

Estimating 2008 Costs of Production

Soybean, Double Crop, Furrow Irrigation, Conventional

AG-1112-12-07

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					
Dual Magnum	pt	12.14	1.5000	18.21	_____
Canopy SP	oz	1.39	3.0000	4.17	_____
Storm	pt	10.23	1.0000	10.23	_____
Select 2EC	oz	1.30	4.0000	5.20	_____
INSECTICIDES					
Orthene 90S	lb	8.59	1.0000	8.59	_____
IRRIGATION SUPPLIES					
IrrPipe+lay+pickup	acre	10.30	1.0000	10.30	_____
SEED/PLANTS					
Soybean Seed Private	lb	0.38	60.0000	22.80	_____
ADJUVANTS					
Surfactant (80-20)	pt	1.27	0.4000	0.51	_____
CUSTOM HIRE					
Cstm Ap Grd Fert	acre	4.92	1.0000	4.92	_____
Cstm Ap Grd. Herb	acre	5.02	2.0000	10.04	_____
Cstm Ap Air Fung	acre	6.25	1.0000	6.25	_____
Cstm Ap Air Insect	acre	5.00	1.0000	5.00	_____
Cstm Ap Air Herb	acre	5.95	1.0000	5.95	_____
Cstm Haul Soybeans	bu	0.15	45.0000	6.75	_____
OPERATOR LABOR					
Tractors	hour	9.45	0.5341	5.04	_____
Harvesters	hour	9.45	0.1021	0.97	_____
IRRIGATION LABOR					
Furrow Irr.	hour	8.19	0.3017	2.48	_____
HAND LABOR					
Implements	hour	8.19	0.0942	0.77	_____
DIESEL FUEL					
Tractors	gal	2.33	5.5478	12.93	_____
Harvesters	gal	2.33	1.4457	3.37	_____
Furrow Irr.	gal	2.33	12.0000	27.96	_____
REPAIR & MAINTENANCE					
Implements	acre	4.20	1.0000	4.20	_____
Tractors	acre	2.13	1.0000	2.13	_____
Harvesters	acre	2.03	1.0000	2.03	_____
Furrow Irr.	ac-in	0.17	12.0000	2.12	_____
INTEREST ON OP. CAP.	acre	6.86	1.0000	6.86	_____
TOTAL DIRECT EXPENSES				224.68	_____
FIXED EXPENSES					
Implements	acre	12.57	1.0000	12.57	_____
Tractors	acre	16.27	1.0000	16.27	_____
Harvesters	acre	9.58	1.0000	9.58	_____
Furrow Irr.	each	2993.11	0.0083	24.94	_____
TOTAL FIXED EXPENSES				63.36	_____
TOTAL SPECIFIED EXPENSES				288.04	_____

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, Furrow Irrigation, Conventional, 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	acre			1.00	Oct							1.0000	4.92	4.92	4.92
0-20-30	lb											150.0000	0.17	26.70	26.70
Disk Harrow	28'	MFWD 225	0.070	2.00	Jun	4.41	4.72	1.17	3.06	0.14	1.33				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
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
Plant - Rigid	8R-30	MFWD 170	0.094	1.00	Jun	2.25	2.55	0.91	2.16	0.18	1.66				9.53
Soybean Seed Private	lb											60.0000	0.38	22.80	22.80
Cultivate	8R-30	MFWD 190	0.103	1.00	Jun	2.73	2.93	0.43	1.40	0.10	0.97				8.46
Cstm Ap Grd. Herb	acre			1.00	Jun							1.0000	5.02	5.02	5.02
Dual Magnum	pt											1.5000	12.14	18.21	18.21
Canopy SP	oz											3.0000	1.39	4.17	4.17
Cultivate	8R-30	MFWD 190	0.103	1.00	Jun	2.73	2.93	0.43	1.40	0.10	0.97				8.46
IrrPipe+lay+pickup	acre			1.00	Jul							1.0000	10.30	10.30	10.30
Cstm Ap Grd. Herb	acre			1.00	Jul							1.0000	5.02	5.02	5.02
Storm	pt											1.0000	10.23	10.23	10.23
Surfactant (80-20)	pt											0.4000	1.27	0.51	0.51
Cstm Ap Air Fung	acre			1.00	Jul							1.0000	6.25	6.25	6.25
Folicur	oz											4.0000	2.05	8.20	8.20
Cstm Ap Air Insect	acre			1.00	Jul							1.0000	5.00	5.00	5.00
Orthene 90S	lb											1.0000	8.59	8.59	8.59
Cstm Ap Air Herb	acre			1.00	Aug							1.0000	5.95	5.95	5.95
Select 2EC	oz											4.0000	1.30	5.20	5.20
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
Furrow Irr.	each			1.00	Jul				24.94			0.0083			24.94
Application 1	ac-in			1.00	Jul			7.52		0.07	0.62	3.0000			8.14
Application 2	ac-in			1.00	Jul			7.52		0.07	0.62	3.0000			8.14
Application 3	ac-in			1.00	Aug			7.52		0.07	0.62	3.0000			8.14
Application 4	ac-in			1.00	Aug			7.52		0.07	0.62	3.0000			8.14
TOTALS						20.46	25.85	34.28	37.51	1.03	9.26			153.82	281.18
INTEREST ON OPERATING CAPITAL															6.86
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															288.04

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, Furrow Irrigated, Conventional, 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)						
21	-102	-85	-68	-51	-34	-17	0
23	-92	-74	-55	-37	-18	0	18
25	-80	-60	-40	-20	0	20	40
27	-66	-44	-22	0	22	44	66
30	-49	-25	0	25	49	74	98
34	-28	0	28	56	83	111	139
39	0	32	64	95	127	159	191

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)						
28	-102	-85	-68	-51	-34	-17	0
30	-92	-74	-55	-37	-18	0	18
33	-81	-61	-40	-20	0	20	40
37	-67	-45	-22	0	22	45	67
41	-50	-25	0	25	50	74	99
46	-28	0	28	56	84	112	140
53	0	32	64	96	128	160	193

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)						
23	-102	-85	-68	-51	-34	-17	0
25	-92	-74	-55	-37	-18	0	18
28	-80	-60	-40	-20	0	20	40
30	-67	-44	-22	0	22	44	67
34	-49	-25	0	25	49	74	99
38	-28	0	28	56	83	111	139
44	0	32	64	96	128	160	191

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)						
26	-102	-85	-68	-51	-34	-17	0
28	-92	-74	-55	-37	-18	0	18
31	-81	-61	-40	-20	0	20	40
34	-67	-44	-22	0	22	44	67
38	-49	-25	0	25	49	74	99
43	-28	0	28	56	84	112	140
49	0	32	64	96	128	160	192

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.