100.0000	17.00	_____
Urea 46%	lb	0.12	250.0000	30.00	_____
<b>FUNGICIDE &amp; SEED TR.</b>					
Gaucho	lb	0.79	6.0000	4.74	_____
<b>HERBICIDES</b>					
Atrazine	pint	1.22	4.0000	4.88	_____
Dual II	pt	13.08	1.5000	19.62	_____
<b>OPERATOR LABOR</b>					
Implements	hour	6.70	0.2380	1.59	_____
Tractors	hour	6.70	0.5324	3.56	_____
Self-Propelled Eq.	hour	6.70	0.2500	1.67	_____
<b>IRRIGATION LABOR</b>					
Center pivot irrg.	hour	6.70	0.0320	0.21	_____
<b>DIESEL FUEL</b>					
Tractors	gal	0.90	4.7024	4.23	_____
Self-Propelled Eq.	gal	0.90	2.0600	1.85	_____
Center pivot irrg.	gal	0.90	8.0000	7.20	_____
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	2.31	1.0000	2.31	_____
Tractors	acre	3.40	1.0000	3.40	_____
Self-Propelled Eq.	acre	4.06	1.0000	4.06	_____
Center pivot irrg.	ac in	0.86	4.0000	3.45	_____
INTEREST ON OP. CAP.	acre	3.23	1.0000	3.23	_____
<b>TOTAL DIRECT EXPENSES</b>				146.59	_____
<b>FIXED EXPENSES</b>					
Implements	acre	4.29	1.0000	4.29	_____
Tractors	acre	7.65	1.0000	7.65	_____
Self-Propelled Eq.	acre	13.64	1.0000	13.64	_____
Center pivot irrg.	acre	51.03	1.0000	51.03	_____
<b>TOTAL FIXED EXPENSES</b>				76.62	_____
<b>TOTAL SPECIFIED EXPENSES</b>				223.22	_____

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**Table 2. Estimated resource use and costs for field operations per acre, Grain Sorghum, Center Pivot Irrigated, Loamy Soils, 2004**

OPERATION/ OPERATING INPUT	SIZE/ UNIT	TRACTOR SIZE	PERF RATE	TIMES OVER	MTH	TRACTOR COST		EQUIP COST		ALLOC LABOR		OPERATING INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Disk, medium cut	26.41'	MFWD190	0.082	1.00	Nov	1.47	1.52	0.44	1.01	0.106	0.71				5.17
Chisel plow	21'	MFWD190	0.092	1.00	Mar	1.65	1.71	0.17	0.33	0.119	0.80				4.66
Cstm ap grd fert dry	acre			1.00	Mar							1.0000	4.00	4.00	4.00
0-40-80	lb											100.0000	0.17	17.00	17.00
Field cultivator	25.5'	MFWD190	0.054	1.00	Mar	0.96	1.00	0.20	0.42	0.070	0.47				3.07
Plntr hbox + sprydir	20'	2WD 150	0.127	1.00	Apr	1.71	1.66	1.19	2.00	0.304	2.04				8.62
Grain sorg. safened	lb											7.0000	1.18	8.26	8.26
Atrazine	pint											4.0000	1.22	4.88	4.88
Dual II	pt											1.5000	13.08	19.62	19.62
Gaucho	lb											6.0000	0.79	4.74	4.74
Water tank	1000 gal	170	0.131	0.06	Apr	0.09	0.05	0.00	0.01	0.001	0.01				0.16
Cstm ap grd fert dry	acre			1.00	May							1.0000	4.00	4.00	4.00
Urea 46%	lb											250.0000	0.12	30.00	30.00
Row cult 8r@30"	20'	2WD 150	0.129	1.00	May	1.74	1.69	0.29	0.49	0.167	1.12				5.35
Center pivot irrg.	ac in			1.00	Jun			2.66	51.03	0.008	0.05	1.0000			53.74
Center pivot irrg.	ac in			1.00	Jul			2.66		0.008	0.05	1.0000			2.71
Center pivot irrg.	ac in			1.00	Jul			2.66		0.008	0.05	1.0000			2.71
Center pivot irrg.	ac in			1.00	Aug			2.66		0.008	0.05	1.0000			2.71
Combine 4WD Grn Sorg	25'		0.200	1.00	Sep			5.92	13.64	0.250	1.67				21.24
Custom haul	cwt			1.00	Sep							64.0000	0.27	17.28	17.28
TOTALS						7.64	7.65	18.88	68.97	1.052	7.05			109.78	219.98
INTEREST ON OPERATING CAPITAL															3.23
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															223.22

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**Estimating 2004 Costs of Production**

**Grain Sorghum, Flood Irrigated,  
Loamy Soils**

AG-800-12-03

**Tony E. Windham, Extension Economist - Management**  
**James Marshall, Extension Economist**

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CROP SEED					
Grain sorg. safened	lb	1.18	7.0000	8.26	_____
CUSTOM WORK					
Cstm ap grd fert dry	acre	4.00	2.0000	8.00	_____
Cstm lsr surv soy&gs	acre	1.25	1.0000	1.25	_____
Custom haul	cwt	0.27	64.0000	17.28	_____
FERTILIZER & LIME					
9-23-30	lb	0.11	300.0000	33.00	_____
Urea 46%	lb	0.12	250.0000	30.00	_____
FUNGICIDE & SEED TR.					
GaUCHo	lb	0.79	6.0000	4.74	_____
HERBICIDES					
Atrazine	pint	1.22	4.0000	4.88	_____
Dual II	pt	13.08	1.5000	19.62	_____
OPERATOR LABOR					
Implements	hour	6.70	0.2705	1.81	_____
Tractors	hour	6.70	0.7111	4.76	_____
Self-Propelled Eq.	hour	6.70	0.2500	1.67	_____
IRRIGATION LABOR					
Flood irrig	hour	6.70	0.0700	0.46	_____
DIESEL FUEL					
Tractors	gal	0.90	6.0287	5.42	_____
Self-Propelled Eq.	gal	0.90	2.0600	1.85	_____
Flood irrig	gal	0.90	7.0000	6.30	_____
REPAIR & MAINTENANCE					
Implements	acre	2.50	1.0000	2.50	_____
Tractors	acre	4.31	1.0000	4.31	_____
Self-Propelled Eq.	acre	4.06	1.0000	4.06	_____
Flood irrig	ac-in	0.21	7.0000	1.50	_____
INTEREST ON OP. CAP.	acre	3.98	1.0000	3.98	_____
TOTAL DIRECT EXPENSES				165.71	_____
FIXED EXPENSES					
Implements	acre	4.77	1.0000	4.77	_____
Tractors	acre	9.69	1.0000	9.69	_____
Self-Propelled Eq.	acre	13.64	1.0000	13.64	_____
Flood irrig	acre	16.33	1.0000	16.33	_____
TOTAL FIXED EXPENSES				44.44	_____
TOTAL SPECIFIED EXPENSES				210.15	_____

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**Table 2. Estimated resource use and costs for field operations per acre, Grain Sorghum, Flood Irrigated, Loamy Soils, 2004**

OPERATION/ OPERATING INPUT	SIZE/ UNIT	TRACTOR SIZE	PERF RATE	TIMES OVER	MTH	TRACTOR COST		EQUIP COST		ALLOC LABOR		OPERATING INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Disk, medium cut	26.41'	MFWD190	0.082	1.00	Nov	1.47	1.52	0.44	1.01	0.106	0.71				5.17
Chisel plow	21'	MFWD190	0.092	1.00	Mar	1.65	1.71	0.17	0.33	0.119	0.80				4.66
Cstm ap grd fert dry	acre			1.00	Mar							1.0000	4.00	4.00	4.00
9-23-30	lb											300.0000	0.11	33.00	33.00
Field cultivator	25.5'	MFWD190	0.054	1.00	Mar	0.96	1.00	0.20	0.42	0.070	0.47				3.07
Plntr hbox + sprydir	20'	2WD 150	0.127	1.00	Apr	1.71	1.66	1.19	2.00	0.304	2.04				8.62
Grain sorg. safened	lb											7.0000	1.18	8.26	8.26
Atrazine	pint											4.0000	1.22	4.88	4.88
Dual II	pt											1.5000	13.08	19.62	19.62
Gaucho	lb											6.0000	0.79	4.74	4.74
Water tank	1000 gal	170	0.131	0.06	Apr	0.09	0.05	0.00	0.01	0.001	0.01				0.16
Cstm lsr surv soy&gs	acre			1.00	May							1.0000	1.25	1.25	1.25
Cstm ap grd fert dry	acre			1.00	May							1.0000	4.00	4.00	4.00
Urea 46%	lb											250.0000	0.12	30.00	30.00
Row cult 8r@30"	20'	2WD 150	0.129	1.00	May	1.74	1.69	0.29	0.49	0.167	1.12				5.35
Levee disk-build	9'	2WD 170	0.196	0.15	Jun	0.44	0.43	0.05	0.11	0.038	0.25				1.29
Blade, rear mount	8'	2WD 105	0.645	0.05	Jun	0.30	0.29	0.01	0.05	0.041	0.28				0.94
Flood irrig	ac-in			1.00	Jun			4.46	16.33	0.040	0.26	4.0000			21.05
Levee disk-knock dwn	9'	2WD 170	0.196	0.10	Jun	0.29	0.28	0.03	0.07	0.025	0.17				0.86
Levee disk-build	9'	2WD 170	0.196	0.15	Jul	0.44	0.43	0.05	0.11	0.038	0.25				1.29
Blade, rear mount	8'	2WD 105	0.645	0.05	Jul	0.30	0.29	0.01	0.05	0.041	0.28				0.94
Flood irrig	ac-in			1.00	Jul			3.34		0.030	0.20	3.0000			3.54
Levee disk-knock dwn	9'	2WD 170	0.196	0.10	Aug	0.29	0.28	0.03	0.07	0.025	0.17				0.86
Combine 4WD Grn Sorg	25'		0.200	1.00	Sep			5.92	13.64	0.250	1.67				21.24
Custom haul	cwt			1.00	Sep							64.0000	0.27	17.28	17.28
TOTALS						9.74	9.69	16.23	34.74	1.301	8.72			127.03	206.16
INTEREST ON OPERATING CAPITAL															3.98
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															210.15

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## Estimating 2004 Costs of Production

# Grain Sorghum, Furrow Irrigated, Loamy Soils

AG-801-12-03

**Tony E. Windham, Extension Economist - Management**  
**James Marshall, Extension Economist**

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CROP SEED					
Grain sorg. safened	lb	1.18	7.0000	8.26	_____
CUSTOM WORK					
Cstm ap grd fert dry	acre	4.00	2.0000	8.00	_____
Custom haul	cwt	0.27	64.0000	17.28	_____
FERTILIZER & LIME					
0-40-80	lb	0.17	100.0000	17.00	_____
Urea 46%	lb	0.12	250.0000	30.00	_____
FUNGICIDE & SEED TR.					
Gaicho	lb	0.79	6.0000	4.74	_____
HERBICIDES					
Atrazine	pint	1.22	4.0000	4.88	_____
Dual II	pt	13.08	1.5000	19.62	_____
MISC. IRRIGATION					
Flex irrigation tube	acre	5.75	1.0000	5.75	_____
OPERATOR LABOR					
Implements	hour	6.70	0.2380	1.59	_____
Tractors	hour	6.70	0.5324	3.56	_____
Self-Propelled Eq.	hour	6.70	0.2500	1.67	_____
IRRIGATION LABOR					
Furrow irrigation	hour	6.70	0.1500	1.00	_____
DIESEL FUEL					
Tractors	gal	0.90	4.7024	4.23	_____
Self-Propelled Eq.	gal	0.90	2.0600	1.85	_____
Furrow irrigation	gal	0.90	6.0000	5.40	_____
REPAIR & MAINTENANCE					
Implements	acre	2.31	1.0000	2.31	_____
Tractors	acre	3.40	1.0000	3.40	_____
Self-Propelled Eq.	acre	4.06	1.0000	4.06	_____
Furrow irrigation	ac in	0.21	6.0000	1.29	_____
INTEREST ON OP. CAP.	acre	3.34	1.0000	3.34	_____
TOTAL DIRECT EXPENSES				149.28	_____
FIXED EXPENSES					
Implements	acre	4.29	1.0000	4.29	_____
Tractors	acre	7.65	1.0000	7.65	_____
Self-Propelled Eq.	acre	13.64	1.0000	13.64	_____
Furrow irrigation	acre	16.33	1.0000	16.33	_____
TOTAL FIXED EXPENSES				41.92	_____
TOTAL SPECIFIED EXPENSES				191.21	_____

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**Table 2. Estimated resource use and costs for field operations per acre, Grain Sorghum, Furrow Irrigated, Loamy Soils, 2004**

OPERATION/ OPERATING INPUT	SIZE/ UNIT	TRACTOR SIZE	PERF RATE	TIMES OVER	MTH	TRACTOR COST		EQUIP COST		ALLOC LABOR		OPERATING INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Disk, medium cut	26.41'	MFWD190	0.082	1.00	Nov	1.47	1.52	0.44	1.01	0.106	0.71				5.17
Chisel plow	21'	MFWD190	0.092	1.00	Mar	1.65	1.71	0.17	0.33	0.119	0.80				4.66
Cstm ap grd fert dry	acre			1.00	Mar							1.0000	4.00	4.00	4.00
0-40-80	lb											100.0000	0.17	17.00	17.00
Field cultivator	25.5'	MFWD190	0.054	1.00	Mar	0.96	1.00	0.20	0.42	0.070	0.47				3.07
Plntr hbox + sprydir	20'	2WD 150	0.127	1.00	Apr	1.71	1.66	1.19	2.00	0.304	2.04				8.62
Grain sorg. safened	lb											7.0000	1.18	8.26	8.26
Atrazine	pint											4.0000	1.22	4.88	4.88
Dual II	pt											1.5000	13.08	19.62	19.62
Gaucho	lb											6.0000	0.79	4.74	4.74
Water tank	1000 gal	170	0.131	0.06	Apr	0.09	0.05	0.00	0.01	0.001	0.01				0.16
Cstm ap grd fert dry	acre			1.00	May							1.0000	4.00	4.00	4.00
Urea 46%	lb											250.0000	0.12	30.00	30.00
Row cult 8r@30"	20'	2WD 150	0.129	1.00	May	1.74	1.69	0.29	0.49	0.167	1.12				5.35
Flex irrigation tube	acre			1.00	May							1.0000	5.75	5.75	5.75
Furrow irrigation	ac in			1.00	Jun			3.34	16.33	0.075	0.50	3.0000			20.17
Furrow irrigation	ac in			1.00	Jul			3.34		0.075	0.50	3.0000			3.84
Combine 4WD Grn Sorg	25'		0.200	1.00	Sep			5.92	13.64	0.250	1.67				21.24
Custom haul	cwt			1.00	Sep							64.0000	0.27	17.28	17.28
TOTALS						7.64	7.65	14.92	34.27	1.170	7.84			115.53	187.86
INTEREST ON OPERATING CAPITAL															3.34
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															191.21

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## Estimating 2004 Costs of Production

### Grain Sorghum, Non-Irrigated, Mixed Soils

AG-802-12-03

**Tony E. Windham, Extension Economist - Management**  
**James Marshall, Extension Economist**

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CROP SEED					
Grain sorg. safened	lb	1.18	6.0000	7.08	_____
CUSTOM WORK					
Cstm ap grd fert dry	acre	4.00	2.0000	8.00	_____
Custom haul	cwt	0.27	42.9000	11.58	_____
FERTILIZER & LIME					
9-23-30	lb	0.11	300.0000	33.00	_____
Urea 46%	lb	0.12	160.0000	19.20	_____
FUNGICIDE & SEED TR.					
Gaucho	lb	0.79	6.0000	4.74	_____
HERBICIDES					
Atrazine	pint	1.22	4.0000	4.88	_____
Dual II	pt	13.08	1.5000	19.62	_____
OPERATOR LABOR					
Implements	hour	6.70	0.2380	1.59	_____
Tractors	hour	6.70	0.5324	3.56	_____
Self-Propelled Eq.	hour	6.70	0.2500	1.67	_____
DIESEL FUEL					
Tractors	gal	0.90	4.7024	4.23	_____
Self-Propelled Eq.	gal	0.90	2.0600	1.85	_____
REPAIR & MAINTENANCE					
Implements	acre	2.31	1.0000	2.31	_____
Tractors	acre	3.40	1.0000	3.40	_____
Self-Propelled Eq.	acre	4.06	1.0000	4.06	_____
INTEREST ON OP. CAP.	acre	3.43	1.0000	3.43	_____
				-----	
TOTAL DIRECT EXPENSES				134.25	_____
FIXED EXPENSES					
Implements	acre	4.29	1.0000	4.29	_____
Tractors	acre	7.65	1.0000	7.65	_____
Self-Propelled Eq.	acre	13.64	1.0000	13.64	_____
				-----	
TOTAL FIXED EXPENSES				25.59	_____
				-----	
TOTAL SPECIFIED EXPENSES				159.85	_____

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**Table 2. Estimated resource use and costs for field operations per acre, Grain Sorghum, Non-Irrigated, Mixed Soils, 2004**

OPERATION/ OPERATING INPUT	SIZE/ UNIT	TRACTOR SIZE	PERF RATE	TIMES OVER	MTH	TRACTOR COST		EQUIP COST		ALLOC LABOR		OPERATING INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Disk, medium cut	26.41'	MFWD190	0.082	1.00	Nov	1.47	1.52	0.44	1.01	0.106	0.71				5.17
Chisel plow	21'	MFWD190	0.092	1.00	Mar	1.65	1.71	0.17	0.33	0.119	0.80				4.66
Cstm ap grd fert dry acre				1.00	Mar							1.0000	4.00	4.00	4.00
9-23-30	lb											300.0000	0.11	33.00	33.00
Field cultivator	25.5'	MFWD190	0.054	1.00	Mar	0.96	1.00	0.20	0.42	0.070	0.47				3.07
Plntr hbox + sprydir	20'	2WD 150	0.127	1.00	Apr	1.71	1.66	1.19	2.00	0.304	2.04				8.62
Grain sorg. safened	lb											6.0000	1.18	7.08	7.08
Atrazine	pint											4.0000	1.22	4.88	4.88
Dual II	pt											1.5000	13.08	19.62	19.62
Gaucho	lb											6.0000	0.79	4.74	4.74
Water tank	1000 gal	170	0.131	0.06	Apr	0.09	0.05	0.00	0.01	0.001	0.01				0.16
Cstm ap grd fert dry acre				1.00	May							1.0000	4.00	4.00	4.00
Urea 46%	lb											160.0000	0.12	19.20	19.20
Row cult 8r@30"	20'	2WD 150	0.129	1.00	May	1.74	1.69	0.29	0.49	0.167	1.12				5.35
Combine 4WD Grn Sorg	25'		0.200	1.00	Sep			5.92	13.64	0.250	1.67				21.24
Custom haul	cwt			1.00	Sep							42.9000	0.27	11.58	11.58
TOTALS						7.64	7.65	8.23	17.94	1.020	6.83			108.10	156.41
INTEREST ON OPERATING CAPITAL															3.43
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															159.85

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**View or print all of the Arkansas crop budgets at <http://www.aragriculture.org/farmplanning/Budgets/default.asp>**