



UNIVERSITY OF ARKANSAS
DIVISION OF AGRICULTURE
Cooperative Extension Service

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

AG-1203-11-08

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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	_____
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	_____
Survey Levees-CrnSoy	acre	5.00	1.0000	5.00	_____
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	0.4094	4.08	_____
Harvesters	hour	9.92	0.1277	1.27	_____
IRRIGATION LABOR					
Flood Irr. - Crn-Sor	hour	8.60	0.1086	0.93	_____
HAND LABOR					
Implements	hour	8.60	0.0942	0.81	_____
DIESEL FUEL					
Tractors	gal	2.60	3.9944	10.39	_____
Harvesters	gal	2.60	1.8070	4.70	_____
Flood Irr. - Crn-Sor	gal	2.60	12.0000	31.20	_____
REPAIR & MAINTENANCE					
Implements	acre	4.30	1.0000	4.30	_____
Tractors	acre	1.55	1.0000	1.55	_____
Harvesters	acre	2.59	1.0000	2.59	_____
Flood Irr. - Crn-Sor	ac-in	0.32	12.0000	3.86	_____
INTEREST ON OP. CAP.	acre	14.44	1.0000	14.44	_____
TOTAL DIRECT EXPENSES				640.40	_____
FIXED EXPENSES					
Implements	acre	10.36	1.0000	10.36	_____
Tractors	acre	11.39	1.0000	11.39	_____
Harvesters	acre	11.77	1.0000	11.77	_____
Flood Irr. - Crn-Sor	each	3058.64	0.0083	25.49	_____
TOTAL FIXED EXPENSES				59.01	_____
TOTAL SPECIFIED EXPENSES				699.41	_____

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Table 2. Estimated resource use and costs for field operations, per acre, Corn, Bt/RR, Flood 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	acre			1.00	Mar							1.0000	6.00	6.00		6.00	
70-75-75	acre											1.0000	197.79	197.79		197.79	
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Mar	1.61	1.56	0.32	1.61	0.04	0.46					5.56	
Plant - Rigid	8R-30	MFWD 170	0.094	1.00	Apr	2.49	2.52	0.95	2.15	0.18	1.75					9.86	
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	
Survey Levees-CrnSoy	acre			1.00	May							1.0000	5.00	5.00		5.00	
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	
Build Levees	8 blade	MFWD 190	0.012	2.00	Jun-Aug	0.73	0.68	0.06	0.37	0.02	0.25					2.09	
Blade-Box	6'-7'	2WD 130	0.020	2.00	Jun-Aug	0.80	0.67	0.02	0.02	0.04	0.40					1.91	
Tear Down Levees	8 blade	MFWD 190	0.012	2.00	Jun-Aug	0.73	0.68	0.06	0.37	0.02	0.25					2.09	
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	
Flood Irr. - Crn-Sor	each			1.00	Jun-Aug											25.49	
Apply Water	ac-in															35.99	
						19.23	23.16	39.36	35.85	0.74	7.09				560.28	684.97	
TOTALS																	
INTEREST ON OPERATING CAPITAL																	14.44
TOTAL SPECIFIED COST																	699.41

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-1203-11-08**

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, Flood 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)						
138	-150	-125	-100	-75	-50	-25	0
144	-131	-105	-79	-52	-26	0	26
151	-110	-82	-55	-27	0	27	55
159	-87	-58	-29	0	29	58	87
167	-61	-30	0	30	61	91	122
177	-32	0	32	64	96	129	161
187	0	34	68	102	136	170	204

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)						
187	-153	-128	-102	-77	-51	-26	0
196	-134	-107	-80	-53	-27	0	27
205	-112	-84	-56	-28	0	28	56
216	-88	-59	-29	0	29	59	88
228	-62	-31	0	31	62	93	124
241	-33	0	33	66	99	132	164
256	0	35	70	105	140	175	209

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)						
150	-82	-68	-54	-41	-27	-14	0
157	-71	-57	-43	-29	-14	0	14
165	-60	-45	-30	-15	0	15	30
174	-48	-32	-16	0	16	32	48
184	-33	-17	0	17	33	50	67
195	-18	0	18	36	53	71	89
208	0	19	38	57	76	95	113

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)						
174	-152	-127	-102	-76	-51	-25	0
183	-133	-106	-80	-53	-27	0	27
192	-112	-84	-56	-28	0	28	56
201	-88	-59	-29	0	29	59	88
212	-62	-31	0	31	62	93	124
225	-33	0	33	65	98	131	163
238	0	35	69	104	139	173	208

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays Drying Expenses on 20% of the Crop.