Projected Costs and Returns Crop Enterprise Budgets for Sorghum Production in Louisiana, 2024

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by

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Introduction

This publication presents estimates of projected costs and returns for grain sorghum production in Louisiana for the 2024 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 2024 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 2024 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 $14.53 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 $17.94 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 8.25% per year. Operating capital was assumed to be borrowed in a manner consistent with timely acquisition of inputs. Fuel price for diesel was $3.50 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 8.50%. 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. A single general farm overhead charge is included in each crop enterprise budget included in this report. This single overhead charge is based on production cost data published by the Economic Research Service, USDA for major crops produced in this region of the United States.

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
Grain Sorghum, 8-row equipment, 38 inch rows, non-irrigated, Northeast Louisiana, 2024.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	8.11	1.5000	12.17	_________
App by Air (3 gal)	appl	6.87	2.0000	13.74	_________
FERTILIZERS					
LA Nitrogen	lb	0.59	110.0000	64.90	_________
LA Phosphate	lb	0.75	40.0000	30.00	_________
LA Potash	lb	0.43	40.0000	17.20	_________
FUNGICIDES					
Cruiser 5FS	oz	0.90	1.2800	1.15	_________
Quadris	oz	6.25	6.0000	37.50	_________
HERBICIDES					
Roundup WeatherMax	oz	0.19	55.0000	10.45	_________
2,4-D Amine 4	pt	2.85	2.0000	5.70	_________
Atrazine 4L	pt	2.75	4.0000	11.00	_________
Dual II Magnum	pt	13.25	1.0000	13.25	_________
INSECTICIDES					
Karate Z	oz	1.41	2.1300	3.00	_________
Belt	oz	6.41	2.5000	16.02	_________
Transform	oz	9.34	1.0000	9.34	_________
Sivanto	oz	3.01	4.0000	12.04	_________
SEED/PLANTS					
Sorghum Concept	lb	2.84	6.0000	17.04	_________
SERVICE FEE					
Digital Ag Fee	acre	10.00	1.0000	10.00	_________
Soil Test	acre	10.00	0.3300	3.30	_________
CUSTOM FERT/LIME					
Lime (Spread)	ton	65.00	0.3300	21.45	_________
CUSTOM HARVEST/HAUL					
Haul Sorghum	bu	0.25	100.0000	25.00	_________
OPERATOR LABOR					
Harvesters	hour	17.94	0.0851	1.53	_________
LA Hired Labor					
Implements	hour	14.53	0.1190	1.73	_________
Tractors	hour	14.53	0.4011	5.84	_________
DIESEL FUEL					
Tractors	gal	3.50	3.4993	12.26	_________
Harvesters	gal	3.50	1.2047	4.22	_________
REPAIR & MAINTENANCE					
Implements	Acre	8.49	1.0000	8.49	_________
Tractors	Acre	2.14	1.0000	2.14	_________
Harvesters	Acre	3.47	1.0000	3.47	_________
INTEREST ON OP. CAP.	Acre	15.84	1.0000	15.84	_________
TOTAL DIRECT EXPENSES				389.77	_________
FIXED EXPENSES					
Implements	Acre	14.41	1.0000	14.41	_________
Tractors	Acre	16.45	1.0000	16.45	_________
Harvesters	Acre	16.60	1.0000	16.60	_________
TOTAL FIXED EXPENSES				47.46	_________
TOTAL SPECIFIED EXPENSES				437.23	_________

Table 1.B Estimated resource use and costs for field operations, per Acre
Grain Sorghum, 8-row equipment, 38 inch rows, non-irrigated,
Northeast Louisiana, 2024.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						-----------dollars-----------					dollars		---------dollars---------		
Lime (Spread)	ton			0.33	Oct							0.3300	65.00	21.45	21.45
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	0.074	1.00	Oct	3.02	3.69	0.67	2.21	0.07	1.08				10.67
Roller	32'	MFWD 170	0.046	1.00	Oct	1.67	1.85	0.18	1.29	0.04	0.68				5.67
Ditcher		2WD 130	0.020	1.00	Oct	0.54	0.55	0.07	0.12	0.02	0.29				1.57
App by Air (5 gal)	appl			1.00	Mar							1.0000	8.11	8.11	8.11
Roundup WeatherMax	oz											22.0000	0.19	4.18	4.18
2,4-D Amine 4	pt											2.0000	2.85	5.70	5.70
Ditcher		2WD 130	0.020	1.00	Apr	0.54	0.55	0.07	0.12	0.02	0.29				1.57
Plant & Pre Rigid	8R-38	MFWD 170	0.080	1.00	Apr	2.87	3.18	1.63	3.94	0.16	2.34				13.96
Sorghum Concept	lb											6.0000	2.84	17.04	17.04
Cruiser 5FS	oz											1.2800	0.90	1.15	1.15
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Apr	3.16	3.87	1.53	2.14	0.11	1.69				12.39
LA Nitrogen	lb											110.0000	0.59	64.90	64.90
LA Phosphate	lb											40.0000	0.75	30.00	30.00
LA Potash	lb											40.0000	0.43	17.20	17.20
Atrazine 4L	pt			1.00	Apr							4.0000	2.75	11.00	11.00
Roundup WeatherMax	oz											22.0000	0.19	4.18	4.18
Dual II Magnum	pt											1.0000	13.25	13.25	13.25
App by Air (3 gal)	appl			1.00	Jul							1.0000	6.87	6.87	6.87
Karate Z	oz											2.1300	1.41	3.00	3.00
Quadris	oz											6.0000	6.25	37.50	37.50
App by Air (3 gal)	appl			1.00	Jul							1.0000	6.87	6.87	6.87
Belt	oz											2.5000	6.41	16.02	16.02
Transform	oz											1.0000	9.34	9.34	9.34
Sivanto	oz											4.0000	3.01	12.04	12.04
App by Air (5 gal)	appl			0.50	Aug							0.5000	8.11	4.06	4.06
Roundup WeatherMax	oz											11.0000	0.19	2.09	2.09
Header Wheat/Sorghum	30' Rigid	275hp	0.085	1.00	Aug	7.69	16.60	1.17	2.20	0.08	1.53				29.19
Haul Sorghum	bu			1.00	Aug							100.0000	0.25	25.00	25.00
Digital Ag Fee	acre			1.00	Aug							1.0000	10.00	10.00	10.00
Soil Test	acre											0.3300	10.00	3.30	3.30
Stalk Shredder-Flail	20'	MFWD 150	0.082	1.00	Sep	2.60	2.76	3.17	2.39	0.08	1.20				12.12
TOTALS						22.09	33.05	8.49	14.41	0.60	9.10			334.25	421.39
INTEREST ON OPERATING CAPITAL															15.84
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															437.23

Table 1.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Grain Sorghum, 8-row equipment, 38 inch rows, non-irrigated,
Northeast Louisiana, 2024.

			BREAKEVEN PRICE										
Grain Sorghum			2.68	2.85	3.05	3.29	3.56	3.89	4.30	4.80	5.45	6.32	7.53
PERCENT	YIELD	UNIT	dollars										
50	50.00	bu	-242	-234	-224	-212	-198	-182	-161	-136	-104	-60	0
			-290	-281	-271	-259	-246	-229	-209	-183	-151	-108	-47
60	60.00	bu	-218	-208	-196	-182	-165	-145	-121	-91	-52	0	72
			-265	-255	-243	-229	-212	-193	-168	-138	-99	-47	25
70	70.00	bu	-194	-182	-168	-151	-132	-109	-80	-45	0	60	145
			-241	-229	-215	-199	-179	-156	-128	-92	-47	13	98
80	80.00	bu	-169	-156	-140	-121	-99	-72	-40	0	52	121	218
			-217	-203	-187	-168	-146	-120	-87	-47	4	73	170
90	90.00	bu	-145	-130	-112	-91	-66	-36	0	45	104	182	291
			-193	-177	-159	-138	-113	-83	-47	-1	56	134	243
100	100.00	bu	-121	-104	-84	-60	-33	0	40	91	156	242	364
			-168	-151	-131	-108	-80	-47	-7	43	108	195	316
110	110.00	bu	-97	-78	-56	-30	0	36	80	136	208	303	436
			-144	-125	-103	-77	-47	-11	33	89	160	255	389
120	120.00	bu	-72	-52	-28	0	33	72	121	182	260	364	509
			-120	-99	-75	-47	-14	25	73	134	212	316	462
130	130.00	bu	-48	-26	0	30	66	109	161	227	312	424	582
			-96	-73	-47	-17	18	61	114	180	264	377	535
140	140.00	bu	-24	0	28	60	99	145	202	273	364	485	655
			-71	-47	-19	13	51	98	154	225	316	437	607
150	150.00	bu	0	26	56	91	132	182	242	318	416	546	728
			-47	-21	8	43	84	134	195	271	368	498	680

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
Grain Sorghum, 8-row equipment, 38 inch rows, non-irrigated,
Northeast Louisiana, 2024.

			BREAKEVEN PRICE										
Grain Sorghum			3.00	3.19	3.42	3.68	3.99	4.37	4.82	5.40	6.13	7.11	8.48
PERCENT	YIELD	UNIT	dollars										
50	50.00	bu	-226	-217	-205	-192	-177	-158	-135	-106	-70	-21	47
			-274	-264	-253	-240	-224	-205	-182	-154	-117	-68	0
60	60.00	bu	-199	-187	-174	-158	-139	-117	-89	-55	-11	47	129
			-246	-235	-221	-205	-187	-164	-137	-102	-58	0	82
70	70.00	bu	-172	-158	-142	-124	-102	-76	-43	-3	47	116	212
			-219	-205	-189	-171	-149	-123	-91	-51	0	68	164
80	80.00	bu	-144	-128	-110	-89	-64	-34	1	47	106	184	294
			-192	-176	-158	-137	-112	-82	-45	0	58	137	246
90	90.00	bu	-117	-99	-79	-55	-27	6	47	98	165	253	376
			-164	-146	-126	-102	-74	-41	0	51	117	205	329
100	100.00	bu	-89	-70	-47	-21	10	47	93	150	223	321	459
			-137	-117	-94	-68	-37	0	45	102	176	274	411
110	110.00	bu	-62	-40	-15	13	47	88	138	201	282	390	541
			-109	-88	-63	-34	0	41	91	154	235	342	493
120	120.00	bu	-34	-11	15	47	84	129	184	253	341	459	623
			-82	-58	-31	0	37	82	137	205	293	411	576
130	130.00	bu	-7	18	47	81	122	170	230	304	400	527	705
			-54	-29	0	34	74	123	182	257	352	480	658
140	140.00	bu	20	47	79	116	159	212	276	356	459	596	788
			-27	0	31	68	112	164	228	308	411	548	740
150	150.00	bu	47	76	110	150	197	253	321	407	517	664	870
			0	29	63	102	149	205	274	360	470	617	823

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
Grain Sorghum, drill planted, conventional tillage, non-irrigated,
Southwest Louisiana, 2024.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (3 gal)	appl	6.87	1.0000	6.87	_________
LARice GPS Charge-SW	acre	0.35	2.0000	0.70	_________
App by Air (5 gal)	appl	8.11	1.0000	8.11	_________
FERTILIZERS					
LA Nitrogen	lb	0.59	104.0000	61.36	_________
LA Phosphate	lb	0.75	48.0000	36.00	_________
LA Potash	lb	0.43	48.0000	20.64	_________
FUNGICIDES					
Quadris	oz	6.25	6.0000	37.50	_________
HERBICIDES					
Londax 60DF	oz	18.08	2.4000	43.39	_________
INSECTICIDES					
Belt	oz	6.41	2.5000	16.02	_________
Sivanto	oz	3.01	4.0000	12.04	_________
Transform	oz	9.34	1.0000	9.34	_________
SEED/PLANTS					
Sorghum Concept	lb	2.84	9.0000	25.56	_________
SERVICE FEE					
Digital Ag Fee	acre	10.00	1.0000	10.00	_________
Soil Test	acre	10.00	0.3300	3.30	_________
CUSTOM FERT/LIME					
Custom Spread(Truc	appl	4.50	1.0000	4.50	_________
CUSTOM HARVEST/HAUL					
Haul Sorghum	bu	0.25	100.0000	25.00	_________
HAND LABOR					
Implements	hour	14.53	0.0942	1.37	_________
LA OPERATOR LABOR					
Self-Propelled	hour	17.94	0.2310	4.15	_________
LA Hired Labor					
Tractors	hour	14.53	0.3812	5.54	_________
DIESEL FUEL					
Tractors	gal	3.50	3.7828	13.24	_________
Self-Propelled	gal	3.50	1.4915	5.22	_________
REPAIR & MAINTENANCE					
Implements	acre	5.68	1.0000	5.68	_________
Tractors	acre	2.27	1.0000	2.27	_________
Self-Propelled	acre	8.40	1.0000	8.40	_________
INTEREST ON OP. CAP.	acre	9.60	1.0000	9.60	_________

TOTAL DIRECT EXPENSES				375.80	_________
FIXED EXPENSES					
Implements	acre	16.10	1.0000	16.10	_________
Tractors	acre	17.58	1.0000	17.58	_________
Self-Propelled	acre	15.30	1.0000	15.30	_________

TOTAL FIXED EXPENSES				48.98	_________

TOTAL SPECIFIED EXPENSES				424.78	_________

Table 2.B Estimated resource use and costs for field operations, per Acre
Grain Sorghum, drill planted, conventional tillage, non-irrigated,
Southwest Louisiana, 2024.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	PRICE	COST	TOTAL COST
						------------dollars-----------					dollars		---------dollars---------		
Disk Harrow	28'	MFWD 225	0.070	1.00	Feb	3.34	3.87	1.46	3.85	0.07	1.02				13.54
Disk Harrow	28'	MFWD 225	0.070	1.00	Mar	3.34	3.87	1.46	3.85	0.07	1.02				13.54
Ditcher		MFWD 130	0.020	1.00	Mar	0.54	0.54	0.07	0.12	0.02	0.29				1.56
LA Boom Sprayer	30 ft	MFWD 170	0.059	1.00	Apr	2.15	2.41	0.13	0.17	0.05	0.87				5.73
Londax 60DF	oz											2.4000	18.08	43.39	43.39
Custom Spread(Truc	appl			1.00	Apr							1.0000	4.50	4.50	4.50
LA Nitrogen	lb											104.0000	0.59	61.36	61.36
LA Phosphate	lb											48.0000	0.75	36.00	36.00
LA Potash	lb											48.0000	0.43	20.64	20.64
Field Cultivate	32'	MFWD 225	0.046	1.00	Apr	2.22	2.57	0.69	3.65	0.04	0.68				9.81
Grain Drill	20'	MFWD 170	0.094	1.00	Apr	3.38	3.78	1.80	4.34	0.18	2.74				16.04
Sorghum Concept	lb											9.0000	2.84	25.56	25.56
Ditcher		MFWD 130	0.020	1.00	Apr	0.54	0.54	0.07	0.12	0.02	0.29				1.56
App by Air (3 gal)	appl			1.00	Jun							1.0000	6.87	6.87	6.87
Quadris	oz											6.0000	6.25	37.50	37.50
LARice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jul							1.0000	8.11	8.11	8.11
Belt	oz											2.5000	6.41	16.02	16.02
LARice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
Sivanto	oz											4.0000	3.01	12.04	12.04
Transform	oz											1.0000	9.34	9.34	9.34
LARice Combine Med	20 ft		0.210	1.00	Aug	13.62	15.30			0.23	4.15				33.07
Haul Sorghum	bu			1.00	Aug							100.0000	0.25	25.00	25.00
Digital Ag Fee	acre			1.00	Aug							1.0000	10.00	10.00	10.00
Soil Test	acre											0.3300	10.00	3.30	3.30
TOTALS						29.13	32.88	5.68	16.10	0.70	11.06			320.33	415.18
INTEREST ON OPERATING CAPITAL															9.60
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															424.78

Table 2.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Grain Sorghum, drill planted, conventional tillage, non-irrigated,
Southwest Louisiana, 2024.

			BREAKEVEN PRICE										
LA Sorghum			2.58	2.75	2.94	3.17	3.43	3.75	4.14	4.63	5.26	6.09	7.26
PERCENT	YIELD	UNIT	dollars										
50	50.00	bu.	-233	-225	-215	-204	-191	-175	-155	-131	-100	-58	0
			-282	-274	-264	-253	-240	-224	-204	-180	-149	-107	-48
60	60.00	bu.	-210	-200	-188	-175	-159	-140	-116	-87	-50	0	70
			-259	-249	-237	-224	-208	-189	-165	-136	-99	-48	21
70	70.00	bu.	-187	-175	-161	-146	-127	-105	-77	-43	0	58	140
			-235	-224	-210	-195	-176	-154	-126	-92	-48	9	91
80	80.00	bu.	-163	-150	-134	-116	-95	-70	-38	0	50	116	210
			-212	-199	-183	-165	-144	-119	-87	-48	1	67	161
90	90.00	bu.	-140	-125	-107	-87	-63	-35	0	43	100	175	280
			-189	-174	-156	-136	-112	-84	-48	-5	51	126	231
100	100.00	bu.	-116	-100	-80	-58	-31	0	38	87	150	233	350
			-165	-149	-129	-107	-80	-48	-10	38	101	184	301
110	110.00	bu.	-93	-75	-53	-29	0	35	77	131	200	292	420
			-142	-124	-102	-78	-48	-13	28	82	151	243	371
120	120.00	bu.	-70	-50	-26	0	31	70	116	175	250	350	490
			-119	-99	-75	-48	-17	21	67	126	201	301	441
130	130.00	bu.	-46	-25	0	29	63	105	155	219	300	409	561
			-95	-74	-48	-19	14	56	106	170	251	360	512
140	140.00	bu.	-23	0	26	58	95	140	194	262	350	467	631
			-72	-48	-22	9	46	91	145	213	301	418	582
150	150.00	bu.	0	25	53	87	127	175	233	306	400	525	701
			-48	-23	4	38	78	126	184	257	351	476	652

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
Grain Sorghum, drill planted, conventional tillage, non-irrigated,
Southwest Louisiana, 2024.

			BREAKEVEN PRICE										
LA Sorghum			2.91	3.10	3.32	3.58	3.88	4.24	4.69	5.24	5.96	6.91	8.24
PERCENT	YIELD	UNIT	dollars										
50	50.00	bu.	-217	-207	-196	-184	-168	-150	-128	-100	-65	-17	48
			-266	-256	-245	-233	-217	-199	-177	-149	-114	-66	0
60	60.00	bu.	-190	-179	-166	-150	-132	-110	-84	-50	-8	48	128
			-239	-228	-215	-199	-181	-159	-133	-99	-57	0	79
70	70.00	bu.	-164	-150	-135	-117	-96	-70	-39	-0	48	115	208
			-213	-199	-184	-166	-145	-119	-88	-49	0	66	159
80	80.00	bu.	-137	-122	-104	-84	-60	-30	4	48	106	182	288
			-186	-171	-153	-133	-108	-79	-44	0	57	133	239
90	90.00	bu.	-110	-93	-73	-50	-23	9	48	98	163	248	368
			-159	-142	-122	-99	-72	-39	0	49	114	199	319
100	100.00	bu.	-84	-65	-43	-17	12	48	93	148	220	315	448
			-133	-114	-92	-66	-36	0	44	99	171	266	399
110	110.00	bu.	-57	-36	-12	15	48	88	137	198	277	381	528
			-106	-85	-61	-33	0	39	88	149	228	333	479
120	120.00	bu.	-30	-8	18	48	85	128	182	248	334	448	608
			-79	-57	-30	0	36	79	133	199	285	399	559
130	130.00	bu.	-4	20	48	82	121	168	226	298	391	515	688
			-53	-28	0	33	72	119	177	249	342	466	639
140	140.00	bu.	22	48	79	115	157	208	270	348	448	581	768
			-26	0	30	66	108	159	222	299	399	532	719
150	150.00	bu.	48	77	110	148	194	248	315	398	505	648	848
			0	28	61	99	145	199	266	349	456	599	799

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 2024.

ITEM NAME	UNIT	PRICE
		dollars
ADJUVANTS		
Surfactant	pt	3.30
CUSTOM FERT/LIME		
Lime (Spread)	ton	65.00
CUSTOM HARVEST/HAUL		
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 SW	cwt	5.60
Plant by Air	cwt	8.00
CUSTOM SPRAY		
App 2,4-D Helicopter	appl	0.00
App by Air (1 gal)	appl	2.50
App by Air (2 gal)	appl	9.00
App by Air (3 gal)	appl	6.87
App by Air (5 gal)	appl	8.11
App by Air (10 gal)	appl	10.57
App Furadan by Air	appl	0.00
App Ordram by Air	appl	0.00
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	26.00
Anhy Ammonia (82% N)	cwt	28.00
Boron (Solubor)	lb	0.75
Crop Oil (Seed Oil)	pt	2.90
DAP	cwt	47.21
Fert 0-20-20	cwt	0.00
Fert 10-10-10	cwt	0.00
Fert 10-34-0	cwt	40.00
Fert 10-34-0	gal	4.66
Fert 13-13-13	cwt	0.00
Fert 41-0-0-4	cwt	38.00
Fert 5-20-20	cwt	0.00
Haul Corn	bu	0.23
Haul Cotton	lb	0.02
LA Nitrogen	lb	0.59
LA Phosphate	lb	0.75
LA Potash	lb	0.43
Phosphorus(46% P2O5)	cwt	39.25
Potash (60% K2O)	cwt	36.20
Sulfur	lb	0.34
UAN (32% N)	cwt	36.15
UAN + Sulfur (28% N)	cwt	31.10
Urea, Solid (46% N)	cwt	31.69
Zinc	lb	0.50
FUNGICIDES		
Apron Maxx RTA	oz	1.02
Apron XL	oz	6.98
Apron XL LS	oz	5.27
Benlate 50 WP	lb	15.95
Captan 4L	pt	4.50
Captan 50 WP	lb	6.13
Crop Oil (Petroleum)	pt	2.90
Cruiser 5FS	oz	0.90
Fungicide	lb	2.82
Gem 25 WG	oz	3.70
Manzate 75 DF	lb	4.86
Manzate Flowable	pt	4.60
Moncut 70 DF	lb	32.81
Quadris	oz	6.25
Ridomil GoldPC 10G	lb	2.08

Appendix Table 1. Operating inputs: estimated prices Louisiana, 2024.

ITEM NAME	UNIT	PRICE
		dollars
FUNGICIDES CONT'D		
Rovral 4F	pt	14.90
Rovral WG	lb	0.00
Shelter	oz	8.50
Stiletto	oz	0.58
Stratego	pt	22.50
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	1.02
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	0.45
Mepex	oz	0.09
PGR IV	oz	1.55
Pix Plus	oz	1.36
Pix Ultra	oz	0.21
HARVEST AIDS		
Accelerate	pt	2.59
Ammonium Sulfate	lb	0.24
Boll'd	pt	3.84
CottonQuik	pt	6.06
Def 6	pt	7.50
Def/Folex	pt	11.25
Dropp 50 WP	lb	45.45
Dropp SC	oz	1.56
Ethephon 6E	pt	3.56
Finish 6	pt	11.74
Folex 6EC	pt	11.25
Ginstar EC	pt	29.72
Gramoxone Extra	pt	5.28
Gramoxone Inteon	oz	0.19
Gramoxone Max	pt	5.28
Leafless	pt	18.56
Prep	pt	3.84
Sodium Chlorate 3L	gal	3.50
Solium Chlorate 6L	gal	8.61
HERBICIDES		
2,4-D Amine 4	pt	2.88
2,4-D Ester	pt	5.03
AAtrex 4L	pt	3.00
Accent Gold	oz	6.12
Accent SP	oz	23.39
Aim 2EC	oz	8.13
Aim DF	oz	8.13
Arrosolo	qt	7.88
Assure II	oz	0.74
Atrazine 4L	pt	2.75
Atrazine 90DF	lb	5.09
Authority 75DF	lb	37.75
Axiom 68DF	lb	25.74
Backdraft	pt	2.40
Banvel	pt	10.94
Basagran	pt	5.43
Basis Gold	lb	9.00
Beacon 75% WSP	oz	34.87
Beyond	oz	4.48
Bicep II Magnum	qt	11.80

Appendix Table 1. Operating inputs: estimated prices Louisiana, 2024.

ITEM NAME	UNIT	PRICE
		dollars
HERBICIDES CONT'D		
Bicep II zmsgnum	qt	11.18
Blazer Ultra	pt	9.79
Boa	pt	3.63
Bolero 8EC	pt	7.73
Boundary	pt	12.00
Buctril 4EC	pt	4.28
Butoxone 175(2,4-DB)	pt	3.24
Butoxone 200(2,4-DB)	pt	3.92
Butyrac 175 (2,4-DB)	pt	3.29
Butyrac 200 (2,4-DB)	pt	3.52
Canopy 75%	oz	3.25
Canopy XL	oz	3.25
Caparol 4L	pt	4.97
Caparol Accu-Pak	lb	0.00
Celebrity Plus	lb	84.50
Clarity	pt	14.29
Classic	oz	16.67
Clincher EC	oz	2.54
Cobra 2EC	oz	1.50
Command 3ME	pt	17.50
Command XTRA	pt	0.00
Cornerstone	pt	2.50
Cotoran 4L	pt	5.24
Cotoran DF	lb	7.92
Cotton Pro Flowable	pt	3.75
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	5.46
Direx 80 DF	lb	6.20
Diuron 4L	pt	4.25
Diuron 80 DF	lb	5.50
DSMA 4	pt	0.90
Dual 8E	pt	0.00
Dual II Magnum	pt	13.25
Dual Magnum	pt	10.75
Duet	pt	6.09
Evik DF 80W	lb	11.22
Exceed	oz	10.71
Exceed Custom Pak	oz	11.50
Expert	pt	4.39
Facet 75DF	lb	50.00
First Rate	oz	37.99
Flexstar HL	pt	9.75
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	1.33
Fusion	pt	29.86
Glyfos	pt	1.80
Glyphomax	pt	3.49
Glyphosate Plus 4L	pt	4.03
Glystar Plus	pt	2.17
Goal 2XL	pt	10.75
Gramoxone Extra	pt	0.00
Gramoxone Max	pt	5.28
Gramoxone Max	pt	5.28
Grandstand R	qt	18.68
Guardsman	pt	4.66
Guardsman Max	pt	7.22
Harmony Extra	oz	11.00

Appendix Table 1. Operating Inputs: Estimated Prices for 2024.

ITEM NAME	UNIT	PRICE
		dollars
HERBICIDES CONT'D		
Hoelon 3EC	pt	11.03
Karmex DF	lb	5.93
LA Asulox/Asulam	gal	46.00
LA Weedmaster	qt	8.50
Lariat	qt	7.58
Lasso 4EC	qt	6.60
Layby Pro	qt	3.87
Londax 60DF	oz	18.08
Lorox 50DF	lb	24.12
Matador	pt	0.00
MSMA 6.6	pt	6.18
MSMA6 + Surfactant	pt	6.18
Newpath 2SL	oz	4.28
Ordram 15-G	lb	1.34
Ordram 8-E	pt	9.42
Outlook	pt	14.77
Pendimax 3.3	pt	2.47
Permit 75DF	oz	19.50
Poast 1.53	pt	12.77
Poast Plus	pt	9.69
Propanil 4E	qt	5.15
Prowl 3.3 EC	pt	5.56
Pursuit DG	oz	11.59
Pursuit Plus EC	pt	7.10
Python WDG	oz	15.10
Raptor	oz	4.38
Reflex 2LC	pt	7.34
Regiment 80WP	oz	4.38
Remedy	pt	8.45
Resource .86EC	pt	26.88
Ricestar	pt	26.01
Roundup Original	pt	6.00
Roundup Original Max	oz	0.38
Roundup Power Max	pt	7.50
Roundup Ultra MAX	pt	5.97
Roundup Ultra Dry	lb	6.14
Roundup WeatherMax	oz	0.19
Scepter 70 DG	oz	4.64
Select 2EC	oz	0.94
Sencor 4F	pt	14.74
Sencor DF	lb	23.95
Squadron CE	pt	12.50
Stam 4E	qt	8.00
Stam 80 EDF	lb	9.45
Staple 85%	oz	3.95
Staple Plus	oz	8.55
Steadfast	oz	12.26
Touchdown	qt	10.21
Touchdown 4 IQ	pt	3.33
Touchdown Total	qt	10.21
Treflan HFP	pt	4.36
Treflan TR-10	lb	1.10
Tri-Scept	pt	5.24
Trifluralin 4EC	pt	4.36
Trilin 10G	lb	0.79
Trilin 4EC	pt	2.12
Typhoon	qt	13.06
Valor WP	oz	3.20
Whip 360	pt	25.08
Zorial Rapid 80DF	lb	14.10

Appendix Table 1. Operating Inputs: Estimated Prices for 2024.

ITEM NAME	UNIT	PRICE
		dollars
INSECTICIDES		
Acephate 90SP	lb	8.25
Admire 2 Flowable	oz	2.56
Ammo 2.5 EC	oz	0.85
App Fert by Air(Min)	appl	7.50
Asana .66 XL	oz	0.62
Aztec 2.1% G	lb	3.88
Baythroid 2	oz	2.58
Belt	oz	6.41
Besiege	oz	2.75
Bidrin 8L	oz	1.51
Brigade EC	pt	20.27
Brigade WSB	lb	26.04
Capture 2EC	oz	1.37
Centric 40WG	oz	5.95
Comite	pt	8.45
Condor XL	pt	0.00
Confirm 2F	oz	1.88
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	20.16
Dimethoate 4E	pt	13.50
Dimilin 2L	oz	1.63
Dipel DF	lb	13.13
Dipel ES	pt	4.89
Force 3G	lb	7.28
Furadan 3G	lb	0.00
Furadan 4F	pt	9.81
Fury 1.5 EC	oz	1.30
Gaucho 480	oz	5.80
Intrepid 2F	oz	1.99
Intruder 70WP	oz	1.80
Karate Z	oz	1.41
Lannate LV	pt	8.33
Lannate SP	oz	2.42
Larvin 3.2	oz	0.63
Leverage 2.7	oz	2.17
Lorsban 15G	lb	2.35
Lorsban 4E	pt	6.10
Malathion 57EC	pt	6.43
Malathion 8E	pt	9.84
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	1.18
Orthene 90S	lb	7.00
Orthene 97	lb	29.33
Ovasyn	pt	0.00
Penncap M	pt	6.71
Phaser 3E	qt	8.13
Pounce 25WP	lb	19.96
Pounce 3.2 EC	oz	0.34
Prevathon	oz	1.05
Provado 1.6F	oz	1.94
Scout X-TRA	oz	0.00
Sevin 80S	lb	7.40
Sevin XLR Plus	qt	17.53
Sivanto	oz	2.50
Spintor 2SC	oz	4.93

Appendix Table 1. Operating Inputs: Estimated Prices for 2024.

ITEM NAME	UNIT	PRICE
		dollars
INSECTICIDES CONT'D		
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
Transform	oz	7.81
Trimax	oz	1.85
Vydate C-LV	oz	0.93
Warrior Z	oz	1.80
Warrior ZT	oz	3.02
IRRIGATION SUPPLIES		
Rice Gates	each	3.65
Roll-Out Pipe	ft	0.24
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	3.61
Corn Seed BtRR	thous	3.61
Corn Seed Conv.	thous	3.80
Corn Seed RR	thous	4.26
Corn Seed VT3	thous	3.91
Corn Seed VT3Pro	thous	3.91
Cotton Seed BG/RR	thous	0.62
Cotton Seed BGII/RRF	thous	2.70
Cotton Seed Bt	thous	2.60
Cotton Seed BtRR	thous	3.15
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	1.30
Rice Clearfield XL8	lb	6.12
Rice Seed (Levees)	lb	0.90
Rice Seed CF(Levees)	lb	1.30
Rice Seed Conv.	lb	0.39
Rice Seed Hybrid	lb	5.66
SC Cultured seedcane	acre	665.00
Sorghum Concept	lb	2.84
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	1.12
Soybean Seed Stack	lb	1.28
Wheat Seed Private	lb	0.34
SERVICE FEE		
Cotton Checkoff	bale	2.56
Cotton Storage	bale	25.00
Crop Consultant	acre	9.00
Custom Apply	acre	8.00
Custom Combine Rice	acre	0.00
Custom Spread(Truc	appl	4.50
Digital Ag Fee	acre	10.00
Insect Scouting	acre	7.00
LARice Air Plant NE	cwt	5.50
Rice Consultant	acre	9.00

Appendix Table 1. Operating Inputs: Estimated Prices for 2024.

ITEM NAME	UNIT	PRICE
		dollars
SERVICE FEE CONT'D		
RRF Cotton Tech Fee	cap/ac	48.25
SC Treating Charge	acre	0.00
Soil Test	acre	10.00
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
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 Fe	cap/ac	62.69
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

Appendix Table 2. Tractors: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Louisiana 2024.

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 (200-249 hp)	240hp	161,548	300	8	12.35	17.94	43.22	16.82	77.99	80.57	158.56
Combine (225-274 hp)	Track250hp	0	300	8	12.87	17.94	45.04	0.00	62.98	0.00	62.98
Combine (250-299 hp)	275hp	463,000	300	8	14.15	17.94	49.52	48.22	115.69	230.93	346.62
Combine (250-299hp)	Grass295hp	218,222	300	8	15.18	17.94	53.13	22.73	93.80	108.84	202.64
Combine (275-299 hp)	Track290hp	0	300	8	14.93	17.94	52.25	0.00	70.19	0.00	70.19
Combine (300-349 hp)	325hp	468,000	300	8	16.73	17.94	58.55	48.75	125.24	233.42	358.67
Combine (300-349hp)	Track320hp	0	300	8	16.47	17.94	57.64	0.00	75.58	0.00	75.58
Combine (350-379 hp)	370hp	500,000	300	8	19.04	17.94	66.64	52.08	136.66	249.38	386.04
Combine (350-379 hp)	Track365hp	0	300	8	18.79	17.94	65.76	0.00	83.70	0.00	83.70
Cotton Stripper	173hp	170,000	200	8	8.08	17.94	28.28	26.56	72.78	127.18	199.96
Tractor(40-59hp)Cab	2WD 50	39,900	600	8	2.57	14.53	9.00	1.24	24.78	9.33	34.12
Tractor(40-59hp)Cab	MFWD 50	50,300	600	8	2.57	14.53	9.00	1.57	25.10	11.77	36.87
Tractor(40-59hp)RB	2WD 50	28,100	600	8	2.57	14.53	9.00	0.87	24.41	6.57	30.99
Tractor(40-59hp)RB	MFWD 50	33,900	600	8	2.57	14.53	9.00	1.05	24.59	7.93	32.52
Tractor(60-89hp)CAB	2WD 75	64,000	600	8	3.86	14.53	13.51	2.00	30.04	14.97	45.01
Tractor(60-89hp)CAB	MFWD 75	74,900	600	8	3.86	14.53	13.51	2.34	30.38	17.52	47.90
Tractor(60-89hp)RB	2WD 75	59,800	600	8	3.86	14.53	13.51	1.86	29.91	13.99	43.90
Tractor(60-89hp)RB	MFWD 75	53,500	600	8	3.86	14.53	13.51	1.67	29.71	12.51	42.23
Tractor(90-119hp)CB	2WD 105	94,400	600	8	5.40	14.53	18.91	2.95	36.39	22.08	58.48
Tractor(90-119hp)CB	MFWD 105	103,500	600	8	5.40	14.53	18.91	3.23	36.68	24.21	60.89
Tractor(90-119hp)RB	2WD 105	84,000	600	8	5.40	14.53	18.91	2.62	36.07	19.65	55.72
Tractor(90-119hp)RB	MFWD 105	90,700	600	8	5.40	14.53	18.91	2.83	36.28	21.22	57.50
Tractor(120-139hp)CB	2WD 130	135,400	600	8	6.69	14.53	23.41	4.23	42.18	31.68	73.86
Tractor(120-139hp)CB	MFWD 130	170,900	600	8	6.69	14.53	23.41	5.34	43.29	39.99	83.28
Tractor(140-159hp)CB	2WD 150	137,500	600	8	7.72	14.53	27.02	4.29	45.85	32.17	78.02
Tractor(140-159hp)CB	MFWD 150	171,000	600	8	7.72	14.53	27.02	5.34	46.89	40.01	86.91
Tractor(160-179hp)CB	2WD 170	166,000	600	8	8.75	14.53	30.62	5.18	50.34	40.12	90.46
Tractor(160-179hp)CB	MFWD 170	201,000	600	8	8.75	14.53	30.62	6.28	51.43	48.58	100.01
Tractor(160-199hp)CB	Track 180	142,710	600	8	9.26	14.53	32.42	4.45	51.41	34.49	85.90
Tractor(180-199hp)CB	2WD 190	143,000	600	8	9.77	14.53	34.22	4.46	53.22	34.56	87.78
Tractor(180-199hp)CB	MFWD 190	246,000	600	8	9.77	14.53	34.22	7.68	56.44	59.45	115.90
Tractor(200-249hp)CB	4WD 225	147,066	600	8	11.58	14.53	40.53	4.59	59.66	35.54	95.20
Tractor(200-249hp)CB	MFWD 225	309,000	600	8	11.58	14.53	40.53	9.65	64.72	74.68	139.40
Tractor(200-249hp)CB	Track 225	277,000	600	8	11.58	14.53	40.53	8.65	63.72	66.94	130.66
Tractor(250-349hp)CB	4WD 300	432,000	600	8	15.44	14.53	54.04	13.50	82.07	104.41	186.48
Tractor(250-349hp)CB	Track 300	329,000	600	8	15.44	14.53	54.04	10.28	78.85	79.51	158.37
Tractor(350-449hp)CB	4WD 400	480,000	600	8	20.58	14.53	72.06	15.00	101.59	116.01	217.60
Tractor(350-449hp)CB	Track 400	625,000	600	8	20.58	14.53	72.06	19.53	106.12	151.05	257.17
Tractor(450-uphp)CB	TRACK-475	279,879	600	8	24.44	14.53	85.57	8.74	108.84	67.64	176.49

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 2024.

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/ac	----------------		$/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'	9,360	100	8	1.00	0.200	3.58	0.64	0.46	4.69	2.71	7.41
Butt Levee (Backhoe)	70 HP	73,000	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	16.87	14.69	11.76	43.33	56.33	99.67
Cotton Picker-1st-BB	4R2X1260hp	317,399	200	8	13.33	0.172	5.59	8.03	8.54	22.17	40.91	63.09
Cotton Picker-1st-BB	4R30"250hp	262,000	200	8	12.86	0.327	10.63	14.74	13.40	38.77	64.17	102.94
Cotton Picker-1st-BB	4R30"325hp	350,000	200	8	18.01	0.327	10.63	20.63	17.90	49.17	85.72	134.89
Cotton Picker-1st-BB	4R38"255hp	268,000	200	8	13.12	0.257	8.37	11.84	10.79	31.00	51.68	82.69
Cotton Picker-1st-BB	4R38"325hp	351,000	200	8	18.01	0.257	8.37	16.24	14.13	38.75	67.69	106.45
Cotton Picker-1st-BB	5R30"255hp	285,000	200	8	12.86	0.261	8.50	11.78	11.66	31.95	55.84	87.79
Cotton Picker-1st-BB	5R38"250hp	284,601	200	8	12.86	0.207	6.72	9.33	9.21	25.27	44.11	69.39
Cotton Picker-1st-BB	6R30"325hp	465,000	200	8	18.27	0.218	7.08	13.95	15.85	36.89	75.92	112.82
Cotton Picker-1st-BB	6R38"330hp	465,000	200	8	18.27	0.172	5.59	11.01	12.51	29.13	59.94	89.07
Cotton Picker-1st-Tr	2R38"157hp	144,912	200	8	8.08	0.519	16.87	14.69	11.76	43.33	56.33	99.67
Cotton Picker-1st-Tr	4R2X1255hp	322,137	200	8	18.01	0.172	5.59	10.86	8.67	25.13	41.52	66.66
Cotton Picker-1st-Tr	4R30"250hp	261,825	200	8	12.86	0.327	10.63	14.74	13.39	38.76	64.12	102.89
Cotton Picker-1st-Tr	4R30"325hp	311,088	200	8	16.72	0.327	10.63	19.16	15.91	45.71	76.19	121.90
Cotton Picker-1st-Tr	4R38"255hp	268,000	200	8	13.12	0.257	8.37	11.84	10.79	31.00	51.68	82.69
Cotton Picker-1st-Tr	4R38"325hp	351,000	200	8	18.01	0.257	8.37	16.24	14.13	38.75	67.69	106.45
Cotton Picker-1st-Tr	5R30"255hp	285,303	200	8	13.12	0.261	8.50	12.03	11.67	32.21	55.90	88.11
Cotton Picker-1st-Tr	5R38"250hp	290,471	200	8	12.86	0.207	6.72	9.33	9.40	25.46	45.02	70.49
Cotton Picker-1st-Tr	6R30"325hp	465,000	200	8	16.72	0.218	7.08	12.77	15.85	35.72	75.92	111.65
Cotton Picker-1st-Tr	6R38"330hp	465,000	200	8	18.01	0.172	5.59	10.86	12.51	28.97	59.94	88.92
Cotton Picker-2nd-BB	2R38"157hp	144,912	200	8	8.08	0.440	14.29	12.44	9.96	36.70	47.72	84.43
Cotton Picker-2nd-BB	4R2x1260hp	322,187	200	8	18.01	0.145	4.73	9.20	7.34	21.28	35.18	56.46
Cotton Picker-2nd-BB	4R30"250hp	261,825	200	8	12.86	0.277	9.00	12.48	11.34	32.83	54.32	87.15
Cotton Picker-2nd-BB	4R30"325hp	311,088	200	8	16.72	0.277	9.00	16.23	13.47	38.72	64.54	103.26
Cotton Picker-2nd-BB	4R38"255hp	268,000	200	8	13.12	0.218	7.08	10.03	9.14	26.26	43.78	70.04
Cotton Picker-2nd-BB	4R38"325hp	351,000	200	8	18.01	0.218	7.08	13.76	11.97	32.82	57.33	90.16
Cotton Picker-2nd-BB	5R30"255hp	285,303	200	8	13.12	0.221	7.20	10.19	9.88	27.28	47.35	74.63
Cotton Picker-2nd-BB	5R38"250hp	284,601	200	8	12.86	0.175	5.69	7.90	7.80	21.40	37.37	58.77
Cotton Picker-2nd-BB	6R30"325hp	465,000	200	8	18.01	0.184	6.00	11.65	13.43	31.08	64.31	95.40
Cotton Picker-2nd-Tr	6R38"330hp	465,000	200	8	18.01	0.145	4.73	9.19	10.60	24.54	50.77	75.31
Cotton Picker/Module	6R-30(500)	854,000	200	8	25.73	0.218	7.08	19.65	29.12	55.86	139.44	195.31
LA Pickup Truck	1/2 ton	28,000	800	5	2.50	1.000	14.53	8.02	3.15	25.70	8.29	33.99
LA Rice Combine	25 ft	181,500	300	10	8.60	0.300	5.92	9.03	14.53	29.49	26.46	55.96
LA Rice Combine-2	25 ft	181,500	300	10	8.60	0.300	5.92	9.03	14.53	29.49	26.46	55.96
LARice Combine Med	20 ft	165,000	300	10	7.10	0.210	4.14	5.22	9.24	18.61	16.83	35.44
Levee Sprayer	27'	30,768	350	8	2.57	0.038	0.96	0.34	0.06	1.37	0.50	1.87
Sprayer(300-450Gal)	60'	103,000	350	8	5.66	0.017	0.44	0.34	0.09	0.89	0.77	1.66
Sprayer(300-450Gal)	80'	103,000	350	8	5.66	0.013	0.33	0.26	0.07	0.66	0.58	1.25
Sprayer(600-750Gal)	60'	216,000	350	8	10.29	0.017	0.44	0.63	0.20	1.28	1.62	2.91
Sprayer(600-825Gal)	80'	268,000	350	8	10.29	0.013	0.33	0.47	0.18	0.99	1.51	2.51
Sprayer(600-825Gal)	90'	331,000	350	8	10.29	0.011	0.29	0.42	0.20	0.92	1.66	2.59
Sprayer(1000-1400Gal	90'	363,000	350	8	14.15	0.014	0.35	0.69	0.27	1.32	2.18	3.51
Sprayer(1200PlusGal)	120'	472,000	350	8	15.44	0.008	0.22	0.47	0.22	0.92	1.77	2.69

Appendix Table 4. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2024.

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---------------------							
Blade-Box	6'	2WD 130	2,070	200	20	0.020	0.29	0.46	0.01	0.08	0.86	0.02	0.63	1.51
Blade-Box	10'	2WD 50	3,890	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	6,190	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	1,270	200	20	1.176	17.09	10.59	0.70	1.03	29.43	0.76	7.73	37.93
Blade-Scraper	10'	2WD 50	3,870	200	20	1.176	17.09	10.59	2.16	1.03	30.88	2.33	7.73	40.95
Blade-Scraper	14'	2WD 50	10,790	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy-1st Pick	2R38"157hp	MFWD 190	30,500	200	10	0.519	7.55	17.78	3.96	3.99	33.29	10.20	30.89	74.39
Boll Buggy-1st pick	4R2x1260hp	MFWD 190	30,500	200	10	0.172	2.50	5.89	1.31	1.32	11.04	3.38	10.24	24.67
Boll Buggy-1st pick	4R30"255hp	MFWD 190	30,500	200	10	0.327	4.75	11.20	2.49	2.51	20.97	6.43	19.46	46.87
Boll Buggy-1st pick	4R30"325hp	MFWD 190	30,500	200	10	0.327	4.75	11.20	2.49	2.51	20.97	6.43	19.46	46.87
Boll Buggy-1st pick	4R38"255hp	MFWD 190	30,500	200	10	0.257	3.74	8.82	1.96	1.98	16.51	5.06	15.32	36.90
Boll Buggy-1st pick	4R38"325hp	MFWD 190	30,500	200	10	0.257	3.74	8.82	1.96	1.98	16.51	5.06	15.32	36.90
Boll Buggy-1st pick	5R30"255hp	MFWD 190	30,500	200	10	0.261	3.80	8.96	1.99	2.01	16.78	5.14	15.57	37.49
Boll Buggy-1st pick	5R38"255hp	MFWD 190	30,500	200	10	0.207	3.01	7.09	1.57	1.59	13.27	4.07	12.31	29.66
Boll Buggy-1st pick	6R30"325hp	MFWD 190	30,500	200	10	0.218	3.17	7.47	1.66	1.67	13.98	4.28	12.97	31.24
Boll Buggy-1st pick	6R38"325hp	MFWD 190	30,500	200	10	0.172	2.50	5.89	1.31	1.32	11.04	3.38	10.24	24.67
Boll Buggy-2nd pick	2R38"157hp	MFWD 190	30,500	200	10	0.440	6.39	15.06	3.35	3.38	28.20	8.64	26.17	63.02
Boll Buggy-2nd pick	4R2x1260hp	MFWD 190	30,500	200	10	0.145	2.12	4.99	1.11	1.12	9.35	2.86	8.67	20.89
Boll Buggy-2nd pick	4R30"255hp	MFWD 190	30,500	200	10	0.277	4.02	9.49	2.11	2.13	17.76	5.44	16.48	39.70
Boll Buggy-2nd pick	4R30"325hp	MFWD 190	30,500	200	10	0.277	4.02	9.49	2.11	2.13	17.76	5.44	16.48	39.70
Boll Buggy-2nd pick	4R38 255hp	MFWD 190	30,500	200	10	0.218	3.17	7.47	1.66	1.67	13.99	4.28	12.98	31.26
Boll Buggy-2nd pick	4R38 325hp	MFWD 190	30,500	200	10	0.218	3.17	7.47	1.66	1.67	13.99	4.28	12.98	31.26
Boll Buggy-2nd pick	5R30"255hp	MFWD 190	30,500	200	10	0.221	3.22	7.59	1.69	1.70	14.21	4.35	13.19	31.76
Boll Buggy-2nd pick	5R38"255hp	MFWD 190	30,500	200	10	0.175	2.55	6.00	1.33	1.34	11.24	3.44	10.43	25.12
Boll Buggy-2nd pick	6R30"325hp	MFWD 190	30,500	200	10	0.184	2.68	6.32	1.40	1.42	11.84	3.63	10.99	26.46
Boll Buggy-2nd pick	6R38"325hp	MFWD 190	30,500	200	10	0.145	2.12	4.99	1.11	1.12	9.35	2.86	8.67	20.89
Boll Buggy-Stripper	13' Bcast	MFWD 150	30,500	200	10	0.251	3.65	6.80	1.92	1.34	13.73	4.94	10.07	28.75
Boll Buggy-Stripper	16' Bcast	MFWD 150	30,500	200	10	0.204	2.97	5.52	1.56	1.09	11.15	4.01	8.18	23.36
Boll Buggy-Stripper	19' Bcast	MFWD 150	30,500	200	10	0.172	2.50	4.65	1.31	0.92	9.39	3.38	6.89	19.67
Boll Buggy-Stripper	4R30"2X1Br	MFWD 150	30,500	200	10	0.218	3.17	5.89	1.66	1.16	11.89	4.28	8.73	24.91
Boll Buggy-Stripper	4R30"Brush	MFWD 150	30,500	200	10	0.327	4.75	8.84	2.49	1.74	17.84	6.43	13.09	37.38
Boll Buggy-Stripper	4R38"2X1Br	MFWD 150	30,500	200	10	0.172	2.50	4.65	1.31	0.92	9.39	3.38	6.89	19.67
Boll Buggy-Stripper	4R38"Brush	MFWD 150	30,500	200	10	0.257	3.74	6.96	1.96	1.37	14.05	5.06	10.31	29.43
Boll Buggy-Stripper	5R30"Brush	MFWD 150	30,500	200	10	0.261	3.80	7.07	1.99	1.39	14.27	5.14	10.47	29.90
Boll Buggy-Stripper	5R38"Brush	MFWD 150	30,500	200	10	0.207	3.01	5.59	1.57	1.10	11.29	4.07	8.29	23.65
Boll Buggy-Stripper	6R30"Brush	MFWD 150	30,500	200	10	0.218	3.17	5.89	1.66	1.16	11.89	4.28	8.73	24.91
Chisel Plow(Folding)	16'	2WD 130	22,500	150	12	0.115	1.67	2.70	0.93	0.48	5.81	2.09	3.66	11.56
Chisel Plow(Folding)	24'	MFWD 190	57,300	150	12	0.076	1.11	2.61	1.58	0.58	5.89	3.52	4.54	13.97
Chisel Plow(Folding)	32'	MFWD 225	72,800	150	12	0.057	0.83	2.34	1.51	0.55	5.25	3.38	4.31	12.95
Chisel Plow(Folding)	42'	MFWD 225	86,400	150	12	0.044	0.63	1.78	1.37	0.42	4.22	3.06	3.28	10.57
Chisel Plow(Rigid)	15'	2WD 130	20,300	150	12	0.123	1.79	2.88	0.90	0.52	6.10	2.01	3.90	12.02
Chisel Plow(Rigid)	24'	MFWD 190	16,000	150	12	0.077	1.11	2.63	0.44	0.59	4.79	0.99	4.57	10.36
Chisel-Harrow	21 shank	2WD 190	6,750	150	12	0.088	1.27	3.01	0.21	0.39	4.90	0.47	3.04	8.42
Chisel-Harrow	27 shank	MFWD 225	14,100	150	12	0.068	0.99	2.77	0.34	0.66	4.78	0.77	5.11	10.67
Colter-Chisel-Harrow	21 shank	2WD 190	19,200	150	12	0.088	1.27	3.01	0.61	0.39	5.29	1.36	3.04	9.70
Colter-Chisel-Harrow	27 shank	MFWD 225	24,000	150	12	0.068	0.99	2.77	0.59	0.66	5.02	1.32	5.11	11.46
Corn Grain Cart 8R30	500 bu	MFWD 190	35,100	200	12	0.031	0.46	1.09	0.30	0.24	2.10	0.67	1.89	4.68
Corn Grain Cart 8R40	700bu	MFWD 190	51,600	200	12	0.025	0.36	0.85	0.34	0.19	1.76	0.77	1.48	4.02
Cult & Post	4R-38	2WD 105	27,300	150	10	0.173	3.77	3.27	1.26	0.45	8.76	4.16	3.40	16.34
Cult & Post	6R-30	MFWD 150	33,900	150	10	0.146	6.39	3.96	1.32	0.78	12.46	4.38	5.86	22.71
Cult & Post	6R-38	MFWD 150	33,800	150	10	0.115	2.52	3.12	1.04	0.61	7.31	3.44	4.63	15.39
Cult & Post	8R-30	MFWD 190	44,200	150	10	0.110	2.39	3.76	1.29	0.84	8.30	4.28	6.54	19.12
Cult & Post	8R-38	MFWD 190	44,100	150	10	0.086	1.89	2.97	1.02	0.66	6.56	3.37	5.17	15.11
Cult & Post	8R-38 2x1	MFWD 190	64,900	150	10	0.057	1.26	1.98	1.00	0.44	4.69	3.31	3.44	11.44
Cult & Post	10R-30	MFWD 225	32,000	150	10	0.088	1.91	3.56	0.75	0.84	7.08	2.48	6.57	16.13
Cult & Post	10R-38	MFWD 225	0	150	10	0.065	1.41	2.63	0.00	0.62	4.68	0.00	4.85	9.54
Cult & Post	12R-30	MFWD 225	67,800	150	10	0.073	1.59	2.97	1.32	0.70	6.60	4.38	5.47	16.46
Cult & Post	12R-38	MFWD 225	64,900	150	10	0.057	1.26	2.34	1.00	0.55	5.16	3.31	4.32	12.80
Cultipacker	12'	2WD 130	6,720	300	12	0.124	1.80	2.91	0.19	0.52	5.44	0.34	3.94	9.73
Cultipacker	20'	MFWD 150	10,900	300	12	0.074	1.08	2.01	0.19	0.39	3.69	0.33	2.98	7.01
Cultivate	4R-38	2WD 105	21,500	150	10	0.162	2.35	3.07	0.93	0.42	6.78	3.07	3.19	13.05
Cultivate	6R-30	MFWD 150	28,100	150	10	0.137	1.99	3.71	1.03	0.73	7.47	3.40	5.50	16.38
Cultivate	6R-38	MFWD 150	28,000	150	10	0.108	1.57	2.93	0.81	0.58	5.90	2.67	4.34	12.92
Cultivate	8R-30	MFWD 190	38,400	150	10	0.103	1.49	3.53	1.05	0.79	6.87	3.48	6.13	16.49
Cultivate	8R-38	MFWD 190	39,800	150	10	0.081	1.18	2.79	0.86	0.62	5.46	2.85	4.84	13.17
Cultivate	8R-38 2x1	MFWD 190	59,000	150	10	0.054	0.78	1.85	0.85	0.41	3.91	2.82	3.22	9.96
Cultivate	10R-30	MFWD 225	28,200	150	10	0.082	1.19	3.34	0.62	0.79	5.95	2.05	6.16	14.17
Cultivate	10R-38	MFWD 225	0	150	10	0.065	0.94	2.63	0.00	0.62	4.21	0.00	4.85	9.06
Cultivate	12R-30	MFWD 225	62,000	150	10	0.068	0.99	2.78	1.13	0.66	5.58	3.75	5.13	14.47
Cultivate	12R-38	MFWD 225	59,100	150	10	0.054	0.78	2.20	0.85	0.52	4.36	2.82	4.05	11.24
Disk & Incorporate	14'	2WD 130	45,300	200	10	0.149	3.26	3.50	2.03	0.63	9.43	4.48	4.74	18.65
Disk & Incorporate	24'	MFWD 190	77,700	200	10	0.087	1.90	2.98	2.03	0.67	7.59	4.48	5.19	17.27
Disk & Incorporate	32'	4WD 225	95,100	200	10	0.068	1.49	2.78	1.96	0.31	6.56	4.32	2.44	13.32
Disk & Incorporate	42'	MFWD 225	30,542	200	10	0.049	1.07	1.99	0.44	0.47	3.98	0.99	3.66	8.64
Disk Bed (Hipper)	4R-38	MFWD 150	15,700	160	10	0.147	2.14	3.98	0.57	0.78	7.50	1.91	5.90	15.32
Disk Bed (Hipper)	6R-30	MFWD 170	23,900	160	10	0.125	1.81	3.82	0.74	0.78	7.17	2.46	6.07	15.71
Disk Bed (Hipper)	6R-38	MFWD 170	23,900	160	10	0.098	1.43	3.02	0.58	0.61	5.66	1.94	4.79	12.40
Disk Bed (Hipper)	8R-30	MFWD 190	33,100	160	10	0.093	1.36	3.20	0.77	0.72	6.06	2.56	5.57	14.20
Disk Bed (Hipper)	8R-38 2x1	MFWD 190	114,000	160	10	0.049	0.71	1.68	1.40	0.37	4.19	4.64	2.93	11.77
Disk Bed (Hipper)	10R-30	MFWD 225	19,900	160	10	0.075	1.08	3.04	0.37	0.72	5.22	1.23	5.60	12.06
Disk Bed (Hipper)	10R-38	MFWD 225	23,100	160	10	0.059	0.85	2.39	0.34	0.57	4.16	1.12	4.41	9.71
Disk Bed (Hipper)	12R-30	MFWD 225	87,500	160	10	0.062	0.90	2.53	1.36	0.60	5.41	4.51	4.66	14.59

Appendix Table 4. Implements: estimated purchase price, annual use, useful life, performance rate,
(Continued) and direct and fixed cost per acre, Louisiana 2024.

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							
Disk Bed (Hipper)	12R-38	MFWD 225	114,000	160	10	0.049	0.71	1.99	1.40	0.47	4.59	4.64	3.68	12.93
Disk Bed (Hipper)Fld	8R-38	MFWD 190	45,800	160	10	0.074	1.07	2.53	0.84	0.56	5.03	2.80	4.40	12.24
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	36,100	160	10	0.074	1.07	2.53	0.66	0.56	4.85	2.21	4.40	11.46
Disk Bed w/roller	8R-30	2WD 190	40,100	160	10	0.093	1.36	3.20	0.93	0.41	5.92	3.10	3.24	12.27
Disk Bed w/roller	12R-30	MFWD 225	76,000	160	10	0.062	0.90	2.53	1.18	0.60	5.23	3.92	4.66	13.82
Disk Harrow	14'	2WD 130	39,400	180	10	0.140	2.03	3.28	1.53	0.59	7.45	4.05	4.44	15.95
Disk Harrow	24'	MFWD 190	71,900	180	10	0.081	1.18	2.80	1.63	0.62	6.25	4.32	4.86	15.44
Disk Harrow	28'	MFWD 225	74,700	180	10	0.070	1.01	2.84	1.45	0.67	5.99	3.84	5.23	15.08
Disk Harrow	32'		89,300	180	10	0.061	1.10	0.00	1.52	0.00	0.00	4.02	0.00	0.00
Disk Harrow	42'	MFWD 225	145,000	180	10	0.046	0.67	1.89	1.88	0.45	4.91	4.98	3.49	13.38
Ditcher		2WD 130	8,760	200	10	0.020	0.29	0.46	0.07	0.08	0.91	0.11	0.63	1.66
Ditcher (1m/160a)		2WD 130	8,760	200	10	0.009	0.13	0.21	0.03	0.03	0.42	0.05	0.29	0.77
Fert Appl (Liquid)	4R-38	MFWD 150	25,400	150	8	0.154	3.37	4.17	2.61	0.82	10.99	3.67	6.18	20.86
Fert Appl (Liquid)	6R-30	MFWD 170	25,300	150	8	0.130	2.85	4.01	2.20	0.82	9.89	3.10	6.36	19.35
Fert Appl (Liquid)	6R-38	MFWD 170	25,300	150	8	0.103	2.25	3.16	1.74	0.64	7.81	2.44	5.02	15.28
Fert Appl (Liquid)	8R-30	MFWD 190	26,300	150	8	0.098	2.14	3.36	1.72	0.75	7.97	2.41	5.83	16.23
Fert Appl (Liquid)	8R-38	MFWD 190	29,500	150	8	0.077	1.69	2.65	1.52	0.59	6.47	2.14	4.61	13.23
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	32,900	150	8	0.051	1.12	1.76	1.13	0.39	4.42	1.59	3.07	9.09
Fert Appl (Liquid)	10R-30	MFWD 225	18,600	150	8	0.078	1.71	3.18	0.97	0.75	6.63	1.36	5.86	13.86
Fert Appl (Liquid)	10R-38	MFWD 225	20,300	150	8	0.061	1.35	2.51	0.83	0.59	5.29	1.17	4.62	11.10
Fert Appl (Liquid)	12R-30	MFWD 225	30,600	150	8	0.078	1.71	3.18	1.60	0.75	7.25	2.25	5.86	15.37
Fert Appl (Liquid)	12R-38	MFWD 225	31,100	150	8	0.051	1.12	2.09	1.07	0.49	4.79	1.50	3.86	10.15
Field Cultivate	12'	2WD 150	23,000	100	10	0.124	1.80	3.36	0.71	0.53	6.42	3.78	4.00	14.20
Field Cultivate	24'	MFWD 170	38,600	100	10	0.062	0.90	1.90	0.60	0.39	3.80	3.17	3.02	9.99
Field Cultivate	32'	MFWD 190	61,400	100	10	0.046	0.67	1.59	0.71	0.35	3.35	3.78	2.77	9.91
Field Cultivate	42'	MFWD 225	80,900	100	10	0.035	0.51	1.44	0.71	0.34	3.01	3.80	2.65	9.47
Field Cultivate	50'	MFWD 225	82,900	100	10	0.029	0.43	1.21	0.61	0.28	2.55	3.27	2.23	8.05
Gate Installer		2WD 130	2,960	10	10	0.020	0.58	0.46	0.17	0.08	1.31	0.76	0.63	2.70
Grain Drill	12'	2WD 130	51,400	150	8	0.157	4.56	3.68	3.02	0.66	11.94	7.31	4.97	24.23
Grain Drill	15'	MFWD 150	46,800	150	8	0.125	3.65	3.39	2.20	0.67	9.92	5.32	5.03	20.28
Grain Drill	20'	MFWD 170	53,500	150	8	0.094	2.74	2.88	1.89	0.59	8.11	4.56	4.58	17.25
Grain Drill	24'	MFWD 190	80,300	150	8	0.078	2.28	2.68	2.36	0.60	7.94	5.71	4.67	18.32
Grain Drill	30'	MFWD 225	96,600	150	8	0.062	1.82	2.54	2.27	0.60	7.25	5.49	4.69	17.45
Grain Drill & Pre	12'	2WD 130	57,200	150	8	0.169	4.91	3.96	3.62	0.71	13.22	8.76	5.36	27.35
Grain Drill & Pre	15'	MFWD 150	52,600	150	8	0.135	3.93	3.65	2.67	0.72	10.98	6.44	5.41	22.85
Grain Drill & Pre	20'	MFWD 170	59,300	150	8	0.101	2.95	3.10	2.25	0.63	8.95	5.45	4.93	19.33
Grain Drill & Pre	24'	MFWD 190	86,100	150	8	0.084	2.45	2.89	2.73	0.65	8.73	6.59	5.03	20.36
Grain Drill & Pre	30'	MFWD 225	102,000	150	8	0.067	1.96	2.74	2.58	0.65	7.95	6.25	5.05	19.25
Harrow	13'	2WD 130	4,360	200	10	0.119	1.73	2.79	0.18	0.50	5.22	0.34	3.78	9.35
Harrow	21'	2WD 150	6,750	200	10	0.073	1.07	1.99	0.17	0.31	3.56	0.32	2.37	6.27
Harrow	40'	MFWD 190	21,300	200	10	0.038	0.56	1.32	0.28	0.29	2.48	0.54	2.30	5.33
Harrow	47'	MFWD 190	26,000	200	10	0.033	0.48	1.13	0.30	0.25	2.16	0.56	1.96	4.69
Header - Corn	4R-38	240hp	25,147	300	8	0.201	3.60	8.69	1.26	3.38	16.95	2.36	16.20	35.52
Header - Corn	6R30"	240hp	72,300	300	8	0.170	3.05	7.36	3.07	2.86	16.35	5.76	13.72	35.84
Header - Corn	6R38"	240hp	73,500	300	8	0.134	2.41	5.81	2.47	2.26	12.95	4.62	10.83	28.41
Header - Corn	8R-30	240hp	99,100	300	8	0.127	2.29	5.52	3.16	2.14	13.12	5.92	10.29	29.33
Header - Corn	8R-38	275hp	87,300	300	8	0.100	1.81	5.00	2.20	4.86	13.88	4.12	23.31	41.32
Header - Corn	12R-20	275hp	148,000	300	8	0.127	2.29	6.32	4.72	6.15	19.50	8.84	29.49	57.83
Header - Corn	12R-30	275hp	135,000	300	8	0.085	1.52	4.21	2.87	4.10	12.72	5.37	19.66	37.76
Header - Rice (CL)	22' Rigid	240hp	83,200	300	8	0.288	5.17	12.46	5.99	4.85	28.49	11.23	23.24	62.97
Header - Rice (CL)	25' Rigid	240hp	83,200	300	8	0.253	4.55	10.97	5.28	4.27	25.07	9.88	20.45	55.41
Header - Rice (CL)	30' Rigid	275hp	85,600	300	8	0.211	3.79	10.47	4.52	10.20	29.00	8.47	48.85	86.32
Header - Rice (SL)	22' Rigid	240hp	83,200	300	8	0.250	4.48	10.80	5.20	4.20	24.69	9.73	20.14	54.57
Header - Rice (SL)	25' Rigid	240hp	83,200	300	8	0.220	3.94	9.50	4.57	3.70	21.73	8.56	17.72	48.02
Header - Rice (SL)	30' Rigid	275hp	85,600	300	8	0.183	3.28	9.07	3.92	8.84	25.13	7.34	42.33	74.81
Header - Soybean	15' Flex	240hp	0	300	8	0.170	3.05	7.36	0.00	2.86	13.28	0.00	13.72	27.00
Header - Soybean	18' Flex	240hp	41,750	300	8	0.141	2.54	6.13	1.48	2.38	12.54	2.77	11.43	26.75
Header - Soybean	22' Flex	240hp	42,600	300	8	0.116	2.08	5.01	1.23	1.95	10.29	2.31	9.35	21.96
Header - Soybean	25' Flex	275hp	42,000	300	8	0.102	1.83	5.05	1.07	4.92	12.89	2.00	23.59	38.49
Header - Soybean	30' Flex	275hp	48,600	300	8	0.085	1.52	4.21	1.03	4.10	10.88	1.93	19.66	32.48
Header Wheat/Sorghum	18' Rigid	240hp	19,800	300	8	0.141	2.54	6.13	0.70	2.38	11.76	1.31	11.43	24.51
Header Wheat/Sorghum	22' Rigid	240hp	19,800	300	8	0.116	2.08	5.01	0.57	1.95	9.62	1.07	9.35	20.06
Header Wheat/Sorghum	25' Rigid	240hp	41,800	300	8	0.102	1.83	4.41	1.06	1.71	9.03	1.99	8.23	19.26
Header Wheat/Sorghum	30' Rigid	275hp	55,100	300	8	0.085	1.52	4.21	1.17	4.10	11.02	2.19	19.66	32.87
Header-Cotton Bcast	13'	173hp	21,300	200	8	0.251	8.17	7.12	1.00	6.68	22.99	3.76	32.02	58.78
Header-Cotton-Bcast	16'	173hp	23,800	200	8	0.204	6.64	5.78	0.91	5.43	18.77	3.41	26.02	48.22
Header-Cotton-Bcast	19'	173hp	26,200	200	8	0.172	5.59	4.87	0.84	4.57	15.89	3.16	21.91	40.97
Header-Cotton-Brush	4R30"	173hp	20,520	200	8	0.327	10.63	9.25	1.25	8.69	29.84	4.71	41.63	76.19
Header-Cotton-Brush	4R30"2X1	173hp	34,400	200	8	0.218	7.08	6.17	1.40	5.79	20.46	5.27	27.75	53.49
Header-Cotton-Brush	4R38"	173hp	34,000	200	8	0.257	8.37	7.29	1.64	6.84	24.15	6.15	32.78	63.08
Header-Cotton-Brush	4R38"2X1	173hp	36,000	200	8	0.172	5.59	4.87	1.16	4.57	16.20	4.35	21.91	42.47
Header-Cotton-Brush	5R-30	173hp	42,800	200	8	0.261	8.50	7.40	2.10	6.95	24.96	7.86	33.31	66.14
Header-Cotton-Brush	5R-38	173hp	44,300	200	8	0.207	6.72	5.85	1.72	5.50	19.81	6.44	26.35	52.60
Header-Cotton-Brush	6R-30	173hp	52,700	200	8	0.218	7.08	6.17	2.15	5.79	21.21	8.07	27.75	57.04
Heavy Disk	14'	MFWD 150	25,900	180	10	0.145	2.12	3.94	1.05	0.77	7.89	2.77	5.83	16.51

Appendix Table 4. Implements: estimated purchase price, annual use, useful life, performance rate,
(Continued) and direct and fixed cost per acre, Louisiana 2024.

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	--------	--------	--------	--------
Heavy Disk	21'	MFWD 170	40,600	180	10	0.097	1.41	2.97	1.09	0.61	6.10	2.90	4.72	13.73
Heavy Disk	27'	MFWD 190	50,400	180	10	0.075	1.09	2.59	1.05	0.58	5.33	2.80	4.49	12.63
LA Boom Sprayer	30 ft	MFWD 150	3,000	150	10	0.059	0.87	1.62	0.13	0.32	2.94	0.17	2.40	5.52
Land Plane	40'x10'	MFWD 190	6,020	200	10	0.242	3.52	8.30	0.29	1.86	13.98	0.96	14.42	29.38
Land Plane	50'x16'	MFWD 190	13,500	200	10	0.151	2.20	5.19	0.40	1.16	8.96	1.35	9.01	19.33
LARice Backhoe-Rrmnt	2 ft	MFWD 150	6,000	100	10	0.500	7.26	13.51	2.64	2.67	26.08	4.37	20.00	50.46
LARice Land Level	13 ft	MFWD 150	7,500	200	15	0.190	2.76	5.13	0.15	1.01	9.07	0.83	7.60	17.51
LARice Levee Plow	8 ft	4WD 300	4,600	150	10	0.050	0.72	2.70	0.07	0.67	4.18	0.22	5.22	9.62
LARice Water Level	24 ft	4WD 300	3,500	100	15	0.149	2.17	8.10	0.23	2.02	12.53	0.61	15.65	28.80
Levee Splitter (1/80	2 blade	2WD 150	9,220	50	10	0.004	0.06	0.11	0.00	0.01	0.19	0.10	0.13	0.43
Lo-Till & Bed	4R-38	MFWD 190	5,100	150	12	0.145	2.11	4.98	0.26	1.11	8.48	0.61	8.65	17.75
Middle Buster	6R-38	MFWD 150	12,800	160	8	0.120	1.74	3.24	0.36	0.64	5.99	1.39	4.80	12.20
Middle Buster	8R-30	MFWD 190	20,800	160	8	0.114	1.65	3.90	0.55	0.87	7.00	2.15	6.78	15.94
Middle Buster	8R-38	MFWD 190	18,100	160	8	0.090	1.31	3.08	0.38	0.69	5.47	1.48	5.36	12.32
Middle Buster	8R-40 2x1	MFWD 190	29,200	160	8	0.060	0.87	2.05	0.41	0.46	3.80	1.59	3.57	8.96
Middle Buster	10R-30	MFWD 225	29,300	160	8	0.091	1.32	3.70	0.62	0.88	6.53	2.42	6.82	15.78
Middle Buster	10R-38	MFWD 225	32,100	160	8	0.072	1.04	2.92	0.54	0.69	5.20	2.09	5.38	12.68
Middle Buster	12R-38	MFWD 225	29,200	160	8	0.060	0.87	2.43	0.41	0.58	4.30	1.59	4.48	10.38
Module Builder-1st	2R-38(157)	MFWD 190	31,300	200	10	0.519	15.10	17.78	4.06	3.99	40.94	10.47	30.89	82.32
Module Builder-1st	4R-30(255)	MFWD 190	34,700	200	10	0.327	9.51	11.20	2.84	2.51	26.07	7.31	19.46	52.85
Module Builder-1st	4R-30(325)	MFWD 190	34,700	200	10	0.327	9.51	11.20	2.84	2.51	26.07	7.31	19.46	52.85
Module Builder-1st	4R-38(255)	MFWD 190	34,700	200	10	0.257	7.49	8.82	2.23	1.98	20.53	5.76	15.32	41.62
Module Builder-1st	4R-38(325)	MFWD 190	34,700	200	10	0.257	7.49	8.82	2.23	1.98	20.53	5.76	15.32	41.62
Module Builder-1st	4R2x1260hp	MFWD 190	34,700	200	10	0.172	5.00	5.89	1.49	1.32	13.72	3.85	10.24	27.81
Module Builder-1st	5R-30(255)	MFWD 190	34,700	200	10	0.261	7.61	8.96	2.27	2.01	20.86	5.85	15.57	42.28
Module Builder-1st	5R-38(255)	MFWD 190	34,700	200	10	0.207	6.02	7.09	1.79	1.59	16.50	4.63	12.31	33.45
Module Builder-1st	6R-30(325)	MFWD 190	34,700	200	10	0.218	6.34	7.47	1.89	1.67	17.38	4.87	12.97	35.23
Module Builder-1st	6R-38(325)	MFWD 190	34,700	200	10	0.172	5.00	5.89	1.49	1.32	13.72	3.85	10.24	27.81
Module Builder-2nd	2R-38(157)	MFWD 190	34,700	200	10	0.440	12.79	15.06	3.81	3.38	35.06	9.83	26.17	71.06
Module Builder-2nd	4R-30(255)	MFWD 190	34,700	200	10	0.277	8.05	9.49	2.40	2.13	22.08	6.19	16.48	44.77
Module Builder-2nd	4R-30(325)	MFWD 190	34,700	200	10	0.277	8.05	9.49	2.40	2.13	22.08	6.19	16.48	44.77
Module Builder-2nd	4R-38(255)	MFWD 190	34,700	200	10	0.218	6.34	7.47	1.89	1.67	17.39	4.88	12.98	35.25
Module Builder-2nd	4R-38(325)	MFWD 190	34,700	200	10	0.218	6.34	7.47	1.89	1.67	17.39	4.88	12.98	35.25
Module Builder-2nd	4R2x1 255	MFWD 190	34,700	200	10	0.145	4.24	4.99	1.26	1.12	11.62	3.26	8.67	23.56
Module Builder-2nd	5R-30(255)	MFWD 190	34,700	200	10	0.221	6.44	7.59	1.92	1.70	17.67	4.95	13.19	35.81
Module Builder-2nd	5R-38(255)	MFWD 190	34,700	200	10	0.175	5.10	6.00	1.52	1.34	13.97	3.92	10.43	28.33
Module Builder-2nd	6R-30(325)	MFWD 190	34,700	200	10	0.184	5.37	6.32	1.60	1.42	14.72	4.13	10.99	29.84
Module Builder-2nd	6R-38(325)	MFWD 190	34,700	200	10	0.145	4.24	4.99	1.26	1.12	11.62	3.26	8.67	23.56
Module Builder-Strip	13' Bcast	MFWD 150	34,700	200	10	0.251	7.31	6.80	2.18	1.34	17.65	5.62	10.07	33.35
Module Builder-Strip	16' Bcast	MFWD 150	34,700	200	10	0.204	5.94	5.52	1.77	1.09	14.34	4.57	8.18	27.10
Module Builder-Strip	19' Brush	MFWD 150	34,700	200	10	0.172	5.00	4.65	1.49	0.92	12.07	3.85	6.89	22.82
Module Builder-Strip	4R-30	MFWD 150	34,700	200	10	0.327	9.51	8.84	2.84	1.74	22.94	7.31	13.09	43.36
Module Builder-Strip	4R-30 2X1	MFWD 150	34,700	200	10	0.218	6.34	5.89	1.89	1.16	15.29	4.87	8.73	28.91
Module Builder-Strip	4R-38	MFWD 150	34,700	200	10	0.257	7.49	6.96	2.23	1.37	18.07	5.76	10.31	34.14
Module Builder-Strip	4R-38 2X1	MFWD 150	34,700	200	10	0.172	5.00	4.65	1.49	0.92	12.07	3.85	6.89	22.82
Module Builder-Strip	5R-30	MFWD 150	34,700	200	10	0.261	7.61	7.07	2.27	1.39	18.35	5.85	10.47	34.69
Module Builder-Strip	5R-38	MFWD 150	34,700	200	10	0.207	6.02	5.59	1.79	1.10	14.52	4.63	8.29	27.44
Module Builder-Strip	6R-30	MFWD 150	34,700	200	10	0.218	6.34	5.89	1.89	1.16	15.29	4.87	8.73	28.91
Mulcher Plow	30'	MFWD 225	0	100	10	0.068	0.98	2.76	0.00	0.65	4.40	0.00	5.08	9.49
NT Grain Drill	12'	2WD 130	57,200	150	8	0.163	4.75	3.83	3.51	0.69	12.79	8.47	5.18	26.45
NT Grain Drill	15'	MFWD 150	73,300	150	8	0.130	3.80	3.53	3.59	0.69	11.64	8.68	5.23	25.57
NT Grain Drill	20'	MFWD 170	98,900	150	8	0.098	2.85	3.00	3.64	0.61	10.12	8.79	4.77	23.68
NT Grain Drill	24'	MFWD 190	111,300	150	8	0.081	2.37	2.80	3.41	0.62	9.22	8.24	4.86	22.33
NT Grain Drill	30'	MFWD 225	110,200	150	8	0.065	1.90	2.65	2.70	0.63	7.89	6.53	4.88	19.31
NT Grain Drill & Pre	12'	2WD 130	63,000	150	8	0.176	5.12	4.12	4.16	0.74	14.16	10.05	5.58	29.80
NT Grain Drill & Pre	20'	MFWD 170	86,500	150	8	0.105	2.89	3.70	3.43	0.61	10.63	7.49	4.34	22.47
NT Grain Drill & Pre	24'	MFWD 190	116,600	150	8	0.088	2.40	3.44	3.85	0.59	10.30	8.41	4.20	22.92
NT Grain Drill & Pre	30'	MFWD 225	115,500	150	8	0.070	1.92	3.26	3.05	0.60	8.85	6.66	4.30	19.82
NT Plant&Pre-Folding	8R-38	MFWD 170	67,800	150	8	0.083	2.28	2.92	2.12	0.48	7.82	4.64	3.43	15.90
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	107,000	150	8	0.055	1.52	1.94	2.23	0.32	6.02	4.87	2.28	13.19
NT Plant&Pre-Folding	10R-30	MFWD 190	57,555	150	8	0.084	2.31	3.31	1.82	0.57	8.02	3.98	4.03	16.04
NT Plant&Pre-Folding	10R-38	MFWD 190	52,893	150	8	0.066	1.82	2.61	1.32	0.45	6.20	2.88	3.18	12.28
NT Plant&Pre-Folding	12R-20	MFWD 190	82,800	150	8	0.105	2.89	4.13	3.28	0.71	11.02	7.16	5.04	23.24
NT Plant&Pre-Folding	12R-30	MFWD 190	101,000	150	8	0.070	1.92	2.75	2.67	0.47	7.83	5.83	3.36	17.02
NT Plant&Pre-Folding	12R-38	MFWD 190	111,800	150	8	0.055	1.52	2.17	2.33	0.37	6.40	5.09	2.65	14.16
NT Plant&Pre-Folding	16R-30	MFWD 190	149,400	150	8	0.052	1.44	2.06	2.96	0.35	6.83	6.46	2.52	15.82
NT Plant&Pre-Folding	23R-15	MFWD 190	203,900	150	8	0.073	2.00	2.87	5.61	0.49	10.99	12.26	3.50	26.75
NT Plant&Pre-Folding	24R-20	MFWD 190	238,100	150	8	0.052	1.44	2.06	4.72	0.35	8.59	10.30	2.52	21.42
NT Plant&Pre-Folding	24R-30	MFWD 190	224,900	150	8	0.035	0.96	1.37	2.97	0.23	5.55	6.49	1.68	13.72
NT Plant&Pre-Rigid	4R-30	2WD 130	37,700	150	8	0.211	5.78	5.66	2.99	0.77	15.21	6.52	5.29	27.03
NT Plant&Pre-Rigid	4R-38	2WD 130	34,500	150	8	0.166	4.55	4.45	2.15	0.61	11.77	4.70	4.16	20.65
NT Plant&Pre-Rigid	6R-30	MFWD 150	47,400	150	8	0.141	3.85	4.35	2.50	0.69	11.41	5.47	4.74	21.62
NT Plant&Pre-Rigid	6R-38	MFWD 150	47,500	150	8	0.111	3.04	3.43	1.98	0.54	9.01	4.32	3.74	17.08
NT Plant&Pre-Rigid	8R-22	MFWD 170	26,219	150	8	0.143	3.93	5.03	1.41	0.83	11.22	3.08	5.91	20.22
NT Plant&Pre-Rigid	8R-30	MFWD 170	60,300	150	8	0.105	2.89	3.70	2.39	0.61	9.60	5.22	4.34	19.16
NT Plant&Pre-Rigid	8R-38	MFWD 170	56,200	150	8	0.077	2.11	2.70	1.62	0.44	6.88	3.55	3.17	13.60
NT Plant&Pre-Rigid	10R-30	MFWD 190	51,900	150	8	0.084	2.31	3.31	1.64	0.57	7.84	3.59	4.03	15.47
NT Plant&Pre-Rigid	12R-20	MFWD 190	66,600	150	8	0.105	2.89	4.13	2.64	0.71	10.38	5.76	5.04	21.20
NT Plant&Pre-Rigid	12R-30	MFWD 190	86,600	150	8	0.070	1.92	2.75	2.28	0.47	7.45	4.99	3.36	15.81
NT Plant-Folding	8R-38	MFWD 170	72,900	150	8	0.077	2.12	2.71	2.12	0.45	7.41	4.63	3.19	15.23
NT Plant-Folding	8R-38 2x1	MFWD 170	102,200	150	8	0.051	1.41	1.80	1.98	0.30	5.50	4.32	2.12	11.95
NT Plant-Folding	10R-30	MFWD 190	52,061	150	8	0.078	2.14	3.07	1.53	0.53	7.28	3.34	3.75	14.38
NT Plant-Folding	10R-38	MFWD 190	47,646	150	8	0.061	1.69	2.42	1.10	0.41	5.64	2.41	2.95	11.01

Appendix Table 4. Implements: estimated purchase price, annual use, useful life, performance rate,
(Continued) and direct and fixed cost per acre, Louisiana 2024.

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-Rigid	4R-30	2WD 130	41,900	150	8	0.211	6.14	4.95	3.32	0.89	15.32	8.02	6.70	30.04
NT Plant&Pre-Rigid	4R-38	2WD 130	37,500	150	8	0.166	4.84	3.90	2.34	0.70	11.78	5.65	5.27	22.71
NT Plant&Pre-Rigid	6R-30	MFWD 150	50,800	150	8	0.141	4.09	3.81	2.68	0.75	11.34	6.48	5.64	23.47
NT Plant&Pre-Rigid	6R-38	MFWD 150	49,500	150	8	0.111	3.23	3.00	2.06	0.59	8.90	4.98	4.45	18.34
NT Plant&Pre-Rigid	8R-22	MFWD 170	26,219	150	8	0.143	4.18	4.40	1.41	0.90	10.90	3.41	6.99	21.31
NT Plant&Pre-Rigid	8R-30	MFWD 170	65,200	150	8	0.105	3.07	3.23	2.58	0.66	9.56	6.24	5.13	20.94
NT Plant&Pre-Rigid	8R-38	MFWD 170	62,300	150	8	0.077	2.24	2.36	1.80	0.48	6.89	4.35	3.74	14.99
NT Plant&Pre-Rigid	10R-30	MFWD 190	51,900	150	8	0.084	2.45	2.89	1.64	0.65	7.65	3.97	5.03	16.65
NT Plant&Pre-Rigid	12R-20	MFWD 190	66,600	150	8	0.105	3.07	3.62	2.64	0.81	10.14	6.37	6.28	22.81
NT Plant&Pre-Rigid	12R-30	MFWD 190	100,400	150	8	0.070	2.04	2.41	2.65	0.54	7.65	6.40	4.19	18.26
NT Plant-Folding	8R-38	MFWD 170	77,700	150	8	0.077	2.25	2.37	2.26	0.48	7.38	5.46	3.77	16.61
NT Plant-Folding	8R-38 2x1	MFWD 170	109,000	150	8	0.051	1.50	1.58	2.11	0.32	5.52	5.10	2.51	13.13
NT Plant-Folding	10R-30	MFWD 190	52,061	150	8	0.078	2.28	2.68	1.53	0.60	7.11	3.70	4.67	15.48
NT Plant-Folding	10R-38	MFWD 190	47,646	150	8	0.061	1.80	2.12	1.10	0.47	5.50	2.67	3.68	11.86
NT Plant-Folding	12R-20	MFWD 190	77,500	150	8	0.098	2.85	3.36	2.85	0.75	9.82	6.89	5.83	22.55
NT Plant-Folding	12R-30	MFWD 190	97,600	150	8	0.065	1.90	2.24	2.39	0.50	7.04	5.78	3.89	16.72
NT Plant-Folding	12R-38	MFWD 190	109,000	150	8	0.051	1.50	1.76	2.11	0.39	5.78	5.10	3.07	13.95
NT Plant-Folding	16R-30	MFWD 190	182,000	150	8	0.049	1.42	1.68	3.35	0.37	6.83	8.09	2.91	17.84
NT Plant-Folding	23R-15	MFWD 190	207,000	150	8	0.068	1.98	2.33	5.29	0.52	10.13	12.77	4.05	26.97
NT Plant-Folding	24R-20	MFWD 190	244,000	150	8	0.049	1.42	1.68	4.49	0.37	7.97	10.84	2.91	21.74
NT Plant-Folding	24R-30	MFWD 190	208,000	150	8	0.032	0.95	1.12	2.55	0.25	4.87	6.16	1.94	12.98
Plant - Rigid	4R-30	2WD 130	32,000	150	8	0.188	5.47	4.41	2.26	0.79	12.95	5.46	5.97	24.39
Plant - Rigid	4R-38	2WD 130	27,600	150	8	0.148	4.31	3.47	1.53	0.62	9.95	3.70	4.70	18.37
Plant - Rigid	6R-30	MFWD 150	38,900	150	8	0.125	3.65	3.39	1.83	0.67	9.55	4.42	5.03	19.01
Plant - Rigid	6R-38	MFWD 150	37,500	150	8	0.099	2.88	2.68	1.39	0.53	7.49	3.36	3.97	14.83
Plant - Rigid	8R-22	MFWD 170	18,473	150	8	0.127	3.71	3.91	0.88	0.80	9.32	2.13	6.21	17.67
Plant - Rigid	8R-30	MFWD 170	51,300	150	8	0.094	2.73	2.88	1.81	0.59	8.03	4.37	4.58	16.99
Plant - Rigid	8R-38	MFWD 170	48,400	150	8	0.074	2.16	2.28	1.35	0.46	6.26	3.26	3.62	13.15
Plant - Rigid	10R-30	MFWD 190	40,700	150	8	0.075	2.19	2.58	1.15	0.57	6.50	2.77	4.48	13.76
Plant - Rigid	12R-20	MFWD 190	60,700	150	8	0.094	2.73	3.22	2.14	0.72	8.83	5.18	5.60	19.62
Plant - Rigid	12R-30	MFWD 190	77,800	150	8	0.062	1.82	2.15	1.83	0.48	6.29	4.42	3.73	14.45
Plant - Rigid	15R-15	2WD 150	71,200	150	8	0.094	2.73	2.54	2.51	0.40	8.21	6.07	3.03	17.32
Pull Levee (1m/80a))	4 blade	2WD 50	3,180	100	10	0.003	0.05	0.03	0.00	0.00	0.08	0.01	0.02	0.12
Rice Grain Cart	500 Bu	MFWD 190	35,100	200	12	0.057	0.82	1.95	0.54	0.43	3.76	1.21	3.39	8.37
Rice Grain Cart	700 Bu	MFWD 190	54,400	200	12	0.063	0.92	2.17	0.93	0.48	4.51	2.08	3.77	10.37
Roller	32'	MFWD 170	22,800	100	12	0.046	0.67	1.42	0.17	0.29	2.57	1.28	2.26	6.12
Rotary Cutter	7'	MFWD 130	6,580	185	10	0.168	2.44	3.94	0.89	0.89	8.18	0.79	6.73	15.71
Rotary Cutter	12'	2WD 150	20,200	185	10	0.098	1.42	2.65	1.60	0.42	6.11	1.41	3.15	10.68
Rotary Cutter	15'	MFWD 150	27,300	185	10	0.078	1.14	2.12	1.73	0.41	5.42	1.53	3.14	10.10
Row Cond & Inc	13'	2WD 130	18,700	100	10	0.137	2.82	3.69	0.64	0.50	7.67	3.09	3.45	14.21
Row Cond & Inc	21'	2WD 170	26,900	100	10	0.085	1.75	2.98	0.57	0.44	5.75	2.75	3.13	11.64
Row Cond & Inc	26'	MFWD 190	29,300	100	10	0.063	1.30	2.48	0.46	0.42	4.67	2.22	3.02	9.92
Row Cond & Inc	38'	MFWD 225	40,100	100	10	0.047	0.96	2.18	0.47	0.40	4.03	2.26	2.87	9.18
Row Cond & Inc	42'	MFWD 225	20,400	100	10	0.040	0.82	1.86	0.20	0.34	3.23	0.98	2.45	6.67
Row Cond (Plant)	13'	2WD 130	7,120	100	10	0.157	2.28	3.68	0.27	0.66	6.90	1.47	4.97	13.36
Row Cond (Plant)	21'	2WD 170	11,700	100	10	0.097	1.41	2.97	0.28	0.50	5.18	1.50	3.90	10.59
Row Cond (Plant)	27'	MFWD 190	12,400	100	10	0.078	1.14	2.69	0.24	0.60	4.67	1.28	4.67	10.64
Row Cond (Plant)	38'	MFWD 225	16,587	100	10	0.053	0.78	2.17	0.22	0.51	3.70	1.17	4.01	8.89
Row Cond (Plant)	42'	MFWD 225	15,582	100	10	0.048	0.70	1.97	0.18	0.46	3.33	1.00	3.63	7.97
RT Cult (Early)	8R-30	2WD 170	20,774	200	12	0.103	1.49	3.15	1.02	0.53	6.21	1.32	4.13	11.67
RT Cult (Early)	12R-30	2WD 190	29,998	200	12	0.068	0.99	2.35	0.98	0.30	4.64	1.27	2.37	8.29
RT Cult (Late)	8R-30	2WD 170	20,774	200	12	0.128	1.87	3.94	1.28	0.66	7.77	1.65	5.17	14.59
RT Cult (Late)	12R-30	2WD 190	29,998	200	12	0.085	1.24	2.94	1.23	0.38	5.80	1.59	2.97	10.37
RT Cult + PD (Early)	8R-30	2WD 150	20,774	200	12	0.110	2.39	2.97	1.09	0.47	6.93	1.40	3.53	11.88
RT Cult + PD (Early)	12R-30	MFWD 225	29,998	200	12	0.073	1.59	2.97	1.05	0.70	6.33	1.35	5.47	13.16
RT Cult + PD (Late)	8R-30	2WD 170	26,264	200	12	0.137	2.99	4.21	1.73	0.71	9.65	2.22	5.51	17.39
RT Cult + PD (Late)	12R-30	2WD 190	35,493	200	12	0.091	1.99	3.13	1.55	0.40	7.10	2.00	3.16	12.27
Spin Spreader	5 ton	MFWD 190	14,500	100	8	0.042	1.22	1.44	0.34	0.32	3.33	0.85	2.50	6.69
Spin Spreader	5 ton	MFWD 190	14,500	100	8	0.042	1.22	1.44	0.34	0.32	3.33	0.85	2.50	6.69
Spray (Band)	27'	MFWD 170	5,810	200	8	0.062	1.36	1.91	0.17	0.39	3.85	0.25	3.04	7.15
Spray (Band)	40'	MFWD 170	10,350	200	8	0.042	0.92	1.29	0.20	0.26	2.68	0.30	2.05	5.05
Spray (Band)	50'	MFWD 170	9,670	200	8	0.033	0.73	1.03	0.15	0.21	2.14	0.22	1.64	4.01
Spray (Band)	53'	MFWD 170	9,940	200	8	0.031	0.69	0.97	0.14	0.20	2.02	0.22	1.55	3.79
Spray (Band)	60'	MFWD 170	18,600	200	8	0.028	0.61	0.86	0.24	0.17	1.90	0.36	1.37	3.64
Spray (Bcast/HB)	13' Rigid	MFWD 150	8,890	200	8	0.130	2.83	3.51	0.54	0.69	7.59	0.81	5.20	13.61
Spray (Bcast/HB)	20' Rigid	2WD 50	10,400	200	8	0.084	1.84	0.76	0.41	0.07	3.09	0.61	0.55	4.26
Spray (Bcast/HB)	27' Fold	MFWD 170	13,000	200	8	0.062	1.36	1.91	0.38	0.39	4.06	0.57	3.04	7.67
Spray (Bcast/HB)	27' Rigid	MFWD 170	12,200	200	8	0.062	1.36	1.91	0.35	0.39	4.03	0.53	3.04	7.61
Spray (Bcast/HB)	30' Fold	MFWD 170	18,700	200	8	0.056	1.22	1.72	0.49	0.35	3.80	0.74	2.74	7.28
Spray (Bcast/HB)	40' Fold	MFWD 170	22,600	200	8	0.042	0.92	1.29	0.44	0.26	2.93	0.67	2.05	5.65
Spray (Bcast/HB/HD)	27'	MFWD 170	13,000	200	8	0.062	1.36	1.91	0.38	0.39	4.06	0.57	3.04	7.67
Spray (Bcast/HB/HD)	40'	MFWD 170	22,600	200	8	0.042	0.92	1.29	0.44	0.26	2.93	0.67	2.05	5.65
Spray (Broadcast)	27'	MFWD 170	5,810	200	8	0.062	1.36	1.91	0.17	0.39	3.85	0.25	3.04	7.15
Spray (Broadcast)	40'	MFWD 170	10,350	200	8	0.042	0.92	1.29	0.20	0.26	2.68	0.30	2.05	5.05
Spray (Broadcast)	50'	MFWD 170	9,670	200	8	0.033	0.73	1.03	0.15	0.21	2.14	0.22	1.64	4.01
Spray (Broadcast)	53'	MFWD 170	9,940	200	8	0.031	0.69	0.97	0.14	0.20	2.02	0.22	1.55	3.79
Spray (Broadcast)	60'	MFWD 170	18,600	200	8	0.028	0.61	0.86	0.24	0.17	1.90	0.36	1.37	3.64
Spray (Direct/Hood)	8R-30	MFWD 170	19,000	200	8	0.084	1.84	2.59	0.75	0.53	5.72	1.12	4.11	10.96
Spray (Direct/Hood)	8R-38	MFWD 170	19,800	200	8	0.066	1.45	2.04	0.62	0.42	4.54	0.92	3.24	8.72
Spray (Direct/Hood)	12R-30	MFWD 170	26,100	200	8	0.056	1.22	1.72	0.69	0.35	4.00	1.03	2.74	7.77

Appendix Table 4. Implements: estimated purchase price, annual use, useful life, performance rate,
(Continued) and direct and fixed cost per acre, Louisiana 2024.

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---------------------							
Spray (Direct/Hood)	12R-38	MFWD 170	26,100	200	8	0.044	0.97	1.36	0.54	0.27	3.15	0.81	2.16	6.13
Spray (Direct/Layby)	8R-30	MFWD 170	19,500	200	8	0.084	1.84	2.59	0.77	0.53	5.74	1.15	4.11	11.01
Spray (Direct/Layby)	8R-38	MFWD 170	19,500	200	8	0.066	1.45	2.04	0.61	0.42	4.53	0.91	3.24	8.70
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	29,500	200	8	0.044	0.97	1.36	0.61	0.27	3.22	0.92	2.16	6.31
Spray (Direct/Layby)	10R-30	MFWD 170	12,200	200	8	0.067	1.47	2.07	0.38	0.42	4.36	0.57	3.28	8.22
Spray (Direct/Layby)	12R-30	MFWD 170	29,500	200	8	0.056	1.22	1.72	0.78	0.35	4.09	1.16	2.74	8.00
Spray (Direct/Layby)	12R-38	MFWD 170	29,500	200	8	0.044	0.97	1.36	0.61	0.27	3.22	0.92	2.16	6.31
Spray (Direct/Layby)	16R-20	MFWD 170	34,600	200	8	0.063	1.38	1.94	1.02	0.39	4.74	1.53	3.07	9.36
Spray (Spot)	27'	MFWD 170	5,810	200	8	0.062	1.36	1.91	0.17	0.39	3.85	0.25	3.04	7.15
Spray (Spot)	40'	MFWD 170	10,350	200	8	0.042	0.92	1.29	0.20	0.26	2.68	0.30	2.05	5.05
Spray (Spot)	50'	MFWD 170	9,670	200	8	0.033	0.73	1.03	0.15	0.21	2.14	0.22	1.64	4.01
Spray (Spot)	53'	MFWD 170	10,100	200	8	0.031	0.69	0.97	0.15	0.20	2.02	0.22	1.55	3.80
Spray (Spot)	60'	MFWD 170	18,600	200	8	0.028	0.61	0.86	0.24	0.17	1.90	0.36	1.37	3.64
Stalk Shredder	14'	MFWD 150	36,300	200	10	0.117	1.71	3.18	3.74	0.62	9.27	2.82	4.71	16.81
Stalk Shredder	20'	MFWD 150	36,300	200	10	0.082	1.19	2.22	2.62	0.44	6.48	1.97	3.30	11.76
Stalk Shredder-Flail	12'	MFWD 150	30,000	200	10	0.137	1.99	3.71	3.60	0.73	10.05	2.72	5.50	18.28
Stalk Shredder-Flail	20'	MFWD 150	43,900	200	10	0.082	1.19	2.22	3.16	0.44	7.03	2.39	3.30	12.73
Subsoiler	3 shank	MFWD 190	5,690	100	15	0.204	2.96	6.99	0.38	1.57	11.92	1.27	12.14	25.34
Subsoiler	4 shank	MFWD 225	14,800	100	15	0.153	2.23	6.22	0.75	1.48	10.70	2.49	11.47	24.67
Subsoiler	5 shank	MFWD 225	18,300	100	15	0.122	1.77	4.95	0.74	1.18	8.66	2.45	9.13	20.26
Subsoiler low-till	4 shank	MFWD 225	9,830	100	15	0.153	2.23	6.22	0.50	1.48	10.44	1.65	11.47	23.57
Subsoiler low-till	6 shank	MFWD 225	26,600	100	15	0.102	1.48	4.14	0.90	0.98	7.51	2.98	7.63	18.13
Subsoiler low-till	8 shank	MFWD 225	25,700	100	15	0.076	1.11	3.10	0.65	0.73	5.60	2.15	5.71	13.48
TerraTill Bed w/roll	4R-38	MFWD 225	14,300	150	12	0.160	2.33	6.52	0.83	1.55	11.24	1.85	12.01	25.11
TerraTill Bed w/roll	6R-38	MFWD 225	19,400	150	12	0.107	1.56	4.35	0.75	1.03	7.71	1.68	8.03	17.42
TerraTill Bed w/roll	4R-30	MFWD 225	14,300	150	12	0.204	2.96	8.28	1.05	1.97	14.27	2.35	15.25	31.89
TerraTill Bed w/roll	6R-30	MFWD 225	15,310	150	12	0.136	1.97	5.52	0.75	1.31	9.56	1.67	10.17	21.42