

Estimating 2008 Costs of Production Soybean, Double Crop, Flood Irrigation, Roundup Ready

AG-1110-12-07

C. Robert Stark, Jr., Associate Professor-Agriculture Economics
Jeremy Ross, Extension Agronomist - Soybeans

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
0-20-30	lb	0.17	150.0000	26.70	_____
FUNGICIDES					
Folicur	oz	2.05	4.0000	8.20	_____
HERBICIDES					
Glyphosate Plus	pt	1.88	6.0000	11.28	_____
INSECTICIDES					
Orthene 90S	lb	8.59	1.0000	8.59	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.64	60.0000	38.40	_____
CUSTOM HIRE					
Cstm Ap Grd Fert	acre	4.92	1.0000	4.92	_____
Cstm Ap Grd. Herb	acre	5.02	3.0000	15.06	_____
Cstm Ap Air Fung	acre	6.25	1.0000	6.25	_____
Cstm Ap Air Insect	acre	5.00	1.0000	5.00	_____
Cstm Haul Soybeans	bu	0.15	45.0000	6.75	_____
OPERATOR LABOR					
Tractors	hour	9.45	0.6340	6.00	_____
Harvesters	hour	9.45	0.1021	0.97	_____
IRRIGATION LABOR					
Flood Irr. - Soybean	hour	8.19	0.0905	0.74	_____
HAND LABOR					
Implements	hour	8.19	0.0942	0.77	_____
DIESEL FUEL					
Tractors	gal	2.33	7.0670	16.47	_____
Harvesters	gal	2.33	1.4457	3.37	_____
Flood Irr. - Soybean	gal	2.33	10.0000	23.30	_____
REPAIR & MAINTENANCE					
Implements	acre	4.00	1.0000	4.00	_____
Tractors	acre	2.65	1.0000	2.65	_____
Harvesters	acre	2.03	1.0000	2.03	_____
Flood Irr. - Soybean	ac-in	0.15	10.0000	1.50	_____
INTEREST ON OP. CAP.	acre	5.92	1.0000	5.92	_____
TOTAL DIRECT EXPENSES				198.87	_____
FIXED EXPENSES					
Implements	acre	11.73	1.0000	11.73	_____
Tractors	acre	20.21	1.0000	20.21	_____
Harvesters	acre	9.58	1.0000	9.58	_____
Flood Irr. - Soybean	each	2993.11	0.0083	24.94	_____
TOTAL FIXED EXPENSES				66.46	_____
TOTAL SPECIFIED EXPENSES				265.33	_____

Visit our web site at: <http://www.uaex.edu>

View or print all of the Arkansas crop budgets at http://www.uaex.edu/depts/ag_economics/crop_budgets.htm

University of Arkansas, United States Department of Agriculture and County Governments Cooperating
 The Division of Agriculture offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.

Table 2. Estimated resource use and costs for field operations, per acre, Double Crop, Soybeans, Flood Irrigation, Roundup Ready, 2008

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-----			
Cstm Ap Grd Fert 0-20-30	acre lb			1.00	Oct							1.0000	4.92	4.92	4.92
Disk Harrow	28'	MFWD 225	0.070	2.00	Jun	4.41	4.72	1.17	3.06	0.14	1.33	150.0000	0.17	26.70	26.70
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Jun	1.47	1.57	0.33	1.72	0.04	0.44				14.69
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Jun	1.47	1.57	0.33	1.72	0.04	0.44				5.53
Grain Drill	20'	2WD 170	0.094	1.00	Jun	2.19	2.08	1.14	2.72	0.18	1.66				9.79
Soybean Seed RR	lb											60.0000	0.64	38.40	38.40
Cstm Ap Grd. Herb Glyphosate Plus	acre pt			1.00	Jun							1.0000	5.02	5.02	5.02
Land Plane	50'x16'	MFWD 225	0.151	2.00	Jul	9.52	10.21	0.43	1.40	0.30	2.87				24.43
Levee Pull (1m/80a)	8 blade	MFWD 170	0.003	0.15	Jul	0.01	0.01			0.00	0.01				0.03
Blade-Scraper	8'-10'	MFWD 105		0.05	Jul										
Cstm Ap Grd. Herb Glyphosate Plus	acre pt			1.00	Jul							1.0000	5.02	5.02	5.02
Levee Splitter (1/80)	8 blade	MFWD 150	0.004	0.10	Jul	0.01	0.01			0.00		2.0000	1.88	3.76	3.76
Cstm Ap Air Fung Folicur	acre oz			1.00	Jul							1.0000	6.25	6.25	6.25
Cstm Ap Air Insect Orthene 90S	acre lb			1.00	Jul							4.0000	2.05	8.20	8.20
Levee Pull (1m/80a)	8 blade	MFWD 170	0.003	0.15	Aug	0.01	0.01			0.00	0.01	1.0000	8.59	8.59	8.59
Blade-Scraper	8'-10'	MFWD 105		0.05	Aug										
Cstm Ap Grd. Herb Glyphosate Plus	acre pt			1.00	Aug							1.0000	5.02	5.02	5.02
Levee Splitter (1/80)	8 blade	MFWD 150	0.004	0.10	Aug	0.01	0.01			0.00		2.0000	1.88	3.76	3.76
Levee Pull (1m/80a)	8 blade	MFWD 170	0.003	0.15	Sep	0.01	0.01			0.00	0.01				0.02
Blade-Scraper	8'-10'	MFWD 105		0.05	Sep										
Levee Splitter (1/80)	8 blade	MFWD 150	0.004	0.10	Sep	0.01	0.01			0.00					0.02
Header - Soybean	25' Flex	275hp	0.102	1.00	Oct	5.40	9.58	0.60	1.11	0.10	0.97				17.66
Cstm Haul Soybeans	bu			1.00	Oct							45.0000	0.15	6.75	6.75
Flood Irr. - Soybean	each			1.00	Jul						24.94	0.0083			24.94
Application 1	ac-in			1.00	Jul			9.92		0.03	0.30	4.0000			10.22
Application 2	ac-in			1.00	Aug			7.44		0.02	0.22	3.0000			7.66
Application 3	ac-in			1.00	Sep			7.44		0.02	0.22	3.0000			7.66
TOTALS						24.52	29.79	28.80	36.67	0.92	8.48			131.15	259.41
INTEREST ON OPERATING CAPITAL															5.92
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															265.33

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.

Table 3. Breakeven Yields (BEY) Required to Cover Direct Expenses and Net Returns above Direct Expenses for Price/Yield Combinations and Select Land Tenure Arrangements, per acre.

Soybean, Double Crop, Flood Irrigated, Roundup Ready, 2008

Farm Owner

BEY (bu/acre)	Crop Price (\$/bu)						
	5.70	6.51	7.32	8.13	8.94	9.75	10.56
	Returns above Variable Costs (\$/Acre)						
18	-90	-75	-60	-45	-30	-15	0
20	-81	-65	-49	-32	-16	0	16
22	-71	-53	-35	-18	0	18	35
24	-59	-39	-20	0	20	39	59
27	-43	-22	0	22	43	65	87
30	-24	0	24	49	73	98	122
35	0	28	56	84	112	140	168

Farm Owner is assumed to have 100% Equity in Land

Tenant 75-25 Crop-Share

BEY (bu/acre)	Crop Price (\$/bu)						
	5.70	6.51	7.32	8.13	8.94	9.75	10.56
	Returns above Variable Costs (\$/Acre)						
25	-90	-75	-60	-45	-30	-15	0
27	-81	-65	-49	-33	-16	0	16
29	-71	-53	-36	-18	0	18	36
32	-59	-39	-20	0	20	39	59
36	-44	-22	0	22	44	66	87
41	-25	0	25	49	74	99	123
47	0	28	57	85	113	141	170

Landowner Receives 25% of the Crop.

Tenant pays 100% of Hauling Crop to Grain Elevator

Landowner Pays 100% of Fixed Irrigation Expenses

Tenant 90-10 Crop-Share

BEY (bu/acre)	Crop Price (\$/bu)						
	5.70	6.51	7.32	8.13	8.94	9.75	10.56
	Returns above Variable Costs (\$/Acre)						
21	-90	-75	-60	-45	-30	-15	0
22	-81	-65	-49	-32	-16	0	16
24	-71	-53	-35	-18	0	18	35
27	-59	-39	-20	0	20	39	59
30	-44	-22	0	22	44	65	87
34	-25	0	25	49	74	98	123
39	0	28	56	84	112	141	169

Landowner Receives 10% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Tenant 80-20 Crop-Share

BEY (bu/acre)	Crop Price (\$/bu)						
	5.70	6.51	7.32	8.13	8.94	9.75	10.56
	Returns above Variable Costs (\$/Acre)						
23	-90	-75	-60	-45	-30	-15	0
25	-81	-65	-49	-33	-16	0	16
27	-71	-53	-36	-18	0	18	36
30	-59	-39	-20	0	20	39	59
34	-44	-22	0	22	44	65	87
38	-25	0	25	49	74	98	123
44	0	28	56	85	113	141	169

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.