

Projected Costs and Returns Crop Enterprise Budgets for Cotton Production in Louisiana, 2015

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



**Farm Management Research & Extension
Department of Agricultural Economics & Agribusiness
Louisiana State University Agricultural Center
A.E.A. Information Series No. 301 - January 2015**

January 2015

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by

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Introduction

This publication presents estimates of projected costs and returns for cotton production in Louisiana for the 2015 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 2015 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 2015 planning budgets. Machinery and other input cost data are presented in the Appendix.

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

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

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

Expected Crop Yields and Market Prices

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

Direct Production Costs

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

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

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

Interest on operating capital (short term) was charged at a nominal rate of 3.40% per year. Operating capital was assumed to be borrowed in a manner consistent with timely acquisition of inputs. Fuel prices for diesel and gasoline were \$2.75 per gallon and \$3.40 per gallon, respectively. Variable costs for tractors, self-propelled machinery, and irrigation machinery include the cost of fuel, lubrication, and repair.

The intermediate term interest rate was charged at an historical real rate of 4.50%. The reasoning behind the difference in short and intermediate term rates is that longer term nominal rates are highly variable and closely follow the trend set by the rate of inflation. Intermediate term interest rates above the real rate of interest can overstate true interest costs because they overlook the value gained by an asset due solely to inflation.

Farm Machinery Costs

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

Overhead Costs

Overhead costs reflect significant expenses associated with the operation of the entire farm business, but are not necessarily attributable to a specific crop enterprise. Examples of farm overhead costs include tax services, record keeping, utilities, farmstead maintenance, and insurance and property taxes where applicable. General farm overhead costs can vary greatly from farm to farm based on many factors including farm size, land tenure and crop production technology utilized. 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, 2015.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (3 gal)	appl	4.75	5.0000	23.75	_____
App by Air (5 gal)	appl	6.00	1.0000	6.00	_____
HARVEST AIDS					
Dropp SC	oz	1.09	1.2000	1.31	_____
Prep	pt	4.00	1.3300	5.32	_____
Def/Folex	pt	8.62	0.7500	6.47	_____
FERTILIZERS					
LA Phosphate	lb	0.61	60.0000	36.60	_____
LA Potash	lb	0.34	60.0000	20.40	_____
LA Nitrogen	lb	0.50	90.0000	45.00	_____
HERBICIDES					
Roundup WeatherMax	oz	0.27	88.0000	23.76	_____
2,4-D Amine 4	pt	1.85	1.0000	1.85	_____
Valor WP	oz	4.23	1.5000	6.35	_____
Cotoran 4L	pt	5.98	1.2000	7.18	_____
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	6.27	0.4000	2.51	_____
Centric 40WG	oz	4.83	4.0000	19.32	_____
Karate Z	oz	3.40	6.3900	21.73	_____
Orthene 90S	lb	5.75	1.1500	6.61	_____
Diamond .83EC	pt	16.28	0.7500	12.21	_____
Bidrin 8L	oz	0.98	12.0000	11.76	_____
SEED/PLANTS					
Cotton Seed BGII/RRF	thous	0.61	52.5000	32.03	_____
TECHNOLOGY FEE					
BGII/RRF Cot Tech Fe	cap/ac	69.25	1.0000	69.25	_____
Eradication Fee	acre	6.00	1.0000	6.00	_____
GROWTH REGULATORS					
Pix Plus	oz	0.19	16.0000	3.04	_____
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	48.00	0.3300	15.84	_____
OPERATOR LABOR					
Self-Propelled	hour	12.55	0.2428	3.04	_____
HAND LABOR					
Self-Propelled	hour	9.60	0.2075	1.97	_____
LA Hired Labor					
Implements	hour	9.60	0.3636	3.48	_____
Tractors	hour	9.60	1.0916	10.48	_____
DIESEL FUEL					
Tractors	gal	2.74	10.1428	27.80	_____
Self-Propelled	gal	2.74	3.8741	10.63	_____
REPAIR & MAINTENANCE					
Implements	Acre	9.89	1.0000	9.89	_____
Tractors	Acre	5.43	1.0000	5.43	_____
Self-Propelled	Acre	13.51	1.0000	13.51	_____
INTEREST ON OP. CAP.	Acre	9.56	1.0000	9.56	_____
TOTAL DIRECT EXPENSES				520.43	_____
FIXED EXPENSES					
Implements	Acre	15.55	1.0000	15.55	_____
Tractors	Acre	32.90	1.0000	32.90	_____
Self-Propelled	Acre	53.46	1.0000	53.46	_____
TOTAL FIXED EXPENSES				101.91	_____
TOTAL SPECIFIED EXPENSES				622.34	_____

Table 1.B Estimated resource use and costs for field operations, per Acre
 Cotton, B2/RRFlex,8-row equipment, non-irrigated, alluvial soil, Louisiana, 2015.

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	1.54	1.48	0.06	0.15	0.04	0.47				3.70
Paratill & Bed Fold.	8R-38	MFWD 225	0.080	0.50	Nov	1.57	1.74	0.79	1.32	0.04	0.39				5.81
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Nov	2.47	2.37	0.90	0.98	0.11	1.12				7.84
LA Phosphate	lb											60.0000	0.61	36.60	36.60
LA Potash	lb											60.0000	0.34	20.40	20.40
Lime (Spread)	ton			0.33	Nov							0.3300	48.00	15.84	15.84
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	0.074	1.00	Nov	2.36	2.26	0.37	0.94	0.07	0.71				6.64
Row Cond (Harrow)	27'	MFWD 190	0.057	1.00	Nov	1.83	1.75	0.18	0.73	0.05	0.55				5.04
Roller	32'	MFWD 170	0.046	1.00	Nov	1.36	1.48	0.14	0.74	0.04	0.45				4.17
Ditcher		2WD 130	0.020	1.00	Nov	0.43	0.35	0.04	0.05	0.02	0.19				1.06
Sprayer (600-750Gal)		60'	0.017	1.00	Mar	0.66	1.05			0.02	0.30				2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
2,4-D Amine 4	pt											1.0000	1.85	1.85	1.85
Valor WP	oz											1.5000	4.23	6.35	6.35
Plant & Pre Folding	8R-38	MFWD 170	0.080	1.00	Apr	2.34	2.55	1.38	2.55	0.16	1.54				10.36
Cotoran 4L	pt											1.2000	5.98	7.18	7.18
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	69.25	69.25	69.25
Ditcher		2WD 130	0.020	1.00	Apr	0.43	0.35	0.04	0.05	0.02	0.19				1.06
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Apr	2.47	2.37	0.90	0.98	0.11	1.12				7.84
LA Nitrogen	lb											90.0000	0.50	45.00	45.00
Sprayer(600-750Gal)		60'	0.017	1.00	May	0.66	1.05			0.02	0.30				2.01
Dimethoate 4E	pt											0.4000	6.27	2.51	2.51
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
Dual II Magnum	pt											1.0000	14.50	14.50	14.50
Sprayer(600-750Gal)		60'	0.017	1.00	May	0.66	1.05			0.02	0.30				2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
Centric 40WG	oz											2.0000	4.83	9.66	9.66
Sprayer(600-750Gal)		60'	0.017	1.00	Jun	0.66	1.05			0.02	0.30				2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
App by Air (3 gal)	appl			1.00	Jun							1.0000	4.75	4.75	4.75
Centric 40WG	oz											2.0000	4.83	9.66	9.66
Pix Plus	oz											4.0000	0.19	0.76	0.76
Spray (Direct/Layby)	8R-38	MFWD 170	0.066	1.00	Jun	1.95	2.13	0.38	0.44	0.10	0.96				5.86
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	4.75	4.75	4.75
Karate Z	oz											2.1300	3.40	7.24	7.24
Orthene 90S	lb											0.6000	5.75	3.45	3.45
Diamond .83EC	pt											0.3750	16.28	6.11	6.11
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75	4.75
Karate Z	oz											2.1300	3.40	7.24	7.24
Bidrin 8L	oz											6.0000	0.98	5.88	5.88
Pix Plus	oz											12.0000	0.19	2.28	2.28
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75	4.75
Bidrin 8L	oz											6.0000	0.98	5.88	5.88
Diamond .83EC	pt											0.3750	16.28	6.11	6.11
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75	4.75
Orthene 90S	lb											0.5500	5.75	3.16	3.16
Karate Z	oz											2.1300	3.40	7.24	7.24
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.00	6.00	6.00
Dropp SC	oz											1.2000	1.09	1.31	1.31
Prep	pt											1.3300	4.00	5.32	5.32
Def/Folex	pt											0.7500	8.62	6.47	6.47
Cotton Picker-1st-BB		6R38*330hp	0.172	1.00	Sep	21.50	49.26			0.34	3.81				74.57
Module Builder-1st		6R-38(325)	0.172	1.00	Sep	5.48	5.25	1.49	2.93	0.34	3.30				18.45
Boll Buggy-1st pick		6R38*325hp	0.172	1.00	Sep	5.48	5.25	1.32	2.58	0.17	1.65				16.28
Stalk Shredder-Flail	12'	MFWD 150	0.137	1.00	Nov	3.52	3.57	1.90	1.11	0.13	1.32				11.42
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						57.37	86.36	9.89	15.55	1.90	18.97			424.64	612.78
INTEREST ON OPERATING CAPITAL															9.56
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															622.34

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, 2015.

Cotton Lint			-----BREAKEVEN PRICE-----										
			0.24	0.26	0.28	0.30	0.33	0.37	0.41	0.46	0.52	0.61	0.74
PERCENT	YIELD	UNIT	-----dollars-----										
50	500.00	1b	-247	-238	-228	-216	-202	-185	-164	-139	-105	-61	0
			-349	-340	-330	-318	-304	-287	-266	-240	-207	-163	-101
60	600.00	1b	-222	-211	-199	-185	-168	-148	-123	-92	-52	0	74
			-324	-313	-301	-287	-270	-250	-225	-194	-154	-101	-27
70	700.00	1b	-197	-185	-171	-154	-134	-111	-82	-46	0	61	148
			-299	-287	-273	-256	-236	-213	-184	-148	-101	-40	46
80	800.00	1b	-173	-158	-142	-123	-101	-74	-41	0	52	123	222
			-274	-260	-244	-225	-203	-176	-143	-101	-48	21	120
90	900.00	1b	-148	-132	-114	-92	-67	-37	0	46	105	185	296
			-250	-234	-216	-194	-169	-138	-101	-55	4	83	194
100	1000.00	1b	-123	-105	-85	-61	-33	0	41	92	158	247	370
			-225	-207	-187	-163	-135	-101	-60	-9	57	145	268
110	1100.00	1b	-98	-79	-57	-30	0	37	82	139	211	309	444
			-200	-181	-158	-132	-101	-64	-19	37	109	207	343
120	1200.00	1b	-74	-52	-28	0	33	74	123	185	264	370	519
			-176	-154	-130	-101	-68	-27	21	83	162	268	417
130	1300.00	1b	-49	-26	0	30	67	111	164	231	317	432	593
			-151	-128	-101	-71	-34	9	62	129	215	330	491
140	1400.00	1b	-24	0	28	61	101	148	206	278	370	494	667
			-126	-101	-73	-40	-0	46	104	176	268	392	565
150	1500.00	1b	0	26	57	92	134	185	247	324	423	556	741
			-101	-75	-44	-9	32	83	145	222	321	454	639

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, 2015.

Cotton Lint			-----BREAKEVEN PRICE-----										
			0.31	0.33	0.36	0.39	0.42	0.47	0.52	0.59	0.67	0.78	0.94
PERCENT	YIELD	UNIT	-----dollars-----										
50	500.00	1b	-213	-201	-189	-173	-155	-134	-108	-75	-33	23	101
			-315	-303	-290	-275	-257	-236	-210	-177	-135	-78	0
60	600.00	1b	-181	-168	-152	-134	-112	-87	-55	-16	34	101	196
			-283	-270	-254	-236	-214	-189	-157	-118	-67	0	94
70	700.00	1b	-150	-134	-116	-95	-69	-39	-3	42	101	180	291
			-252	-236	-218	-196	-171	-141	-105	-59	0	78	189
80	800.00	1b	-118	-100	-79	-55	-27	7	49	101	169	259	385
			-220	-202	-181	-157	-128	-94	-52	0	67	157	283
90	900.00	1b	-87	-66	-43	-16	15	54	101	161	236	338	480
			-189	-168	-145	-118	-85	-47	0	59	135	236	378
100	1000.00	1b	-55	-33	-7	23	58	101	154	220	304	417	574
			-157	-135	-109	-78	-42	0	52	118	202	315	472
110	1100.00	1b	-24	0	29	62	101	149	206	279	372	495	669
			-126	-101	-72	-39	0	47	105	177	270	393	567
120	1200.00	1b	7	34	65	101	144	196	259	338	439	574	763
			-94	-67	-36	0	42	94	157	236	337	472	661
130	1300.00	1b	38	68	101	141	187	243	312	397	507	653	858
			-63	-33	0	39	85	141	210	295	405	551	756
140	1400.00	1b	70	101	138	180	230	291	364	456	574	732	952
			-31	0	36	78	128	189	262	354	472	630	850
150	1500.00	1b	101	135	174	220	273	338	417	515	642	811	1047
			0	33	72	118	171	236	315	413	540	709	945

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, 2015.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (3 gal)	appl	4.75	5.0000	23.75	_____
App by Air (5 gal)	appl	6.00	1.0000	6.00	_____
HARVEST AIDS					
Dropp SC	oz	1.09	1.2000	1.31	_____
Prep	pt	4.00	1.3300	5.32	_____
Def/Folex	pt	8.62	0.7500	6.47	_____
FERTILIZERS					
LA Phosphate	lb	0.61	60.0000	36.60	_____
LA Potash	lb	0.34	60.0000	20.40	_____
LA Nitrogen	lb	0.50	90.0000	45.00	_____
HERBICIDES					
Roundup WeatherMax	oz	0.27	88.0000	23.76	_____
2,4-D Amine 4	pt	1.85	1.0000	1.85	_____
Valor WP	oz	4.23	1.5000	6.35	_____
Cotoran 4L	pt	5.98	1.2000	7.18	_____
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	6.27	0.4000	2.51	_____
Orthene 90S	lb	5.75	1.8000	10.35	_____
Centric 40WG	oz	4.83	4.0000	19.32	_____
Karate Z	oz	3.40	6.3900	21.73	_____
Bidrin 8L	oz	0.98	12.0000	11.76	_____
Diamond .83EC	pt	16.28	0.7500	12.21	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Cotton Seed BGII/RRF	thous	0.61	52.5000	32.03	_____
TECHNOLOGY FEE					
BGII/RRF Cot Tech Fe	cap/ac	69.25	1.0000	69.25	_____
Eradication Fee	acre	6.00	1.0000	6.00	_____
GROWTH REGULATORS					
Pix Plus	oz	0.19	24.0000	4.56	_____
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	48.00	0.3300	15.84	_____
OPERATOR LABOR					
Self-Propelled	hour	12.55	0.2428	3.04	_____
IRRIGATION LABOR					
Implements	hour	9.60	0.0062	0.06	_____
HAND LABOR					
Self-Propelled	hour	9.60	0.2075	1.97	_____
LA Hired Labor					
Implements	hour	9.60	0.3636	3.48	_____
Tractors	hour	9.60	1.3665	13.12	_____
LA Irrigation Labor					
Special Labor	hour	9.60	0.1500	1.44	_____
DIESEL FUEL					
Tractors	gal	2.74	12.8637	35.26	_____
Self-Propelled	gal	2.74	3.8293	10.50	_____
Roll-Out Pipe Irr.	gal	2.74	8.5535	23.43	_____
REPAIR & MAINTENANCE					
Implements	Acre	10.36	1.0000	10.36	_____
Tractors	Acre	6.86	1.0000	6.86	_____
Self-Propelled	Acre	12.19	1.0000	12.19	_____
Roll-Out Pipe Irr.	Acre	5.98	1.0000	5.98	_____
INTEREST ON OP. CAP.	Acre	10.39	1.0000	10.39	_____
TOTAL DIRECT EXPENSES				577.35	_____
FIXED EXPENSES					
Implements	Acre	16.84	1.0000	16.84	_____
Tractors	Acre	41.61	1.0000	41.61	_____
Self-Propelled	Acre	48.41	1.0000	48.41	_____
Roll-Out Pipe Irr.	Acre	45.14	1.0000	45.14	_____
TOTAL FIXED EXPENSES				152.00	_____
TOTAL SPECIFIED EXPENSES				729.35	_____

Table 2.B Estimated resource use and costs for field operations, per Acre
 Cotton, B2/RRFlex Cotton, 8-row equipment, irrigated, alluvial soil, Louisiana, 2015.

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	1.54	1.48	0.06	0.15	0.04	0.47				3.70
Paratill & Bed Fold.	8R-38	MFWD 225	0.080	0.50	Nov	1.57	1.74	0.79	1.32	0.04	0.39				5.81
Lime (Spread)	ton			0.33	Nov							0.3300	48.00	15.84	15.84
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Nov	2.47	2.37	0.90	0.98	0.11	1.12				7.84
LA Phosphate	lb											60.0000	0.61	36.60	36.60
LA Potash	lb											60.0000	0.34	20.40	20.40
Disk Bed (Hipper)Fld	8R-38	MFWD 190	0.074	1.00	Nov	2.36	2.26	0.39	1.01	0.07	0.71				6.73
Row Cond (Harrow)	38'	MFWD 225	0.039	1.00	Nov	1.53	1.69	0.22	0.89	0.03	0.38				4.71
Roller	32'	MFWD 170	0.046	1.00	Nov	1.36	1.48	0.14	0.74	0.04	0.45				4.17
Ditcher		2WD 130	0.020	1.00	Nov	0.43	0.35	0.04	0.05	0.02	0.19				1.06
Sprayer (600-750Gal)		60'	0.017	1.00	Mar	0.66	1.05			0.02	0.30				2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
2,4-D Amine 4	pt											1.0000	1.85	1.85	1.85
Valor WP	oz											1.5000	4.23	6.35	6.35
Plant & Pre Folding	8R-38	MFWD 170	0.080	1.00	Apr	2.34	2.55	1.38	2.55	0.16	1.54				10.36
Cotoran 4L	pt											1.2000	5.98	7.18	7.18
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	69.25	69.25	69.25
Ditcher		2WD 130	0.020	1.00	Apr	0.43	0.35	0.04	0.05	0.02	0.19				1.06
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Apr	2.47	2.37	0.90	0.98	0.11	1.12				7.84
LA Nitrogen	lb											90.0000	0.50	45.00	45.00
Sprayer (600-750Gal)		60'	0.017	1.00	May	0.66	1.05			0.02	0.30				2.01
Dimethoate 4E	pt											0.4000	6.27	2.51	2.51
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
Dual II Magnum	pt											1.0000	14.50	14.50	14.50
Sprayer (600-750Gal)		60'	0.017	1.00	May	0.66	1.05			0.02	0.30				2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
Orthene 90S	lb											0.6000	5.75	3.45	3.45
Centric 40WG	oz											2.0000	4.83	9.66	9.66
App by Air (3 gal)	appl			1.00	Jun							1.0000	4.75	4.75	4.75
Centric 40WG	oz											2.0000	4.83	9.66	9.66
Pix Plus	oz											12.0000	0.19	2.28	2.28
Spray (Direct/Layby)	8R-38	MFWD 170	0.066	1.00	Jun	1.95	2.13	0.38	0.44	0.10	0.96				5.86
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	4.75	4.75	4.75
Karate Z	oz											2.1300	3.40	7.24	7.24
Bidrin 8L	oz											6.0000	0.98	5.88	5.88
Pix Plus	oz											12.0000	0.19	2.28	2.28
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75	4.75
Karate Z	oz											2.1300	3.40	7.24	7.24
Bidrin 8L	oz											6.0000	0.98	5.88	5.88
Diamond .83EC	pt											0.3750	16.28	6.11	6.11
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75	4.75
Orthene 90S	lb											0.6000	5.75	3.45	3.45
Karate Z	oz											2.1300	3.40	7.24	7.24
Diamond .83EC	pt											0.3750	16.28	6.11	6.11
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75	4.75
Orthene 90S	lb											0.6000	5.75	3.45	3.45
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.00	6.00	6.00
Dropp SC	oz											1.2000	1.09	1.31	1.31
Prep	pt											1.3300	4.00	5.32	5.32
Def/Folex	pt											0.7500	8.62	6.47	6.47
Cotton Picker-1st-Tr		6R38*330hp	0.172	1.00	Sep	20.05	44.21			0.34	3.81				68.07
Module Builder-1st		MFWD 190	0.172	1.00	Sep	5.48	5.25	1.49	2.93	0.34	3.30				18.45
Boll Buggy-1st pick		MFWD 190	0.172	1.00	Sep	5.48	5.25	1.32	2.58	0.17	1.65				16.28
Stalk Shredder-Flail	12'	MFWD 150	0.137	1.00	Nov	3.52	3.57	1.90	1.11	0.13	1.32				11.42
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	9.19	8.77	29.82	46.20	0.44	4.31	1.0000		8.58	106.87
TOTALS						64.81	90.02	39.77	61.98	2.33	23.11			439.27	718.96
INTEREST ON OPERATING CAPITAL															10.39
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															729.35

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, 2015.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.17	0.18	0.20	0.21	0.23	0.26	0.29	0.32	0.37	0.43	0.52
PERCENT	YIELD	UNIT	-----dollars-----										
50	700.00	lb	-245	-236	-226	-214	-200	-183	-163	-137	-105	-61	0
			-397	-388	-378	-366	-352	-335	-315	-289	-257	-213	-152
60	840.00	lb	-220	-210	-198	-183	-167	-147	-122	-91	-52	0	73
			-372	-362	-350	-335	-319	-299	-274	-243	-204	-152	-78
70	980.00	lb	-196	-183	-169	-153	-133	-110	-81	-45	0	61	147
			-348	-335	-321	-305	-285	-262	-233	-197	-152	-90	-4
80	1120.00	lb	-171	-157	-141	-122	-100	-73	-40	0	52	122	220
			-323	-309	-293	-274	-252	-225	-192	-152	-99	-29	68
90	1260.00	lb	-147	-131	-113	-91	-66	-36	0	45	105	183	294
			-299	-283	-265	-243	-218	-188	-152	-106	-46	31	142
100	1400.00	lb	-122	-105	-84	-61	-33	0	40	91	157	245	367
			-274	-257	-236	-213	-185	-152	-111	-60	5	93	215
110	1540.00	lb	-98	-78	-56	-30	0	36	81	137	210	306	441
			-250	-230	-208	-182	-152	-115	-70	-14	58	154	289
120	1680.00	lb	-73	-52	-28	0	33	73	122	183	262	367	515
			-225	-204	-180	-152	-118	-78	-29	31	110	215	363
130	1820.00	lb	-49	-26	0	30	66	110	163	229	315	429	588
			-201	-178	-152	-121	-85	-41	11	77	163	277	436
140	1960.00	lb	-24	0	28	61	100	147	204	275	367	490	662
			-176	-152	-123	-90	-51	-4	52	123	215	338	510
150	2100.00	lb	0	26	56	91	133	183	245	321	420	551	735
			-152	-125	-95	-60	-18	31	93	169	268	399	583

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, 2015.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.24	0.26	0.28	0.30	0.33	0.37	0.41	0.46	0.53	0.61	0.74
PERCENT	YIELD	UNIT	-----dollars-----										
50	700.00	lb	-194	-182	-167	-151	-131	-107	-79	-42	3	65	152
			-346	-334	-319	-303	-283	-259	-231	-194	-148	-86	0
60	840.00	lb	-159	-145	-127	-107	-84	-55	-21	22	77	152	255
			-311	-297	-279	-259	-236	-207	-173	-129	-74	0	103
70	980.00	lb	-125	-107	-87	-64	-37	-3	36	87	152	238	359
			-277	-259	-239	-216	-189	-155	-115	-64	0	86	207
80	1120.00	lb	-90	-70	-47	-21	10	48	94	152	226	325	463
			-242	-222	-199	-173	-141	-103	-57	0	74	173	311
90	1260.00	lb	-55	-33	-7	22	57	100	152	216	300	411	567
			-207	-185	-159	-129	-94	-51	0	64	148	259	415
100	1400.00	lb	-21	3	32	65	104	152	209	281	374	498	671
			-173	-148	-119	-86	-47	0	57	129	222	346	519
110	1540.00	lb	13	40	72	108	152	203	267	346	449	585	775
			-138	-111	-79	-43	0	51	115	194	297	433	623
120	1680.00	lb	48	77	112	152	199	255	325	411	523	671	879
			-103	-74	-39	0	47	103	173	259	371	519	727
130	1820.00	lb	82	114	152	195	246	307	383	476	597	758	983
			-69	-37	0	43	94	155	231	324	445	606	831
140	1960.00	lb	117	152	191	238	293	359	440	541	671	845	1087
			-34	0	39	86	141	207	288	389	519	693	935
150	2100.00	lb	152	189	231	281	341	411	498	606	746	931	1191
			0	37	79	129	189	259	346	454	594	779	1039

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, 2015.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (3 gal)	appl	4.75	5.0000	23.75	_____
App by Air (5 gal)	appl	6.00	1.0000	6.00	_____
HARVEST AIDS					
Dropp SC	oz	1.09	1.2000	1.31	_____
Prep	pt	4.00	1.3300	5.32	_____
Def/Folex	pt	8.62	0.7500	6.47	_____
FERTILIZERS					
LA Phosphate	lb	0.61	50.0000	30.50	_____
LA Potash	lb	0.34	60.0000	20.40	_____
LA Nitrogen	lb	0.50	90.0000	45.00	_____
HERBICIDES					
Roundup WeatherMax	oz	0.27	88.0000	23.76	_____
2,4-D Amine 4	pt	1.85	1.0000	1.85	_____
Valor WP	oz	4.23	1.5000	6.35	_____
Cotoran 4L	pt	5.98	1.2000	7.18	_____
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	6.27	0.4000	2.51	_____
Orthene 90S	lb	5.75	1.8000	10.35	_____
Centric 40WG	oz	4.83	4.0000	19.32	_____
Karate Z	oz	3.40	6.3900	21.73	_____
Bidrin 8L	oz	0.98	12.0000	11.76	_____
Diamond .83EC	pt	16.28	0.3750	6.11	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Cotton Seed BGII/RRF	thous	0.61	52.5000	32.03	_____
TECHNOLOGY FEE					
BGII/RRF Cot Tech Fe	cap/ac	69.25	1.0000	69.25	_____
Eradication Fee	acre	6.00	1.0000	6.00	_____
GROWTH REGULATORS					
Pix Plus	oz	0.19	24.0000	4.56	_____
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	12.55	0.2428	3.04	_____
IRRIGATION LABOR					
Implements	hour	9.60	0.0062	0.06	_____
HAND LABOR					
Self-Propelled	hour	9.60	0.2075	1.97	_____
LA Hired Labor					
Implements	hour	9.60	0.3636	3.48	_____
Tractors	hour	9.60	1.3594	13.04	_____
LA Irrigation Labor					
Special Labor	hour	9.60	0.1500	1.44	_____
DIESEL FUEL					
Tractors	gal	2.74	12.8904	35.34	_____
Self-Propelled	gal	2.74	3.8741	10.63	_____
Roll-Out Pipe Irr.	gal	2.74	8.5535	23.43	_____
REPAIR & MAINTENANCE					
Implements	Acre	10.45	1.0000	10.45	_____
Tractors	Acre	6.84	1.0000	6.84	_____
Self-Propelled	Acre	13.51	1.0000	13.51	_____
Roll-Out Pipe Irr.	Acre	5.98	1.0000	5.98	_____
INTEREST ON OP. CAP.	Acre	10.28	1.0000	10.28	_____
TOTAL DIRECT EXPENSES				550.17	_____
FIXED EXPENSES					
Implements	Acre	17.18	1.0000	17.18	_____
Tractors	Acre	41.52	1.0000	41.52	_____
Self-Propelled	Acre	53.46	1.0000	53.46	_____
Roll-Out Pipe Irr.	Acre	45.14	1.0000	45.14	_____
TOTAL FIXED EXPENSES				157.30	_____
TOTAL SPECIFIED EXPENSES				707.47	_____

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, 2015.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Disk Harrow	28'	MFWD 225	0.070	1.00	Sep	2.73	3.02	0.88	1.80	0.07	0.67				9.10
Land Plane	40'x10'	MFWD 190	0.242	0.20	Oct	1.54	1.48	0.06	0.15	0.04	0.47				3.70
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Nov	2.47	2.37	0.90	0.98	0.11	1.12				7.84
LA Phosphate	lb											50.0000	0.61	30.50	30.50
LA Potash	lb											60.0000	0.34	20.40	20.40
Disk Bed (Hipper)Fld	8R-38	MFWD 190	0.074	1.00	Nov	2.36	2.26	0.39	1.01	0.07	0.71				6.73
Row Cond (Harrow)	27'	MFWD 190	0.057	1.00	Nov	1.83	1.75	0.18	0.73	0.05	0.55				5.04
Roller	32'	MFWD 170	0.046	1.00	Nov	1.36	1.48	0.14	0.74	0.04	0.45				4.17
Ditcher		2WD 130	0.020	1.00	Nov	0.43	0.35	0.04	0.05	0.02	0.19				1.06
Sprayer (600-750Gal)		60'	0.017	1.00	Mar	0.66	1.05			0.02	0.30				2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
2,4-D Amine 4	pt											1.0000	1.85	1.85	1.85
Valor WP	oz											1.5000	4.23	6.35	6.35
Plant & Pre Folding	8R-38	MFWD 170	0.080	1.00	Apr	2.34	2.55	1.38	2.55	0.16	1.54				10.36
Cotoran 4L	pt											1.2000	5.98	7.18	7.18
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	69.25	69.25	69.25
Ditcher		2WD 130	0.020	1.00	Apr	0.43	0.35	0.04	0.05	0.02	0.19				1.06
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Apr	2.47	2.37	0.90	0.98	0.11	1.12				7.84
LA Nitrogen	lb											90.0000	0.50	45.00	45.00
Sprayer (600-750Gal)		60'	0.017	1.00	May	0.66	1.05			0.02	0.30				2.01
Dimethoate 4E	pt											0.4000	6.27	2.51	2.51
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
Dual II Magnum	pt											1.0000	14.50	14.50	14.50
Sprayer (600-750Gal)		60'	0.017	1.00	May	0.66	1.05			0.02	0.30				2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
Sprayer (600-750Gal)		60'	0.017	1.00	Jun	0.66	1.05			0.02	0.30				2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94	5.94
Orthene 90S	lb											0.6000	5.75	3.45	3.45
Centric 40WG	oz											2.0000	4.83	9.66	9.66
App by Air (3 gal)	appl			1.00	Jun							1.0000	4.75	4.75	4.75
Centric 40WG	oz											2.0000	4.83	9.66	9.66
Pix Plus	oz											12.0000	0.19	2.28	2.28
Spray (Direct/Layby)	8R-38	MFWD 170	0.066	1.00	Jun	1.95	2.13	0.38	0.44	0.10	0.96				5.86
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	4.75	4.75	4.75
Karate Z	oz											2.1300	3.40	7.24	7.24
Bidrin 8L	oz											6.0000	0.98	5.88	5.88
Pix Plus	oz											12.0000	0.19	2.28	2.28
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75	4.75
Karate Z	oz											2.1300	3.40	7.24	7.24
Bidrin 8L	oz											6.0000	0.98	5.88	5.88
Diamond .83EC	pt											0.3750	16.28	6.11	6.11
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75	4.75
Orthene 90S	lb											0.6000	5.75	3.45	3.45
Karate Z	oz											2.1300	3.40	7.24	7.24
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75	4.75
Orthene 90S	lb											0.6000	5.75	3.45	3.45
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.00	6.00	6.00
Dropp SC	oz											1.2000	1.09	1.31	1.31
Prep	pt											1.3300	4.00	5.32	5.32
Def/Folex	pt											0.7500	8.62	6.47	6.47
Cotton Picker-1st-BB		6R38*330hp	0.172	1.00	Sep	21.50	49.26			0.34	3.81				74.57
Module Builder-1st	6R-38(325)	MFWD 190	0.172	1.00	Sep	5.48	5.25	1.49	2.93	0.34	3.30				18.45
Boll Buggy-1st pick	6R38*325hp	MFWD 190	0.172	1.00	Sep	5.48	5.25	1.32	2.58	0.17	1.65				16.28
Stalk Shredder-Flail	20'	MFWD 150	0.082	1.00	Nov	2.12	2.14	1.94	1.13	0.08	0.79				8.12
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.	Acres				Jul	9.19	8.77	29.82	46.20	0.44	4.31	1.0000		8.58	106.87
TOTALS						66.32	94.98	39.86	62.32	2.32	23.03			410.68	697.19
INTEREST ON OPERATING CAPITAL															10.28
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															707.47

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, 2015.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.20	0.22	0.23	0.25	0.28	0.30	0.34	0.38	0.44	0.51	0.61
PERCENT	YIELD	UNIT	-----dollars-----										
50	600.00	lb	-247	-238	-228	-216	-202	-185	-164	-138	-105	-61	0
			-404	-395	-385	-373	-359	-342	-322	-296	-263	-219	-157
60	720.00	lb	-222	-211	-199	-185	-168	-148	-123	-92	-52	0	74
			-379	-369	-356	-342	-325	-305	-280	-249	-210	-157	-83
70	840.00	lb	-197	-185	-171	-154	-134	-111	-82	-46	0	61	148
			-354	-342	-328	-311	-292	-268	-239	-203	-157	-95	-9
80	960.00	lb	-172	-158	-142	-123	-101	-74	-41	0	52	123	222
			-330	-316	-299	-280	-258	-231	-198	-157	-104	-33	65
90	1080.00	lb	-148	-132	-114	-92	-67	-37	0	46	105	185	296
			-305	-289	-271	-249	-224	-194	-157	-110	-51	28	139
100	1200.00	lb	-123	-105	-85	-61	-33	0	41	92	158	247	370
			-280	-263	-242	-219	-190	-157	-116	-64	1	89	213
110	1320.00	lb	-98	-79	-57	-30	0	37	82	138	211	308	444
			-256	-236	-214	-188	-157	-120	-74	-18	54	151	287
120	1440.00	lb	-74	-52	-28	0	33	74	123	185	264	370	518
			-231	-210	-185	-157	-123	-83	-33	28	107	213	361
130	1560.00	lb	-49	-26	0	30	67	111	164	231	317	432	593
			-206	-183	-157	-126	-89	-46	7	74	160	275	435
140	1680.00	lb	-24	0	28	61	101	148	205	277	370	494	667
			-182	-157	-128	-95	-56	-9	48	120	213	336	509
150	1800.00	lb	0	26	57	92	134	185	247	324	423	555	741
			-157	-130	-100	-64	-22	28	89	167	266	398	584

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, 2015.

			-----BREAKEVEN PRICE-----										
Cotton Lint			0.29	0.31	0.33	0.36	0.39	0.43	0.48	0.54	0.62	0.73	0.87
PERCENT	YIELD	UNIT	-----dollars-----										
50	600.00	lb	-194	-182	-167	-150	-130	-106	-77	-40	6	69	157
			-351	-339	-324	-307	-287	-263	-234	-197	-150	-87	0
60	720.00	lb	-159	-144	-126	-106	-82	-53	-18	25	81	157	262
			-316	-301	-284	-263	-239	-211	-175	-131	-75	0	105
70	840.00	lb	-124	-106	-86	-62	-34	-1	39	91	157	245	368
			-281	-263	-243	-219	-191	-158	-117	-65	0	87	211
80	960.00	lb	-89	-68	-45	-18	13	51	98	157	232	333	474
			-246	-226	-203	-175	-143	-105	-58	0	75	175	316
90	1080.00	lb	-53	-31	-5	25	61	104	157	223	308	421	579
			-211	-188	-162	-131	-95	-52	0	65	150	263	422
100	1200.00	lb	-18	6	35	69	109	157	215	289	383	509	685
			-175	-150	-121	-87	-47	0	58	131	226	351	527
110	1320.00	lb	16	44	76	113	157	210	274	355	458	597	790
			-140	-113	-81	-43	0	52	117	197	301	439	633
120	1440.00	lb	51	81	116	157	205	262	333	421	534	685	896
			-105	-75	-40	0	47	105	175	263	377	527	739
130	1560.00	lb	86	119	157	201	253	315	391	487	609	773	1002
			-70	-37	0	43	95	158	234	329	452	615	844
140	1680.00	lb	122	157	197	245	301	368	450	553	685	861	1107
			-35	0	40	87	143	211	293	395	527	703	950
150	1800.00	lb	157	195	238	289	349	421	509	619	760	949	1213
			0	37	81	131	191	263	351	461	603	791	1055

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, 2015.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (3 gal)	appl	4.75	5.0000	23.75	_____
App by Air (5 gal)	appl	6.00	1.0000	6.00	_____
HARVEST AIDS					
Dropp SC	oz	1.09	1.2000	1.31	_____
Prep	pt	4.00	1.3300	5.32	_____
Def/Folex	pt	8.62	0.7500	6.47	_____
FERTILIZERS					
LA Phosphate	lb	0.61	60.0000	36.60	_____
LA Potash	lb	0.34	60.0000	20.40	_____
LA Nitrogen	lb	0.50	90.0000	45.00	_____
HERBICIDES					
Roundup WeatherMax	oz	0.27	88.0000	23.76	_____
2,4-D Amine 4	pt	1.85	1.0000	1.85	_____
Valor WP	oz	4.23	1.5000	6.35	_____
Cotoran 4L	pt	5.98	1.2000	7.18	_____
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	6.27	0.4000	2.51	_____
Orthene 90S	lb	5.75	1.8000	10.35	_____
Centric 40WG	oz	4.83	4.0000	19.32	_____
Karate Z	oz	3.40	6.3900	21.73	_____
Bidrin 8L	oz	0.98	12.0000	11.76	_____
Diamond .83EC	pt	16.28	0.7500	12.21	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Cotton Seed BGII/RRF	thous	0.61	52.5000	32.03	_____
TECHNOLOGY FEE					
BGII/RRF Cot Tech Fe	cap/ac	69.25	1.0000	69.25	_____
Eradication Fee	acre	6.00	1.0000	6.00	_____
GROWTH REGULATORS					
Pix Plus	oz	0.19	24.0000	4.56	_____
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	12.55	0.2428	3.04	_____
IRRIGATION LABOR					
Implements	hour	9.60	0.0062	0.06	_____
HAND LABOR					
Self-Propelled	hour	9.60	0.2075	1.97	_____
LA Hired Labor					
Implements	hour	9.60	0.2997	2.87	_____
Tractors	hour	9.60	1.1722	11.25	_____
LA Irrigation Labor					
Special Labor	hour	9.60	0.1500	1.44	_____
DIESEL FUEL					
Tractors	gal	2.74	11.4327	31.35	_____
Self-Propelled	gal	2.74	3.8741	10.63	_____
Roll-Out Pipe Irr.	gal	2.74	8.5535	23.43	_____
REPAIR & MAINTENANCE					
Implements	Acre	9.82	1.0000	9.82	_____
Tractors	Acre	6.19	1.0000	6.19	_____
Self-Propelled	Acre	13.51	1.0000	13.51	_____
Roll-Out Pipe Irr.	Acre	5.98	1.0000	5.98	_____
INTEREST ON OP. CAP.	Acre	10.27	1.0000	10.27	_____
TOTAL DIRECT EXPENSES				555.24	_____
FIXED EXPENSES					
Implements	Acre	16.26	1.0000	16.26	_____
Tractors	Acre	37.55	1.0000	37.55	_____
Self-Propelled	Acre	53.46	1.0000	53.46	_____
Roll-Out Pipe Irr.	Acre	45.14	1.0000	45.14	_____
TOTAL FIXED EXPENSES				152.41	_____
TOTAL SPECIFIED EXPENSES				707.65	_____

Table 4.B Estimated resource use and costs for field operations, per Acre
Cotton, B2/RRFlex Cotton, 12-row equipment, irrigated, Alluvial Soil, Louisiana, 2015.

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	1.54	1.48	0.06	0.15	0.04	0.47					3.70
Paratill & Bed Fold.	12R-38	MFWD 225	0.053	0.50	Nov	1.04	1.16	0.67	1.12	0.02	0.26					4.25
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Nov	2.01	2.23	0.60	0.65	0.07	0.75					6.24
LA Phosphate	lb											60.0000	0.61	36.60		36.60
LA Potash	lb											60.0000	0.34	20.40		20.40
Disk Bed (Hipper)	12R-38	MFWD 225	0.049	1.00	Nov	1.92	2.12	0.39	1.00	0.04	0.47					5.90
Row Cond (Harrow)	38'	MFWD 225	0.039	1.00	Nov	1.53	1.69	0.22	0.89	0.03	0.38					4.71
Roller	32'	MFWD 170	0.046	1.00	Nov	1.36	1.48	0.14	0.74	0.04	0.45					4.17
Ditcher		2WD 130	0.020	1.00	Nov	0.43	0.35	0.04	0.05	0.02	0.19					1.06
Sprayer (600-750Gal)		60'	0.017	1.00	Mar	0.66	1.05			0.02	0.30					2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94		5.94
2,4-D Amine 4	pt											1.0000	1.85	1.85		1.85
Valor WP	oz											1.5000	4.23	6.35		6.35
Plant & Pre Folding	12R-38	MFWD 190	0.053	1.00	Apr	1.70	1.63	1.56	2.87	0.10	1.02					8.78
Cotoran 4L	pt											1.2000	5.98	7.18		7.18
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	69.25	69.25		69.25
Ditcher		2WD 130	0.020	1.00	Apr	0.43	0.35	0.04	0.05	0.02	0.19					1.06
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr	2.01	2.23	0.60	0.65	0.07	0.75					6.24
LA Nitrogen	lb											90.0000	0.50	45.00		45.00
Sprayer (600-750Gal)		60'	0.017	1.00	May	0.66	1.05			0.02	0.30					2.01
Dimethoate 4E	pt											0.4000	6.27	2.51		2.51
Roundup WeatherMax	oz											22.0000	0.27	5.94		5.94
Dual II Magnum	pt											1.0000	14.50	14.50		14.50
Sprayer (600-750Gal)		60'	0.017	1.00	May	0.66	1.05			0.02	0.30					2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94		5.94
Sprayer (600-750Gal)		60'	0.017	1.00	Jun	0.66	1.05			0.02	0.30					2.01
Roundup WeatherMax	oz											22.0000	0.27	5.94		5.94
Orthene 90S	lb											0.6000	5.75	3.45		3.45
Centric 40WG	oz											2.0000	4.83	9.66		9.66
App by Air (3 gal)	appl			1.00	Jun							1.0000	4.75	4.75		4.75
Centric 40WG	oz											2.0000	4.83	9.66		9.66
Pix Plus	oz											12.0000	0.19	2.28		2.28
Spray (Direct/Layby)	12R-38	MFWD 170	0.044	1.00	Jun	1.30	1.42	0.34	0.39	0.06	0.64					4.09
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	4.75	4.75		4.75
Karate Z	oz											2.1300	3.40	7.24		7.24
Bidrin 8L	oz											6.0000	0.98	5.88		5.88
Pix Plus	oz											12.0000	0.19	2.28		2.28
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75		4.75
Karate Z	oz											2.1300	3.40	7.24		7.24
Bidrin 8L	oz											6.0000	0.98	5.88		5.88
Diamond .83EC	pt											0.3750	16.28	6.11		6.11
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75		4.75
Orthene 90S	lb											0.6000	5.75	3.45		3.45
Karate Z	oz											2.1300	3.40	7.24		7.24
Diamond .83EC	pt											0.3750	16.28	6.11		6.11
App by Air (3 gal)	appl			1.00	Aug							1.0000	4.75	4.75		4.75
Orthene 90S	lb											0.6000	5.75	3.45		3.45
App by Air (5 gal)	appl			1.00	Sep							1.0000	6.00	6.00		6.00
Dropp SC	oz											1.2000	1.09	1.31		1.31
Prep	pt											1.3300	4.00	5.32		5.32
Def/Folex	pt											0.7500	8.62	6.47		6.47
Cotton Picker-1st-BB		6R38*330hp	0.172	1.00	Sep	21.50	49.26			0.34	3.81					74.57
Module Builder-1st		6R-38(325)	0.172	1.00	Sep	5.48	5.25	1.49	2.93	0.34	3.30					18.45
Boll Buggy-1st pick		6R38*325hp	0.172	1.00	Sep	5.48	5.25	1.32	2.58	0.17	1.65					16.28
Stalk Shredder-Flail	20'	MFWD 150	0.082	1.00	Nov	2.12	2.14	1.94	1.13	0.08	0.79					8.12
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	9.19	8.77	29.82	46.20	0.44	4.31	1.0000		8.58		106.87
TOTALS						61.68	91.01	39.23	61.40	2.07	20.63			423.43		697.38
INTEREST ON OPERATING CAPITAL																10.27
UNALLOCATED LABOR																0.00
TOTAL SPECIFIED COST																707.65

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, 2015.

Cotton Lint			-----BREAKEVEN PRICE-----										
			0.16	0.17	0.19	0.20	0.22	0.24	0.27	0.30	0.35	0.41	0.49
PERCENT	YIELD	UNIT	-----dollars-----										
50	700.00	lb	-230	-222	-212	-201	-188	-172	-153	-129	-98	-57	0
			-382	-374	-365	-354	-341	-325	-306	-282	-251	-210	-152
60	840.00	lb	-207	-197	-186	-172	-157	-138	-115	-86	-49	0	69
			-359	-350	-338	-325	-309	-290	-267	-238	-201	-152	-83
70	980.00	lb	-184	-172	-159	-144	-125	-103	-76	-43	0	57	138
			-336	-325	-312	-296	-278	-256	-229	-195	-152	-94	-14
80	1120.00	lb	-161	-148	-133	-115	-94	-69	-38	0	49	115	207
			-313	-300	-285	-267	-246	-221	-190	-152	-103	-37	55
90	1260.00	lb	-138	-123	-106	-86	-62	-34	0	43	98	172	276
			-290	-275	-258	-238	-215	-186	-152	-109	-53	20	124
100	1400.00	lb	-115	-98	-79	-57	-31	0	38	86	148	230	345
			-267	-251	-232	-210	-183	-152	-113	-65	-4	78	193
110	1540.00	lb	-92	-74	-53	-28	0	34	76	129	197	288	414
			-244	-226	-205	-181	-152	-117	-75	-22	45	135	262
120	1680.00	lb	-69	-49	-26	0	31	69	115	172	247	345	484
			-221	-201	-179	-152	-120	-83	-37	20	94	193	331
130	1820.00	lb	-46	-24	0	28	62	103	153	216	296	403	553
			-198	-177	-152	-123	-89	-48	1	63	143	251	400
140	1960.00	lb	-23	0	26	57	94	138	192	259	345	461	622
			-175	-152	-125	-94	-58	-14	39	106	193	308	470
150	2100.00	lb	0	24	53	86	125	172	230	302	395	518	691
			-152	-127	-99	-65	-26	20	78	150	242	366	539

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, 2015.

Cotton Lint			-----BREAKEVEN PRICE-----										
			0.23	0.25	0.27	0.29	0.32	0.35	0.39	0.44	0.50	0.59	0.71
PERCENT	YIELD	UNIT	-----dollars-----										
50	700.00	lb	-179	-167	-154	-138	-119	-96	-69	-34	10	69	152
			-332	-320	-306	-290	-271	-249	-221	-186	-142	-83	0
60	840.00	lb	-146	-132	-115	-96	-74	-46	-13	27	81	152	252
			-298	-284	-268	-249	-226	-199	-166	-124	-71	0	99
70	980.00	lb	-113	-96	-77	-55	-28	2	41	90	152	235	351
			-265	-249	-229	-207	-181	-149	-110	-62	0	83	199
80	1120.00	lb	-80	-61	-39	-13	16	52	97	152	223	318	451
			-232	-213	-191	-166	-135	-99	-55	0	71	166	298
90	1260.00	lb	-46	-25	0	27	61	102	152	214	294	401	550
			-199	-177	-153	-124	-90	-49	0	62	142	249	398
100	1400.00	lb	-13	10	37	69	107	152	207	276	365	484	650
			-166	-142	-114	-83	-45	0	55	124	213	332	498
110	1540.00	lb	19	45	75	110	152	202	263	339	437	567	750
			-132	-106	-76	-41	0	49	110	186	284	415	597
120	1680.00	lb	52	81	114	152	197	252	318	401	508	650	849
			-99	-71	-38	0	45	99	166	249	355	498	697
130	1820.00	lb	85	116	152	193	242	301	373	463	579	733	949
			-66	-35	0	41	90	149	221	311	427	581	797
140	1960.00	lb	119	152	190	235	288	351	429	526	650	816	1049
			-33	0	38	83	135	199	276	373	498	664	896
150	2100.00	lb	152	187	229	276	333	401	484	588	721	899	1148
			0	35	76	124	181	249	332	435	569	747	996

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

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
IRRIGATION LABOR					
Implements	hour	9.60	0.0062	0.06	_____
LA Hired Labor					
Tractors	hour	9.60	0.2930	2.81	_____
LA Irrigation Labor					
Special Labor	hour	9.60	0.1500	1.44	_____
DIESEL FUEL					
Tractors	gal	2.74	2.8274	7.75	_____
Engine, RPF, 75	gal	2.74	8.5535	23.43	_____
REPAIR & MAINTENANCE					
Implements	Acre	0.41	1.0000	0.41	_____
Tractors	Acre	1.44	1.0000	1.44	_____
Well & Pump, Furrow	each	390.00	0.0062	2.44	_____
Engine, RPF, 75	ac-in	0.33	10.5000	3.54	_____
INTEREST ON OP. CAP.	Acre	0.78	1.0000	0.78	_____
TOTAL DIRECT EXPENSES				52.68	_____
FIXED EXPENSES					
Implements	Acre	1.06	1.0000	1.06	_____
Tractors	Acre	8.77	1.0000	8.77	_____
Well & Pump, Furrow	each	1095.88	0.0062	6.85	_____
Main Line Pipe	each	756.66	0.0062	4.73	_____
Land Forming (\$300)	each	26.30	1.0000	26.30	_____
Engine, RPF, 75	each	1160.82	0.0062	7.26	_____
TOTAL FIXED EXPENSES				54.97	_____
TOTAL SPECIFIED EXPENSES				107.65	_____

Appendix Table 2 Estimated costs per Acre, Center pivot irrigation system, 1/4 mile
applying 7.5 inches in three applications Louisiana, 2015.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
LA Hired Labor					
Special Labor	hour	9.60	0.2036	1.95	_____
DIESEL FUEL					
Engine, 1/4 CP, 65	gal	2.74	11.2011	30.70	_____
REPAIR & MAINTENANCE					
Well & Pump, 1/4 CP	each	390.00	0.0074	2.89	_____
Engine, 1/4 CP, 65	ac-in	0.59	7.5000	4.47	_____
Pivot, 1/4 CP	1320'	1516.40	0.0074	11.23	_____
INTEREST ON OP. CAP.	Acre	0.87	1.0000	0.87	_____
TOTAL DIRECT EXPENSES				52.11	_____
FIXED EXPENSES					
Well & Pump, 1/4 CP	each	1095.88	0.0074	8.12	_____
Engine, 1/4 CP, 65	each	1237.70	0.0074	9.17	_____
Pivot, 1/4 CP	each	5828.74	0.0074	43.18	_____
TOTAL FIXED EXPENSES				60.47	_____
TOTAL SPECIFIED EXPENSES				112.58	_____

Appendix Table 3. Operating Inputs: Estimated Prices for 2015.

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Vitavax M Flowable	oz	1.06
Crop Oil (Seed Oil)	pt	4.60	Vitavax RTU-Thiram	oz	0.40
Crop Oil (Petroleum)	pt	3.60	Vitavax T-L	oz	0.29
Surfactant	pt	3.60	GIN/DRY		
CUSTOM FERT/LIME			Dry Corn	bu	0.19
App Fert by Air	cwt	6.50	Dry Grain Sorghum	cwt	0.25
App Fert by Air(Min)	appl	6.50	Dry Rice	bu	0.40
Custom Apply Fert	acre	7.50	Dry Rice (cwt)	cwt	0.90
Custom Spread(Truc	appl	4.50	GROWTH REGULATORS		
Lime (Spread)	ton	48.00	Early Harvest PGR	oz	1.55
CUSTOM HARVEST/HAUL			LA Polado	oz	0.38
Custom Combine Rice	acre	0.00	Mepex	oz	0.09
Haul Corn	bu	0.23	PGR IV	oz	1.55
Haul Cotton	lb	0.02	Pix Plus	oz	0.19
Haul Sorghum	bu	0.25	Pix Ultra	oz	0.39
Haul Soybeans	bu	0.27	HARVEST AIDS		
Haul Wheat	bu	0.26	Accelerate	pt	2.59
LARice Haul	cwt	0.30	Ammonium Sulfate	lb	0.20
CUSTOM PLANT			Boll'd	pt	7.01
LARice Air Plant NE	cwt	5.50	CottonQuik	pt	4.25
LARice Air Plant SW	cwt	5.60	Def 6	pt	8.25
CUSTOM SPRAY			Def/Folex	pt	8.62
App by Air (2 gal)	appl	3.25	Dropp 50 WP	lb	45.45
App by Air (3 gal)	appl	4.75	Dropp SC	oz	1.09
App by Air (5 gal)	appl	6.00	Ethephon 6E	pt	3.27
App by Air (10 gal)	appl	8.00	Finish 6	pt	8.59
LARice GPS Charge-SW	acre	0.35	Folex 6EC	pt	7.55
LARice GPS Charge_NE	acre	0.25	Ginstar EC	pt	27.89
FERTILIZERS			Gramoxone Extra	pt	4.86
Amm Nitrate (34% N)	cwt	22.50	Gramoxone Inteon	oz	0.25
Amm Sulfate (21% N)	cwt	18.60	Gramoxone Max	pt	4.06
Fert 10-34-0	cwt	26.00	Harvade 5F	oz	0.67
Fert 41-0-0-4	cwt	23.50	Leafless	pt	18.56
LA Nitrogen	lb	0.50	Prep	pt	4.00
LA Phosphate	lb	0.61	Sodium Chlorate 3L	gal	3.50
LA Potash	lb	0.34	Solium Chlorate 6L	gal	5.57
Phosphorus(46% P2O5)	cwt	24.50	Starfire	pt	0.00
Potash (60% K2O)	cwt	23.60	HERBICIDES		
Sulfur	lb	0.26	2,4-D Amine 4	pt	1.85
UAN (32% N)	cwt	18.50	2,4-D Ester	pt	3.00
UAN + Sulfur (28% N)	cwt	17.90	AAtrex 4L	pt	2.08
Urea, Solid (46% N)	cwt	25.25	AAtrex NINE-O	lb	3.93
Zinc	lb	0.50	Accent Gold	oz	6.12
FUNGICIDES			Accent SP	oz	36.25
Apron Maxx RTA	oz	0.81	Aim 2EC	oz	7.19
Apron XL	oz	7.93	Aim DF	oz	9.65
Apron XL LS	oz	7.93	Arrosolo	qt	7.88
Benlate 50 WP	lb	15.95	Assure II	oz	0.70
Captan 4L	pt	2.83	Atrazine 4L	pt	1.50
Captan 50 WP	lb	6.00	Atrazine 90DF	lb	2.80
Cruiser 5FS	oz	17.38	Authority 75DF	lb	26.95
Delta Coat AD	oz	3.75	Axiom 68DF	lb	25.74
Dithane F-45	qt	7.94	Backdraft	pt	2.40
Dithane Rainsheild	lb	2.75	Banvel	pt	11.10
Fungicide	lb	2.82	Basagran	pt	11.88
Gem 25 WG	oz	3.70	Basis Gold	lb	9.00
Manzate 75 DF	lb	4.83	Beacon 75% WSP	oz	34.87
Manzate Flowable	pt	4.60	Beyond	oz	4.29
Moncut 70 DF	lb	25.00	Bicep II Magnum	qt	10.97
Orbit	oz	2.75	Bicep II zmsgnum	qt	10.97
Prevail	lb	28.25	Bladex 4L	qt	0.00
Quadris	oz	1.95	Bladex 90DF	lb	0.00
Ridomil GoldPC 10G	lb	2.08	Blazer 2L	pt	0.00
Ridomil Gold PC	lb	4.00	Blazer Ultra	pt	9.56
Ridomil Gold PC Liq	oz	6.54	Boa	pt	3.63
Rovral 4F	pt	14.20	Bolero 8EC	pt	7.50
Rovral WG	lb	0.00	Boundary	pt	10.05
Shelter	oz	8.50	Buctril 4EC	pt	17.06
Stiletto	oz	0.56	Butoxone 175(2,4-DB)	pt	3.24
Stratego	pt	24.91	Butoxone 200(2,4-DB)	pt	3.92
Terraclor Flowable	pt	4.74	Butyrac 175 (2,4-DB)	pt	3.27
Terraclor 2EC	pt	1.87	Butyrac 200 (2,4-DB)	pt	4.20
Terraclor Super X EC	pt	3.95	Canopy 75%	oz	2.69
Terraclor Super X G	lb	2.82	Canopy XL	oz	2.23
Tilt 3.6 EC	oz	0.84			
Vitavax 200	oz	0.47			

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

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
HERBICIDES (CON'T)			Lightning	oz	14.25
Caparol 4L	pt	3.69	Linex 4L	pt	12.12
Caparol Accu-Pak	lb	0.00	Londax 60DF	oz	17.25
Celebrity Plus	lb	84.50	Lorox 50DF	lb	18.70
Clarity	pt	11.88	MSMA 6.6	pt	3.50
Classic	oz	16.28	MSMA6 + Surfactant	pt	2.63
Clincher EC	oz	2.30	Newpath 2SL	oz	3.47
Cobra 2EC	oz	1.61	Ordram 15-G	lb	1.34
Command 3ME	pt	18.50	Ordram 8-E	pt	9.42
Command XTRA	pt	0.00	Outlook	pt	16.88
Conclude Ultra	pt	0.00	Pendimax 3.3	pt	2.47
Conclude Ultra	pt	0.00	Permit 75DF	oz	18.50
Conclude XACT	pt	11.32	Poast 1.53	pt	11.95
Conclude XTRA	pt	8.32	Poast Plus	pt	8.66
Cornerstone	pt	2.50	Propanil 4E	qt	5.15
Cotoran 4L	pt	5.98	Prowl 3.3 EC	pt	3.44
Cotoran DF	lb	7.92	Pursuit DG	oz	11.59
Cotton Pro Flowable	pt	3.44	Pursuit Plus EC	pt	7.10
Crossbow	pt	8.05	Python WDG	oz	13.04
Cy-Pro 4L	qt	0.00	Raptor	oz	4.18
Cypro 90DF	lb	0.00	Reflex 2LC	pt	7.04
Delta Goal	pt	9.44	Regiment 80WP	oz	4.38
Denim 0.16 EC	pt	24.06	Remedy	pt	8.45
Detail	pt	7.99	Resource .86EC	pt	28.75
Direx 4L	pt	2.81	Ricestar	pt	22.55
Direx 80 DF	lb	7.37	Roundup Original	pt	6.00
Diuron 4L	pt	2.81	Roundup Original Max	oz	0.38
Diuron 80 DF	lb	2.70	Roundup Power Max	pt	3.16
Domain 60DF	lb	12.75	Roundup Ultra MAX	pt	5.97
DSMA 4	pt	0.90	Roundup Ultra Dry	lb	6.14
Dual 8E	pt	0.00	Roundup WeatherMax	oz	0.27
Dual II Magnum	pt	14.50	Scepter 70 DG	oz	4.52
Dual Magnum	pt	13.49	Select 2EC	oz	0.77
Duet	pt	4.99	Sencor 4F	pt	14.74
Evik DF 80W	lb	11.75	Sencor DF	lb	11.20
Exceed	oz	10.71	Squadron CE	pt	12.50
Exceed Custom Pak	oz	11.50	Stam 4E	qt	5.12
Expert	pt	4.27	Stam 80 EDF	lb	8.04
Facet 75DF	lb	50.00	Staple 85%	oz	16.01
First Rate	oz	38.78	Staple Plus	oz	8.55
Flexstar HL	pt	4.50	Steadfast	oz	11.85
FloMet 4L	pt	4.74	Steel	pt	10.28
Freedom	qt	2.51	Storm	pt	11.50
Front Row	oz	21.92	Strongarm	oz	51.20
Frontier 6.0	oz	0.63	Superwham	qt	8.83
Fultime	pt	5.25	Suprend	lb	12.92
Fusilade DX	oz	1.14	Surpass 20G	lb	2.36
Fusion	pt	27.00	Surpass EC	qt	26.25
Glyphos	pt	1.80	Touchdown	qt	9.32
Glyphomax	pt	3.49	Touchdown 4 IQ	pt	3.33
Glyphosate Plus 4L	pt	3.19	Touchdown Total	qt	6.74
Glystar Plus	pt	2.25	Treflan HFP	pt	2.90
Goal 2XL	pt	10.00	Treflan TR-10	lb	1.10
Gramoxone Max	pt	5.46	Tri-Scept	pt	5.24
Gramoxone Max	pt	4.06	Trifluralin 4EC	pt	3.34
Grandstand R	qt	28.38	Trilin 10G	lb	0.79
Guardzman	pt	4.66	Trilin 4EC	pt	2.12
Guardzman Max	pt	6.93	Typhoon	qt	13.06
Harmony Extra	oz	14.35	Valor WP	oz	4.23
Hoelon 3EC	pt	11.03	Whip 360	pt	25.08
Karmex DF	lb	5.93	Zorial Rapid 80DF	lb	14.10
LA Asulox/Asulam	gal	37.00	INSECTICIDES		
LA Weedmaster	qt	6.50	Acephate 80SP	lb	0.00
Lariat	qt	7.49	Acephate 90SP	lb	7.23
Lasso 4EC	qt	6.60	Admire 2 Flowable	oz	4.78
Lasso II 15G	lb	0.00	Ammo 2.5 EC	oz	0.92
Layby Pro	qt	6.30	Asana .66 XL	oz	0.64
Lexone 75DF	lb	18.90	Aztec 2.1% G	lb	3.68
Liberty	pt	8.84	Baythroid 2	oz	2.30
Lightning	oz	14.25	Bidrin 8L	oz	0.98

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

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
INSECTICIDES (CON'T)					
		dollars			dollars
Brigade EC	pt	15.10	Trimax	oz	1.85
Brigade WSB	lb	21.00	Vydate C-LV	oz	0.89
Capture 2EC	oz	2.40	Warrior Z	oz	1.80
Carbamate	oz	0.00	Warrior ZT	oz	1.88
Centric 40WG	oz	4.83	SEED/PLANTS		
Comite	pt	8.46	Corn Seed Bt	thous	2.60
Condor XL	pt	0.00	Corn Seed BtRR	thous	3.47
Confirm 2F	oz	2.05	Corn Seed Conv.	thous	2.88
Counter 15G	lb	4.22	Corn Seed RR	thous	3.08
Counter CR	lb	2.65	Corn Seed VT3	thous	2.84
Curacron 8E	pt	10.74	Corn Seed VT3Pro	thous	3.12
Decis 1.5EC	oz	2.84	Cotton Seed BG/RR	thous	0.62
Declare	pt	4.08	Cotton Seed BGII/RRF	thous	0.61
Denim 0.16EC	pt	32.63	Cotton Seed Bt	thoud	0.28
Di-Syston 15G	lb	3.48	Cotton Seed BtRR	thous	0.74
Di-Syston 8	pt	14.32	Cotton Seed Bxn	thous	0.00
Diamond .83EC	pt	16.28	Cotton Seed Conv.	thous	0.00
Dimethoate 4E	pt	6.27	Cotton Seed Liberty	thous	1.05
Dimilin 2L	oz	2.02	Cotton Seed Liberty	thous	1.05
Dipel DF	lb	13.50	Cotton Seed RR	thous	0.63
Dipel ES	pt	5.00	Cotton Seed RR	thous	0.63
Force 3G	lb	6.73	Cotton Seed WS	thous	0.49
Furadan 3G	lb	0.00	Cotton Seed WS/RR	thous	0.00
Furadan 4F	pt	9.81	Cotton Seed WS/RRF	thous	0.59
Fury 1.5 EC	oz	1.30	Sorghum Concept	lb	2.28
Gaicho 480	oz	5.80	Sorghum Hybrid Sudax	lb	1.20
Intrepid 2F	oz	1.76	Sorghum NonConcept	lb	1.18
Intruder 70WP	oz	9.65	Soybean Seed LL	lb	0.89
Karate Z	oz	3.40	Soybean Seed Private	lb	0.38
Lannate LV	pt	10.34	Soybean Seed Public	lb	0.00
Lannate SP	oz	1.93	Soybean Seed RR	lb	1.11
Larvin 3.2	oz	0.63	Soybean Seed Stack	lb	1.28
Leverage 2.7	oz	1.66	Wheat Seed Private	lb	0.32
Lorsban 15G	lb	2.15	Wheat Seed Public	lb	0.00
Lorsban 4E	pt	5.63	SERVICE FEE		
Malathion 57EC	pt	4.23	Cotton Checkoff	bale	2.56
Malathion 8E	pt	5.60	Cotton Storage	bale	25.00
Malathion ULV	pt	4.93	Crop Consultant	acre	7.00
Mepichlor 4.2% Liq	pt	5.91	Insect Scouting	acre	7.00
Methyl Parathion	pt	5.79	Rice Consultant	acre	7.00
Monitor 4	pt	16.50	SC Treating Charge	acre	0.00
Monitor 4	pt	16.50	Survey & Mark Levees	acre	4.50
Mustang Max	oz	1.60	Survey & Mark Levees	acre	4.50
Organophosphate	oz	0.00	BG Cot Tech Fee	thous	0.28
Orthene 90S	lb	5.75	BG Cot Tech Fee	cap/ac	19.50
Orthene 97	lb	10.59	BG II Cot Tech Fee	thous	0.76
Ovasyn	pt	0.00	BG II Cot Tech Fee	cap/ac	31.91
Ovicide	oz	0.00	BG II/RR Tech Fee	thous	1.49
Penncap M	pt	6.71	BG II/RR Tech Fee	cap/ac	62.69
Phaser 3E	qt	8.13	BGII/RRF Cot Tech Fe	thous	1.49
Pirate 3SC	oz	0.00	BGII/RRF Cot Tech Fe	cap/ac	69.25
Pounce 25WP	lb	12.85	Eradication Fee	acre	6.00
Pounce 3.2 EC	oz	0.91	Eradication Zone 1	acre	6.00
Provado 1.6F	oz	1.94	Eradication Zone 1A	acre	6.00
Scout X-TRA	oz	0.00	Eradication Zone 1B	acre	6.00
Sevin 80S	lb	7.40	Eradication Zone 2	acre	6.00
Sevin XLR Plus	qt	12.50	Eradication Zone 3	acre	6.00
Spintor 2SC	oz	4.93	Eradication Zone 4	acre	6.00
Steward	pt	29.30	RR Cotton Tech Fee	thous	1.04
Synthetic Pyrethroid	oz	0.00	RR Cotton Tech Fee	cap/ac	43.66
Temik 15G Grit	lb	4.00	RR Cotton Tech Fee	thous	1.04
Thimet 20-G	lb	3.60	RR Cotton Tech Fee	cap/ac	43.66
Thionex 3EC	pt	4.65	RRF Cotton Tech Fee	thous	1.04
Thionex 50W	lb	10.45	RRF Cotton Tech Fee	cap/ac	48.25
Tracer	oz	9.73			

Appendix Table 4. Tractors: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Louisiana 2015.

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	12.55	26.79	0.00	39.34	0.00	39.34
Combine (200-249 hp)	240hp	161,548	300	8	12.35	12.55	33.83	16.82	63.21	64.41	127.63
Combine (225-274 hp)	Track250hp	0	300	8	12.87	12.55	35.26	0.00	47.81	0.00	47.81
Combine (250-299 hp)	275hp	291,000	300	8	14.15	12.55	38.77	30.31	81.63	116.03	197.67
Combine (250-299hp)	Grass295hp	218,222	300	8	15.18	12.55	41.59	22.73	76.87	87.01	163.89
Combine (275-299 hp)	Track290hp	0	300	8	14.93	12.55	40.90	0.00	53.45	0.00	53.45
Combine (300-349 hp)	325hp	325,000	300	8	16.73	12.55	45.84	33.85	92.24	129.59	221.84
Combine (300-349hp)	Track320hp	0	300	8	16.47	12.55	45.12	0.00	57.67	0.00	57.67
Combine (350-379 hp)	370hp	344,000	300	8	19.04	12.55	52.16	35.83	100.55	137.17	237.72
Combine (350-379 hp)	Track365hp	0	300	8	18.79	12.55	51.48	0.00	64.03	0.00	64.03
Cotton Stripper	173hp	170,000	200	8	8.08	12.55	22.13	26.56	61.25	101.68	162.93
Tractor(40-59hp)Cab	2WD 50	33,700	600	8	2.57	9.60	7.05	1.05	17.70	6.12	23.82
Tractor(40-59hp)Cab	MFWD 50	38,900	600	8	2.57	9.60	7.05	1.21	17.86	7.06	24.93
Tractor(40-59hp)RB	2WD 50	18,900	600	8	2.57	9.60	7.05	0.59	17.24	3.43	20.67
Tractor(40-59hp)RB	MFWD 50	26,200	600	8	2.57	9.60	7.05	0.81	17.47	4.75	22.22
Tractor(60-89hp)CAB	2WD 75	43,400	600	8	3.86	9.60	10.57	1.35	21.53	7.88	29.41
Tractor(60-89hp)CAB	MFWD 75	47,900	600	8	3.86	9.60	10.57	1.49	21.67	8.69	30.37
Tractor(60-89hp)RB	2WD 75	35,000	600	8	3.86	9.60	10.57	1.09	21.27	6.35	27.62
Tractor(60-89hp)RB	MFWD 75	39,600	600	8	3.86	9.60	10.57	1.23	21.41	7.19	28.60
Tractor(90-119hp)CB	2WD 105	63,100	600	8	5.40	9.60	14.80	1.97	26.38	11.45	37.84
Tractor(90-119hp)CB	MFWD 105	74,400	600	8	5.40	9.60	14.80	2.32	26.73	13.51	40.24
Tractor(90-119hp)RB	2WD 105	54,300	600	8	5.40	9.60	14.80	1.69	26.10	9.86	35.96
Tractor(90-119hp)RB	MFWD 105	56,900	600	8	5.40	9.60	14.80	1.77	26.18	10.33	36.52
Tractor(120-139hp)CB	2WD 130	96,300	600	8	6.69	9.60	18.33	3.00	30.94	17.48	48.43
Tractor(120-139hp)CB	MFWD 130	114,000	600	8	6.69	9.60	18.33	3.56	31.49	20.70	52.20
Tractor(140-159hp)CB	2WD 150	127,000	600	8	7.72	9.60	21.15	3.96	34.72	23.06	57.78
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	9.60	21.15	4.46	35.22	25.97	61.19
Tractor(160-179hp)CB	2WD 170	156,000	600	8	8.75	9.60	23.97	4.87	38.45	29.71	68.16
Tractor(160-179hp)CB	MFWD 170	167,000	600	8	8.75	9.60	23.97	5.21	38.79	31.81	70.60
Tractor(160-199hp)CB	Track 180	142,710	600	8	9.26	9.60	25.38	4.45	39.44	27.18	66.63
Tractor(180-199hp)CB	2WD 190	143,000	600	8	9.77	9.60	26.79	4.46	40.86	27.24	68.10
Tractor(180-199hp)CB	MFWD 190	160,000	600	8	9.77	9.60	26.79	5.00	41.39	30.47	71.87
Tractor(200-249hp)CB	4WD 225	147,066	600	8	11.58	9.60	31.73	4.59	45.92	28.01	73.94
Tractor(200-249hp)CB	MFWD 225	226,000	600	8	11.58	9.60	31.73	7.06	48.39	43.05	91.44
Tractor(200-249hp)CB	Track 225	277,000	600	8	11.58	9.60	31.73	8.65	49.98	52.76	102.75
Tractor(250-349hp)CB	4WD 300	277,000	600	8	15.44	9.60	42.31	8.65	60.56	52.76	113.33
Tractor(250-349hp)CB	Track 300	281,000	600	8	15.44	9.60	42.31	8.78	60.69	53.52	114.22
Tractor(350-449hp)CB	4WD 400	313,000	600	8	20.58	9.60	56.41	9.78	75.79	59.62	135.41
Tractor(350-449hp)CB	Track 400	364,000	600	8	20.58	9.60	56.41	11.37	77.38	69.33	146.72
Tractor(450-uphp)CB	TRACK-475	279,879	600	8	24.44	9.60	66.99	8.74	85.33	53.31	138.65

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 2015.

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
ATV - 4 Wheeler	12'	0	100	8	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
ATV - 4 Wheeler	20'	8,750	100	8	1.00	0.200	2.51	0.68	0.43	3.62	2.00	5.62
Butt Levee (Backhoe)	70 HP	73,300	150	8	5.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Cotton Picker-1st-BB	2R38"157hp	144,912	200	8	8.08	0.519	11.51	11.50	11.76	34.78	45.04	79.82
Cotton Picker-1st-BB	4R2X1260hp	317,399	200	8	13.33	0.172	3.81	6.29	8.54	18.65	32.71	51.36
Cotton Picker-1st-BB	4R30"250hp	262,000	200	8	12.86	0.327	7.25	11.54	13.40	32.19	51.30	83.50
Cotton Picker-1st-BB	4R30"325hp	350,000	200	8	18.01	0.327	7.25	16.15	17.90	41.31	68.53	109.84
Cotton Picker-1st-BB	4R38"255hp	267,000	200	8	13.12	0.257	5.70	9.27	10.75	25.73	41.16	66.90
Cotton Picker-1st-BB	4R38"325hp	406,000	200	8	18.01	0.257	5.70	12.72	16.35	34.78	62.59	97.38
Cotton Picker-1st-BB	5R30"255hp	285,000	200	8	12.86	0.261	5.80	9.22	11.66	26.69	44.64	71.33
Cotton Picker-1st-BB	5R38"250hp	284,601	200	8	12.86	0.207	4.58	7.30	9.21	21.10	35.27	56.38
Cotton Picker-1st-BB	6R30"325hp	465,000	200	8	18.27	0.218	4.83	10.92	15.85	31.61	60.70	92.31
Cotton Picker-1st-BB	6R38"325hp	478,000	200	8	18.27	0.172	3.81	8.62	12.86	25.31	49.26	74.57
Cotton Picker-1st-Tr	2R38"157hp	144,912	200	8	8.08	0.519	11.51	11.50	11.76	34.78	45.04	79.82
Cotton Picker-1st-Tr	4R2X1255hp	322,137	200	8	18.01	0.172	3.81	8.50	8.67	20.99	33.20	54.19
Cotton Picker-1st-Tr	4R30"250hp	261,825	200	8	12.86	0.327	7.25	11.54	13.39	32.18	51.26	83.45
Cotton Picker-1st-Tr	4R30"325hp	311,088	200	8	16.72	0.327	7.25	15.00	15.91	38.17	60.91	99.08
Cotton Picker-1st-Tr	4R38"255hp	262,818	200	8	13.12	0.257	5.70	9.27	10.58	25.56	40.52	66.08
Cotton Picker-1st-Tr	4R38"325hp	325,618	200	8	18.01	0.257	5.70	12.72	13.11	31.54	50.20	81.75
Cotton Picker-1st-Tr	5R30"255hp	285,303	200	8	13.12	0.261	5.80	9.41	11.67	26.89	44.69	71.58
Cotton Picker-1st-Tr	5R38"325hp	290,471	200	8	12.86	0.207	4.58	7.30	9.40	21.29	35.99	57.29
Cotton Picker-1st-Tr	6R30"325hp	429,000	200	8	16.72	0.218	4.83	10.00	14.62	29.46	56.00	85.47
Cotton Picker-1st-Tr	6R38"330hp	429,000	200	8	18.01	0.172	3.81	8.50	11.55	23.86	44.21	68.08
Cotton Picker-2nd-BB	2R38"157hp	144,912	200	8	8.08	0.440	9.74	9.74	9.96	29.46	38.15	67.61
Cotton Picker-2nd-BB	4R2x1260hp	322,187	200	8	18.01	0.145	3.23	7.20	7.34	17.78	28.12	45.91
Cotton Picker-2nd-BB	4R30"250hp	261,825	200	8	12.86	0.277	6.14	9.77	11.34	27.26	43.42	70.69
Cotton Picker-2nd-BB	4R30"325hp	311,088	200	8	16.72	0.277	6.14	12.71	13.47	32.33	51.59	83.93
Cotton Picker-2nd-BB	4R38"255hp	262,818	200	8	13.12	0.218	4.83	7.85	8.96	21.65	34.32	55.98
Cotton Picker-2nd-BB	4R38"325hp	325,618	200	8	18.01	0.218	4.83	10.77	11.10	26.72	42.52	69.24
Cotton Picker-2nd-BB	5R30"255hp	285,303	200	8	13.12	0.221	4.91	7.97	9.88	22.78	37.85	60.64
Cotton Picker-2nd-BB	5R38"250hp	284,601	200	8	12.86	0.175	3.88	6.18	7.80	17.88	29.87	47.75
Cotton Picker-2nd-BB	6R30"325hp	405,906	200	8	18.01	0.184	4.09	9.12	11.72	24.94	44.88	69.82
Cotton Picker-2nd-BB	6R38"330hp	404,462	200	8	18.01	0.145	3.23	7.20	9.22	19.65	35.30	54.96
Cotton Picker-2nd-Tr	2R38"157hp	144,912	200	8	8.08	0.440	9.74	9.74	9.96	29.46	38.15	67.61
Cotton Picker-2nd-Tr	4R2X1260hp	322,137	200	8	18.01	0.145	3.23	7.20	7.34	17.78	28.12	45.90
Cotton Picker-2nd-Tr	4R30"250hp	261,825	200	8	12.86	0.277	6.14	9.77	11.34	27.26	43.42	70.69
Cotton Picker-2nd-Tr	4R30"325hp	311,088	200	8	16.72	0.277	6.14	12.71	13.47	32.33	51.59	83.93
Cotton Picker-2nd-Tr	4R38"255hp	262,818	200	8	13.12	0.218	4.83	7.85	8.96	21.65	34.32	55.98
Cotton Picker-2nd-Tr	4R38"325hp	325,618	200	8	18.01	0.218	4.83	10.77	11.10	26.72	42.52	69.24
Cotton Picker-2nd-Tr	5R30"255hp	285,303	200	8	13.12	0.221	4.91	7.97	9.88	22.78	37.85	60.64
Cotton Picker-2nd-Tr	5R38"250hp	290,471	200	8	12.86	0.175	3.88	6.18	7.96	18.04	30.49	48.53
Cotton Picker-2nd-Tr	6R30"325hp	381,665	200	8	16.72	0.184	4.09	8.47	11.02	23.59	42.20	65.79
Cotton Picker-2nd-Tr	6R38"330hp	404,462	200	8	18.01	0.145	3.23	7.20	9.22	19.65	35.30	54.96
LA Pickup Truck	1/2 ton	25,000	800	5	2.50	1.000	9.60	8.50	2.81	20.91	6.54	27.45
Levee Sprayer	27'	30,768	350	8	2.57	0.038	0.66	0.27	0.06	0.99	0.40	1.40
Sprayer(300-450Gal)	60'	103,000	350	8	5.66	0.017	0.30	0.27	0.09	0.67	0.62	1.29
Sprayer(300-450Gal)	80'	103,000	350	8	5.66	0.013	0.22	0.20	0.07	0.50	0.46	0.97
Sprayer(600-750Gal)	60'	174,000	350	8	10.29	0.017	0.30	0.49	0.16	0.96	1.04	2.01
Sprayer(600-825Gal)	80'	254,000	350	8	10.29	0.013	0.22	0.37	0.17	0.78	1.14	1.92
Sprayer(600-825Gal)	90'	240,000	350	8	10.29	0.011	0.20	0.33	0.15	0.68	0.96	1.65
Sprayer(1000-1400Gal)	90'	290,000	350	8	14.15	0.014	0.24	0.54	0.21	1.01	1.39	2.40
Sprayer(1200PlusGal)	120'	318,000	350	8	15.44	0.008	0.15	0.37	0.15	0.67	0.95	1.63

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2015.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Blade-Box	6'	2WD 130	1,090	200	20	0.020	0.19	0.36	0.01	0.06	0.62	0.00	0.34	0.98
Blade-Box	10'	2WD 50	5,060	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box	14'	2WD 50	7,550	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	6'	2WD 50	1,150	200	20	1.176	11.29	8.29	0.64	0.69	20.92	0.48	4.03	25.45
Blade-Scraper	10'	2WD 50	3,310	200	20	1.176	11.29	8.29	1.84	0.69	22.13	1.40	4.03	27.57
Blade-Scraper	14'	2WD 50	6,730	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	1.10	2.11	0.93	0.34	4.51	1.56	2.02	8.09
Chisel Plow(Folding)	24'	MFWD 190	37,200	150	12	0.076	0.73	2.04	1.02	0.38	4.19	1.71	2.33	8.23
Chisel Plow(Folding)	32'	MFWD 225	48,000	150	12	0.057	0.55	1.83	1.00	0.40	3.79	1.66	2.48	7.95
Chisel Plow(Folding)	42'	MFWD 225	55,200	150	12	0.044	0.42	1.39	0.87	0.31	3.00	1.46	1.89	6.36
Chisel Plow(Rigid)	15'	2WD 130	11,900	150	12	0.123	1.18	2.25	0.52	0.37	4.34	0.88	2.15	7.38
Chisel Plow(Rigid)	24'	MFWD 190	13,100	150	12	0.077	0.73	2.06	0.36	0.38	3.55	0.60	2.34	6.50
Chisel-Harrow	21 shank	2WD 190	12,500	150	12	0.088	0.84	2.35	0.39	0.39	3.99	0.66	2.39	7.05
Chisel-Harrow	27 shank	MFWD 225	14,100	150	12	0.068	0.65	2.17	0.34	0.48	3.66	0.58	2.94	7.19
Colter-Chisel-Harrow	21 shank	2WD 190	19,200	150	12	0.088	0.84	2.35	0.61	0.39	4.20	1.01	2.39	7.62
Colter-Chisel-Harrow	27 shank	MFWD 225	24,000	150	12	0.068	0.65	2.17	0.59	0.48	3.90	0.98	2.94	7.84
Corn Grain Cart 8R30	500 bu	MFWD 190	24,700	200	12	0.031	0.30	0.85	0.21	0.15	1.53	0.35	0.97	2.86
Corn Grain Cart 8R40	700bu	MFWD 190	34,200	200	12	0.025	0.24	0.66	0.23	0.12	1.26	0.38	0.76	2.41
Cult & Post	4R-38	2WD 105	17,800	150	10	0.173	2.49	2.56	0.82	0.29	6.17	2.09	1.70	9.98
Cult & Post	6R-30	MFWD 150	21,900	150	10	0.146	4.22	3.10	0.85	0.65	8.83	2.18	3.80	14.83
Cult & Post	6R-38	MFWD 150	21,700	150	10	0.115	1.66	2.44	0.67	0.51	5.30	1.70	3.00	10.01
Cult & Post	8R-30	MFWD 190	25,600	150	10	0.110	1.58	2.94	0.75	0.55	5.83	1.91	3.35	11.09
Cult & Post	8R-38	MFWD 190	17,800	150	10	0.086	1.25	2.33	0.41	0.43	4.42	1.05	2.65	8.13
Cult & Post	8R-38 2x1	MFWD 190	37,100	150	10	0.057	0.83	1.55	0.57	0.28	3.24	1.46	1.76	6.47
Cult & Post	10R-30	MFWD 225	34,600	150	10	0.088	1.26	2.79	0.81	0.62	5.49	2.06	3.78	11.35
Cult & Post	10R-38	MFWD 225	0	150	10	0.065	0.93	2.06	0.00	0.45	3.46	0.00	2.80	6.26
Cult & Post	12R-30	MFWD 225	42,200	150	10	0.073	1.05	2.32	0.82	0.51	4.72	2.10	3.15	9.98
Cult & Post	12R-38	MFWD 225	44,700	150	10	0.057	0.83	1.83	0.69	0.40	3.76	1.75	2.49	8.02
Cultipacker	12'	2WD 130	4,846	300	12	0.124	1.19	2.28	0.14	0.37	3.99	0.18	2.17	6.35
Cultipacker	20'	MFWD 150	15,200	300	12	0.074	0.71	1.57	0.26	0.33	2.89	0.35	1.93	5.19
Cultivate	4R-38	2WD 105	11,900	150	10	0.162	1.55	2.40	0.51	0.27	4.75	1.31	1.60	7.67
Cultivate	6R-30	MFWD 150	15,900	150	10	0.137	1.32	2.90	0.58	0.61	5.42	1.48	3.57	10.48
Cultivate	6R-38	MFWD 150	15,700	150	10	0.108	1.04	2.29	0.45	0.48	4.27	1.15	2.81	8.25
Cultivate	8R-30	MFWD 190	20,600	150	10	0.103	0.99	2.76	0.56	0.51	4.83	1.44	3.14	9.42
Cultivate	8R-38	MFWD 190	21,800	150	10	0.081	0.78	2.18	0.47	0.40	3.84	1.20	2.48	7.54
Cultivate	8R-38 2x1	MFWD 190	29,700	150	10	0.054	0.52	1.45	0.42	0.27	2.67	1.09	1.65	5.42
Cultivate	10R-30	MFWD 225	28,200	150	10	0.082	0.79	2.61	0.62	0.58	4.61	1.58	3.55	9.74
Cultivate	10R-38	MFWD 225	0	150	10	0.065	0.62	2.06	0.00	0.45	3.14	0.00	2.80	5.94
Cultivate	12R-30	MFWD 225	36,300	150	10	0.068	0.66	2.18	0.66	0.48	3.99	1.69	2.95	8.64
Cultivate	12R-38	MFWD 225	37,400	150	10	0.054	0.52	1.72	0.54	0.38	3.16	1.37	2.33	6.88
Disk & Incorporate	14'	2WD 130	27,800	200	10	0.149	2.15	2.74	1.24	0.45	6.59	2.12	2.61	11.33
Disk & Incorporate	24'	MFWD 190	41,400	200	10	0.087	1.25	2.33	1.08	0.43	5.11	1.84	2.66	9.62
Disk & Incorporate	32'	4WD 225	56,800	200	10	0.068	0.99	2.18	1.17	0.31	4.65	1.99	1.92	8.57
Disk & Incorporate	42'	MFWD 225	30,542	200	10	0.049	0.70	1.55	0.44	0.34	3.06	0.76	2.11	5.94
Disk Bed (Hipper)	4R-38	MFWD 150	7,820	160	10	0.147	1.41	3.12	0.28	0.65	5.48	0.73	3.83	10.05
Disk Bed (Hipper)	6R-30	MFWD 170	12,800	160	10	0.125	1.20	2.99	0.40	0.65	5.24	1.01	3.97	10.24
Disk Bed (Hipper)	6R-38	MFWD 170	13,500	160	10	0.098	0.94	2.36	0.33	0.51	4.16	0.84	3.13	8.14
Disk Bed (Hipper)	8R-30	MFWD 190	17,400	160	10	0.093	0.90	2.51	0.40	0.46	4.28	1.03	2.85	8.18
Disk Bed (Hipper)	8R-38 2x1	MFWD 190	31,900	160	10	0.049	0.47	1.32	0.39	0.24	2.43	1.00	1.50	4.94
Disk Bed (Hipper)	10R-30	MFWD 225	19,900	160	10	0.075	0.72	2.37	0.37	0.52	4.00	0.95	3.22	8.18
Disk Bed (Hipper)	10R-38	MFWD 225	23,000	160	10	0.059	0.56	1.87	0.34	0.41	3.20	0.86	2.54	6.61
Disk Bed (Hipper)	12R-30	MFWD 225	28,100	160	10	0.062	0.60	1.98	0.43	0.44	3.46	1.11	2.69	7.27
Disk Bed (Hipper)	12R-38	MFWD 225	31,900	160	10	0.049	0.47	1.56	0.39	0.34	2.78	1.00	2.12	5.90
Disk Bed (Hipper)Fld	8R-38	MFWD 190	21,300	160	10	0.074	0.71	1.98	0.39	0.37	3.46	1.00	2.25	6.72
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	19,800	160	10	0.074	0.71	1.98	0.36	0.37	3.43	0.93	2.25	6.62
Disk Bed w/roller	8R-30	2WD 190	22,100	160	10	0.093	0.90	2.51	0.51	0.41	4.34	1.32	2.55	8.22
Disk Bed w/roller	12R-30	MFWD 225	47,200	160	10	0.062	0.60	1.98	0.73	0.44	3.76	1.87	2.69	8.33
Disk Harrow	14'	2WD 130	21,800	180	10	0.140	1.34	2.57	0.84	0.42	5.19	1.73	2.45	9.37
Disk Harrow	24'	MFWD 190	42,600	180	10	0.081	0.78	2.19	0.96	0.40	4.35	1.97	2.49	8.82
Disk Harrow	28'	MFWD 225	45,200	180	10	0.070	0.67	2.22	0.88	0.49	4.27	1.79	3.02	9.09
Disk Harrow	32'	MFWD 225	50,800	180	10	0.061	0.58	1.95	0.86	0.43	3.84	1.76	2.64	8.25
Disk Harrow	42'	MFWD 225	99,500	180	10	0.046	0.44	1.48	1.29	0.33	3.55	2.63	2.01	8.20
Ditcher		2WD 130	4,910	200	10	0.020	0.19	0.36	0.03	0.06	0.65	0.05	0.34	1.05
Ditcher (1m/160a)		2WD 130	4,910	200	10	0.009	0.09	0.17	0.01	0.02	0.30	0.02	0.16	0.49
Fert Appl (Liquid)	4R-38	MFWD 150	13,500	150	8	0.154	2.22	3.27	1.39	0.69	7.58	1.51	4.01	13.11
Fert Appl (Liquid)	6R-30	MFWD 170	16,300	150	8	0.130	1.88	3.13	1.42	0.68	7.13	1.55	4.16	12.84
Fert Appl (Liquid)	6R-38	MFWD 170	14,500	150	8	0.103	1.48	2.47	0.99	0.53	5.50	1.08	3.28	9.88
Fert Appl (Liquid)	8R-30	MFWD 190	15,200	150	8	0.098	1.41	2.63	0.99	0.49	5.53	1.08	2.99	9.60
Fert Appl (Liquid)	8R-38	MFWD 190	17,300	150	8	0.077	1.11	2.08	0.89	0.38	4.48	0.97	2.36	7.82
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	16,900	150	8	0.051	0.74	1.38	0.58	0.25	2.97	0.63	1.57	5.18
Fert Appl (Liquid)	10R-30	MFWD 225	18,600	150	8	0.078	1.13	2.49	0.97	0.55	5.15	1.06	3.38	9.59
Fert Appl (Liquid)	10R-38	MFWD 225	20,300	150	8	0.061	0.89	1.96	0.83	0.43	4.13	0.91	2.66	7.71
Fert Appl (Liquid)	12R-30	MFWD 225	19,400	150	8	0.078	1.13	2.49	1.01	0.55	5.19	1.10	3.38	9.68
Fert Appl (Liquid)	12R-38	MFWD 225	17,400	150	8	0.051	0.74	1.64	0.59	0.36	3.34	0.65	2.22	6.22
Field Cult & Inc	12'	2WD 150	13,605	100	10	0.132	1.90	2.79	0.44	0.52	5.67	1.83	3.04	10.55
Field Cult & Inc	24'	MFWD 170	24,679	100	10	0.066	0.95	1.58	0.40	0.34	3.28	1.66	2.10	7.05

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2015.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
-----\$/acre-----														
Field Cultivate	12'	2WD 150	16,600	100	10	0.124	1.19	2.63	0.51	0.49	4.83	2.10	2.86	9.81
Field Cultivate	24'	MFWD 170	26,000	100	10	0.062	0.59	1.49	0.40	0.32	2.81	1.64	1.97	6.44
Field Cultivate	32'	MFWD 190	39,500	100	10	0.046	0.44	1.25	0.46	0.23	2.39	1.87	1.42	5.69
Field Cultivate	42'	MFWD 225	51,500	100	10	0.035	0.34	1.12	0.45	0.25	2.17	1.86	1.53	5.57
Field Cultivate	50'	MFWD 225	61,300	100	10	0.029	0.28	0.94	0.45	0.21	1.90	1.86	1.28	5.05
Gate Installer		2WD 130	2,960	10	10	0.020	0.38	0.36	0.17	0.06	0.98	0.57	0.34	1.91
Grain Drill	12'	2WD 130	22,700	150	8	0.157	3.01	2.88	1.33	0.47	7.70	2.46	2.74	12.92
Grain Drill	15'	MFWD 150	30,500	150	8	0.125	2.41	2.65	1.43	0.56	7.07	2.64	3.26	12.98
Grain Drill	20'	MFWD 170	37,600	150	8	0.094	1.81	2.26	1.32	0.49	5.89	2.44	2.99	11.34
Grain Drill	24'	MFWD 190	56,700	150	8	0.078	1.50	2.10	1.67	0.39	5.67	3.07	2.39	11.15
Grain Drill	30'	MFWD 225	61,300	150	8	0.062	1.20	1.99	1.44	0.44	5.09	2.66	2.70	10.45
Grain Drill & Pre	12'	2WD 130	28,700	150	8	0.169	3.24	3.10	1.82	0.50	8.68	3.35	2.95	14.99
Grain Drill & Pre	15'	MFWD 150	36,500	150	8	0.135	2.59	2.86	1.85	0.60	7.92	3.41	3.51	14.85
Grain Drill & Pre	20'	MFWD 170	43,500	150	8	0.101	1.94	2.43	1.65	0.52	6.57	3.05	3.23	12.85
Grain Drill & Pre	24'	MFWD 190	59,500	150	8	0.084	1.62	2.26	1.88	0.42	6.20	3.47	2.57	12.26
Grain Drill & Pre	30'	MFWD 225	68,700	150	8	0.067	1.29	2.14	1.74	0.47	5.66	3.21	2.91	11.79
Harrow	13'	2WD 130	4,360	200	10	0.119	1.14	2.19	0.18	0.35	3.87	0.26	2.08	6.23
Harrow	21'	2WD 150	5,400	200	10	0.073	0.70	1.56	0.13	0.29	2.70	0.20	1.70	4.61
Harrow	40'	MFWD 190	16,700	200	10	0.038	0.37	1.04	0.22	0.19	1.83	0.33	1.18	3.34
Harrow	47'	MFWD 190	21,000	200	10	0.033	0.31	0.88	0.24	0.16	1.61	0.35	1.00	2.97
Header - Corn	4R-38	240hp	25,147	300	8	0.201	2.52	6.80	1.26	3.38	13.97	1.83	12.95	28.77
Header - Corn	6R30"	240hp	43,500	300	8	0.170	2.13	5.76	1.85	2.86	12.61	2.69	10.96	26.27
Header - Corn	6R38"	240hp	44,700	300	8	0.134	1.68	4.54	1.50	2.26	10.00	2.18	8.65	20.84
Header - Corn	8R-30	240hp	56,200	300	8	0.127	1.60	4.32	1.79	2.14	9.86	2.60	8.22	20.70
Header - Corn	8R-38	275hp	57,600	300	8	0.100	1.26	3.91	1.45	3.06	9.69	2.11	11.71	23.52
Header - Corn	12R-20	275hp	76,400	300	8	0.127	1.60	4.95	2.43	3.87	12.86	3.54	14.81	31.22
Header - Corn	12R-30	275hp	87,700	300	8	0.085	1.06	3.30	1.86	2.58	8.81	2.71	9.87	21.40
Header - Rice (CL)	22' Rigid	240hp	21,887	300	8	0.288	3.62	9.76	1.57	4.85	19.81	2.29	18.58	40.68
Header - Rice (CL)	25' Rigid	240hp	51,600	300	8	0.253	3.18	8.59	3.27	4.27	19.32	4.75	16.35	40.43
Header - Rice (CL)	30' Rigid	275hp	59,000	300	8	0.211	2.65	8.20	3.12	6.41	20.38	4.53	24.54	49.46
Header - Rice (SL)	22' Rigid	240hp	21,887	300	8	0.250	3.13	8.45	1.36	4.20	17.17	1.98	16.10	35.26
Header - Rice (SL)	25' Rigid	240hp	51,600	300	8	0.220	2.76	7.44	2.83	3.70	16.74	4.12	14.17	35.04
Header - Rice (SL)	30' Rigid	275hp	59,000	300	8	0.183	2.30	7.10	2.70	5.55	17.66	3.92	21.27	42.87
Header - Soybean	15' Flex	240hp	0	300	8	0.170	2.13	5.76	0.00	2.86	10.76	0.00	10.96	21.73
Header - Soybean	18' Flex	240hp	20,309	300	8	0.141	1.78	4.80	0.72	2.38	9.69	1.04	9.14	19.87
Header - Soybean	22' Flex	240hp	28,900	300	8	0.116	1.45	3.92	0.83	1.95	8.17	1.21	7.47	16.87
Header - Soybean	25' Flex	275hp	32,700	300	8	0.102	1.28	3.96	0.83	3.09	9.17	1.21	11.85	22.24
Header - Soybean	30' Flex	275hp	31,200	300	8	0.085	1.06	3.30	0.66	2.58	7.61	0.96	9.87	18.45
Header Wheat/Sorghum	18' Rigid	240hp	19,069	300	8	0.141	1.78	4.80	0.67	2.38	9.64	0.98	9.14	19.77
Header Wheat/Sorghum	22' Rigid	240hp	19,500	300	8	0.116	1.45	3.92	0.56	1.95	7.90	0.82	7.47	16.20
Header Wheat/Sorghum	25' Rigid	240hp	27,300	300	8	0.102	1.28	3.45	0.69	1.71	7.15	1.01	6.58	14.75
Header Wheat/Sorghum	30' Rigid	275hp	30,300	300	8	0.085	1.06	3.30	0.64	2.58	7.59	0.93	9.87	18.41
Heavy Disk	14'	MFWD 150	21,900	180	10	0.145	1.40	3.08	0.88	0.65	6.02	1.81	3.79	11.62
Heavy Disk	21'	MFWD 170	34,500	180	10	0.097	0.93	2.33	0.93	0.50	4.70	1.90	3.09	9.70
Heavy Disk	27'	MFWD 190	41,400	180	10	0.075	0.72	2.02	0.87	0.37	4.00	1.77	2.30	8.08
LA Boom Sprayer	30 ft	MFWD 150	3,000	150	10	0.059	0.57	1.26	0.13	0.26	2.24	0.14	1.55	3.94
Land Plane	40'x10'	MFWD 190	6,020	200	10	0.242	2.32	6.50	0.29	1.21	10.33	0.74	7.39	18.47
Land Plane	50'x16'	MFWD 190	12,300	200	10	0.151	1.45	4.06	0.37	0.75	6.65	0.95	4.62	12.22
LARice Backhoe-Rrmnt	2 ft	MFWD 150	6,000	100	10	0.500	4.80	10.57	2.64	2.23	20.25	3.54	12.98	36.78
LARice Land Level	13 ft	MFWD 150	7,500	200	15	0.190	1.82	4.02	0.15	0.84	6.85	0.62	4.93	12.42
LARice Levee Plow	8 ft	4WD 300	4,600	150	10	0.050	0.48	2.11	0.07	0.43	3.10	0.18	2.63	5.92
LARice Water Level	24 ft	4WD 300	3,500	100	15	0.149	1.43	6.34	0.23	1.29	9.31	0.46	7.91	17.68
Levee Splitter (1/80	2 blade	2WD 150	3,280	50	10	0.004	0.04	0.08	0.00	0.01	0.14	0.02	0.09	0.27
Lo-Till & Bed	4R-38	MFWD 190	5,100	150	12	0.145	1.39	3.90	0.26	0.72	6.29	0.46	4.43	11.19
Middle Buster	6R-38	MFWD 150	12,800	160	8	0.120	1.15	2.54	0.36	0.53	4.59	1.09	3.12	8.81
Middle Buster	8R-30	MFWD 190	20,800	160	8	0.114	1.09	3.05	0.55	0.57	5.28	1.69	3.48	10.46
Middle Buster	8R-38	MFWD 190	18,100	160	8	0.090	0.86	2.41	0.38	0.45	4.11	1.16	2.75	8.03
Middle Buster	8R-40 2x1	MFWD 190	29,200	160	8	0.060	0.57	1.61	0.41	0.30	2.89	1.25	1.83	5.98
Middle Buster	10R-30	MFWD 225	29,300	160	8	0.091	0.87	2.89	0.62	0.64	5.04	1.91	3.93	10.89
Middle Buster	10R-38	MFWD 225	32,100	160	8	0.072	0.69	2.28	0.54	0.50	4.02	1.65	3.10	8.78
Middle Buster	12R-38	MFWD 225	29,200	160	8	0.060	0.57	1.90	0.41	0.42	3.31	1.25	2.58	7.16
Mulcher Plow	30'	MFWD 225	0	100	10	0.068	0.65	2.16	0.00	0.48	3.29	0.00	2.93	6.22
NT Grain Drill	12'	2WD 130	42,000	150	8	0.163	3.14	3.00	2.57	0.49	9.21	4.74	2.86	16.82
NT Grain Drill	15'	MFWD 150	48,800	150	8	0.130	2.51	2.77	2.39	0.58	8.26	4.41	3.40	16.08
NT Grain Drill	20'	MFWD 170	64,400	150	8	0.098	1.88	2.35	2.37	0.51	7.12	4.36	3.12	14.61
NT Grain Drill	24'	MFWD 190	79,200	150	8	0.081	1.57	2.19	2.43	0.40	6.60	4.47	2.49	13.57
NT Grain Drill	30'	MFWD 225	90,600	150	8	0.065	1.25	2.07	2.22	0.46	6.02	4.09	2.81	12.93
NT Grain Drill & Pre	12'	2WD 130	39,500	150	8	0.176	3.38	3.23	2.61	0.53	9.75	4.81	3.08	17.65
NT Grain Drill & Pre	15'	MFWD 150	54,800	150	8	0.141	2.70	2.98	2.89	0.63	9.21	5.33	3.66	18.22
NT Grain Drill & Pre	20'	MFWD 170	70,400	150	8	0.105	2.03	2.53	2.79	0.55	7.91	5.14	3.36	16.42
NT Grain Drill & Pre	24'	MFWD 190	85,200	150	8	0.088	1.69	2.36	2.81	0.44	7.31	5.18	2.68	15.18
NT Grain Drill & Pre	30'	MFWD 225	98,000	150	8	0.070	1.35	2.23	2.59	0.49	6.68	4.77	3.03	14.49
NT Plant&Pre-Folding	8R-38	MFWD 170	48,000	150	8	0.083	1.60	2.00	1.50	0.43	5.55	2.77	2.65	10.98

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, (Continued) and direct and fixed cost per acre, Louisiana 2015.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	---Fixed---		Total Cost
									Imp.	P.U.		Imp.	P.U.	
-----\$/acre-----														
NT Grain Drill & Pre	15'	MFWD 150	54,800	150	8	0.141	2.70	2.98	2.89	0.63	9.21	5.33	3.66	18.22
NT Grain Drill & Pre	20'	MFWD 170	70,400	150	8	0.105	2.03	2.53	2.79	0.55	7.91	5.14	3.36	16.42
NT Grain Drill & Pre	24'	MFWD 190	85,200	150	8	0.088	1.69	2.36	2.81	0.44	7.31	5.18	2.68	15.18
NT Grain Drill & Pre	30'	MFWD 225	98,000	150	8	0.070	1.35	2.23	2.59	0.49	6.68	4.77	3.03	14.49
NT Plant&Pre-Folding	8R-38	MFWD 170	48,000	150	8	0.083	1.60	2.00	1.50	0.43	5.55	2.77	2.65	10.98
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	80,800	150	8	0.055	1.06	1.33	1.68	0.29	4.38	3.10	1.77	9.25
NT Plant&Pre-Folding	10R-30	MFWD 190	57,555	150	8	0.084	1.62	2.26	1.82	0.42	6.14	3.36	2.57	12.08
NT Plant&Pre-Folding	10R-38	MFWD 190	52,893	150	8	0.066	1.28	1.78	1.32	0.33	4.72	2.43	2.03	9.19
NT Plant&Pre-Folding	12R-20	MFWD 190	70,200	150	8	0.105	2.03	2.83	2.78	0.52	8.17	5.12	3.22	16.53
NT Plant&Pre-Folding	12R-30	MFWD 190	72,000	150	8	0.070	1.35	1.88	1.90	0.35	5.49	3.50	2.14	11.15
NT Plant&Pre-Folding	12R-38	MFWD 190	80,800	150	8	0.055	1.06	1.49	1.68	0.27	4.52	3.10	1.69	9.32
NT Plant&Pre-Folding	16R-30	MFWD 190	101,000	150	8	0.052	1.01	1.41	2.00	0.26	4.69	3.69	1.61	10.00
NT Plant&Pre-Folding	23R-15	MFWD 190	129,000	150	8	0.073	1.41	1.96	3.55	0.36	7.29	6.54	2.23	16.08
NT Plant&Pre-Folding	24R-20	MFWD 190	143,000	150	8	0.052	1.01	1.41	2.83	0.26	5.53	5.22	1.61	12.36
NT Plant&Pre-Folding	24R-30	MFWD 190	188,000	150	8	0.035	0.67	0.94	2.48	0.17	4.28	4.57	1.07	9.93
NT Plant&Pre-Rigid	4R-30	2WD 130	26,600	150	8	0.211	4.06	3.87	2.11	0.63	10.68	3.88	3.69	18.27
NT Plant&Pre-Rigid	4R-38	2WD 130	28,800	150	8	0.166	3.19	3.05	1.79	0.50	8.55	3.31	2.91	14.77
NT Plant&Pre-Rigid	6R-30	MFWD 150	36,900	150	8	0.141	2.70	2.98	1.95	0.63	8.27	3.59	3.66	15.53
NT Plant&Pre-Rigid	6R-38	MFWD 150	33,100	150	8	0.111	2.13	2.35	1.38	0.49	6.37	2.54	2.89	11.81
NT Plant&Pre-Rigid	8R-22	MFWD 170	26,219	150	8	0.143	2.76	3.45	1.41	0.75	8.37	2.60	4.57	15.56
NT Plant&Pre-Rigid	8R-30	MFWD 170	42,200	150	8	0.105	2.03	2.53	1.67	0.55	6.79	3.08	3.36	13.24
NT Plant&Pre-Rigid	8R-38	MFWD 170	39,300	150	8	0.077	1.48	1.85	1.13	0.40	4.87	2.09	2.45	9.42
NT Plant&Pre-Rigid	10R-30	MFWD 190	46,300	150	8	0.084	1.62	2.26	1.46	0.42	5.78	2.70	2.57	11.06
NT Plant&Pre-Rigid	12R-20	MFWD 190	52,100	150	8	0.105	2.03	2.83	2.06	0.52	7.46	3.80	3.22	14.49
NT Plant&Pre-Rigid	12R-30	MFWD 190	64,700	150	8	0.070	1.35	1.88	1.71	0.35	5.30	3.15	2.14	10.60
Paratill & Bed	4R-30	MFWD 225	16,500	150	12	0.204	1.96	6.48	1.21	1.44	11.10	2.02	8.79	21.93
Paratill & Bed	4R-38	MFWD 225	15,200	150	12	0.160	1.54	5.10	0.88	1.13	8.66	1.47	6.92	17.06
Paratill & Bed	6R-30	MFWD 225	22,600	150	12	0.136	1.30	4.32	1.11	0.96	7.70	1.85	5.86	15.42
Paratill & Bed	6R-38	MFWD 225	20,300	150	12	0.107	1.03	3.41	0.78	0.75	5.99	1.31	4.62	11.93
Paratill & Bed	8R-30	MFWD 225	28,100	150	12	0.102	0.98	3.24	1.03	0.72	5.98	1.72	4.39	12.10
Paratill & Bed	8R382X1	MFWD 225	69,100	150	12	0.053	0.51	1.70	1.34	0.37	3.94	2.23	2.31	8.49
Paratill & Bed Fold.	8R-38	MFWD 225	54,400	150	12	0.080	0.77	2.56	1.58	0.57	5.49	2.64	3.47	11.61
Paratill & Bed Fold.	12R-38	MFWD 225	69,100	150	12	0.053	0.51	1.70	1.34	0.37	3.94	2.23	2.31	8.49
Paratill & Bed Rigid	8R-38	MFWD 225	24,500	150	12	0.080	0.77	2.56	0.71	0.57	4.62	1.19	3.47	9.29
Pipe Drag	30'	2WD 150	500	100	12	0.051	0.49	1.09	0.00	0.20	1.80	0.02	1.19	3.02
Pipe Spool 160ac	1/4m roll	2WD 130	3,380	15	12	0.003	0.09	0.05	0.00	0.00	0.16	0.06	0.05	0.28
Pipe Trailer 1m/160a	30'	2WD 130	1,330	100	15	0.003	0.18	0.06	0.00	0.01	0.26	0.00	0.06	0.33
Plant & Pre Folding	8R-38	MFWD 170	45,900	150	8	0.080	1.54	1.92	1.38	0.41	5.26	2.54	2.55	10.36
Plant & Pre Folding	8R38 2x1	MFWD 170	77,600	150	8	0.053	1.02	1.28	1.55	0.27	4.14	2.86	1.70	8.70
Plant & Pre Folding	10R-30	MFWD 190	52,920	150	8	0.081	1.55	2.17	1.61	0.40	5.75	2.96	2.47	11.20
Plant & Pre Folding	10R-38	MFWD 190	48,258	150	8	0.064	1.22	1.71	1.15	0.32	4.42	2.13	1.95	8.51
Plant & Pre Folding	12R-20	MFWD 190	66,900	150	8	0.101	1.94	2.72	2.54	0.50	7.72	4.69	3.09	15.51
Plant & Pre Folding	12R-30	MFWD 190	68,700	150	8	0.067	1.29	1.81	1.74	0.33	5.19	3.21	2.06	10.47
Plant & Pre Folding	12R-38	MFWD 190	77,600	150	8	0.053	1.02	1.43	1.55	0.26	4.28	2.86	1.62	8.77
Plant & Pre Folding	16R-30	MFWD 190	96,200	150	8	0.050	0.97	1.36	1.83	0.25	4.42	3.37	1.54	9.34
Plant & Pre Folding	23R-15	MFWD 190	123,000	150	8	0.070	1.35	1.88	3.25	0.35	6.84	5.99	2.14	14.98
Plant & Pre Folding	24R-20	MFWD 190	137,000	150	8	0.050	0.97	1.36	2.60	0.25	5.19	4.80	1.54	11.55
Plant & Pre Folding	24R-30	MFWD 190	182,000	150	8	0.033	0.64	0.90	2.30	0.16	4.03	4.25	1.03	9.32
Plant & Pre Rigid	4R-30	2WD 130	22,500	150	8	0.203	3.89	3.72	1.71	0.61	9.94	3.15	3.55	16.65
Plant & Pre Rigid	4R-38	2WD 130	27,700	150	8	0.159	3.07	2.93	1.66	0.48	8.14	3.06	2.79	14.00
Plant & Pre Rigid	6R-30	MFWD 150	33,100	150	8	0.135	2.59	2.86	1.68	0.60	7.74	3.09	3.51	14.36
Plant & Pre Rigid	6R-38	MFWD 150	31,400	150	8	0.106	2.05	2.26	1.25	0.47	6.04	2.31	2.77	11.14
Plant & Pre Rigid	8R-22	MFWD 170	23,550	150	8	0.138	2.65	3.31	1.22	0.72	7.90	2.24	4.39	14.54
Plant & Pre Rigid	8R-30	MFWD 170	40,100	150	8	0.101	1.94	2.43	1.52	0.52	6.44	2.81	3.23	12.48
Plant & Pre Rigid	8R-38	MFWD 170	37,600	150	8	0.080	1.54	1.92	1.13	0.41	5.01	2.08	2.55	9.65
Plant & Pre Rigid	10R-30	MFWD 190	43,600	150	8	0.081	1.55	2.17	1.32	0.40	5.47	2.44	2.47	10.39
Plant & Pre Rigid	12R-20	MFWD 190	48,900	150	8	0.101	1.94	2.72	1.86	0.50	7.04	3.43	3.09	13.56
Plant & Pre Rigid	12R-30	MFWD 190	61,400	150	8	0.067	1.29	1.81	1.55	0.33	5.01	2.87	2.06	9.94
Plant - Folding	8R-38	MFWD 170	39,900	150	8	0.074	1.43	1.78	1.11	0.38	4.72	2.05	2.37	9.14
Plant - Folding	8R-38 2x1	MFWD 170	70,200	150	8	0.049	0.95	1.18	1.30	0.25	3.70	2.40	1.57	7.69
Plant - Folding	10R-30	MFWD 190	47,426	150	8	0.075	1.44	2.02	1.34	0.37	5.18	2.47	2.29	9.95
Plant - Folding	10R-38	MFWD 190	43,011	150	8	0.059	1.14	1.59	0.95	0.29	3.99	1.76	1.81	7.57
Plant - Folding	12R-20	MFWD 190	61,000	150	8	0.094	1.81	2.52	2.15	0.47	6.96	3.97	2.87	13.81
Plant - Folding	12R-30	MFWD 190	61,400	150	8	0.062	1.20	1.68	1.44	0.31	4.65	2.66	1.91	9.23
Plant - Folding	12R-38	MFWD 190	70,200	150	8	0.049	0.95	1.32	1.30	0.24	3.83	2.40	1.51	7.75
Plant - Folding	16R-30	MFWD 190	88,900	150	8	0.047	0.90	1.26	1.57	0.23	3.97	2.89	1.43	8.30
Plant - Folding	23R-15	MFWD 190	116,000	150	8	0.065	1.25	1.75	2.84	0.32	6.18	5.24	1.99	13.43
Plant - Folding	24R-20	MFWD 190	129,000	150	8	0.047	0.90	1.26	2.28	0.23	4.68	4.20	1.43	10.32
Plant - Folding	24R-30	MFWD 190	172,000	150	8	0.031	0.60	0.84	2.02	0.15	3.62	3.73	0.95	8.32
Plant - Rigid	4R-30	2WD 130	19,600	150	8	0.188	3.62	3.45	1.38	0.56	9.03	2.55	3.29	14.88
Plant - Rigid	4R-38	2WD 130	21,500	150	8	0.148	2.85	2.72	1.19	0.44	7.21	2.20	2.59	12.01
Plant - Rigid	6R-30	MFWD 150	29,300	150	8	0.125	2.41	2.65	1.38	0.56	7.01	2.54	3.26	12.82
Plant - Rigid	6R-38	MFWD 150	25,500	150	8	0.099	1.90	2.09	0.94	0.44	5.39	1.74	2.57	9.72
Plant - Rigid	8R-22	MFWD 170	18,473	150	8	0.127	2.45	3.06	0.88	0.66	7.07	1.63	4.06	12.77
Plant - Rigid	8R-30	MFWD 170	34,100	150	8	0.094	1.81	2.26	1.20	0.49	5.76	2.22	2.99	10.98
Plant - Rigid	8R-38	MFWD 170	31,700	150	8	0.074	1.43	1.78	0.88	0.38	4.49	1.63	2.37	8.49
Plant - Rigid	10R-30	MFWD 190	37,600	150	8	0.075	1.44	2.02	1.06	0.37	4.91	1.95	2.29	9.16
Plant - Rigid	12R-20	MFWD 190	42,900	150	8	0.094	1.81	2.52	1.51	0.47	6.32	2.79	2.87	11.99
Plant - Rigid	12R-30	MFWD 190	54,100	150	8	0.062	1.20	1.68	1.27	0.31	4.48	2.34	1.91	8.74
Plant - Rigid	15R-15	2WD 150	51,400	150	8	0.094	1.81	1.99	1.81	0.37	5.99	3.34	2.17	11.51
Pull Levee (1m/80a)	4 blade	2WD 50	3,180	100	10	0.003	0.03	0.02	0.00	0.00	0.06	0.01	0.01	0.08

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2015.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost	
									Imp.	P.U.		Imp.	P.U.		
			dollars	hours	years	hr/ac	-----\$/acre-----								
Rice Grain Cart	500 Bu	MFWD 190	24,700	200	12	0.057	0.54	1.53	0.38	0.28	2.74	0.63	1.74	5.12	
Rice Grain Cart	700 Bu	MFWD 190	34,200	200	12	0.063	0.60	1.70	0.58	0.31	3.21	0.97	1.93	6.12	
Roller	32'	MFWD 170	17,500	100	12	0.046	0.44	1.11	0.13	0.24	1.94	0.73	1.48	4.16	
Rotary Cutter	7'	MFWD 130	4,380	185	10	0.168	1.61	3.08	0.59	0.59	5.90	0.40	3.48	9.79	
Rotary Cutter	12'	2WD 150	12,600	185	10	0.098	0.94	2.07	1.00	0.38	4.41	0.68	2.26	7.36	
Rotary Cutter	15'	MFWD 150	19,000	185	10	0.078	0.75	1.66	1.21	0.35	3.97	0.82	2.04	6.84	
Row Cond & Inc	13'	2WD 130	13,300	100	10	0.137	1.98	2.52	0.45	0.41	5.38	1.87	2.41	9.67	
Row Cond & Inc	21'	2WD 170	19,700	100	10	0.085	1.22	2.04	0.42	0.41	4.11	1.71	2.53	8.36	
Row Cond & Inc	26'	MFWD 190	18,700	100	10	0.063	0.91	1.69	0.29	0.31	3.22	1.20	1.93	6.36	
Row Cond & Inc	38'	MFWD 225	27,100	100	10	0.047	0.67	1.49	0.31	0.33	2.83	1.30	2.03	6.16	
Row Cond & Inc	42'	MFWD 225	20,400	100	10	0.040	0.57	1.27	0.20	0.28	2.34	0.83	1.73	4.90	
Row Cond (Harrow)	13'	2WD 130	7,300	100	10	0.114	1.10	2.10	0.20	0.34	3.76	0.85	2.00	6.62	
Row Cond (Harrow)	21'	2WD 170	12,000	100	10	0.071	0.68	1.70	0.21	0.34	2.94	0.87	2.11	5.93	
Row Cond (Harrow)	27'	MFWD 190	12,400	100	10	0.057	0.55	1.53	0.17	0.28	2.55	0.72	1.75	5.03	
Row Cond (Harrow)	38'	MFWD 225	22,200	100	10	0.039	0.37	1.24	0.21	0.27	2.12	0.88	1.69	4.70	
Row Cond (Harrow)	42'	MFWD 225	15,582	100	10	0.035	0.34	1.12	0.13	0.25	1.85	0.56	1.53	3.95	
Row Cond (Plant)	13'	2WD 130	7,120	100	10	0.157	1.50	2.88	0.27	0.47	5.14	1.14	2.74	9.03	
Row Cond (Plant)	21'	2WD 170	11,700	100	10	0.097	0.93	2.33	0.28	0.47	4.02	1.16	2.89	8.07	
Row Cond (Plant)	27'	MFWD 190	12,400	100	10	0.078	0.75	2.10	0.24	0.39	3.49	0.99	2.39	6.88	
Row Cond (Plant)	38'	MFWD 225	16,587	100	10	0.053	0.51	1.70	0.22	0.37	2.82	0.90	2.31	6.04	
Row Cond (Plant)	42'	MFWD 225	15,582	100	10	0.048	0.46	1.54	0.18	0.34	2.54	0.77	2.09	5.41	
RT Cult (Early)	8R-30	2WD 170	20,774	200	12	0.103	0.99	2.47	1.02	0.50	4.99	1.00	3.06	9.05	
RT Cult (Early)	12R-30	2WD 190	29,998	200	12	0.068	0.66	1.84	0.98	0.30	3.79	0.96	1.87	6.63	
RT Cult (Late)	8R-30	2WD 170	20,774	200	12	0.128	1.23	3.09	1.28	0.62	6.23	1.25	3.83	11.32	
RT Cult (Late)	12R-30	2WD 190	29,998	200	12	0.085	0.82	2.30	1.23	0.38	4.74	1.20	2.34	8.29	
RT Cult + PD (Early)	8R-30	2WD 150	26,264	200	12	0.110	1.58	2.32	1.38	0.43	5.73	1.35	2.53	9.61	
RT Cult + PD (Early)	12R-30	MFWD 225	35,493	200	12	0.073	1.05	2.32	1.24	0.51	5.14	1.21	3.15	9.52	
RT Cult + PD (Late)	8R-30	2WD 170	26,264	200	12	0.137	1.97	3.29	1.73	0.67	7.67	1.68	4.08	13.45	
RT Cult + PD (Late)	12R-30	2WD 190	35,493	200	12	0.091	1.31	2.45	1.55	0.40	5.74	1.52	2.49	9.76	
Spin Spreader	5 ton	MFWD 190	10,800	100	8	0.042	0.80	1.12	0.25	0.21	2.40	0.49	1.28	4.18	
Spin Spreader	5 ton	MFWD 190	10,800	100	8	0.042	0.80	1.12	0.25	0.21	2.40	0.49	1.28	4.18	
Spray (Band)	27'	MFWD 170	5,940	200	8	0.062	0.90	1.50	0.17	0.32	2.90	0.20	1.99	5.10	
Spray (Band)	40'	MFWD 170	7,350	200	8	0.042	0.60	1.01	0.14	0.22	1.99	0.16	1.34	3.50	
Spray (Band)	50'	MFWD 170	6,730	200	8	0.033	0.48	0.81	0.10	0.17	1.58	0.12	1.07	2.78	
Spray (Band)	53'	MFWD 170	7,650	200	8	0.031	0.45	0.76	0.11	0.16	1.50	0.13	1.01	2.65	
Spray (Band)	60'	MFWD 170	10,000	200	8	0.028	0.40	0.67	0.13	0.14	1.36	0.15	0.89	2.41	
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,810	200	8	0.130	1.87	2.75	0.35	0.58	5.56	0.41	3.38	9.35	
Spray (Bcast/HB)	20' Rigid	2WD 50	6,840	200	8	0.084	1.21	0.59	0.27	0.04	2.13	0.31	0.29	2.74	
Spray (Bcast/HB)	27' Fold	MFWD 170	10,700	200	8	0.062	0.90	1.50	0.31	0.32	3.04	0.36	1.99	5.40	
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,890	200	8	0.062	0.90	1.50	0.23	0.32	2.96	0.26	1.99	5.22	
Spray (Bcast/HB)	30' Fold	MFWD 170	15,300	200	8	0.056	0.81	1.35	0.40	0.29	2.86	0.47	1.79	5.12	
Spray (Bcast/HB)	40' Fold	MFWD 170	17,400	200	8	0.042	0.60	1.01	0.34	0.22	2.18	0.40	1.34	3.93	
Spray (Bcast/HB/HD)	27'	MFWD 170	22,400	200	8	0.062	0.90	1.50	0.65	0.32	3.39	0.76	1.99	6.14	
Spray (Bcast/HB/HD)	40'	MFWD 170	32,200	200	8	0.042	0.60	1.01	0.63	0.22	2.48	0.74	1.34	4.57	
Spray (Broadcast)	27'	MFWD 170	5,940	200	8	0.062	0.90	1.50	0.17	0.32	2.90	0.20	1.99	5.10	
Spray (Broadcast)	40'	MFWD 170	7,350	200	8	0.042	0.60	1.01	0.14	0.22	1.99	0.16	1.34	3.50	
Spray (Broadcast)	50'	MFWD 170	6,730	200	8	0.033	0.48	0.81	0.10	0.17	1.58	0.12	1.07	2.78	
Spray (Broadcast)	53'	MFWD 170	7,650	200	8	0.031	0.45	0.76	0.11	0.16	1.50	0.13	1.01	2.65	
Spray (Broadcast)	60'	MFWD 170	10,000	200	8	0.028	0.40	0.67	0.13	0.14	1.36	0.15	0.89	2.41	
Spray (Direct/Hood)	8R-30	MFWD 170	17,700	200	8	0.084	1.21	2.02	0.70	0.44	4.39	0.81	2.69	7.89	
Spray (Direct/Hood)	8R-38	MFWD 170	18,900	200	8	0.066	0.96	1.60	0.59	0.34	3.50	0.68	2.12	6.32	
Spray (Direct/Hood)	12R-30	MFWD 170	25,600	200	8	0.056	0.81	1.35	0.67	0.29	3.13	0.78	1.79	5.71	
Spray (Direct/Hood)	12R-38	MFWD 170	26,200	200	8	0.044	0.64	1.06	0.54	0.23	2.48	0.63	1.41	4.54	
Spray (Direct/Layby)	8R-30	MFWD 170	12,300	200	8	0.084	1.21	2.02	0.48	0.44	4.17	0.56	2.69	7.43	
Spray (Direct/Layby)	8R-38	MFWD 170	12,200	200	8	0.066	0.96	1.60	0.38	0.34	3.29	0.44	2.12	5.87	
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	16,200	200	8	0.044	0.64	1.06	0.33	0.23	2.27	0.39	1.41	4.08	
Spray (Direct/Layby)	10R-30	MFWD 170	12,200	200	8	0.067	0.97	1.62	0.38	0.35	3.33	0.44	2.15	5.94	
Spray (Direct/Layby)	12R-30	MFWD 170	17,900	200	8	0.056	0.81	1.35	0.47	0.29	2.93	0.55	1.79	5.27	
Spray (Direct/Layby)	12R-38	MFWD 170	16,200	200	8	0.044	0.64	1.06	0.33	0.23	2.27	0.39	1.41	4.08	
Spray (Direct/Layby)	16R-20	MFWD 170	10,000	200	8	0.063	0.91	1.51	0.29	0.33	3.06	0.34	2.01	5.42	
Spray (Spot)	27'	MFWD 170	5,940	200	8	0.062	0.90	1.50	0.17	0.32	2.90	0.20	1.99	5.10	
Spray (Spot)	40'	MFWD 170	7,350	200	8	0.042	0.60	1.01	0.14	0.22	1.99	0.16	1.34	3.50	
Spray (Spot)	50'	MFWD 170	7,420	200	8	0.033	0.48	0.81	0.11	0.17	1.59	0.13	1.07	2.80	
Spray (Spot)	53'	MFWD 170	7,650	200	8	0.031	0.45	0.76	0.11	0.16	1.50	0.13	1.01	2.65	
Spray (Spot)	60'	MFWD 170	10,000	200	8	0.028	0.40	0.67	0.13	0.14	1.36	0.15	0.89	2.41	
Stalk Shredder	14'	MFWD 150	13,200	200	10	0.117	1.13	2.49	1.36	0.52	5.51	0.79	3.06	9.36	
Stalk Shredder	20'	MFWD 150	30,500	200	10	0.082	0.79	1.74	2.20	0.36	5.10	1.28	2.14	8.53	
Stalk Shredder-Flail	12'	MFWD 150	15,800	200	10	0.137	1.32	2.90	1.90	0.61	6.74	1.10	3.57	11.42	
Stalk Shredder-Flail	20'	MFWD 150	26,900	200	10	0.082	0.79	1.74	1.94	0.36	4.84	1.13	2.14	8.12	
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	1.96	5.47	0.24	1.02	8.70	0.57	6.22	15.49	
Subsoiler	4 shank	MFWD 225	8,230	100	15	0.153	1.47	4.87	0.42	1.08	7.85	0.99	6.61	15.46	
Subsoiler	5 shank	MFWD 225	11,100	100	15	0.122	1.17	3.88	0.45	0.86	6.37	1.06	5.26	12.71	
Subsoiler low-till	4 shank	MFWD 225	12,400	100	15	0.153	1.47	4.87	0.63	1.08	8.06	1.49	6.61	16.18	
Subsoiler low-till	6 shank	MFWD 225	14,800	100	15	0.102	0.98	3.24	0.50	0.72	5.44	1.18	4.39	11.03	
Subsoiler low-till	8 shank	MFWD 225	19,600	100	15	0.076	0.73	2.42	0.50	0.54	4.20	1.18	3.29	8.67	
TerraTill Bed w/roll	4R-38	MFWD 225	14,300	150	12	0.160	1.54	5.10	0.83	1.13	8.61	1.38	6.92	16.92	

Appendix Table 6. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2015.

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-----							
TerraTill Bed w/roll	6R-38	MFWD 225	19,400	150	12	0.107	1.03	3.41	0.75	0.75	5.95	1.25	4.62	11.84
TerraTill Bed w/roll	4R-30	MFWD 225	14,300	150	12	0.204	1.96	6.48	1.05	1.44	10.94	1.75	8.79	21.49
TerraTill Bed w/roll	6R-30	MFWD 225	15,310	150	12	0.136	1.30	4.32	0.75	0.96	7.34	1.25	5.86	14.46
Boll Buggy-1st Pick	2R38*157hp	MFWD 190	26,200	200	10	0.519	4.98	13.92	3.40	2.59	24.91	6.66	15.83	47.41
Boll Buggy-1st pick	4R2x1260hp	MFWD 190	26,200	200	10	0.172	1.65	4.61	1.12	0.86	8.26	2.20	5.25	15.72
Boll Buggy-1st pick	4R30*255hp	MFWD 190	26,200	200	10	0.327	3.14	8.77	2.14	1.63	15.69	4.19	9.97	29.87
Boll Buggy-1st pick	4R30*325hp	MFWD 190	30,600	200	10	0.327	3.14	8.77	2.50	1.63	16.05	4.90	9.97	30.93
Boll Buggy-1st pick	4R38*255hp	MFWD 190	30,600	200	10	0.257	2.47	6.90	1.97	1.28	12.64	3.86	7.85	24.36
Boll Buggy-1st pick	4R38*325hp	MFWD 190	30,600	200	10	0.257	2.47	6.90	1.97	1.28	12.64	3.86	7.85	24.36
Boll Buggy-1st pick	5R30*255hp	MFWD 190	30,600	200	10	0.261	2.51	7.01	2.00	1.30	12.84	3.92	7.98	24.75
Boll Buggy-1st pick	5R38*255hp	MFWD 190	30,600	200	10	0.207	1.98	5.55	1.58	1.03	10.16	3.10	6.31	19.58
Boll Buggy-1st pick	6R30*325hp	MFWD 190	30,600	200	10	0.218	2.09	5.84	1.66	1.09	10.70	3.26	6.65	20.62
Boll Buggy-1st pick	6R38*325hp	MFWD 190	30,600	200	10	0.172	1.65	4.61	1.31	0.86	8.45	2.58	5.25	16.28
Boll Buggy-2nd pick	2R38*157hp	MFWD 190	30,600	200	10	0.440	4.22	11.79	3.36	2.20	21.58	6.59	13.41	41.59
Boll Buggy-2nd pick	4R2x1260hp	MFWD 190	30,600	200	10	0.145	1.40	3.91	1.11	0.72	7.15	2.18	4.44	13.79
Boll Buggy-2nd pick	4R30*255hp	MFWD 190	30,600	200	10	0.277	2.66	7.43	2.12	1.38	13.60	4.15	8.45	26.20
Boll Buggy-2nd pick	4R30*325hp	MFWD 190	30,600	200	10	0.277	2.66	7.43	2.12	1.38	13.60	4.15	8.45	26.20
Boll Buggy-2nd pick	4R38 255hp	MFWD 190	30,600	200	10	0.218	2.09	5.85	1.67	1.09	10.70	3.27	6.65	20.63
Boll Buggy-2nd pick	4R38 325hp	MFWD 190	30,600	200	10	0.218	2.09	5.85	1.67	1.09	10.70	3.27	6.65	20.63
Boll Buggy-2nd pick	5R30*255hp	MFWD 190	30,600	200	10	0.221	2.12	5.94	1.69	1.10	10.88	3.32	6.76	20.96
Boll Buggy-2nd pick	5R38*255hp	MFWD 190	30,600	200	10	0.175	1.68	4.70	1.34	0.87	8.60	2.62	5.34	16.58
Boll Buggy-2nd pick	6R30*325hp	MFWD 190	30,600	200	10	0.184	1.77	4.95	1.41	0.92	9.06	2.76	5.63	17.47
Boll Buggy-2nd pick	6R38*325hp	MFWD 190	30,600	200	10	0.145	1.40	3.91	1.11	0.72	7.15	2.18	4.44	13.79
Boll Buggy-Stripper	13' Bcast	MFWD 150	30,600	200	10	0.251	2.41	5.32	1.92	1.12	10.79	3.77	6.54	21.10
Boll Buggy-Stripper	16' Bcast	MFWD 150	30,600	200	10	0.204	1.96	4.32	1.56	0.91	8.77	3.06	5.31	17.15
Boll Buggy-Stripper	19' Bcast	MFWD 150	30,600	200	10	0.172	1.65	3.64	1.31	0.77	7.38	2.58	4.47	14.44
Boll Buggy-Stripper	4R30*2X1Br	MFWD 150	30,600	200	10	0.218	2.09	4.61	1.66	0.97	9.35	3.26	5.66	18.29
Boll Buggy-Stripper	4R30*Brush	MFWD 150	30,600	200	10	0.327	3.14	6.92	2.50	1.46	14.03	4.90	8.50	27.44
Boll Buggy-Stripper	4R38*2X1Br	MFWD 150	30,600	200	10	0.172	1.65	3.64	1.31	0.77	7.38	2.58	4.47	14.44
Boll Buggy-Stripper	4R38*Brush	MFWD 150	30,600	200	10	0.257	2.47	5.45	1.97	1.15	11.05	3.86	6.69	21.60
Boll Buggy-Stripper	5R30*Brush	MFWD 150	30,600	200	10	0.261	2.51	5.54	2.00	1.17	11.22	3.92	6.80	21.95
Boll Buggy-Stripper	5R38*Brush	MFWD 150	30,600	200	10	0.207	1.98	4.38	1.58	0.92	8.88	3.10	5.38	17.36
Boll Buggy-Stripper	6R30*Brush	MFWD 150	30,600	200	10	0.218	2.09	4.61	1.66	0.97	9.35	3.26	5.66	18.29
Module Builder-1st	4R-30(255)	MFWD 190	34,700	200	10	0.327	6.28	8.77	2.84	1.63	19.53	5.56	9.97	35.07
Module Builder-1st	4R-30(325)	MFWD 190	34,700	200	10	0.327	6.28	8.77	2.84	1.63	19.53	5.56	9.97	35.07
Module Builder-1st	4R-38(255)	MFWD 190	34,700	200	10	0.257	4.94	6.90	2.23	1.28	15.38	4.37	7.85	27.61
Module Builder-1st	4R-38(325)	MFWD 190	34,700	200	10	0.257	4.94	6.90	2.23	1.28	15.38	4.37	7.85	27.61
Module Builder-1st	4R2x1260hp	MFWD 190	34,700	200	10	0.172	3.30	4.61	1.49	0.86	10.28	2.92	5.25	18.46
Module Builder-1st	5R-30(255)	MFWD 190	34,700	200	10	0.261	5.02	7.01	2.27	1.30	15.62	4.44	7.98	28.05
Module Builder-1st	5R-38(255)	MFWD 190	34,700	200	10	0.207	3.97	5.55	1.79	1.03	12.36	3.51	6.31	22.19
Module Builder-1st	6R-30(325)	MFWD 190	34,700	200	10	0.218	4.19	5.84	1.89	1.09	13.02	3.70	6.65	23.38
Module Builder-1st	6R-38(325)	MFWD 190	34,700	200	10	0.172	3.30	4.61	1.49	0.86	10.28	2.92	5.25	18.46
Module Builder-2nd	2R-38(157)	MFWD 190	34,700	200	10	0.440	8.45	11.79	3.81	2.20	26.26	7.47	13.41	47.15
Module Builder-2nd	4R-30(255)	MFWD 190	34,700	200	10	0.277	5.32	7.43	2.40	1.38	16.54	4.71	8.45	29.70
Module Builder-2nd	4R-30(325)	MFWD 190	34,700	200	10	0.277	5.32	7.43	2.40	1.38	16.54	4.71	8.45	29.70
Module Builder-2nd	4R-38(255)	MFWD 190	34,700	200	10	0.218	4.19	5.85	1.89	1.09	13.02	3.70	6.65	23.39
Module Builder-2nd	4R-38(325)	MFWD 190	34,700	200	10	0.218	4.19	5.85	1.89	1.09	13.02	3.70	6.65	23.39
Module Builder-2nd	4R2x1 255	MFWD 190	34,700	200	10	0.145	2.80	3.91	1.26	0.72	8.70	2.47	4.44	15.63
Module Builder-2nd	5R-30(255)	MFWD 190	34,700	200	10	0.221	4.25	5.94	1.92	1.10	13.23	3.76	6.76	23.76
Module Builder-2nd	5R-38(255)	MFWD 190	34,700	200	10	0.175	3.36	4.70	1.52	0.87	10.47	2.98	5.34	18.80
Module Builder-2nd	6R-30(325)	MFWD 190	34,700	200	10	0.184	3.54	4.95	1.60	0.92	11.03	3.14	5.63	19.80
Module Builder-2nd	6R-38(325)	MFWD 190	34,700	200	10	0.145	2.80	3.91	1.26	0.72	8.70	2.47	4.44	15.63
Module Builder-Strip	13' Bcast	MFWD 150	34,700	200	10	0.251	4.83	5.32	2.18	1.12	13.47	4.27	6.54	24.29
Module Builder-Strip	16' Brush	MFWD 150	34,700	200	10	0.204	3.92	4.32	1.77	0.91	10.94	3.47	5.31	19.73
Module Builder-Strip	19' Brush	MFWD 150	34,700	200	10	0.172	3.30	3.64	1.49	0.77	9.21	2.92	4.47	16.62
Module Builder-Strip	4R-30	MFWD 150	34,700	200	10	0.327	6.28	6.92	2.84	1.46	17.51	5.56	8.50	31.57
Module Builder-Strip	4R-30 2X1	MFWD 150	34,700	200	10	0.218	4.19	4.61	1.89	0.97	11.67	3.70	5.66	21.05
Module Builder-Strip	4R-38	MFWD 150	34,700	200	10	0.257	4.94	5.45	2.23	1.15	13.79	4.37	6.69	24.86
Module Builder-Strip	4R-38 2X1	MFWD 150	34,700	200	10	0.172	3.30	3.64	1.49	0.77	9.21	2.92	4.47	16.62
Module Builder-Strip	5R-30	MFWD 150	34,700	200	10	0.261	5.02	5.54	2.27	1.17	14.01	4.44	6.80	25.26
Module Builder-Strip	5R-38	MFWD 150	34,700	200	10	0.207	3.97	4.38	1.79	0.92	11.08	3.51	5.38	19.98
Module Builder-Strip	6R-30	MFWD 150	34,700	200	10	0.218	4.19	4.61	1.89	0.97	11.67	3.70	5.66	21.05