



UNIVERSITY OF ARKANSAS
 DIVISION OF AGRICULTURE
 Cooperative Extension Service

Estimating 2009 Costs of Production Corn, Bt/RR, Furrow Irrigated, Loamy Soils

AG-1199-11-08

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ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
70-75-75	acre	197.79	1.0000	197.79	_____
Urea, Solid (46% N)	lb.	0.30	325.0000	97.50	_____
Agrotain	lburea	0.02	325.0000	7.80	_____
HERBICIDES					
Bicep II Magnum	qt	9.46	1.5000	14.19	_____
Glyphosate Plus	pt	4.82	4.0000	19.28	_____
Atrazine 4L	pt	1.69	2.0000	3.38	_____
Callisto 4SC	oz	4.61	3.0000	13.83	_____
IRRIGATION SUPPLIES					
Irrppip+lay+pickup	acre	13.50	1.0000	13.50	_____
CROP SEED					
Corn Seed Bt/RR	thous	2.97	33.0000	98.01	_____
CUSTOM HIRE					
Cstm Ap Grd Fert	acre	6.00	2.0000	12.00	_____
Cstm Ap Grd. Herb	acre	6.00	3.0000	18.00	_____
Haul Corn	bu	0.22	175.0000	38.50	_____
GIN/DRY					
Dry Corn	bu	0.19	175.0000	33.25	_____
Corn Checkoff	bu	0.01	175.0000	1.75	_____
OPERATOR LABOR					
Tractors	hour	9.92	0.4729	4.70	_____
Harvesters	hour	9.92	0.1277	1.27	_____
IRRIGATION LABOR					
Furrow Irr.	hour	8.60	0.3017	2.59	_____
HAND LABOR					
Implements	hour	8.60	0.0942	0.81	_____
DIESEL FUEL					
Tractors	gal	2.60	4.7387	12.31	_____
Harvesters	gal	2.60	1.8070	4.70	_____
Furrow Irr.	gal	2.60	12.0000	31.20	_____
REPAIR & MAINTENANCE					
Implements	acre	4.62	1.0000	4.62	_____
Tractors	acre	1.84	1.0000	1.84	_____
Harvesters	acre	2.59	1.0000	2.59	_____
Furrow Irr.	ac-in	0.18	12.0000	2.25	_____
INTEREST ON OP. CAP.	acre	14.67	1.0000	14.67	_____
TOTAL DIRECT EXPENSES				652.33	_____
FIXED EXPENSES					
Implements	acre	11.31	1.0000	11.31	_____
Tractors	acre	13.52	1.0000	13.52	_____
Harvesters	acre	11.77	1.0000	11.77	_____
Furrow Irr.	each	3058.64	0.0083	25.49	_____
TOTAL FIXED EXPENSES				62.09	_____
TOTAL SPECIFIED EXPENSES				714.42	=====

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Table 2. Estimated resource use and costs for field operations, per acre, Corn, Bt/RR, Furrow Irrigated, Loamy Soils, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
Disk Harrow	28'	MFWD 225	0.070	1.00	Nov	2.43	2.35	0.65	1.62	0.07	0.70					7.75
Chisel Plow(Folding)	24'	MFWD 190	0.076	1.00	Nov	2.22	2.07	0.69	1.44	0.07	0.76					7.18
Cstm Ap Grd Fert 70-75-75	acre			1.00	Mar							1.0000	6.00	6.00		6.00
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Mar	1.61	1.56	0.32	1.61	0.04	0.46	1.0000	197.79	197.79		197.79
Disk Bed (Hipper)	8R-30	MFWD 190	0.093	1.00	Apr	2.73	2.54	0.31	0.95	0.09	0.93					5.56
Row Cond Rdg	26'	MFWD 190	0.059	1.00	Apr	1.74	1.62	0.15	0.76	0.05	0.59					7.46
Plant - Rigid	8R-30	MFWD 170	0.094	1.00	Apr	2.49	2.52	0.95	2.15	0.18	1.75					4.86
Corn Seed Bt/RR	thous											33.0000	2.97	98.01		98.01
Cstm Ap Grd. Herb	acre			1.00	Apr							1.0000	6.00	6.00		6.00
Bicep II Magnum	qt											1.5000	9.46	14.19		14.19
Cstm Ap Grd. Herb	acre			1.00	Apr							1.0000	6.00	6.00		6.00
Glyphosate Plus	pt											2.0000	4.82	9.64		9.64
Atrazine 4L	pt											2.0000	1.69	3.38		3.38
Cstm Ap Grd Fert	acre			1.00	Apr							1.0000	6.00	6.00		6.00
Urea, Solid (46% N)	lb.											325.0000	0.30	97.50		97.50
Agrotain	lburea											325.0000	0.02	7.80		7.80
Cstm Ap Grd. Herb	acre			1.00	May							1.0000	6.00	6.00		6.00
Glyphosate Plus	pt											2.0000	4.82	9.64		9.64
Callisto 4SC	oz											3.0000	4.61	13.83		13.83
Irrppip+lay+pickup	acre			1.00	Jun							1.0000	13.50	13.50		13.50
Header - Corn	8R-30	275hp	0.127	1.00	Sep	7.29	11.77	1.40	2.47	0.12	1.27					24.20
Haul Corn	bu											175.0000	0.22	38.50		38.50
Dry Corn	bu											175.0000	0.19	33.25		33.25
Corn Checkoff	bu											175.0000	0.01	1.75		1.75
Corn Grain Cart	8R30 500 bu	MFWD 190	0.031	1.00	Sep	0.93	0.86	0.15	0.31	0.03	0.32					2.57
Furrow Irr.	each			1.00	Jun-Aug				25.49							25.49
Apply Water	ac-in								33.45							36.04
TOTALS						21.44	25.29	38.07	36.80	0.99	9.37				568.78	699.75
INTEREST ON OPERATING CAPITAL																14.67
TOTAL SPECIFIED COST																714.42

Information presented in this document is prepared solely as a general guide and is not intended to recognize or predict the costs and returns from any one particular farm operation. The mention of any commercial product in this analysis does not imply its endorsement by the University of Arkansas Cooperative Extension Service over other products not named, nor does the omission imply that they are not satisfactory. This budget does not include costs for land, overhead, or management. **AG-1199-11-08**

Table 3. Break-even Yields (BEY) Required to cover Direct Expenses and Net Returns above Direct Expenses at Price/Yield Combinations for Select Land Tenure Arrangements, per acre.

Corn, Bt/RR, Furrow Irrigated, Loamy Soils, 2009

Farm Owner							
BEY (bu/acre)	Crop Price (\$/bu)						
	3.46	3.64	3.82	4.00	4.19	4.37	4.55
	Net Returns above Variable Costs (\$/acre)						
141	-154	-128	-102	-77	-51	-26	0
147	-134	-107	-80	-54	-27	0	27
154	-112	-84	-56	-28	0	28	56
162	-88	-59	-29	0	29	59	88
171	-62	-31	0	31	62	93	124
180	-33	0	33	66	98	131	164
191	0	35	70	104	139	174	209

Farm Owner is assumed to have 100% Equity in Land

Tenant 75-25 Crop-Share							
BEY (bu/acre)	Crop Price (\$/bu)						
	3.46	3.64	3.82	4.00	4.19	4.37	4.55
	Net Returns above Variable Costs (\$/acre)						
191	-156	-130	-104	-78	-52	-26	0
200	-136	-109	-82	-55	-27	0	27
210	-114	-86	-57	-29	0	29	57
221	-90	-60	-30	0	30	60	90
233	-63	-32	0	32	63	95	127
246	-34	0	34	67	101	134	168
261	0	36	71	107	143	178	214

Landowner Receives 25% of the Crop.

Tenant pays 100% of Hauling Crop to Grain Elevator

Landowner Pays Drying Expenses on 25% of the Crop

Tenant 50-50 Cost-Share

Tenant 50-50 Cost-Share							
BEY (bu/acre)	Crop Price (\$/bu)						
	3.46	3.64	3.82	4.00	4.19	4.37	4.55
	Net Returns above Variable Costs (\$/acre)						
157	-86	-71	-57	-43	-29	-14	0
164	-75	-60	-45	-30	-15	0	15
173	-63	-47	-31	-16	0	16	31
182	-50	-33	-17	0	17	33	50
192	-35	-18	0	18	35	53	70
204	-19	0	19	37	56	74	93
217	0	20	40	59	79	99	119

Landowner Receives 50% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays Drying Expenses on 50% of the Crop.

Landowner Pays 100% of Irrigation Expenses (Except Labor).

Landowner Pays 50% of:

Seed, Fertilizer, Herbicides, Fungicides, Insecticides, and Aerial Application Costs.

Tenant 80-20 Crop-Share

Tenant 80-20 Crop-Share							
BEY (bu/acre)	Crop Price (\$/bu)						
	3.46	3.64	3.82	4.00	4.19	4.37	4.55
	Net Returns above Variable Costs (\$/acre)						
178	-156	-130	-104	-78	-52	-26	0
186	-136	-109	-81	-54	-27	0	27
196	-114	-85	-57	-28	0	28	57
206	-90	-60	-30	0	30	60	90
217	-63	-32	0	32	63	95	126
229	-33	0	33	67	100	134	167
243	0	35	71	106	142	177	213

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays Drying Expenses on 20% of the Crop.