CORN, GRAIN SORGHUM &WHEAT 2015 PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2014-03

October 2014

Foreword

This report is designed to provide necessary planning data to farmers, research and extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled "**Returns Above Specified Expenses**." Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. "**Returns Above Direct Expenses**" should be used in making 2015 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses**."

Acknowledgments

A list of individuals who contributed to the development of the agricultural enterprise budgets follows this acknowledgment. The administrative committee structure and enterprise committees have shown a spirit of cooperation seldom found when so many work together. A team effort has led to many improvements in the budgets over the years.

Special appreciation is expressed to producers who provided information on crop practices used. Appreciation also is expressed to farm supply dealers, equipment dealers, custom operators, and chemical companies who provided prices for crop production inputs. The Mississippi Agricultural Statistics Service is commended for its excellence in collecting price and production practice data.

Acknowledgment is made to the Mississippi State University Extension Service, the Mississippi Agricultural and Forestry Experiment Station, and the United States Agricultural Research Service staffs for the excellent cooperation that made this report possible.

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Budgets for Agricultural Enterprises

This publication provides economic and technical information in the form of enterprise budgets for a major crop produced by Mississippi farmers. A multidisciplinary approach involving researchers and extension personnel was used to determine production practices and input quantities, and to estimate costs and returns for each enterprise (14). The purpose of this section is to present the methods and procedures used to calculate costs and returns for each budget included in this publication.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the food and fiber industry. They are used:

- by farmers for planning,
- by extension personnel in providing educational programs to farmers,
- by lenders as a basis for credit,
- to provide basic data for research, and
- to inform non-farmers of the costs incurred by farmers in the production of food and fiber crops.

A budget should be prepared with a specific objective in mind. The budgets in this report were prepared to provide general information for several different uses. They provide information concerning general levels of costs and returns which will need to be adjusted for specific situations. Most users should think of these budgets as a first approximation and then make appropriate adjustments using the "Your Farm" column provided on each budget to add, delete, or change costs or incomes to reflect their specific situations.

Methods and Procedures

Production Practices

The production practices listed in each budget are the result of a combined effort by researchers and extension personnel to represent those practices that producers could use in a specific production system. Producers might use different practices in their own operations. If different types and quantities of operating inputs are to be used, then the budgeted expenses should be changed to more accurately reflect actual input usage. The Mississippi Agricultural Statistics Service conducts a survey of producers of major field crops in Mississippi. Data collected from producers are a part of the information used in selecting the practices included in each budget.

Committees made up of appropriate disciplines from the Mississippi Agricultural and Forestry Experiment Station, the Mississippi State University Extension Service, and the U.S. Department of Agriculture review and update the practices in the budgets every year. The updates are based on the collective judgment of the committee members. Quantities of materials and individual production practices budgeted are based on survey data from producers and/or generally accepted recommendations by committee members.

Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2014. (Appendix Tables 1, 2, and 3).

A performance rate reflects the time required to perform a given task or operation and is expressed as that part of an hour per acre. Previous studies and expert knowledge of the equipment committee members are used to estimate performance rates for new and larger equipment (1, 4, 5, 6, 7, 9, and 13).

The hours of annual use have been modified based on information collected from the cited studies (3, 4, 6, and 7).

Repairs and maintenance as a percentage of new cost are estimated for the life of the equipment and include oil and lubricants (1, 4, and 6).

Estimates of Direct Costs

Direct costs include estimated costs of repairs and maintenance (R&M) for all machinery and include fuel costs for powered machinery (Appendix Tables 1, 2, and 3). Direct costs are estimated on an hourly basis and are then converted to a per-acre basis using the performance rate for the particular operation. R&M costs for towed equipment and powered equipment are estimated as follows:

$$RPH = \frac{RLC \; x \; RP}{THL}$$

$$RPA = RPH \; x \; PR$$

where:

RPH = R&M cost per hour of use
RLC = Replacement cost of machine
RP = R&M percentage (percent of RLC)
THL = Total hours of machine life
RPA = R&M cost per acre
PR = Performance rate

Direct costs include an estimate of fuel cost based on average fuel consumption per hour of use for the power unit. Other components of direct costs include quantities of materials used in production multiplied by the price per unit of these inputs, custom rates, hourly wage rates, and interest charges on operating capital (Appendix Tables 4, 5, and 6).

The labor wage rate per hour includes social security, accident and unemployment insurance, and some perquisites (11). Labor costs are estimated for four labor categories: operator labor, hand labor, irrigation labor, and unallocated labor. Operator labor and hand labor represent estimates of labor required to perform the in-field tasks. Operator labor is that labor required to operate all power-driven equipment. Irrigation labor is used to perform tasks associated with an irrigation system. Unallocated labor is an estimate of labor that is not used directly in producing the enterprise. Its cost is estimated as a percentage of operator labor (11). The percentages used for the various crop enterprises are listed in Appendix Table 6.

Interest on operating capital is determined by using a short-term interest rate obtained from agricultural lenders and making a charge against capital outflows as the production process takes place. Interest is accumulated until the crop is harvested.

Estimates of Fixed Costs

Annual fixed cost estimates for machinery are based on a budgeting technique which computes the annual capital recovery charge (2, p. 143). When a combination of machines or equipment is required to perform a single operation, the total cost per acre for all equipment used in the operation is estimated. The fixed cost of machinery ownership is calculated by first computing the capital recovery factor and then using it to estimate the annual capital recovery charge.

$$CRF = \frac{IIR}{1 - (1 + IIR)^{-TYL}}$$

where:

CRF = Capital recovery factor
IIR = Intermediate-term interest rate
TYL = Total years of life

$$CRCPY = [(RLC - SV) \; x \; CRF] + (SV \; x \; IIR)$$

where:

CRCPY = Capital recovery charge per year
RLC = Replacement cost
SV = Salvage value (at end of useful life)

This value is then converted to its per-hour and per-acre equivalent values:

$$CRCPH = \frac{CRCPY}{HAU}$$

$$CRCPA = CRCPH \times PR$$

where:

CRCPH = Capital recovery charge per hour
HAU = Hours of annual use
CRCPA = Capital recovery charge per acre
PR = Performance rate

Estimates of Returns

It is difficult to estimate crop yields that may be expected for a particular production system in a given year. Crop yields used in the budgets are representative of historical yields modified to match the production system used to produce the yield. All yields including conventional, no-tillage, irrigation, and double-cropping are tempered with unpublished research and judgments of the commodity committees. Producers should use yield estimates that are reflective of their own operation.

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2014 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

The futures price for an appropriate contract month is determined by averaging the closing prices for the month of September. The basis is determined by subtracting the average daily cash price for the month of September from the average daily closing price of the near contract month. These average futures prices and the basis adjustments are presented in Appendix Table 7.

A special table is presented to illustrate the effects of alternative levels of yields and prices on net returns. The budgeted yield and the budgeted price are used as base values (100 percent). Yields are then varied from 50 to 150 percent of the base yield while prices are varied from 75 to 125 percent of the base price. Net returns are computed for each combination of yield and price.

Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8 and 9. A dryland crop budget may be converted to an irrigated crop budget by adding the appropriate direct and fixed costs to the costs of the dryland crop. Also, adjustments in crop yields and other costs may be required with the addition of supplemental irrigation.

Net Returns

Net returns are generally considered to be the amount left after subtracting all costs from all incomes for a particular enterprise. In these budgets, "RETURNS ABOVE DIRECT EXPENSES" and "RETURNS ABOVE TOTAL SPECIFIED EXPENSES" are used as a proxy for the economic concepts of net returns above variable costs and net returns above variable plus fixed costs, respectively. Some items are intentionally left out of these calculations, i.e., costs for land or land rent, taxes, insurance premiums, general farm overhead, and expected incomes from government payments or insurance payments. These costs and incomes vary widely among farms and farm situations so as to make routine calculation for representative situations impractical. These items should, however, be considered by each producer and factored into the final budget each producer develops for his own situation.

Enterprise Budgets

Table 1.A Estimated costs per acre
Corn, stale seedbed, BtRR, 8-row 38", 185 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	1.0000	6.00	
App by Air (3 gal)	appl	4.75	1.0000	4.75	
FERTILIZERS					
DAP	cwt	29.00	1.8000	52.20	
Potash (60% K2O)	cwt	23.60	1.3750	32.45	
Fert 10-34-0	cwt	26.00	0.5000	13.00	
UAN + Sulfur (28%)	cwt	17.90	3.5710	63.92	
UAN (32% N)	cwt	18.50	4.3750	80.94	
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.25	2.0000	4.50	
Clarity	pt	11.88	0.5000	5.94	
Atrazine 4L	pt	1.93	4.0000	7.72	
Halex GT	pt	5.96	3.6000	21.46	
INSECTICIDES					
Intrepid 2F	oz	2.00	4.0000	8.00	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	
SEED/PLANTS					
Corn Seed BtRR	thous	3.47	30.0000	104.10	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	6.50	1.0000	6.50	
HAULING					
Haul Corn	bu	0.23	185.0000	42.55	
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.5000	22.50	
OPERATOR LABOR					
Tractors	hour	12.55	0.4883	6.14	
Harvesters	hour	12.55	0.1009	1.27	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	
Implements	hour	9.06	0.0625	0.57	
HAND LABOR					
Implements	hour	9.06	0.1752	1.59	
UNALLOCATED LABOR	hour	12.57	0.4597	5.78	
DIESEL FUEL					
Tractors	gal	3.20	4.6505	14.88	
Harvesters	gal	3.20	1.6890	5.40	
Roll-Out Pipe Irr.	gal	3.20	10.5901	33.88	
REPAIR & MAINTENANCE					
Implements	acre	7.19	1.0000	7.19	
Tractors	acre	2.48	1.0000	2.48	
Harvesters	acre	3.42	1.0000	3.42	
Roll-Out Pipe Irr.	acre	5.96	1.0000	5.96	
INTEREST ON OP. CAP.	acre	13.83	1.0000	13.83	

TOTAL DIRECT EXPENSES				590.46	
FIXED EXPENSES					
Implements	acre	9.74	1.0000	9.74	
Tractors	acre	14.96	1.0000	14.96	
Harvesters	acre	13.08	1.0000	13.08	
Roll-Out Pipe Irr.	acre	49.19	1.0000	49.19	

TOTAL FIXED EXPENSES				86.97	

TOTAL SPECIFIED EXPENSES				677.43	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 1.B Summary of estimated costs and returns per acre
Corn, stale seedbed, BtRR, 8-row 38", 185 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.50	185.0000	647.50	
TOTAL INCOME				647.50	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	10.75	1.0000	10.75	
FERTILIZERS	acre	242.51	1.0000	242.51	
HERBICIDES	acre	39.62	1.0000	39.62	
INSECTICIDES	acre	8.00	1.0000	8.00	
IRRIGATION SUPPLIES	acre	8.58	1.0000	8.58	
SEED/PLANTS	acre	104.10	1.0000	104.10	
CUSTOM FERTILIZE	acre	6.50	1.0000	6.50	
HAULING	acre	42.55	1.0000	42.55	
CUSTOM LIME	acre	22.50	1.0000	22.50	
HAND LABOR	hour	9.06	0.1752	1.59	
IRRIGATE LABOR	hour	9.06	0.3875	3.53	
OPERATOR LABOR	hour	12.55	0.5893	7.41	
UNALLOCATED LABOR	hour	12.57	0.4597	5.78	
DIESEL FUEL	gal	3.20	16.9298	54.16	
REPAIR & MAINTENANCE	acre	19.05	1.0000	19.05	
INTEREST ON OP. CAP.	acre	13.83	1.0000	13.83	
TOTAL DIRECT EXPENSES				590.46	
RETURNS ABOVE DIRECT EXPENSES				57.04	
TOTAL FIXED EXPENSES				86.97	
TOTAL SPECIFIED EXPENSES				677.43	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-29.93	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 1.C Estimated resource use for field operations, per acre
Corn, stale seedbed, BtRR, 8-row 38", 185 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Lime (Spread)	ton			0.25	Oct	0.5000				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct		0.04	0.04	0.08	0.03
DAP	cwt					1.8000				
Potash (60% K2O)	cwt					1.3750				
Bed/Disk w/roller	8R-38	MFWD 190	0.074	1.00	Oct		0.07	0.07	0.07	0.06
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
Clarity	pt					0.5000				
Plant & Pre-Rigid	8R-38	MFWD 190	0.080	1.00	Mar		0.08	0.08	0.16	0.07
Corn Seed BtRR	thous					30.0000				
Fert 10-34-0	cwt					0.5000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	cwt					3.5710				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	May		0.07	0.07	0.11	0.06
UAN (32% N)	cwt					4.3750				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	325 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 190	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					185.0000				
Stalk Shredder Flex	20'	MFWD 190	0.082	1.00	Sep		0.08	0.08	0.08	0.07
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.58	0.58	1.15	0.45

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 1.D Estimated costs for field operations, per acre
Corn, stale seedbed, BtRR, 8-row 38", 185 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	22.50					0.99	23.49		23.49
Spin Spreader	5 ton		1.32	0.48	1.39		0.14	3.33	1.84	5.17
DAP	cwt	52.20					2.30	54.50		54.50
Potash (60% K2O)	cwt	32.45					1.43	33.88		33.88
Bed/Disk w/roller	8R-38		2.32	0.86	1.77		0.22	5.17	3.56	8.73
App by Air (5 gal)	appl	6.00					0.18	6.18		6.18
Glyphosate 3lbs a.e	pt	4.50					0.13	4.63		4.63
Clarity	pt	5.94					0.17	6.11		6.11
Plant & Pre-Rigid	8R-38		2.51	1.55	2.65		0.17	6.88	4.64	11.52
Corn Seed BtRR	thous	104.10					2.67	106.77		106.77
Fert 10-34-0	cwt	13.00					0.33	13.33		13.33
Custom Apply Fert	acre	6.50					0.14	6.64		6.64
UAN + Sulfur (28%)	cwt	63.92					1.41	65.33		65.33
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Atrazine 4L	pt	7.72					0.17	7.89		7.89
Halex GT	pt	21.46					0.47	21.93		21.93
Fert Appl (Liquid)	8R-38		2.43	1.31	2.20		0.11	6.05	3.45	9.50
UAN (32% N)	cwt	80.94					1.48	82.42		82.42
App by Air (3 gal)	appl	4.75					0.07	4.82		4.82
Intrepid 2F	oz	8.00					0.12	8.12		8.12
Header - Corn	8R-38		5.40	4.87	2.41		0.05	12.73	15.19	27.92
Grain Cart Corn	700 bu		0.78	0.36	0.59		0.01	1.74	1.19	2.93
Haul Corn	bu	42.55					0.16	42.71		42.71
Stalk Shredder Flex	20'		2.58	2.88	1.97		0.03	7.46	4.05	11.51
Roll-Out Pipe Irr.	acre	8.58	35.94	6.46	4.53		0.84	56.35	52.00	108.35
TOTALS		485.11	54.16	19.05	18.31	0.00	13.83	590.46	86.97	677.43

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 1.E Estimated monthly income and expense flows per acre
Corn, stale seedbed, BtRR, 8-row 38", 185 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2015

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	647.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	4.75	0.00	0.00	0.00
FERTILIZERS	84.65	0.00	0.00	0.00	0.00	13.00	63.92	80.94	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.44	0.00	29.18	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.58	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	104.10	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.55
CUSTOM LIME	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.64	0.00	0.00	0.00	0.00	2.65	0.80	2.43	3.01	0.23	0.58	4.97
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.83	0.00	0.00	0.00	0.00	2.51	0.88	2.43	25.88	8.47	0.40	8.76
REPAIR & MAINTENANCE	1.63	0.00	0.00	0.00	0.00	1.55	0.28	1.31	5.19	0.88	0.10	8.11
INTEREST ON OP. CAP.	5.17	0.00	0.00	0.00	0.48	3.17	2.23	1.59	0.83	0.10	0.01	0.25
TOTAL DIRECT EXPENSES	122.42	0.00	0.00	0.00	16.92	126.98	103.79	88.70	56.24	9.68	1.09	64.64
NET INCOME	-122.42	0.00	0.00	0.00	-16.92	-126.98	-103.79	-88.70	-56.24	-9.68	-1.09	582.86
NET INCOME TO DATE	-122.42	-122.42	-122.42	-122.42	-139.34	-266.32	-370.11	-458.81	-515.05	-524.73	-525.82	57.04

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.
* Lease costs are based on hourly usage costs.

Table 1.F Estimated returns for various price/yield combinations, per acre
Corn, stale seedbed, BtRR, 8-row 38", 185 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.62	2.80	2.97	3.15	3.32	3.50	3.67	3.85	4.02	4.20	4.37
PERCENT	YIELD	UNIT	dollars										
50	92.50	bu	-326	-310	-293	-277	-261	-245	-229	-212	-196	-180	-164
			-413	-397	-380	-364	-348	-332	-316	-299	-283	-267	-251
60	111.00	bu	-282	-262	-243	-223	-204	-184	-165	-146	-126	-107	-87
			-368	-349	-330	-310	-291	-271	-252	-232	-213	-194	-174
70	129.50	bu	-237	-215	-192	-169	-147	-124	-101	-79	-56	-33	-11
			-324	-302	-279	-256	-234	-211	-188	-166	-143	-120	-98
80	148.00	bu	-193	-167	-141	-115	-89	-63	-38	-12	13	39	65
			-280	-254	-228	-202	-176	-150	-124	-99	-73	-47	-21
90	166.50	bu	-149	-119	-90	-61	-32	-3	25	54	83	113	142
			-236	-206	-177	-148	-119	-90	-61	-32	-2	26	55
100	185.00	bu	-104	-72	-40	-7	24	57	89	121	154	186	218
			-191	-159	-127	-94	-62	-29	2	34	67	99	131
110	203.50	bu	-60	-24	10	46	81	117	153	188	224	259	295
			-147	-111	-76	-40	-5	30	66	101	137	172	208
120	222.00	bu	-16	22	61	100	139	177	216	255	294	333	372
			-103	-64	-25	13	52	91	129	168	207	246	285
130	240.50	bu	28	70	112	154	196	238	280	322	364	406	448
			-58	-16	25	67	109	151	193	235	277	319	361
140	259.00	bu	72	117	162	208	253	298	344	389	434	480	525
			-14	30	76	121	166	211	257	302	347	393	438
150	277.50	bu	116	165	213	262	310	359	407	456	505	553	602
			29	78	126	175	223	272	321	369	418	466	515

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.
Note: Cost of production estimates are based on 2014 input prices.

Table 2.A Estimated costs per acre
Corn, stale seedbed, BtRR, non-irrigated, 8-row 38"
135 bu yield goal, Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	1.0000	6.00	_____
App by Air (3 gal)	appl	4.75	1.0000	4.75	_____
FERTILIZERS					
DAP	cwt	29.00	1.0870	31.52	_____
Potash (60% K2O)	cwt	23.60	0.8300	19.59	_____
Fert 10-34-0	cwt	26.00	0.5000	13.00	_____
UAN + Sulfur (28%)	cwt	17.90	2.1430	38.36	_____
UAN (32% N)	cwt	18.50	3.2815	60.71	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.25	2.0000	4.50	_____
Clarity	pt	11.88	0.5000	5.94	_____
Atrazine 4L	pt	1.93	4.0000	7.72	_____
Halex GT	pt	5.96	3.6000	21.46	_____
INSECTICIDES					
Intrepid 2F	oz	2.00	4.0000	8.00	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.47	26.0000	90.22	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	6.50	1.0000	6.50	_____
HAULING					
Haul Corn	bu	0.23	135.0000	31.05	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.5000	22.50	_____
OPERATOR LABOR					
Tractors	hour	12.55	0.4098	5.14	_____
Harvesters	hour	12.55	0.1009	1.27	_____
HAND LABOR					
Implements	hour	9.06	0.1752	1.59	_____
UNALLOCATED LABOR	hour	12.57	0.4597	5.78	_____
DIESEL FUEL					
Tractors	gal	3.20	4.0079	12.82	_____
Harvesters	gal	3.20	1.3770	4.41	_____
REPAIR & MAINTENANCE					
Implements	acre	7.02	1.0000	7.02	_____
Tractors	acre	2.15	1.0000	2.15	_____
Harvesters	acre	3.06	1.0000	3.06	_____
INTEREST ON OP. CAP.	acre	10.16	1.0000	10.16	_____

TOTAL DIRECT EXPENSES				425.22	_____
FIXED EXPENSES					
Implements	acre	8.85	1.0000	8.85	_____
Tractors	acre	13.04	1.0000	13.04	_____
Harvesters	acre	11.72	1.0000	11.72	_____

TOTAL FIXED EXPENSES				33.61	_____

TOTAL SPECIFIED EXPENSES				458.83	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 2.B Summary of estimated costs and returns per acre
Corn, stale seedbed, BtRR, non-irrigated, 8-row 38"
135 bu yield goal, Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.50	135.0000	472.50	
TOTAL INCOME				472.50	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	10.75	1.0000	10.75	
FERTILIZERS	acre	163.18	1.0000	163.18	
HERBICIDES	acre	39.62	1.0000	39.62	
INSECTICIDES	acre	8.00	1.0000	8.00	
SEED/PLANTS	acre	90.22	1.0000	90.22	
CUSTOM FERTILIZE	acre	6.50	1.0000	6.50	
HAULING	acre	31.05	1.0000	31.05	
CUSTOM LIME	acre	22.50	1.0000	22.50	
HAND LABOR	hour	9.06	0.1752	1.59	
OPERATOR LABOR	hour	12.55	0.5107	6.41	
UNALLOCATED LABOR	hour	12.57	0.4597	5.78	
DIESEL FUEL	gal	3.20	5.3850	17.23	
REPAIR & MAINTENANCE	acre	12.23	1.0000	12.23	
INTEREST ON OP. CAP.	acre	10.16	1.0000	10.16	
TOTAL DIRECT EXPENSES				425.22	
RETURNS ABOVE DIRECT EXPENSES				47.28	
TOTAL FIXED EXPENSES				33.61	
TOTAL SPECIFIED EXPENSES				458.83	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				13.67	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 2.C Estimated resource use for field operations, per acre
Corn, stale seedbed, BtRR, non-irrigated, 8-row 38"
135 bu yield goal, Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Lime (Spread)	ton			0.25	Oct	0.5000				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct		0.04	0.04	0.08	0.03
DAP	cwt					1.0870				
Potash (60% K2O)	cwt					0.8300				
Bed/Disk w/roller	8R-38	MFWD 190	0.074	1.00	Oct		0.07	0.07	0.07	0.06
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
Clarity	pt					0.5000				
Plant & Pre-Rigid	8R-38	MFWD 190	0.080	1.00	Mar		0.08	0.08	0.16	0.07
Corn Seed BtRR	thous					26.0000				
Fert 10-34-0	cwt					0.5000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	cwt					2.1430				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	May		0.07	0.07	0.11	0.06
UAN (32% N)	cwt					3.2815				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 190	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					135.0000				
Stalk Shredder Flex	20'	MFWD 190	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.51	0.51	0.68	0.45

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 2.D Estimated costs for field operations, per acre
Corn, stale seedbed, BtRR, non-irrigated, 8-row 38"
135 bu yield goal, Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	22.50					0.99	23.49		23.49
Spin Spreader	5 ton		1.32	0.48	1.39		0.14	3.33	1.84	5.17
DAP	cwt	31.52					1.39	32.91		32.91
Potash (60% K2O)	cwt	19.59					0.86	20.45		20.45
Bed/Disk w/roller	8R-38		2.32	0.86	1.77		0.22	5.17	3.56	8.73
App by Air (5 gal)	appl	6.00					0.18	6.18		6.18
Glyphosate 3lbs a.e	pt	4.50					0.13	4.63		4.63
Clarity	pt	5.94					0.17	6.11		6.11
Plant & Pre-Rigid	8R-38		2.51	1.55	2.65		0.17	6.88	4.64	11.52
Corn Seed BtRR	thous	90.22					2.32	92.54		92.54
Fert 10-34-0	cwt	13.00					0.33	13.33		13.33
Custom Apply Fert	acre	6.50					0.14	6.64		6.64
UAN + Sulfur (28%)	cwt	38.36					0.84	39.20		39.20
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Atrazine 4L	pt	7.72					0.17	7.89		7.89
Halex GT	pt	21.46					0.47	21.93		21.93
Fert Appl (Liquid)	8R-38		2.43	1.31	2.20		0.11	6.05	3.45	9.50
UAN (32% N)	cwt	60.71					1.11	61.82		61.82
App by Air (3 gal)	appl	4.75					0.07	4.82		4.82
Intrepid 2F	oz	8.00					0.12	8.12		8.12
Header - Corn	8R-38		4.41	4.51	2.41		0.04	11.37	13.83	25.20
Grain Cart Corn	700 bu		0.78	0.36	0.59		0.01	1.74	1.19	2.93
Haul Corn	bu	31.05					0.11	31.16		31.16
Stalk Shredder Flex	20'		2.58	2.88	1.97		0.03	7.46	4.05	11.51
TOTALS		371.82	17.23	12.23	13.78	0.00	10.16	425.22	33.61	458.83

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 2.E Estimated monthly income and expense flows per acre
Corn, stale seedbed, BtRR, non-irrigated, 8-row 38"
135 bu yield goal, Delta Area, Mississippi, 2015

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	472.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	4.75	0.00	0.00	0.00
FERTILIZERS	51.11	0.00	0.00	0.00	0.00	13.00	38.36	60.71	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.44	0.00	29.18	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	90.22	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.05
CUSTOM LIME	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.16	0.00	0.00	0.00	0.00	2.65	0.80	2.20	0.00	0.00	0.00	4.97
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.64	0.00	0.00	0.00	0.00	2.51	0.88	2.43	0.00	0.00	0.00	7.77
REPAIR & MAINTENANCE	1.34	0.00	0.00	0.00	0.00	1.55	0.28	1.31	0.00	0.00	0.00	7.75
INTEREST ON OP. CAP.	3.60	0.00	0.00	0.00	0.48	2.82	1.66	1.22	0.19	0.00	0.00	0.19
TOTAL DIRECT EXPENSES	85.35	0.00	0.00	0.00	16.92	112.75	77.66	67.87	12.94	0.00	0.00	51.73
NET INCOME	-85.35	0.00	0.00	0.00	-16.92	-112.75	-77.66	-67.87	-12.94	0.00	0.00	420.77
NET INCOME TO DATE	-85.35	-85.35	-85.35	-85.35	-102.27	-215.02	-292.68	-360.55	-373.49	-373.49	-373.49	47.28

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.
* Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre
Corn, stale seedbed, BtRR, non-irrigated, 8-row 38"
135 bu yield goal, Delta Area, Mississippi, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.62	2.80	2.97	3.15	3.32	3.50	3.67	3.85	4.02	4.20	4.37
PERCENT	YIELD	UNIT	dollars										
50	67.50	bu	-232	-220	-208	-197	-185	-173	-161	-149	-137	-126	-114
			-266	-254	-242	-230	-218	-207	-195	-183	-171	-159	-147
60	81.00	bu	-200	-185	-171	-157	-143	-129	-115	-100	-86	-72	-58
			-233	-219	-205	-191	-177	-162	-148	-134	-120	-106	-91
70	94.50	bu	-167	-151	-134	-118	-101	-85	-68	-52	-35	-18	-2
			-201	-184	-168	-151	-135	-118	-102	-85	-69	-52	-36
80	108.00	bu	-135	-116	-97	-78	-59	-40	-22	-3	15	34	53
			-169	-150	-131	-112	-93	-74	-55	-36	-17	1	19
90	121.50	bu	-103	-81	-60	-39	-18	3	24	45	66	88	109
			-136	-115	-94	-72	-51	-30	-9	12	33	54	75
100	135.00	bu	-70	-47	-23	0	23	47	70	94	118	141	165
			-104	-80	-57	-33	-9	13	37	60	84	108	131
110	148.50	bu	-38	-12	13	39	65	91	117	143	169	195	221
			-72	-46	-20	5	31	57	83	109	135	161	187
120	162.00	bu	-6	22	50	78	107	135	163	192	220	248	277
			-39	-11	16	45	73	101	130	158	186	215	243
130	175.50	bu	26	56	87	118	148	179	210	241	271	302	333
			-7	23	53	84	115	146	176	207	238	268	299
140	189.00	bu	58	91	124	157	190	223	256	289	323	356	389
			24	57	90	124	157	190	223	256	289	322	355
150	202.50	bu	90	126	161	197	232	267	303	338	374	409	445
			57	92	128	163	198	234	269	305	340	376	411

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.
Note: Cost of production estimates are based on 2014 input prices.

Table 3.A Estimated costs per acre
Corn, conventional tillage, RR seed, 8-row 38",
185 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	1.0000	6.00	
App by Air (3 gal)	appl	4.75	1.0000	4.75	
FERTILIZERS					
DAP	cwt	29.00	1.8000	52.20	
Potash (60% K2O)	cwt	23.60	1.3750	32.45	
UAN + Sulfur (28%)	cwt	17.90	3.5710	63.92	
UAN (32% N)	cwt	18.50	4.3750	80.94	
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.25	2.0000	4.50	
Clarity	pt	11.88	0.5000	5.94	
Atrazine 4L	pt	1.93	4.0000	7.72	
Halex GT	pt	5.96	3.6000	21.46	
INSECTICIDES					
Intrepid 2F	oz	2.00	4.0000	8.00	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	
SEED/PLANTS					
Corn Seed RR2	thous	3.08	30.0000	92.40	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	6.50	1.0000	6.50	
HAULING					
Haul Corn	bu	0.23	185.0000	42.55	
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.5000	22.50	
OPERATOR LABOR					
Tractors	hour	12.55	0.7718	9.70	
Harvesters	hour	12.55	0.1009	1.27	
Self-Propelled	hour	12.55	0.0176	0.22	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	
Implements	hour	9.06	0.0625	0.57	
HAND LABOR					
Implements	hour	9.06	0.1554	1.41	
Self-Propelled	hour	9.06	0.0088	0.08	
UNALLOCATED LABOR	hour	12.53	0.7306	9.16	
DIESEL FUEL					
Tractors	gal	3.20	7.4227	23.76	
Harvesters	gal	3.20	1.3770	4.41	
Self-Propelled	gal	3.20	0.1586	0.51	
Roll-Out Pipe Irr.	gal	3.20	10.5901	33.88	
REPAIR & MAINTENANCE					
Implements	acre	8.43	1.0000	8.43	
Tractors	acre	3.95	1.0000	3.95	
Harvesters	acre	3.06	1.0000	3.06	
Self-Propelled	acre	0.16	1.0000	0.16	
Roll-Out Pipe Irr.	acre	5.96	1.0000	5.96	
INTEREST ON OP. CAP.	acre	13.89	1.0000	13.89	

TOTAL DIRECT EXPENSES				583.79	
FIXED EXPENSES					
Implements	acre	13.01	1.0000	13.01	
Tractors	acre	23.97	1.0000	23.97	
Harvesters	acre	11.72	1.0000	11.72	
Self-Propelled	acre	1.05	1.0000	1.05	
Roll-Out Pipe Irr.	acre	49.19	1.0000	49.19	

TOTAL FIXED EXPENSES				98.94	

TOTAL SPECIFIED EXPENSES				682.73	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 3.B Summary of estimated costs and returns per acre
Corn, conventional tillage, RR seed, 8-row 38",
185 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.50	185.0000	647.50	_____
TOTAL INCOME				647.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	10.75	1.0000	10.75	_____
FERTILIZERS	acre	229.51	1.0000	229.51	_____
HERBICIDES	acre	39.62	1.0000	39.62	_____
INSECTICIDES	acre	8.00	1.0000	8.00	_____
IRRIGATION SUPPLIES	acre	8.58	1.0000	8.58	_____
SEED/PLANTS	acre	92.40	1.0000	92.40	_____
CUSTOM FERTILIZE	acre	6.50	1.0000	6.50	_____
HAULING	acre	42.55	1.0000	42.55	_____
CUSTOM LIME	acre	22.50	1.0000	22.50	_____
HAND LABOR	hour	9.06	0.1642	1.49	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	12.55	0.8904	11.19	_____
UNALLOCATED LABOR	hour	12.53	0.7306	9.16	_____
DIESEL FUEL	gal	3.20	19.5486	62.56	_____
REPAIR & MAINTENANCE	acre	21.56	1.0000	21.56	_____
INTEREST ON OP. CAP.	acre	13.89	1.0000	13.89	_____
TOTAL DIRECT EXPENSES				583.79	_____
RETURNS ABOVE DIRECT EXPENSES				63.71	_____
TOTAL FIXED EXPENSES				98.94	_____
TOTAL SPECIFIED EXPENSES				682.73	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-35.23	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 3.C Estimated resource use for field operations, per acre
Corn, conventional tillage, RR seed, 8-row 38",
185 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Subsoiler	3 shank	MFWD 190	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.25	Oct	0.5000				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct		0.04	0.04	0.08	0.03
DAP	cwt					1.8000				
Potash (60% K2O)	cwt					1.3750				
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	0.074	1.00	Oct		0.07	0.07	0.07	0.06
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
Clarity	pt					0.5000				
Row Cond Rigid	26'	MFWD 190	0.059	1.00	Mar		0.05	0.05	0.05	0.05
Plant - Rigid	8R-38	MFWD 190	0.074	1.00	Mar		0.07	0.07	0.14	0.06
Corn Seed RR2	thous					30.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	cwt					3.5710				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	May		0.07	0.07	0.11	0.06
UAN (32% N)	cwt					4.3750				
Cultivate	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.06
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 190	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					185.0000				
Stalk Shredder Flex	20'	MFWD 190	0.082	1.00	Sep		0.08	0.08	0.08	0.07
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.89	0.87	1.44	0.73

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 3.D Estimated costs for field operations, per acre
Corn, conventional tillage, RR seed, 8-row 38",
185 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Subsoiler	3 shank		3.20	0.65	2.43		0.28	6.56	3.54	10.10
Disk Harrow	24'		2.56	1.40	1.95		0.26	6.17	4.58	10.75
Lime (Spread)	ton	22.50					0.99	23.49		23.49
Spin Spreader	5 ton		1.32	0.48	1.39		0.14	3.33	1.84	5.17
DAP	cwt	52.20					2.30	54.50		54.50
Potash (60% K2O)	cwt	32.45					1.43	33.88		33.88
Bed/Disk (Hipper)Rd	8R-38		2.32	0.76	1.77		0.21	5.06	3.30	8.36
App by Air (5 gal)	appl	6.00					0.18	6.18		6.18
Glyphosate 3lbs a.e	pt	4.50					0.13	4.63		4.63
Clarity	pt	5.94					0.17	6.11		6.11
Row Cond Rigid	26'		1.87	0.50	1.42		0.10	3.89	2.68	6.57
Plant - Rigid	8R-38		2.33	1.28	2.46		0.16	6.23	4.00	10.23
Corn Seed RR2	thous	92.40					2.37	94.77		94.77
Custom Apply Fert	acre	6.50					0.14	6.64		6.64
UAN + Sulfur (28%)	cwt	63.92					1.41	65.33		65.33
Sprayer 600-750gal	60' 175hp		0.51	0.16	0.50		0.03	1.20	1.05	2.25
Atrazine 4L	pt	7.72					0.17	7.89		7.89
Halex GT	pt	21.46					0.47	21.93		21.93
Fert Appl (Liquid)	8R-38		2.43	1.31	2.20		0.11	6.05	3.45	9.50
UAN (32% N)	cwt	80.94					1.48	82.42		82.42
Cultivate	8R-38		2.31	0.81	1.75		0.09	4.96	3.43	8.39
App by Air (3 gal)	appl	4.75					0.07	4.82		4.82
Intrepid 2F	oz	8.00					0.12	8.12		8.12
Header - Corn	8R-38		4.41	4.51	2.41		0.04	11.37	13.83	25.20
Grain Cart Corn	700 bu		0.78	0.36	0.59		0.01	1.74	1.19	2.93
Haul Corn	bu	42.55					0.16	42.71		42.71
Stalk Shredder Flex	20'		2.58	2.88	1.97		0.03	7.46	4.05	11.51
Roll-Out Pipe Irr.	acre	8.58	35.94	6.46	4.53		0.84	56.35	52.00	108.35
TOTALS		460.41	62.56	21.56	25.37	0.00	13.89	583.79	98.94	682.73

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 3.E Estimated monthly income and expense flows per acre
Corn, conventional tillage, RR seed, 8-row 38",
185 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2015

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	647.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	4.75	0.00	0.00	0.00
FERTILIZERS	84.65	0.00	0.00	0.00	0.00	0.00	63.92	80.94	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.44	0.00	29.18	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.58	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	92.40	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.55
CUSTOM LIME	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	8.02	0.00	0.00	0.00	0.00	3.88	0.50	4.18	3.01	0.23	0.58	4.97
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	10.59	0.00	0.00	0.00	0.00	4.20	0.51	4.74	25.88	8.47	0.40	7.77
REPAIR & MAINTENANCE	3.58	0.00	0.00	0.00	0.00	1.78	0.16	2.12	5.19	0.88	0.10	7.75
INTEREST ON OP. CAP.	5.70	0.00	0.00	0.00	0.48	2.63	2.22	1.68	0.83	0.10	0.01	0.24
TOTAL DIRECT EXPENSES	135.04	0.00	0.00	0.00	16.92	104.89	102.99	93.66	56.24	9.68	1.09	63.28
NET INCOME	-135.04	0.00	0.00	0.00	-16.92	-104.89	-102.99	-93.66	-56.24	-9.68	-1.09	584.22
NET INCOME TO DATE	-135.04	-135.04	-135.04	-135.04	-151.96	-256.85	-359.84	-453.50	-509.74	-519.42	-520.51	63.71

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre
Corn, conventional tillage, RR seed, 8-row 38",
185 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.62	2.80	2.97	3.15	3.32	3.50	3.67	3.85	4.02	4.20	4.37
PERCENT	YIELD	UNIT	dollars										
50	92.50	bu	-319	-303	-287	-271	-254	-238	-222	-206	-190	-173	-157
			-418	-402	-386	-370	-353	-337	-321	-305	-289	-272	-256
60	111.00	bu	-275	-255	-236	-217	-197	-178	-158	-139	-119	-100	-81
			-374	-354	-335	-315	-296	-277	-257	-238	-218	-199	-180
70	129.50	bu	-231	-208	-185	-163	-140	-117	-95	-72	-49	-27	-4
			-329	-307	-284	-261	-239	-216	-194	-171	-148	-126	-103
80	148.00	bu	-186	-160	-134	-109	-83	-57	-31	-5	20	46	72
			-285	-259	-233	-207	-182	-156	-130	-104	-78	-52	-26
90	166.50	bu	-142	-113	-84	-55	-25	3	32	61	90	119	148
			-241	-212	-183	-153	-124	-95	-66	-37	-8	20	49
100	185.00	bu	-98	-65	-33	-1	31	63	96	128	160	193	225
			-197	-164	-132	-99	-67	-35	-2	29	61	94	126
110	203.50	bu	-53	-18	17	52	88	124	159	195	231	266	302
			-152	-117	-81	-45	-10	25	60	96	132	167	203
120	222.00	bu	-9	29	68	106	145	184	223	262	301	340	378
			-108	-69	-30	8	46	85	124	163	202	241	279
130	240.50	bu	34	76	118	160	203	245	287	329	371	413	455
			-64	-22	19	62	104	146	188	230	272	314	356
140	259.00	bu	79	124	169	214	260	305	350	396	441	486	532
			-19	25	70	116	161	206	252	297	342	387	433
150	277.50	bu	123	171	220	268	317	366	414	463	511	560	608
			24	72	121	170	218	267	315	364	412	461	509

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.
Note: Cost of production estimates are based on 2014 input prices.

Table 4.A Estimated costs per acre
Corn, conventional tillage, RR seed, 8-row 38"
135 bu yield goal, non-irrigated, Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	1.0000	6.00	
App by Air (3 gal)	appl	4.75	1.0000	4.75	
FERTILIZERS					
DAP	cwt	29.00	1.0870	31.52	
Potash (60% K2O)	cwt	23.60	0.8300	19.59	
UAN + Sulfur (28%)	cwt	17.90	2.1430	38.36	
UAN (32% N)	cwt	18.50	3.2815	60.71	
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.25	2.0000	4.50	
Clarity	pt	11.88	0.5000	5.94	
Atrazine 4L	pt	1.93	4.0000	7.72	
Halex GT	pt	5.96	3.6000	21.46	
INSECTICIDES					
Intrepid 2F	oz	2.00	4.0000	8.00	
SEED/PLANTS					
Corn Seed RR2	thous	3.08	26.0000	80.08	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	6.50	1.0000	6.50	
HAULING					
Haul Corn	bu	0.23	135.0000	31.05	
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.5000	22.50	
OPERATOR LABOR					
Tractors	hour	12.55	0.6196	7.78	
Harvesters	hour	12.55	0.1009	1.27	
Self-Propelled	hour	12.55	0.0176	0.22	
HAND LABOR					
Implements	hour	9.06	0.1554	1.41	
Self-Propelled	hour	9.06	0.0088	0.08	
UNALLOCATED LABOR	hour	12.53	0.6643	8.33	
DIESEL FUEL					
Tractors	gal	3.20	6.0597	19.39	
Harvesters	gal	3.20	1.3770	4.41	
Self-Propelled	gal	3.20	0.1586	0.51	
REPAIR & MAINTENANCE					
Implements	acre	7.83	1.0000	7.83	
Tractors	acre	3.24	1.0000	3.24	
Harvesters	acre	3.06	1.0000	3.06	
Self-Propelled	acre	0.16	1.0000	0.16	
INTEREST ON OP. CAP.	acre	10.18	1.0000	10.18	

TOTAL DIRECT EXPENSES				416.55	
FIXED EXPENSES					
Implements	acre	11.03	1.0000	11.03	
Tractors	acre	19.71	1.0000	19.71	
Harvesters	acre	11.72	1.0000	11.72	
Self-Propelled	acre	1.05	1.0000	1.05	

TOTAL FIXED EXPENSES				43.51	

TOTAL SPECIFIED EXPENSES				460.06	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 4.B Summary of estimated costs and returns per acre
Corn, conventional tillage, RR seed, 8-row 38"
135 bu yield goal, non-irrigated, Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.50	135.0000	472.50	
TOTAL INCOME				472.50	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	10.75	1.0000	10.75	
FERTILIZERS	acre	150.18	1.0000	150.18	
HERBICIDES	acre	39.62	1.0000	39.62	
INSECTICIDES	acre	8.00	1.0000	8.00	
SEED/PLANTS	acre	80.08	1.0000	80.08	
CUSTOM FERTILIZE	acre	6.50	1.0000	6.50	
HAULING	acre	31.05	1.0000	31.05	
CUSTOM LIME	acre	22.50	1.0000	22.50	
HAND LABOR	hour	9.06	0.1642	1.49	
OPERATOR LABOR	hour	12.55	0.7382	9.27	
UNALLOCATED LABOR	hour	12.53	0.6643	8.33	
DIESEL FUEL	gal	3.20	7.5954	24.31	
REPAIR & MAINTENANCE	acre	14.29	1.0000	14.29	
INTEREST ON OP. CAP.	acre	10.18	1.0000	10.18	
TOTAL DIRECT EXPENSES				416.55	
RETURNS ABOVE DIRECT EXPENSES				55.95	
TOTAL FIXED EXPENSES				43.51	
TOTAL SPECIFIED EXPENSES				460.06	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				12.44	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 4.C Estimated resource use for field operations, per acre
Corn, conventional tillage, RR seed, 8-row 38"
135 bu yield goal, non-irrigated, Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Subsoiler	3 shank	MFWD 190	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.25	Oct	0.5000				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct		0.04	0.04	0.08	0.03
DAP	cwt					1.0870				
Potash (60% K2O)	cwt					0.8300				
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	0.074	1.00	Oct		0.07	0.07	0.07	0.06
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
Clarity	pt					0.5000				
Row Cond Rigid	26'	MFWD 190	0.059	1.00	Mar		0.05	0.05	0.05	0.05
Plant - Rigid	8R-38	MFWD 190	0.074	1.00	Mar		0.07	0.07	0.14	0.06
Corn Seed RR2	thous					26.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	cwt					2.1430				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	May		0.07	0.07	0.11	0.06
UAN (32% N)	cwt					3.2815				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 190	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					135.0000				
Stalk Shredder Flex	20'	MFWD 190	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.73	0.72	0.90	0.66

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 4.D Estimated costs for field operations, per acre
Corn, conventional tillage, RR seed, 8-row 38"
135 bu yield goal, non-irrigated, Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Subsoiler	3 shank		3.20	0.65	2.43		0.28	6.56	3.54	10.10
Disk Harrow	24'		2.56	1.40	1.95		0.26	6.17	4.58	10.75
Lime (Spread)	ton	22.50					0.99	23.49		23.49
Spin Spreader	5 ton		1.32	0.48	1.39		0.14	3.33	1.84	5.17
DAP	cwt	31.52					1.39	32.91		32.91
Potash (60% K2O)	cwt	19.59					0.86	20.45		20.45
Bed/Disk (Hipper)Rd	8R-38		2.32	0.76	1.77		0.21	5.06	3.30	8.36
App by Air (5 gal)	appl	6.00					0.18	6.18		6.18
Glyphosate 3lbs a.e	pt	4.50					0.13	4.63		4.63
Clarity	pt	5.94					0.17	6.11		6.11
Row Cond Rigid	26'		1.87	0.50	1.42		0.10	3.89	2.68	6.57
Plant - Rigid	8R-38		2.33	1.28	2.46		0.16	6.23	4.00	10.23
Corn Seed RR2	thous	80.08					2.06	82.14		82.14
Custom Apply Fert	acre	6.50					0.14	6.64		6.64
UAN + Sulfur (28%)	cwt	38.36					0.84	39.20		39.20
Sprayer 600-750gal	60' 175hp		0.51	0.16	0.50		0.03	1.20	1.05	2.25
Atrazine 4L	pt	7.72					0.17	7.89		7.89
Halex GT	pt	21.46					0.47	21.93		21.93
Fert Appl (Liquid)	8R-38		2.43	1.31	2.20		0.11	6.05	3.45	9.50
UAN (32% N)	cwt	60.71					1.11	61.82		61.82
App by Air (3 gal)	appl	4.75					0.07	4.82		4.82
Intrepid 2F	oz	8.00					0.12	8.12		8.12
Header - Corn	8R-38		4.41	4.51	2.41		0.04	11.37	13.83	25.20
Grain Cart Corn	700 bu		0.78	0.36	0.59		0.01	1.74	1.19	2.93
Haul Corn	bu	31.05					0.11	31.16		31.16
Stalk Shredder Flex	20'		2.58	2.88	1.97		0.03	7.46	4.05	11.51
TOTALS		348.68	24.31	14.29	19.09	0.00	10.18	416.55	43.51	460.06

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 4.E Estimated monthly income and expense flows per acre
Corn, conventional tillage, RR seed, 8-row 38"
135 bu yield goal, non-irrigated, Delta Area, Mississippi, 2015

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	472.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	4.75	0.00	0.00	0.00
FERTILIZERS	51.11	0.00	0.00	0.00	0.00	0.00	38.36	60.71	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.44	0.00	29.18	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	80.08	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.05
CUSTOM LIME	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.54	0.00	0.00	0.00	0.00	3.88	0.50	2.20	0.00	0.00	0.00	4.97
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.40	0.00	0.00	0.00	0.00	4.20	0.51	2.43	0.00	0.00	0.00	7.77
REPAIR & MAINTENANCE	3.29	0.00	0.00	0.00	0.00	1.78	0.16	1.31	0.00	0.00	0.00	7.75
INTEREST ON OP. CAP.	4.13	0.00	0.00	0.00	0.48	2.32	1.65	1.22	0.19	0.00	0.00	0.19
TOTAL DIRECT EXPENSES	97.97	0.00	0.00	0.00	16.92	92.26	76.86	67.87	12.94	0.00	0.00	51.73
NET INCOME	-97.97	0.00	0.00	0.00	-16.92	-92.26	-76.86	-67.87	-12.94	0.00	0.00	420.77
NET INCOME TO DATE	-97.97	-97.97	-97.97	-97.97	-114.89	-207.15	-284.01	-351.88	-364.82	-364.82	-364.82	55.95

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre
Corn, conventional tillage, RR seed, 8-row 38"
135 bu yield goal, non-irrigated, Delta Area, Mississippi, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.62	2.80	2.97	3.15	3.32	3.50	3.67	3.85	4.02	4.20	4.37
PERCENT	YIELD	UNIT	dollars										
50	67.50	bu	-223	-211	-200	-188	-176	-164	-152	-141	-129	-117	-105
			-267	-255	-243	-231	-220	-208	-196	-184	-172	-160	-149
60	81.00	bu	-191	-177	-163	-148	-134	-120	-106	-92	-78	-63	-49
			-234	-220	-206	-192	-178	-164	-149	-135	-121	-107	-93
70	94.50	bu	-159	-142	-126	-109	-92	-76	-59	-43	-26	-10	6
			-202	-186	-169	-153	-136	-119	-103	-86	-70	-53	-37
80	108.00	bu	-126	-107	-89	-70	-51	-32	-13	5	24	43	62
			-170	-151	-132	-113	-94	-75	-56	-38	-19	-0	18
90	121.50	bu	-94	-73	-51	-30	-9	11	33	54	75	96	118
			-138	-116	-95	-74	-52	-31	-10	10	32	53	74
100	135.00	bu	-62	-38	-14	8	32	55	79	103	126	150	174
			-105	-82	-58	-34	-11	12	36	59	83	106	130
110	148.50	bu	-29	-3	22	48	74	100	126	152	178	204	230
			-73	-47	-21	4	30	56	82	108	134	160	186
120	162.00	bu	2	30	59	87	115	144	172	200	229	257	285
			-41	-12	15	44	72	100	129	157	185	214	242
130	175.50	bu	34	65	96	126	157	188	219	249	280	311	341
			-8	21	52	83	114	144	175	206	236	267	298
140	189.00	bu	67	100	133	166	199	232	265	298	331	364	397
			23	56	89	122	155	188	222	255	288	321	354
150	202.50	bu	99	134	170	205	241	276	312	347	382	418	453
			55	91	126	162	197	233	268	303	339	374	410

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.
Note: Cost of production estimates are based on 2014 input prices.

Table 5.A Estimated costs per acre
Corn, stale seedbed, RR seed, 8-row 30",
135 bu yield goal, All Areas, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	1.0000	6.00	_____
App by Air (3 gal)	appl	4.75	1.0000	4.75	_____
FERTILIZERS					
DAP	cwt	29.00	1.0870	31.52	_____
Potash (60% K2O)	cwt	23.60	0.8300	19.59	_____
UAN + Sulfur (28%)	cwt	17.90	2.1430	38.36	_____
UAN (32% N)	cwt	18.50	3.2815	60.71	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.25	2.0000	4.50	_____
Clarity	pt	11.88	0.5000	5.94	_____
Atrazine 4L	pt	1.93	4.0000	7.72	_____
Halex GT	pt	5.96	3.6000	21.46	_____
INSECTICIDES					
Intrepid 2F	oz	2.00	4.0000	8.00	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.08	28.0000	86.24	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	6.50	1.0000	6.50	_____
HAULING					
Haul Corn	bu	0.23	135.0000	31.05	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.5000	22.50	_____
OPERATOR LABOR					
Tractors	hour	12.55	0.5400	6.78	_____
Harvesters	hour	12.55	0.1277	1.60	_____
Self-Propelled	hour	12.55	0.0176	0.22	_____
HAND LABOR					
Implements	hour	9.06	0.1854	1.67	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR	hour	12.56	0.6168	7.75	_____
DIESEL FUEL					
Tractors	gal	3.20	4.7257	15.12	_____
Harvesters	gal	3.20	1.7419	5.57	_____
Self-Propelled	gal	3.20	0.1586	0.51	_____
REPAIR & MAINTENANCE					
Implements	acre	8.46	1.0000	8.46	_____
Tractors	acre	2.64	1.0000	2.64	_____
Harvesters	acre	3.87	1.0000	3.87	_____
Self-Propelled	acre	0.16	1.0000	0.16	_____
INTEREST ON OP. CAP.	acre	10.08	1.0000	10.08	_____

TOTAL DIRECT EXPENSES				419.35	_____
FIXED EXPENSES					
Implements	acre	11.60	1.0000	11.60	_____
Tractors	acre	16.05	1.0000	16.05	_____
Harvesters	acre	14.82	1.0000	14.82	_____
Self-Propelled	acre	1.05	1.0000	1.05	_____

TOTAL FIXED EXPENSES				43.52	_____

TOTAL SPECIFIED EXPENSES				462.87	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 5.B Summary of estimated costs and returns per acre
Corn, stale seedbed, RR seed, 8-row 30",
135 bu yield goal, All Areas, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.50	135.0000	472.50	
TOTAL INCOME				472.50	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	10.75	1.0000	10.75	
FERTILIZERS	acre	150.18	1.0000	150.18	
HERBICIDES	acre	39.62	1.0000	39.62	
INSECTICIDES	acre	8.00	1.0000	8.00	
SEED/PLANTS	acre	86.24	1.0000	86.24	
CUSTOM FERTILIZE	acre	6.50	1.0000	6.50	
HAULING	acre	31.05	1.0000	31.05	
CUSTOM LIME	acre	22.50	1.0000	22.50	
HAND LABOR	hour	9.06	0.1943	1.75	
OPERATOR LABOR	hour	12.55	0.6854	8.60	
UNALLOCATED LABOR	hour	12.56	0.6168	7.75	
DIESEL FUEL	gal	3.20	6.6263	21.20	
REPAIR & MAINTENANCE	acre	15.13	1.0000	15.13	
INTEREST ON OP. CAP.	acre	10.08	1.0000	10.08	
TOTAL DIRECT EXPENSES				419.35	
RETURNS ABOVE DIRECT EXPENSES				53.15	
TOTAL FIXED EXPENSES				43.52	
TOTAL SPECIFIED EXPENSES				462.87	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				9.63	

Note: Cost of production estimates are based on 2014 input prices
Fertilization decisions should be based on soil tests.

Table 5.C Estimated resource use for field operations, per acre
Corn, stale seedbed, RR seed, 8-row 30",
135 bu yield goal, All Areas, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Lime (Spread)	ton			0.25	Oct	0.5000				
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Oct		0.04	0.04	0.08	0.03
DAP	cwt					1.0870				
Potash (60% K2O)	cwt					0.8300				
Disk Heavy	20'	MFWD 170	0.097	1.00	Oct		0.09	0.09	0.09	0.08
Bed/Disk w/roller	8R-30/40	MFWD 170	0.093	1.00	Oct		0.09	0.09	0.09	0.08
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
Clarity	pt					0.5000				
Plant - Rigid	8R-30	MFWD 170	0.094	1.00	Mar		0.09	0.09	0.18	0.08
Corn Seed RR2	thous					28.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	cwt					2.1430				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	8R-30	MFWD 170	0.098	1.00	May		0.09	0.09	0.14	0.08
UAN (32% N)	cwt					3.2815				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	500 bu	MFWD 170	0.031	1.00	Sep		0.03	0.03	0.03	0.02
Haul Corn	bu					135.0000				
Stalk Shredder Flex	20'	MFWD 170	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.68	0.66	0.87	0.61

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 5.D Estimated costs for field operations, per acre
Corn, stale seedbed, RR seed, 8-row 30",
135 bu yield goal, All Areas, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	22.50					0.99	23.49		23.49
Spin Spreader	5 ton		1.18	0.47	1.39		0.13	3.17	1.75	4.92
DAP	cwt	31.52					1.39	32.91		32.91
Potash (60% K2O)	cwt	19.59					0.86	20.45		20.45
Disk Heavy	20'		2.72	1.49	2.32		0.29	6.82	4.97	11.79
Bed/Disk w/roller	8R-30/40		2.63	0.98	2.24		0.26	6.11	4.11	10.22
App by Air (5 gal)	appl	6.00					0.18	6.18		6.18
Glyphosate 3lbs a.e	pt	4.50					0.13	4.63		4.63
Clarity	pt	5.94					0.17	6.11		6.11
Plant - Rigid	8R-30		2.64	1.67	3.10		0.19	7.60	5.02	12.62
Corn Seed RR2	thous	86.24					2.21	88.45		88.45
Custom Apply Fert	acre	6.50					0.14	6.64		6.64
UAN + Sulfur (28%)	cwt	38.36					0.84	39.20		39.20
Sprayer 600-750gal	60' 175hp		0.51	0.16	0.50		0.03	1.20	1.05	2.25
Atrazine 4L	pt	7.72					0.17	7.89		7.89
Halex GT	pt	21.46					0.47	21.93		21.93
Fert Appl (Liquid)	8R-30		2.75	1.48	2.78		0.13	7.14	4.00	11.14
UAN (32% N)	cwt	60.71					1.11	61.82		61.82
App by Air (3 gal)	appl	4.75					0.07	4.82		4.82
Intrepid 2F	oz	8.00					0.12	8.12		8.12
Header - Corn	8R-30		5.57	5.66	3.04		0.05	14.32	17.43	31.75
Grain Cart Corn	500 bu		0.89	0.37	0.76		0.01	2.03	1.31	3.34
Haul Corn	bu	31.05					0.11	31.16		31.16
Stalk Shredder Flex	20'		2.31	2.85	1.97		0.03	7.16	3.88	11.04
TOTALS		354.84	21.20	15.13	18.10	0.00	10.08	419.35	43.52	462.87

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 5.E Estimated monthly income and expense flows per acre
Corn, stale seedbed, RR seed, 8-row 30",
135 bu yield goal, All Areas, Mississippi, 2015

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	472.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	4.75	0.00	0.00	0.00
FERTILIZERS	51.11	0.00	0.00	0.00	0.00	0.00	38.36	60.71	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.44	0.00	29.18	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	86.24	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.05
CUSTOM LIME	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.95	0.00	0.00	0.00	0.00	3.10	0.50	2.78	0.00	0.00	0.00	5.77
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	6.53	0.00	0.00	0.00	0.00	2.64	0.51	2.75	0.00	0.00	0.00	8.77
REPAIR & MAINTENANCE	2.94	0.00	0.00	0.00	0.00	1.67	0.16	1.48	0.00	0.00	0.00	8.88
INTEREST ON OP. CAP.	3.92	0.00	0.00	0.00	0.48	2.40	1.65	1.24	0.19	0.00	0.00	0.20
TOTAL DIRECT EXPENSES	92.95	0.00	0.00	0.00	16.92	96.05	76.86	68.96	12.94	0.00	0.00	54.67
NET INCOME	-92.95	0.00	0.00	0.00	-16.92	-96.05	-76.86	-68.96	-12.94	0.00	0.00	417.83
NET INCOME TO DATE	-92.95	-92.95	-92.95	-92.95	-109.87	-205.92	-282.78	-351.74	-364.68	-364.68	-364.68	53.15

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* Lease costs are based on hourly usage costs.

Table 5.F Estimated returns for various price/yield combinations, per acre
Corn, stale seedbed, RR seed, 8-row 30",
135 bu yield goal, All Areas, Mississippi, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.62	2.80	2.97	3.15	3.32	3.50	3.67	3.85	4.02	4.20	4.37
PERCENT	YIELD	UNIT	dollars										
50	67.50	bu	-226	-214	-202	-191	-179	-167	-155	-143	-132	-120	-108
			-270	-258	-246	-234	-222	-211	-199	-187	-175	-163	-151
60	81.00	bu	-194	-180	-165	-151	-137	-123	-109	-95	-80	-66	-52
			-237	-223	-209	-195	-181	-166	-152	-138	-124	-110	-96
70	94.50	bu	-161	-145	-128	-112	-95	-79	-62	-46	-29	-13	3
			-205	-188	-172	-155	-139	-122	-106	-89	-73	-56	-40
80	108.00	bu	-129	-110	-91	-72	-54	-35	-16	2	21	40	59
			-173	-154	-135	-116	-97	-78	-59	-40	-21	-3	15
90	121.50	bu	-97	-76	-54	-33	-12	9	30	51	72	94	115
			-140	-119	-98	-77	-55	-34	-13	8	29	50	71
100	135.00	bu	-64	-41	-17	5	29	53	76	100	124	147	171
			-108	-84	-61	-37	-13	9	33	56	80	104	127
110	148.50	bu	-32	-6	19	45	71	97	123	149	175	201	227
			-76	-50	-24	1	27	53	79	105	131	157	183
120	162.00	bu	-0	28	56	84	113	141	169	198	226	254	283
			-43	-15	12	41	69	97	126	154	182	211	239
130	175.50	bu	31	62	93	124	154	185	216	246	277	308	339
			-11	19	49	80	111	142	172	203	234	264	295
140	189.00	bu	64	97	130	163	196	229	262	295	328	361	395
			20	53	86	120	153	186	219	252	285	318	351
150	202.50	bu	96	132	167	202	238	273	309	344	380	415	451
			53	88	123	159	194	230	265	301	336	372	407

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.
Note: Cost of production estimates are based on 2014 input prices.

Table 6.A Estimated costs per acre
Corn, no-tillage, BtRR, 8-row 30", 135 bu yield goal
Non-Delta Areas, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	1.0000	6.00	_____
App by Air (3 gal)	appl	4.75	1.0000	4.75	_____
FERTILIZERS					
DAP	cwt	29.00	1.0870	31.52	_____
Potash (60% K2O)	cwt	23.60	0.8300	19.59	_____
Fert 10-34-0	cwt	26.00	0.5000	13.00	_____
UAN (32% N)	cwt	18.50	5.0000	92.50	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.25	2.0000	4.50	_____
Clarity	pt	11.88	0.5000	5.94	_____
Atrazine 4L	pt	1.93	4.0000	7.72	_____
Halex GT	pt	5.96	3.6000	21.46	_____
INSECTICIDES					
Intrepid 2F	oz	2.00	4.0000	8.00	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.47	28.0000	97.16	_____
HAULING					
Haul Corn	bu	0.23	135.0000	31.05	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.5000	22.50	_____
OPERATOR LABOR					
Tractors	hour	12.55	0.4231	5.32	_____
Harvesters	hour	12.55	0.1277	1.60	_____
HAND LABOR					
Implements	hour	9.06	0.2283	2.06	_____
UNALLOCATED LABOR	hour	12.54	0.4957	6.22	_____
DIESEL FUEL					
Tractors	gal	3.20	3.2673	10.46	_____
Harvesters	gal	3.20	1.7419	5.57	_____
REPAIR & MAINTENANCE					
Implements	acre	7.55	1.0000	7.55	_____
Tractors	acre	1.69	1.0000	1.69	_____
Harvesters	acre	3.87	1.0000	3.87	_____
INTEREST ON OP. CAP.	acre	9.17	1.0000	9.17	_____

TOTAL DIRECT EXPENSES				419.20	_____
FIXED EXPENSES					
Implements	acre	9.26	1.0000	9.26	_____
Tractors	acre	9.77	1.0000	9.77	_____
Harvesters	acre	14.82	1.0000	14.82	_____

TOTAL FIXED EXPENSES				33.85	_____

TOTAL SPECIFIED EXPENSES				453.05	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 6.B Summary of estimated costs and returns per acre
Corn, no-tillage, BtRR, 8-row 30", 135 bu yield goal
Non-Delta Areas, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.50	135.0000	472.50	
TOTAL INCOME				472.50	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	10.75	1.0000	10.75	
FERTILIZERS	acre	156.61	1.0000	156.61	
HERBICIDES	acre	39.62	1.0000	39.62	
INSECTICIDES	acre	8.00	1.0000	8.00	
SEED/PLANTS	acre	97.16	1.0000	97.16	
HAULING	acre	31.05	1.0000	31.05	
CUSTOM LIME	acre	22.50	1.0000	22.50	
HAND LABOR	hour	9.06	0.2283	2.06	
OPERATOR LABOR	hour	12.55	0.5508	6.92	
UNALLOCATED LABOR	hour	12.54	0.4957	6.22	
DIESEL FUEL	gal	3.20	5.0092	16.03	
REPAIR & MAINTENANCE	acre	13.11	1.0000	13.11	
INTEREST ON OP. CAP.	acre	9.17	1.0000	9.17	
TOTAL DIRECT EXPENSES				419.20	
RETURNS ABOVE DIRECT EXPENSES				53.30	
TOTAL FIXED EXPENSES				33.85	
TOTAL SPECIFIED EXPENSES				453.05	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				19.45	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 6.C Estimated resource use for field operations, per acre
Corn, no-tillage, BtRR, 8-row 30", 135 bu yield goal
Non-Delta Areas, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Lime (Spread)	ton			0.25	Oct	0.5000				
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
Clarity	pt					0.5000				
Spin Spreader	5 ton	2WD 150	0.042	1.00	Mar		0.04	0.04	0.08	0.03
DAP	cwt					1.0870				
Potash (60% K2O)	cwt					0.8300				
NT Plant&Pre-Rigid	8R-30	2WD 150	0.105	1.00	Mar		0.10	0.10	0.21	0.09
Corn Seed BtRR	thous					28.0000				
Fert 10-34-0	cwt					0.5000				
Spray (Broadcast)	27'	2WD 150	0.062	1.00	Apr		0.06	0.06	0.09	0.05
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	8R-30	2WD 150	0.098	1.00	Apr		0.09	0.09	0.14	0.08
UAN (32% N)	cwt					5.0000				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	500 bu	2WD 150	0.031	1.00	Sep		0.03	0.03	0.03	0.02
Haul Corn	bu					135.0000				
Stalk Shredder Flex	20'	2WD 150	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.55	0.55	0.77	0.49

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 6.D Estimated costs for field operations, per acre
Corn, no-tillage, BtRR, 8-row 30", 135 bu yield goal
Non-Delta Areas, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Lime (Spread)	ton	22.50					0.99	23.49		23.49
App by Air (5 gal)	appl	6.00					0.18	6.18		6.18
Glyphosate 3lbs a.e	pt	4.50					0.13	4.63		4.63
Clarity	pt	5.94					0.17	6.11		6.11
Spin Spreader	5 ton		1.04	0.43	1.39		0.07	2.93	1.47	4.40
DAP	cwt	31.52					0.81	32.33		32.33
Potash (60% K2O)	cwt	19.59					0.50	20.09		20.09
NT Plant&Pre-Rigid	8R-30		2.61	2.09	3.48		0.21	8.39	5.52	13.91
Corn Seed BtRR	thous	97.16					2.49	99.65		99.65
Fert 10-34-0	cwt	13.00					0.33	13.33		13.33
Spray (Broadcast)	27'		1.55	0.42	1.78		0.08	3.83	1.65	5.48
Atrazine 4L	pt	7.72					0.17	7.89		7.89
Halex GT	pt	21.46					0.47	21.93		21.93
Fert Appl (Liquid)	8R-30		2.43	1.39	2.78		0.15	6.75	3.35	10.10
UAN (32% N)	cwt	92.50					2.04	94.54		94.54
App by Air (3 gal)	appl	4.75					0.07	4.82		4.82
Intrepid 2F	oz	8.00					0.12	8.12		8.12
Header - Corn	8R-30		5.57	5.66	3.04		0.05	14.32	17.43	31.75
Grain Cart Corn	500 bu		0.79	0.34	0.76		0.01	1.90	1.10	3.00
Haul Corn	bu	31.05					0.11	31.16		31.16
Stalk Shredder Flex	20'		2.04	2.78	1.97		0.02	6.81	3.33	10.14
TOTALS		365.69	16.03	13.11	15.20	0.00	9.17	419.20	33.85	453.05

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.

Table 6.E Estimated monthly income and expense flows per acre
Corn, no-tillage, BtRR, 8-row 30", 135 bu yield goal
Non-Delta Areas, Mississippi, 2015

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	472.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	4.75	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	64.11	92.50	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.44	0.00	29.18	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	97.16	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.05
CUSTOM LIME	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	4.87	4.56	0.00	0.00	0.00	0.00	5.77
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	3.65	3.98	0.00	0.00	0.00	0.00	8.40
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	2.52	1.81	0.00	0.00	0.00	0.00	8.78
INTEREST ON OP. CAP.	0.99	0.00	0.00	0.00	0.48	4.41	2.91	0.00	0.19	0.00	0.00	0.19
TOTAL DIRECT EXPENSES	23.49	0.00	0.00	0.00	16.92	176.72	134.94	0.00	12.94	0.00	0.00	54.19
NET INCOME	-23.49	0.00	0.00	0.00	-16.92	-176.72	-134.94	0.00	-12.94	0.00	0.00	418.31
NET INCOME TO DATE	-23.49	-23.49	-23.49	-23.49	-40.41	-217.13	-352.07	-352.07	-365.01	-365.01	-365.01	53.30

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Intrepid application is necessary only on refuge acres.
* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
Corn, no-tillage, BtRR, 8-row 30", 135 bu yield goal
Non-Delta Areas, Mississippi, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.62	2.80	2.97	3.15	3.32	3.50	3.67	3.85	4.02	4.20	4.37
PERCENT	YIELD	UNIT	dollars										
50	67.50	bu	-226	-214	-202	-190	-179	-167	-155	-143	-131	-120	-108
			-260	-248	-236	-224	-213	-201	-189	-177	-165	-153	-142
60	81.00	bu	-194	-179	-165	-151	-137	-123	-109	-94	-80	-66	-52
			-227	-213	-199	-185	-171	-157	-142	-128	-114	-100	-86
70	94.50	bu	-161	-145	-128	-112	-95	-79	-62	-46	-29	-12	3
			-195	-179	-162	-146	-129	-112	-96	-79	-63	-46	-30
80	108.00	bu	-129	-110	-91	-72	-53	-34	-16	2	21	40	59
			-163	-144	-125	-106	-87	-68	-49	-31	-12	6	25
90	121.50	bu	-97	-75	-54	-33	-12	9	30	51	72	94	115
			-130	-109	-88	-67	-45	-24	-3	17	39	60	81
100	135.00	bu	-64	-41	-17	6	29	53	76	100	124	147	171
			-98	-75	-51	-27	-4	19	43	66	90	113	137
110	148.50	bu	-32	-6	19	45	71	97	123	149	175	201	227
			-66	-40	-14	11	37	63	89	115	141	167	193
120	162.00	bu	-0	28	56	84	113	141	169	198	226	254	283
			-34	-5	22	51	79	107	136	164	192	221	249
130	175.50	bu	32	62	93	124	154	185	216	247	277	308	339
			-1	29	59	90	121	151	182	213	243	274	305
140	189.00	bu	64	97	130	163	196	229	262	295	329	362	395
			30	63	96	129	162	195	229	262	295	328	361
150	202.50	bu	96	132	167	203	238	273	309	344	380	415	451
			62	98	133	169	204	240	275	310	346	381	417

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.
Note: Cost of production estimates are based on 2014 input prices.

Table 7.A Estimated costs per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	1.0000	6.00	_____
Custom Spray Ground	acre	7.50	1.0000	7.50	_____
FERTILIZERS					
DAP	cwt	29.00	0.7600	22.04	_____
Potash (60% K2O)	cwt	23.60	0.5800	13.69	_____
UAN + Sulfur (28%)	cwt	17.90	4.2500	76.07	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.25	2.0000	4.50	_____
2,4-D Amine 4	pt	2.44	2.0000	4.88	_____
Lexar	pt	7.08	6.0000	42.48	_____
SEED/PLANTS					
Sorghum Concept	lb	2.28	6.0000	13.68	_____
ADJUVANTS					
Surfactant	pt	3.60	0.3000	1.08	_____
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.5000	22.50	_____
OPERATOR LABOR					
Tractors	hour	12.55	0.3120	3.93	_____
Harvesters	hour	12.55	0.1021	1.28	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
UNALLOCATED LABOR	hour	12.55	0.3727	4.68	_____
DIESEL FUEL					
Tractors	gal	3.20	2.7303	8.74	_____
Harvesters	gal	3.20	1.3935	4.46	_____
REPAIR & MAINTENANCE					
Implements	acre	4.84	1.0000	4.84	_____
Tractors	acre	1.53	1.0000	1.53	_____
Harvesters	acre	3.10	1.0000	3.10	_____
INTEREST ON OP. CAP.	acre	5.77	1.0000	5.77	_____

TOTAL DIRECT EXPENSES				279.06	_____
FIXED EXPENSES					
Implements	acre	9.04	1.0000	9.04	_____
Tractors	acre	9.27	1.0000	9.27	_____
Harvesters	acre	11.86	1.0000	11.86	_____

TOTAL FIXED EXPENSES				30.17	_____

TOTAL SPECIFIED EXPENSES				309.23	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Direct Costs do not include allowance for white sugarcane aphid control which averages $25.00 per acre.

Table 7.B Summary of estimated costs and returns per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Grain Sorghum	bu	3.34	100.0000	334.00	
TOTAL INCOME				334.00	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.50	1.0000	13.50	
FERTILIZERS	acre	111.80	1.0000	111.80	
HERBICIDES	acre	51.86	1.0000	51.86	
SEED/PLANTS	acre	13.68	1.0000	13.68	
ADJUVANTS	acre	1.08	1.0000	1.08	
HAULING	acre	25.00	1.0000	25.00	
CUSTOM LIME	acre	22.50	1.0000	22.50	
HAND LABOR	hour	9.06	0.1442	1.31	
OPERATOR LABOR	hour	12.55	0.4142	5.21	
UNALLOCATED LABOR	hour	12.55	0.3727	4.68	
DIESEL FUEL	gal	3.20	4.1239	13.20	
REPAIR & MAINTENANCE	acre	9.47	1.0000	9.47	
INTEREST ON OP. CAP.	acre	5.77	1.0000	5.77	
TOTAL DIRECT EXPENSES				279.06	
RETURNS ABOVE DIRECT EXPENSES				54.94	
TOTAL FIXED EXPENSES				30.17	
TOTAL SPECIFIED EXPENSES				309.23	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				24.77	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Direct Costs do not include allowance for white sugarcane aphid control which averages $25.00 per acre.

Table 7. Estimated resource use for field operations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Lime (Spread)	ton			0.25	Oct	0.5000				
Disk Harrow	24'	MFWD 170	0.081	1.00	Nov		0.08	0.08	0.08	0.07
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
2,4-D Amine 4	pt					2.0000				
Surfactant	pt					0.3000				
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Apr		0.04	0.04	0.08	0.03
DAP	cwt					0.7600				
Potash (60% K2O)	cwt					0.5800				
Field Cultivate Fld	32'	MFWD 170	0.046	1.00	Apr		0.04	0.04	0.04	0.04
Plant - Folding	12R-30	MFWD 170	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Sorghum Concept	lb					6.0000				
Custom Spray Ground	acre			1.00	Apr	1.0000				
Lexar	pt					6.0000				
Fert Appl (Liquid)	12R-30	MFWD 170	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	cwt					4.2500				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Sorghum	bu					100.0000				
TOTALS							0.41	0.41	0.55	0.37

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Direct Costs do not include allowance for white sugarcane aphid control which averages $25.00 per acre.

Table 7.D Estimated costs for field operations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Lime (Spread)	ton	22.50					0.99	23.49		23.49
Disk Harrow	24'		2.29	1.37	1.95		0.23	5.84	4.41	10.25
App by Air (5 gal)	appl	6.00					0.18	6.18		6.18
Glyphosate 3lbs a.e	pt	4.50					0.13	4.63		4.63
2,4-D Amine 4	pt	4.88					0.14	5.02		5.02
Surfactant	pt	1.08					0.03	1.11		1.11
Spin Spreader	5 ton		1.18	0.47	1.39		0.07	3.11	1.75	4.86
DAP	cwt	22.04					0.48	22.52		22.52
Potash (60% K2O)	cwt	13.69					0.30	13.99		13.99
Field Cultivate Fld	32'		1.31	0.67	1.12		0.07	3.17	3.16	6.33
Plant - Folding	12R-30		1.76	1.76	2.07		0.12	5.71	4.54	10.25
Sorghum Concept	lb	13.68					0.30	13.98		13.98
Custom Spray Ground	acre	7.50					0.17	7.67		7.67
Lexar	pt	42.48					0.93	43.41		43.41
Fert Appl (Liquid)	12R-30		2.20	1.40	2.24		0.11	5.95	3.44	9.39
UAN + Sulfur (28%)	cwt	76.07					1.39	77.46		77.46
Header Wheat/Sorghum	25' Rigid		4.46	3.80	2.43		0.04	10.73	12.87	23.60
Haul Sorghum	bu	25.00					0.09	25.09		25.09
TOTALS		239.42	13.20	9.47	11.20	0.00	5.77	279.06	30.17	309.23

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Direct Costs do not include allowance for white sugarcane aphid control which averages $25.00 per acre.

Table 7.E Estimated monthly income and expense flows per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2015

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	334.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	35.73	76.07	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.38	0.00	42.48	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	13.68	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
CUSTOM LIME	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	1.95	0.00	0.00	0.00	0.00	4.58	2.24	0.00	0.00	0.00	2.43
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	2.29	0.00	0.00	0.00	0.00	4.25	2.20	0.00	0.00	0.00	4.46
REPAIR & MAINTENANCE	0.00	1.37	0.00	0.00	0.00	0.00	2.90	1.40	0.00	0.00	0.00	3.80
INTEREST ON OP. CAP.	0.99	0.23	0.00	0.00	0.48	0.00	2.44	1.50	0.00	0.00	0.00	0.13
TOTAL DIRECT EXPENSES	23.49	5.84	0.00	0.00	16.94	0.00	113.56	83.41	0.00	0.00	0.00	35.82
NET INCOME	-23.49	-5.84	0.00	0.00	-16.94	0.00	-113.56	-83.41	0.00	0.00	0.00	298.18
NET INCOME TO DATE	-23.49	-29.33	-29.33	-29.33	-46.27	-46.27	-159.83	-243.24	-243.24	-243.24	-243.24	54.94

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
Direct Costs do not include allowance for white sugarcane aphid control which averages $25.00 per acre.
* Lease costs are based on hourly usage costs.

Table 7. Estimated returns for various price/yield combinations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Grain Sorghum			2.50	2.67	2.83	3.00	3.17	3.34	3.50	3.67	3.84	4.00	4.17
PERCENT	YIELD	UNIT	dollars										
50	50.00	bu	-141	-132	-124	-116	-107	-99	-91	-82	-74	-66	-57
			-171	-163	-154	-146	-138	-129	-121	-112	-104	-96	-87
60	60.00	bu	-118	-108	-98	-88	-78	-68	-58	-48	-38	-28	-18
			-148	-138	-128	-118	-108	-98	-88	-78	-68	-58	-48
70	70.00	bu	-96	-84	-72	-61	-49	-37	-26	-14	-2	9	20
			-126	-114	-102	-91	-79	-67	-56	-44	-32	-21	-9
80	80.00	bu	-73	-60	-46	-33	-20	-6	6	19	33	46	59
			-103	-90	-77	-63	-50	-37	-23	-10	3	16	29
90	90.00	bu	-51	-36	-21	-6	9	24	39	54	69	84	99
			-81	-66	-51	-36	-21	-6	8	23	38	53	69
100	100.00	bu	-28	-11	4	21	38	54	71	88	105	121	138
			-58	-42	-25	-8	8	24	41	58	74	91	108
110	110.00	bu	-6	12	30	49	67	85	104	122	140	159	177
			-36	-17	0	18	37	55	74	92	110	129	147
120	120.00	bu	16	36	56	76	96	116	136	156	176	196	216
			-13	6	26	46	66	86	106	126	146	166	186
130	130.00	bu	39	60	82	104	125	147	169	191	212	234	256
			8	30	52	74	95	117	139	160	182	204	225
140	140.00	bu	61	84	108	131	155	178	201	225	248	272	295
			31	54	78	101	124	148	171	195	218	241	265
150	150.00	bu	84	109	134	159	184	209	234	259	284	309	334
			53	79	104	129	154	179	204	229	254	279	304

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.
Note: Cost of production estimates are based on 2014 input prices.

Table 8.A Estimated costs per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	3.0000	18.00	_____
FERTILIZERS					
DAP	cwt	29.00	1.0000	29.00	_____
Potash (60% K2O)	cwt	23.60	0.7500	17.70	_____
Fert 41-0-0-4	cwt	23.50	2.8000	65.80	_____
FUNGICIDES					
Quilt	pt	22.34	0.8750	19.55	_____
HERBICIDES					
Axiom 68DF	oz	1.86	10.0000	18.60	_____
Axial XL	oz	1.05	16.4000	17.22	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.32	90.0000	28.80	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	6.50	2.8000	18.20	_____
HAULING					
Haul Wheat	bu	0.26	70.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.5000	22.50	_____
OPERATOR LABOR					
Tractors	hour	12.55	0.2648	3.33	_____
Harvesters	hour	12.55	0.1021	1.28	_____
HAND LABOR					
Implements	hour	9.06	0.1363	1.23	_____
UNALLOCATED LABOR	hour	12.56	0.2936	3.69	_____
DIESEL FUEL					
Tractors	gal	3.20	2.3178	7.42	_____
Harvesters	gal	3.20	1.3935	4.46	_____
REPAIR & MAINTENANCE					
Implements	acre	3.70	1.0000	3.70	_____
Tractors	acre	1.30	1.0000	1.30	_____
Harvesters	acre	3.10	1.0000	3.10	_____
INTEREST ON OP. CAP.	acre	7.17	1.0000	7.17	_____
TOTAL DIRECT EXPENSES				310.25	_____
FIXED EXPENSES					
Implements	acre	7.71	1.0000	7.71	_____
Tractors	acre	7.87	1.0000	7.87	_____
Harvesters	acre	11.86	1.0000	11.86	_____
TOTAL FIXED EXPENSES				27.44	_____
TOTAL SPECIFIED EXPENSES				337.69	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 8.B Summary of estimated costs and returns per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	4.98	70.0000	348.60	_____
TOTAL INCOME				348.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	18.00	1.0000	18.00	_____
FERTILIZERS	acre	112.50	1.0000	112.50	_____
FUNGICIDES	acre	19.55	1.0000	19.55	_____
HERBICIDES	acre	35.82	1.0000	35.82	_____
SEED/PLANTS	acre	28.80	1.0000	28.80	_____
CUSTOM FERTILIZE	acre	18.20	1.0000	18.20	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	22.50	1.0000	22.50	_____
HAND LABOR	hour	9.06	0.1363	1.23	_____
OPERATOR LABOR	hour	12.55	0.3670	4.61	_____
UNALLOCATED LABOR	hour	12.56	0.2936	3.69	_____
DIESEL FUEL	gal	3.20	3.7114	11.88	_____
REPAIR & MAINTENANCE	acre	8.10	1.0000	8.10	_____
INTEREST ON OP. CAP.	acre	7.17	1.0000	7.17	_____
TOTAL DIRECT EXPENSES				310.25	_____
RETURNS ABOVE DIRECT EXPENSES				38.35	_____
TOTAL FIXED EXPENSES				27.44	_____
TOTAL SPECIFIED EXPENSES				337.69	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				10.91	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 8.C Estimated resource use for field operations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Lime (Spread)	ton			0.25	Sep	0.5000				
Disk Harrow	24'	MFWD 170	0.081	1.00	Sep		0.08	0.08	0.08	0.06
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Sep		0.04	0.04	0.08	0.03
DAP	cwt					1.0000				
Potash (60% K2O)	cwt					0.7500				
Field Cultivate Fld	32'	MFWD 170	0.046	1.00	Sep		0.04	0.04	0.04	0.03
Grain Drill	20'	MFWD 170	0.094	1.00	Oct		0.09	0.09	0.18	0.07
Wheat Seed Private	lb					90.0000				
App by Air (5 gal)	appl			1.00	Nov	1.0000				
Axiom 68DF	oz					10.0000				
App by Air (5 gal)	appl			1.00	Jan	1.0000				
Axial XL	oz					16.4000				
App Fert by Air	cwt			1.00	Feb	1.4000				
Fert 41-0-0-4	cwt					1.4000				
App Fert by Air	cwt			1.00	Mar	1.4000				
Fert 41-0-0-4	cwt					1.4000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Quilt	pt					0.8750				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Jun		0.10	0.10	0.10	0.08
Haul Wheat	bu					70.0000				
TOTALS							0.36	0.36	0.50	0.29

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 8.D Estimated costs for field operations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	DIRECT COST FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	22.50					0.83	23.33		23.33
Disk Harrow	24'		2.29	1.37	1.85		0.20	5.71	4.41	10.12
Spin Spreader	5 ton		1.18	0.47	1.33		0.11	3.09	1.75	4.84
DAP	cwt	29.00					1.06	30.06		30.06
Potash (60% K2O)	cwt	17.70					0.65	18.35		18.35
Field Cultivate Fld	32'		1.31	0.67	1.06		0.11	3.15	3.16	6.31
Grain Drill	20'		2.64	1.79	2.98		0.24	7.65	5.25	12.90
Wheat Seed Private	lb	28.80					0.95	29.75		29.75
App by Air (5 gal)	appl	6.00					0.18	6.18		6.18
Axiom 68DF	oz	18.60					0.55	19.15		19.15
App by Air (5 gal)	appl	6.00					0.13	6.13		6.13
Axial XL	oz	17.22					0.38	17.60		17.60
App Fert by Air	cwt	9.10					0.17	9.27		9.27
Fert 41-0-0-4	cwt	32.90					0.60	33.50		33.50
App Fert by Air	cwt	9.10					0.13	9.23		9.23
Fert 41-0-0-4	cwt	32.90					0.48	33.38		33.38
App by Air (5 gal)	appl	6.00					0.07	6.07		6.07
Quilt	pt	19.55					0.22	19.77		19.77
Header Wheat/Sorghum	25' Rigid		4.46	3.80	2.31		0.04	10.61	12.87	23.48
Haul Wheat	bu	18.20					0.07	18.27		18.27
TOTALS		273.57	11.88	8.10	9.53	0.00	7.17	310.25	27.44	337.69

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 8.E Estimated monthly income and expense flows per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2015

ITEM	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	348.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	6.00	0.00	0.00	6.00	0.00	0.00
FERTILIZERS	0.00	0.00	46.70	0.00	0.00	0.00	0.00	32.90	32.90	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.55	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	18.60	0.00	17.22	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	28.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.10	9.10	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.20
CUSTOM LIME	0.00	0.00	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	4.24	2.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.31
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	4.78	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.46
REPAIR & MAINTENANCE	0.00	0.00	2.51	1.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.80
INTEREST ON OP. CAP.	0.00	0.00	2.96	1.19	0.73	0.00	0.51	0.77	0.61	0.29	0.00	0.11
TOTAL DIRECT EXPENSES	0.00	0.00	83.69	37.40	25.33	0.00	23.73	42.77	42.61	25.84	0.00	28.88
NET INCOME	0.00	0.00	-83.69	-37.40	-25.33	0.00	-23.73	-42.77	-42.61	-25.84	0.00	319.72
NET INCOME TO DATE	0.00	0.00	-83.69	-121.09	-146.42	-146.42	-170.15	-212.92	-255.53	-281.37	-281.37	38.35

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Wheat			3.73	3.98	4.23	4.48	4.73	4.98	5.22	5.47	5.72	5.97	6.22
PERCENT	YIELD	UNIT	dollars										
50	35.00	bu	-170	-161	-152	-144	-135	-126	-118	-109	-100	-91	-83
			-197	-189	-180	-171	-162	-154	-145	-136	-128	-119	-110
60	42.00	bu	-146	-135	-125	-114	-104	-93	-83	-72	-62	-51	-41
			-173	-163	-152	-142	-131	-121	-110	-100	-89	-79	-68
70	49.00	bu	-121	-109	-97	-85	-72	-60	-48	-36	-24	-11	0
			-149	-136	-124	-112	-100	-88	-75	-63	-51	-39	-27
80	56.00	bu	-97	-83	-69	-55	-41	-27	-13	0	14	28	42
			-124	-110	-96	-83	-69	-55	-41	-27	-13	0	14
90	63.00	bu	-73	-57	-41	-26	-10	5	21	36	52	68	83
			-100	-84	-69	-53	-37	-22	-6	9	24	40	56
100	70.00	bu	-48	-31	-13	3	20	38	55	73	90	108	125
			-76	-58	-41	-23	-6	10	28	45	63	80	98
110	77.00	bu	-24	-5	13	33	52	71	90	109	128	148	167
			-51	-32	-13	5	24	43	63	82	101	120	139
120	84.00	bu	-0	20	41	62	83	104	125	146	167	188	208
			-27	-6	14	35	56	76	97	118	139	160	181
130	91.00	bu	24	46	69	92	114	137	160	182	205	228	250
			-3	19	42	64	87	110	132	155	177	200	223
140	98.00	bu	48	72	97	121	146	170	194	219	243	268	292
			21	45	69	94	118	143	167	191	216	240	265
150	105.00	bu	72	98	125	151	177	203	229	255	281	308	334
			45	71	97	123	149	176	202	228	254	280	306

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.
Note: Cost of production estimates are based on 2014 input prices.

APPENDIX

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 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 (250-299 hp)	265 hp	291,000	300	8	13.64	12.55	43.64	30.31	86.51	116.03	202.54
Combine (300-349 hp)	325 hp	325,000	300	8	16.73	12.55	53.53	33.85	99.94	129.59	229.53
Combine (350-399 hp)	355 hp	350,000	300	8	18.27	12.55	58.46	36.45	107.47	139.56	247.03
Combine (400-449 hp)	425 hp	375,000	300	8	21.87	12.55	70.00	39.06	121.61	149.53	271.14
Combine (450-499hp)	475 hp	397,000	300	8	24.44	12.55	78.23	41.35	132.14	158.30	290.44
Cotton Stripper	173 hp	170,000	200	8	8.08	12.55	25.85	26.56	64.96	101.68	166.65
Tractor(20-39hp)CB	MFWD 30	31,100	600	8	1.54	12.55	4.94	0.97	18.46	5.64	24.11
Tractor(20-39hp)RB	MFWD 30	18,600	600	8	1.54	12.55	4.94	0.58	18.07	3.37	21.44
Tractor(40-59hp)CB	2WD 50	33,700	600	8	2.57	12.55	8.23	1.05	21.83	6.12	27.95
Tractor(40-59hp)CB	MFWD 50	38,900	600	8	2.57	12.55	8.23	1.21	22.00	7.06	29.06
Tractor(40-59hp)RB	2WD 50	18,900	600	8	2.57	12.55	8.23	0.59	21.37	3.43	24.80
Tractor(40-59hp)RB	MFWD 50	26,200	600	8	2.57	12.55	8.23	0.81	21.60	4.75	26.36
Tractor(60-89hp)CB	2WD 75	43,400	600	8	3.86	12.55	12.35	1.35	26.25	7.88	34.14
Tractor(60-89hp)CB	MFWD 75	47,900	600	8	3.86	12.55	12.35	1.49	26.40	8.69	35.09
Tractor(60-89hp)RB	2WD 75	35,000	600	8	3.86	12.55	12.35	1.09	25.99	6.35	32.35
Tractor(60-89hp)RB	MFWD 75	39,600	600	8	3.86	12.55	12.35	1.23	26.14	7.19	33.33
Tractor(90-119hp)CB	2WD 105	63,100	600	8	5.40	12.55	17.29	1.97	31.81	11.45	43.27
Tractor(90-119hp)CB	MFWD 105	74,400	600	8	5.40	12.55	17.29	2.32	32.16	13.51	45.68
Tractor(90-119hp)RB	2WD 105	54,300	600	8	5.40	12.55	17.29	1.69	31.54	9.86	41.40
Tractor(90-119hp)RB	MFWD 105	56,900	600	8	5.40	12.55	17.29	1.77	31.62	10.33	41.95
Tractor(120-139hp)CB	2WD 130	96,300	600	8	6.69	12.55	21.41	3.00	36.97	17.48	54.46
Tractor(120-139hp)CB	MFWD 130	114,000	600	8	6.69	12.55	21.41	3.56	37.52	20.70	58.22
Tractor(140-159hp)CB	2WD 150	127,000	600	8	7.72	12.55	24.70	3.96	41.22	23.06	64.29
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	12.55	24.70	4.46	41.72	25.97	67.69
Tractor(160-179hp)CB	MFWD 170	156,000	600	8	8.75	12.55	28.00	4.87	45.42	29.71	75.14
Tractor(180-199hp)CB	MFWD 190	167,000	600	8	9.77	12.55	31.29	5.21	49.06	31.81	80.87
Tractor(200-249hp)CB	MFWD 225	226,000	600	8	11.58	12.55	37.06	7.06	56.67	43.05	99.72
Tractor(200-249hp)CB	Track 225	277,000	600	8	11.58	12.55	37.06	8.65	58.26	52.76	111.03
Tractor(250-349hp)CB	4WD 300	277,000	600	8	15.44	12.55	49.41	8.65	70.62	52.76	123.38
Tractor(250-349hp)CB	MFWD 300	271,000	600	8	15.44	12.55	49.41	8.46	70.43	51.62	122.05
Tractor(250-349hp)CB	Track 300	281,000	600	8	15.44	12.55	49.41	8.78	70.74	53.52	124.27
Tractor(350-449hp)CB	4WD 400	313,000	600	8	20.58	12.55	65.88	9.78	88.21	59.62	147.84
Tractor(350-449hp)CB	Track 400	364,000	600	8	20.58	12.55	65.88	11.37	89.80	69.33	159.14
Tractor(450-550hp)CB	4WD 500	361,000	600	8	25.73	12.55	82.35	11.28	106.18	68.76	174.95
Tractor(450-550hp)CB	Track 500	399,000	600	8	25.73	12.55	82.35	12.46	107.37	76.00	183.38
Utility Vechicle	900 CC	14,300	200	8	1.00	12.55	3.40	2.23	18.18	8.55	26.73
Utility Vehicle	800 CC	6,500	200	8	0.70	12.55	2.38	1.01	15.94	3.88	19.83
Utility Vehicle-mule	600 CC	11,500	200	8	0.50	12.55	1.70	1.79	16.04	6.87	22.92

Notes:
Labor: Includes allocated labor from power unit.
Total Direct: Does not include interest on operating capital.
CB = Cab, RB = Roll Bar

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate,and direct and fixed cost per acre, Mississippi, 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					
Cotton Picker	4R-30(350)	350,000	200	8	18.01	0.327	7.07	18.87	17.90	43.85	68.53	112.38
Cotton Picker	4R-38(255)	267,000	200	8	13.12	0.257	5.57	10.82	10.75	27.15	41.16	68.31
Cotton Picker	4R-38(350)	406,000	200	8	18.01	0.257	5.57	14.86	16.35	36.78	62.59	99.38
Cotton Picker	4R2x1(350)	413,000	200	8	18.01	0.172	3.72	9.93	11.11	24.77	42.56	67.34
Cotton Picker	6R-30(355)	465,000	200	8	18.27	0.218	4.71	12.76	15.85	33.33	60.70	94.03
Cotton Picker	6R-38(355)	478,000	200	8	18.27	0.172	3.72	10.07	12.86	26.66	49.26	75.93
Cotton Picker/Module	4R-38(365)	548,000	200	8	18.78	0.257	5.57	15.49	22.07	43.14	84.49	127.63
Cotton Picker/Module	6R-30(365)	608,000	200	8	18.78	0.218	4.71	13.12	20.73	38.57	79.36	117.94
Cotton Picker/Module	6R-30(500)	688,000	200	8	25.73	0.218	4.71	17.97	23.46	46.15	89.81	135.96
Cotton Picker/Module	6R-38(365)	606,000	200	8	18.78	0.172	3.72	10.35	16.31	30.39	62.45	92.85
Cotton Picker/Module	6R-38(500)	689,000	200	8	25.73	0.172	3.72	14.19	18.55	36.46	71.01	107.47
Dry Applicator SP	70'300cuft	289,000	350	8	16.98	0.015	0.25	0.82	0.23	1.31	1.49	2.80
Sprayer 110Gal	30' 50hp	44,000	350	8	2.41	0.035	0.60	0.27	0.08	0.95	0.53	1.48
Sprayer 600-750gal	60' 175hp	174,000	350	8	9.00	0.017	0.30	0.50	0.16	0.97	1.04	2.02
Sprayer 600-825gal	80' 175hp	174,000	350	8	11.81	0.013	0.22	0.49	0.12	0.84	0.78	1.63
Sprayer 600-825gal	90' 250hp	254,000	350	8	12.73	0.011	0.20	0.47	0.15	0.83	1.02	1.85
Sprayer 800gal	100' 250hp	256,000	350	8	14.15	0.010	0.18	0.47	0.14	0.80	0.92	1.73
Sprayer 800gal	80' 250hp	242,000	350	8	12.86	0.013	0.22	0.54	0.17	0.94	1.09	2.03
Sprayer 1000-1400gal	90' 275hp	290,000	350	8	14.15	0.010	0.18	0.47	0.16	0.82	1.04	1.87
Sprayer 1000gal	100' 300hp	302,000	350	8	15.44	0.010	0.18	0.52	0.17	0.87	1.09	1.96
Sprayer 1200+gal	120' 300hp	318,000	350	8	15.44	0.008	0.15	0.43	0.15	0.73	0.95	1.69
Utility Vehicle	20'	15,650	200	8	1.00	0.052	0.90	0.17	0.12	1.21	0.49	1.70
Utility Vehicle	75"ropewic	8,750	200	8	0.70	0.170	3.22	0.40	0.23	3.86	0.89	4.75

Notes:
Labor: includes allocated labor plus any additional labor from self-propelled machine.
Direct: Does not include interest on operating capital.

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 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							
Bed-Paratill Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.01	2.99	1.58	0.57	6.16	2.64	3.47	12.28
Bed-Paratill Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.67	1.99	1.34	0.37	4.38	2.23	2.31	8.93
Bed-Paratill Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.67	1.99	1.34	0.37	4.38	2.23	2.31	8.93
Bed-Paratill Rigid	4R-30	MFWD 225	16,500	150	12	0.204	2.56	7.57	1.21	1.44	12.79	2.02	8.79	23.62
Bed-Paratill Rigid	4R-38	MFWD 225	15,200	150	12	0.160	2.01	5.96	0.88	1.13	10.00	1.47	6.92	18.39
Bed-Paratill Rigid	6R-30	MFWD 225	22,600	150	12	0.136	1.70	5.04	1.11	0.96	8.83	1.85	5.86	16.54
Bed-Paratill Rigid	6R-38	MFWD 225	20,300	150	12	0.107	1.34	3.98	0.78	0.75	6.88	1.31	4.62	12.82
Bed-Paratill Rigid	8R-30	MFWD 225	27,200	150	12	0.102	1.28	3.78	1.00	0.72	6.79	1.67	4.39	12.86
Bed-Paratill Rigid	8R-38	MFWD 225	24,500	150	12	0.080	1.01	2.99	0.71	0.57	5.29	1.19	3.47	9.95
Bed-Paratill w/rol	4R-30	MFWD 225	17,600	150	12	0.204	2.56	7.57	1.29	1.44	12.87	2.16	8.79	23.83
Bed-Paratill w/rol	4R-38	MFWD 225	17,600	150	12	0.160	2.01	5.96	1.02	1.13	10.14	1.70	6.92	18.77
Bed-Paratill w/rol	6R-38	MFWD 225	22,700	150	12	0.107	1.34	3.98	0.88	0.75	6.97	1.46	4.62	13.07
Bed-Rip/Disk Fold.	8R-38	MFWD 190	38,000	300	20	0.073	0.91	2.28	0.13	0.38	3.72	0.62	2.32	6.67
Bed-Rip/Disk Fold.	12R-30	MFWD 225	53,200	300	20	0.061	0.77	2.28	0.16	0.43	3.65	0.73	2.65	7.04
Bed-Rip/Disk Fold.	12R-38	MFWD 225	53,200	300	20	0.046	0.58	1.71	0.12	0.32	2.74	0.55	1.98	5.28
Bed-Rip/Disk Rigid	4R-30	MFWD 190	16,700	300	20	0.184	2.32	5.78	0.15	0.96	9.22	0.69	5.88	15.79
Bed-Rip/Disk Rigid	4R-38	MFWD 190	16,700	300	20	0.146	1.84	4.59	0.12	0.76	7.32	0.54	4.66	12.53
Bed-Rip/Disk Rigid	6R-38	MFWD 190	23,000	300	20	0.097	1.22	3.04	0.11	0.50	4.88	0.50	3.09	8.48
Bed-Rip/Disk Rigid	8R-30	MFWD 190	29,800	300	20	0.139	1.74	4.35	0.20	0.72	7.02	0.92	4.42	12.37
Bed-Rip/Disk Rigid	8R-38	MFWD 190	29,800	300	20	0.073	0.91	2.28	0.10	0.38	3.69	0.48	2.32	6.50
Bed-Rip/Disk Rigid	6R-30	MFWD 190	23,000	300	20	0.123	1.54	3.85	0.14	0.64	6.18	0.63	3.92	10.74
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	23,900	150	12	0.107	1.34	3.98	0.92	0.75	7.02	1.54	4.62	13.19
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	31,400	150	12	0.080	1.01	2.99	0.91	0.57	5.49	1.52	3.47	10.49
Bed-Roll-Fold.	8R-38	MFWD 190	27,000	160	10	0.074	0.93	2.31	0.50	0.38	4.13	1.27	2.35	7.76
Bed-Roll-Fold.	12R-30	MFWD 225	28,800	160	10	0.062	0.78	2.31	0.45	0.44	3.99	1.14	2.69	7.82
Bed-Roll-Fold.	12R-38	MFWD 225	32,400	160	10	0.049	0.61	1.82	0.39	0.34	3.19	1.01	2.12	6.33
Bed-Roll-Fold.	16R-30	MFWD 225	33,600	160	10	0.046	0.58	1.73	0.39	0.33	3.05	1.00	2.01	6.07
Bed-Roll-Rigid	8R-38	MFWD 190	20,200	160	10	0.074	0.93	2.31	0.37	0.38	4.01	0.95	2.35	7.32
Bed/Disk (Hipper)	4R-38	MFWD 150	7,820	160	10	0.147	1.85	3.64	0.28	0.65	6.44	0.73	3.83	11.01
Bed/Disk (Hipper)	6R-30	MFWD 170	12,800	160	10	0.125	1.56	3.50	0.40	0.60	6.07	1.01	3.71	10.81
Bed/Disk (Hipper)	6R-38	MFWD 170	13,500	160	10	0.098	1.23	2.76	0.33	0.48	4.81	0.84	2.93	8.59
Bed/Disk (Hipper)	8R-30	MFWD 190	17,400	160	10	0.093	1.17	2.93	0.40	0.48	5.00	1.03	2.98	9.02
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	31,900	160	10	0.049	0.61	1.54	0.39	0.25	2.81	1.00	1.56	5.38
Bed/Disk (Hipper)	10R-30	MFWD 225	19,900	160	10	0.075	0.94	2.77	0.37	0.52	4.62	0.95	3.22	8.80
Bed/Disk (Hipper)	10R-38	MFWD 225	23,100	160	10	0.059	0.74	2.19	0.34	0.41	3.69	0.87	2.54	7.11
Bed/Disk (Hipper)	12R-30	MFWD 225	29,100	160	10	0.062	0.78	2.31	0.45	0.44	3.99	1.15	2.69	7.84
Bed/Disk (Hipper)	12R-38	MFWD 225	31,900	160	10	0.049	0.61	1.82	0.39	0.34	3.18	1.00	2.12	6.31
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	21,300	160	10	0.074	0.93	2.31	0.39	0.38	4.03	1.00	2.35	7.39
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	19,800	160	10	0.074	0.93	2.31	0.36	0.38	4.00	0.93	2.35	7.29
Bed/Disk w/roller	8R-30/40	MFWD 190	22,100	160	10	0.093	1.17	2.93	0.51	0.48	5.11	1.32	2.98	9.42
Bed/Disk w/roller	12R-30/40	MFWD 225	47,200	160	10	0.062	0.78	2.31	0.73	0.44	4.27	1.87	2.69	8.85
Bed/Disk w/roller	8R-38	MFWD 190	25,400	160	10	0.074	0.93	2.31	0.47	0.38	4.10	1.19	2.35	7.66
Bed/Lister	4R-38	MFWD 150	18,200	160	8	0.228	2.86	5.64	0.97	1.02	10.50	2.96	5.93	19.40
Bed/Lister	6R-38	MFWD 150	15,500	160	8	0.120	1.50	2.96	0.43	0.53	5.45	1.33	3.12	9.90
Bed/Lister	8R-30	MFWD 190	22,400	160	8	0.114	1.43	3.57	0.59	0.59	6.20	1.82	3.63	11.66
Bed/Lister	8R-38	MFWD 190	22,800	160	8	0.090	1.13	2.82	0.48	0.47	4.91	1.47	2.87	9.25
Bed/Lister	8R-38 2x1	MFWD 190	35,700	160	8	0.060	0.75	1.88	0.50	0.31	3.45	1.53	1.91	6.89
Bed/Lister	10R-30	MFWD 225	30,100	160	8	0.091	1.14	3.38	0.64	0.64	5.82	1.96	3.93	11.71
Bed/Lister	10R-38	MFWD 225	33,100	160	8	0.072	0.90	2.66	0.55	0.50	4.64	1.70	3.10	9.44
Bed/Lister	12R-38	MFWD 225	35,700	160	8	0.060	0.75	2.22	0.50	0.42	3.90	1.53	2.58	8.02
Bed\Lister	16R-30	MFWD 225	45,900	160	8	0.035	0.44	1.30	0.37	0.24	2.36	1.15	1.51	5.03
Blade-Box	6'-7'	2WD 130	1,090	200	20	0.020	0.25	0.42	0.01	0.06	0.74	0.00	0.34	1.10
Blade-Box	8'-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	12'-16'	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'-7'	2WD 50	1,150	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	8'-10'	2WD 50	3,310	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	12'-16'	2WD 50	6,730	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy	4R-30(350)	MFWD 190	30,600	200	10	0.327	4.10	10.24	2.50	1.70	18.56	4.90	10.41	33.88
Boll Buggy	4R-38(255)	MFWD 190	30,600	200	10	0.257	3.23	8.06	1.97	1.34	14.61	3.86	8.20	26.68
Boll Buggy	4R-38(350)	MFWD 190	30,600	200	10	0.257	3.23	8.06	1.97	1.34	14.61	3.86	8.20	26.68
Boll Buggy	4R2x1(350)	MFWD 190	30,600	200	10	0.172	2.16	5.39	1.31	0.89	9.77	2.58	5.48	17.83
Boll Buggy	6R-30(355)	MFWD 190	30,600	200	10	0.218	2.73	6.83	1.66	1.13	12.37	3.26	6.94	22.58
Boll Buggy	6R-38(355)	MFWD 190	30,600	200	10	0.172	2.16	5.39	1.31	0.89	9.77	2.58	5.48	17.83
Boll Buggy-Stripper	13' Bcast	MFWD 150	30,500	200	10	0.251	3.16	6.22	1.92	1.12	12.42	3.75	6.54	22.72
Boll Buggy-Stripper	16' Bcast	MFWD 150	30,600	200	10	0.204	2.56	5.05	1.56	0.91	10.10	3.06	5.31	18.48
Boll Buggy-Stripper	19' Bcast	MFWD 150	30,600	200	10	0.172	2.16	4.25	1.31	0.77	8.50	2.58	4.47	15.56
Boll Buggy-Stripper	4R-30 2x1	MFWD 150	30,600	200	10	0.218	2.73	5.39	1.66	0.97	10.77	3.26	5.66	19.71
Boll Buggy-Stripper	4R-36	MFWD 150	30,500	200	10	0.272	3.42	6.74	2.08	1.21	13.46	4.07	7.08	24.62
Boll Buggy-Stripper	4R-38	MFWD 150	30,600	200	10	0.257	3.23	6.36	1.97	1.15	12.72	3.86	6.69	23.28
Boll Buggy-Stripper	4R-38 2x1	MFWD 150	30,600	200	10	0.172	2.16	4.25	1.31	0.77	8.50	2.58	4.47	15.56
Boll Buggy-Stripper	5R-30	MFWD 150	30,600	200	10	0.261	3.28	6.47	2.00	1.17	12.93	3.92	6.80	23.65
Boll Buggy-Stripper	5R-38	MFWD 150	30,600	200	10	0.207	2.60	5.11	1.58	0.92	10.23	3.10	5.38	18.71
Boll Buggy-Stripper	6R-30	MFWD 150	30,600	200	10	0.218	2.73	5.39	1.66	0.97	10.77	3.26	5.66	19.71
Boll Buggy-Stripper	6R-38	MFWD 150	30,600	200	10	0.172	2.16	4.25	1.31	0.77	8.50	2.58	4.47	15.56
Boll Buggy-Stripper	8R-30	MFWD 150	30,600	200	10	0.163	2.05	4.04	1.25	0.73	8.08	2.45	4.25	14.78
Boll Buggy-Stripper	8R-36/38	MFWD 150	30,600	200	10	0.129	1.62	3.19	0.98	0.57	6.38	1.93	3.36	11.68
Chisel Plow-Folding	16'	2WD 130	22,500	150	12	0.115	1.45	2.47	0.93	0.34	5.21	1.56	2.02	8.79

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Chisel Plow-Folding	24'	MFWD 190	37,200	150	12	0.076	0.95	2.39	1.02	0.39	4.77	1.71	2.43	8.92
Chisel Plow-Folding	32'	MFWD 225	48,000	150	12	0.057	0.72	2.14	1.00	0.40	4.27	1.66	2.48	8.43
Chisel Plow-Folding	42'	MFWD 225	55,200	150	12	0.044	0.55	1.63	0.87	0.31	3.37	1.46	1.89	6.72
Chisel Plow-Folding	50'	MFWD 225	75,500	150	10	0.036	0.46	1.37	1.20	0.26	3.30	1.89	1.59	6.79
Chisel Plow-Folding	61'	MFWD 225	85,100	150	12	0.030	0.38	1.12	0.93	0.21	2.64	1.55	1.30	5.50
Chisel Plow-Rigid	10'	MFWD 170	6,000	150	12	0.184	2.32	5.17	0.40	0.90	8.79	0.66	5.49	14.95
Chisel Plow-Rigid	15'	2WD 130	11,900	150	12	0.123	1.54	2.63	0.52	0.37	5.08	0.88	2.15	8.12
Chisel Plow-Rigid	20'	MFWD 225	1,200	150	12	0.102	1.28	3.80	0.04	0.72	5.86	0.07	4.42	10.36
Chisel Plow-Rigid	24'	MFWD 190	13,100	150	12	0.077	0.96	2.41	0.36	0.40	4.14	0.60	2.45	7.20
Chisel-Harrow	21 shank	2WD 190	12,500	150	12	0.088	1.10	2.75	0.39	0.30	4.56	0.66	1.84	7.06
Chisel-Harrow	27 shank	MFWD 225	14,100	150	12	0.068	0.85	2.53	0.34	0.48	4.22	0.58	2.94	7.75
Coulter-Chisel-Harro	21 shank	2WD 190	19,200	150	12	0.088	1.10	2.75	0.61	0.30	4.77	1.01	1.84	7.63
Coulter-Chisel-Harro	27 shank	MFWD 225	24,000	150	12	0.068	0.85	2.53	0.59	0.48	4.47	0.98	2.94	8.41
Cult & PD Ridge Till	8R-30	2WD 150	30,100	200	12	0.110	1.87	2.71	1.58	0.43	6.61	1.54	2.53	10.70
Cult & PD Ridge Till	12R-30	2WD 190	41,300	200	12	0.073	1.25	2.29	1.45	0.25	5.25	1.41	1.53	8.20
Cultivate	4R-30	2WD 105	11,100	150	10	0.206	2.58	3.56	0.61	0.40	7.17	1.55	2.36	11.09
Cultivate	4R-38	2WD 105	11,900	150	10	0.162	2.03	2.80	0.51	0.27	5.63	1.31	1.60	8.55
Cultivate	6R-30	MFWD 150	15,900	150	10	0.137	1.72	3.39	0.58	0.61	6.32	1.48	3.57	11.37
Cultivate	6R-38	MFWD 150	15,700	150	10	0.108	1.36	2.68	0.45	0.48	4.98	1.15	2.81	8.96
Cultivate	8R-30	MFWD 190	20,600	150	10	0.103	1.29	3.22	0.56	0.53	5.62	1.44	3.28	10.35
Cultivate	8R-38	MFWD 190	21,800	150	10	0.073	0.92	2.30	0.42	0.38	4.04	1.09	2.34	7.47
Cultivate	8R-38 2x1	MFWD 190	29,700	150	10	0.054	0.68	1.69	0.42	0.28	3.09	1.09	1.72	5.91
Cultivate	10R-30	MFWD 225	28,200	150	10	0.082	1.03	3.05	0.62	0.58	5.29	1.58	3.55	10.42
Cultivate	12R-30	MFWD 225	36,300	150	10	0.068	0.86	2.54	0.66	0.48	4.56	1.69	2.95	9.21
Cultivate	12R-38	MFWD 225	37,400	150	10	0.054	0.68	2.01	0.54	0.38	3.61	1.37	2.33	7.33
Cultivate	16R-30	MFWD 225	45,200	150	10	0.051	0.64	1.91	0.62	0.36	3.54	1.58	2.21	7.34
Cultivate & Post	4R-30	2WD 105	17,100	150	10	0.220	3.75	3.80	1.00	0.37	8.93	2.55	2.16	13.66
Cultivate & Post	4R-38	2WD 105	17,800	150	10	0.173	2.95	2.99	0.82	0.29	7.07	2.09	1.70	10.87
Cultivate & Post	6R-30	MFWD 150	21,900	150	10	0.146	2.50	3.62	0.85	0.65	7.64	2.18	3.80	13.63
Cultivate & Post	6R-38	MFWD 150	21,700	150	10	0.115	1.97	2.86	0.67	0.51	6.02	1.70	3.00	10.74
Cultivate & Post	8R-30	MFWD 190	26,500	150	10	0.110	1.87	3.44	0.77	0.57	6.67	1.98	3.49	12.15
Cultivate & Post	8R-38	MFWD 190	27,800	150	10	0.086	1.48	2.72	0.64	0.45	5.30	1.64	2.76	9.71
Cultivate & Post	8R-38 2x1	MFWD 190	37,100	150	10	0.057	0.98	1.81	0.57	0.30	3.67	1.45	1.84	6.97
Cultivate & Post	10R-30	MFWD 225	34,100	150	10	0.088	1.50	3.26	0.80	0.62	6.18	2.03	3.78	12.01
Cultivate & Post	12R-30	MFWD 225	42,200	150	10	0.073	1.25	2.71	0.82	0.51	5.31	2.10	3.15	10.57
Cultivate & Post	12R-38	MFWD 225	44,700	150	10	0.057	0.98	2.14	0.69	0.40	4.23	1.75	2.49	8.48
Cultivate & Post	16R-30	MFWD 225	52,600	150	10	0.055	0.93	2.03	0.77	0.38	4.13	1.96	2.36	8.47
Cultivate Ridge Till	8R-30	2WD 170	25,000	200	12	0.103	1.29	2.88	1.23	0.38	5.80	1.20	2.33	9.34
Cultivate Ridge Till	12R-30	2WD 190	35,400	200	12	0.068	0.86	2.15	1.16	0.23	4.41	1.13	1.44	6.99
Disk & Incorporate	14'	2WD 130	27,800	200	10	0.149	2.55	3.20	1.24	0.45	7.45	2.12	2.61	12.19
Disk & Incorporate	20'	MFWD 190	43,600	180	10	0.092	1.16	2.89	1.34	0.48	5.87	2.28	2.94	11.10
Disk & Incorporate	24'	MFWD 190	48,500	200	10	0.087	1.49	2.73	1.27	0.45	5.94	2.15	2.77	10.88
Disk & Incorporate	28'	MFWD 225	51,200	200	10	0.074	1.27	2.77	1.14	0.52	5.72	1.95	3.22	10.90
Disk & Incorporate	32'	MFWD 225	56,800	200	10	0.065	1.11	2.42	1.11	0.46	5.12	1.89	2.81	9.83
Disk Harrow	14'	2WD 130	21,800	180	10	0.140	1.76	3.00	0.84	0.42	6.03	1.73	2.45	10.22
Disk Harrow	20'	MFWD 190	37,700	180	10	0.098	1.23	3.07	1.02	0.51	5.84	2.09	3.12	11.06
Disk Harrow	24'	MFWD 190	42,600	180	10	0.081	1.02	2.56	0.96	0.42	4.98	1.97	2.60	9.56
Disk Harrow	28'	MFWD 225	45,200	180	10	0.070	0.88	2.59	0.88	0.49	4.85	1.79	3.02	9.67
Disk Harrow	32'	MFWD 225	50,800	180	10	0.061	0.77	2.27	0.86	0.43	4.34	1.76	2.64	8.75
Disk Harrow	42'	MFWD 225	99,500	180	10	0.046	0.58	1.73	1.29	0.33	3.94	2.63	2.01	8.59
Disk Harrow 40-100hp	14'	2WD 75	14,100	180	10	0.140	1.76	1.73	0.54	0.15	4.19	1.12	0.89	6.20
Disk Heavy	14'	MFWD 150	21,800	180	10	0.145	1.83	3.60	0.88	0.65	6.97	1.80	3.79	12.56
Disk Heavy	20'	MFWD 170	37,700	180	10	0.097	1.22	2.72	1.01	0.47	5.43	2.07	2.89	10.40
Disk Heavy	28'	MFWD 190	45,200	180	10	0.075	0.94	2.36	0.95	0.39	4.66	1.93	2.40	9.00
Disk Ripper	15'	MFWD 225	40,400	180	10	0.136	1.70	5.04	1.52	0.96	9.24	3.11	5.86	18.23
Ditcher		2WD 130	4,910	200	10	0.020	0.25	0.42	0.03	0.06	0.77	0.05	0.34	1.17
Ditcher (1m/160a)		2WD 130	4,910	200	10	0.009	0.11	0.20	0.01	0.02	0.36	0.02	0.16	0.55
Fert Appl (Liquid)	4R-38	MFWD 150	13,500	150	8	0.154	2.64	3.82	1.39	0.69	8.54	1.51	4.01	14.08
Fert Appl (Liquid)	6R-30	MFWD 170	16,300	150	8	0.130	2.23	3.66	1.42	0.63	7.96	1.55	3.89	13.40
Fert Appl (Liquid)	6R-38	MFWD 170	14,500	150	8	0.103	1.76	2.89	0.99	0.50	6.16	1.08	3.07	10.32
Fert Appl (Liquid)	8R-30	MFWD 190	15,200	150	8	0.098	1.67	3.07	0.99	0.51	6.25	1.08	3.12	10.46
Fert Appl (Liquid)	8R-38	MFWD 190	17,300	150	8	0.077	1.32	2.42	0.89	0.40	5.05	0.97	2.46	8.50
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	16,900	150	8	0.051	0.88	1.61	0.58	0.26	3.35	0.63	1.64	5.63
Fert Appl (Liquid)	10R-30	MFWD 225	18,600	150	8	0.078	1.34	2.91	0.97	0.55	5.78	1.06	3.38	10.22
Fert Appl (Liquid)	10R-38	MFWD 225	20,300	150	8	0.061	1.05	2.29	0.83	0.43	4.63	0.91	2.66	8.21
Fert Appl (Liquid)	12R-30	MFWD 225	19,400	150	8	0.078	1.34	2.91	1.01	0.55	5.82	1.10	3.38	10.31
Fert Appl (Liquid)	12R-38	MFWD 225	18,500	150	8	0.051	0.88	1.91	0.63	0.36	3.80	0.69	2.22	6.72
Field Cult & Inc	42'	MFWD 225	60,400	100	10	0.037	0.64	1.39	0.57	0.26	2.88	2.32	1.62	6.83
Field Cult & Inc	50'	MFWD 225	70,900	100	10	0.031	0.54	1.17	0.56	0.22	2.50	2.29	1.36	6.16
Field Cult & Inc Fld	24'	MFWD 170	32,200	100	10	0.066	1.12	1.85	0.53	0.32	3.83	2.17	1.96	7.96
Field Cult & Inc Fld	32'	MFWD 190	44,700	100	10	0.049	0.84	1.55	0.55	0.25	3.21	2.25	1.57	7.04
Field Cult & Inc Rdg	12'	2WD 150	17,500	100	10	0.132	2.25	3.26	0.57	0.52	6.62	2.35	3.04	12.03
Field Cultivate Fld	24'	MFWD 170	26,200	100	10	0.062	0.78	1.74	0.40	0.30	3.23	1.66	1.84	6.74
Field Cultivate Fld	32'	MFWD 190	37,300	100	10	0.046	0.58	1.46	0.43	0.24	2.72	1.77	1.48	5.98
Field Cultivate Fld	42'	MFWD 225	53,000	100	10	0.035	0.44	1.31	0.47	0.25	2.48	1.92	1.53	5.93
Field Cultivate Fld	50'	MFWD 225	63,300	100	10	0.029	0.37	1.10	0.47	0.21	2.16	1.92	1.28	5.37
Field Cultivate Rdg	12'	2WD 150	11,500	100	10	0.124	1.56	3.07	0.35	0.49	5.48	1.45	2.86	9.81
Grain Cart Corn	500 bu	MFWD 190	24,700	200	12	0.031	0.40	0.99	0.21	0.16	1.78	0.35	1.01	3.15

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	----------$/acre----------							
Grain Cart Corn	700 bu	MFWD 190	34,200	200	12	0.025	0.31	0.78	0.23	0.13	1.45	0.38	0.79	2.63
Grain Cart Corn	1000 bu	MFWD 225	48,300	200	12	0.025	0.31	0.92	0.32	0.17	1.74	0.54	1.07	3.36
Grain Cart Rice	500 bu	MFWD 190	24,700	200	12	0.062	0.78	1.95	0.41	0.32	3.48	0.69	1.98	6.16
Grain Cart Rice	700 bu	MFWD 190	34,200	200	12	0.055	0.69	1.72	0.50	0.28	3.20	0.84	1.74	5.80
Grain Cart Rice	1000 bu	MFWD 190	48,300	200	12	0.045	0.57	1.43	0.59	0.23	2.84	0.99	1.45	5.30
Grain Cart Soybean	500 bu	MFWD 190	24,700	200	12	0.025	0.32	0.79	0.17	0.13	1.42	0.28	0.81	2.51
Grain Cart Soybean	700 bu	MFWD 190	34,200	200	12	0.021	0.26	0.66	0.19	0.11	1.23	0.32	0.67	2.24
Grain Cart Soybean	1000 bu	MFWD 190	48,300	200	12	0.021	0.26	0.66	0.27	0.11	1.32	0.46	0.67	2.45
Grain Cart Wht/Sor	500 bu	MFWD 190	24,700	200	12	0.025	0.32	0.79	0.17	0.13	1.42	0.28	0.81	2.51
Grain Cart Wht/Sor	700 bu	MFWD 190	34,200	200	12	0.021	0.26	0.66	0.19	0.11	1.23	0.32	0.67	2.24
Grain Cart Wht/Sor	1000 bu	MFWD 190	48,300	200	12	0.021	0.26	0.66	0.27	0.11	1.32	0.46	0.67	2.45
Grain Drill	8'	2WD 130	23,200	150	8	0.235	5.09	5.04	2.05	0.70	12.90	3.77	4.12	20.80
Grain Drill	10'	2WD 130	25,900	150	8	0.188	4.07	4.03	1.83	0.56	10.51	3.37	3.29	17.18
Grain Drill	12'	2WD 130	22,700	150	8	0.157	3.39	3.36	1.33	0.47	8.57	2.46	2.74	13.78
Grain Drill	15'	MFWD 150	30,500	150	8	0.125	2.71	3.10	1.43	0.56	7.82	2.64	3.26	13.73
Grain Drill	20'	MFWD 170	37,600	150	8	0.094	2.03	2.64	1.32	0.45	6.46	2.44	2.80	11.71
Grain Drill	24'	MFWD 190	56,700	150	8	0.078	1.69	2.45	1.67	0.41	6.23	3.07	2.49	11.81
Grain Drill	30'	MFWD 225	61,300	150	8	0.062	1.35	2.32	1.44	0.44	5.57	2.66	2.70	10.94
Grain Drill	35'	MFWD 225	86,100	150	8	0.053	1.16	1.99	1.73	0.38	5.28	3.20	2.31	10.80
Grain Drill & Pre	8'	2WD 130	29,100	150	8	0.253	5.48	5.43	2.77	0.76	14.45	5.10	4.43	23.99
Grain Drill & Pre	10'	2WD 130	31,800	150	8	0.203	4.38	4.34	2.42	0.61	11.76	4.46	3.55	19.78
Grain Drill & Pre	12'	2WD 130	28,700	150	8	0.169	3.65	3.62	1.82	0.50	9.61	3.35	2.95	15.92
Grain Drill & Pre	15'	MFWD 150	36,500	150	8	0.135	2.92	3.34	1.85	0.60	8.72	3.41	3.51	15.65
Grain Drill & Pre	20'	MFWD 170	43,500	150	8	0.101	2.19	2.84	1.65	0.49	7.18	3.05	3.01	13.25
Grain Drill & Pre	24'	MFWD 190	62,700	150	8	0.084	1.82	2.64	1.98	0.44	6.90	3.66	2.69	13.26
Grain Drill & Pre	30'	MFWD 225	68,700	150	8	0.067	1.46	2.50	1.74	0.47	6.19	3.21	2.91	12.32
Grain Drill & Pre	35'	MFWD 225	93,500	150	8	0.058	1.25	2.15	2.03	0.40	5.84	3.74	2.49	12.09
Grain Drill & Pre T	8R-38	MFWD 225	39,600	150	8	0.062	1.35	2.32	0.93	0.44	5.06	1.71	2.70	9.49
Harrow - Rigid	21'	2WD 150	6,330	200	10	0.073	0.92	1.82	0.16	0.29	3.21	0.23	1.70	5.15
Harrow - Folding	16'	MFWD 190	5,150	200	10	0.097	1.21	3.03	0.17	0.50	4.93	0.25	3.08	8.27
Harrow - Folding	24'	MFWD 190	12,000	200	10	0.064	0.81	2.02	0.27	0.33	3.44	0.39	2.05	5.90
Harrow - Folding	30'	MFWD 190	14,500	200	10	0.051	0.64	1.61	0.26	0.27	2.80	0.38	1.64	4.83
Harrow - Folding	40'	MFWD 190	17,800	200	10	0.038	0.48	1.21	0.24	0.20	2.14	0.35	1.23	3.73
Harrow - Folding	48'	MFWD 225	21,500	200	10	0.032	0.40	1.19	0.24	0.22	2.07	0.35	1.39	3.82
Harrow - Rigid	13'	2WD 130	4,360	200	10	0.119	1.49	2.55	0.18	0.35	4.59	0.26	2.08	6.95
Header - Corn	6R-30	265 hp	43,500	300	8	0.170	2.13	7.43	1.85	5.16	16.58	2.69	19.75	39.03
Header - Corn	6R-38	265 hp	44,700	300	8	0.134	1.68	5.86	1.50	4.07	13.13	2.18	15.59	30.91
Header - Corn	8R-30	265 hp	56,200	300	8	0.127	1.60	5.57	1.79	3.87	12.84	2.60	14.81	30.26
Header - Corn	8R-38	325 hp	57,600	300	8	0.100	1.26	5.40	1.45	3.41	11.54	2.11	13.08	26.73
Header - Corn	12R-20	325 hp	76,400	300	8	0.127	1.60	6.83	2.43	4.32	15.20	3.54	16.55	35.29
Header - Corn	12R-30	325 hp	87,700	300	8	0.085	1.06	4.55	1.86	2.88	10.37	2.71	11.03	24.12
Header - Draper (CL)	25' Rigid	265 hp	52,500	300	8	0.203	2.54	8.86	2.44	6.15	20.01	3.68	23.56	47.25
Header - Draper (CL)	30' Rigid	325 hp	59,800	300	8	0.169	2.12	9.05	2.31	5.72	19.23	3.49	21.93	44.65
Header - Draper (CL)	36' Rigid	355 hp	64,800	300	8	0.141	1.76	8.24	2.09	5.14	17.25	3.15	19.68	40.09
Header - Draper (SL)	25' Rigid	325 hp	52,500	300	8	0.176	2.20	9.42	2.11	5.95	19.70	3.19	22.80	45.70
Header - Draper (SL)	30' Rigid	325 hp	59,800	300	8	0.146	1.84	7.85	2.00	4.96	16.66	3.02	19.00	38.70
Header - Draper (SL)	36' Rigid	355 hp	64,800	300	8	0.122	1.53	7.14	1.81	4.45	14.95	2.73	17.05	34.74
Header - Rice (CL)	25' Rigid	325 hp	51,600	300	8	0.253	3.18	13.59	3.27	8.59	28.64	4.75	32.89	66.30
Header - Rice (CL)	30' Rigid	325 hp	59,000	300	8	0.211	2.65	11.32	3.12	7.16	24.26	4.53	27.41	56.20
Header - Rice (SL)	25' Rigid	325 hp	51,600	300	8	0.220	2.76	11.77	2.83	7.44	24.82	4.12	28.51	57.45
Header - Rice (SL)	30' Rigid	325 hp	59,000	300	8	0.183	2.30	9.81	2.70	6.20	21.02	3.92	23.75	48.71
Header -RiceStrp(CL)	20'	265 hp	47,200	300	8	0.253	3.18	11.08	2.99	7.69	24.95	4.35	29.45	58.76
Header -RiceStrp(CL)	24'	325 hp	51,800	300	8	0.211	2.65	11.32	2.73	7.16	23.88	3.98	27.41	55.27
Header -RiceStrp(CL)	32'	325 hp	57,200	300	8	0.158	1.99	8.49	2.26	5.37	18.12	3.29	20.56	41.98
Header -RiceStrp(SL)	20'	265 hp	47,200	300	8	0.220	2.76	9.60	2.59	6.66	21.62	3.77	25.52	50.92
Header -RiceStrp(SL)	24'	325 hp	51,800	300	8	0.183	2.30	9.81	2.37	6.20	20.69	3.44	23.75	47.90
Header -RiceStrp(SL)	32'	325 hp	57,200	300	8	0.137	1.72	7.36	1.96	4.65	15.70	2.85	17.81	36.38
Header -Soybean	22' Flex	265 hp	30,300	300	8	0.116	1.45	5.06	0.87	3.51	10.92	1.27	13.47	25.67
Header -Soybean	25' Flex	325 hp	32,700	300	8	0.102	1.28	5.46	0.83	3.45	11.04	1.21	13.24	25.50
Header -Soybean	30' Flex	325 hp	31,200	300	8	0.085	1.06	4.55	0.66	2.88	9.17	0.96	11.03	21.17
Header -Soybean	35' Flex	355 hp	43,500	300	8	0.072	0.91	4.26	0.79	2.66	8.63	1.15	10.18	19.97
Header Wheat/Sorghum	22' Rigid	265 hp	19,500	300	8	0.116	1.45	5.06	0.56	3.51	10.60	0.82	13.47	24.90
Header Wheat/Sorghum	25' Rigid	325 hp	27,300	300	8	0.102	1.28	5.46	0.69	3.45	10.90	1.01	13.24	25.16
Header Wheat/Sorghum	30' Rigid	325 hp	30,300	300	8	0.085	1.06	4.55	0.64	2.88	9.15	0.93	11.03	21.12
Header-Cotton Bcast	13'	173 hp	21,300	200	8	0.251	5.44	6.51	1.00	6.68	19.64	2.92	25.60	48.17
Header-Cotton-Bcast	16'	173 hp	23,800	200	8	0.204	4.42	5.29	0.91	5.43	16.06	2.65	20.80	39.51
Header-Cotton-Bcast	19'	173 hp	26,200	200	8	0.172	3.72	4.45	0.84	4.57	13.60	2.45	17.52	33.58
Header-Cotton-Brush	4R-30 2x1	173 hp	34,400	200	8	0.218	4.71	5.64	1.40	5.79	17.56	4.09	22.19	43.84
Header-Cotton-Brush	4R-36	173 hp	34,000	200	8	0.272	5.89	7.05	1.73	7.24	21.93	5.05	27.74	54.73
Header-Cotton-Brush	4R-38	173 hp	34,000	200	8	0.257	5.57	6.66	1.64	6.84	20.72	4.77	26.21	51.71
Header-Cotton-Brush	4R-38 2x1	173 hp	36,000	200	8	0.172	3.72	4.45	1.16	4.57	13.91	3.37	17.52	34.81
Header-Cotton-Brush	5R-30	173 hp	42,800	200	8	0.261	5.65	6.77	2.10	6.95	21.48	6.10	26.63	54.22
Header-Cotton-Brush	5R-38	173 hp	44,300	200	8	0.207	4.47	5.35	1.72	5.50	17.05	5.00	21.06	43.12
Header-Cotton-Brush	6R-30	173 hp	52,700	200	8	0.218	4.71	5.64	2.15	5.79	18.31	6.26	22.19	46.77
Header-Cotton-Brush	6R-38	173 hp	54,400	200	8	0.172	3.72	4.45	1.75	4.57	14.51	5.10	17.52	37.14
Header-Cotton-Brush	8R-30	173 hp	72,700	200	8	0.163	3.53	4.23	2.23	4.34	14.34	6.48	16.64	37.47
Header-Cotton-Brush	8R-36/38	173 hp	74,300	200	8	0.129	2.79	3.34	1.80	3.43	11.38	5.23	13.15	29.77
Land Plane	50'x16'	MFWD 190	12,300	200	10	0.151	1.90	4.74	0.37	0.79	7.81	0.95	4.82	13.58

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Levee Pull & Seed	8 Blade	MFWD 170	10,200	100	10	0.003	0.04	0.09	0.00	0.01	0.16	0.03	0.10	0.31
Levee Pull (1m/80a)	8 blade	MFWD 170	7,120	100	10	0.003	0.04	0.09	0.00	0.01	0.16	0.02	0.10	0.29
Levee Splitter (1/80	32"	MFWD 150	7,120	100	10	0.004	0.05	0.10	0.00	0.01	0.17	0.03	0.10	0.31
Module Builder	4R-30(350)	MFWD 190	34,700	200	10	0.327	7.07	10.24	2.84	1.70	21.86	5.56	10.41	37.84
Module Builder	4R-38(255)	MFWD 190	34,700	200	10	0.257	5.57	8.06	2.23	1.34	17.21	4.37	8.20	29.79
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	5.57	8.06	2.23	1.34	17.21	4.37	8.20	29.79
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	3.72	5.39	1.49	0.89	11.51	2.92	5.48	19.91
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	4.71	6.83	1.89	1.13	14.57	3.70	6.94	25.22
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	3.72	5.39	1.49	0.89	11.51	2.92	5.48	19.91
Module Builder-Strip	13' Bcast	MFWD 150	34,700	200	10	0.251	5.44	6.22	2.18	1.12	14.97	4.27	6.54	25.79
Module Builder-Strip	16' Bcast	MFWD 150	34,700	200	10	0.204	4.42	5.05	1.77	0.91	12.16	3.47	5.31	20.95
Module Builder-Strip	19' Bcast	MFWD 150	34,700	200	10	0.172	3.72	4.25	1.49	0.77	10.24	2.92	4.47	17.64
Module Builder-Strip	4R-30 2x1	MFWD 150	34,700	200	10	0.218	4.71	5.39	1.89	0.97	12.97	3.70	5.66	22.35
Module Builder-Strip	4R-36	MFWD 150	34,700	200	10	0.272	5.89	6.74	2.36	1.21	16.22	4.63	7.08	27.94
Module Builder-Strip	4R-38	MFWD 150	34,700	200	10	0.257	5.57	6.36	2.23	1.15	15.32	4.37	6.69	26.40
Module Builder-Strip	4R-38 2x1	MFWD 150	34,700	200	10	0.172	3.72	4.25	1.49	0.77	10.24	2.92	4.47	17.64
Module Builder-Strip	5R-30	MFWD 150	34,700	200	10	0.261	5.65	6.47	2.27	1.17	15.57	4.44	6.80	26.82
Module Builder-Strip	5R-38	MFWD 150	34,700	200	10	0.207	4.47	5.11	1.79	0.92	12.32	3.51	5.38	21.22
Module Builder-Strip	6R-30	MFWD 150	34,700	200	10	0.218	4.71	5.39	1.89	0.97	12.97	3.70	5.66	22.35
Module Builder-Strip	6R-38	MFWD 190	34,700	200	10	0.172	3.72	5.39	1.49	0.89	11.51	2.92	5.48	19.91
Module Builder-Strip	8R-36/38	MFWD 190	34,700	200	10	0.129	2.79	4.04	1.12	0.67	8.64	2.19	4.11	14.95
NT Grain Drill	6'	MFWD 170	24,100	150	8	0.327	7.07	9.16	2.95	1.59	20.79	5.45	9.72	35.97
NT Grain Drill	10'	2WD 130	35,700	150	8	0.235	5.09	5.04	3.15	0.70	14.00	5.81	4.12	23.94
NT Grain Drill	12'	2WD 130	42,000	150	8	0.163	3.53	3.50	2.57	0.49	10.11	4.74	2.86	17.72
NT Grain Drill	15'	MFWD 150	48,800	150	8	0.130	2.82	3.23	2.39	0.58	9.04	4.41	3.40	16.86
NT Grain Drill	20'	MFWD 170	64,400	150	8	0.098	2.12	2.74	2.37	0.47	7.72	4.36	2.91	15.01
NT Grain Drill	24'	MFWD 190	79,200	150	8	0.081	1.76	2.56	2.43	0.42	7.18	4.47	2.60	14.27
NT Grain Drill	30'	MFWD 225	90,600	150	8	0.065	1.41	2.42	2.22	0.46	6.52	4.09	2.81	13.44
NT Grain Drill & Pre	6'	MFWD 170	30,000	150	8	0.352	7.61	9.87	3.96	1.71	23.17	7.30	10.47	40.96
NT Grain Drill & Pre	10'	2WD 130	41,600	150	8	0.211	4.57	4.52	3.30	0.63	13.03	6.07	3.69	22.81
NT Grain Drill & Pre	12'	2WD 130	47,900	150	8	0.176	3.80	3.77	3.16	0.53	11.28	5.83	3.08	20.19
NT Grain Drill & Pre	15'	MFWD 150	54,800	150	8	0.141	3.04	3.48	2.89	0.63	10.06	5.33	3.66	19.06
NT Grain Drill & Pre	20'	MFWD 170	70,400	150	8	0.105	2.28	2.96	2.79	0.51	8.55	5.14	3.14	16.84
NT Grain Drill & Pre	24'	MFWD 190	85,200	150	8	0.088	1.90	2.75	2.81	0.45	7.93	5.18	2.80	15.93
NT Grain Drill & Pre	30'	MFWD 225	98,000	150	8	0.070	1.52	2.61	2.59	0.49	7.22	4.77	3.03	15.03
NT Plant&Pre-Folding	8R-38	MFWD 170	48,000	150	8	0.083	1.80	2.34	1.50	0.40	6.06	2.77	2.48	11.31
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	80,800	150	8	0.055	1.20	1.55	1.68	0.27	4.72	3.10	1.65	9.48
NT Plant&Pre-Folding	12R-20	MFWD 190	70,200	150	8	0.105	2.28	3.31	2.78	0.55	8.93	5.12	3.36	17.42
NT Plant&Pre-Folding	12R-30	MFWD 190	72,000	150	8	0.070	1.52	2.20	1.90	0.36	6.00	3.50	2.24	11.75
NT Plant&Pre-Folding	12R-38	MFWD 190	80,800	150	8	0.055	1.20	1.74	1.68	0.29	4.92	3.10	1.77	9.80
NT Plant&Pre-Folding	16R-30	MFWD 190	101,000	150	8	0.052	1.14	1.65	2.00	0.27	5.07	3.69	1.68	10.44
NT Plant&Pre-Folding	23R-15	MFWD 190	129,000	150	8	0.073	1.58	2.29	3.55	0.38	7.82	6.54	2.33	16.70
NT Plant&Pre-Folding	24R-15	MFWD 225	133,000	150	8	0.070	1.52	2.61	3.51	0.49	8.15	6.47	3.03	17.66
NT Plant&Pre-Folding	24R-20	MFWD 190	143,000	150	8	0.052	1.14	1.65	2.83	0.27	5.90	5.22	1.68	12.81
NT Plant&Pre-Folding	24R-30	MFWD 190	188,000	150	8	0.035	0.76	1.10	2.48	0.18	4.53	4.57	1.12	10.23
NT Plant&Pre-Folding	31R-15	MFWD 225	147,000	150	8	0.054	1.18	2.02	3.01	0.38	6.60	5.55	2.35	14.51
NT Plant&Pre-Folding	32R-15	MFWD 225	163,000	150	8	0.052	1.14	1.95	3.23	0.37	6.70	5.95	2.27	14.93
NT Plant&Pre-Rigid	4R-30	2WD 130	26,600	150	8	0.211	4.57	4.52	2.11	0.63	11.84	3.88	3.69	19.43
NT Plant&Pre-Rigid	4R-38	2WD 130	28,800	150	8	0.166	3.59	3.56	1.79	0.50	9.46	3.31	2.91	15.69
NT Plant&Pre-Rigid	6R-30	MFWD 150	36,900	150	8	0.141	3.04	3.48	1.95	0.63	9.11	3.59	3.66	16.37
NT Plant&Pre-Rigid	6R-38	MFWD 150	33,100	150	8	0.111	2.40	2.75	1.38	0.49	7.03	2.54	2.89	12.47
NT Plant&Pre-Rigid	8R-30	MFWD 170	42,200	150	8	0.105	2.28	2.96	1.67	0.51	7.43	3.08	3.14	13.66
NT Plant&Pre-Rigid	8R-38	MFWD 170	39,800	150	8	0.083	1.80	2.34	1.24	0.40	5.80	2.29	2.48	10.58
NT Plant&Pre-Rigid	10R-30	MFWD 190	46,300	150	8	0.084	1.82	2.64	1.46	0.44	6.38	2.70	2.69	11.78
NT Plant&Pre-Rigid	11R-15	MFWD 170	49,900	150	8	0.143	3.10	4.02	2.69	0.70	10.53	4.96	4.27	19.77
NT Plant&Pre-Rigid	11R-20	MFWD 170	45,500	150	8	0.115	2.49	3.23	1.97	0.56	8.27	3.63	3.43	15.33
NT Plant&Pre-Rigid	12R-20	MFWD 190	52,100	150	8	0.105	2.28	3.31	2.06	0.55	8.21	3.80	3.36	15.38
NT Plant&Pre-Rigid	12R-30	MFWD 190	64,700	150	8	0.070	1.52	2.20	1.71	0.36	5.80	3.15	2.24	11.20
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	55,800	150	8	0.097	2.10	3.61	2.03	0.68	8.44	3.75	4.19	16.40
NT Plant&Pre-Rigid	15R-15	MFWD 190	61,400	150	8	0.113	2.44	3.54	2.60	0.59	9.17	4.79	3.59	17.57
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	140,000	150	8	0.055	1.20	2.06	2.92	0.39	6.58	5.38	2.39	14.36
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	120,000	150	8	0.083	1.80	3.09	3.76	0.59	9.25	6.93	3.59	19.78
NT Plant-Folding	8R-38	MFWD 170	42,100	150	8	0.077	1.67	2.17	1.22	0.37	5.45	2.25	2.30	10.02
NT Plant-Folding	8R-38 2x1	MFWD 170	73,500	150	8	0.051	1.11	1.44	1.42	0.25	4.24	2.62	1.53	8.40
NT Plant-Folding	12R-20	MFWD 190	64,200	150	8	0.098	2.12	3.07	2.36	0.51	8.07	4.35	3.12	15.55
NT Plant-Folding	12R-30	MFWD 190	64,600	150	8	0.065	1.41	2.04	1.58	0.34	5.39	2.92	2.08	10.39
NT Plant-Folding	12R-38	MFWD 190	63,500	150	8	0.051	1.11	1.61	1.23	0.26	4.23	2.26	1.64	8.14
NT Plant-Folding	16R-30	MFWD 190	93,200	150	8	0.049	1.06	1.53	1.71	0.25	4.57	3.16	1.56	9.29
NT Plant-Folding	23R-15	MFWD 190	122,000	150	8	0.068	1.47	2.13	3.12	0.35	7.08	5.74	2.16	15.00
NT Plant-Folding	24R-15	MFWD 225	126,000	150	8	0.065	1.41	2.42	3.09	0.46	7.39	5.70	2.81	15.91
NT Plant-Folding	24R-20	MFWD 190	136,000	150	8	0.049	1.06	1.53	2.50	0.25	5.35	4.61	1.56	11.53
NT Plant-Folding	24R-30	MFWD 190	178,000	150	8	0.032	0.70	1.02	2.18	0.17	4.08	4.02	1.04	9.15
NT Plant-Folding	31R-15	MFWD 225	140,000	150	8	0.050	1.09	1.88	2.66	0.35	6.00	4.90	2.18	13.09
NT Plant-Folding	32R-15	MFWD 225	155,000	150	8	0.049	1.06	1.82	2.85	0.34	6.08	5.25	2.11	13.45
NT Plant-Rigid	4R-30	2WD 130	20,600	150	8	0.196	4.24	4.20	1.51	0.59	10.55	2.79	3.43	16.79
NT Plant-Rigid	4R-38	2WD 130	22,900	150	8	0.154	3.34	3.31	1.32	0.46	8.44	2.44	2.70	13.60
NT Plant-Rigid	6R-30	MFWD 150	31,000	150	8	0.130	2.82	3.23	1.52	0.58	8.17	2.80	3.40	14.37

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
NT Plant-Rigid	6R-38	MFWD 150	27,100	150	8	0.103	2.23	2.55	1.05	0.46	6.30	1.93	2.68	10.92
NT Plant-Rigid	8R-30	MFWD 170	36,300	150	8	0.098	2.12	2.74	1.33	0.47	6.68	2.46	2.91	12.06
NT Plant-Rigid	8R-38	MFWD 170	33,800	150	8	0.077	1.67	2.17	0.98	0.37	5.21	1.81	2.30	9.33
NT Plant-Rigid	10R-30	MFWD 190	40,300	150	8	0.078	1.69	2.45	1.18	0.41	5.75	2.18	2.49	10.44
NT Plant-Rigid	11R-15	MFWD 170	43,900	150	8	0.133	2.88	3.74	2.19	0.65	9.48	4.05	3.97	17.50
NT Plant-Rigid	11R-20	MFWD 170	39,600	150	8	0.107	2.31	3.00	1.59	0.52	7.44	2.93	3.18	13.56
NT Plant-Rigid	12R-20	MFWD 190	46,200	150	8	0.098	2.12	3.07	1.70	0.51	7.40	3.13	3.12	13.66
NT Plant-Rigid	12R-30	MFWD 190	56,800	150	8	0.065	1.41	2.04	1.39	0.34	5.20	2.56	2.08	9.85
NT Plant-Rigid	13R-18/20	MFWD 225	49,800	150	8	0.090	1.96	3.37	1.69	0.64	7.67	3.12	3.91	14.72
NT Plant-Rigid	15R-15	MFWD 190	54,400	150	8	0.105	2.26	3.28	2.14	0.54	8.24	3.94	3.34	15.53
NT Plant-TwinRow	12R-30/40	MFWD 225	130,000	150	8	0.051	1.11	1.91	2.51	0.36	5.91	4.64	2.22	12.78
NT Plant-TwinRow	8R-30/40	MFWD 225	114,000	150	8	0.077	1.67	2.87	3.31	0.54	8.42	6.11	3.34	17.88
One-Trip Prep	4R-38	MFWD 170	21,200	150	10	0.146	1.84	4.10	1.45	0.71	8.11	2.11	4.36	14.59
One-Trip Prep	6R-38	MFWD 190	26,900	150	10	0.097	1.22	3.04	1.22	0.50	5.99	1.77	3.09	10.86
One-Trip Prep	8R-38	MFWD 225	31,700	150	10	0.073	0.92	2.74	1.09	0.52	5.28	1.59	3.18	10.06
Peanut Cond.& Lifter	6-Row	MFWD 190	12,600	300	20	0.100	1.25	3.12	0.21	0.52	5.11	0.29	3.18	8.59
Peanut Conditioner	6-Row	MFWD 190	14,400	300	20	0.100	1.25	3.12	0.28	0.52	5.19	0.29	3.18	8.66
Peanut Dig/Invertor	4R-30	MFWD 190	26,100	300	15	0.235	2.95	7.38	1.53	1.23	13.10	1.76	7.50	22.36
Peanut Dig/Invertor	4R-38	MFWD 190	26,100	300	15	0.186	2.33	5.82	1.20	0.97	10.34	1.39	5.92	17.66
Peanut Dig/Invertor	6R-38	MFWD 190	38,400	300	15	0.124	1.55	3.88	0.83	0.64	6.92	1.36	3.94	12.23
Peanut Dump Cart	6-Row	MFWD 190	45,500	300	20	0.310	3.89	9.70	0.82	1.61	16.03	3.16	9.86	29.05
Peanut Harvester	4R-30	MFWD 225	121,000	300	20	0.849	10.66	31.50	5.82	6.00	53.99	20.89	36.59	111.48
Peanut Harvester	4R-38	MFWD 225	121,000	300	20	0.934	11.72	34.63	6.40	6.60	59.37	24.17	40.23	123.78
Peanut Harvester	6R-38	MFWD 225	138,000	300	20	0.625	7.84	23.16	4.16	4.41	39.58	18.43	26.90	84.93
Peanut Lifter	6-Row	MFWD 225	6,090	300	20	0.100	1.25	3.70	0.12	0.70	5.79	0.12	4.30	10.22
Peanut Plt&Pre Fold.	12R-38	MFWD 190	77,600	150	8	0.080	1.73	2.51	2.33	0.41	7.01	4.31	2.55	13.88
Peanut Plt&Pre Rigid	8R-30	MFWD 190	40,100	150	8	0.152	3.30	4.78	2.29	0.79	11.17	4.23	4.86	20.27
Peanut Plt&Pre Rigid	8R-38	MFWD 190	37,600	150	8	0.120	2.60	3.77	1.70	0.63	8.72	3.13	3.84	15.70
Pipe Spool 160ac	1/4m roll	2WD 130	3,380	15	12	0.003	0.09	0.06	0.00	0.00	0.17	0.06	0.05	0.29
Pipe Trailer 1m/160a	30'	2WD 130	1,330	100	15	0.003	0.18	0.08	0.00	0.01	0.27	0.00	0.06	0.34
Plant & Pre-Folding	8R-38	MFWD 170	45,900	150	8	0.080	1.73	2.24	1.38	0.39	5.75	2.54	2.38	10.68
Plant & Pre-Folding	8R-38 2x1	MFWD 170	77,600	150	8	0.053	1.15	1.49	1.55	0.26	4.46	2.86	1.58	8.92
Plant & Pre-Folding	12R-20	MFWD 190	66,900	150	8	0.101	2.19	3.17	2.54	0.52	8.44	4.69	3.23	16.37
Plant & Pre-Folding	12R-30	MFWD 190	68,700	150	8	0.067	1.46	2.11	1.74	0.35	5.67	3.21	2.15	11.04
Plant & Pre-Folding	12R-38	MFWD 190	77,600	150	8	0.053	1.15	1.67	1.55	0.27	4.66	2.86	1.70	9.22
Plant & Pre-Folding	16R-30	MFWD 190	96,200	150	8	0.050	1.09	1.58	1.83	0.26	4.78	3.37	1.61	9.77
Plant & Pre-Folding	23R-15	MFWD 190	123,000	150	8	0.070	1.52	2.20	3.25	0.36	7.35	5.99	2.24	15.58
Plant & Pre-Folding	24R-15	MFWD 225	126,000	150	8	0.067	1.46	2.50	3.19	0.47	7.64	5.89	2.91	16.45
Plant & Pre-Folding	24R-20	MFWD 190	137,000	150	8	0.050	1.09	1.58	2.60	0.26	5.55	4.80	1.61	11.97
Plant & Pre-Folding	24R-30	MFWD 190	182,000	150	8	0.033	0.73	1.05	2.31	0.17	4.27	4.25	1.07	9.61
Plant & Pre-Folding	31R-15	MFWD 225	139,000	150	8	0.052	1.13	1.94	2.73	0.37	6.18	5.03	2.25	13.48
Plant & Pre-Folding	32R-15	MFWD 225	154,000	150	8	0.050	1.09	1.88	2.93	0.35	6.26	5.40	2.18	13.85
Plant & Pre-Rigid	4R-30	2WD 130	25,500	150	8	0.203	4.38	4.34	1.94	0.61	11.29	3.57	3.55	18.41
Plant & Pre-Rigid	4R-38	2WD 130	27,700	150	8	0.159	3.45	3.42	1.66	0.48	9.02	3.06	2.79	14.87
Plant & Pre-Rigid	6R-30	MFWD 150	35,300	150	8	0.135	2.92	3.34	1.79	0.60	8.66	3.30	3.51	15.48
Plant & Pre-Rigid	6R-38	MFWD 150	31,400	150	8	0.106	2.30	2.64	1.25	0.47	6.68	2.31	2.77	11.78
Plant & Pre-Rigid	8R-30	MFWD 170	40,100	150	8	0.101	2.19	2.84	1.52	0.49	7.05	2.81	3.01	12.89
Plant & Pre-Rigid	8R-38	MFWD 170	37,600	150	8	0.080	1.73	2.24	1.13	0.39	5.50	2.08	2.38	9.97
Plant & Pre-Rigid	10R-30	MFWD 190	43,600	150	8	0.081	1.75	2.54	1.32	0.42	6.04	2.44	2.58	11.08
Plant & Pre-Rigid	11R-15	MFWD 170	46,900	150	8	0.148	3.20	4.15	2.60	0.72	10.68	4.80	4.40	19.89
Plant & Pre-Rigid	11R-20	MFWD 170	42,500	150	8	0.110	2.39	3.10	1.76	0.54	7.81	3.25	3.29	14.37
Plant & Pre-Rigid	12R-20	MFWD 190	48,900	150	8	0.101	2.19	3.17	1.86	0.52	7.76	3.43	3.23	14.42
Plant & Pre-Rigid	12R-30	MFWD 190	61,400	150	8	0.067	1.46	2.11	1.55	0.35	5.49	2.87	2.15	10.51
Plant & Pre-Rigid	13R-18/20	MFWD 225	52,200	150	8	0.093	2.02	3.46	1.83	0.66	7.98	3.37	4.02	15.38
Plant & Pre-Rigid	15R-15	MFWD 190	57,300	150	8	0.108	2.34	3.39	2.33	0.56	8.64	4.29	3.45	16.39
Plant & Pre-TwinRow	12R-30/40	MFWD 225	133,000	150	8	0.053	1.15	1.98	2.66	0.37	6.17	4.91	2.30	13.38
Plant & Pre-TwinRow	8R-30/40	MFWD 225	116,000	150	8	0.080	1.73	2.97	3.49	0.56	8.76	6.43	3.45	18.65
Plant - Folding	8R-38	MFWD 170	39,900	150	8	0.074	1.61	2.08	1.11	0.36	5.17	2.05	2.21	9.44
Plant - Folding	8R-38 2x1	MFWD 170	70,200	150	8	0.049	1.07	1.38	1.30	0.24	4.00	2.40	1.47	7.89
Plant - Folding	12R-20	MFWD 190	61,000	150	8	0.094	2.03	2.95	2.15	0.49	7.63	3.97	2.99	14.61
Plant - Folding	12R-30	MFWD 190	61,400	150	8	0.062	1.35	1.96	1.44	0.32	5.10	2.66	1.99	9.76
Plant - Folding	12R-38	MFWD 190	70,200	150	8	0.049	1.07	1.55	1.30	0.25	4.19	2.40	1.57	8.17
Plant - Folding	16R-30	MFWD 190	88,900	150	8	0.047	1.01	1.47	1.57	0.24	4.31	2.89	1.49	8.70
Plant - Folding	23R-15	MFWD 190	116,000	150	8	0.065	1.41	2.04	2.84	0.34	6.65	5.24	2.08	13.98
Plant - Folding	24R-15	MFWD 225	119,000	150	8	0.062	1.35	2.32	2.80	0.44	6.93	5.16	2.70	14.81
Plant - Folding	24R-20	MFWD 190	129,000	150	8	0.047	1.01	1.47	2.28	0.24	5.02	4.20	1.49	10.72
Plant - Folding	24R-30	MFWD 190	172,000	150	8	0.031	0.67	0.98	2.02	0.16	3.85	3.73	0.99	8.58
Plant - Folding	31R-15	MFWD 225	132,000	150	8	0.048	1.05	1.80	2.41	0.34	5.61	4.44	2.09	12.15
Plant - Folding	32R-15	MFWD 225	147,000	150	8	0.047	1.01	1.74	2.59	0.33	5.69	4.78	2.02	12.51
Plant - Rigid	4R-30	2WD 130	19,600	150	8	0.188	4.07	4.03	1.38	0.56	10.06	2.55	3.29	15.91
Plant - Rigid	4R-38	2WD 130	21,800	150	8	0.148	3.20	3.17	1.21	0.44	8.04	2.23	2.59	12.88
Plant - Rigid	6R-30	MFWD 150	29,300	150	8	0.125	2.71	3.10	1.38	0.56	7.76	2.54	3.26	13.57
Plant - Rigid	6R-38	MFWD 150	25,500	150	8	0.099	2.14	2.45	0.94	0.44	5.98	1.74	2.57	10.31
Plant - Rigid	8R-30	MFWD 170	34,100	150	8	0.094	2.03	2.64	1.20	0.45	6.34	2.22	2.80	11.36
Plant - Rigid	8R-38	MFWD 170	31,700	150	8	0.074	1.61	2.08	0.88	0.36	4.94	1.63	2.21	8.79
Plant - Rigid	10R-30	MFWD 190	37,600	150	8	0.075	1.63	2.36	1.06	0.39	5.44	1.95	2.39	9.80

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Plant - Rigid	11R-15	MFWD 170	41,000	150	8	0.137	2.97	3.85	2.11	0.67	9.61	3.89	4.09	17.60
Plant - Rigid	11R-20	MFWD 170	36,600	150	8	0.103	2.22	2.88	1.41	0.50	7.02	2.60	3.06	12.69
Plant - Rigid	12R-20	MFWD 190	42,900	150	8	0.094	2.03	2.95	1.51	0.49	6.99	2.79	2.99	12.79
Plant - Rigid	12R-30	MFWD 190	54,100	150	8	0.062	1.35	1.96	1.27	0.32	4.92	2.34	1.99	9.27
Plant - Rigid	13R-18/20	MFWD 225	46,300	150	8	0.086	1.87	3.22	1.50	0.61	7.22	2.77	3.74	13.74
Plant - Rigid	15R-15	2WD 150	51,400	150	8	0.094	2.03	2.32	1.81	0.37	6.55	3.34	2.17	12.08
Plant - TwinRow	12R-30/40	MFWD 225	123,000	150	8	0.049	1.07	1.83	2.28	0.35	5.55	4.21	2.13	11.90
Plant - TwinRow	8R-30/40	MFWD 225	110,000	150	8	0.074	1.61	2.76	3.07	0.52	7.97	5.66	3.20	16.84
Plant - TwinRow	8R-30/40	MFWD 225	103,000	150	8	0.074	1.60	2.84	2.87	0.50	7.84	5.30	3.09	16.24
Spray (Spot)	60'	MFWD 225	10,400	200	8	0.028	0.48	1.07	0.13	0.19	1.88	0.15	1.17	3.21
Stalk Shredder	14'	MFWD 150	13,000	200	10	0.117	1.47	3.00	1.34	0.50	6.32	0.78	2.93	10.03
Stalk Shredder Flex	20'	MFWD 150	34,700	200	10	0.082	1.03	2.10	2.50	0.35	5.99	1.45	2.05	9.50
Stalk Shredder-Flail	12'	MFWD 150	15,800	200	10	0.137	1.71	3.50	1.90	0.58	7.71	1.10	3.42	12.24
Stalk Shredder-Flail	15'	MFWD 150	19,500	200	10	0.110	1.37	2.80	1.87	0.47	6.52	1.09	2.73	10.35
Stalk Shredder-Flail	18'	MFWD 150	25,300	200	10	0.091	1.14	2.33	2.02	0.39	5.90	1.18	2.28	9.36
Stalk Shredder-Flail	20'	MFWD 150	26,300	200	10	0.082	1.03	2.10	1.89	0.35	5.38	1.10	2.05	8.54
Stalk Shredder-Flail	25'	MFWD 150	37,600	200	10	0.066	0.82	1.68	2.17	0.28	4.96	1.26	1.64	7.86
Strip Till	8R38/12R30	MFWD 225	42,100	150	10	0.061	0.77	2.35	1.12	0.41	4.66	1.76	2.55	8.99
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.55	6.59	0.24	1.02	10.41	0.57	6.22	17.21
Subsoiler	4 shank	MFWD 225	8,050	100	15	0.153	1.92	5.87	0.41	1.04	9.25	0.97	6.37	16.60
Roller/Cultipacker	12'	2WD 130	4,130	300	12	0.124	1.56	2.66	0.12	0.37	4.72	0.16	2.17	7.05
Roller/Cultipacker	20'	MFWD 150	16,200	300	12	0.074	0.93	1.84	0.28	0.33	3.40	0.37	1.93	5.71
Roller/Cultipacker	30'	MFWD 170	18,100	300	12	0.049	0.62	1.39	0.21	0.24	2.47	0.28	1.47	4.23
Roller/Cultipacker	38'	MFWD 225	19,600	300	12	0.039	0.49	1.45	0.18	0.27	2.40	0.24	1.69	4.34
Roller/Stubble	20'	2WD 50	13,200	300	12	0.074	0.93	0.61	0.23	0.04	1.82	0.30	0.25	2.39
Roller/Stubble	32'	MFWD 225	22,400	300	12	0.046	0.58	1.72	0.24	0.32	2.89	0.32	2.00	5.22
Rotary Cutter	7'	MFWD 130	4,380	185	10	0.168	2.11	3.60	0.59	0.59	6.91	0.40	3.48	10.80
Rotary Cutter	12'	2WD 150	12,600	185	10	0.098	1.23	2.42	1.00	0.38	5.05	0.68	2.26	7.99
Rotary Cutter-Flex	15'	MFWD 150	19,500	185	10	0.078	0.98	1.94	1.24	0.35	4.52	0.84	2.04	7.40
Rotary Cutter-Flex	20'	MFWD 150	27,000	185	10	0.058	0.73	1.45	1.29	0.26	3.74	0.87	1.53	6.15
Row Cond & Inc-Fold.	26'	MFWD 190	24,700	100	10	0.063	1.08	1.98	0.39	0.33	3.79	1.59	2.01	7.41
Row Cond & Inc-Fold.	38'	MFWD 225	35,300	100	10	0.043	0.74	1.60	0.38	0.30	3.04	1.56	1.86	6.47
Row Cond & Inc-Rigid	13'	2WD 130	13,300	100	10	0.126	2.16	2.71	0.42	0.38	5.68	1.72	2.21	9.63
Row Cond & Inc-Rigid	21'	2WD 170	19,700	100	10	0.078	1.34	2.20	0.38	0.29	4.22	1.57	1.78	7.58
Row Cond & Inc-Rigid	26'	MFWD 190	18,700	100	10	0.026	0.45	0.83	0.12	0.13	1.55	0.50	0.84	2.90
Row Cond Folding	26'	MFWD 225	18,800	100	10	0.059	0.74	2.21	0.28	0.42	3.66	1.14	2.57	7.38
Row Cond Folding	38'	MFWD 225	28,000	100	10	0.040	0.51	1.51	0.28	0.28	2.60	1.16	1.75	5.52
Row Cond Rigid	13'	2WD 130	7,300	100	10	0.119	1.49	2.55	0.21	0.35	4.63	0.88	2.08	7.61
Row Cond Rigid	21'	2WD 170	12,000	100	10	0.073	0.92	2.07	0.22	0.27	3.49	0.90	1.67	6.07
Row Cond Rigid	26'	MFWD 190	12,800	100	10	0.059	0.74	1.86	0.19	0.31	3.12	0.77	1.90	5.80
Row Cond./Roll-Fold.	26'	MFWD 190	33,500	160	10	0.072	0.90	2.25	0.60	0.37	4.14	1.53	2.29	7.97
Row Cond./Roll-Fold.	30'	MFWD 190	36,100	160	10	0.062	0.78	1.95	0.56	0.32	3.63	1.43	1.98	7.05
Row Cond./Roll-Fold.	40'	MFWD 225	44,800	160	10	0.046	0.58	1.73	0.52	0.33	3.18	1.33	2.01	6.53
Row Cond./Roll-Rigid	21'	MFWD 190	23,900	160	10	0.089	1.12	2.79	0.53	0.46	4.91	1.35	2.84	9.11
Row Cond./Roll-Rigid	26'	MFWD 190	27,200	160	10	0.072	0.90	2.25	0.49	0.37	4.02	1.25	2.29	7.57
Spin Spreader	5 ton	MFWD 190	10,800	100	8	0.042	0.90	1.31	0.25	0.21	2.70	0.49	1.33	4.53
Spray (ATV Ropewick)	75"	800 CC	620	200	8	0.260	4.44	0.61	0.07	0.26	5.40	0.08	1.01	6.50
Spray (ATV)	12'/17'	800 CC	430	200	8	0.112	1.92	0.26	0.02	0.11	2.33	0.02	0.43	2.79
Spray (ATV)	20'	800 CC	1,350	200	8	0.084	1.44	0.20	0.05	0.08	1.78	0.06	0.32	2.17
Spray (Band)	27' Fold	MFWD 170	5,940	200	8	0.062	1.07	1.75	0.17	0.30	3.30	0.20	1.86	5.37
Spray (Band)	40' Fold	MFWD 170	7,350	200	8	0.042	0.72	1.18	0.14	0.20	2.25	0.16	1.25	3.68
Spray (Band)	50' Fold	MFWD 170	6,730	200	8	0.033	0.57	0.94	0.10	0.16	1.79	0.12	1.00	2.92
Spray (Band)	53' Fold	MFWD 170	7,650	200	8	0.031	0.54	0.89	0.11	0.15	1.70	0.13	0.94	2.79
Spray (Band)	60' Fold	MFWD 170	10,000	200	8	0.028	0.48	0.78	0.13	0.13	1.54	0.15	0.83	2.53
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,810	200	8	0.130	2.22	3.21	0.35	0.58	6.37	0.41	3.38	10.16
Spray (Bcast/HB)	20' Rigid	MFWD 150	6,840	200	8	0.084	1.44	2.09	0.27	0.37	4.18	0.31	2.19	6.69
Spray (Bcast/HB)	27' Fold	MFWD 170	11,300	200	8	0.062	1.07	1.75	0.33	0.30	3.46	0.38	1.86	5.71
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,870	200	8	0.062	1.07	1.75	0.23	0.30	3.36	0.26	1.86	5.49
Spray (Bcast/HB)	30' Fold	MFWD 170	19,200	200	8	0.056	0.96	1.57	0.50	0.27	3.32	0.59	1.67	5.59
Spray (Bcast/HB)	40' Fold	MFWD 170	20,500	200	8	0.042	0.72	1.18	0.40	0.20	2.52	0.47	1.25	4.25
Spray (Bcast/HB/HD)	27'	MFWD 170	22,400	200	8	0.062	1.07	1.75	0.65	0.30	3.78	0.76	1.86	6.41
Spray (Bcast/HB/HD)	40'	MFWD 170	32,200	200	8	0.042	0.72	1.18	0.63	0.20	2.75	0.74	1.25	4.75
Spray (Broadcast)	27'	MFWD 170	5,940	200	8	0.062	1.07	1.75	0.17	0.30	3.30	0.20	1.86	5.37
Spray (Broadcast)	40'	MFWD 170	7,350	200	8	0.042	0.72	1.18	0.14	0.20	2.25	0.16	1.25	3.68
Spray (Broadcast)	50'	MFWD 170	6,730	200	8	0.033	0.57	0.94	0.10	0.16	1.79	0.12	1.00	2.92
Spray (Broadcast)	53'	MFWD 170	7,650	200	8	0.031	0.54	0.89	0.11	0.15	1.70	0.13	0.94	2.79
Spray (Broadcast)	60'	MFWD 170	10,000	200	8	0.028	0.48	0.78	0.13	0.13	1.54	0.15	0.83	2.53
Spray (Direct/Hood)	8R-30	MFWD 170	17,700	200	8	0.084	1.44	2.36	0.70	0.41	4.92	0.81	2.51	8.26
Spray (Direct/Hood)	8R-38	MFWD 170	18,900	200	8	0.066	1.14	1.87	0.59	0.32	3.93	0.68	1.98	6.61
Spray (Direct/Hood)	12R-30	MFWD 170	25,600	200	8	0.056	0.96	1.57	0.67	0.27	3.49	0.78	1.67	5.95
Spray (Direct/Hood)	12R-38	MFWD 170	26,200	200	8	0.044	0.76	1.24	0.54	0.21	2.77	0.63	1.32	4.73
Spray (Direct/Layby)	8R-38	MFWD 170	12,200	200	8	0.066	1.14	1.87	0.38	0.32	3.72	0.44	1.98	6.15
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	16,200	200	8	0.044	0.76	1.24	0.33	0.21	2.56	0.39	1.32	4.27
Spray (Direct/Layby)	12R-30	MFWD 170	17,900	200	8	0.056	0.96	1.57	0.47	0.27	3.29	0.55	1.67	5.51
Spray (Direct/Layby)	12R-38	MFWD 170	16,200	200	8	0.044	0.76	1.24	0.33	0.21	2.56	0.39	1.32	4.27
Spray (Direct/Layby)	16R-20	2WD 50	10,000	200	8	0.062	1.07	0.51	0.29	0.03	1.91	0.34	0.21	2.47

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Spray (Levee Leaper)	50'	MFWD 225	14,000	200	8	0.033	0.57	1.25	0.22	0.23	2.29	0.25	1.45	4.00
Spray (Pull Type)	60'	MFWD 225	29,700	200	8	0.028	0.48	1.04	0.39	0.19	2.11	0.45	1.21	3.79
Spray (Pull Type)	80'	MFWD 225	39,400	200	8	0.021	0.36	0.78	0.39	0.14	1.68	0.45	0.91	3.04
Spray (Pull Type)	90'	2WD 50	39,900	200	8	0.018	0.32	0.15	0.35	0.01	0.83	0.40	0.06	1.31
Spray (Pull Type)	120'	MFWD 225	72,900	200	8	0.014	0.24	0.52	0.48	0.09	1.34	0.56	0.60	2.51
Spray (Ropewick)	20'	MFWD 190	2,650	200	8	0.084	1.44	2.64	0.10	0.44	4.64	0.12	2.69	7.45
Spray (Spot)	27'	MFWD 170	5,940	200	8	0.062	1.07	1.75	0.17	0.30	3.30	0.20	1.86	5.37
Spray (Spot)	40'	MFWD 170	7,350	200	8	0.042	0.72	1.18	0.14	0.20	2.25	0.16	1.25	3.68
Spray (Spot)	50'	MFWD 170	67,300	200	8	0.033	0.57	0.94	1.06	0.16	2.75	1.24	1.00	5.00
Spray (Spot)	53'	MFWD 170	7,650	200	8	0.031	0.54	0.89	0.11	0.15	1.70	0.13	0.94	2.79
Spray (Spot)	60'	MFWD 225	10,000	200	8	0.028	0.48	1.04	0.13	0.19	1.85	0.15	1.21	3.22
Stalk Shredder	14'	MFWD 150	13,200	200	10	0.117	1.47	2.91	1.36	0.52	6.27	0.79	3.06	10.13
Stalk Shredder Flex	20'	MFWD 150	34,000	200	10	0.082	1.03	2.03	2.45	0.36	5.89	1.43	2.14	9.46
Stalk Shredder-Flail	12'	MFWD 150	15,800	200	10	0.137	1.72	3.39	1.90	0.61	7.63	1.10	3.57	12.31
Stalk Shredder-Flail	15'	MFWD 150	19,900	200	10	0.110	1.38	2.71	1.91	0.49	6.50	1.11	2.85	10.47
Stalk Shredder-Flail	18'	MFWD 150	25,700	200	10	0.091	1.15	2.26	2.06	0.40	5.88	1.20	2.38	9.46
Stalk Shredder-Flail	20'	MFWD 150	26,900	200	10	0.082	1.03	2.03	1.94	0.36	5.38	1.13	2.14	8.65
Stalk Shredder-Flail	25'	MFWD 150	37,700	200	10	0.066	0.82	1.63	2.17	0.29	4.93	1.26	1.71	7.91
Strip Till	8R-38	MFWD 225	38,600	150	10	0.061	0.77	2.28	1.03	0.43	4.52	1.61	2.65	8.79
Strip Till	12R-30	MFWD 225	47,500	150	10	0.061	0.77	2.28	1.26	0.43	4.76	1.98	2.65	9.40
Strip Till	12R-40	MFWD 225	54,100	150	10	0.046	0.58	1.71	1.08	0.32	3.70	1.69	1.98	7.39
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.56	6.39	0.24	1.06	10.26	0.57	6.50	17.33
Subsoiler	4 shank	MFWD 225	8,230	100	15	0.153	1.92	5.69	0.42	1.08	9.12	0.99	6.61	16.73
Subsoiler	5 shank	MFWD 225	11,100	100	15	0.122	1.53	4.53	0.45	0.86	7.38	1.06	5.26	13.72
Subsoiler low-till	4 shank	MFWD 225	12,400	100	15	0.153	1.92	5.69	0.63	1.08	9.34	1.49	6.61	17.45
Subsoiler low-till	6 shank	MFWD 225	14,800	100	15	0.102	1.28	3.78	0.50	0.72	6.29	1.18	4.39	11.88
Subsoiler low-till	8 shank	MFWD 225	22,200	100	15	0.076	0.96	2.83	0.56	0.54	4.90	1.33	3.29	9.53

Notes:
Labor: Includes labor from Power unit plus additional labor from the implement.
Total Direct: Does not include interest on operating capital.
HB = Hooded Boom, HD = Hooded Direct

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2015 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			CruiserMaxx	oz	4.15
Crop Oil Conc.(Pet.)	pt	3.60	Dithane F-45	qt	7.94
Crop Oil Conc.(Veg.)	pt	4.60	Dithane Rainshield	lb	2.75
Drift/Defoamer	pt	4.90	Enable 2F	oz	1.94
Spreader Sticker	pt	3.55	Folicur 3.6	oz	1.08
Surfactant	pt	3.60	Headline EC	oz	3.62
CLEANING			Headline SC	oz	3.53
Cleaning Peanuts	ton	18.00	Manzate 75 DF	lb	4.83
CROP CONSULTANT			Moncut 70 DF	lb	25.00
Crop Consultant	acre	7.00	Prevail	lb	28.50
Rice Consultant	acre	7.00	Prosaro	oz	2.77
CUSTOM FERTILIZE			Provost	oz	2.46
App Fert by Air	cwt	6.50	Quadris	oz	2.86
App Fert by Air(Mi	appl	6.50	Quilt	pt	22.34
Custom Apply Fert	acre	6.50	Quilt XCEL	pt	30.41
CUSTOM LIME			Ridomil Gold	oz	6.54
Lime (Spread)	ton	45.00	Ridomil Gold PC GR	lb	4.00
CUSTOM PLANT			Rovral 4F	pt	14.20
Custom Plant	acre	13.00	Stiletto	oz	0.58
Custom Plant Air	cwt	6.50	Stratego	pt	24.91
CUSTOM SPRAY			Stratego YLD	oz	4.91
App by Air (2 gal)	appl	3.25	Tebuconazole	oz	0.78
App by Air (3 gal)	appl	4.75	Terrachlor 2EC	pt	1.87
App by Air (5 gal)	appl	6.00	Tilt 3.6 EC	oz	0.84
App by Air (10 gal)	appl	8.00	Tilt/ Bravo SE	oz	0.43
Custom Spray Ground	acre	7.50	Uniform	oz	5.12
Custom Spray Self Pr	acre	6.25	Vitavax RTU-Thiram	oz	0.40
Custom Spray Tractor	acre	7.75	GINNING		
DRYING			Gin & Haul	lb	0.11
Dry Corn	bu	0.19	GROWTH REGULATORS		
Dry Grain Sorghum	cwt	0.25	Early Harvest PGR	oz	1.55
Dry Peanuts	ton	24.00	Mepex	oz	0.09
Dry Rice	bu	0.40	Mepex Gin Out	oz	0.16
ERADICATION FEE			Mepichlor 4.2%	oz	0.11
Eradication	acre	1.00	Mepiquat	oz	0.90
FERTILIZERS			Mepiquat Extra	oz	0.10
Amm Sulfate (21% N)	cwt	18.60	Pentia	pt	5.89
Amm Sulfate dry/mix	lb	0.20	Pix Plus	oz	0.19
Boron 15G	lb	0.75	Stance	oz	1.22
Boron Plus	pt	4.25	SuperBoll	oz	2.57
DAP	cwt	29.00	HARVEST AIDS		
Fert 10-34-0	cwt	26.00	Adios	oz	1.38
Fert 11-37-0	cwt	28.00	Aim 2EC	oz	6.33
Fert 30-0-0-5	cwt	18.00	Ammonium Sulfate	lb	0.20
Fert 33-0-0-12S	cwt	23.75	CottonQuik	pt	4.52
Fert 41-0-0-4	cwt	23.50	Def 6	pt	8.25
Lime	ton	35.00	Def/Folex	pt	8.62
Phosphorus(46% P2O5)	cwt	24.50	Defol 3	gal	3.49
Potash (60% K2O)	cwt	23.60	Defol 5	gal	6.07
Sulfur 90%	lb	0.26	Defol 750	pt	2.04
Sulfur 90%	lb	0.26	Dropp SC	oz	1.60
Sulfur Plus	pt	2.60	ET	pt	47.26
SuperMax AMS	pt	2.70	Ethephon 6E	pt	3.27
UAN (32% N)	cwt	18.50	Finish 6	pt	8.59
UAN + Sulfur (28%)	cwt	17.90	First Pick	pt	3.55
Urea, Solid (46% N)	cwt	25.25	Flash	pt	6.34
Zinc Plus	pt	3.00	Folex 6EC	pt	8.99
Zinc Sulfate 31%	lb	0.50	Freefall SC	oz	1.34
FUNGICIDES			Ginstar EC	pt	27.89
Abound	pt	31.43	Gramoxone SL	oz	0.30
Alfa Guard	lb	1.61	Paraquat	oz	0.33
Allegiance Flowable	pt	55.63	Prep	pt	3.32
Apron Maxx RTA	oz	0.81	Sharpen	oz	5.63
Apron Maxx RTA+Moly	pt	14.74	Shed-a-leaf	gal	3.60
Apron XL LS	oz	7.93	Sodium Chlorate 3L	gal	3.50
Artisan	oz	1.02	Sodium Chlorate 5L	gal	5.57
Bravo Ultrex	lb	5.83	TDZ SC	oz	1.50
Bravo Weather Stick	pt	4.43	Thidiazuron 4lb	oz	1.50
Captan 50 WP	lb	6.00	Tribufos 6lb	pt	9.13
Cotton Seed Trt.	acre	20.00	Vacate	oz	1.17

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2015(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
HAULING			Glyfos Xtra	pt	2.25
Haul Corn	bu	0.23	Glyphosate 3lbs a.e	pt	2.25
Haul Peanuts	ton	14.50	Glyphosate 3lbs a.e	oz	0.14
Haul Rice	bu	0.35	Glystar Plus	pt	2.25
Haul Sorghum	bu	0.25	Goal 2XL	pt	10.00
Haul Soybeans	bu	0.27	Gramonone SL 2.0	oz	0.32
Haul Wheat	bu	0.26	Grandstand R	qt	28.38
HERBICIDES			Guardsman Max	pt	6.93
2,4-D Amine 4	pt	2.44	Halex GT	pt	5.96
2,4-D Weedar 64	pt	3.00	Halomax	oz	19.00
AAtrex 4L	pt	2.08	Harmony Extra SG	oz	12.84
AAtrex NINE-O	lb	3.93	Harmony Extra XP	oz	14.35
Accent Q	oz	32.47	Harness XTRA	pt	7.24
Aim 2EC	oz	6.33	Hoelon 3EC	pt	11.03
Assure II	oz	0.74	Ignite 280	pt	8.93
Atrazine 4L	pt	1.93	Impact	oz	11.67
Atrazine 90DF	lb	3.93	Karmex XP	lb	5.93
Axial XL	oz	1.05	Lariat	qt	7.49
Axiom 68DF	oz	1.86	Laudis	oz	5.43
Banvel	pt	11.10	Layby Pro	qt	14.18
Basagran	pt	11.88	Leadoff	oz	4.00
Basis	oz	17.91	Lexar	pt	7.08
Beyond	oz	4.29	Liberty 280	oz	0.66
Bicep II Magnum	qt	10.97	Linex 4L	pt	12.12
Bicep Lite Magnum	pt	7.24	Londax 60DF	oz	17.25
Blazer Ultra	pt	9.56	Lorox 50DF	lb	18.70
Bolero 8EC	pt	7.50	Makaze	pt	1.88
Boundary 6.5 EC	pt	10.05	Metribuzin 75	lb	10.75
Buccaneer Plus	pt	2.19	MSMA 6.6	pt	3.50
Bullet	pt	3.73	MSMA6 Plus	pt	3.21
Butyrac 175 (2,4-D	pt	3.27	Newpath 2SL	oz	3.47
Butyrac 200 (2,4-DB)	pt	4.20	Osprey	oz	3.08
Cadre	oz	4.01	Outlook	pt	16.88
Callisto 4SC	oz	5.68	Paraquat	oz	0.33
Canopy 75%	oz	2.69	Parazone 3SL	oz	0.32
Canopy EX	oz	7.63	Parrlay	pt	8.13
Caparol 4L	pt	3.69	Parrot 4L	pt	2.95
Capreno	oz	6.48	Peak Accu Pak	oz	15.45
Celebrity Plus	lb	84.50	Permit 75 DF	oz	19.73
Clarity	pt	11.88	Poast 1.53	pt	11.95
Classic	oz	16.28	Poast Plus	pt	8.66
Clearpath	lb	55.06	PowerFlex	pt	10.39
Clincher SF	oz	2.30	Prefix	pt	6.26
Cobra 2EC	oz	1.61	Propimax EC	pt	15.81
Command 3ME	pt	19.06	Prowl 3.3 EC	pt	5.63
Cornerstone Plus	pt	1.56	Prowl H20	pt	5.95
Corvus	oz	6.46	Pursuit 2S	oz	3.25
Cotoran 4L	pt	5.98	Python WDG	oz	13.04
Cotton Pro	pt	3.50	Quinstar	lb	45.94
Credit Extra	pt	2.10	Raptor	oz	4.18
Dicamba	pt	11.41	RealmQ	oz	4.75
Direx 4L	pt	4.44	Reflex 2LC	pt	7.04
Diuron 4L	pt	4.19	Regiment 80WP	oz	41.38
Diuron 80 DF	lb	2.70	Remedy Ultra	pt	8.60
Diuron 80%	lb	2.70	Resolve SG	oz	7.95
Dual II Magnum	pt	14.50	Resource .86EC	pt	28.75
Dual Magnum	pt	13.49	Ricebeaux	pt	5.40
Duet	pt	4.99	RicePro	pt	4.87
Envoke	oz	93.50	Riceshot	pt	3.81
Evik DF 80W	lb	11.75	Ricestar HT	pt	22.55
Exceed	oz	10.71	Rifel	pt	8.24
Expert	pt	4.27	Roundup Power Max	oz	0.21
Facet L	pt	10.36	Roundup PowerMax	pt	3.25
Finesse	oz	8.06	Roundup WeatherMax	oz	0.27
First Rate	oz	38.78	Roundup WeatherMax	pt	4.07
Flexstar	pt	10.68	Salvo	pt	5.13
Frontier 6.0	oz	0.63	Scepter 70 DG	oz	4.52
Fultime	pt	5.25	Select Max	pt	12.32
Fusilade DX	oz	1.14	Sequence	pt	5.96

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2015 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Sharpen	oz	5.68	Imidan 70 WSB	oz	0.68
Simazine 4L	pt	3.17	Incidental Pest Trt	acre	12.00
Stalwart	pt	7.44	Intrepid 2F	oz	2.00
Stam 80 EDF	lb	8.04	Intruder 70WSP	oz	9.65
Stam M4	qt	7.75	Karate Z	oz	2.85
Staple LX	oz	8.55	Kelthane MF 4EC	pt	5.00
Steadfast	oz	11.85	Lambda	oz	1.10
Sterling Blue	pt	9.81	Lannate LV	pt	10.34
Storm	pt	11.50	Lannate SP	oz	1.93
Strada WG	oz	6.50	Larvin 3.2	oz	0.63
Strongarm	oz	51.20	Leverage 2.7	oz	1.66
Superwham	qt	8.83	Lorsban 15G	lb	3.59
Suprend	lb	12.92	Lorsban 4E	pt	5.63
Surpass EC	qt	26.25	Macho	oz	0.91
Synchrony XP	oz	12.07	Malathion 5E	pt	4.99
Touchdown Total	qt	6.74	Malathion 8E	pt	5.60
Treflan 4D	pt	3.40	Methyl Parathion 4	pt	5.79
Tricor DF	lb	15.28	Monitor 4	pt	16.50
Trifluralin 4EC	pt	3.34	Montana	oz	0.91
Valor SX	oz	6.15	Mustang Max	oz	1.60
Valor XLT	oz	4.69	Nuprid 4F	oz	1.15
Verdict	oz	1.65	Oberon 4 SC	pt	76.00
Zidua	oz	7.80	Orthene 90S	lb	6.55
Zorial Rapid 80DF	lb	14.10	Penncap-M	pt	6.71
INOCULANT			Pounce 25WP	lb	12.85
Nitrastick S	lbseed	0.02	Prolex	oz	2.62
Nitro Fix	lbseed	0.03	Provoke	oz	1.75
Optimize LIFT	oz	0.54	Radiant	oz	6.20
INSECT SCOUTING			Respect .8EC	pt	34.00
Insect Scouting	acre	7.00	Sevin 4F	pt	6.00
INSECTICIDES			Sevin 80S	lb	7.40
Abamectin .15EC	pt	12.50	Sevin XLR Plus	qt	12.50
Acephate 90%	lb	6.88	Sniper	oz	1.05
Acephate 90SP	lb	7.23	Steward	pt	30.12
Acramite-4SC	oz	1.88	Temik 15G Grit	lb	4.00
Asana .66 XL	oz	0.64	Temik 15G Gypsum	lb	4.00
Aztec 2.1% G	lb	3.68	Thimet 20-G Lock N L	lb	3.60
Baythroid XL	oz	2.40	Thionex 3 EC	pt	4.65
Bidrin 8WM	oz	1.04	Thionex 50W	lb	10.45
Bidrin XP	oz	0.80	Tombstone Helios	pt	43.75
Bifenthrin	oz	0.95	Tracer 4SC	oz	9.73
Bifenture 2EC	pt	14.69	Trimax Pro	oz	1.85
Brigade EC	pt	21.01	Tundra	oz	0.78
Brigade WSB	lb	22.20	Vydate C-LV	oz	0.89
Capture LFR	oz	2.40	Phorate	lb	3.00
Carbaryl 4L	pt	5.35	Zeal Miticid I	oz	15.89
Carbine 50WG	oz	5.25	Zephyr	oz	0.85
Centric 40WG	oz	4.83	IRRIGATION SUPPLIES		
Comite ll	pt	8.46	Roll-Out Pipe	ft	0.26
Confirm 2F	oz	2.05	SEED/PLANTS		
Counter 15G	lb	4.22	Corn Seed BtRR	thous	3.47
Cruiser Maxx Rice	lbseed	0.15	Corn Seed Conv.	thous	2.88
Curacron 8E	pt	10.75	Corn Seed LLRRBT	thous	3.43
Cypermethrin	oz	0.55	Corn Seed RR2	thous	3.08
Denim 0.16 EC	pt	32.63	Corn Seed VT3	thous	3.72
Diamond .83EC	pt	16.61	Corn Seed VT3Pro	thous	3.56
Dimethoate 4E	pt	6.27	Cotton Seed B2RF	thous	0.74
Dimilin 2L	oz	2.01	Cotton Seed LLB2	thous	1.19
Dipel DF	lb	13.50	Peanut Seed	lb	0.70
Dipel ES	pt	5.00	Rice Clearfield	lb	0.90
Discipline 2 EC	oz	0.86	Rice Clearfield Hyb	lb	6.12
Endigo ZC	pt	15.07	Rice Conv. Hybrid	lb	5.80
Epi-Mek	pt	15.66	Rice Seed (Levees)	lb	0.38
Fanfare 2EC	oz	0.88	Rice Seed CF(Levees)	lb	0.90
Force 3G	lb	6.73	Rice Seed CFH(Levee)	lb	6.12
Furadan 4F	pt	9.81	Rice Seed Conv.	lb	0.38
Furadan 4FLFR	pt	9.81	Sorghum Concept	lb	2.28
Gaucho 600	oz	5.80	Soybean Seed LL	lb	1.12
Hero	pt	24.59	Soybean Seed RR2	lb	1.19
Holster	pt	14.38			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2015(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Wheat Seed Private	lb	0.32	B2RF Cot Tech Fee	thous	1.49
SURVEY & MARK LEVEES			B2RF Cot Tech Fee	cap/ac	62.69
Survey & Mark Levees	acre	4.50	LLB2 Cot Tech Fee	thous	0.76
Survey & Mark Levees	acre	4.50	RF Cot Tech Fee	thous	1.04
TECHNOLOGY FEE			RF Cot Tech Fee	cap/ac	43.66
B2 Cot Tech Fee	thous	0.76	WRF Cot Tech Fee	thous	1.45
B2 Cot Tech Fee	cap/ac	31.91	WS Cot Tech Fee	thous	0.41
			WS Cotton Tech Fee	cap/ac	24.00

Appendix Table 5. Estimated fuel prices and interest rates, Mississippi, 2015

ITEM NAME	UNIT	PRICE
		dollars
Diesel Fuel (DI) Price	($/gal):	3.20
Gasoline (GA) Price.	($/gal):	3.40
LP Gas (LP) Price.	($/gal):	2.30
Short-term Interest Rate	(%):	4.40
Intermediate-term Interest Rate. . . .	(%):	4.50

Appendix Table 6. Labor types, wage rates and unallocated labor multipliers for crop enterprises, Mississippi, 2015

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	12.55
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06

CROP ENTERPRISE	UNALLOCATED LABOR MULTIPLIERS (%)
Corn	90
Cotton	80
Grain Sorghum	90
Peanuts	80
Rice	90
Soybeans	90
Wheat	80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2015

Crop	unit	Futures Contract Month	Futures Contract Price[a]	Basis[b]	Forward Contract Price[c]	Loan Rate[d]	Budget Price[e]
Corn	bu	Dec '15	3.84420	-0.3411	3.50	2.1	3.50
Cotton Lint	lb	Dec '15	0.67240	-0.0310	0.641	0.52	0.64
Cottonseed	lb						0.113[f]
Grain Sorghum	bu				3.34	2.02	3.34
Peanuts	ton				425.00	355.00	425.00
Soybeans	bu	Nov '15	9.86050	-0.2036	9.66	5.21	9.66
Rice	bu	Sep '15	5.83450	-0.2583	5.58	2.98	5.58
Wheat	bu	Jul '15	5.37180	-0.3954	4.98	2.65	4.98

[a] Average of the daily closing futures contract prices during September 2014 for the stated contract months.

[b] Basis is the mid-week Greenville, MS cash price minus the futures contract price for the stated contract month. The reported basis is an Olympic average from 2006 to 2013, which removes the highest and lowest within week basis value. All basis values are composed of the typical harvest timeframe for each crop according to USDA, NASS crop progress reports.
Sources: Arkansas Farm Bureau Commodity Report and Daily Grain Report, Mississippi Department of Ag-USDA Market News.

[c] The forward contract price for cotton, soybeans, corn, wheat, and rice is the futures contract price plus the basis. The forward contract price for grain sorghum is 95% of the forward contract price for corn. The forward contract price for peanuts is estimated from a poll of industry peanut buyers.

[d] Average Mississippi loan rate for the 2014 crop year for soybeans, corn, grain sorghum, and wheat. 2014 National average Loan rate for cotton. 2014 Mississippi farm stored loan rate for long grain rice. 2014 national average loan rate for peanuts.

[e] Price used in the 2015 MAFES Planning Budgets.

[f] Cottonseed price is the marketing year average price averaged over the years 2010-2014.

Appendix Table 8. Estimated costs for field operations, per acre
Irrigation with a 1/4-mile center pivot system
135-acre system, 7.5 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Maintenance										
IRRIGATE LABOR	hour				1.07		0.02	1.09		1.09
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Apply Water										
IRRIGATE LABOR	hour				0.20			0.20		0.20
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Pivot, 1/4 CP	each			11.23			0.21	11.44	43.18	54.62
Well & Pump, 1/4 CP	each			2.89			0.05	2.94	8.12	11.06
Engine, 1/4 CP, 65	each								9.17	9.17
June Irr. 3app@.75"	ac-in		10.75	1.34			0.22	12.31		12.31
July Irr. 4app@.75"	ac-in		14.34	1.79			0.24	16.37		16.37
Aug Irr. 3app@.75"	ac-in		10.75	1.34			0.13	12.22		12.22
TOTALS		0.00	35.84	18.59	1.84	0.00	0.88	57.15	60.47	117.62

Note: Cost of production estimates are based on 2014 input prices.

Appendix Table 9. Estimated costs for field operations, per acre
Corn irrigated with roll-out pipe
160-acre system, 13 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	DIRECT COST FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
			dollars							
Land Plane	50'x16'		1.19	0.29	0.48		0.09	2.05	1.45	3.50
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.20	0.05	0.12		0.01	0.38	0.18	0.56
Roll-Out Pipe	ft	8.58					0.13	8.71		8.71
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.27	0.06	0.39		0.01	0.73	0.47	1.20
IRRIGATE LABOR	hour				1.81		0.03	1.84		1.84
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.40	0.10	0.58		0.01	1.09	0.71	1.80
Land Forming ($390)	each								30.35	30.35
Well & Pump, Furrow	each			2.44			0.04	2.48	6.85	9.33
Main Line Pipe	each								4.73	4.73
Engine, RPF, Corn	each								7.26	7.26
1st June Irrigation	ac-in		8.47	0.88			0.14	9.49		9.49
2nd June Irrigation	ac-in		8.47	0.88			0.14	9.49		9.49
3rd June Irrigation	ac-in		8.47	0.88			0.14	9.49		9.49
July Irrigation	ac-in		8.47	0.88			0.10	9.45		9.45
TOTALS		8.58	35.94	6.46	4.53	0.00	0.84	56.35	52.00	108.35

Note: Cost of production estimates are based on 2014 input prices.

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