

Projected Costs and Returns Crop Enterprise Budgets for Soybean Production in Louisiana, 2016

Michael A. Deliberto, Brian M. Hilbun, and Michael E. Salassi



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SOYBEAN ENTERPRISE BUDGETS:

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PROJECTED COSTS AND RETURNS CROP ENTERPRISE BUDGETS FOR SOYBEAN PRODUCTION IN LOUISIANA, 2016

by

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Introduction

This publication presents estimates of projected costs and returns for soybean production in Louisiana for the 2016 crop year. Crop producers are annually faced with critical management decisions that impact the employment of production inputs for various crop enterprises and the combination of crops that will be assembled into a cropping system. The need for reliable information is crucial if sound production decisions are to be made. Planning information plays a pivotal role in the development of annual crop production plans by producers and is important in supporting their efforts to secure the necessary resources to carry out their plans. In addition, information regarding production alternatives and costs and returns for major crop enterprises is needed by extension personnel, researchers, lending institutions, and others involved in agriculture or agribusiness. The purpose of this report is to provide planning information regarding crop production costs and market returns for the 2016 crop year.

Crop enterprise budgets in this report are presented in two budget formats. The first budget format (table A) is a summary of costs and returns for the crop enterprise. The second budget format (table B) provides a table listing the sequence of production operations, indicating the equipment and implements used, month of operation, labor required, machine time required, and materials used. Labor costs, material costs, custom costs, and direct and fixed costs for tractors and equipment are also included for each operation. All costs are summed giving the total cost per operation or practice. In addition, breakeven prices to cover

direct production costs and total specified production costs are presented in tables C and D.

Procedure

The general procedure used in this study was to project machinery and other input price data and apply these data to the production practice data for crop enterprises produced in Louisiana. Input prices were obtained from surveys of farm suppliers, machinery dealers, and aerial applicators to provide a basis for estimating 2016 planning budgets. Machinery and other input cost data are presented in the Appendix.

The budgets included in this report are categorized by per acre total direct expenses and per acre total fixed expenses for a production season. Within these two broad categories, the various inputs are itemized with their respective costs. Although a particular enterprise budget is presented on a per acre basis, some individual cost items are specified on an hourly or price per unit basis. Direct expenses include such cost items as seed, fertilizer, chemicals, fuel, labor, repairs, and irrigation. Fixed expenses include such items as depreciation and interest on investment which are generally incurred during the production period.

Due to the detailed nature of the cost computations, a computerized budget generator procedure was utilized. The Mississippi State Budget Generator Program, developed at Mississippi State University, is utilized by the LSU Agricultural Center in developing these crop enterprise costs and returns budgets. The budget generator provides a standard format for crop and livestock budgets and this computational procedure is widely accepted for

estimating projected commodity costs and returns information for upcoming crop year planning purposes.

Expected Crop Yields and Market Prices

Projected crop enterprise budgets in this report include a calculation of expected market returns for the crop. Expected crop yields and market prices are selected at the beginning of the crop year. Projected crop yields are determined based on recent production history for expected yield given normal weather conditions. Projected market prices are specified as expected marketing year average prices for the commodity, based on harvest time futures price quotes as well as other market information at the beginning of the crop year. No estimate of income from farm program participation or crop insurance is included in this budgets due to the wide variety of farm program and crop insurance choices available to producers.

Direct Production Costs

Direct or variable production costs were estimated by utilizing updated crop production input price data. Input price data for various crop production inputs were updated by obtaining prices from farm input suppliers in the fall and winter prior to the crop year. Herbicide, fertilizer, and insecticide expenditures for each enterprise budget are based upon the types of chemicals producers generally reported using for that situation. Suggested prices for selected farm inputs and aerial application rates are presented in the appendix.

Hired labor was charged at \$9.60 per hour for all classes of labor except for harvest machinery and laser leveling operator labor. This wage rate include a basic wage rate plus additional costs for social security, Medicare, and workman's compensation. Operator labor was charged at \$15.30 per hour, which includes a basic wage rate plus additional costs for social security, Medicare, and workman's compensation. The higher wage rate was

charged for these classes of operators because of the relatively higher skills required to run these types of machinery and the general consensus that these operators are generally twelve month (salaried) employees i.e. foremen. Farm labor may not be generally available on an hourly basis; however, an hourly charge represents a practical method for charging labor to the respective crop enterprises on a per acre basis.

Interest on operating capital (short term) was charged at a nominal rate of 4.50% per year. Operating capital was assumed to be borrowed in a manner consistent with timely acquisition of inputs. Fuel prices for diesel and gasoline were \$2.00 per gallon and \$2.25 per gallon, respectively. Variable costs for tractors, self-propelled machinery, and irrigation machinery include the cost of fuel, lubrication, and repair.

The intermediate term interest rate was charged at an historical real rate of 5.00%. The reasoning behind the difference in short and intermediate term rates is that longer term nominal rates are highly variable and closely follow the trend set by the rate of inflation. Intermediate term interest rates above the real rate of interest can overstate true interest costs because they overlook the value gained by an asset due solely to inflation.

Farm Machinery Costs

Machinery cost data were obtained from a sample of machinery dealers. New machinery prices were used to reflect the economic cost of acquiring and maintaining capital assets in current dollar values. Purchase prices for selected power and machinery items included in this report are presented in the appendix. Other data included in the appendix indicate hours of annual use and years of life for each selected machinery item. Fuel consumption, accumulated repair costs, and other machinery performance data are based on ASAE standards. Machinery fixed costs are calculated using the capital recovery method which includes estimates of both annual depreciation and interest on investment.

Overhead Costs

Overhead costs reflect significant expenses associated with the operation of the entire farm business, but are not necessarily attributable to a specific crop enterprise. Examples of farm overhead costs include tax services, record keeping, utilities, farmstead maintenance, and insurance and property taxes where applicable. General farm overhead costs can vary greatly from farm to farm based on many factors including farm size, land tenure and crop production technology utilized. As the primary purpose of this report is to estimate production costs associated with a specific commodity, no charges for general farm overhead are included.

Land and Management Charges

The estimated production expenses included in this report include only direct and fixed expenses associated with the production of the specific crop enterprise. Labor charges included in the enterprise budgets only include charges for field labor. No charges for management are included. In addition, no charges for land are included in the enterprise cost tables. Following each set of enterprise cost tables, two sets of net return tables are included. One set, representing owner operators, includes estimates of net returns above direct and total specified costs, which would represent returns to land, management and general farm overhead. Another set, representing tenant operators, includes estimates net returns above direct and total specified costs with a crop share taken out of revenue, representing net returns to management and general farm overhead.

Acknowledgments

Several individuals were instrumental in making this report possible. The authors are particularly indebted to Louisiana crop producers and LSU Agricultural Center Extension Service agents and Experiment Station scientists for their cooperation and assistance in providing specific production practice information, as well as farm suppliers and agribusiness firms for supplying input price information.

Internet Access

This publication, along with projected costs and returns reports for other major agricultural crop commodities produced in Louisiana, as well as other farm management publications, are available on the Internet on the LSU AgCenter web page under the “*Extension and Outreach*” section of the Department of Agricultural Economics and Agribusiness web page. These projected costs and returns reports are also available on the LSU Ag Center crop commodities web pages. The web address for the LSU AgCenter is: www.lsuagcenter.com

Table 1.A Estimated costs per Acre
Soybeans, RR, 8-row equipment, stale seedbed, non-irrigated,
alluvial soils, Northeast Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
App by Air (3 gal)	appl	5.00	3.0000	15.00	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.25	16.0000	4.00	_____
FERTILIZERS					
LA Phosphate	lb	0.54	50.0000	27.00	_____
LA Potash	lb	0.35	50.0000	17.50	_____
FUNGICIDES					
Quadris	oz	2.66	6.0000	15.96	_____
Stratego	pt	25.00	0.6250	15.63	_____
HERBICIDES					
Roundup WeatherMax	oz	0.08	66.0000	5.28	_____
2,4-D Amine 4	pt	1.85	1.0000	1.85	_____
Valor WP	oz	4.23	2.0000	8.46	_____
Dual II Magnum	pt	13.50	1.0000	13.50	_____
Flexstar HL	pt	4.50	1.0000	4.50	_____
INSECTICIDES					
Brigade EC	pt	3.50	0.7500	2.63	_____
Orthene 90S	lb	5.75	0.6000	3.45	_____
Intrepid 2F	oz	6.13	6.0000	36.78	_____
Surfactant	pt	5.35	1.0000	5.35	_____
SEED/PLANTS					
Soybean Seed RR	lb	1.11	50.0000	55.50	_____
CUSTOM FERT/LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CUSTOM HARVEST/HAUL					
Haul Soybeans	bu	0.27	45.0000	12.15	_____
OPERATOR LABOR					
Harvesters	hour	13.40	0.0851	1.14	_____
LA Hired Labor					
Implements	hour	10.18	0.1345	1.38	_____
Tractors	hour	10.18	0.4272	4.33	_____
DIESEL FUEL					
Tractors	gal	2.00	4.0612	8.12	_____
Harvesters	gal	2.00	1.2047	2.41	_____
REPAIR & MAINTENANCE					
Implements	Acre	4.23	1.0000	4.23	_____
Tractors	Acre	2.36	1.0000	2.36	_____
Harvesters	Acre	2.79	1.0000	2.79	_____
INTEREST ON OP. CAP.	Acre	5.21	1.0000	5.21	_____

TOTAL DIRECT EXPENSES				311.18	_____
FIXED EXPENSES					
Implements	Acre	7.58	1.0000	7.58	_____
Tractors	Acre	14.78	1.0000	14.78	_____
Harvesters	Acre	11.02	1.0000	11.02	_____

TOTAL FIXED EXPENSES				33.38	_____

TOTAL SPECIFIED EXPENSES				344.56	_____

Table 1.B Estimated resource use and costs for field operations, per Acre
Soybeans, RR, 8-row equipment, stale seedbed, non-irrigated,
alluvial soils, Northeast Louisiana, 2016.

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-----															
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Oct	1.96	2.75	0.77	0.87	0.11	1.19				7.54
LA Phosphate	lb											50.0000	0.54	27.00	27.00
LA Potash	lb											50.0000	0.35	17.50	17.50
Lime (Spread)	ton			0.33	Oct							0.3300	46.00	15.18	15.18
Disk Harrow	28'	MFWD 225	0.070	1.00	Oct	2.12	3.15	0.97	2.05	0.07	0.71				9.00
Land Plane	40'x10'	MFWD 190	0.242	0.20	Oct	1.22	1.72	0.06	0.15	0.04	0.49				3.64
Disk Bed (Hipper)Fld	8R-38	MFWD 190	0.074	1.00	Oct	1.87	2.63	0.37	0.98	0.07	0.75				6.60
Ditcher		2WD 130	0.020	1.00	Oct	0.33	0.36	0.04	0.05	0.02	0.20				0.98
App by Air (5 gal)	appl			1.00	Mar							1.0000	6.50	6.50	6.50
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76
2,4-D Amine 4	pt											1.0000	1.85	1.85	1.85
Valor WP	oz											2.0000	4.23	8.46	8.46
Plant - Folding	8R-38	MFWD 170	0.074	1.00	May	1.69	2.43	1.19	2.28	0.14	1.52				9.11
Soybean Seed RR	lb											50.0000	1.11	55.50	55.50
Ditcher		2WD 130	0.020	1.00	May	0.33	0.36	0.04	0.05	0.02	0.20				0.98
Spray (Broadcast)	40'	MFWD 170	0.042	1.00	May	0.96	1.38	0.15	0.18	0.06	0.65				3.32
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76
Dual II Magnum	pt											1.0000	13.50	13.50	13.50
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76
Flexstar HL	pt											1.0000	4.50	4.50	4.50
App by Air (3 gal)	appl			1.00	Jul							1.0000	5.00	5.00	5.00
Brigade EC	pt											0.3750	3.50	1.31	1.31
Quadris	oz											6.0000	2.66	15.96	15.96
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Orthene 90S	lb											0.6000	5.75	3.45	3.45
Stratego	pt											0.6250	25.00	15.63	15.63
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Brigade EC	pt											0.3750	3.50	1.31	1.31
Intrepid 2F	oz											6.0000	6.13	36.78	36.78
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.50	6.50	6.50
Gramoxone Inteon	oz											16.0000	0.25	4.00	4.00
Surfactant	pt											1.0000	5.35	5.35	5.35
Header - Soybean	30' Flex	275hp	0.085	1.00	Oct	5.20	11.02	0.64	0.97	0.08	1.14				18.97
Haul Soybeans	bu			1.00	Oct							45.0000	0.27	12.15	12.15
TOTALS						15.68	25.80	4.23	7.58	0.64	6.85			279.21	339.35
INTEREST ON OPERATING CAPITAL															5.21
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															344.56

Table 1.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, 8-row equipment, stale seedbed, non-irrigated,
alluvial soils, Northeast Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
Soybeans			4.70	5.01	5.38	5.80	6.31	6.91	7.65	8.57	9.76	11.34	13.55
PERCENT	YIELD	UNIT	-----dollars-----										
50	22.50	bu	-199	-192	-183	-174	-163	-149	-132	-112	-85	-49	0
			-232	-225	-217	-207	-196	-182	-166	-145	-118	-83	-33
60	27.00	bu	-179	-170	-160	-149	-135	-119	-99	-74	-42	0	59
			-212	-204	-194	-182	-169	-152	-133	-108	-76	-33	26
70	31.50	bu	-159	-149	-137	-124	-108	-89	-66	-37	0	49	119
			-192	-182	-171	-157	-142	-123	-99	-70	-33	16	86
80	36.00	bu	-139	-128	-114	-99	-81	-59	-33	0	42	99	179
			-172	-161	-148	-133	-114	-93	-66	-33	9	66	145
90	40.50	bu	-119	-106	-91	-74	-54	-29	0	37	85	149	239
			-152	-140	-125	-108	-87	-63	-33	3	52	116	205
100	45.00	bu	-99	-85	-68	-49	-27	0	33	74	128	199	298
			-133	-118	-102	-83	-60	-33	-0	41	94	165	265
110	49.50	bu	-79	-64	-45	-24	0	29	66	112	170	249	358
			-113	-97	-79	-58	-33	-3	33	78	137	215	325
120	54.00	bu	-59	-42	-22	0	27	59	99	149	213	298	418
			-93	-76	-56	-33	-6	26	66	116	180	265	385
130	58.50	bu	-39	-21	0	24	54	89	132	186	256	348	478
			-73	-54	-33	-8	20	56	99	153	222	315	444
140	63.00	bu	-19	0	22	49	81	119	166	224	298	398	538
			-53	-33	-10	16	48	86	132	190	265	365	504
150	67.50	bu	0	21	45	74	108	149	199	261	341	448	597
			-33	-12	12	41	75	116	165	228	308	415	564

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 1.D Breakeven price above total expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, 8-row equipment, stale seedbed, non-irrigated,
alluvial soils, Northeast Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
Soybeans			5.19	5.54	5.95	6.42	6.98	7.65	8.47	9.50	10.82	12.58	15.04
PERCENT	YIELD	UNIT	-----dollars-----										
50	22.50	bu	-188	-180	-171	-160	-147	-132	-114	-91	-61	-22	33
			-221	-213	-204	-193	-181	-166	-147	-124	-94	-55	0
60	27.00	bu	-166	-156	-145	-132	-117	-99	-77	-49	-14	33	99
			-199	-189	-178	-166	-151	-132	-110	-83	-47	0	66
70	31.50	bu	-143	-132	-119	-105	-87	-66	-40	-8	33	88	166
			-177	-166	-153	-138	-120	-99	-73	-41	0	55	132
80	36.00	bu	-121	-109	-94	-77	-57	-33	-3	33	80	144	232
			-155	-142	-127	-110	-90	-66	-36	0	47	110	199
90	40.50	bu	-99	-85	-68	-49	-27	0	33	74	128	199	299
			-132	-118	-102	-83	-60	-33	0	41	94	166	265
100	45.00	bu	-77	-61	-43	-22	3	33	70	116	175	254	365
			-110	-94	-76	-55	-30	0	36	83	142	221	332
110	49.50	bu	-55	-37	-17	5	33	66	107	158	223	310	432
			-88	-71	-51	-27	0	33	73	124	189	276	398
120	54.00	bu	-33	-14	7	33	63	99	144	199	270	365	498
			-66	-47	-25	0	30	66	110	166	237	332	465
130	58.50	bu	-10	9	33	61	93	133	181	241	318	421	565
			-44	-23	0	27	60	99	147	207	284	387	531
140	63.00	bu	11	33	58	88	124	166	218	282	365	476	631
			-22	0	25	55	90	132	184	249	332	443	598
150	67.50	bu	33	57	84	116	154	199	254	324	413	531	698
			0	23	51	83	120	166	221	290	379	498	664

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 2.A Estimated costs per Acre
Soybeans, RR, 8-row equipment, stale seedbed, irrigated,
alluvial soils, Northeast Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	2.0000	13.00	_____
App by Air (3 gal)	appl	5.00	4.0000	20.00	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.25	16.0000	4.00	_____
FERTILIZERS					
LA Phosphate	lb	0.54	50.0000	27.00	_____
LA Potash	lb	0.35	50.0000	17.50	_____
FUNGICIDES					
Quadris	oz	2.66	6.0000	15.96	_____
Stratego	pt	25.00	0.6250	15.63	_____
HERBICIDES					
Roundup WeatherMax	oz	0.08	66.0000	5.28	_____
2,4-D Amine 4	pt	1.85	1.0000	1.85	_____
Valor WP	oz	4.23	2.0000	8.46	_____
Dual II Magnum	pt	13.50	1.0000	13.50	_____
Flexstar HL	pt	4.50	1.0000	4.50	_____
INSECTICIDES					
Brigade EC	pt	3.50	0.7500	2.63	_____
Orthene 90S	lb	5.75	0.6000	3.45	_____
Intrepid 2F	oz	6.13	6.0000	36.78	_____
Surfactant	pt	5.35	1.0000	5.35	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Soybean Seed RR	lb	1.11	50.0000	55.50	_____
CUSTOM FERT/LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CUSTOM HARVEST/HAUL					
Haul Soybeans	bu	0.27	55.0000	14.85	_____
OPERATOR LABOR					
Harvesters	hour	13.40	0.0851	1.14	_____
IRRIGATION LABOR					
Implements	hour	9.06	0.0062	0.06	_____
LA Hired Labor					
Implements	hour	10.18	0.1345	1.38	_____
Tractors	hour	10.18	0.7203	7.32	_____
LA Irrigation Labor					
Special Labor	hour	10.18	0.1500	1.51	_____
DIESEL FUEL					
Tractors	gal	2.00	6.8886	13.78	_____
Harvesters	gal	2.00	1.2047	2.41	_____
Roll-Out Pipe Irr.	gal	2.00	4.8877	9.78	_____
REPAIR & MAINTENANCE					
Implements	Acre	4.64	1.0000	4.64	_____
Tractors	Acre	3.97	1.0000	3.97	_____
Harvesters	Acre	2.79	1.0000	2.79	_____
Roll-Out Pipe Irr.	Acre	4.66	1.0000	4.66	_____
INTEREST ON OP. CAP.	Acre	5.76	1.0000	5.76	_____

TOTAL DIRECT EXPENSES				348.19	_____
FIXED EXPENSES					
Implements	Acre	8.67	1.0000	8.67	_____
Tractors	Acre	24.94	1.0000	24.94	_____
Harvesters	Acre	11.02	1.0000	11.02	_____
Roll-Out Pipe Irr.	Acre	48.24	1.0000	48.24	_____

TOTAL FIXED EXPENSES				92.87	_____

TOTAL SPECIFIED EXPENSES				441.06	_____

Table 2.B Estimated resource use and costs for field operations, per Acre
Soybeans, RR, 8-row equipment, stale seedbed, irrigated,
alluvial soils, Northeast Louisiana, 2016.

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-----			
Lime (Spread)	ton			0.33	Oct							0.3300	46.00	15.18	15.18
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Oct	1.96	2.75	0.77	0.87	0.11	1.19				7.54
LA Phosphate	lb											50.0000	0.54	27.00	27.00
LA Potash	lb											50.0000	0.35	17.50	17.50
Disk Harrow	28'	MFWD 225	0.070	1.00	Oct	2.12	3.15	0.97	2.05	0.07	0.71				9.00
Land Plane	40'x10'	MFWD 190	0.242	0.20	Oct	1.22	1.72	0.06	0.15	0.04	0.49				3.64
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	0.074	1.00	Oct	1.87	2.63	0.35	0.92	0.07	0.75				6.52
Ditcher		2WD 130	0.020	1.00	Oct	0.33	0.36	0.04	0.05	0.02	0.20				0.98
App by Air (5 gal)	appl			1.00	Mar							1.0000	6.50	6.50	6.50
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76
2,4-D Amine 4	pt											1.0000	1.85	1.85	1.85
Valor WP	oz											2.0000	4.23	8.46	8.46
Plant - Folding	8R-38	MFWD 170	0.074	1.00	May	1.69	2.43	1.19	2.28	0.14	1.52				9.11
Soybean Seed RR	lb											50.0000	1.11	55.50	55.50
Ditcher		2WD 130	0.020	1.00	May	0.33	0.36	0.04	0.05	0.02	0.20				0.98
Spray (Broadcast)	40'	MFWD 170	0.042	1.00	May	0.96	1.38	0.15	0.18	0.06	0.65				3.32
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76
Dual II Magnum	pt											1.0000	13.50	13.50	13.50
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76
Flexstar HL	pt											1.0000	4.50	4.50	4.50
App by Air (3 gal)	appl			1.00	Jul							1.0000	5.00	5.00	5.00
Brigade EC	pt											0.3750	3.50	1.31	1.31
Quadris	oz											6.0000	2.66	15.96	15.96
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Orthene 90S	lb											0.6000	5.75	3.45	3.45
Stratego	pt											0.6250	25.00	15.63	15.63
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Brigade EC	pt											0.3750	3.50	1.31	1.31
Intrepid 2F	oz											6.0000	6.13	36.78	36.78
App by Air (3 gal)	appl			1.00	Sep							1.0000	5.00	5.00	5.00
Gramoxone Inteon	oz											16.0000	0.25	4.00	4.00
Surfactant	pt											1.0000	5.35	5.35	5.35
Header - Soybean	30' Flex	275hp	0.085	1.00	Oct	5.20	11.02	0.64	0.97	0.08	1.14				18.97
Haul Soybeans	bu			1.00	Oct							55.0000	0.27	14.85	14.85
Roll-Out Pipe Irr.	Acre				Jul	7.27	10.16	14.87	49.39	0.44	4.56	1.0000		8.58	94.83
TOTALS						22.95	35.96	19.08	56.91	1.09	11.41			288.99	435.30
INTEREST ON OPERATING CAPITAL															5.76
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															441.06

Table 2.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, 8-row equipment, stale seedbed, irrigated,
alluvial soils, Northeast Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
Soybeans			4.31	4.59	4.93	5.32	5.77	6.33	7.00	7.84	8.92	10.36	12.38
PERCENT	YIELD	UNIT	-----dollars-----										
50	27.50	bu	-222	-214	-205	-194	-181	-166	-148	-124	-95	-55	0
			-315	-307	-297	-287	-274	-259	-240	-217	-188	-148	-92
60	33.00	bu	-199	-190	-179	-166	-151	-133	-111	-83	-47	0	66
			-292	-283	-272	-259	-244	-226	-203	-176	-140	-92	-26
70	38.50	bu	-177	-166	-153	-138	-121	-99	-74	-41	0	55	133
			-270	-259	-246	-231	-214	-192	-166	-134	-92	-37	40
80	44.00	bu	-155	-142	-128	-111	-90	-66	-37	0	47	111	199
			-248	-235	-221	-203	-183	-159	-129	-92	-45	18	107
90	49.50	bu	-133	-119	-102	-83	-60	-33	0	41	95	166	266
			-226	-211	-195	-176	-153	-126	-92	-51	2	73	173
100	55.00	bu	-111	-95	-76	-55	-30	0	37	83	142	222	333
			-203	-188	-169	-148	-123	-92	-55	-9	49	129	240
110	60.50	bu	-88	-71	-51	-27	0	33	74	124	190	277	399
			-181	-164	-144	-120	-92	-59	-18	32	97	184	307
120	66.00	bu	-66	-47	-25	0	30	66	111	166	238	333	466
			-159	-140	-118	-92	-62	-26	18	73	145	240	373
130	71.50	bu	-44	-23	0	27	60	99	148	208	285	388	533
			-137	-116	-92	-65	-32	7	55	115	192	295	440
140	77.00	bu	-22	0	25	55	90	133	185	249	333	444	599
			-115	-92	-67	-37	-1	40	92	157	240	351	506
150	82.50	bu	0	23	51	83	121	166	222	291	380	499	666
			-92	-69	-41	-9	28	73	129	198	287	406	573

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 2.D Breakeven price above total expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, 8-row equipment, stale seedbed, irrigated,
alluvial soils, Northeast Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
Soybeans			5.43	5.80	6.23	6.72	7.31	8.01	8.88	9.95	11.33	13.18	15.76
PERCENT	YIELD	UNIT	-----dollars-----										
50	27.50	bu	-191	-181	-169	-155	-139	-120	-96	-66	-28	21	92
			-284	-273	-262	-248	-232	-213	-189	-159	-121	-71	0
60	33.00	bu	-162	-150	-136	-120	-100	-77	-49	-13	31	92	178
			-255	-243	-229	-213	-193	-170	-142	-106	-60	0	85
70	38.50	bu	-134	-120	-103	-84	-62	-34	-1	39	92	163	263
			-227	-213	-196	-177	-154	-127	-94	-53	0	71	170
80	44.00	bu	-105	-89	-71	-49	-23	7	45	92	153	234	348
			-198	-182	-163	-142	-116	-85	-47	0	60	142	255
90	49.50	bu	-77	-59	-38	-13	15	50	92	146	214	305	433
			-170	-152	-131	-106	-77	-42	0	53	121	213	340
100	55.00	bu	-49	-28	-5	21	54	92	140	199	275	376	518
			-142	-121	-98	-71	-38	0	47	106	182	284	426
110	60.50	bu	-20	1	27	57	92	135	187	252	336	447	604
			-113	-91	-65	-35	0	42	94	159	243	355	511
120	66.00	bu	7	31	60	92	131	178	234	305	397	518	689
			-85	-60	-32	0	38	85	142	213	304	426	596
130	71.50	bu	36	62	92	128	170	220	282	359	458	589	774
			-56	-30	0	35	77	127	189	266	365	497	681
140	77.00	bu	64	92	125	163	209	263	329	412	518	661	859
			-28	0	32	71	116	170	236	319	426	568	766
150	82.50	bu	92	123	158	199	247	305	376	465	579	732	945
			0	30	65	106	154	213	284	372	486	639	852

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 3.A Estimated costs per Acre
Soybeans, RR, 8-row equipment, stale seedbed,
irrigated, Macon Ridge, Northeast Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	2.0000	13.00	_____
App by Air (3 gal)	appl	5.00	4.0000	20.00	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.25	16.0000	4.00	_____
FERTILIZERS					
LA Phosphate	lb	0.54	50.0000	27.00	_____
LA Potash	lb	0.35	50.0000	17.50	_____
FUNGICIDES					
Quadris	oz	2.66	6.0000	15.96	_____
Stratego	pt	25.00	0.6250	15.63	_____
HERBICIDES					
Roundup WeatherMax	oz	0.08	66.0000	5.28	_____
2,4-D Amine 4	pt	1.85	1.0000	1.85	_____
Valor WP	oz	4.23	2.0000	8.46	_____
Dual II Magnum	pt	13.50	1.0000	13.50	_____
Flexstar HL	pt	4.50	1.0000	4.50	_____
INSECTICIDES					
Brigade EC	pt	3.50	0.7500	2.63	_____
Orthene 90S	lb	5.75	0.6000	3.45	_____
Intrepid 2F	oz	6.13	6.0000	36.78	_____
Surfactant	pt	5.35	1.0000	5.35	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Soybean Seed RR	lb	1.11	50.0000	55.50	_____
CUSTOM HARVEST/HAUL					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
OPERATOR LABOR					
Harvesters	hour	13.40	0.0851	1.14	_____
IRRIGATION LABOR					
Implements	hour	9.06	0.0062	0.06	_____
LA Hired Labor					
Implements	hour	10.18	0.1345	1.38	_____
Tractors	hour	10.18	0.7203	7.32	_____
LA Irrigation Labor					
Special Labor	hour	10.18	0.1500	1.51	_____
DIESEL FUEL					
Tractors	gal	2.00	6.8886	13.78	_____
Harvesters	gal	2.00	1.2047	2.41	_____
Roll-Out Pipe Irr.	gal	2.00	4.8877	9.78	_____
REPAIR & MAINTENANCE					
Implements	Acre	4.93	1.0000	4.93	_____
Tractors	Acre	3.97	1.0000	3.97	_____
Harvesters	Acre	2.79	1.0000	2.79	_____
Roll-Out Pipe Irr.	Acre	4.66	1.0000	4.66	_____
INTEREST ON OP. CAP.	Acre	5.64	1.0000	5.64	_____
TOTAL DIRECT EXPENSES				331.83	_____
FIXED EXPENSES					
Implements	Acre	9.05	1.0000	9.05	_____
Tractors	Acre	24.94	1.0000	24.94	_____
Harvesters	Acre	11.02	1.0000	11.02	_____
Roll-Out Pipe Irr.	Acre	48.24	1.0000	48.24	_____
TOTAL FIXED EXPENSES				93.25	_____
TOTAL SPECIFIED EXPENSES				425.08	_____

Table 3.B Estimated resource use and costs for field operations, per Acre
Soybeans, RR, 8-row equipment, stale seedbed,
irrigated, Macon Ridge, Northeast Louisiana, 2016.

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-----																
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Oct	1.96	2.75	0.77	0.87	0.11	1.19				7.54	
LA Phosphate	lb											50.0000	0.54	27.00	27.00	
LA Potash	lb											50.0000	0.35	17.50	17.50	
Disk Harrow	28'	MFWD 225	0.070	1.00	Oct	2.12	3.15	0.97	2.05	0.07	0.71				9.00	
Land Plane	40'x10'	MFWD 190	0.242	0.20	Oct	1.22	1.72	0.06	0.15	0.04	0.49				3.64	
Disk Bed (Hipper)Fld	8R-38	MFWD 190	0.074	1.00	Oct	1.87	2.63	0.37	0.98	0.07	0.75				6.60	
Ditcher		2WD 130	0.020	1.00	Oct	0.33	0.36	0.04	0.05	0.02	0.20				0.98	
App by Air (5 gal)	appl			1.00	Mar							1.0000	6.50	6.50	6.50	
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76	
2,4-D Amine 4	pt											1.0000	1.85	1.85	1.85	
Valor WP	oz											2.0000	4.23	8.46	8.46	
Plant - Folding	8R-38	MFWD 170	0.074	1.00	May	1.69	2.43	1.19	2.28	0.14	1.52				9.11	
Soybean Seed RR	lb											50.0000	1.11	55.50	55.50	
Ditcher		2WD 130	0.020	1.00	May	0.33	0.36	0.04	0.05	0.02	0.20				0.98	
Spray (Bcast/HB)	40' Fold	MFWD 170	0.042	1.00	May	0.96	1.38	0.42	0.50	0.06	0.65				3.91	
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76	
Dual II Magnum	pt											1.0000	13.50	13.50	13.50	
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50	
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76	
Flexstar HL	pt											1.0000	4.50	4.50	4.50	
App by Air (3 gal)	appl			1.00	Jul							1.0000	5.00	5.00	5.00	
Brigade EC	pt											0.3750	3.50	1.31	1.31	
Quadris	oz											6.0000	2.66	15.96	15.96	
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00	
Orthene 90S	lb											0.6000	5.75	3.45	3.45	
Stratego	pt											0.6250	25.00	15.63	15.63	
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00	
Brigade EC	pt											0.3750	3.50	1.31	1.31	
Intrepid 2F	oz											6.0000	6.13	36.78	36.78	
App by Air (3 gal)	appl			1.00	Sep							1.0000	5.00	5.00	5.00	
Gramoxone Inteon	oz											16.0000	0.25	4.00	4.00	
Surfactant	pt											1.0000	5.35	5.35	5.35	
Header - Soybean	30' Flex	275hp	0.085	1.00	Oct	5.20	11.02	0.64	0.97	0.08	1.14				18.97	
Haul Soybeans	bu			1.00	Oct							50.0000	0.27	13.50	13.50	
Roll-Out Pipe Irr.	Acre				Jul	7.27	10.16	14.87	49.39	0.44	4.56	1.0000		8.58	94.83	
						-----		-----		-----		-----			-----	
TOTALS						22.95	35.96	19.37	57.29	1.09	11.41			272.46	419.44	
INTEREST ON OPERATING CAPITAL															5.64	
UNALLOCATED LABOR															0.00	
TOTAL SPECIFIED COST															425.08	

Table 3.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, 8-row equipment, stale seedbed,
irrigated, Macon Ridge, Northeast Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
Soybeans			4.51	4.81	5.16	5.57	6.05	6.63	7.34	8.22	9.36	10.87	13.00
PERCENT	YIELD	UNIT	-----dollars-----										
50	25.00	bu	-212	-204	-195	-185	-173	-159	-141	-119	-90	-53	0
			-305	-297	-289	-278	-266	-252	-234	-212	-184	-146	-93
60	30.00	bu	-190	-181	-171	-159	-144	-127	-106	-79	-45	0	63
			-284	-275	-264	-252	-237	-220	-199	-172	-138	-93	-29
70	35.00	bu	-169	-159	-146	-132	-115	-95	-70	-39	0	53	127
			-262	-252	-240	-225	-208	-188	-163	-133	-93	-40	34
80	40.00	bu	-148	-136	-122	-106	-86	-63	-35	0	45	106	190
			-241	-229	-215	-199	-180	-156	-128	-93	-47	12	97
90	45.00	bu	-127	-113	-97	-79	-57	-31	0	39	90	159	254
			-220	-206	-191	-172	-151	-125	-93	-53	-2	65	161
100	50.00	bu	-106	-90	-73	-53	-28	0	35	79	136	212	318
			-199	-184	-166	-146	-122	-93	-57	-13	43	118	224
110	55.00	bu	-84	-68	-48	-26	0	31	70	119	181	265	381
			-178	-161	-142	-119	-93	-61	-22	26	88	171	288
120	60.00	bu	-63	-45	-24	0	28	63	106	159	227	318	445
			-156	-138	-117	-93	-64	-29	12	65	134	224	352
130	65.00	bu	-42	-22	0	26	57	95	141	198	272	371	509
			-135	-115	-93	-66	-35	2	48	105	179	278	415
140	70.00	bu	-21	0	24	53	86	127	176	238	318	424	572
			-114	-93	-68	-40	-6	34	83	145	224	331	479
150	75.00	bu	0	22	48	79	115	159	212	278	363	477	636
			-93	-70	-44	-13	22	65	118	185	270	384	543

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 3.D Breakeven price above total expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, 8-row equipment, stale seedbed,
irrigated, Macon Ridge, Northeast Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
Soybeans			5.75	6.15	6.60	7.13	7.75	8.50	9.41	10.55	12.02	13.98	16.73
PERCENT	YIELD	UNIT	-----dollars-----										
50	25.00	bu	-181	-171	-159	-146	-131	-112	-89	-61	-24	24	93
			-274	-264	-253	-240	-224	-205	-182	-154	-117	-68	0
60	30.00	bu	-153	-141	-128	-112	-93	-71	-43	-9	34	93	175
			-246	-235	-221	-205	-187	-164	-137	-102	-58	0	82
70	35.00	bu	-126	-112	-96	-78	-56	-30	1	41	93	161	257
			-219	-205	-189	-171	-149	-123	-91	-51	0	68	164
80	40.00	bu	-98	-83	-65	-43	-18	10	47	93	152	230	340
			-192	-176	-158	-137	-112	-82	-45	0	58	137	246
90	45.00	bu	-71	-53	-33	-9	18	52	93	144	210	298	422
			-164	-146	-126	-102	-74	-41	0	51	117	205	329
100	50.00	bu	-43	-24	-1	24	55	93	138	196	269	367	504
			-137	-117	-94	-68	-37	0	45	102	176	274	411
110	55.00	bu	-16	5	29	58	93	134	184	247	328	436	587
			-109	-88	-63	-34	0	41	91	154	235	342	493
120	60.00	bu	10	34	61	93	130	175	230	298	387	504	669
			-82	-58	-31	0	37	82	137	205	293	411	576
130	65.00	bu	38	63	93	127	168	216	276	350	445	573	751
			-54	-29	0	34	74	123	182	257	352	480	658
140	70.00	bu	65	93	124	161	205	257	321	401	504	641	833
			-27	0	31	68	112	164	228	308	411	548	740
150	75.00	bu	93	122	156	196	242	298	367	453	563	710	916
			0	29	63	102	149	205	274	360	470	617	822

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 4.A Estimated costs per Acre
Soybeans, RR, 12-row equipment, 20-inch rows, non-irrigated,
alluvial soils, Northeast Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
App by Air (3 gal)	appl	5.00	3.0000	15.00	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.25	16.0000	4.00	_____
FERTILIZERS					
LA Phosphate	lb	0.54	50.0000	27.00	_____
LA Potash	lb	0.35	50.0000	17.50	_____
FUNGICIDES					
Quadris	oz	2.66	6.0000	15.96	_____
Stratego	pt	25.00	0.6250	15.63	_____
HERBICIDES					
Roundup WeatherMax	oz	0.08	66.0000	5.28	_____
2,4-D Amine 4	pt	1.85	1.0000	1.85	_____
Valor WP	oz	4.23	2.0000	8.46	_____
Dual II Magnum	pt	13.50	1.0000	13.50	_____
Flexstar HL	pt	4.50	1.0000	4.50	_____
INSECTICIDES					
Brigade EC	pt	3.50	0.7500	2.63	_____
Orthene 90S	lb	5.75	0.6000	3.45	_____
Intrepid 2F	oz	6.13	6.0000	36.78	_____
Surfactant	pt	5.35	1.0000	5.35	_____
SEED/PLANTS					
Soybean Seed RR	lb	1.11	50.0000	55.50	_____
CUSTOM FERT/LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CUSTOM HARVEST/HAUL					
Haul Soybeans	bu	0.27	45.0000	12.15	_____
OPERATOR LABOR					
Harvesters	hour	13.40	0.0851	1.14	_____
LA Hired Labor					
Implements	hour	10.18	0.1586	1.62	_____
Tractors	hour	10.18	0.3542	3.59	_____
DIESEL FUEL					
Tractors	gal	2.00	3.4392	6.88	_____
Harvesters	gal	2.00	1.2047	2.41	_____
REPAIR & MAINTENANCE					
Implements	Acre	4.15	1.0000	4.15	_____
Tractors	Acre	1.98	1.0000	1.98	_____
Harvesters	Acre	2.79	1.0000	2.79	_____
INTEREST ON OP. CAP.	Acre	5.22	1.0000	5.22	_____

TOTAL DIRECT EXPENSES				308.99	_____
FIXED EXPENSES					
Implements	Acre	7.68	1.0000	7.68	_____
Tractors	Acre	12.48	1.0000	12.48	_____
Harvesters	Acre	11.02	1.0000	11.02	_____

TOTAL FIXED EXPENSES				31.18	_____

TOTAL SPECIFIED EXPENSES				340.17	_____

Table 4.B Estimated resource use and costs for field operations, per Acre
Soybeans, RR, 12-row equipment, 20-inch rows, non-irrigated,
alluvial soils, Northeast Louisiana, 2016.

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-----			
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	Oct	2.38	3.53	0.94	1.06	0.11	1.20				9.11
LA Phosphate	lb											50.0000	0.54	27.00	27.00
LA Potash	lb											50.0000	0.35	17.50	17.50
Lime (Spread)	ton			0.33	Oct							0.3300	46.00	15.18	15.18
Field Cultivate	32'	MFWD 190	0.046	1.00	Oct	1.17	1.65	0.46	1.93	0.04	0.47				5.68
Land Plane	40'x10'	MFWD 190	0.242	0.20	Oct	1.22	1.72	0.06	0.15	0.04	0.49				3.64
Ditcher		2WD 130	0.020	1.00	Oct	0.33	0.36	0.04	0.05	0.02	0.20				0.98
App by Air (5 gal)	appl			1.00	Mar							1.0000	6.50	6.50	6.50
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76
2,4-D Amine 4	pt											1.0000	1.85	1.85	1.85
Valor WP	oz											2.0000	4.23	8.46	8.46
NT Plant-Rigid	12R-20	MFWD 190	0.098	1.00	May	2.47	3.48	1.55	2.97	0.19	2.00				12.47
Soybean Seed RR	lb											50.0000	1.11	55.50	55.50
Ditcher		2WD 130	0.020	1.00	May	0.33	0.36	0.04	0.05	0.02	0.20				0.98
Spray (Bcast/HB)	40' Fold	MFWD 170	0.042	1.00	May	0.96	1.38	0.42	0.50	0.06	0.65				3.91
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76
Dual II Magnum	pt											1.0000	13.50	13.50	13.50
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50
Roundup WeatherMax	oz											22.0000	0.08	1.76	1.76
Flexstar HL	pt											1.0000	4.50	4.50	4.50
App by Air (3 gal)	appl			1.00	Jul							1.0000	5.00	5.00	5.00
Brigade EC	pt											0.3750	3.50	1.31	1.31
Quadris	oz											6.0000	2.66	15.96	15.96
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Orthene 90S	lb											0.6000	5.75	3.45	3.45
Stratego	pt											0.6250	25.00	15.63	15.63
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Brigade EC	pt											0.3750	3.50	1.31	1.31
Intrepid 2F	oz											6.0000	6.13	36.78	36.78
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.50	6.50	6.50
Gramoxone Inteon	oz											16.0000	0.25	4.00	4.00
Surfactant	pt											1.0000	5.35	5.35	5.35
Header - Soybean	30' Flex	275hp	0.085	1.00	Oct	5.20	11.02	0.64	0.97	0.08	1.14				18.97
Haul Soybeans	bu			1.00	Oct							45.0000	0.27	12.15	12.15
TOTALS						14.06	23.50	4.15	7.68	0.59	6.35			279.21	334.95
INTEREST ON OPERATING CAPITAL															5.22
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															340.17

Table 4.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, 12-row equipment, 20-inch rows, non-irrigated,
alluvial soils, Northeast Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
Soybeans			4.66	4.98	5.34	5.76	6.26	6.86	7.59	8.51	9.69	11.26	13.46
PERCENT	YIELD	UNIT	-----dollars-----										
50	22.50	bu	-197	-190	-182	-173	-161	-148	-131	-111	-84	-49	0
			-229	-221	-213	-204	-193	-179	-163	-142	-115	-80	-31
60	27.00	bu	-178	-169	-159	-148	-134	-118	-98	-74	-42	0	59
			-209	-200	-190	-179	-166	-149	-130	-105	-73	-31	28
70	31.50	bu	-158	-148	-136	-123	-107	-89	-65	-37	0	49	118
			-189	-179	-168	-154	-139	-120	-97	-68	-31	18	87
80	36.00	bu	-138	-127	-114	-98	-80	-59	-32	0	42	98	178
			-169	-158	-145	-130	-112	-90	-64	-31	11	67	146
90	40.50	bu	-118	-105	-91	-74	-53	-29	0	37	84	148	237
			-149	-137	-122	-105	-85	-60	-31	5	53	117	206
100	45.00	bu	-98	-84	-68	-49	-26	0	32	74	127	197	296
			-130	-115	-99	-80	-58	-31	1	43	95	166	265
110	49.50	bu	-79	-63	-45	-24	0	29	65	111	169	247	356
			-110	-94	-76	-55	-31	-1	34	80	138	216	324
120	54.00	bu	-59	-42	-22	0	26	59	98	148	211	296	415
			-90	-73	-54	-31	-4	28	67	117	180	265	384
130	58.50	bu	-39	-21	0	24	53	89	131	185	254	346	474
			-70	-52	-31	-6	22	57	100	154	223	315	443
140	63.00	bu	-19	0	22	49	80	118	164	222	296	395	534
			-50	-31	-8	18	49	87	133	191	265	364	502
150	67.50	bu	0	21	45	74	107	148	197	259	339	445	593
			-31	-9	14	43	76	117	166	228	307	413	562

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 4.D Breakeven price above total expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, 12-row equipment, 20-inch rows, non-irrigated,
alluvial soils, Northeast Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
Soybeans			5.13	5.47	5.87	6.34	6.89	7.55	8.36	9.38	10.68	12.41	14.84
PERCENT	YIELD	UNIT	-----dollars-----										
50	22.50	bu	-187	-179	-170	-160	-147	-132	-114	-91	-62	-23	31
			-218	-210	-201	-191	-178	-163	-145	-122	-93	-54	0
60	27.00	bu	-165	-156	-145	-132	-117	-99	-78	-50	-15	31	96
			-196	-187	-176	-163	-149	-131	-109	-81	-46	0	65
70	31.50	bu	-143	-132	-120	-105	-88	-67	-41	-9	31	85	162
			-174	-163	-151	-136	-119	-98	-72	-40	0	54	131
80	36.00	bu	-121	-109	-94	-78	-58	-34	-5	31	78	140	227
			-153	-140	-126	-109	-89	-65	-36	0	46	109	196
90	40.50	bu	-99	-85	-69	-50	-28	-1	31	72	124	195	293
			-131	-117	-100	-81	-59	-32	0	40	93	163	262
100	45.00	bu	-78	-62	-44	-23	1	31	67	113	171	249	359
			-109	-93	-75	-54	-29	0	36	81	140	218	327
110	49.50	bu	-56	-39	-19	3	31	63	104	154	218	304	424
			-87	-70	-50	-27	0	32	72	122	187	273	393
120	54.00	bu	-34	-15	5	31	60	96	140	195	265	359	490
			-65	-46	-25	0	29	65	109	163	234	327	459
130	58.50	bu	-12	7	31	58	90	129	176	236	312	413	555
			-43	-23	0	27	59	98	145	204	281	382	524
140	63.00	bu	9	31	56	85	120	162	213	277	359	468	621
			-21	0	25	54	89	131	182	245	327	437	590
150	67.50	bu	31	54	81	113	150	195	249	318	405	523	687
			0	23	50	81	119	163	218	286	374	491	655

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 5.A Estimated costs per Acre
Soybeans, RR, 12-row equipment, 20-inch rows, irrigated
alluvial soils, Northeast Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
App by Air (3 gal)	appl	5.00	3.0000	15.00	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.25	16.0000	4.00	_____
FERTILIZERS					
LA Phosphate	lb	0.54	50.0000	27.00	_____
LA Potash	lb	0.35	50.0000	17.50	_____
FUNGICIDES					
Quadris	oz	2.66	6.0000	15.96	_____
Stratego	pt	25.00	0.6250	15.63	_____
HERBICIDES					
Roundup WeatherMax	oz	0.08	66.0000	5.28	_____
2,4-D Amine 4	pt	1.85	1.0000	1.85	_____
Valor WP	oz	4.23	2.0000	8.46	_____
Dual II Magnum	pt	13.50	1.0000	13.50	_____
Flexstar HL	pt	4.50	1.0000	4.50	_____
INSECTICIDES					
Brigade EC	pt	3.50	0.7500	2.63	_____
Orthene 90S	lb	5.75	0.6000	3.45	_____
Intrepid 2F	oz	6.13	6.0000	36.78	_____
Surfactant	pt	5.35	1.0000	5.35	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Soybean Seed RR	lb	1.11	50.0000	55.50	_____
CUSTOM FERT/LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CUSTOM HARVEST/HAUL					
Haul Soybeans	bu	0.27	55.0000	14.85	_____
OPERATOR LABOR					
Harvesters	hour	13.40	0.0851	1.14	_____
IRRIGATION LABOR					
Implements	hour	9.06	0.0062	0.06	_____
LA Hired Labor					
Implements	hour	10.18	0.1586	1.62	_____
Tractors	hour	10.18	0.6473	6.58	_____
LA Irrigation Labor					
Special Labor	hour	10.18	0.1500	1.51	_____
DIESEL FUEL					
Tractors	gal	2.00	6.2667	12.54	_____
Harvesters	gal	2.00	1.2047	2.41	_____
Roll-Out Pipe Irr.	gal	2.00	4.8877	9.78	_____
REPAIR & MAINTENANCE					
Implements	Acre	5.05	1.0000	5.05	_____
Tractors	Acre	3.59	1.0000	3.59	_____
Harvesters	Acre	2.79	1.0000	2.79	_____
Roll-Out Pipe Irr.	Acre	4.66	1.0000	4.66	_____
INTEREST ON OP. CAP.	Acre	5.80	1.0000	5.80	_____

TOTAL DIRECT EXPENSES				348.02	_____
FIXED EXPENSES					
Implements	Acre	9.92	1.0000	9.92	_____
Tractors	Acre	22.64	1.0000	22.64	_____
Harvesters	Acre	11.02	1.0000	11.02	_____
Roll-Out Pipe Irr.	Acre	48.24	1.0000	48.24	_____

TOTAL FIXED EXPENSES				91.82	_____

TOTAL SPECIFIED EXPENSES				439.84	_____

Table 5.B Estimated resource use and costs for field operations, per Acre
Soybeans, RR, 12-row equipment, 20-inch rows, irrigated
alluvial soils, Northeast Louisiana, 2016.

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-----				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	Oct	2.38	3.53	0.94	1.06	0.11	1.20					9.11
LA Phosphate	lb											50.0000	0.54	27.00		27.00
LA Potash	lb											50.0000	0.35	17.50		17.50
Lime (Spread)	ton			0.33	Oct							0.3300	46.00	15.18		15.18
Field Cultivate	32'	MFWD 190	0.046	1.00	Oct	1.17	1.65	0.46	1.93	0.04	0.47					5.68
Land Plane	40'x10'	MFWD 190	0.242	0.20	Oct	1.22	1.72	0.06	0.15	0.04	0.49					3.64
Ditcher		2WD 130	0.020	1.00	Oct	0.33	0.36	0.04	0.05	0.02	0.20					0.98
App by Air (5 gal)	appl			1.00	Mar							1.0000	6.50	6.50		6.50
Roundup WeatherMax	oz											22.0000	0.08	1.76		1.76
2,4-D Amine 4	pt											1.0000	1.85	1.85		1.85
Valor WP	oz											2.0000	4.23	8.46		8.46
NT Plant-Folding	12R-20	MFWD 190	0.098	1.00	May	2.47	3.48	2.29	4.38	0.19	2.00					14.62
Soybean Seed RR	lb											50.0000	1.11	55.50		55.50
Ditcher		2WD 130	0.020	1.00	May	0.33	0.36	0.04	0.05	0.02	0.20					0.98
Spray (Broadcast)	40'	MFWD 170	0.042	1.00	May	0.96	1.38	0.15	0.18	0.06	0.65					3.32
Roundup WeatherMax	oz											22.0000	0.08	1.76		1.76
Dual II Magnum	pt											1.0000	13.50	13.50		13.50
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50		6.50
Roundup WeatherMax	oz											22.0000	0.08	1.76		1.76
Flexstar HL	pt											1.0000	4.50	4.50		4.50
App by Air (3 gal)	appl			1.00	Jul							1.0000	5.00	5.00		5.00
Brigade EC	pt											0.3750	3.50	1.31		1.31
Quadris	oz											6.0000	2.66	15.96		15.96
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00		5.00
Orthene 90S	lb											0.6000	5.75	3.45		3.45
Stratego	pt											0.6250	25.00	15.63		15.63
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00		5.00
Brigade EC	pt											0.3750	3.50	1.31		1.31
Intrepid 2F	oz											6.0000	6.13	36.78		36.78
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.50	6.50		6.50
Gramoxone Inteon	oz											16.0000	0.25	4.00		4.00
Surfactant	pt											1.0000	5.35	5.35		5.35
Header - Soybean	30' Flex	275hp	0.085	1.00	Oct	5.20	11.02	0.64	0.97	0.08	1.14					18.97
Haul Soybeans	bu			1.00	Oct							55.0000	0.27	14.85		14.85
Roll-Out Pipe Irr.	Acre				Jul	7.27	10.16	14.87	49.39	0.44	4.56	1.0000		8.58		94.83
TOTALS						21.33	33.66	19.49	58.16	1.04	10.91			290.49		434.04
INTEREST ON OPERATING CAPITAL																5.80
UNALLOCATED LABOR																0.00
TOTAL SPECIFIED COST																439.84

Table 5.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, 12-row equipment, 20-inch rows, irrigated
alluvial soils, Northeast Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
Soybeans			4.30	4.59	4.93	5.31	5.77	6.32	7.00	7.84	8.92	10.36	12.38
PERCENT	YIELD	UNIT	-----dollars-----										
50	27.50	bu	-222	-214	-204	-194	-181	-166	-148	-124	-95	-55	0
			-313	-305	-296	-286	-273	-258	-239	-216	-186	-147	-91
60	33.00	bu	-199	-190	-179	-166	-151	-133	-111	-83	-47	0	66
			-291	-282	-271	-258	-243	-225	-202	-175	-139	-91	-25
70	38.50	bu	-177	-166	-153	-138	-121	-99	-74	-41	0	55	133
			-269	-258	-245	-230	-212	-191	-165	-133	-91	-36	41
80	44.00	bu	-155	-142	-128	-111	-90	-66	-37	0	47	111	199
			-247	-234	-219	-202	-182	-158	-128	-91	-44	19	108
90	49.50	bu	-133	-118	-102	-83	-60	-33	0	41	95	166	266
			-225	-210	-194	-175	-152	-125	-91	-50	3	74	174
100	55.00	bu	-111	-95	-76	-55	-30	0	37	83	142	222	333
			-202	-186	-168	-147	-122	-91	-54	-8	50	130	241
110	60.50	bu	-88	-71	-51	-27	0	33	74	124	190	277	399
			-180	-163	-143	-119	-91	-58	-17	33	98	185	307
120	66.00	bu	-66	-47	-25	0	30	66	111	166	237	333	466
			-158	-139	-117	-91	-61	-25	19	74	146	241	374
130	71.50	bu	-44	-23	0	27	60	99	148	208	285	388	532
			-136	-115	-91	-64	-31	8	56	116	193	296	441
140	77.00	bu	-22	0	25	55	90	133	185	249	333	444	599
			-114	-91	-66	-36	-0	41	93	157	241	352	507
150	82.50	bu	0	23	51	83	121	166	222	291	380	499	666
			-91	-68	-40	-8	29	74	130	199	288	407	574

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 5.D Breakeven price above total expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, 12-row equipment, 20-inch rows, irrigated
alluvial soils, Northeast Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
Soybeans			5.42	5.78	6.21	6.70	7.29	7.99	8.85	9.92	11.30	13.14	15.72
PERCENT	YIELD	UNIT	-----dollars-----										
50	27.50	bu	-191	-181	-169	-156	-139	-120	-97	-67	-29	21	91
			-283	-273	-261	-247	-231	-212	-188	-159	-121	-70	0
60	33.00	bu	-163	-150	-136	-120	-101	-78	-49	-14	31	91	176
			-254	-242	-228	-212	-193	-169	-141	-106	-60	0	84
70	38.50	bu	-134	-120	-104	-85	-62	-35	-2	38	91	162	261
			-226	-212	-196	-177	-154	-127	-94	-53	0	70	169
80	44.00	bu	-106	-90	-71	-49	-24	6	44	91	152	233	346
			-198	-182	-163	-141	-115	-84	-47	0	60	141	254
90	49.50	bu	-78	-59	-38	-14	14	49	91	144	213	304	431
			-169	-151	-130	-106	-77	-42	0	53	121	212	339
100	55.00	bu	-49	-29	-6	21	53	91	139	198	273	375	516
			-141	-121	-98	-70	-38	0	47	106	182	283	424
110	60.50	bu	-21	0	26	56	91	134	186	251	334	445	601
			-113	-91	-65	-35	0	42	94	159	242	354	509
120	66.00	bu	6	31	59	91	130	176	233	304	395	516	686
			-84	-60	-32	0	38	84	141	212	303	424	594
130	71.50	bu	35	61	91	127	169	219	280	357	456	587	771
			-56	-30	0	35	77	127	188	265	364	495	679
140	77.00	bu	63	91	124	162	207	261	327	410	516	658	856
			-28	0	32	70	115	169	236	318	424	566	764
150	82.50	bu	91	122	157	198	246	304	375	463	577	729	941
			0	30	65	106	154	212	283	371	485	637	849

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 6.A Estimated costs and returns per acre,
Soybeans, RR, drill planted, conventional tillage, in rotation,
Southwest Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
LA Rice GPS Charge-SW	acre	0.35	3.0000	1.05	_____
HARVEST AIDS					
Gramoxone Max	pt	4.06	1.0000	4.06	_____
FERTILIZERS					
LA Phosphate	lb	0.54	50.0000	27.00	_____
LA Potash	lb	0.35	50.0000	17.50	_____
FUNGICIDES					
Quadris	oz	2.34	6.0000	14.04	_____
Stratego	pt	25.00	0.6250	15.63	_____
HERBICIDES					
Roundup Ultra MAX	pt	5.97	3.5000	20.90	_____
Classic	oz	16.85	0.2500	4.21	_____
INSECTICIDES					
Dimilin 2L	oz	2.22	2.0000	4.44	_____
Methyl Parathion	pt	5.79	1.0000	5.79	_____
Orthene 90S	lb	5.75	0.6000	3.45	_____
SEED/PLANTS					
Soybean Seed RR	lb	1.19	75.0000	89.25	_____
ADJUVANTS					
Surfactant	pt	5.35	0.5000	2.68	_____
CUSTOM FERT/LIME					
Custom Spread(Truc	appl	4.50	1.0000	4.50	_____
CUSTOM HARVEST/HAUL					
Haul Soybeans	bu	0.27	35.0000	9.45	_____
HAND LABOR					
Implements	hour	9.06	0.0942	0.85	_____
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.2310	3.54	_____
LA Hired Labor					
Tractors	hour	10.18	0.3772	3.82	_____
LA Other Labor					
Special Labor	hour	10.18	0.1250	1.27	_____
DIESEL FUEL					
Tractors	gal	2.00	3.3869	6.79	_____
Self-Propelled	gal	2.00	1.4915	2.98	_____
REPAIR & MAINTENANCE					
Implements	acre	3.75	1.0000	3.75	_____
Tractors	acre	2.02	1.0000	2.02	_____
Self-Propelled	acre	8.40	1.0000	8.40	_____
INTEREST ON OP. CAP.	acre	5.60	1.0000	5.60	_____

TOTAL DIRECT EXPENSES				282.46	_____
FIXED EXPENSES					
Implements	acre	8.51	1.0000	8.51	_____
Tractors	acre	12.34	1.0000	12.34	_____
Self-Propelled	acre	12.77	1.0000	12.77	_____

TOTAL FIXED EXPENSES				33.62	_____

TOTAL SPECIFIED EXPENSES				316.08	_____

Table 6.B Estimated resource use and costs for field operations, per acre,
Soybeans, RR, drill planted, conventional tillage,in rotation,
Southwest Louisiana, 2016.

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	32'	Track 300	0.061	1.00	Nov	2.45	3.49	0.91	1.93	0.06	0.62				9.40
LARice Land Level	13 ft	MFWD 150	0.190	0.20	Nov	0.77	1.07	0.03	0.13	0.03	0.39				2.39
Ditcher		MFWD 150	0.020	1.00	Nov	0.40	0.56	0.04	0.05	0.02	0.20				1.25
Disk Harrow	32'	MFWD 150	0.061	1.00	Mar	1.24	1.72	0.91	1.93	0.06	0.62				6.42
Custom Spread(Truc	appl			1.00	Mar							1.0000	4.50	4.50	4.50
LA Phosphate	lb											50.0000	0.54	27.00	27.00
LA Potash	lb											50.0000	0.35	17.50	17.50
Field Cultivate	24'	MFWD 150	0.062	1.00	Mar	1.25	1.74	0.42	1.76	0.06	0.63				5.80
Ditcher		MFWD 150	0.020	1.00	Apr	0.40	0.56	0.04	0.05	0.02	0.20				1.25
Grain Drill	20'	MFWD 150	0.094	1.00	May	1.90	2.64	1.36	2.61	0.18	1.81				10.32
LA Other Labor	hour									0.12	1.27				1.27
Soybean Seed RR	lb											75.0000	1.19	89.25	89.25
Ditcher		MFWD 150	0.020	1.00	May	0.40	0.56	0.04	0.05	0.02	0.20				1.25
App by Air (5 gal)	appl			1.00	May							1.0000	6.50	6.50	6.50
Roundup Ultra MAX	pt											2.0000	5.97	11.94	11.94
Classic	oz											0.2500	16.85	4.21	4.21
Surfactant	pt											0.2000	5.35	1.07	1.07
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50
Roundup Ultra MAX	pt											1.5000	5.97	8.96	8.96
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (3 gal)	appl			1.00	Jul								5.00		
Dimilin 2L	oz											2.0000	2.22	4.44	4.44
Quadris	oz											6.0000	2.34	14.04	14.04
App by Air (5 gal)	appl			1.00	Aug							1.0000	6.50	6.50	6.50
Methyl Parathion	pt											1.0000	5.79	5.79	5.79
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (3 gal)	appl			1.00	Sep								5.00		
Stratego	pt											0.6250	25.00	15.63	15.63
Orthene 90S	lb											0.6000	5.75	3.45	3.45
App by Air (5 gal)	appl			1.00	Sep								6.50		
Gramoxone Max	pt											1.0000	4.06	4.06	4.06
Surfactant	pt											0.3000	5.35	1.60	1.60
LARice Combine Med	20 ft		0.210	1.00	Oct	11.38	12.77			0.23	3.54				27.69
Haul Soybeans	bu			1.00	Oct							35.0000	0.27	9.45	9.45
TOTALS						20.19	25.11	3.75	8.51	0.82	9.48			243.44	310.48
INTEREST ON OPERATING CAPITAL															5.60
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															316.08

Table 6.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, drill planted, conventional tillage,in rotation,
Southwest Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
LA Soybeans			5.47	5.84	6.27	6.77	7.36	8.07	8.93	10.02	11.41	13.26	15.86
PERCENT	YIELD	UNIT	-----dollars-----										
50	17.50	bu	-181	-175	-167	-159	-148	-136	-121	-102	-77	-45	0
			-215	-209	-201	-192	-182	-170	-154	-135	-111	-79	-33
60	21.00	bu	-163	-155	-146	-136	-124	-109	-90	-68	-38	0	54
			-197	-189	-180	-170	-157	-142	-124	-101	-72	-33	20
70	24.50	bu	-145	-136	-125	-113	-99	-81	-60	-34	0	45	109
			-179	-170	-159	-147	-132	-115	-94	-67	-33	11	75
80	28.00	bu	-127	-116	-104	-90	-74	-54	-30	0	38	90	163
			-161	-150	-138	-124	-108	-88	-63	-33	5	57	130
90	31.50	bu	-109	-97	-83	-68	-49	-27	0	34	77	136	218
			-142	-131	-117	-101	-83	-60	-33	0	44	102	184
100	35.00	bu	-90	-77	-62	-45	-24	0	30	68	116	181	272
			-124	-111	-96	-79	-58	-33	-3	34	83	148	239
110	38.50	bu	-72	-58	-41	-22	0	27	60	102	155	227	327
			-106	-92	-75	-56	-33	-6	27	68	122	193	293
120	42.00	bu	-54	-38	-20	0	24	54	90	136	194	272	382
			-88	-72	-54	-33	-8	20	57	102	161	239	348
130	45.50	bu	-36	-19	0	22	49	81	121	170	233	318	436
			-70	-53	-33	-10	16	48	87	136	200	284	403
140	49.00	bu	-18	0	20	45	74	109	151	204	272	363	491
			-51	-33	-12	11	40	75	118	171	239	330	457
150	52.50	bu	0	19	41	68	99	136	181	238	311	409	545
			-33	-14	8	34	65	102	148	205	278	375	512

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Table 6.D Breakeven price above total expenses and net returns for price/yield combinations, per Acre
Soybeans, RR, drill planted, conventional tillage,in rotation,
Southwest Louisiana, 2016.

			-----BREAKEVEN PRICE-----										
LA Soybeans			6.11	6.52	7.00	7.57	8.23	9.03	10.00	11.22	12.78	14.87	17.79
PERCENT	YIELD	UNIT	-----dollars-----										
50	17.50	bu	-170	-163	-155	-145	-133	-119	-102	-81	-53	-17	33
			-204	-197	-188	-178	-167	-153	-136	-114	-87	-51	0
60	21.00	bu	-150	-141	-131	-119	-105	-89	-68	-43	-10	33	94
			-183	-175	-165	-153	-139	-122	-102	-76	-43	0	61
70	24.50	bu	-129	-119	-107	-94	-77	-58	-34	-4	33	84	156
			-163	-153	-141	-127	-111	-91	-68	-38	0	51	122
80	28.00	bu	-109	-97	-84	-68	-49	-27	-0	33	77	135	217
			-143	-131	-117	-102	-83	-61	-34	0	43	102	183
90	31.50	bu	-89	-75	-60	-43	-22	2	33	71	121	186	278
			-122	-109	-94	-76	-55	-30	0	38	87	153	245
100	35.00	bu	-68	-53	-37	-17	5	33	67	110	165	238	340
			-102	-87	-70	-51	-27	0	34	76	131	204	306
110	38.50	bu	-48	-32	-13	8	33	64	101	148	208	289	401
			-81	-65	-47	-25	0	30	68	114	175	255	367
120	42.00	bu	-27	-10	10	33	61	94	135	186	252	340	462
			-61	-43	-23	0	27	61	102	153	218	306	429
130	45.50	bu	-7	11	33	59	89	125	169	225	296	391	524
			-40	-21	0	25	55	91	136	191	262	357	490
140	49.00	bu	13	33	57	84	117	156	203	263	340	442	585
			-20	0	23	51	83	122	170	229	306	408	551
150	52.50	bu	33	55	80	110	145	186	238	301	384	493	646
			0	21	47	76	111	153	204	268	350	459	613

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.

Appendix Table 1 Estimated costs per Acre
Poly pipe irrigation system, 160 acres
applying 10.5 inches in three applications Louisiana, 2015.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
IRRIGATION LABOR					
Implements	hour	9.06	0.0062	0.06	_____
LA Hired Labor					
Tractors	hour	10.18	0.2930	2.99	_____
LA Irrigation Labor					
Special Labor	hour	10.18	0.1500	1.51	_____
DIESEL FUEL					
Tractors	gal	2.00	2.8274	5.66	_____
Engine, RPF, 75	gal	2.00	8.5535	17.10	_____
REPAIR & MAINTENANCE					
Implements	Acre	0.43	1.0000	0.43	_____
Tractors	Acre	1.61	1.0000	1.61	_____
Well & Pump, Furrow	each	390.00	0.0062	2.44	_____
Engine, RPF, 75	ac-in	0.37	10.5000	3.90	_____
INTEREST ON OP. CAP.	Acre	0.70	1.0000	0.70	_____

TOTAL DIRECT EXPENSES				44.98	_____
FIXED EXPENSES					
Implements	Acre	1.15	1.0000	1.15	_____
Tractors	Acre	10.16	1.0000	10.16	_____
Well & Pump, Furrow	each	1152.97	0.0062	7.21	_____
Main Line Pipe	each	796.08	0.0062	4.98	_____
Land Forming (\$300)	each	27.67	1.0000	27.67	_____
Engine, RPF, 75	each	1340.05	0.0062	8.38	_____

TOTAL FIXED EXPENSES				59.55	_____

TOTAL SPECIFIED EXPENSES				104.53	_____

Appendix Table 2 Estimated costs per Acre
Center pivot irrigation system, 1/4 mile
applying 7.5 inches in three applications Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
LA Hired Labor					
Special Labor	hour	10.18	0.2036	2.08	_____
DIESEL FUEL					
Engine, 1/4 CP, 65	gal	2.00	11.2011	22.40	_____
REPAIR & MAINTENANCE					
Well & Pump, 1/4 CP	each	390.00	0.0074	2.89	_____
Engine, 1/4 CP, 65	ac-in	0.61	7.5000	4.64	_____
Pivot, 1/4 CP	1320'	1516.40	0.0074	11.23	_____
INTEREST ON OP. CAP.	Acre	0.76	1.0000	0.76	_____

TOTAL DIRECT EXPENSES				44.00	_____
FIXED EXPENSES					
Well & Pump, 1/4 CP	each	1152.97	0.0074	8.54	_____
Engine, 1/4 CP, 65	each	1340.05	0.0074	9.93	_____
Pivot, 1/4 CP	each	6083.99	0.0074	45.07	_____

TOTAL FIXED EXPENSES				63.54	_____

TOTAL SPECIFIED EXPENSES				107.54	_____

Appendix Table 3. Operating Inputs: Estimated Prices for 2016.

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Tilt 3.6 EC	oz	0.86
Crop Oil (Seed Oil)	pt	4.44	Vitavax 200	oz	0.47
Crop Oil (Petroleum)	pt	3.86	Vitavax M Flowable	oz	1.06
Surfactant	pt	5.35	Vitavax RTU-Thiram	oz	0.40
CUSTOM FERT/LIME			Vitavax T-L	oz	0.29
App Fert by Air	cwt	7.00	GIN/DRY		
App Fert by Air(Min)	appl	7.00	Dry Corn	bu	0.19
Custom Apply Fert	acre	7.00	Dry Grain Sorghum	cwt	0.25
Custom Spread(Truc	appl	4.50	Dry Rice	bu	0.40
Lime (Spread)	ton	46.00	Dry Rice (cwt)	cwt	0.90
CUSTOM HARVEST/HAUL			GROWTH REGULATORS		
Custom Combine Rice	acre	0.00	Early Harvest PGR	oz	1.55
Haul Corn	bu	0.23	LA Polado	oz	0.13
Haul Cotton	lb	0.02	Mepex	oz	0.10
Haul Sorghum	bu	0.25	PGR IV	oz	1.55
Haul Soybeans	bu	0.27	Pix Plus	oz	0.19
Haul Wheat	bu	0.26	Pix Ultra	oz	0.39
LARice Haul	cwt	0.30	HARVEST AIDS		
CUSTOM PLANT			Accelerate	pt	2.59
LARice Air Plant NE	cwt	5.50	Ammonium Sulfate	lb	0.24
LARice Air Plant SW	cwt	5.60	Boll'd	pt	7.01
CUSTOM SPRAY			CottonQuik	pt	5.01
App by Air (2 gal)	appl	4.00	Def 6	pt	8.25
App by Air (3 gal)	appl	5.00	Def/Folex	pt	7.55
App by Air (5 gal)	appl	6.50	Dropp 50 WP	lb	45.45
App by Air (10 gal)	appl	8.75	Dropp SC	oz	0.44
LARice GPS Charge-SW	acre	0.35	Ethephon 6E	pt	4.69
LARice GPS Charge_NE	acre	0.25	Finish 6	pt	8.93
FERTILIZERS			Folex 6EC	pt	9.92
Amm Nitrate (34% N)	cwt	22.50	Ginstar EC	pt	30.60
Amm Sulfate (21% N)	cwt	17.25	Gramoxone Extra	pt	4.86
Fert 10-34-0	cwt	32.50	Gramoxone Inteon	oz	0.25
Fert 41-0-0-4	cwt	20.50	Gramoxone Max	pt	4.06
LA Nitrogen	lb	0.43	Harvade 5F	oz	0.67
LA Phosphate	lb	0.54	Leafless	pt	18.56
LA Potash	lb	0.35	Prep	pt	4.00
Phosphorus(46% P2O5)	cwt	25.00	Sodium Chlorate 3L	gal	3.50
Potash (60% K2O)	cwt	21.27	Solium Chlorate 6L	gal	5.57
Sulfur	lb	0.34	Starfire	pt	0.00
UAN (32% N)	cwt	15.95	HERBICIDES		
UAN + Sulfur (28% N)	cwt	16.33	2,4-D Amine 4	pt	1.85
Urea, Solid (46% N)	cwt	20.83	2,4-D Ester	pt	3.00
Zinc	lb	0.50	AAtrex 4L	pt	2.46
FUNGICIDES			AAtrex NINE-0	lb	3.60
Apron Maxx RTA	oz	0.86	Accent Gold	oz	6.12
Apron XL	oz	6.98	Accent SP	oz	36.25
Apron XL LS	oz	6.98	Aim 2EC	oz	7.19
Benlate 50 WP	lb	15.95	Aim DF	oz	9.65
Captan 4L	pt	2.83	Arrosolo	qt	7.88
Captan 50 WP	lb	4.03	Assure II	oz	0.75
Cruiser 5FS	oz	17.38	Atrazine 4L	pt	1.50
Delta Coat AD	oz	3.75	Atrazine 90DF	lb	3.60
Dithane F-45	qt	8.52	Authority 75DF	lb	26.95
Dithane Rainsheild	lb	2.75	Axiom 68DF	lb	25.74
Fungicide	lb	2.82	Backdraft	pt	2.40
Gem 25 WG	oz	3.70	Banvel	pt	11.98
Manzate 75 DF	lb	4.81	Basagran	pt	12.90
Manzate Flowable	pt	4.60	Basis Gold	lb	9.00
Moncut 70 DF	lb	33.30	Beacon 75% WSP	oz	34.87
Orbit	oz	2.75	Beyond	oz	4.43
Prevail	lb	28.50	Bicep II Magnum	qt	10.37
Quadris	oz	2.66	Bicep II zmsgnum	qt	10.97
Ridomil GoldPC 10G	lb	2.08	Bladex 4L	qt	0.00
Ridomil Gold PC	lb	4.00	Bladex 90DF	lb	0.00
Ridomil Gold PC Liq	oz	6.54			
Rovral 4F	pt	11.14			
Rovral WG	lb	0.00			
Shelter	oz	8.50			
Stiletto	oz	0.58			
Stratego	pt	25.00			
Terrachlor Flowable	pt	4.74			
Terraclor 2EC	pt	1.87			
Terraclor Super X EC	pt	3.95			
Terraclor Super X G	lb	2.82			

Appendix Table 3 Cont'd. Operating Inputs: Estimated Prices for 2016.

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Blazer 2L	pt	0.00	Guardsman Max	pt	7.22
HERBICIDES (CON'T)			Harmony Extra	oz	14.43
Blazer Ultra	pt	9.79	Hoelon 3EC	pt	11.03
Boa	pt	3.63	Karmex DF	lb	5.93
Bolero 8EC	pt	7.67	LA Asulox/Asulam	gal	38.80
Boundary	pt	10.05	LA Weedmaster	qt	7.25
Buctril 4EC	pt	17.06	Lariat	qt	7.58
Butoxone 175(2,4-DB)	pt	3.24	Lasso 4EC	qt	6.60
Butoxone 200(2,4-DB)	pt	3.92	Lasso II 15G	lb	0.00
Butyrac 175 (2,4-DB)	pt	3.11	Layby Pro	qt	6.30
Butyrac 200 (2,4-DB)	pt	4.05	Lexone 75DF	lb	18.90
Canopy 75%	oz	2.70	Liberty	pt	8.84
Canopy XL	oz	2.70	Lightning	oz	14.25
Caparol 4L	pt	4.02	Lightning	oz	14.25
Caparol Accu-Pak	lb	0.00	Linex 4L	pt	10.56
Celebrity Plus	lb	84.50	Londax 60DF	oz	17.13
Clarity	pt	12.89	Lorox 50DF	lb	23.52
Classic	oz	16.85	MSMA 6.6	pt	3.38
Clincher EC	oz	2.30	MSMA6 + Surfactant	pt	2.63
Cobra 2EC	oz	1.68	Newpath 2SL	oz	3.68
Command 3ME	pt	18.50	Ordram 15-G	lb	1.34
Command XTRA	pt	0.00	Ordram 8-E	pt	9.42
Conclude Ultra	pt	0.00	Outlook	pt	16.80
Conclude Ultra	pt	0.00	Pendimax 3.3	pt	2.47
Conclude XACT	pt	11.32	Permit 75DF	oz	18.50
Conclude XTRA	pt	8.32	Poast 1.53	pt	12.41
Cornerstone	pt	2.50	Poast Plus	pt	8.60
Cotoran 4L	pt	5.99	Propanil 4E	qt	5.15
Cotoran DF	lb	7.92	Prowl 3.3 EC	pt	5.62
Cotton Pro Flowable	pt	3.44	Pursuit DG	oz	11.59
Crossbow	pt	8.05	Pursuit Plus EC	pt	7.10
Cy-Pro 4L	qt	0.00	Python WDG	oz	13.56
Cypro 90DF	lb	0.00	Raptor	oz	4.37
Delta Goal	pt	9.44	Reflex 2LC	pt	6.30
Denim 0.16 EC	pt	24.06	Regiment 80WP	oz	4.38
Detail	pt	7.99	Remedy	pt	8.45
Direx 4L	pt	4.41	Resource .86EC	pt	29.40
Direx 80 DF	lb	7.37	Ricestar	pt	22.55
Diuron 4L	pt	4.15	Roundup Original	pt	6.00
Diuron 80 DF	lb	6.20	Roundup Original Max	oz	0.38
Domain 60DF	lb	12.75	Roundup Power Max	pt	1.25
DSMA 4	pt	0.90	Roundup Ultra MAX	pt	5.97
Dual 8E	pt	0.00	Roundup Ultra Dry	lb	6.14
Dual II Magnum	pt	13.50	Roundup WeatherMax	oz	0.08
Dual Magnum	pt	13.01	Scepter 70 DG	oz	4.52
Duet	pt	5.09	Select 2EC	oz	0.78
Evik DF 80W	lb	11.22	Sencor 4F	pt	14.74
Exceed	oz	10.71	Sencor DF	lb	11.20
Exceed Custom Pak	oz	11.50	Squadron CE	pt	12.50
Expert	pt	4.19	Stam 4E	qt	5.12
Facet 75DF	lb	50.00	Stam 80 EDF	lb	9.50
First Rate	oz	41.50	Staple 85%	oz	16.01
Flexstar HL	pt	4.50	Staple Plus	oz	8.55
FloMet 4L	pt	4.74	Steadfast	oz	12.32
Freedom	qt	2.51	Steel	pt	10.28
Front Row	oz	21.92	Storm	pt	11.88
Frontier 6.0	oz	0.63	Strongarm	oz	51.19
Fultime	pt	5.25	Superwham	qt	9.18
Fusilade DX	oz	1.08	Suprend	lb	13.49
Fusion	pt	26.89	Surpass 20G	lb	2.36
Glyphos	pt	1.80	Surpass EC	qt	28.06
Glyphomax	pt	3.49	Touchdown	qt	9.32
Glyphosate Plus 4L	pt	2.00	Touchdown 4 IQ	pt	3.33
Glystar Plus	pt	2.45	Touchdown Total	qt	7.13
Goal 2XL	pt	9.83	Treflan HFP	pt	2.90
Gramoxone Max	pt	5.46	Treflan TR-10	lb	1.10
Gramoxone Max	pt	4.06	Tri-Scept	pt	5.24
Grandstand R	qt	29.47	Trifluralin 4EC	pt	3.60
Guardsman	pt	4.66	Trilin 10G	lb	0.79
			Trilin 4EC	pt	2.12

Appendix Table 3 Cont'd. Operating Inputs: Estimated Prices for 2016.

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Typhoon	qt	13.06	Sevin 80S	lb	7.40
Valor WP	oz	4.23	Sevin XLR Plus	qt	12.50
Whip 360	pt	25.08	Spintor 2SC	oz	4.93
Zorial Rapid 80DF	lb	14.10	Steward	pt	36.33
INSECTICIDES			Synthetic Pyrethroid	oz	0.00
Acephate 80SP	lb	0.00	Temik 15G Grit	lb	4.00
Acephate 90SP	lb	7.45	Thimet 20-G	lb	3.65
Admire 2 Flowable	oz	4.78	Thionex 3EC	pt	4.17
Ammo 2.5 EC	oz	0.78	Thionex 50W	lb	10.45
Asana .66 XL	oz	0.57	Tracer	oz	9.73
Aztec 2.1% G	lb	3.68	Trimax	oz	1.85
Baythroid 2	oz	2.30	Vydate C-LV	oz	0.89
INSECTICIDES (CON'T)			Warrior Z	oz	1.80
Bidrin 8L	oz	0.98	Warrior ZT	oz	1.88
Brigade EC	pt	3.50	SEED/PLANTS		
Brigade WSB	lb	22.47	Corn Seed Bt	thous	2.60
Capture 2EC	oz	2.40	Corn Seed BtRR	thous	3.47
Carbamate	oz	0.00	Corn Seed Conv.	thous	2.61
Centric 40WG	oz	4.95	Corn Seed RR	thous	3.08
Comite	pt	8.46	Corn Seed VT3	thous	3.52
Condor XL	pt	0.00	Corn Seed VT3Pro	thous	3.52
Confirm 2F	oz	1.86	Cotton Seed BG/RR	thous	0.62
Counter 15G	lb	4.51	Cotton Seed BGII/RRF	thous	0.61
Counter CR	lb	2.65	Cotton Seed Bt	thous	0.28
Curacron 8E	pt	10.75	Cotton Seed BtRR	thous	0.74
Decis 1.5EC	oz	2.84	Cotton Seed Bxn	thous	0.00
Declare	pt	4.08	Cotton Seed Conv.	thous	0.00
Denim 0.16EC	pt	32.63	Cotton Seed Liberty	thous	1.05
Di-Syston 15G	lb	3.48	Cotton Seed Liberty	thous	1.05
Di-Syston 8	pt	14.32	Cotton Seed RR	thous	0.63
Diamond .83EC	pt	19.50	Cotton Seed RR	thous	0.63
Dimethoate 4E	pt	6.27	Cotton Seed WS	thous	0.49
Dimilin 2L	oz	2.02	Cotton Seed WS/RR	thous	0.00
Dipel DF	lb	15.09	Cotton Seed WS/RRF	thous	0.59
Dipel ES	pt	5.42	Sorghum Concept	lb	2.29
Force 3G	lb	6.90	Sorghum Hybrid Sudax	lb	1.20
Furadan 3G	lb	0.00	Sorghum NonConcept	lb	1.18
Furadan 4F	pt	9.81	Soybean Seed LL	lb	1.15
Fury 1.5 EC	oz	1.30	Soybean Seed Private	lb	0.38
Gaucho 480	oz	5.80	Soybean Seed Public	lb	0.00
Intrepid 2F	oz	6.13	Soybean Seed RR	lb	1.11
Intruder 70WP	oz	9.83	Soybean Seed Stack	lb	1.28
Karate Z	oz	3.40	Wheat Seed Private	lb	0.38
Lannate LV	pt	11.08	Wheat Seed Public	lb	0.00
Lannate SP	oz	2.13	SERVICE FEE		
Larvin 3.2	oz	0.63	Cotton Checkoff	bale	2.56
Leverage 2.7	oz	2.12	Cotton Storage	bale	25.00
Lorsban 15G	lb	2.15	Crop Consultant	acre	7.00
Lorsban 4E	pt	6.02	Insect Scouting	acre	7.00
Malathion 57EC	pt	4.23	Rice Consultant	acre	8.00
Malathion 8E	pt	5.60	SC Treating Charge	acre	0.00
Malathion ULV	pt	4.93	Survey & Mark Levees	acre	4.50
Mepichlor 4.2% Liq	pt	5.91	Survey & Mark Levees	acre	4.50
Methyl Parathion	pt	5.79	BG Cot Tech Fee	thous	0.28
Monitor 4	pt	16.50	BG Cot Tech Fee	cap/ac	19.50
Monitor 4	pt	16.50	BG II Cot Tech Fee	thous	0.76
Mustang Max	oz	1.48	BG II Cot Tech Fee	cap/ac	31.91
Organophosphate	oz	0.00	BG II/RR Tech Fee	thous	1.49
Orthene 90S	lb	5.75	BG II/RR Tech Fee	cap/ac	62.69
Orthene 97	lb	10.59	BGII/RRF Cot Tech Fe	thous	1.49
Ovasyn	pt	0.00	BGII/RRF Cot Tech Fe	cap/ac	69.25
Ovicide	oz	0.00	Eradication Fee	acre	6.00
PennCap M	pt	6.71	Eradication Zone 1	acre	6.00
Phaser 3E	qt	8.13	Eradication Zone 1A	acre	6.00
Pirate 3SC	oz	0.00	Eradication Zone 1B	acre	6.00
Pounce 25WP	lb	15.16	Eradication Zone 2	acre	6.00
Pounce 3.2 EC	oz	0.91	Eradication Zone 3	acre	6.00
Provado 1.6F	oz	1.94	Eradication Zone 4	acre	6.00
Scout X-TRA	oz	0.00	RR Cotton Tech Fee	thous	1.04

Appendix Table 3 Cont'd. Operating Inputs: Estimated Prices for 2015.

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
RR Cotton Tech Fee	cap/ac	43.66	RRF Cotton Tech Fee	thous	1.04
RR Cotton Tech Fee	thous	1.04	RRF Cotton Tech Fee	cap/ac	48.25
RR Cotton Tech Fee	cap/ac	43.66			

Appendix Table 4. Tractors: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Louisiana 2016.

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hour-----					
Combine (170-199 hp)	190hp	0	300	8	9.78	13.40	19.56	0.00	32.96	0.00	32.96
Combine (200-249 hp)	240hp	161,548	300	8	12.35	13.40	24.70	16.82	54.92	66.39	121.32
Combine (225-274 hp)	Track250hp	0	300	8	12.87	13.40	25.74	0.00	39.14	0.00	39.14
Combine (250-299 hp)	275hp	315,000	300	8	14.15	13.40	28.30	32.81	74.51	129.47	203.98
Combine (250-299hp)	Grass295hp	218,222	300	8	15.18	13.40	30.36	22.73	66.49	89.69	156.18
Combine (275-299 hp)	Track290hp	0	300	8	14.93	13.40	29.86	0.00	43.26	0.00	43.26
Combine (300-349 hp)	325hp	332,000	300	8	16.73	13.40	33.46	34.58	81.44	136.45	217.90
Combine (300-349hp)	Track320hp	0	300	8	16.47	13.40	32.94	0.00	46.34	0.00	46.34
Combine (350-379 hp)	370hp	344,000	300	8	19.04	13.40	38.08	35.83	87.31	141.39	228.70
Combine (350-379 hp)	Track365hp	0	300	8	18.79	13.40	37.58	0.00	50.98	0.00	50.98
Cotton Stripper	173hp	170,000	200	8	8.08	13.40	16.16	26.56	56.12	104.80	160.93
SC Tractor 93 MDR	93	46,683	600	10	4.79	10.18	9.58	2.72	22.48	7.84	30.33
SC Tractpr 68 MDR	68	27,049	600	10	3.50	10.18	7.00	1.57	18.75	4.54	23.30
Tractor(40-59hp)Cab	2WD 50	31,100	600	8	2.57	10.18	5.14	0.97	16.29	5.84	22.14
Tractor(40-59hp)Cab	MFWD 50	38,100	600	8	2.57	10.18	5.14	1.19	16.51	7.16	23.68
Tractor(40-59hp)RB	2WD 50	18,500	600	8	2.57	10.18	5.14	0.57	15.90	3.47	19.38
Tractor(40-59hp)RB	MFWD 50	23,600	600	8	2.57	10.18	5.14	0.73	16.06	4.43	20.50
Tractor(60-89hp)CAB	2WD 75	47,700	600	8	3.86	10.18	7.72	1.49	19.39	8.97	28.36
Tractor(60-89hp)CAB	MFWD 75	49,300	600	8	3.86	10.18	7.72	1.54	19.44	9.27	28.71
Tractor(60-89hp)RB	2WD 75	37,000	600	8	3.86	10.18	7.72	1.15	19.05	6.95	26.01
Tractor(60-89hp)RB	MFWD 75	37,800	600	8	3.86	10.18	7.72	1.18	19.08	7.10	26.19
Tractor(90-119hp)CB	2WD 105	65,300	600	8	5.40	10.18	10.80	2.04	23.02	12.28	35.30
Tractor(90-119hp)CB	MFWD 105	78,300	600	8	5.40	10.18	10.80	2.44	23.43	14.72	38.16
Tractor(90-119hp)RB	2WD 105	59,900	600	8	5.40	10.18	10.80	1.87	22.86	11.26	34.12
Tractor(90-119hp)RB	MFWD 105	60,300	600	8	5.40	10.18	10.80	1.88	22.87	11.33	34.21
Tractor(120-139hp)CB	2WD 130	96,300	600	8	6.69	10.18	13.38	3.00	26.57	18.10	44.68
Tractor(120-139hp)CB	MFWD 130	116,000	600	8	6.69	10.18	13.38	3.62	27.18	21.81	49.00
Tractor(140-159hp)CB	2WD 150	108,000	600	8	7.72	10.18	15.44	3.37	28.99	20.30	49.30
Tractor(140-159hp)CB	MFWD 150	149,000	600	8	7.72	10.18	15.44	4.65	30.27	28.02	58.29
Tractor(160-179hp)CB	2WD 170	156,000	600	8	8.75	10.18	17.50	4.87	32.55	30.69	63.25
Tractor(160-179hp)CB	MFWD 170	166,000	600	8	8.75	10.18	17.50	5.18	32.86	32.66	65.53
Tractor(160-199hp)CB	Track 180	142,710	600	8	9.26	10.18	18.53	4.45	33.16	28.08	61.25
Tractor(180-199hp)CB	2WD 190	143,000	600	8	9.77	10.18	19.55	4.46	34.20	28.13	62.34
Tractor(180-199hp)CB	MFWD 190	180,000	600	8	9.77	10.18	19.55	5.62	35.36	35.42	70.78
Tractor(200-249hp)CB	4WD 225	147,066	600	8	11.58	10.18	23.16	4.59	37.93	28.93	66.87
Tractor(200-249hp)CB	MFWD 225	228,000	600	8	11.58	10.18	23.16	7.12	40.46	44.86	85.33
Tractor(200-249hp)CB	Track 225	277,000	600	8	11.58	10.18	23.16	8.65	41.99	54.50	96.50
Tractor(250-349hp)CB	4WD 300	282,000	600	8	15.44	10.18	30.88	8.81	49.87	55.49	105.36
Tractor(250-349hp)CB	Track 300	289,000	600	8	15.44	10.18	30.88	9.03	50.09	56.86	106.96
Tractor(350-449hp)CB	4WD 400	341,000	600	8	20.58	10.18	41.17	10.65	62.01	67.10	129.11
Tractor(350-449hp)CB	Track 400	364,000	600	8	20.58	10.18	41.17	11.37	62.73	71.62	134.36
Tractor(450-uphp)CB	TRACK-475	279,879	600	8	24.44	10.18	48.89	8.74	67.82	55.07	122.89

Appendix Table 5. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Louisiana 2016.

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/acre				-----\$/acre-----		
ATV - 4 Wheeler	12'	0	100	8	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
ATV - 4 Wheeler	20'	8,750	100	8	1.00	0.200	2.68	0.45	0.43	3.56	2.06	5.63
Butt Levee (Backhoe)	70 HP	73,300	150	8	5.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Cotton Picker-1st-BB	2R38"157hp	144,912	200	8	8.08	0.519	11.67	8.39	11.76	31.83	46.42	78.26
Cotton Picker-1st-BB	4R2X1260hp	357,000	200	8	13.33	0.172	3.87	4.59	9.61	18.07	37.92	56.00
Cotton Picker-1st-BB	4R30"250hp	262,000	200	8	12.86	0.327	7.35	8.42	13.40	29.18	52.88	82.06
Cotton Picker-1st-BB	4R30"325hp	350,000	200	8	18.01	0.327	7.35	11.79	17.90	37.04	70.64	107.69
Cotton Picker-1st-BB	4R38"255hp	268,000	200	8	13.12	0.257	5.78	6.76	10.79	23.35	42.59	65.94
Cotton Picker-1st-BB	4R38"325hp	351,000	200	8	18.01	0.257	5.78	9.28	14.13	29.21	55.78	84.99
Cotton Picker-1st-BB	5R30"255hp	285,000	200	8	12.86	0.261	5.88	6.73	11.66	24.28	46.01	70.29
Cotton Picker-1st-BB	5R38"250hp	284,601	200	8	12.86	0.207	4.65	5.33	9.21	19.20	36.35	55.55
Cotton Picker-1st-BB	6R30"325hp	465,000	200	8	18.27	0.218	4.90	7.97	15.85	28.73	62.56	91.30
Cotton Picker-1st-BB	6R38"330hp	465,000	200	8	18.27	0.172	3.87	6.29	12.51	22.68	49.39	72.08
Cotton Picker-1st-Tr	2R38"157hp	144,912	200	8	8.08	0.519	11.67	8.39	11.76	31.83	46.42	78.26
Cotton Picker-1st-Tr	4R2X1255hp	357,000	200	8	18.01	0.172	3.87	6.20	9.61	19.69	37.92	57.61
Cotton Picker-1st-Tr	4R30"250hp	261,825	200	8	12.86	0.327	7.35	8.42	13.39	29.17	52.84	82.01
Cotton Picker-1st-Tr	4R30"325hp	311,088	200	8	16.72	0.327	7.35	10.95	15.91	34.21	62.78	97.00
Cotton Picker-1st-Tr	4R38"255hp	268,000	200	8	13.12	0.257	5.78	6.76	10.79	23.35	42.59	65.94
Cotton Picker-1st-Tr	4R38"325hp	351,000	200	8	18.01	0.257	5.78	9.28	14.13	29.21	55.78	84.99
Cotton Picker-1st-Tr	5R30"255hp	285,303	200	8	13.12	0.261	5.88	6.87	11.67	24.43	46.06	70.49
Cotton Picker-1st-Tr	5R38"250hp	290,471	200	8	12.86	0.207	4.65	5.33	9.40	19.39	37.10	56.49
Cotton Picker-1st-Tr	6R30"325hp	465,000	200	8	16.72	0.218	4.90	7.30	15.85	28.06	62.56	90.63
Cotton Picker-1st-Tr	6R38"330hp	465,000	200	8	18.01	0.172	3.87	6.20	12.51	22.59	49.39	71.99
Cotton Picker-2nd-BB	2R38"157hp	144,912	200	8	8.08	0.440	9.88	7.11	9.96	26.96	39.32	66.29
Cotton Picker-2nd-BB	4R2X1260hp	357,000	200	8	18.01	0.145	3.27	5.25	8.14	16.67	32.12	48.80
Cotton Picker-2nd-BB	4R30"250hp	261,825	200	8	12.86	0.277	6.22	7.13	11.34	24.71	44.76	69.47
Cotton Picker-2nd-BB	4R30"325hp	311,088	200	8	16.72	0.277	6.22	9.27	13.47	28.98	53.18	82.17
Cotton Picker-2nd-BB	4R38"255hp	268,000	200	8	13.12	0.218	4.90	5.73	9.14	19.77	36.07	55.85
Cotton Picker-2nd-BB	4R38"325hp	351,000	200	8	18.01	0.218	4.90	7.86	11.97	24.74	47.25	71.99
Cotton Picker-2nd-BB	5R30"255hp	285,303	200	8	13.12	0.221	4.98	5.82	9.88	20.69	39.02	59.71
Cotton Picker-2nd-BB	5R38"250hp	284,601	200	8	12.86	0.175	3.94	4.51	7.80	16.26	30.79	47.05
Cotton Picker-2nd-BB	6R30"325hp	465,000	200	8	18.01	0.184	4.15	6.65	13.43	24.24	52.99	77.24
Cotton Picker-2nd-BB	6R38"330hp	465,000	200	8	18.01	0.145	3.27	5.25	10.60	19.13	41.84	60.98
Cotton Picker-2nd-Tr	2R38"157hp	144,912	200	8	8.08	0.440	9.88	7.11	9.96	26.96	39.32	66.29
Cotton Picker-2nd-Tr	4R2X1260hp	357,000	200	8	18.01	0.145	3.27	5.25	8.14	16.67	32.12	48.80
Cotton Picker-2nd-Tr	4R30"250hp	261,825	200	8	12.86	0.277	6.22	7.13	11.34	24.71	44.76	69.47
Cotton Picker-2nd-Tr	4R30"325hp	311,088	200	8	16.72	0.277	6.22	9.27	13.47	28.98	53.18	82.17
Cotton Picker-2nd-Tr	4R38"255hp	268,000	200	8	13.12	0.218	4.90	5.73	9.14	19.77	36.07	55.85
Cotton Picker-2nd-Tr	4R38"325hp	351,000	200	8	18.01	0.218	4.90	7.86	11.97	24.74	47.25	71.99
Cotton Picker-2nd-Tr	5R30"255hp	285,303	200	8	13.12	0.221	4.98	5.82	9.88	20.69	39.02	59.71
Cotton Picker-2nd-Tr	5R38"250hp	290,471	200	8	12.86	0.175	3.94	4.51	7.96	16.42	31.43	47.85
Cotton Picker-2nd-Tr	6R30"325hp	465,000	200	8	16.72	0.184	4.15	6.18	13.43	23.76	52.99	76.76
Cotton Picker-2nd-Tr	6R38"330hp	465,000	200	8	18.01	0.145	3.27	5.25	10.60	19.13	41.84	60.98
LA Pickup Truck	1/2 ton	25,000	800	5	2.50	1.000	10.18	5.62	2.81	18.61	6.65	25.26
LA Rice Combine	25 ft	165,000	300	10	8.60	0.300	5.05	5.16	13.21	23.43	20.07	43.50
LA Rice Combine-2	25 ft	165,000	300	10	8.60	0.300	5.05	5.16	13.21	23.43	20.07	43.50
LARice Combine Med	20 ft	150,000	300	10	7.10	0.210	3.53	2.98	8.40	14.92	12.76	27.69
Levee Sprayer	27'	30,768	350	8	2.57	0.038	0.68	0.19	0.06	0.94	0.41	1.36
Sprayer(300-450Gal)	47'	0	350	8	5.40	0.022	0.40	0.24	0.00	0.64	0.00	0.64
Sprayer(300-450Gal)	60'	103,000	350	8	5.66	0.017	0.31	0.19	0.09	0.61	0.63	1.25
Sprayer(300-450Gal)	80'	103,000	350	8	5.66	0.013	0.23	0.14	0.07	0.45	0.47	0.93
Sprayer(600-750Gal)	60'	174,000	350	8	10.29	0.017	0.31	0.36	0.16	0.84	1.08	1.92
Sprayer(600-825Gal)	80'	180,000	350	8	10.29	0.013	0.23	0.27	0.12	0.63	0.83	1.47
Sprayer(600-825Gal)	90'	255,000	350	8	10.29	0.011	0.21	0.24	0.16	0.61	1.05	1.66
Sprayer(1000-1400Gal)	90'	297,000	350	8	14.15	0.014	0.25	0.39	0.22	0.87	1.47	2.35
Sprayer(1200PlusGal)	120'	336,000	350	8	15.44	0.008	0.15	0.27	0.15	0.58	1.04	1.63

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2016.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost
			dollars	hours	years	hr/acre				\$/acre		
Blade-Box	6'	2WD 130	1,100	200	20	0.020	0.20	0.26	0.01 0.06	0.54	0.00 0.36	0.91
Blade-Box	10'	2WD 50	4,200	200	20	0.000	0.00	0.00	0.00 0.00	0.00	0.00 0.00	0.00
Blade-Box	14'	2WD 50	7,060	200	20	0.000	0.00	0.00	0.00 0.00	0.00	0.00 0.00	0.00
Blade-Scraper	6'	2WD 50	1,150	200	20	1.176	11.97	6.05	0.64 0.68	19.35	0.51 4.09	23.95
Blade-Scraper	10'	2WD 50	3,340	200	20	1.176	11.97	6.05	1.86 0.68	20.57	1.48 4.09	26.15
Blade-Scraper	14'	2WD 50	6,700	200	20	0.000	0.00	0.00	0.00 0.00	0.00	0.00 0.00	0.00
Chisel Plow(Folding)	16'	2WD 130	22,500	150	12	0.115	1.17	1.54	0.93 0.34	4.00	1.62 2.09	7.73
Chisel Plow(Folding)	24'	MFWD 190	38,100	150	12	0.076	0.77	1.49	1.05 0.43	3.75	1.82 2.70	8.28
Chisel Plow(Folding)	32'	MFWD 225	49,100	150	12	0.057	0.58	1.33	1.02 0.41	3.36	1.77 2.59	7.73
Chisel Plow(Folding)	42'	MFWD 225	55,700	150	12	0.044	0.44	1.01	0.88 0.31	2.66	1.53 1.97	6.17
Chisel Plow(Rigid)	15'	2WD 130	11,400	150	12	0.123	1.25	1.64	0.50 0.37	3.78	0.88 2.23	6.89
Chisel Plow(Rigid)	24'	MFWD 190	13,200	150	12	0.077	0.78	1.50	0.36 0.43	3.09	0.63 2.72	6.45
Chisel-Harrow	21 shank	2WD 190	12,500	150	12	0.088	0.89	1.72	0.39 0.39	3.40	0.68 2.47	6.57
Chisel-Harrow	27 shank	MFWD 225	14,100	150	12	0.068	0.69	1.58	0.34 0.48	3.11	0.60 3.07	6.79
Colter-Chisel-Harrow	21 shank	2WD 190	19,200	150	12	0.088	0.89	1.72	0.61 0.39	3.62	1.05 2.47	7.15
Colter-Chisel-Harrow	27 shank	MFWD 225	24,000	150	12	0.068	0.69	1.58	0.59 0.48	3.36	1.02 3.07	7.46
Corn Grain Cart 8R30	500 bu	MFWD 190	23,700	200	12	0.031	0.32	0.62	0.20 0.17	1.33	0.35 1.13	2.82
Corn Grain Cart 8R40	700bu	MFWD 190	36,600	200	12	0.025	0.25	0.48	0.24 0.14	1.13	0.42 0.88	2.44
Cult & Post	4R-38	2WD 105	17,200	150	10	0.173	2.64	1.87	0.79 0.32	5.63	2.09 1.95	9.68
Cult & Post	6R-30	MFWD 150	21,600	150	10	0.146	4.47	2.26	0.84 0.68	8.27	2.23 4.10	14.61
Cult & Post	6R-38	MFWD 150	21,900	150	10	0.115	1.76	1.78	0.67 0.53	4.77	1.78 3.24	9.80
Cult & Post	8R-30	MFWD 190	25,900	150	10	0.110	1.67	2.15	0.75 0.61	5.20	2.00 3.89	11.11
Cult & Post	8R-38	MFWD 190	26,600	150	10	0.086	1.32	1.70	0.61 0.48	4.13	1.62 3.08	8.84
Cult & Post	8R-38 2x1	MFWD 190	37,900	150	10	0.057	0.88	1.13	0.58 0.32	2.92	1.54 2.05	6.52
Cult & Post	10R-30	MFWD 225	31,400	150	10	0.088	1.34	2.03	0.73 0.62	4.74	1.94 3.94	10.64
Cult & Post	10R-38	MFWD 225	0	150	10	0.065	0.99	1.50	0.00 0.46	2.96	0.00 2.91	5.88
Cult & Post	12R-30	MFWD 225	40,700	150	10	0.073	1.11	1.69	0.79 0.52	4.13	2.10 3.29	9.52
Cult & Post	12R-38	MFWD 225	44,800	150	10	0.057	0.88	1.34	0.69 0.41	3.32	1.82 2.59	7.75
Cultipacker	12'	2WD 130	4,846	300	12	0.124	1.26	1.66	0.14 0.37	3.44	0.19 2.25	5.89
Cultipacker	20'	MFWD 150	15,200	300	12	0.074	0.76	1.15	0.26 0.34	2.52	0.36 2.09	4.98
Cultivate	4R-38	2WD 105	11,800	150	10	0.162	1.65	1.75	0.51 0.30	4.22	1.34 1.82	7.40
Cultivate	6R-30	MFWD 150	15,900	150	10	0.137	1.39	2.12	0.58 0.64	4.74	1.53 3.85	10.13
Cultivate	6R-38	MFWD 150	16,500	150	10	0.108	1.10	1.67	0.47 0.50	3.76	1.26 3.04	8.06
Cultivate	8R-30	MFWD 190	20,500	150	10	0.103	1.04	2.01	0.56 0.58	4.21	1.48 3.65	9.35
Cultivate	8R-38	MFWD 190	21,200	150	10	0.081	0.82	1.59	0.46 0.45	3.34	1.21 2.88	7.44
Cultivate	8R-38 2x1	MFWD 190	37,100	150	10	0.054	0.55	1.06	0.53 0.30	2.45	1.41 1.92	5.79
Cultivate	10R-30	MFWD 225	28,200	150	10	0.082	0.83	1.91	0.62 0.58	3.95	1.63 3.70	9.29
Cultivate	10R-38	MFWD 225	0	150	10	0.065	0.66	1.50	0.00 0.46	2.63	0.00 2.91	5.55
Cultivate	12R-30	MFWD 225	35,300	150	10	0.068	0.69	1.59	0.64 0.48	3.42	1.70 3.08	8.22
Cultivate	12R-38	MFWD 225	37,100	150	10	0.054	0.55	1.25	0.53 0.38	2.73	1.41 2.43	6.58
Disk & Incorporate	14'	2WD 130	29,500	200	10	0.149	2.28	2.00	1.32 0.45	6.06	2.33 2.71	11.10
Disk & Incorporate	24'	MFWD 190	44,500	200	10	0.087	1.33	1.70	1.16 0.49	4.69	2.05 3.09	9.84
Disk & Incorporate	32'	4WD 225	58,900	200	10	0.068	1.04	1.59	1.21 0.31	4.17	2.13 1.98	8.30
Disk & Incorporate	42'	MFWD 225	30,542	200	10	0.049	0.74	1.13	0.44 0.34	2.68	0.79 2.20	5.68
Disk Bed (Hipper)	4R-38	MFWD 150	8,380	160	10	0.147	1.50	2.27	0.30 0.68	4.77	0.81 4.13	9.73
Disk Bed (Hipper)	6R-30	MFWD 170	15,100	160	10	0.125	1.27	2.18	0.47 0.64	4.58	1.24 4.08	9.90
Disk Bed (Hipper)	6R-38	MFWD 170	15,100	160	10	0.098	1.00	1.72	0.37 0.51	3.61	0.98 3.22	7.82
Disk Bed (Hipper)	8R-30	MFWD 190	18,100	160	10	0.093	0.95	1.83	0.42 0.52	3.73	1.12 3.32	8.18
Disk Bed (Hipper)	8R-38 2x1	MFWD 190	31,200	160	10	0.049	0.50	0.96	0.38 0.27	2.12	1.01 1.74	4.89
Disk Bed (Hipper)	10R-30	MFWD 225	19,900	160	10	0.075	0.76	1.73	0.37 0.53	3.40	0.98 3.36	7.75
Disk Bed (Hipper)	10R-38	MFWD 225	23,000	160	10	0.059	0.60	1.37	0.34 0.42	2.73	0.89 2.65	6.28
Disk Bed (Hipper)	12R-30	MFWD 225	31,300	160	10	0.062	0.63	1.44	0.48 0.44	3.01	1.29 2.80	7.11
Disk Bed (Hipper)	12R-38	MFWD 225	34,200	160	10	0.049	0.50	1.14	0.42 0.35	2.41	1.11 2.21	5.74
Disk Bed (Hipper)Fld	8R-38	MFWD 190	20,000	160	10	0.074	0.75	1.44	0.37 0.41	2.99	0.97 2.62	6.59
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	18,700	160	10	0.074	0.75	1.44	0.34 0.41	2.96	0.91 2.62	6.50
Disk Bed w/roller	12R-30	2WD 190	28,600	160	10	0.093	0.95	1.83	0.67 0.41	3.87	1.77 2.63	8.28
Disk Bed w/roller	12R-30	MFWD 225	46,700	160	10	0.062	0.63	1.44	0.72 0.44	3.25	1.92 2.80	7.99
Disk Harrow	14'	2WD 130	24,100	180	10	0.140	1.42	1.87	0.93 0.42	4.66	1.98 2.54	9.19
Disk Harrow	24'	MFWD 190	44,500	180	10	0.081	0.83	1.60	1.01 0.46	3.90	2.13 2.89	8.94
Disk Harrow	28'	MFWD 225	49,800	180	10	0.070	0.71	1.62	0.97 0.49	3.80	2.05 3.14	9.00
Disk Harrow	32'		53,500	180	10	0.061	0.82	0.00	0.91 0.00	0.00	1.92 0.00	0.00
Disk Harrow	42'	MFWD 225	98,500	180	10	0.046	0.47	1.08	1.27 0.33	3.17	2.70 2.09	7.97
Ditcher		2WD 130	4,900	200	10	0.020	0.20	0.26	0.03 0.06	0.57	0.05 0.36	0.98
Ditcher (1m/160a)		2WD 130	4,900	200	10	0.009	0.09	0.12	0.01 0.02	0.26	0.02 0.16	0.46
Fert Appl (Liquid)	4R-38	MFWD 150	13,500	150	8	0.154	2.36	2.38	1.39 0.72	6.86	1.57 4.33	12.76
Fert Appl (Liquid)	6R-30	MFWD 170	11,200	150	8	0.130	1.99	2.29	0.97 0.67	5.94	1.10 4.27	11.32
Fert Appl (Liquid)	6R-38	MFWD 170	12,200	150	8	0.103	1.57	1.80	0.84 0.53	4.76	0.94 3.37	9.09
Fert Appl (Liquid)	8R-30	MFWD 190	12,200	150	8	0.098	1.49	1.92	0.79 0.55	4.77	0.90 3.47	9.15
Fert Appl (Liquid)	8R-38	MFWD 190	14,900	150	8	0.077	1.18	1.51	0.77 0.43	3.91	0.87 2.75	7.53
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	17,500	150	8	0.051	0.78	1.01	0.60 0.29	2.69	0.68 1.83	5.20
Fert Appl (Liquid)	10R-30	MFWD 225	18,600	150	8	0.078	1.19	1.81	0.97 0.55	4.55	1.09 3.52	9.17
Fert Appl (Liquid)	10R-38	MFWD 225	20,300	150	8	0.061	0.94	1.43	0.83 0.44	3.66	0.94 2.77	7.38
Fert Appl (Liquid)	12R-30	MFWD 225	17,900	150	8	0.078	1.19	1.81	0.93 0.55	4.51	1.05 3.52	9.10
Fert Appl (Liquid)	12R-38	MFWD 225	17,500	150	8	0.051	0.78	1.19	0.60 0.36	2.95	0.68 2.31	5.95
Field Cult & Inc	12'	2WD 150	13,605	100	10	0.132	2.01	2.04	0.44 0.44	4.95	1.90 2.68	9.54
Field Cult & Inc	24'	MFWD 170	24,679	100	10	0.066	1.00	1.15	0.40 0.34	2.91	1.72 2.15	6.80

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2016.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost
			dollars	hours	years	hr/ac	-----\$/acre-----					
Field Cultivate	12'	2WD 150	16,600	100	10	0.124	1.26	1.92	0.51 0.41	4.12	2.18 2.52	8.83
Field Cultivate	24'	MFWD 170	32,100	100	10	0.062	0.63	1.08	0.49 0.32	2.54	2.11 2.03	6.68
Field Cultivate	32'	MFWD 190	39,100	100	10	0.046	0.47	0.91	0.45 0.26	2.10	1.92 1.65	5.68
Field Cultivate	42'	MFWD 225	55,300	100	10	0.035	0.36	0.82	0.49 0.25	1.93	2.07 1.59	5.60
Field Cultivate	50'	MFWD 225	64,300	100	10	0.029	0.30	0.69	0.48 0.21	1.68	2.02 1.33	5.05
Gate Installer		2WD 130	2,960	10	10	0.020	0.40	0.26	0.17 0.06	0.91	0.60 0.36	1.87
Grain Drill	12'	2WD 130	23,500	150	8	0.157	3.19	2.10	1.38 0.47	7.16	2.64 2.84	12.65
Grain Drill	15'	MFWD 150	32,000	150	8	0.125	2.55	1.94	1.50 0.58	6.59	2.88 3.52	13.00
Grain Drill	20'	MFWD 170	38,600	150	8	0.094	1.91	1.65	1.36 0.48	5.42	2.61 3.08	11.11
Grain Drill	24'	MFWD 190	62,200	150	8	0.078	1.59	1.53	1.83 0.44	5.41	3.50 2.78	11.69
Grain Drill	30'	MFWD 225	61,300	150	8	0.062	1.27	1.45	1.44 0.44	4.62	2.76 2.82	10.21
Grain Drill & Pre	12'	2WD 130	28,900	150	8	0.169	3.44	2.26	1.83 0.50	8.05	3.50 3.06	14.62
Grain Drill & Pre	15'	MFWD 150	37,400	150	8	0.135	2.75	2.09	1.89 0.63	7.37	3.63 3.79	14.80
Grain Drill & Pre	20'	MFWD 170	44,000	150	8	0.101	2.06	1.77	1.67 0.52	6.04	3.20 3.31	12.56
Grain Drill & Pre	24'	MFWD 190	67,600	150	8	0.084	1.72	1.65	2.14 0.47	5.99	4.10 2.99	13.09
Grain Drill & Pre	30'	MFWD 225	78,000	150	8	0.067	1.37	1.56	1.97 0.48	5.40	3.78 3.03	12.23
Harrow	13'	2WD 130	4,360	200	10	0.119	1.21	1.59	0.18 0.35	3.35	0.27 2.16	5.79
Harrow	21'	2WD 150	6,390	200	10	0.073	0.75	1.14	0.16 0.24	2.30	0.24 1.50	4.06
Harrow	40'	MFWD 190	17,000	200	10	0.038	0.39	0.75	0.23 0.21	1.60	0.34 1.37	3.32
Harrow	47'	MFWD 190	22,600	200	10	0.033	0.33	0.64	0.26 0.18	1.42	0.39 1.17	2.99
Header - Corn	4R-38	240hp	25,147	300	8	0.201	2.69	4.96	1.26 3.38	12.31	1.90 13.35	27.56
Header - Corn	6R30"	240hp	45,500	300	8	0.170	2.28	4.20	1.93 2.86	11.29	2.91 11.30	25.51
Header - Corn	6R38"	240hp	46,300	300	8	0.134	1.80	3.32	1.55 2.26	8.93	2.34 8.92	20.20
Header - Corn	8R-30	240hp	58,100	300	8	0.127	1.71	3.15	1.85 2.14	8.86	2.79 8.47	20.14
Header - Corn	8R-38	275hp	59,200	300	8	0.100	1.35	2.85	1.49 3.31	9.01	2.24 13.07	24.33
Header - Corn	12R-20	275hp	77,300	300	8	0.127	1.71	3.61	2.46 4.19	11.98	3.71 16.53	32.23
Header - Corn	12R-30	275hp	90,900	300	8	0.085	1.14	2.40	1.93 2.79	8.27	2.91 11.02	22.21
Header - Rice (CL)	22' Rigid	240hp	21,887	300	8	0.288	3.86	7.12	1.57 4.85	17.42	2.37 19.15	38.95
Header - Rice (CL)	25' Rigid	240hp	64,400	300	8	0.253	3.40	6.27	4.08 4.27	18.03	6.14 16.85	41.03
Header - Rice (CL)	30' Rigid	275hp	74,100	300	8	0.211	2.83	5.98	3.91 6.94	19.68	5.89 27.38	52.96
Header - Rice (SL)	22' Rigid	240hp	21,887	300	8	0.250	3.35	6.17	1.36 4.20	15.09	2.05 16.59	33.75
Header - Rice (SL)	25' Rigid	240hp	64,400	300	8	0.220	2.94	5.43	3.54 3.70	15.62	5.32 14.60	35.56
Header - Rice (SL)	30' Rigid	275hp	74,100	300	8	0.183	2.45	5.18	3.39 6.01	17.05	5.10 23.73	45.90
Header - Soybean	15' Flex	240hp	0	300	8	0.170	2.28	4.20	0.00 2.86	9.35	0.00 11.30	20.65
Header - Soybean	18' Flex	240hp	20,309	300	8	0.141	1.90	3.50	0.72 2.38	8.51	1.08 9.42	19.02
Header - Soybean	22' Flex	240hp	31,300	300	8	0.116	1.55	2.86	0.90 1.95	7.28	1.36 7.70	16.36
Header - Soybean	25' Flex	275hp	34,400	300	8	0.102	1.36	2.89	0.87 3.35	8.49	1.32 13.22	23.04
Header - Soybean	30' Flex	275hp	30,200	300	8	0.085	1.14	2.40	0.64 2.79	6.98	0.96 11.02	18.97
Header Wheat/Sorghum	18' Rigid	240hp	19,069	300	8	0.141	1.90	3.50	0.67 2.38	8.47	1.01 9.42	18.91
Header Wheat/Sorghum	22' Rigid	240hp	18,200	300	8	0.116	1.55	2.86	0.52 1.95	6.90	0.79 7.70	15.40
Header Wheat/Sorghum	25' Rigid	240hp	28,100	300	8	0.102	1.36	2.52	0.71 1.71	6.32	1.07 6.78	14.19
Header Wheat/Sorghum	30' Rigid	275hp	31,000	300	8	0.085	1.14	2.40	0.65 2.79	7.00	0.99 11.02	19.01
Heavy Disk	14'	MFWD 150	24,100	180	10	0.145	1.48	2.25	0.97 0.67	5.39	2.06 4.08	11.55
Heavy Disk	21'	MFWD 170	39,600	180	10	0.097	0.99	1.70	1.07 0.50	4.26	2.26 3.17	9.70
Heavy Disk	27'	MFWD 190	49,800	180	10	0.075	0.77	1.48	1.04 0.42	3.72	2.21 2.68	8.61
LA Boom Sprayer	30 ft	MFWD 150	3,000	150	10	0.059	0.61	0.92	0.13 0.27	1.94	0.14 1.68	3.77
Land Plane	40'x10'	MFWD 190	6,020	200	10	0.242	2.47	4.74	0.29 1.36	8.87	0.77 8.59	18.23
Land Plane	50'x16'	MFWD 190	14,600	200	10	0.151	1.54	2.96	0.44 0.85	5.80	1.16 5.37	12.34
LARice Backhoe-Rrmnt	2 ft	MFWD 150	6,000	100	10	0.500	5.09	7.72	2.64 2.32	17.77	3.64 14.01	35.43
LARice Land Level	13 ft	MFWD 150	7,500	200	15	0.190	1.93	2.93	0.15 0.88	5.91	0.65 5.32	11.89
LARice Levee Plow	8 ft	4WD 300	4,600	150	10	0.050	0.50	1.54	0.07 0.44	2.57	0.18 2.77	5.53
LARice Water Level	24 ft	4WD 300	3,500	100	15	0.149	1.52	4.63	0.23 1.32	7.70	0.48 8.31	16.50
Levee Splitter (1/80	2 blade	2WD 150	3,280	50	10	0.004	0.04	0.06	0.00 0.01	0.12	0.02 0.08	0.23
Lo-Till & Bed	4R-38	MFWD 190	5,100	150	12	0.145	1.48	2.84	0.26 0.81	5.41	0.48 5.15	11.05
Middle Buster	6R-38	MFWD 150	12,800	160	8	0.120	1.22	1.85	0.36 0.55	4.00	1.13 3.36	8.50
Middle Buster	8R-30	MFWD 190	20,800	160	8	0.114	1.16	2.23	0.55 0.64	4.59	1.75 4.04	10.39
Middle Buster	8R-38	MFWD 190	18,100	160	8	0.090	0.91	1.76	0.38 0.50	3.57	1.20 3.19	7.97
Middle Buster	8R-40 2x1	MFWD 190	29,200	160	8	0.060	0.61	1.17	0.41 0.33	2.53	1.29 2.12	5.96
Middle Buster	10R-30	MFWD 225	29,300	160	8	0.091	0.92	2.11	0.62 0.65	4.32	1.97 4.09	10.39
Middle Buster	10R-38	MFWD 225	32,100	160	8	0.072	0.73	1.66	0.54 0.51	3.45	1.70 3.23	8.39
Middle Buster	12R-38	MFWD 225	29,200	160	8	0.060	0.61	1.39	0.41 0.42	2.84	1.29 2.69	6.83
Mulcher Plow	30'	MFWD 225	0	100	10	0.068	0.69	1.57	0.00 0.48	2.75	0.00 3.05	5.81
NT Grain Drill	12'	2WD 130	41,600	150	8	0.163	3.33	2.19	2.55 0.49	8.56	4.88 2.96	16.41
NT Grain Drill	15'	MFWD 150	49,000	150	8	0.130	2.66	2.02	2.40 0.60	7.70	4.60 3.66	15.97
NT Grain Drill	20'	MFWD 170	65,200	150	8	0.098	1.99	1.71	2.40 0.50	6.62	4.59 3.20	14.43
NT Grain Drill	24'	MFWD 190	82,400	150	8	0.081	1.66	1.60	2.52 0.46	6.25	4.83 2.89	13.99
NT Grain Drill	30'	MFWD 225	94,200	150	8	0.065	1.33	1.51	2.31 0.46	5.62	4.42 2.93	12.99
NT Grain Drill & Pre	12'	2WD 130	47,000	150	8	0.176	3.58	2.35	3.10 0.53	9.58	5.94 3.19	18.72
NT Grain Drill & Pre	15'	MFWD 150	54,400	150	8	0.141	2.87	2.17	2.87 0.65	8.58	5.50 3.95	18.03
NT Grain Drill & Pre	20'	MFWD 170	70,600	150	8	0.105	2.15	1.85	2.80 0.54	7.35	5.35 3.45	16.16
NT Grain Drill & Pre	24'	MFWD 190	87,800	150	8	0.088	1.79	1.72	2.90 0.49	6.91	5.55 3.12	15.58
NT Grain Drill & Pre	30'	MFWD 225	102,000	150	8	0.070	1.43	1.63	2.69 0.50	6.26	5.15 3.16	14.59
NT Plant&Pre-Folding	8R-38	MFWD 170	51,600	150	8	0.083	1.70	1.46	1.61 0.43	5.21	3.09 2.73	11.04

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, (Continued) and direct and fixed cost per acre, Louisiana 2016.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost		
			dollars	hours	years	hr/ac	\$/acre							
NT Grain Drill & Pre	15'	MFWD 150	54,400	150	8	0.141	2.87	2.17	2.87	0.65	8.58	5.50	3.95	18.03
NT Grain Drill & Pre	20'	MFWD 170	70,600	150	8	0.105	2.15	1.85	2.80	0.54	7.35	5.35	3.45	16.16
NT Grain Drill & Pre	24'	MFWD 190	87,800	150	8	0.088	1.79	1.72	2.90	0.49	6.91	5.55	3.12	15.58
NT Grain Drill & Pre	30'	MFWD 225	102,000	150	8	0.070	1.43	1.63	2.69	0.50	6.26	5.15	3.16	14.59
NT Plant&Pre-Folding	8R-38	MFWD 170	51,600	150	8	0.083	1.70	1.46	1.61	0.43	5.21	3.09	2.73	11.04
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	84,200	150	8	0.055	1.13	0.97	1.75	0.28	4.15	3.36	1.81	9.33
NT Plant&Pre-Folding	10R-30	MFWD 190	57,555	150	8	0.084	1.72	1.65	1.82	0.47	5.68	3.49	2.99	12.17
NT Plant&Pre-Folding	10R-38	MFWD 190	52,893	150	8	0.066	1.35	1.30	1.32	0.37	4.36	2.53	2.36	9.25
NT Plant&Pre-Folding	12R-20	MFWD 190	73,000	150	8	0.105	2.15	2.06	2.89	0.59	7.71	5.53	3.74	16.99
NT Plant&Pre-Folding	12R-30	MFWD 190	75,900	150	8	0.070	1.43	1.37	2.00	0.39	5.21	3.83	2.49	11.55
NT Plant&Pre-Folding	12R-38	MFWD 190	84,200	150	8	0.055	1.13	1.08	1.75	0.31	4.29	3.36	1.97	9.62
NT Plant&Pre-Folding	16R-30	MFWD 190	102,000	150	8	0.052	1.07	1.03	2.02	0.29	4.43	3.86	1.87	10.17
NT Plant&Pre-Folding	23R-15	MFWD 190	129,000	150	8	0.073	1.49	1.43	3.55	0.41	6.89	6.79	2.60	16.29
NT Plant&Pre-Folding	24R-20	MFWD 190	158,000	150	8	0.052	1.07	1.03	3.13	0.29	5.54	5.99	1.87	13.40
NT Plant&Pre-Folding	24R-30	MFWD 190	185,000	150	8	0.035	0.71	0.68	2.44	0.19	4.05	4.67	1.24	9.97
NT Plant&Pre-Rigid	4R-30	2WD 130	27,100	150	8	0.211	4.30	2.83	2.14	0.63	9.92	4.11	3.83	17.86
NT Plant&Pre-Rigid	4R-38	2WD 130	29,700	150	8	0.166	3.39	2.22	1.85	0.50	7.97	3.54	3.01	14.54
NT Plant&Pre-Rigid	6R-30	MFWD 150	38,200	150	8	0.141	2.87	2.17	2.02	0.65	7.72	3.86	3.95	15.54
NT Plant&Pre-Rigid	6R-38	MFWD 150	34,200	150	8	0.111	2.26	1.71	1.42	0.51	5.93	2.73	3.11	11.78
NT Plant&Pre-Rigid	8R-22	MFWD 170	26,219	150	8	0.143	2.92	2.51	1.41	0.74	7.60	2.70	4.70	15.01
NT Plant&Pre-Rigid	8R-30	MFWD 170	43,600	150	8	0.105	2.15	1.85	1.72	0.54	6.28	3.30	3.45	13.04
NT Plant&Pre-Rigid	8R-38	MFWD 170	41,300	150	8	0.077	1.57	1.35	1.19	0.40	4.51	2.28	2.52	9.32
NT Plant&Pre-Rigid	10R-30	MFWD 190	49,000	150	8	0.084	1.72	1.65	1.55	0.47	5.40	2.97	2.99	11.37
NT Plant&Pre-Rigid	12R-20	MFWD 190	53,000	150	8	0.105	2.15	2.06	2.10	0.59	6.91	4.02	3.74	14.68
NT Plant&Pre-Rigid	12R-30	MFWD 190	69,300	150	8	0.070	1.43	1.37	1.83	0.39	5.04	3.50	2.49	11.04
Paratill & Bed	4R-30	MFWD 225	16,500	150	12	0.204	2.08	4.73	1.21	1.45	9.48	2.11	9.16	20.76
Paratill & Bed	4R-38	MFWD 225	15,200	150	12	0.160	1.63	3.72	0.88	1.14	7.39	1.53	7.21	16.14
Paratill & Bed	6R-30	MFWD 225	22,600	150	12	0.136	1.38	3.15	1.11	0.97	6.62	1.92	6.11	14.66
Paratill & Bed	6R-38	MFWD 225	20,300	150	12	0.107	1.09	2.49	0.78	0.76	5.14	1.36	4.82	11.33
Paratill & Bed	8R-30	MFWD 225	28,100	150	12	0.102	1.04	2.36	1.03	0.72	5.17	1.79	4.58	11.55
Paratill & Bed	8R382X1	MFWD 225	69,100	150	12	0.053	0.54	1.24	1.34	0.38	3.51	2.32	2.41	8.25
Paratill & Bed Fold.	8R-38	MFWD 225	54,400	150	12	0.080	0.82	1.87	1.58	0.57	4.85	2.75	3.62	11.23
Paratill & Bed Fold.	12R-38	MFWD 225	69,100	150	12	0.053	0.54	1.24	1.34	0.38	3.51	2.32	2.41	8.25
Paratill & Bed Rigid	8R-38	MFWD 225	24,900	150	12	0.080	0.82	1.87	0.72	0.57	3.99	1.25	3.62	8.87
Pipe Drag	30'	2WD 150	500	100	12	0.051	0.52	0.79	0.00	0.17	1.51	0.02	1.05	2.58
Pipe Spool 160ac	1/4m roll	2WD 130	3,640	15	12	0.003	0.08	0.04	0.00	0.00	0.14	0.07	0.05	0.27
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.17	0.05	0.00	0.01	0.23	0.00	0.06	0.30
Plant & Pre Folding	8R-38	MFWD 170	48,000	150	8	0.080	1.63	1.40	1.44	0.41	4.90	2.76	2.62	10.28
Plant & Pre Folding	8R38 2x1	MFWD 170	78,800	150	8	0.053	1.08	0.93	1.57	0.27	3.87	3.02	1.74	8.64
Plant & Pre Folding	10R-30	MFWD 190	52,920	150	8	0.081	1.65	1.58	1.61	0.45	5.31	3.08	2.87	11.27
Plant & Pre Folding	10R-38	MFWD 190	48,258	150	8	0.064	1.30	1.25	1.15	0.36	4.07	2.21	2.26	8.56
Plant & Pre Folding	12R-20	MFWD 190	67,600	150	8	0.101	2.06	1.98	2.57	0.57	7.19	4.92	3.59	15.71
Plant & Pre Folding	12R-30	MFWD 190	70,500	150	8	0.067	1.37	1.32	1.78	0.38	4.87	3.42	2.39	10.69
Plant & Pre Folding	12R-38	MFWD 190	78,800	150	8	0.053	1.08	1.04	1.57	0.30	4.01	3.02	1.89	8.92
Plant & Pre Folding	16R-30	MFWD 190	95,100	150	8	0.050	1.03	0.99	1.81	0.28	4.12	3.46	1.79	9.38
Plant & Pre Folding	23R-15	MFWD 190	126,000	150	8	0.070	1.43	1.37	3.33	0.39	6.54	6.37	2.49	15.41
Plant & Pre Folding	24R-20	MFWD 190	147,000	150	8	0.050	1.03	0.99	2.79	0.28	5.11	5.35	1.79	12.26
Plant & Pre Folding	24R-30	MFWD 190	182,000	150	8	0.033	0.68	0.66	2.30	0.19	3.85	4.41	1.19	9.46
Plant & Pre Rigid	4R-30	2WD 130	25,300	150	8	0.203	4.13	2.71	1.92	0.61	9.39	3.68	3.67	16.75
Plant & Pre Rigid	4R-38	2WD 130	27,900	150	8	0.159	3.25	2.13	1.67	0.48	7.54	3.20	2.89	13.64
Plant & Pre Rigid	6R-30	MFWD 150	35,500	150	8	0.135	2.75	2.09	1.80	0.63	7.27	3.44	3.79	14.52
Plant & Pre Rigid	6R-38	MFWD 150	31,500	150	8	0.106	2.17	1.65	1.26	0.49	5.58	2.41	2.99	10.99
Plant & Pre Rigid	8R-22	MFWD 170	23,550	150	8	0.138	2.81	2.41	1.22	0.71	7.16	2.33	4.51	14.01
Plant & Pre Rigid	8R-30	MFWD 170	40,000	150	8	0.101	2.06	1.77	1.52	0.52	5.89	2.91	3.31	12.12
Plant & Pre Rigid	8R-38	MFWD 170	37,700	150	8	0.080	1.63	1.40	1.13	0.41	4.59	2.17	2.62	9.38
Plant & Pre Rigid	10R-30	MFWD 190	44,500	150	8	0.081	1.65	1.58	1.35	0.45	5.05	2.59	2.87	10.52
Plant & Pre Rigid	12R-20	MFWD 190	47,600	150	8	0.101	2.06	1.98	1.81	0.57	6.43	3.46	3.59	13.50
Plant & Pre Rigid	12R-30	MFWD 190	63,900	150	8	0.067	1.37	1.32	1.62	0.38	4.70	3.10	2.39	10.20
Plant - Folding	8R-38	MFWD 170	42,600	150	8	0.074	1.51	1.30	1.19	0.38	4.39	2.27	2.43	9.11
Plant - Folding	8R-38 2x1	MFWD 170	71,100	150	8	0.049	1.01	0.86	1.32	0.25	3.45	2.53	1.62	7.61
Plant - Folding	10R-30	MFWD 190	47,426	150	8	0.075	1.53	1.47	1.34	0.42	4.77	2.56	2.67	10.01
Plant - Folding	10R-38	MFWD 190	43,011	150	8	0.059	1.21	1.16	0.95	0.33	3.66	1.83	2.10	7.61
Plant - Folding	12R-20	MFWD 190	62,200	150	8	0.094	1.91	1.84	2.19	0.53	6.49	4.20	3.33	14.03
Plant - Folding	12R-30	MFWD 190	62,800	150	8	0.062	1.27	1.22	1.48	0.35	4.34	2.83	2.22	9.40
Plant - Folding	12R-38	MFWD 190	71,100	150	8	0.049	1.01	0.97	1.32	0.27	3.58	2.53	1.75	7.87
Plant - Folding	16R-30	MFWD 190	87,400	150	8	0.047	0.95	0.92	1.54	0.26	3.69	2.95	1.66	8.31
Plant - Folding	23R-15	MFWD 190	118,000	150	8	0.065	1.33	1.28	2.89	0.36	5.87	5.54	2.31	13.74
Plant - Folding	24R-20	MFWD 190	140,000	150	8	0.047	0.95	0.92	2.47	0.26	4.62	4.73	1.66	11.02
Plant - Folding	24R-30	MFWD 190	165,000	150	8	0.031	0.63	0.61	1.94	0.17	3.37	3.71	1.11</	

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, (Continued) and direct and fixed cost per acre, Louisiana 2016.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost
			dollars	hours	years	hr/acre				\$/acre		
Rice Grain Cart	500 Bu	MFWD 190	23,700	200	12	0.057	0.58	1.11	0.36 0.32	2.38	0.63 2.02	5.04
Rice Grain Cart	700 Bu	MFWD 190	36,600	200	12	0.063	0.64	1.24	0.62 0.35	2.87	1.09 2.24	6.21
Roller	32'	MFWD 170	17,500	100	12	0.046	0.47	0.81	0.13 0.24	1.66	0.76 1.52	3.96
Rotary Cutter	7'	MFWD 130	4,100	185	10	0.168	1.71	2.25	0.55 0.61	5.13	0.39 3.67	9.20
Rotary Cutter	12'	2WD 150	12,000	185	10	0.098	0.99	1.51	0.95 0.33	3.80	0.67 1.99	6.47
Rotary Cutter	15'	MFWD 150	19,000	185	10	0.078	0.79	1.21	1.21 0.36	3.58	0.85 2.20	6.64
Row Cond & Inc	13'	2WD 130	13,100	100	10	0.137	2.10	1.84	0.45 0.41	4.81	1.90 2.49	9.22
Row Cond & Inc	21'	2WD 170	16,500	100	10	0.085	1.30	1.49	0.35 0.41	3.56	1.48 2.62	7.67
Row Cond & Inc	26'	MFWD 190	19,400	100	10	0.063	0.96	1.24	0.30 0.35	2.87	1.29 2.24	6.41
Row Cond & Inc	38'	MFWD 225	27,100	100	10	0.047	0.72	1.09	0.31 0.33	2.46	1.35 2.11	5.93
Row Cond & Inc	42'	MFWD 225	20,400	100	10	0.040	0.61	0.93	0.20 0.28	2.03	0.86 1.80	4.70
Row Cond (Harrow)	13'	2WD 130	7,300	100	10	0.114	1.16	1.53	0.20 0.34	3.26	0.88 2.08	6.22
Row Cond (Harrow)	21'	2WD 170	12,000	100	10	0.071	0.72	1.24	0.21 0.34	2.52	0.90 2.18	5.61
Row Cond (Harrow)	27'	MFWD 190	12,400	100	10	0.057	0.58	1.12	0.17 0.32	2.20	0.75 2.03	4.99
Row Cond (Harrow)	38'	MFWD 225	22,200	100	10	0.039	0.40	0.91	0.21 0.28	1.80	0.92 1.76	4.49
Row Cond (Harrow)	42'	MFWD 225	15,582	100	10	0.035	0.36	0.82	0.13 0.25	1.57	0.58 1.59	3.75
Row Cond (Plant)	13'	2WD 130	7,120	100	10	0.157	1.60	2.10	0.27 0.47	4.45	1.18 2.84	8.48
Row Cond (Plant)	21'	2WD 170	11,700	100	10	0.097	0.99	1.70	0.28 0.47	3.45	1.20 2.98	7.64
Row Cond (Plant)	27'	MFWD 190	12,400	100	10	0.078	0.80	1.53	0.24 0.44	3.02	1.02 2.78	6.83
Row Cond (Plant)	38'	MFWD 225	16,587	100	10	0.053	0.54	1.24	0.22 0.38	2.39	0.94 2.41	5.75
Row Cond (Plant)	42'	MFWD 225	15,582	100	10	0.048	0.49	1.12	0.18 0.34	2.15	0.80 2.18	5.14
RT Cult (Early)	8R-30	2WD 170	20,774	200	12	0.103	1.04	1.80	1.02 0.50	4.38	1.04 3.16	8.59
RT Cult (Early)	12R-30	2WD 190	29,998	200	12	0.068	0.69	1.34	0.98 0.30	3.34	1.00 1.93	6.27
RT Cult (Late)	8R-30	2WD 170	20,774	200	12	0.128	1.31	2.25	1.28 0.62	5.47	1.30 3.95	10.73
RT Cult (Late)	12R-30	2WD 190	29,998	200	12	0.085	0.87	1.68	1.23 0.38	4.17	1.25 2.41	7.84
RT Cult + PD (Early)	8R-30	2WD 150	26,264	200	12	0.110	1.67	1.69	1.38 0.37	5.13	1.40 2.23	8.77
RT Cult + PD (Early)	12R-30	MFWD 225	35,493	200	12	0.073	1.11	1.69	1.24 0.52	4.58	1.26 3.29	9.14
RT Cult + PD (Late)	8R-30	2WD 170	26,264	200	12	0.137	2.09	2.40	1.73 0.67	6.90	1.75 4.22	12.88
RT Cult + PD (Late)	12R-30	2WD 190	35,493	200	12	0.091	1.39	1.79	1.55 0.40	5.16	1.57 2.57	9.32
Spin Spreader	5 ton	MFWD 190	12,200	100	8	0.042	0.85	0.82	0.28 0.23	2.20	0.57 1.49	4.27
Spin Spreader	5 ton	MFWD 190	12,200	100	8	0.042	0.85	0.82	0.28 0.23	2.20	0.57 1.49	4.27
Spray (Band)	27'	MFWD 170	5,390	200	8	0.062	0.95	1.09	0.15 0.32	2.53	0.19 2.04	4.77
Spray (Band)	40'	MFWD 170	7,700	200	8	0.042	0.64	0.74	0.15 0.21	1.75	0.18 1.38	3.32
Spray (Band)	50'	MFWD 170	6,800	200	8	0.033	0.51	0.59	0.10 0.17	1.39	0.12 1.10	2.62
Spray (Band)	53'	MFWD 170	9,300	200	8	0.031	0.48	0.55	0.13 0.16	1.35	0.16 1.04	2.56
Spray (Band)	60'	MFWD 170	18,400	200	8	0.028	0.43	0.49	0.24 0.14	1.31	0.29 0.92	2.52
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,380	200	8	0.130	1.98	2.01	0.32 0.60	4.93	0.39 3.64	8.97
Spray (Bcast/HB)	20' Rigid	2WD 50	6,340	200	8	0.084	1.29	0.43	0.25 0.04	2.02	0.30 0.29	2.62
Spray (Bcast/HB)	27' Fold	MFWD 170	13,200	200	8	0.062	0.95	1.09	0.38 0.32	2.76	0.46 2.04	5.28
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,680	200	8	0.062	0.95	1.09	0.22 0.32	2.60	0.27 2.04	4.92
Spray (Bcast/HB)	30' Fold	MFWD 170	20,300	200	8	0.056	0.86	0.98	0.53 0.29	2.67	0.64 1.84	5.16
Spray (Bcast/HB)	40' Fold	MFWD 170	21,000	200	8	0.042	0.64	0.74	0.41 0.21	2.02	0.50 1.38	3.90
Spray (Bcast/HB/HD)	27'	MFWD 170	22,400	200	8	0.062	0.95	1.09	0.65 0.32	3.03	0.79 2.04	5.87
Spray (Bcast/HB/HD)	40'	MFWD 170	32,200	200	8	0.042	0.64	0.74	0.63 0.21	2.24	0.76 1.38	4.39
Spray (Broadcast)	27'	MFWD 170	5,390	200	8	0.062	0.95	1.09	0.15 0.32	2.53	0.19 2.04	4.77
Spray (Broadcast)	40'	MFWD 170	7,700	200	8	0.042	0.64	0.74	0.15 0.21	1.75	0.18 1.38	3.32
Spray (Broadcast)	50'	MFWD 170	6,800	200	8	0.033	0.51	0.59	0.10 0.17	1.39	0.12 1.10	2.62
Spray (Broadcast)	53'	MFWD 170	9,300	200	8	0.031	0.48	0.55	0.13 0.16	1.35	0.16 1.04	2.56
Spray (Broadcast)	60'	MFWD 170	18,400	200	8	0.028	0.43	0.49	0.24 0.14	1.31	0.29 0.92	2.52
Spray (Direct/Hood)	8R-30	MFWD 170	18,000	200	8	0.084	1.29	1.48	0.71 0.43	3.92	0.85 2.76	7.54
Spray (Direct/Hood)	8R-38	MFWD 170	24,900	200	8	0.066	1.02	1.17	0.78 0.34	3.31	0.93 2.18	6.44
Spray (Direct/Hood)	12R-30	MFWD 170	26,100	200	8	0.056	0.86	0.98	0.69 0.29	2.83	0.83 1.84	5.50
Spray (Direct/Hood)	12R-38	MFWD 170	26,600	200	8	0.044	0.67	0.77	0.55 0.23	2.24	0.66 1.45	4.36
Spray (Direct/Layby)	8R-30	MFWD 170	9,000	200	8	0.084	1.29	1.48	0.35 0.43	3.56	0.42 2.76	6.76
Spray (Direct/Layby)	8R-38	MFWD 170	9,000	200	8	0.066	1.02	1.17	0.28 0.34	2.82	0.33 2.18	5.34
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	12,400	200	8	0.044	0.67	0.77	0.25 0.23	1.94	0.31 1.45	3.71
Spray (Direct/Layby)	10R-30	MFWD 170	12,200	200	8	0.067	1.03	1.18	0.38 0.35	2.95	0.46 2.21	5.63
Spray (Direct/Layby)	12R-30	MFWD 170	12,500	200	8	0.056	0.86	0.98	0.33 0.29	2.47	0.39 1.84	4.71
Spray (Direct/Layby)	12R-38	MFWD 170	12,400	200	8	0.044	0.67	0.77	0.25 0.23	1.94	0.31 1.45	3.71
Spray (Direct/Layby)	16R-20	MFWD 170	10,000	200	8	0.063	0.96	1.10	0.29 0.32	2.70	0.35 2.07	5.13
Spray (Spot)	27'	MFWD 170	5,390	200	8	0.062	0.95	1.09	0.15 0.32	2.53	0.19 2.04	4.77
Spray (Spot)	40'	MFWD 170	7,700	200	8	0.042	0.64	0.74	0.15 0.21	1.75	0.18 1.38	3.32
Spray (Spot)	50'	MFWD 170	7,420	200	8	0.033	0.51	0.59	0.11 0.17	1.40	0.14 1.10	2.65
Spray (Spot)	53'	MFWD 170	9,300	200	8	0.031	0.48	0.55	0.13 0.16	1.35	0.16 1.04	2.56
Spray (Spot)	60'	MFWD 170	18,400	200	8	0.028	0.43	0.49	0.24 0.14	1.31	0.29 0.92	2.52
Stalk Shredder	14'	MFWD 150	13,100	200	10	0.117	1.19	1.81	1.35 0.54	4.91	0.81 3.30	9.03
Stalk Shredder	20'	MFWD 150	30,200	200	10	0.082	0.83	1.27	2.18 0.38	4.67	1.31 2.31	8.30
Stalk Shredder-Flail	12'	MFWD 150	15,100	200	10	0.137	1.39	2.12	1.81 0.64	5.97	1.09 3.85	10.92
Stalk Shredder-Flail	20'	MFWD 150	27,300	200	10	0.082	0.83	1.27	1.97 0.38	4.46	1.18 2.31	7.97
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.08	3.99	0.24 1.14	7.46	0.59 7.23	15.30
Subsoiler	4 shank	MFWD 225	8,330	100	15	0.153	1.56	3.55	0.42 1.09	6.64	1.05 6.89	14.59
Subsoiler	5 shank	MFWD 225	13,800	100	15	0.122	1.24	2.83	0.56 0.87	5.51	1.39 5.48	12.39
Subsoiler low-till	4 shank	MFWD 225	12,000	100	15	0.153	1.56	3.55	0.61 1.09	6.83	1.51 6.89	15.24
Subsoiler low-till	6 shank	MFWD 225	16,600	100	15	0.102	1.04	2.36	0.56 0.72	4.69	1.39 4.58	10.68
Subsoiler low-till	8 shank	MFWD 225	22,200	100	15	0.076	0.77	1.77	0.56 0.54	3.66	1.40 3.43	8.49
TerraTill Bed w/roll	4R-38	MFWD 225	14,300	150	12	0.160	1.63	3.72	0.83 1.14	7.34	1.44 7.21	16.00

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2016.
(Continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.		Total Direct	--Fixed-- Imp. P.U.		Total Cost
-----\$/acre-----														
TerraTill Bed w/roll	6R-38	MFWD 225	19,400	150	12	0.107	1.09	2.49	0.75	0.76	5.10	1.30	4.82	11.23
TerraTill Bed w/roll	4R-30	MFWD 225	14,300	150	12	0.204	2.08	4.73	1.05	1.45	9.32	1.83	9.16	20.32
TerraTill Bed w/roll	6R-30	MFWD 225	15,310	150	12	0.136	1.38	3.15	0.75	0.97	6.26	1.30	6.11	13.68
Boll Buggy-1st Pick	2R38"157hp	MFWD 190	26,200	200	10	0.519	5.29	10.16	3.40	2.92	21.78	6.92	18.40	47.10
Boll Buggy-1st pick	4R2x1260hp	MFWD 190	30,500	200	10	0.172	1.75	3.37	1.31	0.96	7.40	2.67	6.10	16.18
Boll Buggy-1st pick	4R30"255hp	MFWD 190	26,200	200	10	0.327	3.33	6.40	2.14	1.84	13.72	4.36	11.59	29.67
Boll Buggy-1st pick	4R30"325hp	MFWD 190	30,600	200	10	0.327	3.33	6.40	2.50	1.84	14.08	5.09	11.59	30.77
Boll Buggy-1st pick	4R38"255hp	MFWD 190	30,600	200	10	0.257	2.62	5.04	1.97	1.45	11.08	4.01	9.13	24.22
Boll Buggy-1st pick	4R38"325hp	MFWD 190	30,500	200	10	0.257	2.62	5.04	1.96	1.45	11.08	3.99	9.13	24.20
Boll Buggy-1st pick	5R30"255hp	MFWD 190	30,600	200	10	0.261	2.66	5.12	2.00	1.47	11.26	4.07	9.27	24.61
Boll Buggy-1st pick	5R38"255hp	MFWD 190	30,600	200	10	0.207	2.10	4.05	1.58	1.16	8.91	3.22	7.33	19.47
Boll Buggy-1st pick	6R30"325hp	MFWD 190	30,500	200	10	0.218	2.22	4.26	1.66	1.22	9.38	3.38	7.73	20.49
Boll Buggy-1st pick	6R38"325hp	MFWD 190	30,500	200	10	0.172	1.75	3.37	1.31	0.96	7.40	2.67	6.10	16.18
Boll Buggy-2nd pick	2R38"157hp	MFWD 190	30,600	200	10	0.440	4.48	8.60	3.36	2.47	18.93	6.84	15.59	41.37
Boll Buggy-2nd pick	4R2x1260hp	MFWD 190	30,500	200	10	0.145	1.48	2.85	1.11	0.82	6.27	2.26	5.16	13.70
Boll Buggy-2nd pick	4R30"255hp	MFWD 190	30,600	200	10	0.277	2.82	5.42	2.12	1.55	11.92	4.31	9.82	26.06
Boll Buggy-2nd pick	4R30"325hp	MFWD 190	30,600	200	10	0.277	2.82	5.42	2.12	1.55	11.92	4.31	9.82	26.06
Boll Buggy-2nd pick	4R38 255hp	MFWD 190	30,500	200	10	0.218	2.22	4.27	1.66	1.22	9.38	3.38	7.73	20.50
Boll Buggy-2nd pick	4R38 325hp	MFWD 190	30,500	200	10	0.218	2.22	4.27	1.66	1.22	9.38	3.38	7.73	20.50
Boll Buggy-2nd pick	5R30"255hp	MFWD 190	30,600	200	10	0.221	2.25	4.33	1.69	1.24	9.54	3.45	7.85	20.85
Boll Buggy-2nd pick	5R38"255hp	MFWD 190	30,600	200	10	0.175	1.78	3.43	1.34	0.98	7.54	2.73	6.21	16.49
Boll Buggy-2nd pick	6R30"325hp	MFWD 190	30,500	200	10	0.184	1.88	3.61	1.40	1.03	7.94	2.86	6.54	17.36
Boll Buggy-2nd pick	6R38"325hp	MFWD 190	30,500	200	10	0.145	1.48	2.85	1.11	0.82	6.27	2.26	5.16	13.70
Boll Buggy-Stripper	13' Bcast	MFWD 150	30,600	200	10	0.251	2.56	3.88	1.92	1.17	9.55	3.91	7.05	20.52
Boll Buggy-Stripper	16' Bcast	MFWD 150	30,600	200	10	0.204	2.08	3.15	1.56	0.95	7.76	3.18	5.73	16.67
Boll Buggy-Stripper	19' Bcast	MFWD 150	30,600	200	10	0.172	1.75	2.66	1.31	0.80	6.53	2.68	4.82	14.04
Boll Buggy-Stripper	4R30"2X1Br	MFWD 150	30,600	200	10	0.218	2.22	3.37	1.66	1.01	8.27	3.39	6.11	17.78
Boll Buggy-Stripper	4R30"Brush	MFWD 150	30,600	200	10	0.327	3.33	5.05	2.50	1.52	12.41	5.09	9.17	26.68
Boll Buggy-Stripper	4R38"2X1Br	MFWD 150	30,600	200	10	0.172	1.75	2.66	1.31	0.80	6.53	2.68	4.82	14.04
Boll Buggy-Stripper	4R38"Brush	MFWD 150	30,600	200	10	0.257	2.62	3.98	1.97	1.20	9.77	4.01	7.22	21.01
Boll Buggy-Stripper	5R30"Brush	MFWD 150	30,600	200	10	0.261	2.66	4.04	2.00	1.21	9.93	4.07	7.33	21.34
Boll Buggy-Stripper	5R38"Brush	MFWD 150	30,600	200	10	0.207	2.10	3.19	1.58	0.96	7.85	3.22	5.80	16.88
Boll Buggy-Stripper	6R30"Brush	MFWD 150	30,600	200	10	0.218	2.22	3.37	1.66	1.01	8.27	3.39	6.11	17.78
Module Builder-1st	2R-38(157)	MFWD 190	31,300	200	10	0.519	10.58	10.16	4.06	2.92	27.73	8.26	18.40	54.40
Module Builder-1st	4R-30(255)	MFWD 190	34,700	200	10	0.327	6.66	6.40	2.84	1.84	17.75	5.77	11.59	35.12
Module Builder-1st	4R-30(325)	MFWD 190	34,700	200	10	0.327	6.66	6.40	2.84	1.84	17.75	5.77	11.59	35.12
Module Builder-1st	4R-38(255)	MFWD 190	34,700	200	10	0.257	5.24	5.04	2.23	1.45	13.97	4.54	9.13	27.65
Module Builder-1st	4R-38(325)	MFWD 190	34,700	200	10	0.257	5.24	5.04	2.23	1.45	13.97	4.54	9.13	27.65
Module Builder-1st	4R2x1260hp	MFWD 190	34,700	200	10	0.172	3.50	3.37	1.49	0.96	9.34	3.03	6.10	18.48
Module Builder-1st	5R-30(255)	MFWD 190	34,700	200	10	0.261	5.33	5.12	2.27	1.47	14.20	4.62	9.27	28.09
Module Builder-1st	5R-38(255)	MFWD 190	34,700	200	10	0.207	4.21	4.05	1.79	1.16	11.23	3.65	7.33	22.22
Module Builder-1st	6R-30(325)	MFWD 190	34,700	200	10	0.218	4.44	4.26	1.89	1.22	11.83	3.85	7.73	23.41
Module Builder-1st	6R-38(325)	MFWD 190	34,700	200	10	0.172	3.50	3.37	1.49	0.96	9.34	3.03	6.10	18.48
Module Builder-2nd	2R-38(157)	MFWD 190	34,700	200	10	0.440	8.96	8.60	3.81	2.47	23.86	7.76	15.59	47.22
Module Builder-2nd	4R-30(255)	MFWD 190	34,700	200	10	0.277	5.64	5.42	2.40	1.55	15.03	4.89	9.82	29.75
Module Builder-2nd	4R-30(325)	MFWD 190	34,700	200	10	0.277	5.64	5.42	2.40	1.55	15.03	4.89	9.82	29.75
Module Builder-2nd	4R-38(255)	MFWD 190	34,700	200	10	0.218	4.44	4.27	1.89	1.22	11.83	3.85	7.73	23.42
Module Builder-2nd	4R-38(325)	MFWD 190	34,700	200	10	0.218	4.44	4.27	1.89	1.22	11.83	3.85	7.73	23.42
Module Builder-2nd	4R2x1 255	MFWD 190	34,700	200	10	0.145	2.97	2.85	1.26	0.82	7.91	2.57	5.16	15.65
Module Builder-2nd	5R-30(255)	MFWD 190	34,700	200	10	0.221	4.51	4.33	1.92	1.24	12.02	3.91	7.85	23.80
Module Builder-2nd	5R-38(255)	MFWD 190	34,700	200	10	0.175	3.57	3.43	1.52	0.98	9.51	3.09	6.21	18.82
Module Builder-2nd	6R-30(325)	MFWD 190	34,700	200	10	0.184	3.76	3.61	1.60	1.03	10.02	3.26	6.54	19.83
Module Builder-2nd	6R-38(325)	MFWD 190	34,700	200	10	0.145	2.97	2.85	1.26	0.82	7.91	2.57	5.16	15.65
Module Builder-Strip	13' Bcast	MFWD 150	34,700	200	10	0.251	5.12	3.88	2.18	1.17	12.37	4.44	7.05	23.87
Module Builder-Strip	16' Bcast	MFWD 150	34,700	200	10	0.204	4.16	3.15	1.77	0.95	10.05	3.60	5.73	19.39
Module Builder-Strip	19' Brush	MFWD 150	34,700	200	10	0.172	3.50	2.66	1.49	0.80	8.46	3.03	4.82	16.33
Module Builder-Strip	4R-30	MFWD 150	34,700	200	10	0.327	6.66	5.05	2.84	1.52	16.08	5.77	9.17	31.03
Module Builder-Strip	4R-30 2X1	MFWD 150	34,700	200	10	0.218	4.44	3.37	1.89	1.01	10.72	3.85	6.11	20.68
Module Builder-Strip	4R-38	MFWD 150	34,700	200	10	0.257	5.24	3.98	2.23	1.20	12.66	4.54	7.22	24.43
Module Builder-Strip	4R-38 2X1	MFWD 150	34,700	200	10	0.172	3.50	2.66	1.49	0.80	8.46	3.03	4.82	16.33
Module Builder-Strip	5R-30	MFWD 150	34,700	200	10	0.261	5.33	4.04	2.27	1.21	12.86	4.62	7.33	24.82
Module Builder-Strip	5R-38	MFWD 150	34,700	200	10	0.207	4.21	3.19	1.79	0.96	10.18	3.65	5.80	19.64
Module Builder-Strip	6R-30	MFWD 150	34,700	200	10	0.218	4.44	3.37	1.89	1.01	10.72	3.85	6.11	20.68