

Projected Costs and Returns Crop Enterprise Budgets for Wheat Production in Louisiana, 2017

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by

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Introduction

This publication presents estimates of projected costs and returns for wheat production in Louisiana for the 2017 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 2017 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 2017 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 \$10.69 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 4.75% per year. Operating capital was assumed to be borrowed in a manner consistent with timely acquisition of inputs. Fuel price for diesel was \$1.85 per gallon. 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
Wheat, 8-row equipment, drill planted, non-irrigated,
alluvial soil, Northeast Louisiana, 2017.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
App by Air (3 gal)	appl	5.00	2.0000	10.00	_____
FERTILIZERS					
LA Phosphate	lb	0.49	40.0000	19.60	_____
LA Potash	lb	0.26	40.0000	10.40	_____
LA Nitrogen	lb	0.32	90.0000	28.80	_____
HERBICIDES					
Harmony Extra	oz	12.02	0.4500	5.41	_____
INSECTICIDES					
Surfactant	pt	3.69	0.2000	0.74	_____
Mustang Max	oz	1.48	4.0000	5.92	_____
Karate Z	oz	3.40	2.1300	7.24	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.25	90.0000	22.50	_____
CUSTOM FERT/LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
App Fert by Air(Min)	appl	7.00	1.0000	7.00	_____
CUSTOM HARVEST/HAUL					
Haul Wheat	bu	0.26	60.0000	15.60	_____
OPERATOR LABOR					
Harvesters	hour	13.40	0.0851	1.14	_____
LA Hired Labor					
Implements	hour	10.69	0.1097	1.17	_____
Tractors	hour	10.69	0.2785	2.97	_____
DIESEL FUEL					
Tractors	gal	1.85	2.9104	5.38	_____
Harvesters	gal	1.85	1.2047	2.23	_____
REPAIR & MAINTENANCE					
Implements	Acre	3.94	1.0000	3.94	_____
Tractors	Acre	1.75	1.0000	1.75	_____
Harvesters	Acre	2.86	1.0000	2.86	_____
INTEREST ON OP. CAP.	Acre	3.29	1.0000	3.29	_____

TOTAL DIRECT EXPENSES				179.62	_____
FIXED EXPENSES					
Implements	Acre	8.07	1.0000	8.07	_____
Tractors	Acre	11.00	1.0000	11.00	_____
Harvesters	Acre	11.30	1.0000	11.30	_____

TOTAL FIXED EXPENSES				30.37	_____

TOTAL SPECIFIED EXPENSES				209.99	_____

Table 1.B Estimated resource use and costs for field operations, per Acre
Wheat, 8-row equipment, drill planted, non-irrigated,
alluvial soil, Northeast Louisiana, 2017.

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-----			
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct	1.00	1.54	0.28	0.56	0.08	0.90				4.28
LA Phosphate	lb											40.0000	0.49	19.60	19.60
LA Potash	lb											40.0000	0.26	10.40	10.40
Lime (Spread)	ton			0.33	Oct							0.3300	46.00	15.18	15.18
Disk Harrow	28'	MFWD 225	0.070	1.00	Oct	1.98	3.01	0.98	2.08	0.07	0.75				8.80
Row Cond (Plant)	27'	MFWD 190	0.078	1.00	Oct	1.88	2.88	0.24	1.03	0.07	0.84				6.87
Ditcher		2WD 130	0.020	1.00	Oct	0.36	0.67	0.05	0.06	0.02	0.21				1.35
Grain Drill & Pre	30'	MFWD 225	0.067	1.00	Dec	1.91	2.90	1.79	3.43	0.13	1.44				11.47
Wheat Seed Private	lb											90.0000	0.25	22.50	22.50
App by Air (5 gal)	appl			1.00	Dec							1.0000	6.50	6.50	6.50
Harmony Extra	oz											0.4500	12.02	5.41	5.41
Surfactant	pt											0.2000	3.69	0.74	0.74
App Fert by Air(Min)	appl			1.00	Feb							1.0000	7.00	7.00	7.00
LA Nitrogen	lb											90.0000	0.32	28.80	28.80
App by Air (3 gal)	appl			1.00	Feb							1.0000	5.00	5.00	5.00
Mustang Max	oz											4.0000	1.48	5.92	5.92
App by Air (3 gal)	appl			1.00	Apr							1.0000	5.00	5.00	5.00
Karate Z	oz											2.1300	3.40	7.24	7.24
Header Wheat/Sorghum	30'	Rigid 275hp	0.085	1.00	May	5.09	11.30	0.60	0.91	0.08	1.14				19.04
Haul Wheat	bu			1.00	May							60.0000	0.26	15.60	15.60
TOTALS						12.22	22.30	3.94	8.07	0.47	5.28				206.70
INTEREST ON OPERATING CAPITAL															3.29
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															209.99

Table 1.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Wheat, 8-row equipment, drill planted, non-irrigated,
alluvial soil, Northeast Louisiana, 2017.

			-----BREAKEVEN PRICE-----										
LA	Wheat		2.08	2.21	2.36	2.53	2.74	2.99	3.29	3.67	4.16	4.81	5.72
PERCENT	YIELD	UNIT	-----dollars-----										
50	30.00	bu	-109	-105	-100	-95	-89	-81	-72	-61	-46	-27	0
			-139	-135	-131	-125	-119	-112	-103	-91	-77	-57	-30
60	36.00	bu	-98	-93	-88	-81	-74	-65	-54	-40	-23	0	32
			-128	-123	-118	-112	-104	-95	-84	-71	-53	-30	2
70	42.00	bu	-87	-81	-75	-68	-59	-49	-36	-20	0	27	65
			-117	-112	-105	-98	-89	-79	-66	-50	-30	-3	35
80	48.00	bu	-76	-70	-62	-54	-44	-32	-18	0	23	54	98
			-106	-100	-93	-84	-74	-63	-48	-30	-7	24	67
90	54.00	bu	-65	-58	-50	-40	-29	-16	0	20	46	81	130
			-95	-88	-80	-71	-60	-46	-30	-9	16	51	100
100	60.00	bu	-54	-46	-37	-27	-14	0	18	40	70	109	163
			-84	-77	-68	-57	-45	-30	-12	10	39	78	133
110	66.00	bu	-43	-35	-25	-13	0	16	36	61	93	136	196
			-73	-65	-55	-44	-30	-14	5	30	63	105	165
120	72.00	bu	-32	-23	-12	0	14	32	54	81	116	163	229
			-63	-53	-42	-30	-15	2	24	51	86	133	198
130	78.00	bu	-21	-11	0	13	29	49	72	102	140	190	261
			-52	-42	-30	-16	-0	18	42	71	109	160	231
140	84.00	bu	-10	0	12	27	44	65	90	122	163	218	294
			-41	-30	-17	-3	14	35	60	92	133	187	264
150	90.00	bu	0	11	25	40	59	81	109	143	186	245	327
			-30	-18	-5	10	29	51	78	112	156	215	296

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
Wheat, 8-row equipment, drill planted, non-irrigated,
alluvial soil, Northeast Louisiana, 2017.

			-----BREAKEVEN PRICE-----										
LA	Wheat		2.42	2.57	2.75	2.96	3.20	3.49	3.85	4.30	4.88	5.65	6.73
PERCENT	YIELD	UNIT	-----dollars-----										
50	30.00	bu	-98	-94	-88	-82	-75	-66	-55	-42	-25	-1	30
			-129	-124	-119	-113	-105	-96	-86	-72	-55	-32	0
60	36.00	bu	-86	-80	-74	-66	-57	-47	-34	-18	2	30	69
			-116	-110	-104	-96	-88	-77	-64	-48	-27	0	38
70	42.00	bu	-73	-66	-59	-50	-40	-27	-12	6	30	62	107
			-103	-96	-89	-80	-70	-58	-43	-24	0	32	77
80	48.00	bu	-60	-52	-44	-34	-22	-8	8	30	58	95	146
			-90	-83	-74	-64	-52	-38	-21	0	27	64	116
90	54.00	bu	-47	-38	-29	-18	-4	10	30	54	85	127	185
			-77	-69	-59	-48	-35	-19	0	24	55	96	155
100	60.00	bu	-34	-25	-14	-1	12	30	51	78	113	159	224
			-64	-55	-44	-32	-17	0	21	48	83	129	193
110	66.00	bu	-21	-11	0	14	30	49	73	103	141	192	263
			-51	-41	-29	-16	0	19	43	72	110	161	232
120	72.00	bu	-8	2	15	30	48	69	95	127	168	224	301
			-38	-27	-14	0	17	38	64	96	138	193	271
130	78.00	bu	4	16	30	46	65	88	116	151	196	256	340
			-25	-13	0	16	35	58	86	121	166	226	310
140	84.00	bu	17	30	45	62	83	107	138	175	224	288	379
			-12	0	14	32	52	77	107	145	193	258	349
150	90.00	bu	30	44	60	78	100	127	159	200	252	321	418
			0	13	29	48	70	96	129	169	221	290	387

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 and returns per Acre,
Wheat, 8-row equipment, drill planted, non-irrigated,
Clay soils, Southwest Louisiana, 2017.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
LARice GPS Charge-SW	acre	0.35	2.0000	0.70	_____
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
FERTILIZERS					
LA Nitrogen	lb	0.32	70.5000	22.56	_____
LA Phosphate	lb	0.49	45.0000	22.05	_____
LA Potash	lb	0.26	45.0000	11.70	_____
INSECTICIDES					
Methyl Parathion	pt	5.79	1.5000	8.69	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.25	75.0000	18.75	_____
CUSTOM FERT/LIME					
Custom Spread(Truc	appl	4.50	1.0000	4.50	_____
App Fert by Air	cwt	7.00	0.9000	6.30	_____
CUSTOM HARVEST/HAUL					
Haul Wheat	bu	0.26	60.0000	15.60	_____
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	10.69	0.2837	3.03	_____
DIESEL FUEL					
Tractors	gal	1.85	3.4985	6.48	_____
Self-Propelled	gal	1.85	1.4915	2.76	_____
REPAIR & MAINTENANCE					
Implements	acre	3.72	1.0000	3.72	_____
Tractors	acre	2.00	1.0000	2.00	_____
Self-Propelled	acre	8.40	1.0000	8.40	_____
INTEREST ON OP. CAP.	acre	2.84	1.0000	2.84	_____
TOTAL DIRECT EXPENSES				150.97	_____
FIXED EXPENSES					
Implements	acre	8.51	1.0000	8.51	_____
Tractors	acre	12.45	1.0000	12.45	_____
Self-Propelled	acre	12.77	1.0000	12.77	_____
TOTAL FIXED EXPENSES				33.73	_____
TOTAL SPECIFIED EXPENSES				184.70	_____

Table 2.B Estimated resource use and costs for field operations, per acre,
wheat, 8-row equipment, drill planted, non-irrigated,
Clay soils, Southwest Louisiana, 2017.

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-----															
Disk Harrow	32'	4WD 300	0.061	2.00	Nov	4.59	6.79	1.84	3.88	0.12	1.31				18.41
Custom Spread(Truc	appl			1.00	Nov							1.0000	4.50	4.50	4.50
LA Nitrogen	lb											30.0000	0.32	9.60	9.60
LA Phosphate	lb											45.0000	0.49	22.05	22.05
LA Potash	lb											45.0000	0.26	11.70	11.70
Field Cultivate	32'	4WD 300	0.046	1.00	Nov	1.74	2.58	0.46	1.95	0.04	0.50				7.23
Grain Drill	20'	MFWD 150	0.094	1.00	Nov	1.77	2.54	1.37	2.62	0.18	1.86				10.16
Wheat Seed Private	lb											75.0000	0.25	18.75	18.75
Ditcher		MFWD 150	0.020	1.00	Nov	0.38	0.54	0.05	0.06	0.02	0.21				1.24
App Fert by Air	cwt			1.00	Feb							0.9000	7.00	6.30	6.30
LA Nitrogen	lb											40.5000	0.32	12.96	12.96
LA Rice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50	6.50
Methyl Parathion	pt											1.5000	5.79	8.69	8.69
LA Rice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
LA Rice Combine Med	20 ft		0.210	1.00	May	11.16	12.77			0.23	3.54				27.47
Haul wheat	bu			1.00	May							60.0000	0.26	15.60	15.60
TOTALS						19.64	25.22	3.72	8.51	0.60	7.42			117.35	181.86
INTEREST ON OPERATING CAPITAL															2.84
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															184.70

Table 2.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
wheat, 8-row equipment, drill planted, non-irrigated,
Clay soils, Southwest Louisiana, 2017.

			-----BREAKEVEN PRICE-----										
LA	Wheat		1.76	1.87	1.99	2.14	2.31	2.51	2.76	3.07	3.48	4.01	4.77
PERCENT	YIELD	UNIT	-----dollars-----										
50	30.00	bu	-90	-86	-83	-78	-73	-67	-60	-50	-38	-22	0
			-123	-120	-116	-112	-107	-101	-93	-84	-72	-56	-33
60	36.00	bu	-81	-77	-72	-67	-61	-54	-45	-33	-19	0	27
			-114	-111	-106	-101	-95	-87	-78	-67	-53	-33	-6
70	42.00	bu	-72	-67	-62	-56	-49	-40	-30	-16	0	22	54
			-105	-101	-96	-90	-82	-74	-63	-50	-33	-11	20
80	48.00	bu	-63	-57	-52	-45	-36	-27	-15	0	19	45	81
			-96	-91	-85	-78	-70	-60	-48	-33	-14	11	47
90	54.00	bu	-54	-48	-41	-33	-24	-13	0	16	38	67	108
			-87	-82	-75	-67	-58	-47	-33	-16	4	33	74
100	60.00	bu	-45	-38	-31	-22	-12	0	15	33	57	90	135
			-78	-72	-64	-56	-46	-33	-18	0	24	56	101
110	66.00	bu	-36	-28	-20	-11	0	13	30	50	77	112	162
			-69	-62	-54	-45	-33	-20	-3	17	43	79	128
120	72.00	bu	-27	-19	-10	0	12	27	45	67	96	135	189
			-60	-53	-44	-33	-21	-6	11	33	62	101	155
130	78.00	bu	-18	-9	0	11	24	40	60	84	115	157	216
			-51	-43	-33	-22	-9	6	26	50	82	124	182
140	84.00	bu	-9	0	10	22	36	54	75	101	135	180	243
			-42	-33	-23	-11	3	20	41	67	101	146	209
150	90.00	bu	0	9	20	33	49	67	90	118	154	202	270
			-33	-24	-12	0	15	33	56	84	120	169	236

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
wheat, 8-row equipment, drill planted, non-irrigated,
Clay soils, Southwest Louisiana, 2017.

			-----BREAKEVEN PRICE-----										
LA	Wheat		2.13	2.27	2.42	2.60	2.82	3.07	3.39	3.78	4.28	4.95	5.89
PERCENT	YIELD	UNIT	-----dollars-----										
50	30.00	bu	-78	-74	-70	-64	-58	-50	-41	-29	-14	5	33
			-112	-108	-104	-98	-92	-84	-75	-63	-48	-28	0
60	36.00	bu	-67	-62	-57	-50	-43	-33	-22	-8	9	33	67
			-101	-96	-91	-84	-76	-67	-56	-42	-24	0	33
70	42.00	bu	-56	-50	-44	-36	-27	-16	-3	12	33	61	101
			-90	-84	-78	-70	-61	-50	-37	-21	0	28	67
80	48.00	bu	-45	-38	-31	-22	-12	-0	14	33	57	90	135
			-78	-72	-65	-56	-46	-33	-18	0	24	56	101
90	54.00	bu	-33	-26	-18	-8	2	16	33	54	82	118	168
			-67	-60	-52	-42	-30	-16	0	21	48	84	135
100	60.00	bu	-22	-14	-5	5	18	33	52	75	106	146	202
			-56	-48	-39	-28	-15	0	18	42	72	112	169
110	66.00	bu	-11	-2	7	19	33	50	71	97	130	174	236
			-45	-36	-26	-14	0	16	37	63	96	140	202
120	72.00	bu	-0	9	20	33	49	67	90	118	154	202	270
			-33	-24	-13	0	15	33	56	84	120	169	236
130	78.00	bu	11	21	33	47	64	84	108	139	178	230	304
			-22	-12	0	14	30	50	75	105	144	197	270
140	84.00	bu	22	33	46	61	79	101	127	160	202	259	338
			-11	0	13	28	46	67	93	126	169	225	304
150	90.00	bu	33	45	59	75	95	118	146	181	226	287	371
			0	12	26	42	61	84	112	147	193	253	338

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. Operating Inputs: Estimated Prices for 2017.

ITEM NAME	UNIT	PRICE
CUSTOM FERT/LIME		
App Fert by Air(Min)	appl	7.00
Custom Apply Fert	acre	7.00
Custom Spread(Truc	appl	4.50
Lime (Spread)	ton	46.00
CUSTOM HARVEST/HAUL		
Custom Combine Rice	acre	0.00
Haul Corn	bu	0.23
Haul Cotton	lb	0.02
Haul Rice	bu	0.35
Haul Rice (cwt)	cwt	0.25
Haul Sorghum	bu	0.25
Haul Soybeans	bu	0.27
Haul Wheat	bu	0.26
LARice Haul	cwt	0.30
CUSTOM PLANT		
Custom Spread + Seed	appl	0.00
LARice Air Plant NE	cwt	5.50
LARice Air Plant SW	cwt	5.60
Plant by Air	cwt	7.00
CUSTOM SPRAY		
App 2,4-D Helicopter	appl	0.00
App by Air (1 gal)	appl	2.50
App by Air (2 gal)	appl	4.00
App by Air (3 gal)	appl	5.00
App by Air (5 gal)	appl	6.50
App by Air (10 gal)	appl	8.50
App Furadan by Air	appl	0.00
App Ordram by Air	appl	0.00
Custom Apply	acre	7.00
Custom Terragator	acre	5.00
LARice GPS Charge-SW	acre	0.35
LARice GPS Charge_NE	acre	0.25
Spray Levees, 4whlr	acre	0.00
FERTILIZERS		
Amm Nitrate (34% N)	cwt	22.50
Amm Sulfate (21% N)	cwt	17.23
Anhy Ammonia (82% N)	cwt	28.00
Boron (Solubor)	lb	0.75
Crop Oil (Seed Oil)	pt	4.60
DAP	cwt	24.82
Fert 0-20-20	cwt	0.00
Fert 10-10-10	cwt	0.00
Fert 10-34-0	cwt	28.58
Fert 10-34-0	gal	0.00
Fert 13-13-13	cwt	0.00
Fert 41-0-0-4	cwt	16.85
Fert 5-20-20	cwt	0.00
LA Nitrogen	lb	0.32
LA Phosphate	lb	0.49
LA Potash	lb	0.26
Phosphorus(46% P205)	cwt	21.88
Potash (60% K20)	cwt	16.97
Sulfur	lb	0.34
UAN (32% N)	cwt	14.31
UAN + Sulfur (28% N)	cwt	14.48
Urea, Solid (46% N)	cwt	16.78
Zinc	lb	0.50
FUNGICIDES		
Apron Maxx RTA	oz	0.93
Apron XL	oz	6.98
Apron XL LS	oz	5.27
Benlate 50 WP	lb	15.95
Captan 4L	pt	2.83
Captan 50 WP	lb	5.41
Crop Oil (Petroleum)	pt	3.86
Cruiser 5FS	oz	17.38
Delta Coat AD	oz	3.75
Dithane F-45	qt	9.08
Dithane Rainsheild	lb	4.15
Fungicide	lb	2.82

Appendix Table 1 Cont'd. Operating Inputs: Estimated Prices for 2017.

ITEM NAME	UNIT	PRICE
FUNGICIDES CONT'D		
Gem 25 WG	oz	3.70
Manzate 75 DF	lb	5.54
Manzate Flowable	pt	4.60
Moncut 70 DF	lb	38.35
Orbit	oz	2.75
Prevail	lb	28.50
Quadris	oz	2.66
Ridomil GoldPC 10G	lb	2.08
Ridomil Gold PC	lb	5.30
Ridomil Gold PC Liq	oz	6.54
Rovral 4F	pt	16.97
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
Tilt 3.6 EC	oz	0.85
Vitavax 200	oz	0.47
Vitavax M Flowable	oz	1.06
Vitavax RTU-Thiram	oz	0.40
Vitavax T-L	oz	0.29
GIN/DRY		
Dry Corn	bu	0.19
Dry Grain Sorghum	cwt	0.25
Dry Rice	bu	0.40
Dry Rice (cwt)	cwt	0.90
Gin	lb	0.11
LARice Dry	cwt	0.90
GROWTH REGULATORS		
Early Harvest PGR	oz	1.55
LA Polado	oz	0.14
Mepex	oz	0.13
PGR IV	oz	1.55
Pix Plus	oz	0.40
Pix Ultra	oz	0.39
HARVEST AIDS		
Accelerate	pt	2.59
Ammonium Sulfate	lb	0.24
Boll'd	pt	7.01
CottonQuik	pt	6.06
Def 6	pt	6.88
Def/Folex	pt	7.55
Dropp 50 WP	lb	45.45
Dropp SC	oz	1.09
Ethephon 6E	pt	3.38
Finish 6	pt	10.25
Folex 6EC	pt	9.32
Ginstar EC	pt	30.23
Gramoxone Extra	pt	4.86
Gramoxone Inteon	oz	0.26
Gramoxone Max	pt	4.06
Harvade 5F	oz	0.67
Leafless	pt	18.56
Prep	pt	2.75
Sodium Chlorate 3L	gal	3.50
Sodium Chlorate 6L	gal	5.57
Starfire	pt	0.00
HERBICIDES		
2,4-D Amine 4	pt	1.88
2,4-D Ester	pt	3.00
AAtrex 4L	pt	2.58
AAtrex NINE-O	lb	4.52
Accent Gold	oz	6.12
Accent SP	oz	36.25
Aim 2EC	oz	5.16
Aim DF	oz	9.65
App Fert by Air	cwt	7.00
Arrosolo	qt	7.88
Assure II	oz	0.84
Atrazine 4L	pt	1.50
Atrazine 90DF	lb	3.60

Appendix Table 1 Cont'd. Operating Inputs: Estimated Prices for 2017.

ITEM NAME	UNIT	PRICE
HERBICIDES CONT'D		
Authority 75DF	lb	26.95
Axiom 68DF	lb	25.74
Backdraft	pt	2.40
Banvel	pt	15.02
Basagran	pt	15.81
Basis Gold	lb	9.00
Beacon 75% WSP	oz	34.87
Beyond	oz	4.97
Bicep II Magnum	qt	11.69
Bicep II zmsgnum	qt	10.97
Bladex 4L	qt	0.00
Bladex 90DF	lb	0.00
Blazer 2L	pt	0.00
Blazer Ultra	pt	9.79
Boa	pt	3.63
Bolero 8EC	pt	7.67
Boundary	pt	10.18
Buctril 4EC	pt	17.06
Butoxone 175(2,4-DB)	pt	3.24
Butoxone 200(2,4-DB)	pt	3.92
Butyrac 175 (2,4-DB)	pt	3.55
Butyrac 200 (2,4-DB)	pt	4.77
Canopy 75%	oz	2.70
Canopy XL	oz	2.23
Caparol 4L	pt	4.44
Caparol Accu-Pak	lb	0.00
Celebrity Plus	lb	84.50
Clarity	pt	11.18
Classic	oz	16.95
Clincher EC	oz	2.30
Cobra 2EC	oz	1.68
Command 3ME	pt	18.50
Command XTRA	pt	0.00
Conclude Ultra	pt	0.00
Conclude Ultra	pt	0.00
Conclude XACT	pt	11.32
Conclude XTRA	pt	8.32
Cornerstone	pt	2.50
Cotoran 4L	pt	6.31
Cotoran DF	lb	7.92
Cotton Pro Flowable	pt	3.98
Crossbow	pt	8.05
Cy-Pro 4L	qt	0.00
Cypro 90DF	lb	0.00
Delta Goal	pt	9.44
Denim 0.16 EC	pt	24.06
Detail	pt	7.99
Direx 4L	pt	3.29
Direx 80 DF	lb	6.20
Diuron 4L	pt	3.36
Diuron 80 DF	lb	5.81
Domain 60DF	lb	12.75
DSMA 4	pt	0.90
Dual 8E	pt	0.00
Dual II Magnum	pt	13.50
Dual Magnum	pt	14.97
Duet	pt	4.75
Evik DF 80W	lb	11.22
Exceed	oz	10.71
Exceed Custom Pak	oz	11.50
Expert	pt	4.95
Facet 75DF	lb	50.00
First Rate	oz	41.21
Flexstar HL	pt	4.50
FloMet 4L	pt	4.74
Freedom	qt	2.51
Front Row	oz	21.92
Frontier 6.0	oz	0.63
FulTime	pt	6.29
Fusilade DX	oz	1.13
Fusion	pt	29.86
Glyfos	pt	1.80
Glyphomax	pt	3.49
Glyphosate Plus 4L	pt	1.88

Appendix Table 1 Cont'd. Operating Inputs: Estimated Prices for 2017.

ITEM NAME	UNIT	PRICE
HERBICIDES CONT'D		
Glystar Plus	pt	2.64
Goal 2XL	pt	10.80
Gramoxone Extra	pt	0.00
Gramoxone Max	pt	5.46
Gramoxone Max	pt	5.46
Grandstand R	qt	17.15
Guardsman	pt	4.66
Guardsman Max	pt	7.22
Harmony Extra	oz	12.02
Hoelon 3EC	pt	11.03
Karmex DF	lb	5.93
LA Asulox/Asulam	gal	38.80
LA Weedmaster	qt	6.15
Lariat	qt	7.58
Lasso 4EC	qt	6.60
Lasso II 15G	lb	0.00
Layby Pro	qt	12.60
Lexone 75DF	lb	18.90
Liberty	pt	8.84
Lightning	oz	14.25
Lightning	oz	14.25
Linex 4L	pt	11.23
Londax 60DF	oz	20.27
Lorox 50DF	lb	26.36
Matador	pt	0.00
MSMA 6.6	pt	3.66
MSMA6 + Surfactant	pt	2.63
Newpath 2SL	oz	3.63
Ordram 15-G	lb	1.34
Ordram 8-E	pt	9.42
Outlook	pt	19.31
Pendimax 3.3	pt	2.47
Permit 75DF	oz	18.50
Poast 1.53	pt	13.41
Poast Plus	pt	9.69
Propanil 4E	qt	5.15
Prowl 3.3 EC	pt	6.86
Pursuit DG	oz	11.59
Pursuit Plus EC	pt	7.10
Python WDG	oz	15.58
Raptor	oz	4.96
Reflex 2LC	pt	6.56
Regiment 80WP	oz	4.38
Remedy	pt	8.45
Resource .86EC	pt	29.40
Ricestar	pt	24.54
Roundup Original	pt	6.00
Roundup Original Max	oz	0.38
Roundup Power Max	pt	2.25
Roundup Ultra MAX	pt	5.97
Roundup Ultra Dry	lb	6.14
Roundup WeatherMax	oz	0.08
Scepter 70 DG	oz	5.06
Select 2EC	oz	0.78
Sencor 4F	pt	14.74
Sencor DF	lb	9.50
Squadron CE	pt	4.55
Stam 4E	qt	5.12
Stam 80 EDF	lb	10.85
Staple 85%	oz	16.01
Staple Plus	oz	8.55
Steadfast	oz	12.40
Steel	pt	10.28
Storm	pt	12.75
Strongarm	oz	62.62
Superwham	qt	9.78
Suprend	lb	13.49
Surpass 20G	lb	2.36
Surpass EC	qt	29.04
Touchdown	qt	9.32
Touchdown 4 IQ	pt	3.33
Touchdown Total	qt	8.38
Treflan HFP	pt	2.90
Treflan TR-10	lb	1.10

Appendix Table 1 Cont'd. Operating Inputs: Estimated Prices for 2017.

ITEM NAME	UNIT	PRICE
HERBICIDES CONT'D		
Tri-Scept	pt	5.24
Trifluralin 4EC	pt	4.01
Trilin 10G	lb	0.79
Trilin 4EC	pt	2.12
Typhoon	qt	13.06
Valor WP	oz	6.38
Whip 360	pt	25.08
Zorial Rapid 80DF	lb	14.10
INSECTICIDES		
Acephate 80SP	lb	0.00
Acephate 90SP	lb	8.69
Admire 2 Flowable	oz	4.78
Ammo 2.5 EC	oz	0.92
Asana .66 XL	oz	0.67
Aztec 2.1% G	lb	3.88
Baythroid 2	oz	2.30
Bidrin 8L	oz	0.90
Brigade EC	pt	3.50
Brigade WSB	lb	26.04
Capture 2EC	oz	2.40
Carbamate	oz	0.00
Centric 40WG	oz	5.21
Comite	pt	9.46
Condor XL	pt	0.00
Confirm 2F	oz	1.86
Counter 15G	lb	4.51
Counter CR	lb	2.65
Curacron 8E	pt	10.75
Decis 1.5EC	oz	2.84
Declare	pt	4.08
Denim 0.16EC	pt	32.63
Di-Syston 15G	lb	3.48
Di-Syston 8	pt	14.32
Diamond .83EC	pt	21.84
Dimethoate 4E	pt	5.88
Dimilin 2L	oz	2.12
Dipel DF	lb	14.47
Dipel ES	pt	5.50
Force 3G	lb	7.41
Furadan 3G	lb	0.00
Furadan 4F	pt	9.81
Fury 1.5 EC	oz	1.30
Gaucha 480	oz	5.80
Intrepid 2F	oz	1.80
Intruder 70WP	oz	10.99
Karate Z	oz	3.40
Lannate LV	pt	12.23
Lannate SP	oz	2.42
Larvin 3.2	oz	0.63
Leverage 2.7	oz	1.95
Lorsban 15G	lb	2.40
Lorsban 4E	pt	6.66
Malathion 57EC	pt	4.23
Malathion 8E	pt	5.33
Malathion ULV	pt	4.93
Mepichlor 4.2% Liq	pt	5.91
Methyl Parathion	pt	5.79
Monitor 4	pt	16.50
Monitor 4	pt	16.50
Mustang Max	oz	1.48
Organophosphate	oz	0.00
Orthene 90S	lb	5.75
Orthene 97	lb	10.90
Ovasyn	pt	0.00
Ovicide	oz	0.00
PennCap M	pt	6.71
Phaser 3E	qt	8.13
Pirate 3SC	oz	0.00
Pounce 25WP	lb	16.80
Pounce 3.2 EC	oz	0.91
Provado 1.6F	oz	1.94
Scout X-TRA	oz	0.00
Sevin 80S	lb	7.40
Sevin XLR Plus	qt	15.07

Appendix Table 1 Cont'd. Operating Inputs: Estimated Prices for 2017.

ITEM NAME	UNIT	PRICE
INSECTICIDES CONT'D		
Spintor 2SC	oz	4.93
Steward	pt	39.51
Surfactant	pt	3.69
Synthetic Pyrethroid	oz	0.00
Temik 15G Grit	lb	4.00
Thimet 20-G	lb	3.65
Thionex 3EC	pt	4.17
Thionex 50W	lb	10.45
Tracer	oz	9.73
Trimax	oz	1.85
Vydate C-LV	oz	0.93
Warrior Z	oz	1.80
Warrior ZT	oz	1.88
IRRIGATION SUPPLIES		
Rice Gates	each	3.65
Roll-Out Pipe	ft	0.25
OVERHEAD		
Farmstead & Drainage	Dol	1.00
LARice Insurance	Dollar	1.00
LARice Misc. Overhd	dollar	1.00
LARice Property Tax	dollar	1.00
Shops Bldg & Equip.	Dol	6.55
SERVICE FEE		
Utilities	Dol	1.00
SEED/PLANTS		
Corn Seed Bt	thous	2.60
Corn Seed BtRR	thous	3.89
Corn Seed Conv.	thous	2.59
Corn Seed RR	thous	3.44
Corn Seed VT3	thous	3.52
Corn Seed VT3Pro	thous	3.52
Cotton Seed BG/RR	thous	0.62
Cotton Seed BGII/RRF	thous	0.61
Cotton Seed Bt	thous	0.28
Cotton Seed BtRR	thous	1.26
Cotton Seed Bxn	thous	0.00
Cotton Seed Conv.	thous	0.00
Cotton Seed Liberty	thous	1.05
Cotton Seed Liberty	thous	1.05
Cotton Seed RR	thous	0.63
Cotton Seed RR	thous	0.63
Cotton Seed WS	thous	0.49
Cotton Seed WS/RR	thous	0.00
Cotton Seed WS/RRF	thous	0.59
Rice Clearfield 161	lb	1.05
Rice Clearfield XL8	lb	6.12
Rice Seed (Levees)	lb	0.38
Rice Seed CF(Levees)	lb	1.65
Rice Seed Conv.	lb	0.38
Rice Seed Hybrid	lb	5.57
SC Cultured seedcane	acre	484.00
Sorghum Concept	lb	3.16
Sorghum Hybrid Sudax	lb	1.20
Sorghum NonConcept	lb	1.18
Soybean Seed LL	lb	1.16
Soybean Seed Private	lb	0.38
Soybean Seed Public	lb	0.00
Soybean Seed RR	lb	0.90
Soybean Seed Stack	lb	1.28
Wheat Seed Private	lb	0.25
Wheat Seed Public	lb	0.00
SERVICE FEE		
Cotton Checkoff	bale	2.56
Cotton Storage	bale	25.00
Crop Consultant	acre	7.00
Insect Scouting	acre	7.00
Rice Consultant	acre	8.00
SC Treating Charge	acre	0.00
Survey & Mark Levees	acre	4.50
Survey & Mark Levees	acre	4.50
TECHNOLOGY FEE		
BG Cot Tech Fee	thous	0.28
BG Cot Tech Fee	cap/ac	19.50
BG II Cot Tech Fee	thous	0.76

Appendix Table 1 Cont'd. Operating Inputs: Estimated Prices for 2017.

ITEM NAME	UNIT	PRICE
TECHNOLOGY FEE CONT'D		
BG II Cot Tech Fee	cap/ac	31.91
BG II/RR Tech Fee	thous	1.49
BG II/RR Tech Fee	cap/ac	62.69
BGII/RRF Cot Tech Fe	thous	1.49
BGII/RRF Cot Tech Fee	cap/ac	69.25
Eradication Fee	acre	6.00
Eradication Zone 1	acre	6.00
Eradication Zone 1A	acre	6.00
Eradication Zone 1B	acre	6.00
Eradication Zone 2	acre	6.00
Eradication Zone 3	acre	6.00
Eradication Zone 4	acre	6.00
RR Cotton Tech Fee	thous	1.04
RR Cotton Tech Fee	cap/ac	43.66
RR Cotton Tech Fee	thous	1.04
RR Cotton Tech Fee	cap/ac	43.66
RRF Cotton Tech Fee	thous	1.04
RRF Cotton Tech Fee	cap/ac	48.25

Appendix Table 2. Tractors: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Louisiana 2017.

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	18.09	0.00	31.49	0.00	31.49
Combine (200-249 hp)	240hp	161,548	300	8	12.35	13.40	22.84	16.82	53.07	66.39	119.47
Combine (225-274 hp)	Track250hp	0	300	8	12.87	13.40	23.80	0.00	37.20	0.00	37.20
Combine (250-299 hp)	275hp	323,000	300	8	14.15	13.40	26.17	33.64	73.22	132.75	205.98
Combine (250-299hp)	Grass295hp	218,222	300	8	15.18	13.40	28.08	22.73	64.21	89.69	153.90
Combine (275-299 hp)	Track290hp	0	300	8	14.93	13.40	27.62	0.00	41.02	0.00	41.02
Combine (300-349 hp)	325hp	336,000	300	8	16.73	13.40	30.95	35.00	79.35	138.10	217.45
Combine (300-349hp)	Track320hp	0	300	8	16.47	13.40	30.46	0.00	43.86	0.00	43.86
Combine (350-379 hp)	370hp	344,000	300	8	19.04	13.40	35.22	35.83	84.45	141.39	225.84
Combine (350-379 hp)	Track365hp	0	300	8	18.79	13.40	34.76	0.00	48.16	0.00	48.16
Cotton Stripper	173hp	170,000	200	8	8.08	13.40	14.94	26.56	54.91	104.80	159.71
SC Tractor 93 MDR	93	46,683	600	10	4.79	10.69	8.86	2.72	22.27	7.84	30.12
SC Tractpr 68 MDR	68	27,049	600	10	3.50	10.69	6.47	1.57	18.74	4.54	23.29
test-mes		0	0	0	0.00	13.40	0.00	0.00	0.00	0.00	0.00
Tractor(40-59hp)Cab	2WD 50	32,200	600	8	2.57	10.69	4.76	1.00	16.45	6.05	22.51
Tractor(40-59hp)Cab	MFWD 50	39,100	600	8	2.57	10.69	4.76	1.22	16.67	7.35	24.02
Tractor(40-59hp)RB	2WD 50	20,900	600	8	2.57	10.69	4.76	0.65	16.10	3.93	20.03
Tractor(40-59hp)RB	MFWD 50	24,300	600	8	2.57	10.69	4.76	0.75	16.21	4.56	20.78
Tractor(60-89hp)CAB	2WD 75	48,300	600	8	3.86	10.69	7.14	1.50	19.34	9.08	28.42
Tractor(60-89hp)CAB	MFWD 75	54,100	600	8	3.86	10.69	7.14	1.69	19.52	10.17	29.69
Tractor(60-89hp)RB	2WD 75	34,400	600	8	3.86	10.69	7.14	1.07	18.90	6.46	25.37
Tractor(60-89hp)RB	MFWD 75	35,800	600	8	3.86	10.69	7.14	1.11	18.95	6.73	25.68
Tractor(90-119hp)CB	2WD 105	65,300	600	8	5.40	10.69	9.99	2.04	22.72	12.28	35.00
Tractor(90-119hp)CB	MFWD 105	77,400	600	8	5.40	10.69	9.99	2.41	23.10	14.55	37.66
Tractor(90-119hp)RB	2WD 105	57,600	600	8	5.40	10.69	9.99	1.80	22.48	10.83	33.32
Tractor(90-119hp)RB	MFWD 105	62,100	600	8	5.40	10.69	9.99	1.94	22.62	11.67	34.30
Tractor(120-139hp)CB	2WD 130	177,000	600	8	6.69	10.69	12.37	5.53	28.60	33.28	61.88
Tractor(120-139hp)CB	MFWD 130	123,000	600	8	6.69	10.69	12.37	3.84	26.91	23.13	50.04
Tractor(140-159hp)CB	2WD 150	108,000	600	8	7.72	10.69	14.28	3.37	28.34	20.30	48.65
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	10.69	14.28	4.46	29.44	26.89	56.33
Tractor(160-179hp)CB	2WD 170	156,000	600	8	8.75	10.69	16.18	4.87	31.75	30.69	62.45
Tractor(160-179hp)CB	MFWD 170	170,000	600	8	8.75	10.69	16.18	5.31	32.19	33.45	65.64
Tractor(160-199hp)CB	Track 180	142,710	600	8	9.26	10.69	17.14	4.45	32.29	28.08	60.37
Tractor(180-199hp)CB	2WD 190	143,000	600	8	9.77	10.69	18.09	4.46	33.25	28.13	61.39
Tractor(180-199hp)CB	MFWD 190	186,000	600	8	9.77	10.69	18.09	5.81	34.59	36.60	71.19
Tractor(200-249hp)CB	4WD 225	147,066	600	8	11.58	10.69	21.42	4.59	36.71	28.93	65.65
Tractor(200-249hp)CB	MFWD 225	218,000	600	8	11.58	10.69	21.42	6.81	38.92	42.89	81.82
Tractor(200-249hp)CB	Track 225	277,000	600	8	11.58	10.69	21.42	8.65	40.77	54.50	95.28
Tractor(250-349hp)CB	4WD 300	281,000	600	8	15.44	10.69	28.56	8.78	48.03	55.29	103.33
Tractor(250-349hp)CB	Track 300	292,000	600	8	15.44	10.69	28.56	9.12	48.38	57.46	105.84
Tractor(350-449hp)CB	4WD 400	325,000	600	8	20.58	10.69	38.08	10.15	58.93	63.95	122.89
Tractor(350-449hp)CB	Track 400	351,000	600	8	20.58	10.69	38.08	10.96	59.74	69.07	128.81
Tractor(450-uphp)CB	TRACK-475	279,879	600	8	24.44	10.69	45.23	8.74	64.66	55.07	119.74

Appendix Table 3. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Louisiana 2017.

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	0.38	0.43	3.49	2.06	5.56
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	7.76	11.76	31.20	46.42	77.63
Cotton Picker-1st-BB	4R2X1260hp	357,000	200	8	13.33	0.172	3.87	4.24	9.61	17.73	37.92	55.65
Cotton Picker-1st-BB	4R30"250hp	262,000	200	8	12.86	0.327	7.35	7.79	13.40	28.54	52.88	81.43
Cotton Picker-1st-BB	4R30"325hp	350,000	200	8	18.01	0.327	7.35	10.90	17.90	36.16	70.64	106.80
Cotton Picker-1st-BB	4R38"255hp	268,000	200	8	13.12	0.257	5.78	6.25	10.79	22.84	42.59	65.43
Cotton Picker-1st-BB	4R38"325hp	351,000	200	8	18.01	0.257	5.78	8.58	14.13	28.51	55.78	84.29
Cotton Picker-1st-BB	5R30"255hp	285,000	200	8	12.86	0.261	5.88	6.23	11.66	23.77	46.01	69.79
Cotton Picker-1st-BB	5R38"250hp	284,601	200	8	12.86	0.207	4.65	4.93	9.21	18.80	36.35	55.15
Cotton Picker-1st-BB	6R30"325hp	465,000	200	8	18.27	0.218	4.90	7.37	15.85	28.13	62.56	90.70
Cotton Picker-1st-BB	6R38"330hp	465,000	200	8	18.27	0.172	3.87	5.82	12.51	22.21	49.39	71.61
Cotton Picker-1st-Tr	2R38"157hp	144,912	200	8	8.08	0.519	11.67	7.76	11.76	31.20	46.42	77.63
Cotton Picker-1st-Tr	4R2X1255hp	357,000	200	8	18.01	0.172	3.87	5.74	9.61	19.22	37.92	57.14
Cotton Picker-1st-Tr	4R30"250hp	261,825	200	8	12.86	0.327	7.35	7.79	13.39	28.53	52.84	81.38
Cotton Picker-1st-Tr	4R30"325hp	311,088	200	8	16.72	0.327	7.35	10.13	15.91	33.39	62.78	96.18
Cotton Picker-1st-Tr	4R38"255hp	268,000	200	8	13.12	0.257	5.78	6.25	10.79	22.84	42.59	65.43
Cotton Picker-1st-Tr	4R38"325hp	351,000	200	8	18.01	0.257	5.78	8.58	14.13	28.51	55.78	84.29
Cotton Picker-1st-Tr	5R30"255hp	285,303	200	8	13.12	0.261	5.88	6.35	11.67	23.91	46.06	69.98
Cotton Picker-1st-Tr	5R38"250hp	290,471	200	8	12.86	0.207	4.65	4.93	9.40	18.99	37.10	56.09
Cotton Picker-1st-Tr	6R30"325hp	465,000	200	8	16.72	0.218	4.90	6.75	15.85	27.51	62.56	90.08
Cotton Picker-1st-Tr	6R38"330hp	465,000	200	8	18.01	0.172	3.87	5.74	12.51	22.13	49.39	71.52
Cotton Picker-2nd-BB	2R38"157hp	144,912	200	8	8.08	0.440	9.88	6.57	9.96	26.43	39.32	65.75
Cotton Picker-2nd-BB	4R2X1260hp	357,000	200	8	18.01	0.145	3.27	4.86	8.14	16.28	32.12	48.40
Cotton Picker-2nd-BB	4R30"250hp	261,825	200	8	12.86	0.277	6.22	6.60	11.34	24.17	44.76	68.93
Cotton Picker-2nd-BB	4R30"325hp	311,088	200	8	16.72	0.277	6.22	8.58	13.47	28.29	53.18	81.47
Cotton Picker-2nd-BB	4R38"255hp	268,000	200	8	13.12	0.218	4.90	5.30	9.14	19.34	36.07	55.42
Cotton Picker-2nd-BB	4R38"325hp	351,000	200	8	18.01	0.218	4.90	7.27	11.97	24.15	47.25	71.40
Cotton Picker-2nd-BB	5R30"255hp	285,303	200	8	13.12	0.221	4.98	5.38	9.88	20.25	39.02	59.28
Cotton Picker-2nd-BB	5R38"250hp	284,601	200	8	12.86	0.175	3.94	4.17	7.80	15.92	30.79	46.72
Cotton Picker-2nd-BB	6R30"325hp	465,000	200	8	18.01	0.184	4.15	6.15	13.43	23.74	52.99	76.74
Cotton Picker-2nd-BB	6R38"330hp	465,000	200	8	18.01	0.145	3.27	4.86	10.60	18.74	41.84	60.58
Cotton Picker-2nd-Tr	2R38"157hp	144,912	200	8	8.08	0.440	9.88	6.57	9.96	26.43	39.32	65.75
Cotton Picker-2nd-Tr	4R2X1260hp	357,000	200	8	18.01	0.145	3.27	4.86	8.14	16.28	32.12	48.40
Cotton Picker-2nd-Tr	4R30"250hp	261,825	200	8	12.86	0.277	6.22	6.60	11.34	24.17	44.76	68.93
Cotton Picker-2nd-Tr	4R30"325hp	311,088	200	8	16.72	0.277	6.22	8.58	13.47	28.29	53.18	81.47
Cotton Picker-2nd-Tr	4R38"255hp	268,000	200	8	13.12	0.218	4.90	5.30	9.14	19.34	36.07	55.42
Cotton Picker-2nd-Tr	4R38"325hp	351,000	200	8	18.01	0.218	4.90	7.27	11.97	24.15	47.25	71.40
Cotton Picker-2nd-Tr	5R30"255hp	285,303	200	8	13.12	0.221	4.98	5.38	9.88	20.25	39.02	59.28
Cotton Picker-2nd-Tr	5R38"250hp	290,471	200	8	12.86	0.175	3.94	4.17	7.96	16.08	31.43	47.51
Cotton Picker-2nd-Tr	6R30"325hp	465,000	200	8	16.72	0.184	4.15	5.72	13.43	23.30	52.99	76.30
Cotton Picker-2nd-Tr	6R38"330hp	465,000	200	8	18.01	0.145	3.27	4.86	10.60	18.74	41.84	60.58
LA Pickup Truck	1/2 ton	25,000	800	5	2.50	1.000	10.69	4.75	2.81	18.25	6.65	24.90
LA Rice Combine	25 ft	165,000	300	10	8.60	0.300	5.05	4.77	13.21	23.04	20.07	43.12
LA Rice Combine-2	25 ft	165,000	300	10	8.60	0.300	5.05	4.77	13.21	23.04	20.07	43.12
LA Rice Combine Med	20 ft	150,000	300	10	7.10	0.210	3.53	2.75	8.40	14.69	12.76	27.46
Levee Sprayer	27'	30,768	350	8	2.57	0.038	0.68	0.18	0.06	0.93	0.41	1.34
SC Billet Harvester	6 ft	290,000	750	10	12.00	0.700	11.78	15.54	27.06	54.38	32.47	86.85
SC Harvester 1Rw	6 ft	115,000	400	12	6.80	0.875	14.72	11.00	20.96	46.69	26.80	73.49
SC Harvester 2Rw	12 ft	210,000	400	12	8.00	0.388	6.53	5.74	16.97	29.24	21.70	50.95
SC Loader 1Rw	6 ft	85,000	425	10	5.10	0.598	7.04	5.64	8.74	21.43	14.55	35.99
SC Loader 2Rw	12 ft	150,000	425	10	7.00	0.300	3.53	3.88	7.73	15.15	12.88	28.04
SC Transloader		30,000	120	12	4.70	0.250	2.93	2.17	3.75	8.86	6.65	15.52
SC Truck&Trailer	30 Ton	45,000	400	10	7.00	1.000	11.75	12.95	7.87	32.58	13.67	46.25
Sprayer(300-450Gal)	47'	0	350	8	5.40	0.022	0.40	0.22	0.00	0.62	0.00	0.62
Sprayer(300-450Gal)	60'	103,000	350	8	5.66	0.017	0.31	0.18	0.09	0.59	0.63	1.23
Sprayer(300-450Gal)	80'	103,000	350	8	5.66	0.013	0.23	0.13	0.07	0.44	0.47	0.92
Sprayer(600-750Gal)	60'	193,000	350	8	10.29	0.017	0.31	0.33	0.18	0.83	1.19	2.03
Sprayer(600-825Gal)	80'	202,000	350	8	10.29	0.013	0.23	0.25	0.14	0.63	0.94	1.57
Sprayer(600-825Gal)	90'	273,000	350	8	10.29	0.011	0.21	0.22	0.17	0.60	1.13	1.73
Sprayer(1000-1400Gal)	90'	294,000	350	8	14.15	0.014	0.25	0.36	0.22	0.84	1.46	2.30
Sprayer(1200PlusGal)	120'	343,000	350	8	15.44	0.008	0.15	0.25	0.16	0.57	1.06	1.63

Appendix Table 4. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2017.

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	1,150	200	20	0.020	0.21	0.24	0.01 0.11	0.58	0.00 0.66	1.25
Blade-Box	10'	2WD 50	3,010	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	6,270	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	1,100	200	20	1.176	12.57	5.60	0.61 0.76	19.56	0.48 4.62	24.67
Blade-Scraper	10'	2WD 50	3,390	200	20	1.176	12.57	5.60	1.89 0.76	20.84	1.50 4.62	26.97
Blade-Scraper	14'	2WD 50	6,860	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	1.23	1.43	0.93 0.63	4.24	1.62 3.84	9.71
Chisel Plow(Folding)	24'	MFWD 190	38,000	150	12	0.076	0.81	1.38	1.04 0.44	3.69	1.82 2.79	8.31
Chisel Plow(Folding)	32'	MFWD 225	49,900	150	12	0.057	0.61	1.23	1.04 0.39	3.28	1.80 2.47	7.57
Chisel Plow(Folding)	42'	MFWD 225	60,600	150	12	0.044	0.47	0.94	0.96 0.29	2.67	1.67 1.88	6.23
Chisel Plow(Rigid)	15'	2WD 130	11,400	150	12	0.123	1.31	1.52	0.50 0.68	4.03	0.88 4.10	9.01
Chisel Plow(Rigid)	24'	MFWD 190	12,100	150	12	0.077	0.82	1.39	0.33 0.44	3.00	0.58 2.81	6.40
Chisel-Harrow	21 shank	2WD 190	12,500	150	12	0.088	0.94	1.59	0.39 0.39	3.32	0.68 2.47	6.49
Chisel-Harrow	27 shank	MFWD 225	14,100	150	12	0.068	0.73	1.46	0.34 0.46	3.01	0.60 2.93	6.55
Colter-Chisel-Harrow	21 shank	2WD 190	19,200	150	12	0.088	0.94	1.59	0.61 0.39	3.53	1.05 2.47	7.07
Colter-Chisel-Harrow	27 shank	MFWD 225	24,000	150	12	0.068	0.73	1.46	0.59 0.46	3.25	1.02 2.93	7.22
Corn Grain Cart 8R30	500 bu	MFWD 190	23,700	200	12	0.031	0.34	0.57	0.20 0.18	1.30	0.35 1.16	2.83
Corn Grain Cart 8R40	700bu	MFWD 190	36,600	200	12	0.025	0.26	0.45	0.24 0.14	1.11	0.42 0.91	2.45
Cult & Post	4R-38	2WD 105	17,400	150	10	0.173	2.77	1.73	0.80 0.31	5.62	2.12 1.87	9.62
Cult & Post	6R-30	MFWD 150	21,600	150	10	0.146	4.70	2.09	0.84 0.65	8.29	2.23 3.94	14.47
Cult & Post	6R-38	MFWD 150	22,500	150	10	0.115	1.85	1.65	0.69 0.51	4.72	1.83 3.11	9.67
Cult & Post	8R-30	MFWD 190	25,900	150	10	0.110	1.76	1.99	0.75 0.63	5.15	2.00 4.02	11.18
Cult & Post	8R-38	MFWD 190	26,600	150	10	0.086	1.39	1.57	0.61 0.50	4.08	1.62 3.18	8.90
Cult & Post	8R-38 2x1	MFWD 190	38,300	150	10	0.057	0.92	1.04	0.59 0.33	2.90	1.56 2.11	6.58
Cult & Post	10R-30	MFWD 225	31,700	150	10	0.088	1.41	1.88	0.74 0.59	4.63	1.96 3.77	10.37
Cult & Post	10R-38	MFWD 225	0	150	10	0.065	1.04	1.39	0.00 0.44	2.88	0.00 2.79	5.67
Cult & Post	12R-30	MFWD 225	41,000	150	10	0.073	1.17	1.57	0.80 0.49	4.04	2.11 3.14	9.31
Cult & Post	12R-38	MFWD 225	44,800	150	10	0.057	0.92	1.24	0.69 0.39	3.25	1.82 2.48	7.56
Cultipacker	12'	2WD 130	4,846	300	12	0.124	1.33	1.54	0.14 0.68	3.70	0.19 4.14	8.03
Cultipacker	20'	MFWD 150	15,200	300	12	0.074	0.79	1.06	0.26 0.33	2.46	0.36 2.00	4.84
Cultivate	4R-38	2WD 105	12,000	150	10	0.162	1.73	1.62	0.51 0.29	4.17	1.37 1.75	7.30
Cultivate	6R-30	MFWD 150	16,200	150	10	0.137	1.46	1.96	0.59 0.61	4.64	1.56 3.69	9.90
Cultivate	6R-38	MFWD 150	17,100	150	10	0.108	1.16	1.55	0.49 0.48	3.69	1.30 2.91	7.91
Cultivate	8R-30	MFWD 190	20,500	150	10	0.103	1.10	1.86	0.56 0.59	4.13	1.48 3.77	9.39
Cultivate	8R-38	MFWD 190	21,300	150	10	0.081	0.87	1.47	0.46 0.47	3.28	1.22 2.98	7.49
Cultivate	8R-38 2x1	MFWD 190	37,100	150	10	0.054	0.58	0.98	0.53 0.31	2.41	1.41 1.98	5.81
Cultivate	10R-30	MFWD 225	28,200	150	10	0.082	0.88	1.76	0.62 0.56	3.83	1.63 3.53	9.00
Cultivate	10R-38	MFWD 225	0	150	10	0.065	0.69	1.39	0.00 0.44	2.53	0.00 2.79	5.32
Cultivate	12R-30	MFWD 225	35,500	150	10	0.068	0.73	1.47	0.65 0.46	3.32	1.71 2.94	7.99
Cultivate	12R-38	MFWD 225	37,000	150	10	0.054	0.58	1.16	0.53 0.36	2.64	1.41 2.32	6.39
Disk & Incorporate	14'	2WD 130	29,800	200	10	0.149	2.39	1.85	1.33 0.82	6.41	2.35 4.98	13.75
Disk & Incorporate	24'	MFWD 190	47,900	200	10	0.087	1.39	1.57	1.25 0.50	4.74	2.20 3.19	10.14
Disk & Incorporate	32'	4WD 225	59,300	200	10	0.068	1.10	1.47	1.22 0.31	4.11	2.15 1.98	8.25
Disk & Incorporate	42'	MFWD 225	30,542	200	10	0.049	0.78	1.05	0.44 0.33	2.62	0.79 2.10	5.52
Disk Bed (Hipper)	4R-38	MFWD 150	8,800	160	10	0.147	1.57	2.10	0.32 0.65	4.67	0.85 3.97	9.49
Disk Bed (Hipper)	6R-30	MFWD 170	15,100	160	10	0.125	1.33	2.02	0.47 0.66	4.49	1.24 4.18	9.92
Disk Bed (Hipper)	6R-38	MFWD 170	15,100	160	10	0.098	1.05	1.59	0.37 0.52	3.54	0.98 3.30	7.83
Disk Bed (Hipper)	8R-30	MFWD 190	17,400	160	10	0.093	1.00	1.69	0.40 0.54	3.65	1.07 3.43	8.15
Disk Bed (Hipper)	8R-38 2x1	MFWD 190	33,600	160	10	0.049	0.52	0.89	0.41 0.28	2.12	1.09 1.80	5.02
Disk Bed (Hipper)	10R-30	MFWD 225	19,900	160	10	0.075	0.80	1.60	0.37 0.51	3.29	0.98 3.21	7.49
Disk Bed (Hipper)	10R-38	MFWD 225	23,000	160	10	0.059	0.63	1.26	0.34 0.40	2.64	0.89 2.53	6.07
Disk Bed (Hipper)	12R-30	MFWD 225	30,700	160	10	0.062	0.66	1.33	0.47 0.42	2.91	1.26 2.68	6.86
Disk Bed (Hipper)	12R-38	MFWD 225	33,600	160	10	0.049	0.52	1.05	0.41 0.33	2.33	1.09 2.11	5.54
Disk Bed (Hipper)Fld	8R-38	MFWD 190	20,200	160	10	0.074	0.79	1.34	0.37 0.43	2.93	0.98 2.71	6.63
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	14,600	160	10	0.074	0.79	1.34	0.27 0.43	2.83	0.71 2.71	6.26
Disk Bed w/roller	8R-30	2WD 190	27,800	160	10	0.093	1.00	1.69	0.65 0.41	3.76	1.72 2.63	8.12
Disk Bed w/roller	12R-30	MFWD 225	44,400	160	10	0.062	0.66	1.33	0.69 0.42	3.12	1.83 2.68	7.64
Disk Harrow	14'	2WD 130	24,400	180	10	0.140	1.49	1.73	0.95 0.77	4.96	2.00 4.67	11.64
Disk Harrow	24'	MFWD 190	42,900	180	10	0.081	0.87	1.48	0.97 0.47	3.80	2.06 2.99	8.86
Disk Harrow	28'	MFWD 225	50,400	180	10	0.070	0.74	1.50	0.98 0.47	3.71	2.07 3.00	8.79
Disk Harrow	32'		53,900	180	10	0.061	0.82	0.00	0.91 0.00	0.00	1.94 0.00	0.00
Disk Harrow	42'	MFWD 225	94,400	180	10	0.046	0.49	1.00	1.22 0.31	3.04	2.59 2.00	7.64
Ditcher		2WD 130	5,750	200	10	0.020	0.21	0.24	0.04 0.11	0.61	0.06 0.66	1.34
Ditcher (1m/160a)		2WD 130	5,750	200	10	0.009	0.10	0.11	0.02 0.05	0.28	0.02 0.31	0.63
Fert Appl (Liquid)	4R-38	MFWD 150	14,700	150	8	0.154	2.48	2.20	1.51 0.69	6.89	1.71 4.15	12.76
Fert Appl (Liquid)	6R-30	MFWD 170	13,700	150	8	0.130	2.09	2.11	1.19 0.69	6.11	1.34 4.38	11.84
Fert Appl (Liquid)	6R-38	MFWD 170	11,600	150	8	0.103	1.65	1.67	0.79 0.54	4.67	0.90 3.45	9.04
Fert Appl (Liquid)	8R-30	MFWD 190	14,500	150	8	0.098	1.57	1.77	0.94 0.57	4.87	1.07 3.59	9.53
Fert Appl (Liquid)	8R-38	MFWD 190	16,600	150	8	0.077	1.24	1.40	0.85 0.45	3.96	0.96 2.84	7.77
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	17,700	150	8	0.051	0.82	0.93	0.60 0.30	2.67	0.68 1.89	5.25
Fert Appl (Liquid)	10R-30	MFWD 225	18,600	150	8	0.078	1.25	1.68	0.97 0.53	4.45	1.09 3.37	8.92
Fert Appl (Liquid)	10R-38	MFWD 225	20,300	150	8	0.061	0.99	1.32	0.83 0.42	3.58	0.94 2.65	7.18
Fert Appl (Liquid)	12R-30	MFWD 225	19,000	150	8	0.078	1.25	1.68	0.99 0.53	4.47	1.12 3.37	8.96
Fert Appl (Liquid)	12R-38	MFWD 225	17,700	150	8	0.051	0.82	1.10	0.60 0.35	2.89	0.68 2.21	5.80
Field Cult & Inc	12'	2WD 150	13,605	100	10	0.132	2.12	1.88	0.44 0.44	4.90	1.90 2.68	9.48
Field Cult & Inc	24'	MFWD 170	24,679	100	10	0.066	1.05	1.07	0.40 0.35	2.88	1.72 2.21	6.82

Appendix Table 4. Implements: estimated purchase price, annual use, useful life, performance rate,
(Continued) and direct and fixed cost per acre, Louisiana 2017.

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		
Field Cult & Inc	32'	MFWD 190	33,211	100	10	0.049	0.79	0.89	0.41 0.28	2.39	1.73 1.81	5.94
Field Cult & Inc	42'	MFWD 225	64,700	100	10	0.037	0.60	0.80	0.61 0.25	2.28	2.58 1.62	6.48
Field Cultivate	12'	2WD 150	18,000	100	10	0.124	1.33	1.77	0.55 0.41	4.08	2.36 2.52	8.98
Field Cultivate	24'	MFWD 170	25,300	100	10	0.062	0.66	1.00	0.39 0.33	2.39	1.66 2.08	6.14
Field Cultivate	32'	MFWD 190	39,600	100	10	0.046	0.49	0.84	0.46 0.27	2.07	1.95 1.70	5.73
Field Cultivate	42'	MFWD 225	56,900	100	10	0.035	0.38	0.76	0.50 0.24	1.88	2.13 1.52	5.55
Field Cultivate	50'	MFWD 225	65,300	100	10	0.029	0.31	0.63	0.48 0.20	1.64	2.06 1.28	4.99
Gate Installer		2WD 130	2,960	10	10	0.020	0.42	0.24	0.17 0.11	0.96	0.60 0.66	2.23
Grain Drill	12'	2WD 130	24,100	150	8	0.157	3.35	1.94	1.42 0.86	7.59	2.71 5.23	15.54
Grain Drill	15'	MFWD 150	32,700	150	8	0.125	2.68	1.79	1.54 0.56	6.58	2.94 3.38	12.91
Grain Drill	20'	MFWD 170	38,800	150	8	0.094	2.01	1.52	1.37 0.50	5.41	2.62 3.15	11.19
Grain Drill	24'	MFWD 190	58,600	150	8	0.078	1.67	1.42	1.72 0.45	5.28	3.30 2.87	11.46
Grain Drill	30'	MFWD 225	65,300	150	8	0.062	1.34	1.34	1.53 0.42	4.65	2.94 2.69	10.29
Grain Drill & Pre	12'	2WD 130	29,600	150	8	0.169	3.61	2.09	1.87 0.93	8.52	3.59 5.63	17.75
Grain Drill & Pre	15'	MFWD 150	38,100	150	8	0.135	2.89	1.93	1.93 0.60	7.36	3.70 3.64	14.70
Grain Drill & Pre	20'	MFWD 170	44,300	150	8	0.101	2.17	1.64	1.68 0.53	6.04	3.22 3.39	12.66
Grain Drill & Pre	24'	MFWD 190	64,000	150	8	0.084	1.80	1.53	2.03 0.49	5.86	3.88 3.09	12.84
Grain Drill & Pre	30'	MFWD 225	70,700	150	8	0.067	1.44	1.45	1.79 0.46	5.15	3.43 2.90	11.49
Harrow	13'	2WD 130	4,360	200	10	0.119	1.27	1.47	0.18 0.66	3.59	0.27 3.97	7.85
Harrow	21'	2WD 150	6,750	200	10	0.073	0.79	1.05	0.17 0.24	2.27	0.26 1.50	4.03
Harrow	40'	MFWD 190	17,400	200	10	0.038	0.41	0.70	0.23 0.22	1.57	0.35 1.42	3.35
Harrow	47'	MFWD 190	22,700	200	10	0.033	0.35	0.59	0.26 0.19	1.40	0.39 1.20	3.01
Header - Corn	4R-38	240hp	25,147	300	8	0.201	2.69	4.59	1.26 3.38	11.93	1.90 13.35	27.19
Header - Corn	6R30"	240hp	46,500	300	8	0.170	2.28	3.89	1.97 2.86	11.01	2.97 11.30	25.30
Header - Corn	6R38"	240hp	46,700	300	8	0.134	1.80	3.07	1.56 2.26	8.70	2.36 8.92	19.99
Header - Corn	8R-30	240hp	58,600	300	8	0.127	1.71	2.91	1.87 2.14	8.64	2.81 8.47	19.94
Header - Corn	8R-38	275hp	59,600	300	8	0.100	1.35	2.64	1.50 3.39	8.89	2.26 13.40	24.56
Header - Corn	12R-20	275hp	77,400	300	8	0.127	1.71	3.34	2.47 4.29	11.82	3.71 16.95	32.49
Header - Corn	12R-30	275hp	91,600	300	8	0.085	1.14	2.22	1.94 2.86	8.18	2.93 11.30	22.42
Header - Rice (CL)	22' Rigid	240hp	21,887	300	8	0.288	3.86	6.59	1.57 4.85	16.88	2.37 19.15	38.41
Header - Rice (CL)	25' Rigid	240hp	64,400	300	8	0.253	3.40	5.79	4.08 4.27	17.56	6.14 16.85	40.56
Header - Rice (CL)	30' Rigid	275hp	74,100	300	8	0.211	2.83	5.53	3.91 7.11	19.40	5.89 28.08	53.38
Header - Rice (SL)	22' Rigid	240hp	21,887	300	8	0.250	3.35	5.71	1.36 4.20	14.63	2.05 16.59	33.29
Header - Rice (SL)	25' Rigid	240hp	64,400	300	8	0.220	2.94	5.02	3.54 3.70	15.21	5.32 14.60	35.15
Header - Rice (SL)	30' Rigid	275hp	74,100	300	8	0.183	2.45	4.79	3.39 6.16	16.82	5.10 24.33	46.26
Header - Soybean	15' Flex	240hp	0	300	8	0.170	2.28	3.89	0.00 2.86	9.03	0.00 11.30	20.34
Header - Soybean	18' Flex	240hp	20,300	300	8	0.141	1.90	3.24	0.72 2.38	8.25	1.08 9.42	18.75
Header - Soybean	22' Flex	240hp	31,800	300	8	0.116	1.55	2.65	0.92 1.95	7.08	1.38 7.70	16.18
Header - Soybean	25' Flex	275hp	34,300	300	8	0.102	1.36	2.67	0.87 3.43	8.35	1.31 13.56	23.23
Header - Soybean	30' Flex	275hp	39,600	300	8	0.085	1.14	2.22	0.84 2.86	7.07	1.26 11.30	19.64
Header Wheat/Sorghum	18' Rigid	240hp	19,069	300	8	0.141	1.90	3.24	0.67 2.38	8.20	1.01 9.42	18.64
Header Wheat/Sorghum	22' Rigid	240hp	19,600	300	8	0.116	1.55	2.65	0.56 1.95	6.73	0.85 7.70	15.29
Header Wheat/Sorghum	25' Rigid	240hp	24,300	300	8	0.102	1.36	2.33	0.62 1.71	6.04	0.93 6.78	13.76
Header Wheat/Sorghum	30' Rigid	275hp	28,300	300	8	0.085	1.14	2.22	0.60 2.86	6.83	0.90 11.30	19.04
Heavy Disk	14'	MFWD 150	24,400	180	10	0.145	1.56	2.08	0.98 0.65	5.28	2.09 3.92	11.30
Heavy Disk	21'	MFWD 170	40,600	180	10	0.097	1.04	1.57	1.09 0.51	4.22	2.31 3.25	9.80
Heavy Disk	27'	MFWD 190	50,400	180	10	0.075	0.80	1.36	1.05 0.43	3.67	2.23 2.77	8.68
LA Boom Sprayer	30 ft	MFWD 150	3,000	150	10	0.059	0.64	0.85	0.13 0.26	1.89	0.14 1.61	3.65
Land Plane	40'x10'	MFWD 190	6,020	200	10	0.242	2.59	4.39	0.29 1.41	8.68	0.77 8.88	18.33
Land Plane	50'x16'	MFWD 190	14,300	200	10	0.151	1.62	2.74	0.43 0.88	5.68	1.14 5.55	12.37
LARice Backhoe-Rrmnt	2 ft	MFWD 150	6,000	100	10	0.500	5.34	7.14	2.64 2.23	17.36	3.64 13.44	34.45
LARice Land Level	13 ft	MFWD 150	7,500	200	15	0.190	2.03	2.71	0.15 0.84	5.75	0.65 5.11	11.52
LARice Levee Plow	8 ft	4WD 300	4,600	150	10	0.050	0.53	1.42	0.07 0.43	2.47	0.18 2.76	5.42
LARice Water Level	24 ft	4WD 300	3,500	100	15	0.149	1.60	4.28	0.23 1.31	7.43	0.48 8.29	16.20
Levee Splitter (1/80	2 blade	2WD 150	3,280	50	10	0.004	0.04	0.05	0.00 0.01	0.11	0.02 0.08	0.23
Lo-Till & Bed	4R-38	MFWD 190	5,100	150	12	0.145	1.55	2.63	0.26 0.84	5.30	0.48 5.32	11.11
Middle Buster	6R-38	MFWD 150	12,800	160	8	0.120	1.28	1.71	0.36 0.53	3.89	1.13 3.23	8.26
Middle Buster	8R-30	MFWD 190	20,800	160	8	0.114	1.22	2.06	0.55 0.66	4.50	1.75 4.17	10.43
Middle Buster	8R-38	MFWD 190	18,100	160	8	0.090	0.96	1.63	0.38 0.52	3.50	1.20 3.30	8.01
Middle Buster	8R-40 2x1	MFWD 190	29,200	160	8	0.060	0.64	1.08	0.41 0.34	2.49	1.29 2.19	5.98
Middle Buster	10R-30	MFWD 225	29,300	160	8	0.091	0.97	1.95	0.62 0.62	4.18	1.97 3.91	10.07
Middle Buster	10R-38	MFWD 225	32,100	160	8	0.072	0.77	1.54	0.54 0.49	3.34	1.70 3.09	8.14
Middle Buster	12R-38	MFWD 225	29,200	160	8	0.060	0.64	1.28	0.41 0.40	2.75	1.29 2.57	6.62
Mulcher Plow	30'	MFWD 225	0	100	10	0.068	0.72	1.45	0.00 0.46	2.65	0.00 2.92	5.57
NT Grain Drill	12'	2WD 130	41,800	150	8	0.163	3.49	2.02	2.56 0.90	8.99	4.90 5.44	19.35
NT Grain Drill	15'	MFWD 150	49,200	150	8	0.130	2.79	1.87	2.41 0.58	7.67	4.62 3.52	15.81
NT Grain Drill	20'	MFWD 170	65,600	150	8	0.098	2.09	1.58	2.41 0.52	6.62	4.62 3.28	14.53
NT Grain Drill	24'	MFWD 190	82,400	150	8	0.081	1.74	1.48	2.52 0.47	6.23	4.83 2.99	14.06
NT Grain Drill	30'	MFWD 225	94,200	150	8	0.065	1.39	1.40	2.31 0.44	5.56	4.42 2.80	12.79
NT Grain Drill & Pre	12'	2WD 130	47,200	150	8	0.176	3.76	2.18	3.12 0.97	10.04	5.96 5.86	21.88
NT Grain Drill & Pre	15'	MFWD 150	55,100	150	8	0.141	3.01	2.01	2.91 0.63	8.57	5.57 3.79	17.93
NT Grain Drill & Pre	20'	MFWD 170	71,000	150	8	0.105	2.26	1.71	2.81 0.56	7.35	5.38 3.53	16.27
NT Grain Drill & Pre	24'	MFWD 190	87,800	150	8	0.088	1.88	1.59	2.90 0.51	6.89	5.55 3.22	15.67
NT Grain Drill & Pre	30'	MFWD 225	99,600	150	8	0.070	1.50	1.51	2.63 0.48	6.13	5.03 3.02	14.19
NT Plant&Pre-Folding	8R-38	MFWD 170	54,300	150	8	0.083	1.78	1.35	1.70 0.44	5.28	3.25 2.79	11.34
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	86,900	150	8	0.055	1.19	0.90	1.81 0.29	4.20	3.47 1.86	9.53
NT Plant&Pre-Folding	10R-30	MFWD 190	57,555	150	8	0.084	1.80	1.53	1.82 0.49	5.65	3.49 3.09	12.24
NT Plant&Pre-Folding	10R-38	MFWD 190	52,893	150	8	0.066	1.42	1.20	1.32 0.38	4.34	2.53 2.44	9.31
NT Plant&Pre-Folding	12R-20	MFWD 190	71,600	150	8	0.105	2.26	1.91	2.83 0.61	7.62	5.43 3.87	16.93
NT Plant&Pre-Folding	12R-30	MFWD 190	78,100	150	8	0.070	1.50	1.27	2.06 0.40	5.25	3.95 2.58	11.78

Appendix Table 4. Implements: estimated purchase price, annual use, useful life, performance rate, (Continued) and direct and fixed cost per acre, Louisiana 2017.

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 Plant&Pre-Folding	12R-38	MFWD 190	86,900	150	8	0.055	1.19	1.00	1.81	0.32	4.33	2.03	9.84
NT Plant&Pre-Folding	16R-30	MFWD 190	109,000	150	8	0.052	1.13	0.95	2.16	0.30	4.55	1.93	10.62
NT Plant&Pre-Folding	23R-15	MFWD 190	141,000	150	8	0.073	1.57	1.32	3.88	0.42	7.20	2.68	17.32
NT Plant&Pre-Folding	24R-20	MFWD 190	163,000	150	8	0.052	1.13	0.95	3.23	0.30	5.62	1.93	13.74
NT Plant&Pre-Folding	24R-30	MFWD 190	199,000	150	8	0.035	0.75	0.63	2.63	0.20	4.22	5.03	12.9
NT Plant&Pre-Rigid	4R-30	2WD 130	28,200	150	8	0.211	4.52	2.61	2.23	1.17	10.54	4.27	7.04
NT Plant&Pre-Rigid	4R-38	2WD 130	30,500	150	8	0.166	3.56	2.06	1.90	0.92	8.44	3.64	5.54
NT Plant&Pre-Rigid	6R-30	MFWD 150	39,600	150	8	0.141	3.01	2.01	2.09	0.63	7.75	4.00	3.79
NT Plant&Pre-Rigid	6R-38	MFWD 150	35,400	150	8	0.111	2.38	1.59	1.47	0.49	5.94	2.82	2.99
NT Plant&Pre-Rigid	8R-22	MFWD 170	26,219	150	8	0.143	3.07	2.32	1.41	0.76	7.58	2.70	4.81
NT Plant&Pre-Rigid	8R-30	MFWD 170	45,600	150	8	0.105	2.26	1.71	1.80	0.56	6.34	3.45	3.53
NT Plant&Pre-Rigid	8R-38	MFWD 170	42,900	150	8	0.077	1.65	1.24	1.24	0.41	4.55	2.37	2.58
NT Plant&Pre-Rigid	10R-30	MFWD 190	49,000	150	8	0.084	1.80	1.53	1.55	0.49	5.38	2.97	3.09
NT Plant&Pre-Rigid	12R-20	MFWD 190	57,100	150	8	0.105	2.26	1.91	2.26	0.61	7.05	4.33	3.87
NT Plant&Pre-Rigid	12R-30	MFWD 190	72,000	150	8	0.070	1.50	1.27	1.90	0.40	5.09	3.64	2.58
NT Plant-Folding	8R-38	MFWD 170	48,000	150	8	0.077	1.65	1.25	1.39	0.41	4.72	2.67	2.59
NT Plant-Folding	8R-38 2x1	MFWD 170	79,100	150	8	0.051	1.10	0.83	1.53	0.27	3.74	2.93	1.72
NT Plant-Folding	10R-30	MFWD 190	52,061	150	8	0.078	1.67	1.42	1.53	0.45	5.09	2.93	2.87
NT Plant-Folding	10R-38	MFWD 190	47,646	150	8	0.061	1.32	1.12	1.10	0.36	3.91	2.11	2.26
NT Plant-Folding	12R-20	MFWD 190	66,100	150	8	0.098	2.09	1.77	2.43	0.57	6.88	4.65	3.59
NT Plant-Folding	12R-30	MFWD 190	70,300	150	8	0.065	1.39	1.18	1.72	0.38	4.69	3.30	2.39
NT Plant-Folding	12R-38	MFWD 190	79,100	150	8	0.051	1.10	0.93	1.53	0.30	3.87	2.93	1.89
NT Plant-Folding	16R-30	MFWD 190	101,000	150	8	0.049	1.04	0.88	1.85	0.28	4.08	3.55	1.79
NT Plant-Folding	23R-15	MFWD 190	133,000	150	8	0.068	1.45	1.23	3.40	0.39	6.49	6.50	2.49
NT Plant-Folding	24R-20	MFWD 190	156,000	150	8	0.049	1.04	0.88	2.87	0.28	5.09	5.49	1.79
NT Plant-Folding	24R-30	MFWD 190	180,000	150	8	0.032	0.69	0.59	2.20	0.19	3.69	4.22	1.19
NT Plant-Rigid	4R-30	2WD 130	22,700	150	8	0.196	4.19	2.43	1.67	1.08	9.38	3.19	6.53
NT Plant-Rigid	4R-38	2WD 130	25,100	150	8	0.154	3.30	1.91	1.45	0.85	7.53	2.78	5.14
NT Plant-Rigid	6R-30	MFWD 150	34,100	150	8	0.130	2.79	1.87	1.67	0.58	6.92	3.20	3.52
NT Plant-Rigid	6R-38	MFWD 150	29,900	150	8	0.103	2.21	1.47	1.15	0.46	5.30	2.21	2.78
NT Plant-Rigid	8R-22	MFWD 170	21,142	150	8	0.133	2.85	2.16	1.05	0.70	6.78	2.02	4.47
NT Plant-Rigid	8R-30	MFWD 170	40,200	150	8	0.098	2.09	1.58	1.48	0.52	5.69	2.83	3.28
NT Plant-Rigid	8R-38	MFWD 170	37,500	150	8	0.077	1.65	1.25	1.09	0.41	4.42	2.08	2.59
NT Plant-Rigid	10R-30	MFWD 190	41,900	150	8	0.078	1.67	1.42	1.23	0.45	4.79	2.36	2.87
NT Plant-Rigid	12R-20	MFWD 190	51,700	150	8	0.098	2.09	1.77	1.90	0.57	6.35	3.64	3.59
NT Plant-Rigid	12R-30	MFWD 190	56,200	150	8	0.065	1.39	1.18	1.37	0.38	4.34	2.63	2.39
Paratill & Bed	4R-30	MFWD 225	13,500	150	12	0.204	2.18	4.37	0.99	1.39	8.95	1.72	8.76
Paratill & Bed	4R-38	MFWD 225	13,500	150	12	0.160	1.71	3.44	0.78	1.09	7.04	1.36	6.90
Paratill & Bed	6R-30	MFWD 225	19,900	150	12	0.136	1.45	2.91	0.97	0.92	6.28	1.69	5.84
Paratill & Bed	6R-38	MFWD 225	18,800	150	12	0.107	1.14	2.30	0.73	0.73	4.91	1.26	4.61
Paratill & Bed	8R-30	MFWD 225	25,000	150	12	0.102	1.09	2.18	0.92	0.69	4.89	1.60	4.38
Paratill & Bed	8R382X1	MFWD 225	69,100	150	12	0.053	0.57	1.15	1.34	0.36	3.43	2.32	2.30
Paratill & Bed Fold.	8R-38	MFWD 225	54,400	150	12	0.080	0.86	1.73	1.58	0.55	4.73	2.75	3.46
Paratill & Bed Fold.	12R-38	MFWD 225	69,100	150	12	0.053	0.57	1.15	1.34	0.36	3.43	2.32	2.30
Paratill & Bed Rigid	8R-38	MFWD 225	25,000	150	12	0.080	0.86	1.73	0.72	0.55	3.87	1.26	3.46
Pipe Drag	30'	2WD 150	500	100	12	0.051	0.55	0.73	0.00	0.17	1.47	0.02	1.05
Pipe Spool 160ac	1/4m roll	2WD 130	3,660	15	12	0.003	0.09	0.03	0.00	0.01	0.15	0.07	0.10
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.17	0.04	0.00	0.02	0.24	0.00	0.12
Plant & Pre Folding	8R-38	MFWD 170	48,700	150	8	0.080	1.71	1.29	1.46	0.42	4.90	2.80	2.68
Plant & Pre Folding	8R38 2x1	MFWD 170	79,800	150	8	0.053	1.14	0.86	1.59	0.28	3.89	3.05	1.78
Plant & Pre Folding	10R-30	MFWD 190	52,920	150	8	0.081	1.73	1.46	1.61	0.47	5.29	3.08	2.97
Plant & Pre Folding	10R-38	MFWD 190	48,258	150	8	0.064	1.36	1.15	1.15	0.37	4.06	2.21	2.34
Plant & Pre Folding	12R-20	MFWD 190	64,600	150	8	0.101	2.17	1.83	2.45	0.59	7.05	4.70	3.71
Plant & Pre Folding	12R-30	MFWD 190	71,100	150	8	0.067	1.44	1.22	1.80	0.39	4.87	3.45	2.47
Plant & Pre Folding	12R-38	MFWD 190	79,800	150	8	0.053	1.14	0.96	1.59	0.31	4.01	3.05	1.95
Plant & Pre Folding	16R-30	MFWD 190	99,600	150	8	0.050	1.08	0.91	1.89	0.29	4.19	3.62	1.85
Plant & Pre Folding	23R-15	MFWD 190	127,000	150	8	0.070	1.50	1.27	3.35	0.40	6.55	6.42	2.58
Plant & Pre Folding	24R-20	MFWD 190	149,000	150	8	0.050	1.08	0.91	2.83	0.29	5.13	5.42	1.85
Plant & Pre Folding	24R-30	MFWD 190	185,000	150	8	0.033	0.72	0.61	2.34	0.19	3.88	4.49	1.23
Plant & Pre Rigid	4R-30	2WD 130	25,800	150	8	0.203	4.34	2.51	1.96	1.12	9.94	3.75	6.75
Plant & Pre Rigid	4R-38	2WD 130	28,200	150	8	0.159	3.41	1.97	1.69	0.88	7.97	3.23	5.32
Plant & Pre Rigid	6R-30	MFWD 150	36,000	150	8	0.135	2.89	1.93	1.82	0.60	7.26	3.49	3.64
Plant & Pre Rigid	6R-38	MFWD 150	31,900	150	8	0.106	2.28	1.52	1.27	0.47	5.56	2.44	2.87
Plant & Pre Rigid	8R-22	MFWD 170	23,550	150	8	0.138	2.95	2.23	1.22	0.73	7.14	2.33	4.62
Plant & Pre Rigid	8R-30	MFWD 170	41,000	150	8	0.101	2.17	1.64	1.56	0.53	5.91	2.98	3.39
Plant & Pre Rigid	8R-38	MFWD 170	38,200	150	8	0.080	1.71	1.29	1.14	0.42	4.59	2.19	2.68
Plant & Pre Rigid	10R-30	MFWD 190	41,500	150	8	0.081	1.73	1.46	1.26	0.47	4.94	2.41	2.97
Plant & Pre Rigid	12R-20	MFWD 190	50,100	150	8	0.101	2.17	1.83	1.90	0.59	6.50	3.64	3.71
Plant & Pre Rigid	12R-30	MFWD 190	65,000	150	8	0.067	1.44	1.22	1.64	0.39	4.71	3.15	2.47
Plant - Folding	8R-38	MFWD 170	43,300	150	8	0.074	1.59	1.20	1.21	0.39	4.40	2.31	2.49
Plant - Folding	8R-38 2x1	MFWD 170	72,000	150	8	0.049	1.06	0.80	1.33	0.26	3.46	2.56	1.66
Plant - Folding	10R-30	MFWD 190	47,426	150	8	0.075	1.61	1.36	1.34	0.43	4.75	2.56	2.76
Plant - Folding	10R-38	MFWD 190	43,011	150	8	0.059	1.27	1.07	0.95	0.34	3.65	1.83	2.17
Plant - Folding	12R-20	MFWD 190	59,100	150	8	0.094	2.01	1.70	2.08	0.54	6.35	3.99	3.45
Plant - Folding	12R-30	MFWD 190	63,300	150	8	0.062	1.34	1.13	1.49	0.36	4.33	2.85	2.30
Plant - Folding	12R-38	MFWD 190	72,000	150	8	0.049	1.06	0.89	1.33	0.28	3.58	2.56	1.81
Plant - Folding	16R-30	MFWD 190	91,800	150	8	0.047	1.00	0.85	1.62	0.27	3.75	3.10	1.72
Plant - Folding	23R-15	MFWD 190	119,000	150	8	0.065	1.39	1.18	2.92	0.38	5.88	5.58	2.39
Plant - Folding	24R-2												

Appendix Table 4. Implements: estimated purchase price, annual use, useful life, performance rate,
(Continued) and direct and fixed cost per acre, Louisiana 2017.

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-----						
Plant - Rigid	6R-30	MFWD 150	30,600	150	8	0.125	2.68	1.79	1.44	0.56	6.48	2.75	12.62
Plant - Rigid	6R-38	MFWD 150	26,400	150	8	0.099	2.12	1.41	0.98	0.44	4.96	1.87	9.51
Plant - Rigid	8R-22	MFWD 170	18,473	150	8	0.127	2.73	2.07	0.88	0.67	6.37	1.69	12.34
Plant - Rigid	8R-30	MFWD 170	35,500	150	8	0.094	2.01	1.52	1.25	0.50	5.29	2.40	10.85
Plant - Rigid	8R-38	MFWD 170	32,800	150	8	0.074	1.59	1.20	0.91	0.39	4.11	1.75	2.49
Plant - Rigid	10R-30	MFWD 190	36,100	150	8	0.075	1.61	1.36	1.02	0.43	4.43	1.95	2.76
Plant - Rigid	12R-20	MFWD 190	44,600	150	8	0.094	2.01	1.70	1.57	0.54	5.84	3.01	3.45
Plant - Rigid	12R-30	MFWD 190	57,200	150	8	0.062	1.34	1.13	1.34	0.36	4.19	2.57	2.30
Plant - Rigid	15R-15	2WD 150	54,400	150	8	0.094	2.01	1.34	1.92	0.31	5.60	3.67	1.91
Pull Levee (1m/80a))	4 blade	2WD 50	3,180	100	10	0.003	0.03	0.01	0.00	0.00	0.05	0.01	0.01
Rice Grain Cart	500 Bu	MFWD 190	23,900	200	12	0.057	0.61	1.03	0.36	0.33	2.34	0.64	2.09
Rice Grain Cart	700 Bu	MFWD 190	36,800	200	12	0.063	0.67	1.14	0.63	0.36	2.82	1.09	2.32
Roller	32'	MFWD 170	17,500	100	12	0.046	0.49	0.75	0.13	0.24	1.63	0.76	1.56
Rotary Cutter	7'	MFWD 130	4,690	185	10	0.168	1.79	2.08	0.64	0.64	5.17	0.45	3.89
Rotary Cutter	12'	2WD 150	16,000	185	10	0.098	1.04	1.40	1.27	0.33	4.05	0.89	1.99
Rotary Cutter	15'	MFWD 150	19,400	185	10	0.078	0.83	1.12	1.23	0.35	3.54	0.87	2.11
Row Cond & Inc	13'	2WD 130	13,300	100	10	0.137	2.21	1.70	0.45	0.76	5.14	1.93	4.59
Row Cond & Inc	21'	2WD 170	16,700	100	10	0.085	1.36	1.38	0.35	0.41	3.52	1.50	2.62
Row Cond & Inc	26'	MFWD 190	19,600	100	10	0.063	1.01	1.14	0.31	0.36	2.84	1.31	2.32
Row Cond & Inc	38'	MFWD 225	24,600	100	10	0.047	0.75	1.01	0.29	0.32	2.37	1.22	2.02
Row Cond & Inc	42'	MFWD 225	20,400	100	10	0.040	0.64	0.86	0.20	0.27	1.98	0.86	1.72
Row Cond (Harrow)	13'	2WD 130	7,300	100	10	0.114	1.22	1.42	0.20	0.63	3.49	0.88	3.82
Row Cond (Harrow)	21'	2WD 170	12,000	100	10	0.071	0.76	1.15	0.21	0.34	2.47	0.90	2.18
Row Cond (Harrow)	27'	MFWD 190	12,400	100	10	0.057	0.61	1.03	0.17	0.33	2.16	0.75	2.10
Row Cond (Harrow)	38'	MFWD 225	22,200	100	10	0.039	0.42	0.84	0.21	0.26	1.74	0.92	1.68
Row Cond (Harrow)	42'	MFWD 225	15,582	100	10	0.035	0.38	0.76	0.13	0.24	1.52	0.58	1.52
Row Cond (Plant)	13'	2WD 130	7,120	100	10	0.157	1.68	1.94	0.27	0.86	4.77	1.18	5.23
Row Cond (Plant)	21'	2WD 170	11,700	100	10	0.097	1.04	1.57	0.28	0.47	3.37	1.20	2.98
Row Cond (Plant)	27'	MFWD 190	12,400	100	10	0.078	0.84	1.42	0.24	0.45	2.96	1.02	2.87
Row Cond (Plant)	38'	MFWD 225	16,587	100	10	0.053	0.57	1.15	0.22	0.36	2.31	0.94	2.30
Row Cond (Plant)	42'	MFWD 225	15,582	100	10	0.048	0.52	1.04	0.18	0.33	2.08	0.80	2.08
RT Cult (Early)	8R-30	2WD 170	20,774	200	12	0.103	1.10	1.66	1.02	0.50	4.30	1.04	3.16
RT Cult (Early)	12R-30	2WD 190	29,998	200	12	0.068	0.73	1.24	0.98	0.30	3.27	1.00	1.93
RT Cult (Late)	8R-30	2WD 170	20,774	200	12	0.128	1.37	2.08	1.28	0.62	5.37	1.30	3.95
RT Cult (Late)	12R-30	2WD 190	29,998	200	12	0.085	0.91	1.55	1.23	0.38	4.09	1.25	2.41
RT Cult + PD (Early)	8R-30	2WD 150	26,264	200	12	0.110	1.76	1.57	1.38	0.37	5.09	1.40	2.23
RT Cult + PD (Early)	12R-30	MFWD 225	35,493	200	12	0.073	1.17	1.57	1.24	0.49	4.49	1.26	3.14
RT Cult + PD (Late)	8R-30	2WD 170	26,264	200	12	0.137	2.20	2.22	1.73	0.67	6.83	1.75	4.22
RT Cult + PD (Late)	12R-30	2WD 190	35,493	200	12	0.091	1.46	1.65	1.55	0.40	5.09	1.57	2.57
Spin Spreader	5 ton	MFWD 190	11,800	100	8	0.042	0.89	0.76	0.27	0.24	2.18	0.56	1.54
Spin Spreader	5 ton	MFWD 190	11,800	100	8	0.042	0.89	0.76	0.27	0.24	2.18	0.56	1.54
Spray (Band)	27'	MFWD 170	5,440	200	8	0.062	1.00	1.01	0.15	0.33	2.51	0.19	2.09
Spray (Band)	40'	MFWD 170	7,810	200	8	0.042	0.67	0.68	0.15	0.22	1.74	0.18	1.41
Spray (Band)	50'	MFWD 170	6,940	200	8	0.033	0.54	0.54	0.11	0.17	1.38	0.13	1.13
Spray (Band)	53'	MFWD 170	9,620	200	8	0.031	0.51	0.51	0.14	0.16	1.34	0.17	1.06
Spray (Band)	60'	MFWD 170	18,600	200	8	0.028	0.45	0.45	0.24	0.14	1.30	0.29	0.94
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,480	200	8	0.130	2.08	1.85	0.33	0.58	4.86	0.40	3.50
Spray (Bcast/HB)	20' Rigid	2WD 50	6,450	200	8	0.084	1.35	0.40	0.25	0.05	2.07	0.30	0.33
Spray (Bcast/HB)	27' Fold	MFWD 170	10,700	200	8	0.062	1.00	1.01	0.31	0.33	2.66	0.37	2.09
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,830	200	8	0.062	1.00	1.01	0.23	0.33	2.58	0.27	2.09
Spray (Bcast/HB)	30' Fold	MFWD 170	16,500	200	8	0.056	0.90	0.91	0.43	0.29	2.55	0.52	1.88
Spray (Bcast/HB)	40' Fold	MFWD 170	16,100	200	8	0.042	0.67	0.68	0.31	0.22	1.90	0.38	1.41
Spray (Bcast/HB/HD)	27'	MFWD 170	22,400	200	8	0.062	1.00	1.01	0.65	0.33	3.01	0.79	2.09
Spray (Bcast/HB/HD)	40'	MFWD 170	32,200	200	8	0.042	0.67	0.68	0.63	0.22	2.22	0.76	1.41
Spray (Broadcast)	27'	MFWD 170	5,440	200	8	0.062	1.00	1.01	0.15	0.33	2.51	0.19	2.09
Spray (Broadcast)	40'	MFWD 170	7,810	200	8	0.042	0.67	0.68	0.15	0.22	1.74	0.18	1.41
Spray (Broadcast)	50'	MFWD 170	6,940	200	8	0.033	0.54	0.54	0.11	0.17	1.38	0.13	1.13
Spray (Broadcast)	53'	MFWD 170	9,620	200	8	0.031	0.51	0.51	0.14	0.16	1.34	0.17	1.06
Spray (Broadcast)	60'	MFWD 170	18,600	200	8	0.028	0.45	0.45	0.24	0.14	1.30	0.29	0.94
Spray (Direct/Hood)	8R-30	MFWD 170	15,600	200	8	0.084	1.35	1.36	0.61	0.44	3.79	0.74	2.83
Spray (Direct/Hood)	8R-38	MFWD 170	16,600	200	8	0.066	1.07	1.08	0.52	0.35	3.03	0.62	2.23
Spray (Direct/Hood)	12R-30	MFWD 170	22,200	200	8	0.056	0.90	0.91	0.58	0.29	2.70	0.70	1.88
Spray (Direct/Hood)	12R-38	MFWD 170	22,500	200	8	0.044	0.71	0.72	0.46	0.23	2.14	0.56	1.48
Spray (Direct/Layby)	8R-30	MFWD 170	12,700	200	8	0.084	1.35	1.36	0.50	0.44	3.68	0.60	2.83
Spray (Direct/Layby)	8R-38	MFWD 170	12,700	200	8	0.066	1.07	1.08	0.39	0.35	2.90	0.47	2.23
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	17,300	200	8	0.044	0.71	0.72	0.36	0.23	2.03	0.43	1.48
Spray (Direct/Layby)	10R-30	MFWD 170	12,200	200	8	0.067	1.08	1.09	0.38	0.35	2.92	0.46	2.26
Spray (Direct/Layby)	12R-30	MFWD 170	17,400	200	8	0.056	0.90	0.91	0.46	0.29	2.57	0.55	1.88
Spray (Direct/Layby)	12R-38	MFWD 170	17,300	200	8	0.044	0.71	0.72	0.36	0.23	2.03	0.43	1.48
Spray (Direct/Layby)	16R-20	MFWD 170	10,000	200	8	0.063	1.01	1.02	0.29	0.33	2.67	0.35	2.12
Spray (Spot)	27'	MFWD 170	5,440	200	8	0.062	1.00	1.01	0.15	0.33	2.51	0.19	2.09
Spray (Spot)	40'	MFWD 170	7,810	200	8	0.042	0.67	0.68	0.15	0.22	1.74	0.18	1.41
Spray (Spot)	50'	MFWD 170	6,940	200	8	0.033	0.54	0.54	0.11	0.17	1.38	0.13	1.13
Spray (Spot)	53'	MFWD 170	9,620	200	8	0.031	0.51	0.51	0.14	0.16	1.34	0.17	1.06
Spray (Spot)	60'	MFWD 170	18,600	200	8	0.028	0.45	0.45	0.24	0.14	1.30	0.29	0.94
Stalk Shredder	14'	MFWD 150	12,800	200	10	0.117	1.25	1.68	1.32	0.52	4.79	0.79	3.16
Stalk Shredder	20'	MFWD 150	29,800	200	10	0.082	0.88	1.17	2.15	0.36	4.58	1.29	2.21
Stalk Shredder-Flail	12'	MFWD 150	15,500	200	10	0.137	1.46	1.96	1.86	0.61	5.91	1.12	3.69
Stalk Shredder-Flail	20'	MFWD 150	27,000	200	10	0.082	0.88	1.17	1.94	0.36	4.37	1.17	2.21
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.18	3.69	0.24	1.18	7.31	0.59	7.47
Subsoiler	4 shank	MFWD 225	9,340	100	15	0.153	1.64	3.29	0.47	1.04	6.45	1.18	6.59
Subsoiler	5 shank	MFWD 225	10,800	100	15	0.122	1.30	2.62	0.44	0.83	5.20	1.08	5.24

Appendix Table 4. Implements: estimated purchase price, annual use, useful life, performance rate,
(Continued) and direct and fixed cost per acre, Louisiana 2017.

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		
Subsoiler low-till	4 shank	MFWD 225	10,800	100	15	0.153	1.64	3.29	0.55	1.04	6.53	14.49
Subsoiler low-till	6 shank	MFWD 225	16,600	100	15	0.102	1.09	2.18	0.56	0.69	4.54	10.32
Subsoiler low-till	8 shank	MFWD 225	20,600	100	15	0.076	0.81	1.63	0.52	0.52	3.50	8.08
TerraTill Bed w/roll	4R-38	MFWD 225	14,300	150	12	0.160	1.71	3.44	0.83	1.09	7.09	15.43
TerraTill Bed w/roll	6R-38	MFWD 225	19,400	150	12	0.107	1.14	2.30	0.75	0.73	4.93	10.86
TerraTill Bed w/roll	4R-30	MFWD 225	14,300	150	12	0.204	2.18	4.37	1.05	1.39	9.00	19.60
TerraTill Bed w/roll	6R-30	MFWD 225	15,310	150	12	0.136	1.45	2.91	0.75	0.92	6.05	13.20
Boll Buggy-1st Pick	2R38"157hp	MFWD 190	30,500	200	10	0.519	5.55	9.40	3.96	3.02	21.93	49.01
Boll Buggy-1st pick	4R2x1260hp	MFWD 190	30,500	200	10	0.172	1.84	3.11	1.31	1.00	7.27	16.25
Boll Buggy-1st pick	4R30"255hp	MFWD 190	30,500	200	10	0.327	3.49	5.92	2.49	1.90	13.82	30.88
Boll Buggy-1st pick	4R30"325hp	MFWD 190	30,500	200	10	0.327	3.49	5.92	2.49	1.90	13.82	30.88
Boll Buggy-1st pick	4R38"255hp	MFWD 190	30,500	200	10	0.257	2.75	4.66	1.96	1.49	10.88	24.31
Boll Buggy-1st pick	4R38"325hp	MFWD 190	30,500	200	10	0.257	2.75	4.66	1.96	1.49	10.88	24.31
Boll Buggy-1st pick	5R30"255hp	MFWD 190	30,500	200	10	0.261	2.79	4.73	1.99	1.52	11.05	24.70
Boll Buggy-1st pick	5R38"255hp	MFWD 190	30,500	200	10	0.207	2.21	3.74	1.57	1.20	8.74	19.54
Boll Buggy-1st pick	6R30"325hp	MFWD 190	30,500	200	10	0.218	2.33	3.94	1.66	1.26	9.21	20.58
Boll Buggy-1st pick	6R38"325hp	MFWD 190	30,500	200	10	0.172	1.84	3.11	1.31	1.00	7.27	16.25
Boll Buggy-2nd pick	2R38"157hp	MFWD 190	30,500	200	10	0.440	4.70	7.96	3.35	2.55	18.58	41.52
Boll Buggy-2nd pick	4R2x1260hp	MFWD 190	30,500	200	10	0.145	1.56	2.64	1.11	0.84	6.16	13.76
Boll Buggy-2nd pick	4R30"255hp	MFWD 190	30,500	200	10	0.277	2.96	5.01	2.11	1.61	11.70	26.15
Boll Buggy-2nd pick	4R30"325hp	MFWD 190	30,500	200	10	0.277	2.96	5.01	2.11	1.61	11.70	26.15
Boll Buggy-2nd pick	4R38 255hp	MFWD 190	30,500	200	10	0.218	2.33	3.95	1.66	1.26	9.21	20.59
Boll Buggy-2nd pick	4R38 325hp	MFWD 190	30,500	200	10	0.218	2.33	3.95	1.66	1.26	9.21	20.59
Boll Buggy-2nd pick	5R30"255hp	MFWD 190	30,500	200	10	0.221	2.37	4.01	1.69	1.28	9.36	20.92
Boll Buggy-2nd pick	5R38"255hp	MFWD 190	30,500	200	10	0.175	1.87	3.17	1.33	1.02	7.41	16.55
Boll Buggy-2nd pick	6R30"325hp	MFWD 190	30,500	200	10	0.184	1.97	3.34	1.40	1.07	7.80	17.43
Boll Buggy-2nd pick	6R38"325hp	MFWD 190	30,500	200	10	0.145	1.56	2.64	1.11	0.84	6.16	13.76
Boll Buggy-Stripper	13' Bcast	MFWD 150	30,500	200	10	0.251	2.69	3.59	1.92	1.12	9.33	20.01
Boll Buggy-Stripper	16' Bcast	MFWD 150	30,500	200	10	0.204	2.18	2.92	1.56	0.91	7.58	16.25
Boll Buggy-Stripper	19' Bcast	MFWD 150	30,500	200	10	0.172	1.84	2.46	1.31	0.77	6.38	13.69
Boll Buggy-Stripper	4R30"2X1Br	MFWD 150	30,500	200	10	0.218	2.33	3.11	1.66	0.97	8.08	17.34
Boll Buggy-Stripper	4R30"Brush	MFWD 150	30,500	200	10	0.327	3.49	4.67	2.49	1.46	12.13	26.01
Boll Buggy-Stripper	4R38"2X1Br	MFWD 150	30,500	200	10	0.172	1.84	2.46	1.31	0.77	6.38	13.69
Boll Buggy-Stripper	4R38"Brush	MFWD 150	30,500	200	10	0.257	2.75	3.68	1.96	1.15	9.55	20.48
Boll Buggy-Stripper	5R30"Brush	MFWD 150	30,500	200	10	0.261	2.79	3.74	1.99	1.17	9.70	20.81
Boll Buggy-Stripper	5R38"Brush	MFWD 150	30,500	200	10	0.207	2.21	2.95	1.57	0.92	7.68	16.46
Boll Buggy-Stripper	6R30"Brush	MFWD 150	30,500	200	10	0.218	2.33	3.11	1.66	0.97	8.08	17.34
Module Builder-1st	2R-38(157)	MFWD 190	31,300	200	10	0.519	11.11	9.40	4.06	3.02	27.59	54.88
Module Builder-1st	4R-30(255)	MFWD 190	34,700	200	10	0.327	6.99	5.92	2.84	1.90	17.66	35.42
Module Builder-1st	4R-30(325)	MFWD 190	34,700	200	10	0.327	6.99	5.92	2.84	1.90	17.66	35.42
Module Builder-1st	4R-38(255)	MFWD 190	34,700	200	10	0.257	5.51	4.66	2.23	1.49	13.90	27.89
Module Builder-1st	4R-38(325)	MFWD 190	34,700	200	10	0.257	5.51	4.66	2.23	1.49	13.90	27.89
Module Builder-1st	4R2x1260hp	MFWD 190	34,700	200	10	0.172	3.68	3.11	1.49	1.00	9.29	18.64
Module Builder-1st	5R-30(255)	MFWD 190	34,700	200	10	0.261	5.59	4.73	2.27	1.52	14.13	28.33
Module Builder-1st	5R-38(255)	MFWD 190	34,700	200	10	0.207	4.43	3.74	1.79	1.20	11.18	22.41
Module Builder-1st	6R-30(325)	MFWD 190	34,700	200	10	0.218	4.66	3.94	1.89	1.26	11.77	23.61
Module Builder-1st	6R-38(325)	MFWD 190	34,700	200	10	0.172	3.68	3.11	1.49	1.00	9.29	18.64
Module Builder-2nd	2R-38(157)	MFWD 190	34,700	200	10	0.440	9.41	7.96	3.81	2.55	23.75	47.62
Module Builder-2nd	4R-30(255)	MFWD 190	34,700	200	10	0.277	5.92	5.01	2.40	1.61	14.96	30.00
Module Builder-2nd	4R-30(325)	MFWD 190	34,700	200	10	0.277	5.92	5.01	2.40	1.61	14.96	30.00
Module Builder-2nd	4R-38(255)	MFWD 190	34,700	200	10	0.218	4.66	3.95	1.89	1.26	11.78	23.62
Module Builder-2nd	4R-38(325)	MFWD 190	34,700	200	10	0.218	4.66	3.95	1.89	1.26	11.78	23.62
Module Builder-2nd	4R2x1 255	MFWD 190	34,700	200	10	0.145	3.12	2.64	1.26	0.84	7.87	15.79
Module Builder-2nd	5R-30(255)	MFWD 190	34,700	200	10	0.221	4.74	4.01	1.92	1.28	11.97	24.00
Module Builder-2nd	5R-38(255)	MFWD 190	34,700	200	10	0.175	3.75	3.17	1.52	1.02	9.47	18.99
Module Builder-2nd	6R-30(325)	MFWD 190	34,700	200	10	0.184	3.95	3.34	1.60	1.07	9.97	20.00
Module Builder-2nd	6R-38(325)	MFWD 190	34,700	200	10	0.145	3.12	2.64	1.26	0.84	7.87	15.79
Module Builder-Strip	13' Bcast	MFWD 150	34,700	200	10	0.251	5.38	3.59	2.18	1.12	12.29	23.50
Module Builder-Strip	16' Bcast	MFWD 150	34,700	200	10	0.204	4.37	2.92	1.77	0.91	9.98	19.09
Module Builder-Strip	19' Brush	MFWD 150	34,700	200	10	0.172	3.68	2.46	1.49	0.77	8.41	16.08
Module Builder-Strip	4R-30	MFWD 150	34,700	200	10	0.327	6.99	4.67	2.84	1.46	15.97	30.55
Module Builder-Strip	4R-30 2X1	MFWD 150	34,700	200	10	0.218	4.66	3.11	1.89	0.97	10.65	20.37
Module Builder-Strip	4R-38	MFWD 150	34,700	200	10	0.257	5.51	3.68	2.23	1.15	12.58	24.06
Module Builder-Strip	4R-38 2X1	MFWD 150	34,700	200	10	0.172	3.68	2.46	1.49	0.77	8.41	16.08
Module Builder-Strip	5R-30	MFWD 150	34,700	200	10	0.261	5.59	3.74	2.27	1.17	12.78	24.44
Module Builder-Strip	5R-38	MFWD 150	34,700	200	10	0.207	4.42	2.95	1.79	0.92	10.11	19.34