

Projected Costs and Returns Crop Enterprise Budgets for Cotton Production in Louisiana, 2019

Michael A. Deliberto and Brian M. Hilbun



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COTTON ENTERPRISE BUDGETS:

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PROJECTED COSTS AND RETURNS CROP ENTERPRISE BUDGETS FOR COTTON PRODUCTION IN LOUISIANA, 2019

by

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Introduction

This publication presents estimates of projected costs and returns for cotton production in Louisiana for the 2019 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 2019 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 2019 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 \$10.73 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 6.00% per year. Operating capital was assumed to be borrowed in a manner consistent with timely acquisition of inputs. Fuel price for diesel was \$2.50 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 6.5%. 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
Cotton, B2/RRFlex,8-row equipment, non-irrigated, alluvial soil, Louisiana, 2019.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
IRECT EXPENSES					
CUSTOM SPRAY					
App by Air (3 gal)	appl	5.00	5.0000	25.00	_____
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
HARVEST AIDS					
Dropp SC	oz	1.09	1.2000	1.31	_____
Prep	pt	3.00	1.3300	3.99	_____
Def/Folex	pt	7.00	0.7500	5.25	_____
FERTILIZERS					
LA Phosphate	lb	0.55	60.0000	33.00	_____
LA Potash	lb	0.32	60.0000	19.20	_____
LA Nitrogen	lb	0.43	90.0000	38.70	_____
HERBICIDES					
Roundup WeatherMax	oz	0.26	88.0000	22.88	_____
2,4-D Amine 4	pt	2.31	1.0000	2.31	_____
Valor WP	oz	4.38	1.5000	6.57	_____
Cotoran 4L	pt	6.42	1.2000	7.70	_____
Dual II Magnum	pt	14.50	1.0000	14.50	_____
Layby Pro	qt	12.60	1.0000	12.60	_____
INSECTICIDES					
Ammo 2.5 EC	oz	0.92	1.2800	1.18	_____
Dimethoate 4E	pt	5.35	0.4000	2.14	_____
Centric 40WG	oz	5.37	4.0000	21.48	_____
Karate Z	oz	1.02	6.3900	6.52	_____
Orthene 90S	lb	6.00	1.1500	6.90	_____
Diamond .83EC	pt	19.50	0.7500	14.63	_____
Bidrin 8L	oz	1.33	12.0000	15.96	_____
SEED/PLANTS					
Cotton Seed BGII/RRF	thous	0.61	52.5000	32.03	_____
TECHNOLOGY FEE					
BGII/RRF Cot Tech Fe	cap/ac	62.69	1.0000	62.69	_____
Eradication Fee	acre	6.00	1.0000	6.00	_____
GROWTH REGULATORS					
Pix Plus	oz	0.40	16.0000	6.40	_____
SERVICE FEE					
Crop Consultant	acre	7.00	1.0000	7.00	_____
Cotton Checkoff	bale	2.56	1.9800	5.07	_____
CUSTOM FERT/LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Self-Propelled	hour	13.51	0.2428	3.29	_____
HAND LABOR					
Self-Propelled	hour	9.06	0.2075	1.88	_____
LA Hired Labor					
Implements	hour	10.73	0.3636	3.91	_____
Tractors	hour	10.73	1.0916	11.71	_____
DIESEL FUEL					
Tractors	gal	2.50	10.1428	25.34	_____
Self-Propelled	gal	2.50	3.8741	9.67	_____
REPAIR & MAINTENANCE					
Implements	Acre	10.59	1.0000	10.59	_____
Tractors	Acre	5.53	1.0000	5.53	_____
Self-Propelled	Acre	13.32	1.0000	13.32	_____
INTEREST ON OP. CAP.	Acre	12.47	1.0000	12.47	_____

TOTAL DIRECT EXPENSES				497.74	_____
FIXED EXPENSES					
Implements	Acre	19.16	1.0000	19.16	_____
Tractors	Acre	38.10	1.0000	38.10	_____
Self-Propelled	Acre	59.51	1.0000	59.51	_____

TOTAL FIXED EXPENSES				116.77	_____

TOTAL SPECIFIED EXPENSES				614.51	_____

Table 1.B Estimated resource use and costs for field operations, per Acre
Cotton, B2/RRFlex,8-row equipment, non-irrigated, alluvial soil, Louisiana, 2019.

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-----	
Land Plane	40'x10'	MFWD 190	0.242	0.20	Oct	1.46	1.83	0.06	0.17	0.04	0.52				4.04
Paratill & Bed Fold.	8R-38	MFWD 225	0.080	0.50	Nov	1.41	1.66	0.79	1.54	0.04	0.43				5.83
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Nov	2.32	2.93	0.98	1.22	0.11	1.25				8.70
LA Phosphate	lb											60.0000	0.55	33.00	33.00
LA Potash	lb											60.0000	0.32	19.20	19.20
Lime (Spread)	ton			0.33	Nov							0.3300	38.00	12.54	12.54
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	0.074	1.00	Nov	2.22	2.80	0.34	1.00	0.07	0.80				7.16
Row Cond (Harrow)	27'	MFWD 190	0.057	1.00	Nov	1.71	2.17	0.18	0.83	0.05	0.62				5.51
Roller	32'	MFWD 170	0.046	1.00	Nov	1.24	1.49	0.18	1.12	0.04	0.50				4.53
Ditcher		2WD 130	0.020	1.00	Nov	0.39	0.43	0.05	0.07	0.02	0.21				1.15
Sprayer(600-750Gal)	60'		0.017	1.00	Mar	0.65	1.41			0.02	0.32				2.38
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
2,4-D Amine 4	pt											1.0000	2.31	2.31	2.31
Valor WP	oz											1.5000	4.38	6.57	6.57
Plant & Pre Folding	8R-38	MFWD 170	0.080	1.00	Apr	2.13	2.56	1.74	3.70	0.16	1.72				11.85
Cotoran 4L	pt											1.2000	6.42	7.70	7.70
Cotton Seed BGII/RRF	thous											52.5000	0.61	32.03	32.03
Ammo 2.5 EC	oz											1.2800	0.92	1.18	1.18
BGII/RRF Cot Tech Fe cap/ac												1.0000	62.69	62.69	62.69
Ditcher		2WD 130	0.020	1.00	Apr	0.39	0.43	0.05	0.07	0.02	0.21				1.15
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Apr	2.32	2.93	0.98	1.22	0.11	1.25				8.70
LA Nitrogen	lb											90.0000	0.43	38.70	38.70
Sprayer(600-750Gal)	60'		0.017	1.00	May	0.65	1.41			0.02	0.32				2.38
Dimethoate 4E	pt											0.4000	5.35	2.14	2.14
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
Dual II Magnum	pt											1.0000	14.50	14.50	14.50
Sprayer(600-750Gal)	60'		0.017	1.00	May	0.65	1.41			0.02	0.32				2.38
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
Centric 40WG	oz											2.0000	5.37	10.74	10.74
Sprayer(600-750Gal)	60'		0.017	1.00	Jun	0.65	1.41			0.02	0.32				2.38
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
App by Air (3 gal)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Centric 40WG	oz											2.0000	5.37	10.74	10.74
Pix Plus	oz											4.0000	0.40	1.60	1.60
Spray (Direct/Layby)	8R-38	MFWD 170	0.066	1.00	Jun	1.77	2.14	0.35	0.47	0.10	1.08				5.81
Layby Pro	qt											1.0000	12.60	12.60	12.60
Eradication Fee	acre			1.00	Jul							1.0000	6.00	6.00	6.00
App by Air (3 gal)	appl			1.00	Jul							1.0000	5.00	5.00	5.00
Karate Z	oz											2.1300	1.02	2.17	2.17
Orthene 90S	lb											0.6000	6.00	3.60	3.60
Diamond .83EC	pt											0.3750	19.50	7.31	7.31
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Karate Z	oz											2.1300	1.02	2.17	2.17
Bidrin 8L	oz											6.0000	1.33	7.98	7.98
Pix Plus	oz											12.0000	0.40	4.80	4.80
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Bidrin 8L	oz											6.0000	1.33	7.98	7.98
Diamond .83EC	pt											0.3750	19.50	7.31	7.31
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Orthene 90S	lb											0.5500	6.00	3.30	3.30
Karate Z	oz											2.1300	1.02	2.17	2.17
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.50	6.50	6.50
Dropp SC	oz											1.2000	1.09	1.31	1.31
Prep	pt											1.3300	3.00	3.99	3.99
Def/Folex	pt											0.7500	7.00	5.25	5.25
Cotton Picker-1st-BB	6R38"330hp		0.172	1.00	Sep	20.39	53.87			0.34	3.89				78.15
Module Builder-1st	6R-38(325)	MFWD 190	0.172	1.00	Sep	5.15	6.51	1.49	3.38	0.34	3.70				20.23
Boll Buggy-1st pick	6R38"325hp	MFWD 190	0.172	1.00	Sep	5.15	6.51	1.31	2.97	0.17	1.85				17.79
Stalk Shredder-Flail	12'	MFWD 150	0.137	1.00	Nov	3.21	3.71	2.09	1.40	0.13	1.48				11.89
Crop Consultant	acre			1.00	Nov							1.0000	7.00	7.00	7.00
Cotton Checkoff	bale			1.00	Nov							1.9800	2.56	5.07	5.07
TOTALS						53.86	97.61	10.59	19.16	1.90	20.79			400.03	602.04
INTEREST ON OPERATING CAPITAL															12.47
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															614.51

Table 1.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Cotton, B2/RRFlex,8-row equipment, non-irrigated, alluvial soil, Louisiana, 2019.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.25	0.27	0.29	0.32	0.35	0.38	0.43	0.48	0.55	0.64	0.77
PERCENT	YIELD	UNIT	-----dollars-----										
50	500.00	lb	-259	-250	-239	-226	-212	-194	-172	-145	-111	-64	0
			-376	-366	-356	-343	-328	-311	-289	-262	-227	-181	-116
60	600.00	lb	-233	-222	-209	-194	-176	-155	-129	-97	-55	0	77
			-350	-339	-326	-311	-293	-272	-246	-214	-172	-116	-38
70	700.00	lb	-207	-194	-179	-162	-141	-116	-86	-48	0	64	155
			-324	-311	-296	-278	-258	-233	-203	-165	-116	-51	38
80	800.00	lb	-181	-166	-149	-129	-106	-77	-43	0	55	129	233
			-298	-283	-266	-246	-222	-194	-159	-116	-61	12	116
90	900.00	lb	-155	-138	-119	-97	-70	-38	0	48	111	194	311
			-272	-255	-236	-214	-187	-155	-116	-68	-5	77	194
100	1000.00	lb	-129	-111	-89	-64	-35	0	43	97	166	259	388
			-246	-227	-206	-181	-152	-116	-73	-19	49	142	272
110	1100.00	lb	-103	-83	-59	-32	0	38	86	145	222	324	466
			-220	-200	-176	-149	-116	-77	-30	29	105	207	349
120	1200.00	lb	-77	-55	-29	0	35	77	129	194	277	388	544
			-194	-172	-146	-116	-81	-38	12	77	161	272	427
130	1300.00	lb	-51	-27	0	32	70	116	172	243	333	453	622
			-168	-144	-116	-84	-46	-0	56	126	216	336	505
140	1400.00	lb	-25	0	29	64	106	155	216	291	388	518	700
			-142	-116	-86	-51	-10	38	99	174	272	401	583
150	1500.00	lb	0	27	59	97	141	194	259	340	444	583	777
			-116	-88	-56	-19	24	77	142	223	327	466	661

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
Cotton, B2/RRFlex,8-row equipment, non-irrigated, alluvial soil, Louisiana, 2019.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.33	0.36	0.38	0.42	0.45	0.50	0.56	0.63	0.72	0.84	1.01
PERCENT	YIELD	UNIT	-----dollars-----										
50	500.00	lb	-220	-208	-194	-178	-159	-136	-107	-72	-27	32	116
			-337	-325	-311	-294	-275	-252	-224	-189	-144	-84	0
60	600.00	lb	-186	-172	-155	-136	-113	-85	-51	-9	44	116	217
			-303	-288	-272	-252	-229	-202	-168	-126	-72	0	101
70	700.00	lb	-152	-136	-116	-93	-67	-34	4	53	116	201	319
			-269	-252	-233	-210	-183	-151	-112	-63	0	84	202
80	800.00	lb	-119	-99	-77	-51	-21	15	60	116	189	285	420
			-235	-216	-194	-168	-137	-101	-56	0	72	168	303
90	900.00	lb	-85	-63	-38	-9	24	66	116	179	261	369	521
			-202	-180	-155	-126	-91	-50	0	63	144	252	404
100	1000.00	lb	-51	-27	0	32	70	116	172	243	333	453	622
			-168	-144	-116	-84	-45	0	56	126	216	337	505
110	1100.00	lb	-18	8	38	74	116	167	229	306	405	538	723
			-134	-108	-77	-42	0	50	112	189	288	421	606
120	1200.00	lb	15	44	77	116	162	217	285	369	477	622	824
			-101	-72	-38	0	45	101	168	252	361	505	707
130	1300.00	lb	49	80	116	158	208	268	341	432	550	706	925
			-67	-36	0	42	91	151	224	316	433	589	809
140	1400.00	lb	83	116	155	201	254	319	397	496	622	791	1027
			-33	0	38	84	137	202	280	379	505	674	910
150	1500.00	lb	116	152	194	243	300	369	453	559	694	875	1128
			0	36	77	126	183	252	337	442	577	758	1011

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 Cotton, B2/RRFlex Cotton, 8-row equipment, irrigated, alluvial soil, Louisiana, 2019.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (3 gal)	appl	5.00	5.0000	25.00	_____
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
HARVEST AIDS					
Dropp SC	oz	1.09	1.2000	1.31	_____
Prep	pt	3.00	1.3300	3.99	_____
Def/Folex	pt	7.00	0.7500	5.25	_____
FERTILIZERS					
LA Phosphate	lb	0.55	60.0000	33.00	_____
LA Potash	lb	0.32	60.0000	19.20	_____
LA Nitrogen	lb	0.43	90.0000	38.70	_____
HERBICIDES					
Roundup WeatherMax	oz	0.26	88.0000	22.88	_____
2,4-D Amine 4	pt	2.31	1.0000	2.31	_____
Valor WP	oz	4.38	1.5000	6.57	_____
Cotoran 4L	pt	6.42	1.2000	7.70	_____
Dual II Magnum	pt	14.50	1.0000	14.50	_____
Layby Pro	qt	12.60	1.0000	12.60	_____
INSECTICIDES					
Ammo 2.5 EC	oz	0.92	1.2800	1.18	_____
Dimethoate 4E	pt	5.35	0.4000	2.14	_____
Orthene 90S	lb	6.00	1.8000	10.80	_____
Centric 40WG	oz	5.37	4.0000	21.48	_____
Karate Z	oz	1.02	6.3900	6.52	_____
Bidrin 8L	oz	1.33	12.0000	15.96	_____
Diamond .83EC	pt	19.50	0.7500	14.63	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Cotton Seed BGII/RRF	thous	0.61	52.5000	32.03	_____
TECHNOLOGY FEE					
BGII/RRF Cot Tech Fe	cap/ac	62.69	1.0000	62.69	_____
Eradication Fee	acre	6.00	1.0000	6.00	_____
GROWTH REGULATORS					
Pix Plus	oz	0.40	24.0000	9.60	_____
SERVICE FEE					
Crop Consultant	acre	7.00	1.0000	7.00	_____
Cotton Checkoff	bale	2.56	2.2900	5.86	_____
CUSTOM FERT/LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Self-Propelled	hour	13.51	0.2428	3.29	_____
IRRIGATION LABOR					
Implements	hour	9.06	0.0062	0.06	_____
HAND LABOR					
Self-Propelled	hour	9.06	0.2075	1.88	_____
LA Hired Labor					
Implements	hour	10.73	0.3636	3.91	_____
Tractors	hour	10.73	1.3665	14.65	_____
LA Irrigation Labor					
Special Labor	hour	10.73	0.1500	1.62	_____
DIESEL FUEL					
Tractors	gal	2.50	12.8637	32.15	_____
Self-Propelled	gal	2.50	3.8293	9.56	_____
Roll-Out Pipe Irr.	gal	2.50	8.5535	21.39	_____
REPAIR & MAINTENANCE					
Implements	Acre	11.09	1.0000	11.09	_____
Tractors	Acre	7.03	1.0000	7.03	_____
Self-Propelled	Acre	13.32	1.0000	13.32	_____
Roll-Out Pipe Irr.	Acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	Acre	13.68	1.0000	13.68	_____

TOTAL DIRECT EXPENSES				556.69	_____
FIXED EXPENSES					
Implements	Acre	20.71	1.0000	20.71	_____
Tractors	Acre	48.42	1.0000	48.42	_____
Self-Propelled	Acre	59.51	1.0000	59.51	_____
Roll-Out Pipe Irr.	Acre	56.58	1.0000	56.58	_____

TOTAL FIXED EXPENSES				185.22	_____

TOTAL SPECIFIED EXPENSES				741.91	_____

Table 2.B Estimated resource use and costs for field operations, per Acre
Cotton, B2/RRFlex Cotton, 8-row equipment, irrigated, alluvial soil, Louisiana, 2019.

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-----			
Land Plane	40'x10'	MFWD 190	0.242	0.20	Oct	1.46	1.83	0.06	0.17	0.04	0.52				4.04
Paratill & Bed Fold.	8R-38	MFWD 225	0.080	0.50	Nov	1.41	1.66	0.79	1.54	0.04	0.43				5.83
Lime (Spread)	ton			0.33	Nov							0.3300	38.00	12.54	12.54
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Nov	2.32	2.93	0.98	1.22	0.11	1.25				8.70
LA Phosphate	lb											60.0000	0.55	33.00	33.00
LA Potash	lb											60.0000	0.32	19.20	19.20
Disk Bed (Hipper)Fld	8R-38	MFWD 190	0.074	1.00	Nov	2.22	2.80	0.37	1.08	0.07	0.80				7.27
Row Cond (Harrow)	38'	MFWD 225	0.039	1.00	Nov	1.37	1.62	0.22	1.02	0.03	0.42				4.65
Roller	32'	MFWD 170	0.046	1.00	Nov	1.24	1.49	0.18	1.12	0.04	0.50				4.53
Ditcher		2WD 130	0.020	1.00	Nov	0.39	0.43	0.05	0.07	0.02	0.21				1.15
Sprayer(600-750Gal)	60'		0.017	1.00	Mar	0.65	1.41			0.02	0.32				2.38
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
2,4-D Amine 4	pt											1.0000	2.31	2.31	2.31
Valor WP	oz											1.5000	4.38	6.57	6.57
Plant & Pre Folding	8R-38	MFWD 170	0.080	1.00	Apr	2.13	2.56	1.74	3.70	0.16	1.72				11.85
Cotoran 4L	pt											1.2000	6.42	7.70	7.70
Cotton Seed BGII/RRF	thous											52.5000	0.61	32.03	32.03
Ammo 2.5 EC	oz											1.2800	0.92	1.18	1.18
BGII/RRF Cot Tech Fe cap/ac												1.0000	62.69	62.69	62.69
Ditcher		2WD 130	0.020	1.00	Apr	0.39	0.43	0.05	0.07	0.02	0.21				1.15
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Apr	2.32	2.93	0.98	1.22	0.11	1.25				8.70
LA Nitrogen	lb											90.0000	0.43	38.70	38.70
Sprayer(600-750Gal)	60'		0.017	1.00	May	0.65	1.41			0.02	0.32				2.38
Dimethoate 4E	pt											0.4000	5.35	2.14	2.14
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
Dual II Magnum	pt											1.0000	14.50	14.50	14.50
Sprayer(600-750Gal)	60'		0.017	1.00	May	0.65	1.41			0.02	0.32				2.38
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
Sprayer(600-750Gal)	60'		0.017	1.00	Jun	0.65	1.41			0.02	0.32				2.38
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
Orthene 90S	lb											0.6000	6.00	3.60	3.60
Centric 40WG	oz											2.0000	5.37	10.74	10.74
App by Air (3 gal)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Centric 40WG	oz											2.0000	5.37	10.74	10.74
Pix Plus	oz											12.0000	0.40	4.80	4.80
Spray (Direct/Layby)	8R-38	MFWD 170	0.066	1.00	Jun	1.77	2.14	0.35	0.47	0.10	1.08				5.81
Layby Pro	qt											1.0000	12.60	12.60	12.60
Eradication Fee	acre			1.00	Jul							1.0000	6.00	6.00	6.00
App by Air (3 gal)	appl			1.00	Jul							1.0000	5.00	5.00	5.00
Karate Z	oz											2.1300	1.02	2.17	2.17
Bidrin 8L	oz											6.0000	1.33	7.98	7.98
Pix Plus	oz											12.0000	0.40	4.80	4.80
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Karate Z	oz											2.1300	1.02	2.17	2.17
Bidrin 8L	oz											6.0000	1.33	7.98	7.98
Diamond .83EC	pt											0.3750	19.50	7.31	7.31
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Orthene 90S	lb											0.6000	6.00	3.60	3.60
Karate Z	oz											2.1300	1.02	2.17	2.17
Diamond .83EC	pt											0.3750	19.50	7.31	7.31
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Orthene 90S	lb											0.6000	6.00	3.60	3.60
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.50	6.50	6.50
Dropp SC	oz											1.2000	1.09	1.31	1.31
Prep	pt											1.3300	3.00	3.99	3.99
Def/Folex	pt											0.7500	7.00	5.25	5.25
Cotton Picker-1st-Tr	6R38"330hp		0.172	1.00	Sep	20.28	53.87			0.34	3.89				78.04
Module Builder-1st	6R-38(325)	MFWD 190	0.172	1.00	Sep	5.15	6.51	1.49	3.38	0.34	3.70				20.23
Boll Buggy-1st pick	6R38"325hp	MFWD 190	0.172	1.00	Sep	5.15	6.51	1.31	2.97	0.17	1.85				17.79
Stalk Shredder-Flail	12'	MFWD 150	0.137	1.00	Nov	3.21	3.71	2.09	1.40	0.13	1.48				11.89
Crop Consultant	acre			1.00	Nov							1.0000	7.00	7.00	7.00
Cotton Checkoff	bale			1.00	Nov							2.2900	2.56	5.86	5.86
Roll-Out Pipe Irr.	Acre				Jul	8.65	10.87	28.71	57.86	0.44	4.82	1.0000		8.25	119.16
TOTALS						62.06	107.93	39.37	77.29	2.33	25.41			416.17	728.23
INTEREST ON OPERATING CAPITAL															13.68
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															741.91

Table 2.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Cotton, B2/RRFlex Cotton, 8-row equipment, irrigated, alluvial soil, Louisiana, 2019.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.19	0.20	0.22	0.24	0.26	0.28	0.32	0.36	0.41	0.48	0.57
PERCENT	YIELD	UNIT	-----dollars-----										
50	700.00	lb	-269	-259	-248	-235	-220	-202	-179	-151	-115	-67	0
			-454	-445	-434	-421	-405	-387	-364	-336	-300	-252	-185
60	840.00	lb	-242	-231	-217	-202	-183	-161	-134	-101	-57	0	80
			-427	-416	-402	-387	-369	-346	-320	-286	-242	-185	-104
70	980.00	lb	-215	-202	-186	-168	-147	-121	-89	-50	0	67	161
			-400	-387	-371	-353	-332	-306	-275	-235	-185	-117	-23
80	1120.00	lb	-188	-173	-155	-134	-110	-80	-44	0	57	134	242
			-373	-358	-340	-320	-295	-266	-230	-185	-127	-50	57
90	1260.00	lb	-161	-144	-124	-101	-73	-40	0	50	115	202	323
			-346	-329	-309	-286	-258	-225	-185	-134	-69	16	138
100	1400.00	lb	-134	-115	-93	-67	-36	0	44	101	173	269	404
			-320	-300	-278	-252	-221	-185	-140	-84	-11	84	219
110	1540.00	lb	-107	-86	-62	-33	0	40	89	151	231	336	485
			-293	-271	-247	-218	-185	-144	-95	-33	45	151	300
120	1680.00	lb	-80	-57	-31	0	36	80	134	202	288	404	566
			-266	-242	-216	-185	-148	-104	-50	16	103	219	380
130	1820.00	lb	-53	-28	0	33	73	121	179	252	346	471	646
			-239	-214	-185	-151	-111	-63	-5	67	161	286	461
140	1960.00	lb	-26	0	31	67	110	161	224	303	404	539	727
			-212	-185	-154	-117	-74	-23	39	118	219	353	542
150	2100.00	lb	0	28	62	101	147	202	269	353	462	606	808
			-185	-156	-123	-84	-38	16	84	168	276	421	623

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
Cotton, B2/RRFlex Cotton, 8-row equipment, irrigated, alluvial soil, Louisiana, 2019.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.28	0.30	0.32	0.35	0.38	0.42	0.46	0.52	0.60	0.70	0.84
PERCENT	YIELD	UNIT	-----dollars-----										
50	700.00	lb	-207	-193	-177	-158	-136	-109	-76	-35	16	86	185
			-393	-379	-362	-343	-321	-294	-262	-221	-168	-98	0
60	840.00	lb	-168	-151	-132	-109	-82	-50	-11	37	100	185	303
			-353	-336	-317	-294	-267	-235	-196	-147	-84	0	117
70	980.00	lb	-129	-109	-86	-60	-29	8	54	111	185	283	421
			-314	-294	-272	-245	-214	-176	-131	-73	0	98	235
80	1120.00	lb	-89	-67	-41	-11	24	67	119	185	269	381	538
			-275	-252	-226	-196	-160	-117	-65	0	84	196	353
90	1260.00	lb	-50	-25	3	37	78	126	185	258	353	480	656
			-235	-210	-181	-147	-107	-58	0	73	168	294	471
100	1400.00	lb	-11	16	49	86	131	185	250	332	437	578	774
			-196	-168	-136	-98	-53	0	65	147	252	393	589
110	1540.00	lb	27	58	94	136	185	244	316	406	522	676	892
			-157	-126	-90	-49	0	58	131	221	336	491	707
120	1680.00	lb	67	100	139	185	238	303	381	480	606	774	1010
			-117	-84	-45	0	53	117	196	294	421	589	825
130	1820.00	lb	106	143	185	234	292	362	447	553	690	873	1128
			-78	-42	0	49	107	176	262	368	505	687	943
140	1960.00	lb	145	185	230	283	346	421	512	627	774	971	1246
			-39	0	45	98	160	235	327	442	589	786	1061
150	2100.00	lb	185	227	275	332	399	480	578	701	859	1069	1364
			0	42	90	147	214	294	393	515	673	884	1179

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

Table 3.A Estimated costs per Acre
Cotton, B2/RR Flex Cotton, 8-row equipment, irrigated, Macon Ridge Area, Louisiana, 2019.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
IRECT EXPENSES					
CUSTOM SPRAY					
App by Air (3 gal)	appl	5.00	5.0000	25.00	_____
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
HARVEST AIDS					
Dropp SC	oz	1.09	1.2000	1.31	_____
Prep	pt	3.00	1.3300	3.99	_____
Def/Folex	pt	7.00	0.7500	5.25	_____
FERTILIZERS					
LA Phosphate	lb	0.55	50.0000	27.50	_____
LA Potash	lb	0.32	60.0000	19.20	_____
LA Nitrogen	lb	0.43	90.0000	38.70	_____
HERBICIDES					
Roundup WeatherMax	oz	0.26	88.0000	22.88	_____
2,4-D Amine 4	pt	2.31	1.0000	2.31	_____
Valor WP	oz	4.38	1.5000	6.57	_____
Cotoran 4L	pt	6.42	1.2000	7.70	_____
Dual II Magnum	pt	14.50	1.0000	14.50	_____
Layby Pro	qt	12.60	1.0000	12.60	_____
INSECTICIDES					
Ammo 2.5 EC	oz	0.92	1.2800	1.18	_____
Dimethoate 4E	pt	5.35	0.4000	2.14	_____
Orthene 90S	lb	6.00	1.8000	10.80	_____
Centric 40WG	oz	5.37	4.0000	21.48	_____
Karate Z	oz	1.02	6.3900	6.52	_____
Bidrin 8L	oz	1.33	12.0000	15.96	_____
Diamond .83EC	pt	19.50	0.3750	7.31	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Cotton Seed BGII/RRF	thous	0.61	52.5000	32.03	_____
TECHNOLOGY FEE					
BGII/RRF Cot Tech Fe	cap/ac	62.69	1.0000	62.69	_____
Eradication Fee	acre	6.00	1.0000	6.00	_____
GROWTH REGULATORS					
Pix Plus	oz	0.40	24.0000	9.60	_____
SERVICE FEE					
Crop Consultant	acre	7.00	1.0000	7.00	_____
Cotton Checkoff	bale	2.56	2.0800	5.32	_____
OPERATOR LABOR					
Self-Propelled	hour	13.51	0.2428	3.29	_____
IRRIGATION LABOR					
Implements	hour	9.06	0.0062	0.06	_____
HAND LABOR					
Self-Propelled	hour	9.06	0.2075	1.88	_____
LA Hired Labor					
Implements	hour	10.73	0.3636	3.91	_____
Tractors	hour	10.73	1.3594	14.58	_____
LA Irrigation Labor					
Special Labor	hour	10.73	0.1500	1.62	_____
DIESEL FUEL					
Tractors	gal	2.50	12.8904	32.21	_____
Self-Propelled	gal	2.50	3.8741	9.67	_____
Roll-Out Pipe Irr.	gal	2.50	8.5535	21.39	_____
REPAIR & MAINTENANCE					
Implements	Acre	11.30	1.0000	11.30	_____
Tractors	Acre	7.07	1.0000	7.07	_____
Self-Propelled	Acre	13.32	1.0000	13.32	_____
Roll-Out Pipe Irr.	Acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	Acre	13.49	1.0000	13.49	_____
TOTAL DIRECT EXPENSES				530.96	_____
FIXED EXPENSES					
Implements	Acre	21.36	1.0000	21.36	_____
Tractors	Acre	48.72	1.0000	48.72	_____
Self-Propelled	Acre	59.51	1.0000	59.51	_____
Roll-Out Pipe Irr.	Acre	56.58	1.0000	56.58	_____
TOTAL FIXED EXPENSES				186.17	_____
TOTAL SPECIFIED EXPENSES				717.13	_____

Table 3.B Estimated resource use and costs for field operations, per Acre
Cotton, B2/RR Flex Cotton, 8-row equipment, irrigated, Macon Ridge Area, Louisiana, 2019.

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	28'	MFWD 225	0.070	1.00	Sep	2.45	2.89	1.01	2.37	0.07	0.75				9.47	
Land Plane	40'x10'	MFWD 190	0.242	0.20	Oct	1.46	1.83	0.06	0.17	0.04	0.52				4.04	
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Nov	2.32	2.93	0.98	1.22	0.11	1.25				8.70	
LA Phosphate	lb											50.0000	0.55	27.50	27.50	
LA Potash	lb											60.0000	0.32	19.20	19.20	
Disk Bed (Hipper)Fld	8R-38	MFWD 190	0.074	1.00	Nov	2.22	2.80	0.37	1.08	0.07	0.80				7.27	
Row Cond (Harrow)	27'	MFWD 190	0.057	1.00	Nov	1.71	2.17	0.18	0.83	0.05	0.62				5.51	
Roller	32'	MFWD 170	0.046	1.00	Nov	1.24	1.49	0.18	1.12	0.04	0.50				4.53	
Ditcher		2WD 130	0.020	1.00	Nov	0.39	0.43	0.05	0.07	0.02	0.21				1.15	
Sprayer(600-750Gal)	60'		0.017	1.00	Mar	0.65	1.41			0.02	0.32				2.38	
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72	
2,4-D Amine 4	pt											1.0000	2.31	2.31	2.31	
Valor WP	oz											1.5000	4.38	6.57	6.57	
Plant & Pre Folding	8R-38	MFWD 170	0.080	1.00	Apr	2.13	2.56	1.74	3.70	0.16	1.72				11.85	
Cotoran 4L	pt											1.2000	6.42	7.70	7.70	
Cotton Seed BGII/RRF	thous											52.5000	0.61	32.03	32.03	
Ammo 2.5 EC	oz											1.2800	0.92	1.18	1.18	
BGII/RRF Cot Tech Fe cap/ac												1.0000	62.69	62.69	62.69	
Ditcher		2WD 130	0.020	1.00	Apr	0.39	0.43	0.05	0.07	0.02	0.21				1.15	
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Apr	2.32	2.93	0.98	1.22	0.11	1.25				8.70	
LA Nitrogen	lb											90.0000	0.43	38.70	38.70	
Sprayer(600-750Gal)	60'		0.017	1.00	May	0.65	1.41			0.02	0.32				2.38	
Dimethoate 4E	pt											0.4000	5.35	2.14	2.14	
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72	
Dual II Magnum	pt											1.0000	14.50	14.50	14.50	
Sprayer(600-750Gal)	60'		0.017	1.00	May	0.65	1.41			0.02	0.32				2.38	
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72	
Sprayer(600-750Gal)	60'		0.017	1.00	Jun	0.65	1.41			0.02	0.32				2.38	
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72	
Orthene 90S	lb											0.6000	6.00	3.60	3.60	
Centric 40WG	oz											2.0000	5.37	10.74	10.74	
App by Air (3 gal)	appl			1.00	Jun							1.0000	5.00	5.00	5.00	
Centric 40WG	oz											2.0000	5.37	10.74	10.74	
Pix Plus	oz											12.0000	0.40	4.80	4.80	
Spray (Direct/Layby)	8R-38	MFWD 170	0.066	1.00	Jun	1.77	2.14	0.35	0.47	0.10	1.08				5.81	
Layby Pro	qt											1.0000	12.60	12.60	12.60	
Eradication Fee	acre			1.00	Jul							1.0000	6.00	6.00	6.00	
App by Air (3 gal)	appl			1.00	Jul							1.0000	5.00	5.00	5.00	
Karate Z	oz											2.1300	1.02	2.17	2.17	
Bidrin 8L	oz											6.0000	1.33	7.98	7.98	
Pix Plus	oz											12.0000	0.40	4.80	4.80	
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00	
Karate Z	oz											2.1300	1.02	2.17	2.17	
Bidrin 8L	oz											6.0000	1.33	7.98	7.98	
Diamond .83EC	pt											0.3750	19.50	7.31	7.31	
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00	
Orthene 90S	lb											0.6000	6.00	3.60	3.60	
Karate Z	oz											2.1300	1.02	2.17	2.17	
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00	
Orthene 90S	lb											0.6000	6.00	3.60	3.60	
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.50	6.50	6.50	
Dropp SC	oz											1.2000	1.09	1.31	1.31	
Prep	pt											1.3300	3.00	3.99	3.99	
Def/Folex	pt											0.7500	7.00	5.25	5.25	
Cotton Picker-1st-BB	6R38"330hp		0.172	1.00	Sep	20.39	53.87			0.34	3.89				78.15	
Module Builder-1st	6R-38(325)	MFWD 190	0.172	1.00	Sep	5.15	6.51	1.49	3.38	0.34	3.70				20.23	
Boll Buggy-1st pick	6R38"325hp	MFWD 190	0.172	1.00	Sep	5.15	6.51	1.31	2.97	0.17	1.85				17.79	
Stalk Shredder-Flail	20'	MFWD 150	0.082	1.00	Nov	1.93	2.23	2.12	1.41	0.08	0.89				8.58	
Crop Consultant	acre			1.00	Nov							1.0000	7.00	7.00	7.00	
Cotton Checkoff	bale			1.00	Nov							2.0800	2.56	5.32	5.32	
Roll-Out Pipe Irr.	Acre				Jul	8.65	10.87	28.71	57.86	0.44	4.82	1.0000		8.25	119.16	
						62.27	108.23	39.58	77.94	2.32	25.34				703.64	
TOTALS														390.28		703.64
INTEREST ON OPERATING CAPITAL																13.49
UNALLOCATED LABOR																0.00
TOTAL SPECIFIED COST																717.13

Table 3.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Cotton, B2/RR Flex Cotton, 8-Row Equipment,Irrigated, Macon Ridge Area, Louisiana, 2019.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.22	0.23	0.25	0.27	0.30	0.33	0.37	0.41	0.47	0.55	0.66
PERCENT	YIELD	UNIT	-----dollars-----										
50	600.00	lb	-266	-257	-246	-233	-218	-200	-177	-150	-114	-66	0
			-453	-443	-432	-419	-404	-386	-364	-336	-300	-252	-186
60	720.00	lb	-240	-228	-215	-200	-182	-160	-133	-100	-57	0	80
			-426	-414	-401	-386	-368	-346	-319	-286	-243	-186	-106
70	840.00	lb	-213	-200	-184	-166	-145	-120	-88	-50	0	66	160
			-399	-386	-370	-353	-331	-306	-275	-236	-186	-119	-26
80	960.00	lb	-186	-171	-154	-133	-109	-80	-44	0	57	133	240
			-373	-357	-340	-319	-295	-266	-230	-186	-128	-52	54
90	1080.00	lb	-160	-143	-123	-100	-72	-40	0	50	114	200	320
			-346	-329	-309	-286	-258	-226	-186	-136	-71	14	134
100	1200.00	lb	-133	-114	-92	-66	-36	0	44	100	171	266	400
			-319	-300	-278	-252	-222	-186	-141	-86	-14	80	214
110	1320.00	lb	-106	-85	-61	-33	0	40	88	150	228	333	480
			-292	-271	-247	-219	-186	-146	-97	-36	42	147	294
120	1440.00	lb	-80	-57	-30	0	36	80	133	200	286	400	560
			-266	-243	-216	-186	-149	-106	-52	14	99	214	374
130	1560.00	lb	-53	-28	0	33	72	120	177	250	343	467	640
			-239	-214	-186	-152	-113	-66	-8	64	157	280	454
140	1680.00	lb	-26	0	30	66	109	160	222	300	400	533	720
			-212	-186	-155	-119	-76	-26	36	114	214	347	534
150	1800.00	lb	0	28	61	100	145	200	266	350	457	600	800
			-186	-157	-124	-86	-40	14	80	164	271	414	614

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

Table 3.D Breakeven price above total expenses and net returns for price/yield combinations, per Acre
Cotton, B2/RR Flex Cotton, 8-Row Equipment,Irrigated, Macon Ridge Area, Louisiana, 2019.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.32	0.34	0.37	0.40	0.44	0.48	0.54	0.61	0.69	0.81	0.97
PERCENT	YIELD	UNIT	-----dollars-----										
50	600.00	lb	-204	-190	-174	-155	-133	-107	-74	-33	18	88	186
			-391	-377	-360	-342	-319	-293	-260	-219	-167	-97	0
60	720.00	lb	-165	-149	-129	-107	-80	-48	-9	39	102	186	303
			-351	-335	-315	-293	-266	-234	-195	-146	-83	0	117
70	840.00	lb	-126	-107	-84	-58	-27	10	55	112	186	283	420
			-312	-293	-270	-244	-213	-175	-130	-73	0	97	234
80	960.00	lb	-87	-65	-39	-9	26	68	120	186	269	381	538
			-273	-251	-225	-195	-159	-117	-65	0	83	195	351
90	1080.00	lb	-48	-23	5	39	79	127	186	259	353	479	655
			-234	-209	-180	-146	-106	-58	0	73	167	293	469
100	1200.00	lb	-9	18	50	88	132	186	251	332	437	577	772
			-195	-167	-135	-97	-53	0	65	146	251	391	586
110	1320.00	lb	29	60	95	137	186	244	316	406	521	674	890
			-156	-125	-90	-48	0	58	130	219	335	488	703
120	1440.00	lb	68	102	141	186	239	303	381	479	605	772	1007
			-117	-83	-45	0	53	117	195	293	418	586	821
130	1560.00	lb	107	144	186	235	292	362	446	552	688	870	1124
			-78	-41	0	48	106	175	260	366	502	684	938
140	1680.00	lb	147	186	231	283	346	420	512	626	772	968	1241
			-39	0	45	97	159	234	325	439	586	782	1055
150	1800.00	lb	186	228	276	332	399	479	577	699	856	1066	1359
			0	41	90	146	213	293	391	513	670	879	1173

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

Table 4.A Estimated costs per Acre
Cotton, B2/RRFlex Cotton, 12-row equipment, irrigated, Alluvial Soil, Louisiana, 2019.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (3 gal)	appl	5.00	5.0000	25.00	_____
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
HARVEST AIDS					
Dropp SC	oz	1.09	1.2000	1.31	_____
Prep	pt	3.00	1.3300	3.99	_____
Def/Folex	pt	7.00	0.7500	5.25	_____
FERTILIZERS					
LA Phosphate	lb	0.55	60.0000	33.00	_____
LA Potash	lb	0.32	60.0000	19.20	_____
LA Nitrogen	lb	0.43	90.0000	38.70	_____
HERBICIDES					
Roundup WeatherMax	oz	0.26	88.0000	22.88	_____
2,4-D Amine 4	pt	2.31	1.0000	2.31	_____
Valor WP	oz	4.38	1.5000	6.57	_____
Cotoran 4L	pt	6.42	1.2000	7.70	_____
Dual II Magnum	pt	14.50	1.0000	14.50	_____
Layby Pro	qt	12.60	1.0000	12.60	_____
INSECTICIDES					
Ammo 2.5 EC	oz	0.92	1.2800	1.18	_____
Dimethoate 4E	pt	5.35	0.4000	2.14	_____
Orthene 90S	lb	6.00	1.8000	10.80	_____
Centric 40WG	oz	5.37	4.0000	21.48	_____
Karate Z	oz	1.02	6.3900	6.52	_____
Bidrin 8L	oz	1.33	12.0000	15.96	_____
Diamond .83EC	pt	19.50	0.7500	14.63	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Cotton Seed BGII/RRF	thous	0.61	52.5000	32.03	_____
TECHNOLOGY FEE					
BGII/RRF Cot Tech Fe	cap/ac	62.69	1.0000	62.69	_____
Eradication Fee	acre	6.00	1.0000	6.00	_____
GROWTH REGULATORS					
Pix Plus	oz	0.40	24.0000	9.60	_____
SERVICE FEE					
Crop Consultant	acre	7.00	1.0000	7.00	_____
Cotton Checkoff	bale	2.56	2.2900	5.86	_____
OPERATOR LABOR					
Self-Propelled	hour	13.51	0.2428	3.29	_____
IRRIGATION LABOR					
Implements	hour	9.06	0.0062	0.06	_____
HAND LABOR					
Self-Propelled	hour	9.06	0.2075	1.88	_____
LA Hired Labor					
Implements	hour	10.73	0.2997	3.22	_____
Tractors	hour	10.73	1.1722	12.56	_____
LA Irrigation Labor					
Special Labor	hour	10.73	0.1500	1.62	_____
DIESEL FUEL					
Tractors	gal	2.50	11.4327	28.58	_____
Self-Propelled	gal	2.50	3.8741	9.67	_____
Roll-Out Pipe Irr.	gal	2.50	8.5535	21.39	_____
REPAIR & MAINTENANCE					
Implements	Acre	10.45	1.0000	10.45	_____
Tractors	Acre	6.21	1.0000	6.21	_____
Self-Propelled	Acre	13.32	1.0000	13.32	_____
Roll-Out Pipe Irr.	Acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	Acre	13.48	1.0000	13.48	_____
TOTAL DIRECT EXPENSES				536.25	_____
FIXED EXPENSES					
Implements	Acre	19.83	1.0000	19.83	_____
Tractors	Acre	42.76	1.0000	42.76	_____
Self-Propelled	Acre	59.51	1.0000	59.51	_____
Roll-Out Pipe Irr.	Acre	56.58	1.0000	56.58	_____
TOTAL FIXED EXPENSES				178.68	_____
TOTAL SPECIFIED EXPENSES				714.93	_____

Table 4.B Estimated resource use and costs for field operations, per Acre
Cotton, B2/RRFlex Cotton, 12-row equipment, irrigated, Alluvial Soil, Louisiana, 2019.

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-----			
Land Plane	40'x10'	MFWD 190	0.242	0.20	Oct	1.46	1.83	0.06	0.17	0.04	0.52				4.04
Paratill & Bed Fold.	12R-38	MFWD 225	0.053	0.50	Nov	0.94	1.11	0.67	1.30	0.02	0.29				4.31
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Nov	1.81	2.13	0.69	0.85	0.07	0.83				6.31
LA Phosphate	lb											60.0000	0.55	33.00	33.00
LA Potash	lb											60.0000	0.32	19.20	19.20
Disk Bed (Hipper)	12R-38	MFWD 225	0.049	1.00	Nov	1.72	2.03	0.36	1.05	0.04	0.53				5.69
Row Cond (Harrow)	38'	MFWD 225	0.039	1.00	Nov	1.37	1.62	0.22	1.02	0.03	0.42				4.65
Roller	32'	MFWD 170	0.046	1.00	Nov	1.24	1.49	0.18	1.12	0.04	0.50				4.53
Ditcher		2WD 130	0.020	1.00	Nov	0.39	0.43	0.05	0.07	0.02	0.21				1.15
Sprayer(600-750Gal)	60'		0.017	1.00	Mar	0.65	1.41			0.02	0.32				2.38
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
2,4-D Amine 4	pt											1.0000	2.31	2.31	2.31
Valor WP	oz											1.5000	4.38	6.57	6.57
Plant & Pre Folding	12R-38	MFWD 190	0.053	1.00	Apr	1.60	2.02	1.82	3.88	0.10	1.14				10.46
Cotoran 4L	pt											1.2000	6.42	7.70	7.70
Cotton Seed BGII/RRF	thous											52.5000	0.61	32.03	32.03
Ammo 2.5 EC	oz											1.2800	0.92	1.18	1.18
BGII/RRF Cot Tech Fe cap/ac												1.0000	62.69	62.69	62.69
Ditcher		2WD 130	0.020	1.00	Apr	0.39	0.43	0.05	0.07	0.02	0.21				1.15
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr	1.81	2.13	0.69	0.85	0.07	0.83				6.31
LA Nitrogen	lb											90.0000	0.43	38.70	38.70
Sprayer(600-750Gal)	60'		0.017	1.00	May	0.65	1.41			0.02	0.32				2.38
Dimethoate 4E	pt											0.4000	5.35	2.14	2.14
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
Dual II Magnum	pt											1.0000	14.50	14.50	14.50
Sprayer(600-750Gal)	60'		0.017	1.00	May	0.65	1.41			0.02	0.32				2.38
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
Sprayer(600-750Gal)	60'		0.017	1.00	Jun	0.65	1.41			0.02	0.32				2.38
Roundup WeatherMax	oz											22.0000	0.26	5.72	5.72
Orthene 90S	lb											0.6000	6.00	3.60	3.60
Centric 40WG	oz											2.0000	5.37	10.74	10.74
App by Air (3 gal)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Centric 40WG	oz											2.0000	5.37	10.74	10.74
Pix Plus	oz											12.0000	0.40	4.80	4.80
Spray (Direct/Layby)	12R-38	MFWD 170	0.044	1.00	Jun	1.18	1.42	0.31	0.41	0.06	0.72				4.04
Layby Pro	qt											1.0000	12.60	12.60	12.60
Eradication Fee	acre			1.00	Jul							1.0000	6.00	6.00	6.00
App by Air (3 gal)	appl			1.00	Jul							1.0000	5.00	5.00	5.00
Karate Z	oz											2.1300	1.02	2.17	2.17
Bidrin 8L	oz											6.0000	1.33	7.98	7.98
Pix Plus	oz											12.0000	0.40	4.80	4.80
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Karate Z	oz											2.1300	1.02	2.17	2.17
Bidrin 8L	oz											6.0000	1.33	7.98	7.98
Diamond .83EC	pt											0.3750	19.50	7.31	7.31
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Orthene 90S	lb											0.6000	6.00	3.60	3.60
Karate Z	oz											2.1300	1.02	2.17	2.17
Diamond .83EC	pt											0.3750	19.50	7.31	7.31
App by Air (3 gal)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Orthene 90S	lb											0.6000	6.00	3.60	3.60
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.50	6.50	6.50
Dropp SC	oz											1.2000	1.09	1.31	1.31
Prep	pt											1.3300	3.00	3.99	3.99
Def/Folex	pt											0.7500	7.00	5.25	5.25
Cotton Picker-1st-BB	6R38"330hp		0.172	1.00	Sep	20.39	53.87			0.34	3.89				78.15
Module Builder-1st	6R-38(325)	MFWD 190	0.172	1.00	Sep	5.15	6.51	1.49	3.38	0.34	3.70				20.23
Boll Buggy-1st pick	6R38"325hp	MFWD 190	0.172	1.00	Sep	5.15	6.51	1.31	2.97	0.17	1.85				17.79
Stalk Shredder-Flail	20'	MFWD 150	0.082	1.00	Nov	1.93	2.23	2.12	1.41	0.08	0.89				8.58
Crop Consultant	acre			1.00	Nov							1.0000	7.00	7.00	7.00
Cotton Checkoff	bale			1.00	Nov							2.2900	2.56	5.86	5.86
Roll-Out Pipe Irr.	Acre				Jul	8.65	10.87	28.71	57.86	0.44	4.82				119.16
TOTALS						57.78	102.27	38.73	76.41	2.07	22.63			403.63	701.45
INTEREST ON OPERATING CAPITAL															13.48
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															714.93

Table 4.C Breakeven price above direct expenses and net returns for price/yield combinations, per Acre
Cotton, B2/RRFlex Cotton, 12-row equipment, irrigated, Alluvial Soil, Louisiana, 2019.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.18	0.19	0.21	0.22	0.24	0.27	0.30	0.34	0.39	0.45	0.54
PERCENT	YIELD	UNIT	-----dollars-----										
50	700.00	lb	-255	-246	-236	-223	-209	-191	-170	-143	-109	-63	0
			-434	-425	-414	-402	-388	-370	-349	-322	-288	-242	-178
60	840.00	lb	-230	-219	-206	-191	-174	-153	-127	-95	-54	0	76
			-409	-398	-385	-370	-353	-332	-306	-274	-233	-178	-101
70	980.00	lb	-204	-191	-177	-159	-139	-115	-85	-47	0	63	153
			-383	-370	-355	-338	-318	-293	-263	-226	-178	-114	-25
80	1120.00	lb	-179	-164	-147	-127	-104	-76	-42	0	54	127	230
			-357	-343	-326	-306	-283	-255	-221	-178	-123	-50	51
90	1260.00	lb	-153	-137	-118	-95	-69	-38	0	47	109	191	307
			-332	-315	-296	-274	-248	-217	-178	-130	-68	13	128
100	1400.00	lb	-127	-109	-88	-63	-34	0	42	95	164	255	383
			-306	-288	-267	-242	-213	-178	-136	-82	-14	77	205
110	1540.00	lb	-102	-82	-59	-31	0	38	85	143	219	319	460
			-281	-260	-237	-210	-178	-140	-93	-34	40	141	282
120	1680.00	lb	-76	-54	-29	0	34	76	127	191	274	383	537
			-255	-233	-208	-178	-143	-101	-50	13	95	205	358
130	1820.00	lb	-51	-27	0	31	69	115	170	239	329	447	614
			-229	-206	-178	-146	-108	-63	-8	61	150	269	435
140	1960.00	lb	-25	0	29	63	104	153	213	287	383	511	691
			-204	-178	-149	-114	-73	-25	34	109	205	333	512
150	2100.00	lb	0	27	59	95	139	191	255	335	438	575	767
			-178	-151	-119	-82	-39	13	77	157	260	397	589

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

Table 4.D Breakeven price above total expenses and net returns for price/yield combinations, per Acre
Cotton, B2/RRFlex Cotton, 12-row equipment, irrigated, Alluvial Soil, Louisiana, 2019.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.26	0.28	0.30	0.33	0.36	0.40	0.44	0.50	0.57	0.66	0.80
PERCENT	YIELD	UNIT	-----dollars-----										
50	700.00	lb	-196	-182	-167	-149	-128	-102	-71	-32	17	84	178
			-375	-361	-346	-328	-306	-281	-250	-210	-160	-93	0
60	840.00	lb	-158	-142	-124	-102	-77	-46	-8	38	98	178	291
			-337	-321	-302	-281	-255	-225	-187	-140	-80	0	112
70	980.00	lb	-121	-102	-80	-55	-25	9	53	108	178	272	403
			-300	-281	-259	-234	-204	-168	-125	-70	0	93	225
80	1120.00	lb	-83	-62	-37	-8	25	66	116	178	259	366	516
			-262	-241	-216	-187	-153	-112	-62	0	80	187	337
90	1260.00	lb	-46	-22	5	38	76	122	178	249	339	459	628
			-225	-200	-173	-140	-102	-56	0	70	160	281	450
100	1400.00	lb	-8	17	48	84	127	178	241	319	419	553	741
			-187	-160	-129	-93	-51	0	62	140	241	375	562
110	1540.00	lb	28	58	92	131	178	234	303	389	500	647	853
			-150	-120	-86	-46	0	56	125	210	321	468	675
120	1680.00	lb	66	98	135	178	229	291	366	459	580	741	966
			-112	-80	-43	0	51	112	187	281	401	562	787
130	1820.00	lb	103	138	178	225	280	347	428	530	660	835	1078
			-75	-40	0	46	102	168	250	351	482	656	900
140	1960.00	lb	141	178	221	272	332	403	491	600	741	928	1191
			-37	0	43	93	153	225	312	421	562	750	1012
150	2100.00	lb	178	218	265	319	383	459	553	670	821	1022	1303
			0	40	86	140	204	281	375	492	642	843	1125

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

Appendix Table 1 Estimated costs per Acre
Poly pipe irrigation system, 160 acres
applying 10.5 inches in three applications Louisiana, 2019.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
IRRIGATION LABOR					
Implements	hour	9.06	0.0062	0.06	_____
LA Hired Labor					
Tractors	hour	10.73	0.2930	3.14	_____
LA Irrigation Labor					
Special Labor	hour	10.73	0.1500	1.62	_____
DIESEL FUEL					
Tractors	gal	2.50	2.8274	7.07	_____
Engine, RPF, 75	gal	2.50	8.5535	21.39	_____
REPAIR & MAINTENANCE					
Implements	Acre	0.43	1.0000	0.43	_____
Tractors	Acre	1.58	1.0000	1.58	_____
Well & Pump, Furrow	each	472.80	0.0062	2.96	_____
Engine, RPF, 75	ac-in	0.37	10.5000	3.93	_____
INTEREST ON OP. CAP.	Acre	1.06	1.0000	1.06	_____

TOTAL DIRECT EXPENSES				51.49	_____
FIXED EXPENSES					
Implements	Acre	1.28	1.0000	1.28	_____
Tractors	Acre	10.87	1.0000	10.87	_____
Well & Pump, Furrow	each	1615.03	0.0062	10.09	_____
Main Line Pipe	each	798.66	0.0062	4.99	_____
Land Forming (\$300)	each	31.97	1.0000	31.97	_____
Engine, RPF, 75	each	1524.70	0.0062	9.53	_____

TOTAL FIXED EXPENSES				68.73	_____

TOTAL SPECIFIED EXPENSES				120.22	_____

Appendix Table 2 Estimated costs per Acre
Center pivot irrigation system, 1/4 mile
applying 7.5 inches in three applications Louisiana, 2019.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
LA Hired Labor					
Special Labor	hour	10.73	0.2036	2.19	_____
DIESEL FUEL					
Engine, 1/4 CP, 65	gal	2.50	11.2011	28.00	_____
REPAIR & MAINTENANCE					
Well & Pump, 1/4 CP	each	472.80	0.0074	3.50	_____
Engine, 1/4 CP, 65	ac-in	0.62	7.5000	4.67	_____
Pivot, 1/4 CP	1320'	1820.00	0.0074	13.48	_____
INTEREST ON OP. CAP.	Acre	1.22	1.0000	1.22	_____

TOTAL DIRECT EXPENSES				53.06	_____
FIXED EXPENSES					
Well & Pump, 1/4 CP	each	1615.03	0.0074	11.96	_____
Engine, 1/4 CP, 65	each	1524.70	0.0074	11.29	_____
Pivot, 1/4 CP	each	8258.83	0.0074	61.18	_____

TOTAL FIXED EXPENSES				84.43	_____

TOTAL SPECIFIED EXPENSES				137.49	_____

Appendix Table 3. Operating Inputs: Estimated Prices for 2019.

ITEM NAME	UNIT	PRICE
		dollars
ADJUVANTS		
Surfactant	pt	1.75
CUSTOM FERT/LIME		
App Fert by Air	cwt	7.00
App Fert by Air(Min)	appl	7.00
Custom Apply Fert	acre	7.50
Custom Spread(Truc	appl	4.50
Lime (Spread)	ton	38.00
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	9.00
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	13.43
Anhy Ammonia (82% N)	cwt	28.00
Boron (Solubor)	lb	0.75
Crop Oil (Seed Oil)	pt	4.60
DAP	cwt	23.76
Fert 0-20-20	cwt	0.00
Fert 10-10-10	cwt	0.00
Fert 10-34-0	cwt	22.25
Fert 10-34-0	gal	2.59
Fert 13-13-13	cwt	0.00
Fert 41-0-0-4	cwt	13.50
Fert 5-20-20	cwt	0.00
LA Nitrogen	lb	0.43
LA Phosphate	lb	0.55
LA Potash	lb	0.32
Phosphorus(46% P2O5)	cwt	23.75
Potash (60% K2O)	cwt	20.00
Sulfur	lb	0.34
UAN (32% N)	cwt	11.25
UAN + Sulfur (28% N)	cwt	12.40
Urea, Solid (46% N)	cwt	14.50
Zinc	lb	0.50
FUNGICIDES		
Apron Maxx RTA	oz	0.95
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	4.28
Crop Oil (Petroleum)	pt	2.37
Cruiser 5FS	oz	17.38
Delta Coat AD	oz	3.75
Dithane F-45	qt	7.81

Appendix Table 3 Cont'd. Operating Inputs: Estimated Prices for 2019.

ITEM NAME	UNIT	PRICE
FUNGICIDES CONT'D		
Dithane Rainsheild	lb	4.08
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
Orbit	oz	2.75
Prevail	lb	28.50
Quadris	oz	1.13
Ridomil GoldPC 10G	lb	2.08
Ridomil Gold PC	lb	5.30
Ridomil Gold PC Liq	oz	6.42
Rovral 4F	pt	14.90
Rovral WG	lb	0.00
Shelter	oz	8.50
Stiletto	oz	0.58
Stratego	pt	76.88
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	0.75
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	0.18
Mepex	oz	0.08
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	7.00
Dropp 50 WP	lb	45.45
Dropp SC	oz	1.09
Ethephon 6E	pt	3.53
Finish 6	pt	9.60
Folex 6EC	pt	10.90
Ginstar EC	pt	26.41
Gramoxone Extra	pt	4.86
Gramoxone Max	pt	4.16
Harvade 5F	oz	0.67
Leafless	pt	18.56
Prep	pt	3.00
Sodium Chlorate 3L	gal	3.50
Solium Chlorate 6L	gal	5.57
Starfire	pt	0.00
HERBICIDES		
2,4-D Amine 4	pt	2.31
2,4-D Ester	pt	4.17
AAtrex 4L	pt	2.12
AAtrex NINE-O	lb	3.96
Accent Gold	oz	6.12
Accent SP	oz	36.25
Aim 2EC	oz	5.25
Aim DF	oz	9.65

Appendix Table 3 Cont'd. Operating Inputs: Estimated Prices for 2019.

ITEM NAME	UNIT	PRICE
HERBICIDES CONT'D		
Arrosolo	qt	7.88
Assure II	oz	0.74
Atrazine 4L	pt	1.50
Atrazine 90DF	lb	3.38
Authority 75DF	lb	26.95
Axiom 68DF	lb	25.74
Backdraft	pt	2.40
Banvel	pt	13.43
Basagran	pt	12.31
Basis Gold	lb	9.00
Beacon 75% WSP	oz	34.87
Beyond	oz	4.48
Bicep II Magnum	qt	11.01
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	7.73
Boundary	pt	11.21
Bucril 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	3.29
Butyrac 200 (2,4-DB)	pt	4.34
Canopy 75%	oz	2.74
Canopy XL	oz	2.23
Caparol 4L	pt	4.52
Caparol Accu-Pak	lb	0.00
Celebrity Plus	lb	84.50
Clarity	pt	11.51
Classic	oz	17.18
Clincher EC	oz	2.30
Cobra 2EC	oz	1.72
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	6.42
Cotoran DF	lb	7.92
Cotton Pro Flowable	pt	3.52
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	3.99
Direx 80 DF	lb	6.20
Diuron 4L	pt	3.90
Diuron 80 DF	lb	5.09
Domain 60DF	lb	12.75
DSMA 4	pt	0.90
Dual 8E	pt	0.00
Dual II Magnum	pt	14.50
Dual Magnum	pt	13.81
Duet	pt	5.35
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	43.40
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

Appendix Table 3 Cont'd. Operating Inputs: Estimated Prices for 2019.

ITEM NAME	UNIT	PRICE
Fultime	pt	6.29
Fusilade DX	oz	1.00
Fusion	pt	29.86
Glyfos	pt	1.80
Glyphomax	pt	3.49
Glyphosate Plus 4L	pt	2.00
Glystar Plus	pt	2.17
Goal 2XL	pt	9.89
Gramoxone Extra	pt	0.00
Gramoxone Max	pt	4.16
Gramoxone Max	pt	4.16
Grandstand R	qt	17.15
Guardsman	pt	4.66
Guardsman Max	pt	7.22
Harmony Extra	oz	14.43
Hoelon 3EC	pt	11.03
Karmex DF	lb	5.93
LA Asulox/Asulam	gal	42.20
LA Weedmaster	qt	5.75
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	9.28
Londax 60DF	oz	18.08
Lorox 50DF	lb	24.12
Matador	pt	0.00
MSMA 6.6	pt	3.68
MSMA6 + Surfactant	pt	3.63
Newpath 2SL	oz	3.83
Ordram 15-G	lb	1.34
Ordram 8-E	pt	9.42
Outlook	pt	17.47
Pendimax 3.3	pt	2.47
Permit 75DF	oz	18.50
Poast 1.53	pt	12.77
Poast Plus	pt	9.69
Propanil 4E	qt	5.15
Prowl 3.3 EC	pt	5.44
Pursuit DG	oz	11.59
Pursuit Plus EC	pt	7.10
Python WDG	oz	15.58
Raptor	oz	4.38
Reflex 2LC	pt	6.52
Regiment 80WP	oz	4.38
Remedy	pt	8.45
Resource .86EC	pt	29.40
Ricestar	pt	24.35
Roundup Original	pt	6.00
Roundup Original Max	oz	0.38
Roundup Power Max	pt	2.94
Roundup Ultra MAX	pt	5.97
Roundup Ultra Dry	lb	6.14
Roundup WeatherMax	oz	0.26
Scepter 70 DG	oz	4.48
Select 2EC	oz	0.70
Sencor 4F	pt	14.74
Sencor DF	lb	12.75
Squadron CE	pt	12.50
Stam 4E	qt	5.12
Stam 80 EDF	lb	9.64
Staple 85%	oz	16.01
Staple Plus	oz	8.55
Steadfast	oz	12.26
Steel	pt	10.28
Storm	pt	11.41
Strongarm	oz	56.42
Superwham	qt	9.20
Suprend	lb	13.74

Appendix Table 3 Cont'd. Operating Inputs: Estimated Prices for 2019.

ITEM NAME	UNIT	PRICE
Surpass 20G	lb	2.36
Surpass EC	qt	26.36
Touchdown	qt	9.32
Touchdown 4 IQ	pt	3.33
Touchdown Total	qt	6.97
Treflan HFP	pt	3.52
Treflan TR-10	lb	1.10
Tri-Scept	pt	5.24
Trifluralin 4EC	pt	3.52
Trilin 10G	lb	0.79
Trilin 4EC	pt	2.12
Typhoon	qt	13.06
Valor WP	oz	4.38
Whip 360	pt	25.08
Zorial Rapid 80DF	lb	14.10
INSECTICIDES		
Acephate 80SP	lb	0.00
Acephate 90SP	lb	7.92
Admire 2 Flowable	oz	4.78
Ammo 2.5 EC	oz	0.92
Asana .66 XL	oz	0.58
Aztec 2.1% G	lb	3.88
Baythroid 2	oz	2.30
Bidrin 8L	oz	1.33
Capture 2EC	oz	2.28
Carbamate	oz	0.00
Centric 40WG	oz	5.37
Comite	pt	8.45
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
Dimethoate 4E	pt	5.35
Dimilin 2L	oz	2.13
Dipel DF	lb	13.13
Dipel ES	pt	4.89
Force 3G	lb	6.03
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	1.80
Intruder 70WP	oz	9.71
Karate Z	oz	1.02
Lannate LV	pt	10.99
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	4.23
Malathion 8E	pt	5.50
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	6.00
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	14.13
Pounce 3.2 EC	oz	0.34

Appendix Table 3 Cont'd. Operating Inputs: Estimated Prices for 2019.

ITEM NAME	UNIT	PRICE
INSECTICIDES CONT'D		
Provado 1.6F	oz	1.94
Scout X-TRA	oz	0.00
Sevin 80S	lb	7.40
Sevin XLR Plus	qt	13.23
Spintor 2SC	oz	4.93
Steward	pt	39.51
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	3.63
Corn Seed Conv.	thous	2.89
Corn Seed RR	thous	3.13
Cotton Seed Bt	thoud	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 RR	thous	0.63
Cotton Seed RR	thous	0.63
LA Hybrid Rice Seed	acre	165.00
Rice Clearfield 161	lb	1.05
Rice Clearfield XL8	lb	6.12
Rice Seed (Levees)	lb	0.43
Rice Seed CF(Levees)	lb	0.90
Rice Seed Conv.	lb	0.30
Rice Seed Hybrid	lb	5.66
SC Cultured seedcane	acre	484.00
Sorghum Concept	lb	2.10
Sorghum NonConcept	lb	1.18
Soybean Seed Private	lb	0.38
Soybean Seed Public	lb	0.00
Soybean Seed RR	lb	1.30
Wheat Seed Private	lb	0.22
Wheat Seed Public	lb	0.00
SERVICE FEE		
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
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
BG/RR Cot Tech Fee	thous	1.49
BG/RR Cot Tech Fee	cap/ac	62.69
Eradication Fee	acre	6.00
Eradication Zone 1	acre	6.00
Eradication Zone 1A	acre	6.00

Appendix Table 3 Cont'd. Operating Inputs: Estimated Prices for 2019.

ITEM NAME	UNIT	PRICE
TECHNOLOGY FEE CONT'D		
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

Appendix Table 4. Tractors: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Louisiana 2019.

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	13.51	24.45	0.00	37.96	0.00	37.96
Combine (200-249 hp)	240hp	161,548	300	8	12.35	13.51	30.87	16.82	61.21	72.40	133.62
Combine (225-274 hp)	Track250hp	0	300	8	12.87	13.51	32.17	0.00	45.68	0.00	45.68
Combine (250-299 hp)	275hp	339,000	300	8	14.15	13.51	35.37	35.31	84.19	151.94	236.14
Combine (250-299hp)	Grass295hp	218,222	300	8	15.18	13.51	37.95	22.73	74.19	97.81	172.00
Combine (275-299 hp)	Track290hp	0	300	8	14.93	13.51	37.32	0.00	50.83	0.00	50.83
Combine (300-349 hp)	325hp	362,000	300	8	16.73	13.51	41.82	37.70	93.04	162.25	255.29
Combine (300-349hp)	Track320hp	0	300	8	16.47	13.51	41.17	0.00	54.68	0.00	54.68
Combine (350-379 hp)	370hp	354,000	300	8	19.04	13.51	47.60	36.87	97.98	158.67	256.65
Combine (350-379 hp)	Track365hp	0	300	8	18.79	13.51	46.97	0.00	60.48	0.00	60.48
Cotton Stripper	173hp	170,000	200	8	8.08	13.51	20.20	26.56	60.27	114.29	174.56
SC Tractor 93 MDR	93	46,683	600	10	4.79	10.73	11.97	2.72	25.42	8.74	34.17
SC Tractor 68 MDR	68	27,049	600	10	3.50	10.73	8.75	1.57	21.05	5.06	26.12
test-mes		0	0	0	0.00	13.51	0.00	0.00	0.00	0.00	0.00
Tractor(40-59hp)Cab	2WD 50	29,400	600	8	2.57	10.73	6.43	0.91	18.08	6.10	24.18
Tractor(40-59hp)Cab	MFWD 50	39,500	600	8	2.57	10.73	6.43	1.23	18.39	8.19	26.59
Tractor(40-59hp)RB	2WD 50	22,900	600	8	2.57	10.73	6.43	0.71	17.87	4.75	22.63
Tractor(40-59hp)RB	MFWD 50	27,800	600	8	2.57	10.73	6.43	0.86	18.03	5.77	23.80
Tractor(60-89hp)CAB	2WD 75	52,800	600	8	3.86	10.73	9.65	1.65	22.03	10.95	32.99
Tractor(60-89hp)CAB	MFWD 75	62,500	600	8	3.86	10.73	9.65	1.95	22.33	12.97	35.30
Tractor(60-89hp)RB	2WD 75	38,600	600	8	3.86	10.73	9.65	1.20	21.58	8.01	29.59
Tractor(60-89hp)RB	MFWD 75	40,100	600	8	3.86	10.73	9.65	1.25	21.63	8.32	29.95
Tractor(90-119hp)CB	2WD 105	69,200	600	8	5.40	10.73	13.51	2.16	26.40	14.36	40.76
Tractor(90-119hp)CB	MFWD 105	83,000	600	8	5.40	10.73	13.51	2.59	26.83	17.22	44.06
Tractor(90-119hp)RB	2WD 105	61,200	600	8	5.40	10.73	13.51	1.91	26.15	12.70	38.85
Tractor(90-119hp)RB	MFWD 105	67,500	600	8	5.40	10.73	13.51	2.10	26.35	14.01	40.36
Tractor(120-139hp)CB	2WD 130	103,000	600	8	6.69	10.73	16.72	3.21	30.67	21.37	52.05
Tractor(120-139hp)CB	MFWD 130	114,000	600	8	6.69	10.73	16.72	3.56	31.02	23.66	54.68
Tractor(140-159hp)CB	2WD 150	109,000	600	8	7.72	10.73	19.30	3.40	33.43	22.62	56.06
Tractor(140-159hp)CB	MFWD 150	130,000	600	8	7.72	10.73	19.30	4.06	34.09	26.98	61.07
Tractor(160-179hp)CB	2WD 170	156,000	600	8	8.75	10.73	21.87	4.87	37.48	33.67	71.15
Tractor(160-179hp)CB	MFWD 170	148,000	600	8	8.75	10.73	21.87	4.62	37.23	31.94	69.17
Tractor(160-199hp)CB	Track 180	142,710	600	8	9.26	10.73	23.16	4.45	38.35	30.80	69.15
Tractor(180-199hp)CB	2WD 190	143,000	600	8	9.77	10.73	24.44	4.46	39.64	30.86	70.51
Tractor(180-199hp)CB	MFWD 190	175,000	600	8	9.77	10.73	24.44	5.46	40.64	37.77	78.42
Tractor(200-249hp)CB	4WD 225	147,066	600	8	11.58	10.73	28.95	4.59	44.27	31.74	76.02
Tractor(200-249hp)CB	MFWD 225	191,000	600	8	11.58	10.73	28.95	5.96	45.65	41.22	86.87
Tractor(200-249hp)CB	Track 225	277,000	600	8	11.58	10.73	28.95	8.65	48.33	59.78	108.12
Tractor(250-349hp)CB	4WD 300	286,000	600	8	15.44	10.73	38.60	8.93	58.27	61.73	120.00
Tractor(250-349hp)CB	Track 300	317,000	600	8	15.44	10.73	38.60	9.90	59.24	68.42	127.66
Tractor(350-449hp)CB	4WD 400	328,000	600	8	20.58	10.73	51.47	10.25	72.45	70.79	143.24
Tractor(350-449hp)CB	Track 400	420,000	600	8	20.58	10.73	51.47	13.12	75.32	90.65	165.98
Tractor(450-uphp)CB	TRACK-475	279,879	600	8	24.44	10.73	61.12	8.74	80.59	60.40	141.00

Appendix Table 5. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Louisiana 2019.

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	2.70	0.42	0.43	3.55	2.06	5.62
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	11.72	9.57	11.76	33.06	46.42	79.49
Cotton Picker-1st-BB	4R2X1260hp	317,399	200	8	13.33	0.172	3.88	5.23	8.54	17.67	33.71	51.38
Cotton Picker-1st-BB	4R30"250hp	262,000	200	8	12.86	0.327	7.38	9.60	13.40	30.39	52.88	83.27
Cotton Picker-1st-BB	4R30"325hp	350,000	200	8	18.01	0.327	7.38	13.44	17.90	38.73	70.64	109.37
Cotton Picker-1st-BB	4R30"255hp	268,000	200	8	13.12	0.257	5.81	7.71	10.79	24.32	42.59	66.91
Cotton Picker-1st-BB	4R38"325hp	351,000	200	8	18.01	0.257	5.81	10.58	14.13	30.54	55.78	86.32
Cotton Picker-1st-BB	5R30"255hp	285,000	200	8	12.86	0.261	5.91	7.67	11.66	25.25	46.01	71.27
Cotton Picker-1st-BB	5R38"250hp	284,601	200	8	12.86	0.207	4.67	6.07	9.21	19.96	36.35	56.32
Cotton Picker-1st-BB	6R30"325hp	465,000	200	8	18.27	0.218	4.92	9.09	15.85	29.87	62.56	92.44
Cotton Picker-1st-BB	6R38"330hp	465,000	200	8	18.27	0.172	3.88	7.17	12.51	23.58	49.39	72.98
Cotton Picker-1st-Tr	2R38"157hp	144,912	200	8	8.08	0.519	11.72	9.57	11.76	33.06	46.42	79.49
Cotton Picker-1st-Tr	4R2X1255hp	322,137	200	8	18.01	0.172	3.88	7.07	8.67	19.63	34.22	53.86
Cotton Picker-1st-Tr	4R30"325hp	261,825	200	8	12.86	0.327	7.38	9.60	13.39	30.38	52.84	83.23
Cotton Picker-1st-Tr	4R30"325hp	311,088	200	8	16.72	0.327	7.38	12.48	15.91	35.78	62.78	98.57
Cotton Picker-1st-Tr	4R38"255hp	268,000	200	8	13.12	0.257	5.81	7.71	10.79	24.32	42.59	66.91
Cotton Picker-1st-Tr	4R38"325hp	351,000	200	8	18.01	0.257	5.81	10.58	14.13	30.54	55.78	86.32
Cotton Picker-1st-Tr	5R30"255hp	285,303	200	8	13.12	0.261	5.91	7.83	11.67	25.42	46.06	71.49
Cotton Picker-1st-Tr	5R38"250hp	290,471	200	8	12.86	0.207	4.67	6.07	9.40	20.15	37.10	57.26
Cotton Picker-1st-Tr	6R30"325hp	465,000	200	8	16.72	0.218	4.92	8.32	15.85	29.10	62.56	91.67
Cotton Picker-1st-Tr	6R38"330hp	465,000	200	8	18.01	0.172	3.88	7.07	12.51	23.48	49.39	72.88
Cotton Picker-2nd-BB	2R30"157hp	144,912	200	8	8.08	0.440	9.93	8.89	9.96	28.79	42.88	71.67
Cotton Picker-2nd-BB	4R2X1260hp	322,187	200	8	18.01	0.145	3.29	6.57	7.34	17.21	31.61	48.82
Cotton Picker-2nd-BB	4R30"250hp	261,825	200	8	12.86	0.277	6.25	8.92	11.34	26.52	48.81	75.34
Cotton Picker-2nd-BB	4R30"325hp	311,088	200	8	16.72	0.277	6.25	11.59	13.47	31.33	58.00	89.33
Cotton Picker-2nd-BB	4R38"255hp	268,000	200	8	13.12	0.218	4.92	7.16	9.14	21.23	39.34	60.57
Cotton Picker-2nd-BB	4R38"325hp	351,000	200	8	18.01	0.218	4.92	9.83	11.97	26.73	51.52	78.26
Cotton Picker-2nd-BB	5R30"255hp	285,303	200	8	13.12	0.221	5.00	7.27	9.88	22.17	42.55	64.73
Cotton Picker-2nd-BB	5R38"250hp	284,601	200	8	12.86	0.175	3.96	5.64	7.80	17.41	33.58	50.99
Cotton Picker-2nd-BB	6R30"325hp	465,000	200	8	18.01	0.184	4.17	8.32	13.43	25.92	57.79	83.72
Cotton Picker-2nd-BB	6R38"330hp	465,000	200	8	18.01	0.145	3.29	6.57	10.60	20.46	45.62	66.09
Cotton Picker-2nd-Tr	2R38"157hp	144,912	200	8	8.08	0.440	9.93	8.89	9.96	28.79	42.88	71.67
Cotton Picker-2nd-Tr	4R2X1260hp	322,137	200	8	18.01	0.145	3.29	6.57	7.34	17.21	31.61	48.82
Cotton Picker-2nd-Tr	4R30"250hp	261,825	200	8	12.86	0.277	6.25	8.92	11.34	26.52	48.81	75.34
Cotton Picker-2nd-Tr	4R30"325hp	311,088	200	8	16.72	0.277	6.25	11.59	13.47	31.33	58.00	89.33
Cotton Picker-2nd-Tr	4R38"255hp	268,000	200	8	13.12	0.218	4.92	7.16	9.14	21.23	39.34	60.57
Cotton Picker-2nd-Tr	4R38"325hp	351,000	200	8	18.01	0.218	4.92	9.83	11.97	26.73	51.52	78.26
Cotton Picker-2nd-Tr	5R30"255hp	285,303	200	8	13.12	0.221	5.00	7.27	9.88	22.17	42.55	64.73
Cotton Picker-2nd-Tr	5R38"250hp	290,471	200	8	12.86	0.175	3.96	5.64	7.96	17.57	34.27	51.84
Cotton Picker-2nd-Tr	6R38"330hp	465,000	200	8	18.01	0.145	3.29	6.57	10.60	20.46	45.62	66.09
LA Pickup Truck	1/2 ton	27,500	800	5	2.50	1.000	10.73	6.25	3.09	20.07	7.66	27.74
LA Rice Combine	25 ft	181,500	300	10	8.60	0.300	5.05	6.45	14.53	26.04	23.92	49.97
LA Rice Combine-2	25 ft	181,500	300	10	8.60	0.300	5.05	6.45	14.53	26.04	23.92	49.97
LARice Combine Med	20 ft	165,000	300	10	7.10	0.210	3.53	3.72	9.24	16.50	15.21	31.72
Levee Sprayer	27'	30,768	350	8	2.57	0.038	0.69	0.24	0.06	1.00	0.45	1.45
SC Billet Harvester	6 ft	319,000	750	10	12.00	0.700	11.78	21.00	29.77	62.55	38.76	101.32
SC Harvester 1Rw	6 ft	126,500	400	12	6.80	0.875	14.72	14.87	23.05	52.66	32.32	84.98
SC Harvester 2Rw	12 ft	231,000	400	12	8.00	0.388	6.53	7.76	18.67	32.96	26.17	59.13
SC Loader 1Rw	6 ft	93,500	425	10	5.10	0.598	7.06	7.63	9.61	24.31	17.34	41.66
SC Loader 2Rw	12 ft	165,000	425	10	7.00	0.300	3.54	5.25	8.51	17.31	15.35	32.66
SC Transloader		33,000	120	12	4.70	0.250	2.95	2.93	4.12	10.01	8.03	18.04
SC Truck&Trailer	30 Ton	49,500	400	10	7.00	1.000	11.80	17.50	8.66	37.96	16.29	54.26
Sprayer(300-450Gal)	47'	0	350	8	5.40	0.022	0.40	0.30	0.00	0.70	0.00	0.70
Sprayer(300-450Gal)	60'	103,000	350	8	5.66	0.017	0.31	0.24	0.09	0.66	0.69	1.36
Sprayer(300-450Gal)	80'	103,000	350	8	5.66	0.013	0.23	0.18	0.07	0.49	0.52	1.02
Sprayer(600-750Gal)	60'	208,000	350	8	10.29	0.017	0.31	0.45	0.19	0.96	1.40	2.37
Sprayer(600-825Gal)	80'	210,000	350	8	10.29	0.013	0.23	0.34	0.14	0.72	1.06	1.79
Sprayer(600-825Gal)	90'	288,000	350	8	10.29	0.011	0.21	0.30	0.18	0.69	1.30	1.99
Sprayer(1000-1400Gal)	90'	328,000	350	8	14.15	0.014	0.25	0.49	0.24	1.00	1.77	2.77
Sprayer(1200PlusGal)	120'	332,000	350	8	15.44	0.008	0.15	0.34	0.15	0.65	1.12	1.78

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2019.

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	1,221	200	20	0.020	0.21	0.33	0.01 0.06	0.62	0.01 0.42	1.06
Blade-Box	10'	2WD 50	3,700	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	1,213	200	20	1.176	12.62	7.56	0.67 0.84	21.71	0.62 5.59	27.92
Blade-Scraper	10'	2WD 50	3,550	200	20	1.176	12.62	7.56	1.98 0.84	23.01	1.81 5.59	30.42
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	1.93	0.93 0.37	4.48	1.82 2.47	8.77
Chisel Plow(Folding)	24'	MFWD 190	39,900	150	12	0.076	0.82	1.86	1.10 0.41	4.20	2.14 2.88	9.23
Chisel Plow(Folding)	32'	MFWD 225	51,900	150	12	0.057	0.61	1.67	1.08 0.34	3.72	2.10 2.38	8.20
Chisel Plow(Folding)	42'	MFWD 225	62,500	150	12	0.044	0.47	1.27	0.99 0.26	3.00	1.93 1.81	6.74
Chisel Plow(Rigid)	15'	2WD 130	11,800	150	12	0.123	1.32	2.06	0.52 0.39	4.30	1.02 2.63	7.96
Chisel Plow(Rigid)	24'	MFWD 190	11,700	150	12	0.077	0.82	1.88	0.32 0.42	3.45	0.63 2.90	6.99
Chisel-Harrow	21 shank	2WD 190	6,750	150	12	0.088	0.94	2.15	0.21 0.39	3.70	0.41 2.71	6.83
Chisel-Harrow	27 shank	MFWD 225	14,100	150	12	0.068	0.73	1.98	0.34 0.40	3.47	0.67 2.82	6.97
Colter-Chisel-Harrow	21 shank	2WD 190	19,200	150	12	0.088	0.94	2.15	0.61 0.39	4.10	1.18 2.71	8.00
Colter-Chisel-Harrow	27 shank	MFWD 225	24,000	150	12	0.068	0.73	1.98	0.59 0.40	3.71	1.15 2.82	7.69
Corn Grain Cart 8R30	500 bu	MFWD 190	25,700	200	12	0.031	0.34	0.78	0.22 0.17	1.52	0.43 1.20	3.15
Corn Grain Cart 8R40	700bu	MFWD 190	37,300	200	12	0.025	0.26	0.61	0.25 0.13	1.26	0.49 0.94	2.70
Cult & Post	4R-38	2WD 105	19,500	150	10	0.173	2.64	2.34	0.90 0.33	6.21	2.63 2.20	11.04
Cult & Post	6R-30	MFWD 150	23,600	150	10	0.146	2.23	2.83	0.92 0.59	6.58	2.69 3.95	13.24
Cult & Post	6R-38	MFWD 150	24,500	150	10	0.115	1.76	2.23	0.75 0.47	5.22	2.21 3.12	10.56
Cult & Post	8R-30	MFWD 190	28,700	150	10	0.110	1.67	2.68	0.84 0.60	5.81	2.45 4.15	12.42
Cult & Post	8R-38	MFWD 190	29,800	150	10	0.086	1.32	2.12	0.69 0.47	4.61	2.01 3.28	9.92
Cult & Post	8R-38 2x1	MFWD 190	47,800	150	10	0.057	0.88	1.41	0.73 0.31	3.35	2.15 2.18	7.69
Cult & Post	10R-30	MFWD 225	32,000	150	10	0.088	1.34	2.54	0.75 0.52	5.16	2.19 3.62	10.98
Cult & Post	10R-38	MFWD 225	0	150	10	0.065	0.99	1.88	0.00 0.38	3.26	0.00 2.68	5.94
Cult & Post	12R-30	MFWD 225	47,200	150	10	0.073	1.11	2.12	0.92 0.43	4.60	2.69 3.02	10.32
Cult & Post	12R-38	MFWD 225	56,500	150	10	0.057	0.88	1.67	0.87 0.34	3.77	2.54 2.38	8.71
Cultipacker	12'	2WD 130	6,910	300	12	0.124	1.33	2.08	0.20 0.40	4.02	0.31 2.66	6.99
Cultipacker	20'	MFWD 150	17,000	300	12	0.074	0.80	1.44	0.29 0.30	2.84	0.45 2.01	5.31
Cultivate	4R-38	2WD 105	12,200	150	10	0.162	1.74	2.19	0.52 0.31	4.77	1.54 2.06	8.38
Cultivate	6R-30	MFWD 150	16,300	150	10	0.137	1.47	2.65	0.59 0.55	5.28	1.74 3.71	10.74
Cultivate	6R-38	MFWD 150	17,200	150	10	0.108	1.16	2.09	0.49 0.44	4.19	1.45 2.92	8.58
Cultivate	8R-30	MFWD 190	21,400	150	10	0.103	1.10	2.52	0.58 0.56	4.78	1.71 3.89	10.39
Cultivate	8R-38	MFWD 190	22,600	150	10	0.081	0.87	1.99	0.49 0.44	3.80	1.43 3.07	8.31
Cultivate	8R-38 2x1	MFWD 190	35,400	150	10	0.054	0.58	1.32	0.51 0.29	2.71	1.49 2.05	6.26
Cultivate	10R-30	MFWD 225	28,200	150	10	0.082	0.88	2.38	0.62 0.49	4.38	1.81 3.40	9.60
Cultivate	10R-38	MFWD 225	0	150	10	0.065	0.69	1.88	0.00 0.38	2.97	0.00 2.68	5.65
Cultivate	12R-30	MFWD 225	39,900	150	10	0.068	0.73	1.99	0.73 0.41	3.87	2.13 2.83	8.84
Cultivate	12R-38	MFWD 225	39,100	150	10	0.054	0.58	1.57	0.56 0.32	3.04	1.65 2.23	6.93
Disk & Incorporate	14'	2WD 130	31,900	200	10	0.149	2.28	2.50	1.43 0.48	6.70	2.78 3.19	12.69
Disk & Incorporate	24'	MFWD 190	50,000	200	10	0.087	1.33	2.13	1.30 0.47	5.25	2.55 3.29	11.10
Disk & Incorporate	32'	4WD 225	66,000	200	10	0.068	1.04	1.99	1.36 0.31	4.71	2.65 2.18	9.55
Disk & Incorporate	42'	MFWD 225	30,542	200	10	0.049	0.74	1.42	0.44 0.29	2.91	0.87 2.02	5.81
Disk Bed (Hipper)	4R-38	MFWD 150	9,200	160	10	0.147	1.58	2.84	0.33 0.59	5.37	0.99 3.98	10.34
Disk Bed (Hipper)	6R-30	MFWD 170	15,100	160	10	0.125	1.34	2.73	0.47 0.57	5.12	1.37 3.99	10.49
Disk Bed (Hipper)	6R-38	MFWD 170	13,000	160	10	0.098	1.05	2.15	0.32 0.45	3.99	0.93 3.15	8.08
Disk Bed (Hipper)	8R-30	MFWD 190	17,800	160	10	0.093	1.00	2.29	0.41 0.51	4.22	1.21 3.54	8.98
Disk Bed (Hipper)	8R-38 2x1	MFWD 190	29,200	160	10	0.049	0.52	1.20	0.36 0.26	2.36	1.05 1.86	5.28
Disk Bed (Hipper)	10R-30	MFWD 225	19,900	160	10	0.075	0.80	2.17	0.37 0.44	3.79	1.09 3.09	7.97
Disk Bed (Hipper)	10R-38	MFWD 225	23,100	160	10	0.059	0.63	1.71	0.34 0.35	3.04	0.99 2.43	6.47
Disk Bed (Hipper)	12R-30	MFWD 225	31,000	160	10	0.062	0.67	1.80	0.48 0.37	3.33	1.41 2.57	7.32
Disk Bed (Hipper)	12R-38	MFWD 225	29,200	160	10	0.049	0.52	1.42	0.36 0.29	2.61	1.05 2.03	5.69
Disk Bed (Hipper)Fld	8R-38	MFWD 190	20,000	160	10	0.074	0.79	1.81	0.37 0.40	3.38	1.08 2.79	7.26
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	18,400	160	10	0.074	0.79	1.81	0.34 0.40	3.35	0.99 2.79	7.14
Disk Bed w/roller	8R-30	2WD 190	26,600	160	10	0.093	1.00	2.29	0.62 0.41	4.34	1.82 2.89	9.05
Disk Bed w/roller	12R-30	MFWD 225	47,000	160	10	0.062	0.67	1.80	0.73 0.37	3.58	2.14 2.57	8.30
Disk Harrow	14'	2WD 130	24,600	180	10	0.140	1.50	2.34	0.95 0.45	5.26	2.24 2.99	10.50
Disk Harrow	24'	MFWD 190	42,700	180	10	0.081	0.87	2.00	0.97 0.44	4.29	2.26 3.09	9.65
Disk Harrow	28'	MFWD 225	52,000	180	10	0.070	0.75	2.03	1.01 0.41	4.21	2.36 2.89	9.47
Disk Harrow	32'	MFWD 225	58,700	180	10	0.061	0.65	1.77	1.00 0.36	3.80	2.33 2.53	8.67
Disk Harrow	42'	MFWD 225	104,000	180	10	0.046	0.50	1.35	1.35 0.27	3.48	3.15 1.92	8.57
Ditcher	2WD 130	2WD 130	5,700	200	10	0.020	0.21	0.33	0.04 0.06	0.65	0.06 0.42	1.15
Ditcher (1m/160a)	2WD 130	2WD 130	5,700	200	10	0.009	0.10	0.15	0.02 0.03	0.30	0.03 0.20	0.54
Fert Appl (Liquid)	4R-38	MFWD 150	12,900	150	8	0.154	2.36	2.98	1.33 0.62	7.30	1.65 4.17	13.13
Fert Appl (Liquid)	6R-30	MFWD 170	16,700	150	8	0.130	1.99	2.86	1.45 0.60	6.92	1.81 4.18	12.92
Fert Appl (Liquid)	6R-38	MFWD 170	16,100	150	8	0.103	1.57	2.26	1.10 0.47	5.42	1.38 3.30	10.11
Fert Appl (Liquid)	8R-30	MFWD 190	16,900	150	8	0.098	1.49	2.40	1.10 0.53	5.54	1.37 3.70	10.63
Fert Appl (Liquid)	8R-38	MFWD 190	19,000	150	8	0.077	1.18	1.89	0.98 0.42	4.49	1.22 2.93	8.64
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	20,300	150	8	0.051	0.78	1.26	0.69 0.28	3.03	0.87 1.95	5.85
Fert Appl (Liquid)	10R-30	MFWD 225	18,600	150	8	0.078	1.19	2.27	0.97 0.46	4.91	1.21 3.23	9.36
Fert Appl (Liquid)	10R-38	MFWD 225	20,300	150	8	0.061	0.94	1.79	0.83 0.36	3.94	1.04 2.55	7.54
Fert Appl (Liquid)	12R-30	MFWD 225	22,600	150	8	0.078	1.19	2.27	1.18 0.46	5.12	1.47 3.23	9.83
Fert Appl (Liquid)	12R-38	MFWD 225	19,900	150	8	0.051	0.78	1.49	0.68 0.30	3.27	0.85 2.13	6.26
Field Cult & Inc	12'	2WD 150	15,800	100	10	0.132	2.01	2.55	0.52 0.45	5.54	2.44 2.99	10.97
Field Cult & Inc	24'	MFWD 170	34,500	100	10	0.066	1.00	1.44	0.57 0.30	3.33	2.66 2.11	8.10

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate,
(Continued) and direct and fixed cost per acre, Louisiana 2019.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost
dollars hours years hr/ac -----\$/acre-----												
Field Cult & Inc	32'	MFWD 190	43,800	100	10	0.049	0.75	1.21	0.54 0.27	2.78	2.53 1.87	7.19
Field Cult & Inc	42'	MFWD 225	69,400	100	10	0.037	0.57	1.09	0.65 0.22	2.55	3.06 1.55	7.17
Field Cultivate	50'	MFWD 225	65,900	100	10	0.029	0.32	0.86	0.49 0.17	1.85	2.29 1.23	5.38
Gate Installer		2WD 130	2,960	10	10	0.020	0.39	0.33	0.17 0.06	0.97	0.66 0.42	2.06
Grain Drill	12'	2WD 130	26,800	150	8	0.157	3.10	2.62	1.57 0.50	7.82	3.35 3.35	14.54
Grain Drill	15'	MFWD 150	32,600	150	8	0.125	2.48	2.42	1.53 0.51	6.96	3.26 3.39	13.62
Grain Drill	20'	MFWD 170	38,800	150	8	0.094	1.86	2.06	1.37 0.43	5.73	2.91 3.01	11.66
Grain Drill	24'	MFWD 190	65,600	150	8	0.078	1.55	1.92	1.93 0.42	5.83	4.10 2.96	12.91
Grain Drill	30'	MFWD 225	63,800	150	8	0.062	1.24	1.82	1.50 0.37	4.94	3.19 2.59	10.73
Grain Drill & Pre	12'	2WD 130	34,100	150	8	0.169	3.34	2.83	2.16 0.54	8.88	4.60 3.61	17.10
Grain Drill & Pre	15'	MFWD 150	39,900	150	8	0.135	2.67	2.61	2.02 0.55	7.86	4.30 3.65	15.82
Grain Drill & Pre	20'	MFWD 170	46,000	150	8	0.101	2.00	2.22	1.75 0.46	6.45	3.72 3.24	13.41
Grain Drill & Pre	24'	MFWD 190	71,000	150	8	0.084	1.67	2.06	2.25 0.46	6.45	4.78 3.19	14.44
Grain Drill & Pre	30'	MFWD 225	71,000	150	8	0.067	1.33	1.95	1.80 0.40	5.50	3.83 2.79	12.12
Harrow	13'	2WD 130	4,360	200	10	0.119	1.28	1.99	0.18 0.38	3.84	0.30 2.55	6.70
Harrow	21'	2WD 150	6,750	200	10	0.073	0.79	1.42	0.17 0.25	2.64	0.29 1.67	4.61
Harrow	40'	MFWD 190	20,200	200	10	0.038	0.41	0.94	0.27 0.21	1.85	0.45 1.46	3.77
Harrow	47'	MFWD 190	23,700	200	10	0.033	0.35	0.80	0.27 0.18	1.61	0.45 1.24	3.32
Header - Corn	4R-38	240hp	25,147	300	8	0.201	2.71	6.20	1.26 3.38	13.57	2.09 14.56	30.23
Header - Corn	6R30"	240hp	48,900	300	8	0.170	2.30	5.25	2.08 2.86	12.50	3.45 12.32	28.29
Header - Corn	6R38"	240hp	48,800	300	8	0.134	1.81	4.15	1.64 2.26	9.86	2.72 9.73	22.32
Header - Corn	8R-30	240hp	62,300	300	8	0.127	1.72	3.94	1.98 2.14	9.80	3.30 9.24	22.35
Header - Corn	8R-38	275hp	63,000	300	8	0.100	1.36	3.57	1.59 3.56	10.09	2.64 15.34	28.07
Header - Corn	12R-20	275hp	95,600	300	8	0.127	1.72	4.51	3.05 4.50	13.80	5.06 19.40	38.27
Header - Corn	12R-30	275hp	98,200	300	8	0.085	1.15	3.01	2.09 3.00	9.25	3.47 12.93	25.66
Header - Rice (CL)	22' Rigid	240hp	64,400	300	8	0.288	3.89	8.90	4.64 4.85	22.30	7.71 20.88	50.90
Header - Rice (CL)	25' Rigid	240hp	64,400	300	8	0.253	3.42	7.83	4.08 4.27	19.62	6.78 18.38	44.79
Header - Rice (CL)	30' Rigid	275hp	74,100	300	8	0.211	2.85	7.48	3.91 7.47	19.72	6.50 32.14	60.38
Header - Rice (SL)	22' Rigid	240hp	64,400	300	8	0.250	3.37	7.71	4.02 4.20	19.32	6.68 18.10	44.11
Header - Rice (SL)	25' Rigid	240hp	64,400	300	8	0.220	2.97	6.79	3.54 3.70	17.00	5.88 15.93	38.82
Header - Rice (SL)	30' Rigid	275hp	74,100	300	8	0.183	2.47	6.48	3.39 6.47	18.83	5.63 27.85	52.32
Header - Soybean	15' Flex	240hp	0	300	8	0.170	2.30	5.25	0.00 2.86	10.42	0.00 12.32	22.75
Header - Soybean	18' Flex	240hp	20,309	300	8	0.141	1.91	4.38	0.72 2.38	9.40	1.19 10.27	20.87
Header - Soybean	22' Flex	240hp	32,600	300	8	0.116	1.56	3.58	0.94 1.95	8.05	1.57 8.40	18.03
Header - Soybean	25' Flex	275hp	34,600	300	8	0.102	1.38	3.29	0.88 3.49	9.05	1.32 13.77	24.15
Header - Soybean	30' Flex	275hp	41,400	300	8	0.085	1.15	2.74	0.88 2.90	7.68	1.32 11.47	20.49
Header Wheat/Sorghum	18' Rigid	240hp	19,069	300	8	0.141	1.91	3.99	0.67 2.38	8.97	1.01 9.42	19.41
Header Wheat/Sorghum	22' Rigid	240hp	19,800	300	8	0.116	1.56	3.26	0.57 1.95	7.36	0.86 7.70	15.93
Header Wheat/Sorghum	25' Rigid	240hp	21,000	300	8	0.102	1.38	3.15	0.53 1.71	6.79	0.89 7.39	15.07
Header Wheat/Sorghum	30' Rigid	275hp	23,600	300	8	0.085	1.15	3.01	0.50 3.00	7.67	0.83 12.93	21.44
Header-Cotton-Bcast	13'	173hp	21,300	200	8	0.251	5.68	5.08	1.00 6.68	18.46	3.34 28.78	50.58
Header-Cotton-Bcast	16'	173hp	23,800	200	8	0.204	4.61	4.13	0.91 5.43	15.09	3.03 23.38	41.51
Header-Cotton-Bcast	19'	173hp	26,200	200	8	0.172	3.88	3.48	0.84 4.57	12.79	2.81 19.69	35.29
Header-Cotton-Brush	4R30"	173hp	20,520	200	8	0.327	7.38	6.61	1.25 8.69	23.95	4.18 37.41	65.55
Header-Cotton-Brush	4R30"2X1	173hp	34,400	200	8	0.218	4.92	4.40	1.40 5.79	16.53	4.67 24.94	46.15
Header-Cotton-Brush	4R38"	173hp	34,000	200	8	0.257	5.81	5.20	1.64 6.84	19.51	5.45 29.46	54.43
Header-Cotton-Brush	4R38"2X1	173hp	36,000	200	8	0.172	3.88	3.48	1.16 4.57	13.10	3.86 19.69	36.66
Header-Cotton-Brush	5R-30	173hp	42,800	200	8	0.261	5.91	5.29	2.10 6.95	20.25	6.98 29.93	57.17
Header-Cotton-Brush	5R-38	173hp	44,300	200	8	0.207	4.67	4.18	1.72 5.50	16.08	5.71 23.68	45.48
Header-Cotton-Brush	6R-30	173hp	52,700	200	8	0.218	4.92	4.40	2.15 5.79	17.28	7.16 24.94	49.39
Heavy Disk	14'	MFWD 150	31,900	180	10	0.145	1.56	2.81	1.29 0.59	6.26	3.02 3.93	13.23
Heavy Disk	21'	MFWD 170	40,600	180	10	0.097	1.04	2.12	1.09 0.45	4.71	2.57 3.10	10.39
Heavy Disk	27'	MFWD 190	50,400	180	10	0.075	0.81	1.85	1.05 0.41	4.13	2.47 2.85	9.47
LA Boom Sprayer	30 ft	MFWD 150	3,000	150	10	0.059	0.64	1.15	0.13 0.24	2.17	0.15 1.61	3.95
Land Plane	40'x10'	MFWD 190	6,020	200	10	0.242	2.60	5.93	0.29 1.32	10.15	0.85 9.16	20.17
Land Plane	50'x16'	MFWD 190	14,300	200	10	0.151	1.62	3.70	0.43 0.82	6.59	1.26 5.72	13.59
LARice Backhoe-Rrmnt	2 ft	MFWD 150	6,000	100	10	0.500	5.36	9.65	2.64 2.03	19.68	3.95 13.49	37.13
LARice Land Level	13 ft	MFWD 150	7,500	200	15	0.190	2.03	3.66	0.15 0.77	6.63	0.72 5.13	12.49
LARice Levee Plow	8 ft	4WD 300	4,600	150	10	0.050	0.53	1.93	0.07 0.44	2.99	0.20 3.08	6.27
LARice Water Level	24 ft	4WD 300	3,500	100	15	0.149	1.60	5.78	0.23 1.33	8.96	0.53 9.25	18.75
Levee Splitter (1/80	2 blade	2WD 150	7,180	50	10	0.004	0.04	0.08	0.00 0.01	0.14	0.06 0.09	0.30
Lo-Till & Bed	4R-38	MFWD 190	5,100	150	12	0.145	1.56	3.55	0.26 0.79	6.18	0.53 5.49	12.21
Middle Buster	6R-38	MFWD 150	12,800	160	8	0.120	1.28	2.32	0.36 0.48	4.45	1.24 3.24	8.94
Middle Buster	8R-30	MFWD 190	20,800	160	8	0.114	1.22	2.79	0.55 0.62	5.19	1.92 4.31	11.43
Middle Buster	8R-38	MFWD 190	18,100	160	8	0.090	0.96	2.20	0.38 0.49	4.05	1.32 3.40	8.78
Middle Buster	8R-40 2x1	MFWD 190	29,200	160	8	0.060	0.64	1.46	0.41 0.32	2.85	1.42 2.27	6.54
Middle Buster	10R-30	MFWD 225	29,300	160	8	0.091	0.98	2.64	0.62 0.54	4.79	2.16 3.76	10.72
Middle Buster	10R-38	MFWD 225	32,100	160	8	0.072	0.77	2.08	0.54 0.42	3.83	1.87 2.96	8.67
Middle Buster	12R-38	MFWD 225	29,200	160	8	0.060	0.64	1.74	0.41 0.35	3.15	1.42 2.47	7.05
Module Builder-1st	2R-38(157)	MFWD 190	31,300	200	10	0.519	10.28	12.70	4.06 2.84	29.89	9.20 19.62	58.72
Module Builder-1st	4R-30(255)	MFWD 190	34,700	200	10	0.327	6.47	8.00	2.84 1.79	19.11	6.42 12.36	37.90
Module Builder-1st	4R-30(325)	MFWD 190	34,700	200	10	0.327	6.47	8.00	2.84 1.79	19.11	6.42 12.36	37.90
Module Builder-1st	4R-38(255)	MFWD 190	34,700	200	10	0.257	5.10	6.30	2.23 1.40	15.05	5.06 9.73	29.84
Module Builder-1st	4R-38(325)	MFWD 190	34,700	200	10	0.257	5.10	6.30	2.23 1.40	15.05	5.06 9.73	29.84
Module Builder-1st	4R2x1260hp	MFWD 190	34,700	200	10	0.172	3.40	4.21	1.49 0.94	10.05	3.38 6.50	19.95
Module Builder-1st	5R-30(255)	MFWD 190	34,700	200	10	0.261	5.18	6.40	2.27 1.43	15.29	5.14 9.89	30.32
Module Builder-1st	5R-38(255)	MFWD 190	34,700	200	10	0.207	4.10	5.06	1.79 1.13	12.09	4.06 7.82	23.99
Module Builder-1st	6R-30(325)	MFWD 190	34,700	200	10	0.218	4.31	5.33	1.89 1.19	12.74	4.28 8.24	25.27
Module Builder-1st	6R-38(325)	MFWD 190	34,700	200	10	0.172	3.40	4.21	1.49 0.94	10.05	3.38 6.50	19.95
Module Builder-2nd	2R-38(157)	MFWD 190	34,700	200	10	0.440	8.71	10.76	3.81 2.40	25.69	8.64 16.62	50.96
Module Builder-2nd	4R-30(255)	MFWD 190	34,700	200	10	0.277	5.48	6.78	2.40 1.51	16.19	5.44 10.47	32.10
Module Builder-2nd	4R-30(325)	MFWD 190	34,700	200	10	0.277	5.48	6.78	2.40 1.51	16.19	5.44 10.47	32.10
Module Builder-2nd	4R-38(255)	MFWD 190	34,700	200	10	0.218	4.32	5.33	1.89 1.19	12.74	4.28 8.24	25.28
Module Builder-2nd	4R-38(325)	MFWD 190	34,700	200	10	0.218	4.32	5.33	1.89 1.19	12.74	4.28 8.24	25.28
Module Builder-2nd	4R2x1 255	MFWD 190	34,700	200	10	0.145	2.88	3.56	1.26 0.79	8.52	2.86 5.51	16.89

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, (Continued) and direct and fixed cost per acre, Louisiana 2019.

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		
Module Builder-2nd	5R-30(255)	MFWD 190	34,700	200	10	0.221	4.39	5.42	1.92 1.21	12.95	4.35 8.37	25.68
Module Builder-2nd	5R-38(255)	MFWD 190	34,700	200	10	0.175	3.47	4.29	1.52 0.95	10.24	3.44 6.62	20.32
Module Builder-2nd	6R-30(325)	MFWD 190	34,700	200	10	0.184	3.65	4.52	1.60 1.01	10.79	3.62 6.98	21.40
Module Builder-2nd	6R-38(325)	MFWD 190	34,700	200	10	0.145	2.88	3.56	1.26 0.79	8.52	2.86 5.51	16.89
Module Builder-Strip	13' Bcast	MFWD 150	34,700	200	10	0.251	4.98	4.86	2.18 1.02	13.05	4.94 6.79	24.79
Module Builder-Strip	16' Bcast	MFWD 150	34,700	200	10	0.204	4.04	3.94	1.77 0.83	10.60	4.01 5.52	20.14
Module Builder-Strip	19' Brush	MFWD 150	34,700	200	10	0.172	3.41	3.32	1.49 0.70	8.93	3.38 4.64	16.96
Module Builder-Strip	4R-30	MFWD 150	34,700	200	10	0.327	6.47	6.31	2.84 1.32	16.96	6.42 8.83	32.23
Module Builder-Strip	4R-30 2X1	MFWD 150	34,700	200	10	0.218	4.31	4.21	1.89 0.88	11.31	4.28 5.88	21.48
Module Builder-Strip	4R-38	MFWD 150	34,700	200	10	0.257	5.10	4.97	2.23 1.04	13.36	5.06 6.95	25.37
Module Builder-Strip	4R-38 2X1	MFWD 150	34,700	200	10	0.172	3.41	3.32	1.49 0.70	8.93	3.38 4.64	16.96
Module Builder-Strip	5R-30	MFWD 150	34,700	200	10	0.261	5.18	5.05	2.27 1.06	13.57	5.14 7.06	25.78
Module Builder-Strip	5R-38	MFWD 150	34,700	200	10	0.207	4.10	3.99	1.79 0.84	10.73	4.06 5.59	20.39
Module Builder-Strip	6R-30	MFWD 150	34,700	200	10	0.218	4.31	4.21	1.89 0.88	11.31	4.28 5.88	21.48
Mulcher Plow	30'	MFWD 225	0	100	10	0.068	0.73	1.97	0.00 0.40	3.10	0.00 2.80	5.91
NT Grain Drill	12'	2WD 130	47,900	150	8	0.163	3.23	2.73	2.94 0.52	9.44	6.25 3.49	19.19
NT Grain Drill & Pre	15'	MFWD 150	62,400	150	8	0.141	2.79	2.72	3.29 0.57	9.38	7.01 3.80	20.20
NT Grain Drill & Pre	20'	MFWD 170	78,400	150	8	0.105	2.09	2.31	3.10 0.48	8.00	6.61 3.37	17.99
NT Grain Drill & Pre	24'	MFWD 190	97,700	150	8	0.088	1.74	2.15	3.22 0.48	7.61	6.86 3.32	17.80
NT Grain Drill & Pre	30'	MFWD 225	111,000	150	8	0.070	1.39	2.04	2.93 0.42	6.79	6.23 2.90	15.93
NT Plant&Pre-Folding	8R-38	MFWD 170	65,000	150	8	0.083	1.65	1.82	2.03 0.38	5.90	4.33 2.67	12.91
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	102,000	150	8	0.055	1.10	1.21	2.12 0.25	4.70	4.52 1.77	11.01
NT Plant&Pre-Folding	10R-30	MFWD 190	57,555	150	8	0.084	1.67	2.06	1.82 0.46	6.03	3.88 3.19	13.11
NT Plant&Pre-Folding	10R-38	MFWD 190	52,893	150	8	0.066	1.32	1.63	1.32 0.36	4.64	2.81 2.52	9.97
NT Plant&Pre-Folding	12R-20	MFWD 190	78,700	150	8	0.105	2.09	2.58	3.12 0.57	8.37	6.63 3.99	19.01
NT Plant&Pre-Folding	12R-30	MFWD 190	87,500	150	8	0.070	1.39	1.72	2.31 0.38	5.81	4.91 2.66	13.40
NT Plant&Pre-Folding	12R-38	MFWD 190	102,000	150	8	0.055	1.10	1.36	2.12 0.30	4.89	4.52 2.10	11.52
NT Plant&Pre-Folding	16R-30	MFWD 190	130,000	150	8	0.052	1.04	1.29	2.57 0.28	5.20	5.48 1.99	12.68
NT Plant&Pre-Folding	23R-15	MFWD 190	163,000	150	8	0.073	1.45	1.79	4.48 0.40	8.14	9.54 2.77	20.45
NT Plant&Pre-Folding	24R-20	MFWD 190	182,000	150	8	0.052	1.04	1.29	3.60 0.28	6.23	7.67 1.99	15.90
NT Plant&Pre-Folding	24R-30	MFWD 190	200,000	150	8	0.035	0.69	0.86	2.64 0.19	4.39	5.62 1.33	11.34
NT Plant&Pre-Rigid	4R-30	2WD 130	29,300	150	8	0.211	4.18	3.53	2.32 0.68	10.73	4.94 4.52	20.19
NT Plant&Pre-Rigid	4R-38	2WD 130	35,200	150	8	0.166	3.29	2.78	2.19 0.53	8.81	4.67 3.56	17.05
NT Plant&Pre-Rigid	6R-30	MFWD 150	43,100	150	8	0.141	2.79	2.72	2.27 0.57	8.36	4.84 3.80	17.01
NT Plant&Pre-Rigid	6R-38	MFWD 150	41,800	150	8	0.111	2.20	2.14	1.74 0.45	6.54	3.71 3.00	13.26
NT Plant&Pre-Rigid	8R-22	MFWD 170	26,219	150	8	0.143	2.84	3.14	1.41 0.66	8.07	3.00 4.59	15.68
NT Plant&Pre-Rigid	8R-30	MFWD 170	53,100	150	8	0.105	2.09	2.31	2.10 0.48	7.00	4.47 3.37	14.85
NT Plant&Pre-Rigid	8R-38	MFWD 170	50,600	150	8	0.077	1.52	1.68	1.46 0.35	5.03	3.11 2.46	10.61
NT Plant&Pre-Rigid	10R-30	MFWD 190	51,900	150	8	0.084	1.67	2.06	1.64 0.46	5.85	3.50 3.19	12.54
NT Plant&Pre-Rigid	12R-20	MFWD 190	65,000	150	8	0.105	2.09	2.58	2.57 0.57	7.83	5.48 3.99	17.31
NT Plant&Pre-Rigid	12R-30	MFWD 190	79,300	150	8	0.070	1.39	1.72	2.09 0.38	5.60	4.45 2.66	12.72
NT Plant-Folding	8R-38	MFWD 170	57,800	150	8	0.077	1.53	1.69	1.68 0.35	5.27	3.57 2.48	11.33
NT Plant-Folding	8R-38 2x1	MFWD 170	93,000	150	8	0.051	1.02	1.13	1.80 0.23	4.19	3.83 1.65	9.67
NT Plant-Folding	10R-30	MFWD 190	52,061	150	8	0.078	1.55	1.92	1.53 0.42	5.43	3.26 2.96	11.66
NT Plant-Folding	10R-38	MFWD 190	47,646	150	8	0.061	1.22	1.51	1.10 0.33	4.18	2.35 2.34	8.88
NT Plant-Folding	12R-20	MFWD 190	71,100	150	8	0.098	1.94	2.40	2.61 0.53	7.50	5.56 3.70	16.77
NT Plant-Folding	12R-30	MFWD 190	78,900	150	8	0.065	1.29	1.60	1.93 0.35	5.19	4.11 2.47	11.78
NT Plant-Folding	12R-38	MFWD 190	93,000	150	8	0.051	1.02	1.26	1.80 0.28	4.37	3.83 1.95	10.15
NT Plant-Folding	16R-30	MFWD 190	122,000	150	8	0.049	0.97	1.20	2.24 0.26	4.68	4.77 1.85	11.31
NT Plant-Folding	23R-15	MFWD 190	155,000	150	8	0.068	1.34	1.66	3.96 0.37	7.35	8.42 2.57	18.35
NT Plant-Folding	24R-20	MFWD 190	174,000	150	8	0.049	0.97	1.20	3.20 0.26	5.64	6.81 1.85	14.31
NT Plant-Folding	24R-30	MFWD 190	184,000	150	8	0.032	0.64	0.80	2.25 0.17	3.88	4.80 1.23	9.92
NT Plant-Rigid	4R-30	2WD 130	22,100	150	8	0.196	3.88	3.28	1.62 0.63	9.43	3.46 4.19	17.09
NT Plant-Rigid	4R-38	2WD 130	27,900	150	8	0.154	3.06	2.58	1.61 0.49	7.76	3.44 3.30	14.51
NT Plant-Rigid	6R-30	MFWD 150	35,800	150	8	0.130	2.59	2.52	1.75 0.53	7.40	3.73 3.53	14.68
NT Plant-Rigid	6R-38	MFWD 150	34,500	150	8	0.103	2.04	1.99	1.33 0.41	5.79	2.84 2.78	11.43
NT Plant-Rigid	8R-22	MFWD 170	21,142	150	8	0.133	2.64	2.92	1.05 0.61	7.24	2.25 4.26	13.76
NT Plant-Rigid	8R-30	MFWD 170	45,800	150	8	0.098	1.94	2.14	1.68 0.45	6.23	3.58 3.13	12.95
NT Plant-Rigid	8R-38	MFWD 170	43,300	150	8	0.077	1.53	1.69	1.26 0.35	4.85	2.68 2.48	10.01
NT Plant-Rigid	10R-30	MFWD 190	46,500	150	8	0.078	1.55	1.92	1.37 0.42	5.27	2.91 2.96	11.15
NT Plant-Rigid	12R-20	MFWD 190	57,800	150	8	0.098	1.94	2.40	2.12 0.53	7.01	4.52 3.70	15.24
NT Plant-Rigid	12R-30	MFWD 190	70,700	150	8	0.065	1.29	1.60	1.73 0.35	4.99	3.69 2.47	11.15
Paratill & Bed	4R-30	MFWD 225	12,300	150	12	0.204	2.19	5.91	0.90 1.21	10.23	1.76 8.42	20.42
Paratill & Bed	4R-38	MFWD 225	12,300	150	12	0.160	1.72	4.65	0.71 0.96	8.05	1.38 6.63	16.08
Paratill & Bed	6R-30	MFWD 225	17,300	150	12	0.136	1.46	3.94	0.85 0.81	7.06	1.65 5.61	14.33
Paratill & Bed	6R-38	MFWD 225	17,200	150	12	0.107	1.15	3.11	0.66 0.64	5.57	1.29 4.43	11.30
Paratill & Bed	8R-30	MFWD 225	22,600	150	12	0.102	1.09	2.95	0.83 0.60	5.49	1.62 4.21	11.33
Paratill & Bed	8R382X1	MFWD 225	69,100	150	12	0.053	0.57	1.55	1.34 0.32	3.79	2.60 2.21	8.62
Paratill & Bed Fold.	8R-38	MFWD 225	54,400	150	12	0.080	0.86	2.33	1.58 0.48	5.27	3.08 3.32	11.68
Paratill & Bed Fold.	12R-38	MFWD 225	69,100	150	12	0.053	0.57	1.55	1.34 0.32	3.79	2.60 2.21	8.62
Paratill & Bed Rigid	8R-38	MFWD 225	22,600	150	12	0.080	0.86	2.33	0.65 0.48	4.34	1.28 3.32	8.95
Pipe Drag	30'	2WD 150	500	100	12	0.051	0.55	0.99	0.00 0.17	1.74	0.02 1.17	2.93
Pipe Spool 160ac	1/4m roll	2WD 130	3,600	15	12	0.003	0.09	0.05	0.00 0.01	0.15	0.07 0.06	0.30
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.17	0.06	0.00 0.01	0.25	0.00 0.08	0.33
Plant & Pre Folding	8R-38	MFWD 170	57,900	150	8	0.080	1.58	1.75	1.74 0.37	5.45	3.70 2.56	11.72
Plant & Pre Folding	8R38 2x1	MFWD 170	91,000	150	8	0.053	1.05	1.16	1.82 0.24	4.29	3.87 1.70	9.88
Plant & Pre Folding	10R-30	MFWD 190	51,900	150	8	0.081	1.60	1.98	1.58 0.44	5.61	3.36 3.06	12.04
Plant & Pre Folding	10R-38	MFWD 190	48,258	150	8	0.064	1.26	1.56	1.15 0.35	4.34	2.46 2.41	9.22
Plant & Pre Folding	12R-20	MFWD 190	67,600	150	8	0.101	2.00	2.48	2.57 0.55	7.62	5.47 3.83	16.92
Plant & Pre Folding	12R-30	MFWD 190	76,800	150	8	0.067	1.33	1.65	1.94 0.37	5.31	4.14 2.55	12.01

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, (Continued) and direct and fixed cost per acre, Louisiana 2019.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	---Fixed--- Imp. P.U.	Total Direct	Total Cost
			dollars	hours	years	hr/ac			\$/acre			
lant & Pre Folding	12R-38	MFWD 190	91,000	150	8	0.053	1.05	1.30	1.82	0.29	4.48	10.37
Plant & Pre Folding	16R-30	MFWD 190	116,000	150	8	0.050	1.00	1.24	2.20	0.27	4.73	11.34
Plant & Pre Folding	23R-15	MFWD 190	143,000	150	8	0.070	1.39	1.72	3.78	0.38	7.28	17.98
Plant & Pre Folding	24R-20	MFWD 190	161,000	150	8	0.050	1.00	1.24	3.06	0.27	5.58	14.02
Plant & Pre Folding	24R-30	MFWD 190	178,000	150	8	0.033	0.66	0.82	2.25	0.18	3.94	10.02
Plant & Pre Rigid	4R-30	2WD 130	25,800	150	8	0.203	4.01	3.39	1.96	0.65	10.03	18.55
Plant & Pre Rigid	4R-38	2WD 130	31,600	150	8	0.159	3.16	2.67	1.89	0.51	8.24	15.69
Plant & Pre Rigid	6R-30	MFWD 150	25,900	150	8	0.135	2.67	2.61	1.31	0.55	7.15	13.60
Plant & Pre Rigid	6R-38	MFWD 150	36,400	150	8	0.106	2.11	2.06	1.45	0.43	6.07	12.05
Plant & Pre Rigid	8R-22	MFWD 170	23,550	150	8	0.138	2.73	3.02	1.22	0.63	7.61	14.62
Plant & Pre Rigid	8R-30	MFWD 170	46,000	150	8	0.101	2.00	2.22	1.75	0.46	6.45	13.41
Plant & Pre Rigid	8R-38	MFWD 170	43,400	150	8	0.080	1.58	1.75	1.30	0.37	5.02	10.36
Plant & Pre Rigid	10R-30	MFWD 190	46,000	150	8	0.081	1.60	1.98	1.40	0.44	5.43	11.48
Plant & Pre Rigid	12R-20	MFWD 190	54,300	150	8	0.101	2.00	2.48	2.06	0.55	7.11	15.34
Plant & Pre Rigid	12R-30	MFWD 190	68,600	150	8	0.067	1.33	1.65	1.74	0.37	5.10	11.36
Plant - Folding	8R-38	MFWD 170	50,600	150	8	0.074	1.47	1.63	1.41	0.34	4.86	10.25
Plant - Folding	8R-38 2x1	MFWD 170	82,300	150	8	0.049	0.98	1.08	1.53	0.22	3.82	8.66
Plant - Folding	10R-30	MFWD 190	47,426	150	8	0.075	1.49	1.84	1.34	0.41	5.09	10.79
Plant - Folding	10R-38	MFWD 190	43,011	150	8	0.059	1.17	1.45	0.95	0.32	3.91	8.20
Plant - Folding	12R-20	MFWD 190	60,400	150	8	0.094	1.86	2.30	2.13	0.51	6.82	14.92
Plant - Folding	12R-30	MFWD 190	68,200	150	8	0.062	1.24	1.53	1.60	0.34	4.73	10.52
Plant - Folding	12R-38	MFWD 190	82,300	150	8	0.049	0.98	1.21	1.53	0.27	3.99	9.12
Plant - Folding	16R-30	MFWD 190	97,900	150	8	0.047	0.93	1.15	1.73	0.25	4.07	9.53
Plant - Folding	23R-15	MFWD 190	134,000	150	8	0.065	1.29	1.60	3.29	0.35	6.54	16.01
Plant - Folding	24R-20	MFWD 190	152,000	150	8	0.047	0.93	1.15	2.68	0.25	5.03	12.52
Plant - Folding	24R-30	MFWD 190	178,000	150	8	0.031	0.62	0.76	2.09	0.17	3.66	9.30
Plant - Rigid	4R-30	2WD 130	18,500	150	8	0.188	3.73	3.15	1.30	0.60	8.80	15.61
Plant - Rigid	4R-38	2WD 130	24,300	150	8	0.148	2.93	2.48	1.35	0.47	7.25	13.30
Plant - Rigid	6R-30	MFWD 150	30,500	150	8	0.125	2.48	2.42	1.43	0.51	6.86	13.31
Plant - Rigid	6R-38	MFWD 150	29,200	150	8	0.099	1.96	1.91	1.08	0.40	5.36	10.35
Plant - Rigid	8R-22	MFWD 170	18,473	150	8	0.127	2.53	2.79	0.88	0.59	6.80	12.77
Plant - Rigid	8R-30	MFWD 170	38,700	150	8	0.094	1.86	2.06	1.36	0.43	5.73	11.65
Plant - Rigid	8R-38	MFWD 170	36,200	150	8	0.074	1.47	1.63	1.01	0.34	4.46	8.99
Plant - Rigid	10R-30	MFWD 190	40,700	150	8	0.075	1.49	1.84	1.15	0.41	4.90	10.19
Plant - Rigid	12R-20	MFWD 190	47,100	150	8	0.094	1.86	2.30	1.66	0.51	6.35	13.45
Plant - Rigid	12R-30	MFWD 190	59,900	150	8	0.062	1.24	1.53	1.41	0.34	4.53	9.91
Plant - Rigid	15R-15	2WD 150	58,900	150	8	0.094	1.86	1.81	2.08	0.32	6.08	12.64
Pull Levee (1m/80a))	4 blade	2WD 50	3,180	100	10	0.003	0.03	0.02	0.00	0.00	0.06	0.09
Rice Grain Cart	500 Bu	MFWD 190	25,700	200	12	0.057	0.61	1.39	0.39	0.31	2.71	5.64
Rice Grain Cart	700 Bu	MFWD 190	37,300	200	12	0.063	0.68	1.55	0.64	0.34	3.22	6.86
Roller	32'	MFWD 170	22,800	100	12	0.046	0.50	1.02	0.17	0.21	1.91	4.52
Rotary Cutter	7'	MFWD 130	4,760	185	10	0.168	1.80	2.81	0.64	0.59	5.87	10.36
Rotary Cutter	12'	2WD 150	11,600	185	10	0.098	1.05	1.89	0.92	0.33	4.20	7.14
Rotary Cutter	15'	MFWD 150	22,800	185	10	0.078	0.84	1.51	1.45	0.31	4.13	7.38
Row Cond & Inc	13'	2WD 130	14,600	100	10	0.137	2.10	2.30	0.50	0.44	5.36	10.66
Row Cond & Inc	21'	2WD 170	20,700	100	10	0.085	1.30	1.86	0.44	0.41	4.02	8.97
Row Cond & Inc	26'	MFWD 190	26,600	100	10	0.063	0.96	1.55	0.42	0.34	3.28	7.65
Row Cond & Inc	38'	MFWD 225	33,800	100	10	0.047	0.72	1.36	0.39	0.28	2.76	6.57
Row Cond & Inc	42'	MFWD 225	20,400	100	10	0.040	0.61	1.16	0.20	0.23	2.22	4.83
Row Cond (Harrow)	13'	2WD 130	7,300	100	10	0.114	1.23	1.92	0.20	0.36	3.73	7.16
Row Cond (Harrow)	21'	2WD 170	12,000	100	10	0.071	0.76	1.55	0.21	0.34	2.87	6.27
Row Cond (Harrow)	27'	MFWD 190	12,400	100	10	0.057	0.61	1.40	0.17	0.31	2.51	5.51
Row Cond (Harrow)	38'	MFWD 225	22,200	100	10	0.039	0.42	1.13	0.21	0.23	2.01	4.65
Row Cond (Harrow)	42'	MFWD 225	15,582	100	10	0.035	0.38	1.02	0.13	0.21	1.76	3.87
Row Cond (Plant)	13'	2WD 130	7,120	100	10	0.157	1.68	2.62	0.27	0.50	5.10	9.77
Row Cond (Plant)	21'	2WD 170	11,700	100	10	0.097	1.04	2.12	0.28	0.47	3.93	8.53
Row Cond (Plant)	27'	MFWD 190	12,400	100	10	0.078	0.84	1.92	0.24	0.42	3.43	7.54
Row Cond (Plant)	38'	MFWD 225	16,587	100	10	0.053	0.57	1.55	0.22	0.32	2.67	5.93
Row Cond (Plant)	42'	MFWD 225	15,582	100	10	0.048	0.52	1.40	0.18	0.29	2.41	5.30
RT Cult (Early)	8R-30	2WD 170	20,774	200	12	0.103	1.10	2.25	1.02	0.50	4.89	9.52
RT Cult (Early)	12R-30	2WD 190	29,998	200	12	0.068	0.73	1.68	0.98	0.30	3.71	6.95
RT Cult (Late)	8R-30	2WD 170	20,774	200	12	0.128	1.38	2.82	1.28	0.62	6.11	11.90
RT Cult (Late)	12R-30	2WD 190	29,998	200	12	0.085	0.92	2.10	1.23	0.38	4.64	8.68
RT Cult + PD (Early)	8R-30	2WD 150	20,774	200	12	0.110	1.67	2.12	1.09	0.37	5.27	8.99
RT Cult + PD (Early)	12R-30	MFWD 225	29,998	200	12	0.073	1.11	2.12	1.05	0.43	4.73	8.94
RT Cult + PD (Late)	8R-30	2WD 170	26,264	200	12	0.137	2.09	3.00	1.73	0.67	7.50	14.08
RT Cult + PD (Late)	12R-30	2WD 190	35,493	200	12	0.091	1.39	2.24	1.55	0.40	5.60	10.19
Spin Spreader	5 ton	MFWD 190	12,400	100	8	0.042	0.83	1.02	0.29	0.23	2.38	4.62
Spin Spreader	5 ton	MFWD 190	12,400	100	8	0.042	0.83	1.02	0.29	0.23	2.38	4.62
Spray (Band)	27'	MFWD 170	7,270	200	8	0.062	0.95	1.37	0.21	0.28	2.83	5.11
Spray (Band)	40'	MFWD 170	8,630	200	8	0.042	0.64	0.92	0.17	0.19	1.93	3.51
Spray (Band)	50'	MFWD 170	13,700	200	8	0.033	0.51	0.74	0.21	0.15	1.63	3.00
Spray (Band)	53'	MFWD 170	9,940	200	8	0.031	0.48	0.69	0.14	0.14	1.48	2.69
Spray (Band)	60'	MFWD 170	15,600	200	8	0.028	0.43	0.61	0.20	0.13	1.38	2.55
Spray (Bcast/HB)	13' Rigid	MFWD 150	6,760	200	8	0.130	1.98	2.51	0.41	0.52	5.44	9.50
Spray (Bcast/HB)	20' Rigid	2WD 50	7,920	200	8	0.084	1.29	0.54	0.31	0.06	2.21	3.03
Spray (Bcast/HB)	27' Fold	MFWD 170	15,100	200	8	0.062	0.95	1.37	0.44	0.28	3.06	5.65

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate,
(Continued) and direct and fixed cost per acre, Louisiana 2019.

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 (Bcast/HB)	27' Fold	MFWD 170	15,100	200	8	0.062	0.95	1.37	0.44 0.28	3.06	0.58 2.00	5.65
Spray (Bcast/HB)	27' Rigid	MFWD 170	9,570	200	8	0.062	0.95	1.37	0.28 0.28	2.89	0.37 2.00	5.27
Spray (Bcast/HB)	30' Fold	MFWD 170	18,600	200	8	0.056	0.86	1.23	0.49 0.26	2.84	0.65 1.80	5.30
Spray (Bcast/HB)	40' Fold	MFWD 170	21,800	200	8	0.042	0.64	0.92	0.43 0.19	2.19	0.57 1.35	4.12
Spray (Bcast/HB/HD)	27'	MFWD 170	22,400	200	8	0.062	0.95	1.37	0.65 0.28	3.27	0.87 2.00	6.15
Spray (Bcast/HB/HD)	40'	MFWD 170	32,200	200	8	0.042	0.64	0.92	0.63 0.19	2.40	0.84 1.35	4.60
Spray (Broadcast)	27'	MFWD 170	7,270	200	8	0.062	0.95	1.37	0.21 0.28	2.83	0.28 2.00	5.11
Spray (Broadcast)	40'	MFWD 170	8,630	200	8	0.042	0.64	0.92	0.17 0.19	1.93	0.22 1.35	3.51
Spray (Broadcast)	50'	MFWD 170	13,700	200	8	0.033	0.51	0.74	0.21 0.15	1.63	0.28 1.08	3.00
Spray (Broadcast)	53'	MFWD 170	9,940	200	8	0.031	0.48	0.69	0.14 0.14	1.48	0.19 1.01	2.69
Spray (Broadcast)	60'	MFWD 170	15,600	200	8	0.028	0.43	0.61	0.20 0.13	1.38	0.27 0.90	2.55
Spray (Direct/Hood)	8R-30	MFWD 170	20,000	200	8	0.084	1.29	1.85	0.79 0.39	4.32	1.05 2.70	8.08
Spray (Direct/Hood)	8R-38	MFWD 170	21,500	200	8	0.066	1.02	1.46	0.67 0.30	3.46	0.89 2.13	6.49
Spray (Direct/Hood)	12R-30	MFWD 170	24,800	200	8	0.056	0.86	1.23	0.65 0.26	3.01	0.87 1.80	5.68
Spray (Direct/Hood)	12R-38	MFWD 170	26,600	200	8	0.044	0.67	0.97	0.55 0.20	2.41	0.73 1.42	4.57
Spray (Direct/Layby)	8R-30	MFWD 170	11,300	200	8	0.084	1.29	1.85	0.44 0.39	3.98	0.59 2.70	7.28
Spray (Direct/Layby)	8R-38	MFWD 170	11,300	200	8	0.066	1.02	1.46	0.35 0.30	3.14	0.47 2.13	5.75
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	14,900	200	8	0.044	0.67	0.97	0.31 0.20	2.17	0.41 1.42	4.00
Spray (Direct/Layby)	10R-30	MFWD 170	12,200	200	8	0.067	1.03	1.48	0.38 0.31	3.21	0.51 2.16	5.89
Spray (Direct/Layby)	12R-30	MFWD 170	14,900	200	8	0.056	0.86	1.23	0.39 0.26	2.74	0.52 1.80	5.07
Spray (Direct/Layby)	12R-38	MFWD 170	14,900	200	8	0.044	0.67	0.97	0.31 0.20	2.17	0.41 1.42	4.00
Spray (Direct/Layby)	16R-20	MFWD 170	17,100	200	8	0.063	0.96	1.38	0.50 0.29	3.15	0.67 2.02	5.85
Spray (Spot)	27'	MFWD 170	7,270	200	8	0.062	0.95	1.37	0.21 0.28	2.83	0.28 2.00	5.11
Spray (Spot)	40'	MFWD 170	8,630	200	8	0.042	0.64	0.92	0.17 0.19	1.93	0.22 1.35	3.51
Spray (Spot)	50'	MFWD 170	13,700	200	8	0.033	0.51	0.74	0.21 0.15	1.63	0.28 1.08	3.00
Spray (Spot)	53'	MFWD 170	9,940	200	8	0.031	0.48	0.69	0.14 0.14	1.48	0.19 1.01	2.69
Spray (Spot)	60'	MFWD 170	15,600	200	8	0.028	0.43	0.61	0.20 0.13	1.38	0.27 0.90	2.55
Stalk Shredder	14'	MFWD 150	21,100	200	10	0.117	1.26	2.27	2.17 0.47	6.19	1.45 3.18	10.82
Stalk Shredder	20'	MFWD 150	29,300	200	10	0.082	0.88	1.59	2.11 0.33	4.92	1.41 2.22	8.56
Stalk Shredder-Flail	12'	MFWD 150	17,400	200	10	0.137	1.47	2.65	2.09 0.55	6.78	1.39 3.71	11.88
Stalk Shredder-Flail	20'	MFWD 150	29,300	200	10	0.082	0.88	1.59	2.11 0.33	4.92	1.41 2.22	8.56
Subsoiler	3 shank	MFWD 190	5,860	100	15	0.204	2.19	4.99	0.39 1.11	8.70	1.12 7.71	17.54
Subsoiler	4 shank	MFWD 225	9,200	100	15	0.153	1.64	4.44	0.47 0.91	7.48	1.32 6.33	15.14
Subsoiler	5 shank	MFWD 225	12,600	100	15	0.122	1.31	3.54	0.51 0.73	6.09	1.44 5.04	12.59
Subsoiler low-till	4 shank	MFWD 225	10,800	100	15	0.153	1.64	4.44	0.55 0.91	7.56	1.55 6.33	15.45
Subsoiler low-till	6 shank	MFWD 225	14,600	100	15	0.102	1.09	2.95	0.49 0.60	5.16	1.40 4.21	10.77
Subsoiler low-till	8 shank	MFWD 225	20,000	100	15	0.076	0.82	2.21	0.51 0.45	4.00	1.43 3.15	8.59
TerraTill Bed w/roll	4R-38	MFWD 225	14,300	150	12	0.160	1.72	4.65	0.83 0.96	8.17	1.61 6.63	16.42
TerraTill Bed w/roll	6R-38	MFWD 225	19,400	150	12	0.107	1.15	3.11	0.75 0.64	5.66	1.46 4.43	11.56
TerraTill Bed w/roll	4R-30	MFWD 225	14,300	150	12	0.204	2.19	5.91	1.05 1.21	10.38	2.05 8.42	20.85
TerraTill Bed w/roll	6R-30	MFWD 225	15,310	150	12	0.136	1.46	3.94	0.75 0.81	6.97	1.46 5.61	14.05
Boll Buggy-1st Pick	2R38"157hp	MFWD 190	30,500	200	10	0.519	5.57	12.70	3.96 2.84	25.08	8.96 19.62	53.68
Boll Buggy-1st pick	4R2x1260hp	MFWD 190	30,500	200	10	0.172	1.84	4.21	1.31 0.94	8.31	2.97 6.50	17.80
Boll Buggy-1st pick	4R30"255hp	MFWD 190	30,500	200	10	0.327	3.51	8.00	2.49 1.79	15.80	5.64 12.36	33.81
Boll Buggy-1st pick	4R30"325hp	MFWD 190	30,500	200	10	0.327	3.51	8.00	2.49 1.79	15.80	5.64 12.36	33.81
Boll Buggy-1st pick	4R38"255hp	MFWD 190	30,500	200	10	0.257	2.76	6.30	1.96 1.40	12.44	4.44 9.73	26.62
Boll Buggy-1st pick	4R38"325hp	MFWD 190	30,500	200	10	0.257	2.76	6.30	1.96 1.40	12.44	4.44 9.73	26.62
Boll Buggy-1st pick	5R30"255hp	MFWD 190	30,500	200	10	0.261	2.81	6.40	1.99 1.43	12.64	4.51 9.89	27.05
Boll Buggy-1st pick	5R38"255hp	MFWD 190	30,500	200	10	0.207	2.22	5.06	1.57 1.13	10.00	3.57 7.82	21.40
Boll Buggy-1st pick	6R30"325hp	MFWD 190	30,500	200	10	0.218	2.34	5.33	1.66 1.19	10.53	3.76 8.24	22.54
Boll Buggy-1st pick	6R38"325hp	MFWD 190	30,500	200	10	0.172	1.84	4.21	1.31 0.94	8.31	2.97 6.50	17.80
Boll Buggy-2nd pick	2R38"157hp	MFWD 190	30,500	200	10	0.440	4.72	10.76	3.35 2.40	21.24	7.59 16.62	45.47
Boll Buggy-2nd pick	4R2x1260hp	MFWD 190	30,500	200	10	0.145	1.56	3.56	1.11 0.79	7.04	2.51 5.51	15.07
Boll Buggy-2nd pick	4R30"255hp	MFWD 190	30,500	200	10	0.277	2.97	6.78	2.11 1.51	13.38	4.78 10.47	28.64
Boll Buggy-2nd pick	4R30"325hp	MFWD 190	30,500	200	10	0.277	2.97	6.78	2.11 1.51	13.38	4.78 10.47	28.64
Boll Buggy-2nd pick	4R38 255hp	MFWD 190	30,500	200	10	0.218	2.34	5.33	1.66 1.19	10.54	3.76 8.24	22.55
Boll Buggy-2nd pick	4R38 325hp	MFWD 190	30,500	200	10	0.218	2.34	5.33	1.66 1.19	10.54	3.76 8.24	22.55
Boll Buggy-2nd pick	5R30"255hp	MFWD 190	30,500	200	10	0.221	2.38	5.42	1.69 1.21	10.70	3.82 8.37	22.91
Boll Buggy-2nd pick	5R38"255hp	MFWD 190	30,500	200	10	0.175	1.88	4.29	1.33 0.95	8.47	3.02 6.62	18.13
Boll Buggy-2nd pick	6R30"325hp	MFWD 190	30,500	200	10	0.184	1.98	4.51	1.40 1.01	8.92	3.19 6.98	19.09
Boll Buggy-2nd pick	6R38"325hp	MFWD 190	30,500	200	10	0.145	1.56	3.56	1.11 0.79	7.04	2.51 5.51	15.07
Boll Buggy-Stripper	13' Bcast	MFWD 150	30,500	200	10	0.251	2.70	4.86	1.92 1.02	10.50	4.34 6.79	21.64
Boll Buggy-Stripper	16' Bcast	MFWD 150	30,500	200	10	0.204	2.19	3.94	1.56 0.83	8.53	3.53 5.52	17.58
Boll Buggy-Stripper	19' Bcast	MFWD 150	30,500	200	10	0.172	1.84	3.32	1.31 0.70	7.18	2.97 4.64	14.81
Boll Buggy-Stripper	4R30"2X1Br	MFWD 150	30,500	200	10	0.218	2.34	4.21	1.66 0.88	9.10	3.76 5.88	18.76
Boll Buggy-Stripper	4R30"Brush	MFWD 150	30,500	200	10	0.327	3.51	6.31	2.49 1.32	13.65	5.64 8.83	28.14
Boll Buggy-Stripper	4R38"2X1Br	MFWD 150	30,500	200	10	0.172	1.84	3.32	1.31 0.70	7.18	2.97 4.64	14.81
Boll Buggy-Stripper	4R38"Brush	MFWD 150	30,500	200	10	0.257	2.76	4.97	1.96 1.04	10.75	4.44 6.95	22.15
Boll Buggy-Stripper	5R30"Brush	MFWD 150	30,500	200	10	0.261	2.81	5.05	1.99 1.06	10.92	4.51 7.06	22.51
Boll Buggy-Stripper	5R38"Brush	MFWD 150	30,500	200	10	0.207	2.22	3.99	1.57 0.84	8.64	3.57 5.59	17.81
Boll Buggy-Stripper	6R30"Brush	MFWD 150	30,500	200	10	0.218	2.34	4.21	1.66 0.88	9.10	3.76 5.88	18.76