CORN, GRAIN SORGHUM &WHEAT 2014 PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2013-03

December 2013

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 2014 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 2013. (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 2013 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 October. The basis is determined by subtracting the average daily cash price for the month of October 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, 2014

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	5.00	1.0000	5.00	_____
FERTILIZERS					
DAP	cwt	25.75	1.8000	46.35	_____
Potash (60% K2O)	cwt	23.75	1.3750	32.66	_____
Fert 10-34-0	cwt	28.25	0.5000	14.13	_____
UAN + Sulfur (28%)	cwt	19.50	3.5710	69.63	_____
UAN (32% N)	cwt	19.50	4.3750	85.31	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	2.0000	4.00	_____
Clarity	pt	10.19	0.5000	5.10	_____
Atrazine 4L	pt	1.97	4.0000	7.88	_____
Halex GT	pt	5.87	3.6000	21.13	_____
INSECTICIDES					
Intrepid 2F	oz	1.84	4.0000	7.36	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.21	30.0000	96.30	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	185.0000	42.55	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.5000	24.00	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.4883	6.10	_____
Harvesters	hour	12.50	0.1009	1.26	_____
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	12.48	0.4597	5.74	_____
DIESEL FUEL					
Tractors	gal	3.30	4.6505	15.35	_____
Harvesters	gal	3.30	1.6890	5.57	_____
Roll-Out Pipe Irr.	gal	3.30	10.5901	34.96	_____
REPAIR & MAINTENANCE					
Implements	acre	7.17	1.0000	7.17	_____
Tractors	acre	2.37	1.0000	2.37	_____
Harvesters	acre	3.29	1.0000	3.29	_____
Roll-Out Pipe Irr.	acre	5.96	1.0000	5.96	_____
INTEREST ON OP. CAP.	acre	11.63	1.0000	11.63	_____

TOTAL DIRECT EXPENSES				588.00	_____
FIXED EXPENSES					
Implements	acre	9.72	1.0000	9.72	_____
Tractors	acre	14.35	1.0000	14.35	_____
Harvesters	acre	12.60	1.0000	12.60	_____
Roll-Out Pipe Irr.	acre	45.14	1.0000	45.14	_____

TOTAL FIXED EXPENSES				81.81	_____

TOTAL SPECIFIED EXPENSES				669.81	_____

Note: Cost of production estimates are based on 2013 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, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	4.53	185.0000	838.05	_____
TOTAL INCOME				838.05	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	11.00	1.0000	11.00	_____
FERTILIZERS	acre	248.08	1.0000	248.08	_____
HERBICIDES	acre	38.11	1.0000	38.11	_____
INSECTICIDES	acre	7.36	1.0000	7.36	_____
IRRIGATION SUPPLIES	acre	8.58	1.0000	8.58	_____
SEED/PLANTS	acre	96.30	1.0000	96.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	42.55	1.0000	42.55	_____
CUSTOM LIME	acre	24.00	1.0000	24.00	_____
HAND LABOR	hour	9.06	0.1752	1.59	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	12.50	0.5893	7.36	_____
UNALLOCATED LABOR	hour	12.48	0.4597	5.74	_____
DIESEL FUEL	gal	3.30	16.9298	55.88	_____
REPAIR & MAINTENANCE	acre	18.79	1.0000	18.79	_____
INTEREST ON OP. CAP.	acre	11.63	1.0000	11.63	_____
TOTAL DIRECT EXPENSES				588.00	_____
RETURNS ABOVE DIRECT EXPENSES				250.05	_____
TOTAL FIXED EXPENSES				81.81	_____
TOTAL SPECIFIED EXPENSES				669.81	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				168.24	_____

Note: Cost of production estimates are based on 2013 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, 2014

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 2013 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, 2014

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Lime (Spread)	ton	24.00					0.90	24.90		24.90
Spin Spreader	5 ton		1.36	0.48	1.38		0.12	3.34	1.80	5.14
DAP	cwt	46.35					1.74	48.09		48.09
Potash (60% K2O)	cwt	32.66					1.22	33.88		33.88
Bed-Disk w/roller	8R-38		2.39	0.91	1.76		0.19	5.25	3.63	8.88
App by Air (5 gal)	appl	6.00					0.15	6.15		6.15
Glyphosate 3lbs a.e	pt	4.00					0.10	4.10		4.10
Clarity	pt	5.10					0.13	5.23		5.23
Plant & Pre-Rigid	8R-38		2.59	1.48	2.63		0.15	6.85	4.45	11.30
Corn Seed BtRR	thous	96.30					2.11	98.41		98.41
Fert 10-34-0	cwt	14.13					0.31	14.44		14.44
Custom Apply Fert	acre	7.50					0.14	7.64		7.64
UAN + Sulfur (28%)	cwt	69.63					1.31	70.94		70.94
Spray (Broadcast)	60'		0.91	0.28	0.80		0.04	2.03	1.02	3.05
Atrazine 4L	pt	7.88					0.15	8.03		8.03
Halex GT	pt	21.13					0.40	21.53		21.53
Fert Appl (Liquid)	8R-38		2.51	1.21	2.19		0.09	6.00	3.26	9.26
UAN (32% N)	cwt	85.31					1.33	86.64		86.64
App by Air (3 gal)	appl	5.00					0.06	5.06		5.06
Intrepid 2F	oz	7.36					0.09	7.45		7.45
Header - Corn	8R-38		5.57	4.71	2.40		0.04	12.72	14.66	27.38
Grain Cart Corn	700 bu		0.81	0.36	0.59		0.01	1.77	1.14	2.91
Haul Corn	bu	42.55					0.13	42.68		42.68
Stalk Shredder Flex	20'		2.66	2.91	1.96		0.02	7.55	3.97	11.52
Roll-Out Pipe Irr.	acre	8.58	37.08	6.45	4.51		0.70	57.32	47.88	105.20
TOTALS		483.48	55.88	18.79	18.22	0.00	11.63	588.00	81.81	669.81

Note: Cost of production estimates are based on 2013 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, 2014

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	838.05
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
FERTILIZERS	79.01	0.00	0.00	0.00	0.00	14.13	69.63	85.31	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.10	0.00	29.01	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	7.36	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	96.30	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	7.50	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	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.61	0.00	0.00	0.00	0.00	2.63	0.80	2.42	3.01	0.23	0.57	4.95
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	4.97	0.00	0.00	0.00	0.00	2.59	0.91	2.51	26.71	8.74	0.41	9.04
REPAIR & MAINTENANCE	1.67	0.00	0.00	0.00	0.00	1.48	0.28	1.21	5.19	0.88	0.10	7.98
INTEREST ON OP. CAP.	4.24	0.00	0.00	0.00	0.38	2.57	2.04	1.42	0.68	0.09	0.01	0.20
TOTAL DIRECT EXPENSES	117.50	0.00	0.00	0.00	15.48	119.70	110.17	92.87	56.53	9.94	1.09	64.72
NET INCOME	-117.50	0.00	0.00	0.00	-15.48	-119.70	-110.17	-92.87	-56.53	-9.94	-1.09	773.33
NET INCOME TO DATE	-117.50	-117.50	-117.50	-117.50	-132.98	-252.68	-362.85	-455.72	-512.25	-522.19	-523.28	250.05

Note: Cost of production estimates are based on 2013 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, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.39	3.62	3.85	4.07	4.30	4.53	4.75	4.98	5.20	5.43	5.66
PERCENT	YIELD	UNIT	dollars										
50	92.50	bu	-252	-231	-210	-189	-168	-147	-126	-105	-84	-63	-42
			-334	-313	-292	-271	-250	-229	-208	-187	-166	-145	-124
60	111.00	bu	-193	-168	-143	-118	-93	-68	-42	-17	7	32	57
			-275	-250	-225	-200	-175	-149	-124	-99	-74	-49	-24
70	129.50	bu	-135	-105	-76	-47	-17	11	40	70	99	128	158
			-217	-187	-158	-129	-99	-70	-41	-11	17	46	76
80	148.00	bu	-76	-43	-9	23	57	90	124	158	191	225	258
			-158	-124	-91	-57	-24	9	42	76	109	143	176
90	166.50	bu	-18	19	57	95	132	170	208	245	283	321	359
			-99	-62	-24	13	50	88	126	164	201	239	277
100	185.00	bu	40	82	124	166	208	250	291	333	375	417	459
			-41	0	42	84	126	168	210	252	293	335	377
110	203.50	bu	99	145	191	237	283	329	375	421	467	513	560
			17	63	109	155	201	247	293	339	386	432	478
120	222.00	bu	157	207	258	308	358	409	459	509	559	610	660
			75	126	176	226	277	327	377	427	478	528	578
130	240.50	bu	216	270	325	379	434	488	543	597	652	706	761
			134	188	243	297	352	406	461	515	570	624	679
140	259.00	bu	274	333	392	450	509	568	626	685	744	802	861
			193	251	310	369	427	486	545	603	662	721	779
150	277.50	bu	333	396	459	522	584	647	710	773	836	899	962
			251	314	377	440	503	565	628	691	754	817	880

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 2013 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, 2014

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	5.00	1.0000	5.00	_____
FERTILIZERS					
DAP	cwt	25.75	1.0870	27.99	_____
Potash (60% K2O)	cwt	23.75	0.8300	19.71	_____
Fert 10-34-0	cwt	28.25	0.5000	14.13	_____
UAN + Sulfur (28%)	cwt	19.50	2.1430	41.79	_____
UAN (32% N)	cwt	19.50	3.2815	63.99	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	2.0000	4.00	_____
Clarity	pt	10.19	0.5000	5.10	_____
Atrazine 4L	pt	1.97	4.0000	7.88	_____
Halex GT	pt	5.87	3.6000	21.13	_____
INSECTICIDES					
Intrepid 2F	oz	1.84	4.0000	7.36	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.21	26.0000	83.46	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	135.0000	31.05	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.5000	24.00	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.4098	5.12	_____
Harvesters	hour	12.50	0.1009	1.26	_____
HAND LABOR					
Implements	hour	9.06	0.1752	1.59	_____
UNALLOCATED LABOR	hour	12.48	0.4597	5.74	_____
DIESEL FUEL					
Tractors	gal	3.30	4.0079	13.23	_____
Harvesters	gal	3.30	1.3770	4.54	_____
REPAIR & MAINTENANCE					
Implements	acre	7.00	1.0000	7.00	_____
Tractors	acre	2.05	1.0000	2.05	_____
Harvesters	acre	2.88	1.0000	2.88	_____
INTEREST ON OP. CAP.	acre	8.59	1.0000	8.59	_____

TOTAL DIRECT EXPENSES				422.09	_____
FIXED EXPENSES					
Implements	acre	8.84	1.0000	8.84	_____
Tractors	acre	12.49	1.0000	12.49	_____
Harvesters	acre	11.03	1.0000	11.03	_____

TOTAL FIXED EXPENSES				32.36	_____

TOTAL SPECIFIED EXPENSES				454.45	_____

Note: Cost of production estimates are based on 2013 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, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	4.53	135.0000	611.55	_____
TOTAL INCOME				611.55	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	11.00	1.0000	11.00	_____
FERTILIZERS	acre	167.61	1.0000	167.61	_____
HERBICIDES	acre	38.11	1.0000	38.11	_____
INSECTICIDES	acre	7.36	1.0000	7.36	_____
SEED/PLANTS	acre	83.46	1.0000	83.46	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	31.05	1.0000	31.05	_____
CUSTOM LIME	acre	24.00	1.0000	24.00	_____
HAND LABOR	hour	9.06	0.1752	1.59	_____
OPERATOR LABOR	hour	12.50	0.5107	6.38	_____
UNALLOCATED LABOR	hour	12.48	0.4597	5.74	_____
DIESEL FUEL	gal	3.30	5.3850	17.77	_____
REPAIR & MAINTENANCE	acre	11.93	1.0000	11.93	_____
INTEREST ON OP. CAP.	acre	8.59	1.0000	8.59	_____
TOTAL DIRECT EXPENSES				422.09	_____
RETURNS ABOVE DIRECT EXPENSES				189.46	_____
TOTAL FIXED EXPENSES				32.36	_____
TOTAL SPECIFIED EXPENSES				454.45	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				157.10	_____

Note: Cost of production estimates are based on 2013 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, 2014

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					1.0870				
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 2013 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, 2014

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	24.00					0.90	24.90		24.90
Spin Spreader	5 ton		1.36	0.48	1.38		0.12	3.34	1.80	5.14
DAP	cwt	27.99					1.05	29.04		29.04
Potash (60% K2O)	cwt	19.71					0.74	20.45		20.45
Bed-Disk w/roller	8R-38		2.39	0.91	1.76		0.19	5.25	3.63	8.88
App by Air (5 gal)	appl	6.00					0.15	6.15		6.15
Glyphosate 3lbs a.e	pt	4.00					0.10	4.10		4.10
Clarity	pt	5.10					0.13	5.23		5.23
Plant & Pre-Rigid	8R-38		2.59	1.48	2.63		0.15	6.85	4.45	11.30
Corn Seed BtRR	thous	83.46					1.83	85.29		85.29
Fert 10-34-0	cwt	14.13					0.31	14.44		14.44
Custom Apply Fert	acre	7.50					0.14	7.64		7.64
UAN + Sulfur (28%)	cwt	41.79					0.78	42.57		42.57
Spray (Broadcast)	60'		0.91	0.28	0.80		0.04	2.03	1.02	3.05
Atrazine 4L	pt	7.88					0.15	8.03		8.03
Halex GT	pt	21.13					0.40	21.53		21.53
Fert Appl (Liquid)	8R-38		2.51	1.21	2.19		0.09	6.00	3.26	9.26
UAN (32% N)	cwt	63.99					1.00	64.99		64.99
App by Air (3 gal)	appl	5.00					0.06	5.06		5.06
Intrepid 2F	oz	7.36					0.09	7.45		7.45
Header - Corn	8R-38		4.54	4.30	2.40		0.04	11.28	13.09	24.37
Grain Cart Corn	700 bu		0.81	0.36	0.59		0.01	1.77	1.14	2.91
Haul Corn	bu	31.05					0.10	31.15		31.15
Stalk Shredder Flex	20'		2.66	2.91	1.96		0.02	7.55	3.97	11.52
TOTALS		370.09	17.77	11.93	13.71	0.00	8.59	422.09	32.36	454.45

Note: Cost of production estimates are based on 2013 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, 2014

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	611.55
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
FERTILIZERS	47.70	0.00	0.00	0.00	0.00	14.13	41.79	63.99	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.10	0.00	29.01	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	7.36	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	83.46	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	7.50	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	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.14	0.00	0.00	0.00	0.00	2.63	0.80	2.19	0.00	0.00	0.00	4.95
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	3.75	0.00	0.00	0.00	0.00	2.59	0.91	2.51	0.00	0.00	0.00	8.01
REPAIR & MAINTENANCE	1.39	0.00	0.00	0.00	0.00	1.48	0.28	1.21	0.00	0.00	0.00	7.57
INTEREST ON OP. CAP.	3.00	0.00	0.00	0.00	0.38	2.29	1.51	1.09	0.15	0.00	0.00	0.17
TOTAL DIRECT EXPENSES	82.98	0.00	0.00	0.00	15.48	106.58	81.80	70.99	12.51	0.00	0.00	51.75
NET INCOME	-82.98	0.00	0.00	0.00	-15.48	-106.58	-81.80	-70.99	-12.51	0.00	0.00	559.80
NET INCOME TO DATE	-82.98	-82.98	-82.98	-82.98	-98.46	-205.04	-286.84	-357.83	-370.34	-370.34	-370.34	189.46

Note: Cost of production estimates are based on 2013 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, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.39	3.62	3.85	4.07	4.30	4.53	4.75	4.98	5.20	5.43	5.66
PERCENT	YIELD	UNIT	dollars										
50	67.50	bu	-177	-161	-146	-131	-116	-100	-85	-70	-54	-39	-24
			-209	-194	-178	-163	-148	-133	-117	-102	-87	-71	-56
60	81.00	bu	-134	-116	-97	-79	-61	-42	-24	-6	12	30	49
			-166	-148	-130	-111	-93	-75	-56	-38	-20	-1	16
70	94.50	bu	-91	-70	-48	-27	-6	15	36	58	79	100	122
			-124	-102	-81	-59	-38	-17	4	25	47	68	90
80	108.00	bu	-48	-24	-0	24	48	73	97	122	146	171	195
			-81	-56	-32	-7	16	41	65	89	114	138	163
90	121.50	bu	-6	21	48	76	103	131	158	186	213	241	269
			-38	-11	16	44	71	99	126	154	181	209	236
100	135.00	bu	36	67	97	128	158	189	220	250	281	311	342
			4	34	65	95	126	157	187	218	248	279	309
110	148.50	bu	79	112	146	180	213	247	281	314	348	382	415
			46	80	114	147	181	215	248	282	316	349	383
120	162.00	bu	122	158	195	232	268	305	342	378	415	452	489
			89	126	163	199	236	273	309	346	383	419	456
130	175.50	bu	164	204	244	284	323	363	403	443	482	522	562
			132	172	211	251	291	331	370	410	450	490	529
140	189.00	bu	207	250	293	336	378	421	464	507	550	592	635
			175	218	260	303	346	389	432	474	517	560	603
150	202.50	bu	250	296	342	387	433	479	525	571	617	663	708
			217	263	309	355	401	447	493	539	584	630	676

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 2013 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, 2014

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	5.00	1.0000	5.00	_____
FERTILIZERS					
DAP	cwt	25.75	1.8000	46.35	_____
Potash (60% K2O)	cwt	23.75	1.3750	32.66	_____
UAN + Sulfur (28%)	cwt	19.50	3.5710	69.63	_____
UAN (32% N)	cwt	19.50	4.3750	85.31	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	2.0000	4.00	_____
Clarity	pt	10.19	0.5000	5.10	_____
Atrazine 4L	pt	1.97	4.0000	7.88	_____
Halex GT	pt	5.87	3.6000	21.13	_____
INSECTICIDES					
Intrepid 2F	oz	1.84	4.0000	7.36	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.05	30.0000	91.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	185.0000	42.55	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.5000	24.00	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.7718	9.65	_____
Harvesters	hour	12.50	0.1009	1.26	_____
Self-Propelled	hour	12.50	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	12.49	0.7306	9.13	_____
DIESEL FUEL					
Tractors	gal	3.30	7.4227	24.51	_____
Harvesters	gal	3.30	1.3770	4.54	_____
Self-Propelled	gal	3.30	0.1586	0.52	_____
Roll-Out Pipe Irr.	gal	3.30	10.5901	34.96	_____
REPAIR & MAINTENANCE					
Implements	acre	8.09	1.0000	8.09	_____
Tractors	acre	3.79	1.0000	3.79	_____
Harvesters	acre	2.88	1.0000	2.88	_____
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	11.78	1.0000	11.78	_____

TOTAL DIRECT EXPENSES				587.02	_____
FIXED EXPENSES					
Implements	acre	12.26	1.0000	12.26	_____
Tractors	acre	22.98	1.0000	22.98	_____
Harvesters	acre	11.03	1.0000	11.03	_____
Self-Propelled	acre	1.04	1.0000	1.04	_____
Roll-Out Pipe Irr.	acre	45.14	1.0000	45.14	_____

TOTAL FIXED EXPENSES				92.45	_____

TOTAL SPECIFIED EXPENSES				679.47	_____

Note: Cost of production estimates are based on 2013 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, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	4.53	185.0000	838.05	_____
TOTAL INCOME				838.05	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	11.00	1.0000	11.00	_____
FERTILIZERS	acre	233.95	1.0000	233.95	_____
HERBICIDES	acre	38.11	1.0000	38.11	_____
INSECTICIDES	acre	7.36	1.0000	7.36	_____
IRRIGATION SUPPLIES	acre	8.58	1.0000	8.58	_____
SEED/PLANTS	acre	91.50	1.0000	91.50	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	42.55	1.0000	42.55	_____
CUSTOM LIME	acre	24.00	1.0000	24.00	_____
HAND LABOR	hour	9.06	0.1642	1.49	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	12.50	0.8904	11.13	_____
UNALLOCATED LABOR	hour	12.49	0.7306	9.13	_____
DIESEL FUEL	gal	3.30	19.5486	64.53	_____
REPAIR & MAINTENANCE	acre	20.88	1.0000	20.88	_____
INTEREST ON OP. CAP.	acre	11.78	1.0000	11.78	_____
TOTAL DIRECT EXPENSES				587.02	_____
RETURNS ABOVE DIRECT EXPENSES				251.03	_____
TOTAL FIXED EXPENSES				92.45	_____
TOTAL SPECIFIED EXPENSES				679.47	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				158.58	_____

Note: Cost of production estimates are based on 2013 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, 2014

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER 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 2013 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, 2014

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Subsoiler	3 shank		3.30	0.63	2.43		0.24	6.60	3.40	10.00
Disk Harrow	24'		2.64	1.23	1.94		0.22	6.03	4.15	10.18
Lime (Spread)	ton	24.00					0.90	24.90		24.90
Spin Spreader	5 ton		1.36	0.48	1.38		0.12	3.34	1.80	5.14
DAP	cwt	46.35					1.74	48.09		48.09
Potash (60% K2O)	cwt	32.66					1.22	33.88		33.88
Bed-Disk (Hipper)Rd	8R-38		2.39	0.67	1.76		0.18	5.00	3.02	8.02
App by Air (5 gal)	appl	6.00					0.15	6.15		6.15
Glyphosate 3lbs a.e	pt	4.00					0.10	4.10		4.10
Clarity	pt	5.10					0.13	5.23		5.23
Row Cond Rigid	26'		1.93	0.49	1.42		0.08	3.92	2.58	6.50
Plant - Rigid	8R-38		2.41	1.22	2.45		0.13	6.21	3.84	10.05
Corn Seed RR2	thous	91.50					2.00	93.50		93.50
Custom Apply Fert	acre	7.50					0.14	7.64		7.64
UAN + Sulfur (28%)	cwt	69.63					1.31	70.94		70.94
Sprayer 600-750gal	60' 175hp		0.52	0.16	0.50		0.02	1.20	1.04	2.24
Atrazine 4L	pt	7.88					0.15	8.03		8.03
Halex GT	pt	21.13					0.40	21.53		21.53
Fert Appl (Liquid)	8R-38		2.51	1.21	2.19		0.09	6.00	3.26	9.26
UAN (32% N)	cwt	85.31					1.33	86.64		86.64
Cultivate	8R-38		2.38	0.77	1.75		0.08	4.98	3.28	8.26
App by Air (3 gal)	appl	5.00					0.06	5.06		5.06
Intrepid 2F	oz	7.36					0.09	7.45		7.45
Header - Corn	8R-38		4.54	4.30	2.40		0.04	11.28	13.09	24.37
Grain Cart Corn	700 bu		0.81	0.36	0.59		0.01	1.77	1.14	2.91
Haul Corn	bu	42.55					0.13	42.68		42.68
Stalk Shredder Flex	20'		2.66	2.91	1.96		0.02	7.55	3.97	11.52
Roll-Out Pipe Irr.	acre	8.58	37.08	6.45	4.51		0.70	57.32	47.88	105.20
TOTALS		464.55	64.53	20.88	25.28	0.00	11.78	587.02	92.45	679.47

Note: Cost of production estimates are based on 2013 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, 2014

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	838.05
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
FERTILIZERS	79.01	0.00	0.00	0.00	0.00	0.00	69.63	85.31	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.10	0.00	29.01	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	7.36	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	91.50	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	7.50	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	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.98	0.00	0.00	0.00	0.00	3.87	0.50	4.17	3.01	0.23	0.57	4.95
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	10.91	0.00	0.00	0.00	0.00	4.34	0.52	4.89	26.71	8.74	0.41	8.01
REPAIR & MAINTENANCE	3.29	0.00	0.00	0.00	0.00	1.71	0.16	1.98	5.19	0.88	0.10	7.57
INTEREST ON OP. CAP.	4.69	0.00	0.00	0.00	0.38	2.21	2.02	1.50	0.68	0.09	0.01	0.20
TOTAL DIRECT EXPENSES	129.88	0.00	0.00	0.00	15.48	103.63	109.34	97.85	56.53	9.94	1.09	63.28
NET INCOME	-129.88	0.00	0.00	0.00	-15.48	-103.63	-109.34	-97.85	-56.53	-9.94	-1.09	774.77
NET INCOME TO DATE	-129.88	-129.88	-129.88	-129.88	-145.36	-248.99	-358.33	-456.18	-512.71	-522.65	-523.74	251.03

Note: Cost of production estimates are based on 2013 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, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.39	3.62	3.85	4.07	4.30	4.53	4.75	4.98	5.20	5.43	5.66
PERCENT	YIELD	UNIT	dollars										
50	92.50	bu	-251	-230	-209	-188	-167	-146	-125	-104	-83	-62	-41
			-343	-322	-301	-281	-260	-239	-218	-197	-176	-155	-134
60	111.00	bu	-192	-167	-142	-117	-92	-67	-41	-16	8	33	58
			-285	-260	-234	-209	-184	-159	-134	-109	-84	-59	-33
70	129.50	bu	-134	-104	-75	-46	-16	12	41	71	100	129	159
			-226	-197	-168	-138	-109	-80	-50	-21	7	37	66
80	148.00	bu	-75	-42	-8	24	58	91	125	159	192	226	259
			-168	-134	-101	-67	-34	-0	33	66	100	133	167
90	166.50	bu	-17	20	58	96	133	171	209	246	284	322	360
			-109	-71	-34	3	41	79	116	154	192	229	267
100	185.00	bu	41	83	125	167	209	251	292	334	376	418	460
			-50	-9	32	74	116	158	200	242	284	326	368
110	203.50	bu	100	146	192	238	284	330	376	422	468	514	561
			7	53	99	145	192	238	284	330	376	422	468
120	222.00	bu	158	208	259	309	359	410	460	510	560	611	661
			66	116	166	217	267	317	367	418	468	518	569
130	240.50	bu	217	271	326	380	435	489	544	598	653	707	762
			124	179	233	288	342	397	451	506	560	615	669
140	259.00	bu	275	334	393	451	510	569	627	686	745	803	862
			183	242	300	359	418	476	535	594	652	711	770
150	277.50	bu	334	397	460	523	585	648	711	774	837	900	962
			241	304	367	430	493	556	619	681	744	807	870

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 2013 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, 2014

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	5.00	1.0000	5.00	_____
FERTILIZERS					
DAP	cwt	25.75	1.0870	27.99	_____
Potash (60% K2O)	cwt	23.75	0.8300	19.71	_____
UAN + Sulfur (28%)	cwt	19.50	2.1430	41.79	_____
UAN (32% N)	cwt	19.50	3.2815	63.99	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	2.0000	4.00	_____
Clarity	pt	10.19	0.5000	5.10	_____
Atrazine 4L	pt	1.97	4.0000	7.88	_____
Halex GT	pt	5.87	3.6000	21.13	_____
INSECTICIDES					
Intrepid 2F	oz	1.84	4.0000	7.36	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.05	26.0000	79.30	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	135.0000	31.05	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.5000	24.00	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.6196	7.75	_____
Harvesters	hour	12.50	0.1009	1.26	_____
Self-Propelled	hour	12.50	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	12.49	0.6643	8.30	_____
DIESEL FUEL					
Tractors	gal	3.30	6.0597	20.01	_____
Harvesters	gal	3.30	1.3770	4.54	_____
Self-Propelled	gal	3.30	0.1586	0.52	_____
REPAIR & MAINTENANCE					
Implements	acre	7.52	1.0000	7.52	_____
Tractors	acre	3.10	1.0000	3.10	_____
Harvesters	acre	2.88	1.0000	2.88	_____
Self-Propelled	acre	0.16	1.0000	0.16	_____
INTEREST ON OP. CAP.	acre	8.67	1.0000	8.67	_____

TOTAL DIRECT EXPENSES				418.22	_____
FIXED EXPENSES					
Implements	acre	10.35	1.0000	10.35	_____
Tractors	acre	18.87	1.0000	18.87	_____
Harvesters	acre	11.03	1.0000	11.03	_____
Self-Propelled	acre	1.04	1.0000	1.04	_____

TOTAL FIXED EXPENSES				41.29	_____

TOTAL SPECIFIED EXPENSES				459.51	_____

Note: Cost of production estimates are based on 2013 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, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	4.53	135.0000	611.55	_____
TOTAL INCOME				611.55	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	11.00	1.0000	11.00	_____
FERTILIZERS	acre	153.48	1.0000	153.48	_____
HERBICIDES	acre	38.11	1.0000	38.11	_____
INSECTICIDES	acre	7.36	1.0000	7.36	_____
SEED/PLANTS	acre	79.30	1.0000	79.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	31.05	1.0000	31.05	_____
CUSTOM LIME	acre	24.00	1.0000	24.00	_____
HAND LABOR	hour	9.06	0.1642	1.49	_____
OPERATOR LABOR	hour	12.50	0.7382	9.23	_____
UNALLOCATED LABOR	hour	12.49	0.6643	8.30	_____
DIESEL FUEL	gal	3.30	7.5954	25.07	_____
REPAIR & MAINTENANCE	acre	13.66	1.0000	13.66	_____
INTEREST ON OP. CAP.	acre	8.67	1.0000	8.67	_____
TOTAL DIRECT EXPENSES				418.22	_____
RETURNS ABOVE DIRECT EXPENSES				193.33	_____
TOTAL FIXED EXPENSES				41.29	_____
TOTAL SPECIFIED EXPENSES				459.51	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				152.04	_____

Note: Cost of production estimates are based on 2013 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, 2014

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 2013 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, 2014

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Subsoiler	3 shank		3.30	0.63	2.43		0.24	6.60	3.40	10.00
Disk Harrow	24'		2.64	1.23	1.94		0.22	6.03	4.15	10.18
Lime (Spread)	ton	24.00					0.90	24.90		24.90
Spin Spreader	5 ton		1.36	0.48	1.38		0.12	3.34	1.80	5.14
DAP	cwt	27.99					1.05	29.04		29.04
Potash (60% K2O)	cwt	19.71					0.74	20.45		20.45
Bed-Disk (Hipper)Rd	8R-38		2.39	0.67	1.76		0.18	5.00	3.02	8.02
App by Air (5 gal)	appl	6.00					0.15	6.15		6.15
Glyphosate 3lbs a.e	pt	4.00					0.10	4.10		4.10
Clarity	pt	5.10					0.13	5.23		5.23
Row Cond Rigid	26'		1.93	0.49	1.42		0.08	3.92	2.58	6.50
Plant - Rigid	8R-38		2.41	1.22	2.45		0.13	6.21	3.84	10.05
Corn Seed RR2	thous	79.30					1.73	81.03		81.03
Custom Apply Fert	acre	7.50					0.14	7.64		7.64
UAN + Sulfur (28%)	cwt	41.79					0.78	42.57		42.57
Sprayer 600-750gal	60' 175hp		0.52	0.16	0.50		0.02	1.20	1.04	2.24
Atrazine 4L	pt	7.88					0.15	8.03		8.03
Halex GT	pt	21.13					0.40	21.53		21.53
Fert Appl (Liquid)	8R-38		2.51	1.21	2.19		0.09	6.00	3.26	9.26
UAN (32% N)	cwt	63.99					1.00	64.99		64.99
App by Air (3 gal)	appl	5.00					0.06	5.06		5.06
Intrepid 2F	oz	7.36					0.09	7.45		7.45
Header - Corn	8R-38		4.54	4.30	2.40		0.04	11.28	13.09	24.37
Grain Cart Corn	700 bu		0.81	0.36	0.59		0.01	1.77	1.14	2.91
Haul Corn	bu	31.05					0.10	31.15		31.15
Stalk Shredder Flex	20'		2.66	2.91	1.96		0.02	7.55	3.97	11.52
TOTALS		351.80	25.07	13.66	19.02	0.00	8.67	418.22	41.29	459.51

Note: Cost of production estimates are based on 2013 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, 2014

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	611.55
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
FERTILIZERS	47.70	0.00	0.00	0.00	0.00	0.00	41.79	63.99	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.10	0.00	29.01	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	7.36	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	79.30	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	7.50	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	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.51	0.00	0.00	0.00	0.00	3.87	0.50	2.19	0.00	0.00	0.00	4.95
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	9.69	0.00	0.00	0.00	0.00	4.34	0.52	2.51	0.00	0.00	0.00	8.01
REPAIR & MAINTENANCE	3.01	0.00	0.00	0.00	0.00	1.71	0.16	1.21	0.00	0.00	0.00	7.57
INTEREST ON OP. CAP.	3.45	0.00	0.00	0.00	0.38	1.94	1.49	1.09	0.15	0.00	0.00	0.17
TOTAL DIRECT EXPENSES	95.36	0.00	0.00	0.00	15.48	91.16	80.97	70.99	12.51	0.00	0.00	51.75
NET INCOME	-95.36	0.00	0.00	0.00	-15.48	-91.16	-80.97	-70.99	-12.51	0.00	0.00	559.80
NET INCOME TO DATE	-95.36	-95.36	-95.36	-95.36	-110.84	-202.00	-282.97	-353.96	-366.47	-366.47	-366.47	193.33

Note: Cost of production estimates are based on 2013 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, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.39	3.62	3.85	4.07	4.30	4.53	4.75	4.98	5.20	5.43	5.66
PERCENT	YIELD	UNIT	dollars										
50	67.50	bu	-173	-158	-142	-127	-112	-96	-81	-66	-51	-35	-20
			-214	-199	-184	-168	-153	-138	-122	-107	-92	-77	-61
60	81.00	bu	-130	-112	-93	-75	-57	-38	-20	-2	16	34	52
			-171	-153	-135	-116	-98	-80	-61	-43	-25	-6	11
70	94.50	bu	-87	-66	-45	-23	-2	19	40	62	83	104	126
			-129	-107	-86	-64	-43	-22	-0	20	42	63	84
80	108.00	bu	-45	-20	3	28	52	77	101	126	150	175	199
			-86	-61	-37	-12	11	35	60	84	109	133	158
90	121.50	bu	-2	25	52	80	107	135	162	190	217	245	272
			-43	-16	11	38	66	94	121	149	176	204	231
100	135.00	bu	40	71	101	132	162	193	223	254	285	315	346
			-0	29	60	90	121	152	182	213	243	274	304
110	148.50	bu	83	116	150	184	217	251	285	318	352	385	419
			41	75	109	142	176	210	243	277	310	344	378
120	162.00	bu	125	162	199	236	272	309	346	382	419	456	492
			84	121	158	194	231	268	304	341	378	414	451
130	175.50	bu	168	208	248	287	327	367	407	446	486	526	566
			127	167	206	246	286	326	365	405	445	485	524
140	189.00	bu	211	254	297	339	382	425	468	511	553	596	639
			170	212	255	298	341	384	427	469	512	555	598
150	202.50	bu	254	300	345	391	437	483	529	575	621	666	712
			212	258	304	350	396	442	488	533	579	625	671

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 2013 input prices.

Table 5.A Estimated costs per acre
Corn, stale seedbed, RR seed, 8-row 30",
135 bu yield goal, All Areas, Mississippi, 2014

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	5.00	1.0000	5.00	_____
FERTILIZERS					
DAP	cwt	25.75	1.0870	27.99	_____
Potash (60% K2O)	cwt	23.75	0.8300	19.71	_____
UAN + Sulfur (28%)	cwt	19.50	2.1430	41.79	_____
UAN (32% N)	cwt	19.50	3.2815	63.99	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	2.0000	4.00	_____
Clarity	pt	10.19	0.5000	5.10	_____
Atrazine 4L	pt	1.97	4.0000	7.88	_____
Halex GT	pt	5.87	3.6000	21.13	_____
INSECTICIDES					
Intrepid 2F	oz	1.84	4.0000	7.36	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.05	28.0000	85.40	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	135.0000	31.05	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.5000	24.00	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.5400	6.76	_____
Harvesters	hour	12.50	0.1277	1.60	_____
Self-Propelled	hour	12.50	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	12.48	0.6168	7.70	_____
DIESEL FUEL					
Tractors	gal	3.30	4.7257	15.60	_____
Harvesters	gal	3.30	1.7419	5.75	_____
Self-Propelled	gal	3.30	0.1586	0.52	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	2.49	1.0000	2.49	_____
Harvesters	acre	3.65	1.0000	3.65	_____
Self-Propelled	acre	0.16	1.0000	0.16	_____
INTEREST ON OP. CAP.	acre	8.59	1.0000	8.59	_____

TOTAL DIRECT EXPENSES				420.97	_____
FIXED EXPENSES					
Implements	acre	11.20	1.0000	11.20	_____
Tractors	acre	15.23	1.0000	15.23	_____
Harvesters	acre	13.95	1.0000	13.95	_____
Self-Propelled	acre	1.04	1.0000	1.04	_____

TOTAL FIXED EXPENSES				41.42	_____

TOTAL SPECIFIED EXPENSES				462.39	_____

Note: Cost of production estimates are based on 2013 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, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	4.53	135.0000	611.55	_____
TOTAL INCOME				611.55	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	11.00	1.0000	11.00	_____
FERTILIZERS	acre	153.48	1.0000	153.48	_____
HERBICIDES	acre	38.11	1.0000	38.11	_____
INSECTICIDES	acre	7.36	1.0000	7.36	_____
SEED/PLANTS	acre	85.40	1.0000	85.40	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	31.05	1.0000	31.05	_____
CUSTOM LIME	acre	24.00	1.0000	24.00	_____
HAND LABOR	hour	9.06	0.1943	1.75	_____
OPERATOR LABOR	hour	12.50	0.6854	8.58	_____
UNALLOCATED LABOR	hour	12.48	0.6168	7.70	_____
DIESEL FUEL	gal	3.30	6.6263	21.87	_____
REPAIR & MAINTENANCE	acre	14.58	1.0000	14.58	_____
INTEREST ON OP. CAP.	acre	8.59	1.0000	8.59	_____
TOTAL DIRECT EXPENSES				420.97	_____
RETURNS ABOVE DIRECT EXPENSES				190.58	_____
TOTAL FIXED EXPENSES				41.42	_____
TOTAL SPECIFIED EXPENSES				462.39	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				149.16	_____

Note: Cost of production estimates are based on 2013 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, 2014

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	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 2013 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, 2014

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	24.00					0.90	24.90		24.90
Spin Spreader	5 ton		1.22	0.46	1.38		0.11	3.17	1.71	4.88
DAP	cwt	27.99					1.05	29.04		29.04
Potash (60% K2O)	cwt	19.71					0.74	20.45		20.45
Disk Heavy	20'		2.81	1.38	2.31		0.24	6.74	4.63	11.37
Bed-Disk w/roller	8R-30		2.71	0.92	2.22		0.22	6.07	3.89	9.96
App by Air (5 gal)	appl	6.00					0.15	6.15		6.15
Glyphosate 3lbs a.e	pt	4.00					0.10	4.10		4.10
Clarity	pt	5.10					0.13	5.23		5.23
Plant - Rigid	8R-30		2.72	1.59	3.09		0.16	7.56	4.78	12.34
Corn Seed RR2	thous	85.40					1.87	87.27		87.27
Custom Apply Fert	acre	7.50					0.14	7.64		7.64
UAN + Sulfur (28%)	cwt	41.79					0.78	42.57		42.57
Sprayer 600-750gal	60' 175hp		0.52	0.16	0.50		0.02	1.20	1.04	2.24
Atrazine 4L	pt	7.88					0.15	8.03		8.03
Halex GT	pt	21.13					0.40	21.53		21.53
Fert Appl (Liquid)	8R-30		2.84	1.44	2.77		0.11	7.16	3.85	11.01
UAN (32% N)	cwt	63.99					1.00	64.99		64.99
App by Air (3 gal)	appl	5.00					0.06	5.06		5.06
Intrepid 2F	oz	7.36					0.09	7.45		7.45
Header - Corn	8R-30		5.75	5.40	3.04		0.04	14.23	16.49	30.72
Grain Cart Corn	500 bu		0.92	0.35	0.76		0.01	2.04	1.24	3.28
Haul Corn	bu	31.05					0.10	31.15		31.15
Stalk Shredder Flex	20'		2.38	2.88	1.96		0.02	7.24	3.79	11.03
TOTALS		357.90	21.87	14.58	18.03	0.00	8.59	420.97	41.42	462.39

Note: Cost of production estimates are based on 2013 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, 2014

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	611.55
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
FERTILIZERS	47.70	0.00	0.00	0.00	0.00	0.00	41.79	63.99	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.10	0.00	29.01	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	7.36	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	85.40	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	7.50	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	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.91	0.00	0.00	0.00	0.00	3.09	0.50	2.77	0.00	0.00	0.00	5.76
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	6.74	0.00	0.00	0.00	0.00	2.72	0.52	2.84	0.00	0.00	0.00	9.05
REPAIR & MAINTENANCE	2.76	0.00	0.00	0.00	0.00	1.59	0.16	1.44	0.00	0.00	0.00	8.63
INTEREST ON OP. CAP.	3.26	0.00	0.00	0.00	0.38	2.03	1.49	1.11	0.15	0.00	0.00	0.17
TOTAL DIRECT EXPENSES	90.37	0.00	0.00	0.00	15.48	94.83	80.97	72.15	12.51	0.00	0.00	54.66
NET INCOME	-90.37	0.00	0.00	0.00	-15.48	-94.83	-80.97	-72.15	-12.51	0.00	0.00	556.89
NET INCOME TO DATE	-90.37	-90.37	-90.37	-90.37	-105.85	-200.68	-281.65	-353.80	-366.31	-366.31	-366.31	190.58

Note: Cost of production estimates are based on 2013 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, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.39	3.62	3.85	4.07	4.30	4.53	4.75	4.98	5.20	5.43	5.66
PERCENT	YIELD	UNIT	dollars										
50	67.50	bu	-176	-160	-145	-130	-114	-99	-84	-69	-53	-38	-23
			-217	-202	-186	-171	-156	-141	-125	-110	-95	-79	-64
60	81.00	bu	-133	-114	-96	-78	-59	-41	-23	-4	13	31	50
			-174	-156	-138	-119	-101	-83	-64	-46	-27	-9	8
70	94.50	bu	-90	-69	-47	-26	-4	16	37	59	80	102	123
			-131	-110	-89	-67	-46	-24	-3	17	39	60	82
80	108.00	bu	-47	-23	1	25	50	74	98	123	147	172	196
			-89	-64	-40	-15	8	33	57	82	106	130	155
90	121.50	bu	-5	22	49	77	105	132	160	187	215	242	270
			-46	-18	8	36	63	91	118	146	173	201	228
100	135.00	bu	37	68	98	129	160	190	221	251	282	312	343
			-3	26	57	88	118	149	179	210	240	271	302
110	148.50	bu	80	114	147	181	214	248	282	315	349	383	416
			39	72	106	139	173	207	240	274	308	341	375
120	162.00	bu	123	159	196	233	269	306	343	380	416	453	490
			81	118	155	191	228	265	301	338	375	412	448
130	175.50	bu	165	205	245	285	324	364	404	444	483	523	563
			124	164	204	243	283	323	363	402	442	482	522
140	189.00	bu	208	251	294	337	379	422	465	508	551	593	636
			167	210	252	295	338	381	424	466	509	552	595
150	202.50	bu	251	297	343	389	434	480	526	572	618	664	710
			210	255	301	347	393	439	485	531	576	622	668

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 2013 input prices.

Table 6.A Estimated costs per acre
Corn, no-tillage, BtRR, 8-row 30", 135 bu yield goal
Non-Delta Areas, Mississippi, 2014

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	5.00	1.0000	5.00	_____
FERTILIZERS					
DAP	cwt	25.75	1.0870	27.99	_____
Potash (60% K2O)	cwt	23.75	0.8300	19.71	_____
Fert 10-34-0	cwt	28.25	0.5000	14.13	_____
UAN (32% N)	cwt	19.50	5.0000	97.50	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	2.0000	4.00	_____
Clarity	pt	10.19	0.5000	5.10	_____
Atrazine 4L	pt	1.97	4.0000	7.88	_____
Halex GT	pt	5.87	3.6000	21.13	_____
INSECTICIDES					
Intrepid 2F	oz	1.84	4.0000	7.36	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.21	28.0000	89.88	_____
HAULING					
Haul Corn	bu	0.23	135.0000	31.05	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.5000	24.00	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.4231	5.29	_____
Harvesters	hour	12.50	0.1277	1.60	_____
HAND LABOR					
Implements	hour	9.06	0.2283	2.06	_____
UNALLOCATED LABOR	hour	12.50	0.4957	6.20	_____
DIESEL FUEL					
Tractors	gal	3.30	3.2673	10.77	_____
Harvesters	gal	3.30	1.7419	5.75	_____
REPAIR & MAINTENANCE					
Implements	acre	7.45	1.0000	7.45	_____
Tractors	acre	1.72	1.0000	1.72	_____
Harvesters	acre	3.65	1.0000	3.65	_____
INTEREST ON OP. CAP.	acre	7.73	1.0000	7.73	_____

TOTAL DIRECT EXPENSES				412.95	_____
FIXED EXPENSES					
Implements	acre	9.04	1.0000	9.04	_____
Tractors	acre	9.99	1.0000	9.99	_____
Harvesters	acre	13.95	1.0000	13.95	_____

TOTAL FIXED EXPENSES				32.98	_____

TOTAL SPECIFIED EXPENSES				445.93	_____

Note: Cost of production estimates are based on 2013 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, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	4.53	135.0000	611.55	_____
TOTAL INCOME				611.55	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	11.00	1.0000	11.00	_____
FERTILIZERS	acre	159.33	1.0000	159.33	_____
HERBICIDES	acre	38.11	1.0000	38.11	_____
INSECTICIDES	acre	7.36	1.0000	7.36	_____
SEED/PLANTS	acre	89.88	1.0000	89.88	_____
HAULING	acre	31.05	1.0000	31.05	_____
CUSTOM LIME	acre	24.00	1.0000	24.00	_____
HAND LABOR	hour	9.06	0.2283	2.06	_____
OPERATOR LABOR	hour	12.50	0.5508	6.89	_____
UNALLOCATED LABOR	hour	12.50	0.4957	6.20	_____
DIESEL FUEL	gal	3.30	5.0092	16.52	_____
REPAIR & MAINTENANCE	acre	12.82	1.0000	12.82	_____
INTEREST ON OP. CAP.	acre	7.73	1.0000	7.73	_____
TOTAL DIRECT EXPENSES				412.95	_____
RETURNS ABOVE DIRECT EXPENSES				198.60	_____
TOTAL FIXED EXPENSES				32.98	_____
TOTAL SPECIFIED EXPENSES				445.93	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				165.62	_____

Note: Cost of production estimates are based on 2013 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, 2014

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 2013 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, 2014

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	24.00					0.90	24.90		24.90
App by Air (5 gal)	appl	6.00					0.15	6.15		6.15
Glyphosate 3lbs a.e	pt	4.00					0.10	4.10		4.10
Clarity	pt	5.10					0.13	5.23		5.23
Spin Spreader	5 ton		1.07	0.44	1.38		0.06	2.95	1.51	4.46
DAP	cwt	27.99					0.61	28.60		28.60
Potash (60% K2O)	cwt	19.71					0.43	20.14		20.14
NT Plant&Pre-Rigid	8R-30		2.69	2.01	3.47		0.18	8.35	5.41	13.76
Corn Seed BtRR	thous	89.88					1.97	91.85		91.85
Fert 10-34-0	cwt	14.13					0.31	14.44		14.44
Spray (Broadcast)	27'		1.60	0.41	1.77		0.07	3.85	1.67	5.52
Atrazine 4L	pt	7.88					0.15	8.03		8.03
Halex GT	pt	21.13					0.40	21.53		21.53
Fert Appl (Liquid)	8R-30		2.50	1.39	2.77		0.12	6.78	3.40	10.18
UAN (32% N)	cwt	97.50					1.83	99.33		99.33
App by Air (3 gal)	appl	5.00					0.06	5.06		5.06
Intrepid 2F	oz	7.36					0.09	7.45		7.45
Header - Corn	8R-30		5.75	5.40	3.04		0.04	14.23	16.49	30.72
Grain Cart Corn	500 bu		0.81	0.33	0.76		0.01	1.91	1.09	3.00
Haul Corn	bu	31.05					0.10	31.15		31.15
Stalk Shredder Flex	20'		2.10	2.84	1.96		0.02	6.92	3.41	10.33
TOTALS		360.73	16.52	12.82	15.15	0.00	7.73	412.95	32.98	445.93

Note: Cost of production estimates are based on 2013 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, 2014

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	611.55
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	61.83	97.50	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.10	0.00	29.01	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	7.36	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	89.88	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	24.00	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	4.85	4.54	0.00	0.00	0.00	0.00	5.76
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	3.76	4.10	0.00	0.00	0.00	0.00	8.66
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	2.45	1.80	0.00	0.00	0.00	0.00	8.57
INTEREST ON OP. CAP.	0.90	0.00	0.00	0.00	0.38	3.56	2.57	0.00	0.15	0.00	0.00	0.17
TOTAL DIRECT EXPENSES	24.90	0.00	0.00	0.00	15.48	166.33	139.52	0.00	12.51	0.00	0.00	54.21
NET INCOME	-24.90	0.00	0.00	0.00	-15.48	-166.33	-139.52	0.00	-12.51	0.00	0.00	557.34
NET INCOME TO DATE	-24.90	-24.90	-24.90	-24.90	-40.38	-206.71	-346.23	-346.23	-358.74	-358.74	-358.74	198.60

Note: Cost of production estimates are based on 2013 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, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.39	3.62	3.85	4.07	4.30	4.53	4.75	4.98	5.20	5.43	5.66
PERCENT	YIELD	UNIT	dollars										
50	67.50	bu	-168	-152	-137	-122	-106	-91	-76	-61	-45	-30	-15
			-201	-185	-170	-155	-139	-124	-109	-94	-78	-63	-48
60	81.00	bu	-125	-106	-88	-70	-51	-33	-15	3	21	39	58
			-158	-139	-121	-103	-84	-66	-48	-29	-11	6	25
70	94.50	bu	-82	-61	-39	-18	3	24	45	67	88	110	131
			-115	-94	-72	-51	-29	-8	12	34	55	77	98
80	108.00	bu	-39	-15	9	33	58	82	106	131	155	180	204
			-72	-48	-23	0	25	49	74	98	122	147	171
90	121.50	bu	2	30	58	85	113	140	168	195	223	250	278
			-30	-2	25	52	80	107	135	162	190	217	245
100	135.00	bu	45	76	106	137	168	198	229	259	290	320	351
			12	43	73	104	135	165	196	226	257	287	318
110	148.50	bu	88	122	155	189	223	256	290	323	357	391	424
			55	89	122	156	190	223	257	290	324	358	391
120	162.00	bu	131	167	204	241	277	314	351	388	424	461	498
			98	134	171	208	245	281	318	355	391	428	465
130	175.50	bu	173	213	253	293	332	372	412	452	491	531	571
			140	180	220	260	299	339	379	419	458	498	538
140	189.00	bu	216	259	302	345	387	430	473	516	559	601	644
			183	226	269	312	354	397	440	483	526	569	611
150	202.50	bu	259	305	351	397	442	488	534	580	626	672	718
			226	272	318	364	409	455	501	547	593	639	685

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 2013 input prices.

Table 7.A Estimated costs per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2014

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	25.75	0.7600	19.57	_____
Potash (60% K2O)	cwt	23.75	0.5800	13.77	_____
UAN + Sulfur (28%)	cwt	19.50	4.2500	82.88	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	2.0000	4.00	_____
2,4-D Amine 4	pt	2.94	2.0000	5.88	_____
Lexar	pt	6.54	6.0000	39.24	_____
SEED/PLANTS					
Sorghum Concept	lb	2.11	6.0000	12.66	_____
ADJUVANTS					
Surfactant	pt	3.68	0.3000	1.10	_____
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.5000	24.00	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.3120	3.90	_____
Harvesters	hour	12.50	0.1021	1.28	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
UNALLOCATED LABOR	hour	12.47	0.3727	4.65	_____
DIESEL FUEL					
Tractors	gal	3.30	2.7303	9.02	_____
Harvesters	gal	3.30	1.3935	4.60	_____
REPAIR & MAINTENANCE					
Implements	acre	4.59	1.0000	4.59	_____
Tractors	acre	1.44	1.0000	1.44	_____
Harvesters	acre	2.92	1.0000	2.92	_____
INTEREST ON OP. CAP.	acre	4.99	1.0000	4.99	_____

TOTAL DIRECT EXPENSES				280.30	_____
FIXED EXPENSES					
Implements	acre	8.68	1.0000	8.68	_____
Tractors	acre	8.81	1.0000	8.81	_____
Harvesters	acre	11.16	1.0000	11.16	_____

TOTAL FIXED EXPENSES				28.65	_____

TOTAL SPECIFIED EXPENSES				308.95	_____

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.

Table 7.B Summary of estimated costs and returns per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Grain Sorghum	bu	4.30	100.0000	430.00	_____
TOTAL INCOME				430.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.50	1.0000	13.50	_____
FERTILIZERS	acre	116.22	1.0000	116.22	_____
HERBICIDES	acre	49.12	1.0000	49.12	_____
SEED/PLANTS	acre	12.66	1.0000	12.66	_____
ADJUVANTS	acre	1.10	1.0000	1.10	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	24.00	1.0000	24.00	_____
HAND LABOR	hour	9.06	0.1442	1.31	_____
OPERATOR LABOR	hour	12.50	0.4142	5.18	_____
UNALLOCATED LABOR	hour	12.47	0.3727	4.65	_____
DIESEL FUEL	gal	3.30	4.1239	13.62	_____
REPAIR & MAINTENANCE	acre	8.95	1.0000	8.95	_____
INTEREST ON OP. CAP.	acre	4.99	1.0000	4.99	_____
TOTAL DIRECT EXPENSES				280.30	_____
RETURNS ABOVE DIRECT EXPENSES				149.70	_____
TOTAL FIXED EXPENSES				28.65	_____
TOTAL SPECIFIED EXPENSES				308.95	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				121.05	_____

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.

Table 7.C Estimated resource use for field operations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2014

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				
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 2013 input prices.
Fertilization decisions should be based on soil tests.

Table 7.D Estimated costs for field operations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2014

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Lime (Spread)	ton	24.00					0.90	24.90		24.90
Disk Harrow	24'		2.36	1.20	1.94		0.19	5.69	3.97	9.66
App by Air (5 gal)	appl	6.00					0.15	6.15		6.15
Glyphosate 3lbs a.e	pt	4.00					0.10	4.10		4.10
2,4-D Amine 4	pt	5.88					0.15	6.03		6.03
Surfactant	pt	1.10					0.03	1.13		1.13
Spin Spreader	5 ton		1.22	0.46	1.38		0.06	3.12	1.71	4.83
DAP	cwt	19.57					0.37	19.94		19.94
Potash (60% K2O)	cwt	13.77					0.26	14.03		14.03
Field Cultivate Fld	32'		1.35	0.68	1.10		0.06	3.19	3.20	6.39
Plant - Folding	12R-30		1.82	1.69	2.07		0.10	5.68	4.35	10.03
Sorghum Concept	lb	12.66					0.24	12.90		12.90
Custom Spray Ground	acre	7.50					0.14	7.64		7.64
Lexar	pt	39.24					0.74	39.98		39.98
Fert Appl (Liquid)	12R-30		2.27	1.31	2.22		0.09	5.89	3.26	9.15
UAN + Sulfur (28%)	cwt	82.88					1.30	84.18		84.18
Header Wheat/Sorghum	25' Rigid		4.60	3.61	2.43		0.03	10.67	12.16	22.83
Haul Sorghum	bu	25.00					0.08	25.08		25.08
TOTALS		241.60	13.62	8.95	11.14	0.00	4.99	280.30	28.65	308.95

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.

Table 7.E Estimated monthly income and expense flows per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2014

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	430.00
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	33.34	82.88	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.88	0.00	39.24	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	12.66	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.10	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	24.00	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	1.94	0.00	0.00	0.00	0.00	4.55	2.22	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	2.36	0.00	0.00	0.00	0.00	4.39	2.27	0.00	0.00	0.00	4.60
REPAIR & MAINTENANCE	0.00	1.20	0.00	0.00	0.00	0.00	2.83	1.31	0.00	0.00	0.00	3.61
INTEREST ON OP. CAP.	0.90	0.19	0.00	0.00	0.43	0.00	1.97	1.39	0.00	0.00	0.00	0.11
TOTAL DIRECT EXPENSES	24.90	5.69	0.00	0.00	17.41	0.00	106.48	90.07	0.00	0.00	0.00	35.75
NET INCOME	-24.90	-5.69	0.00	0.00	-17.41	0.00	-106.48	-90.07	0.00	0.00	0.00	394.25
NET INCOME TO DATE	-24.90	-30.59	-30.59	-30.59	-48.00	-48.00	-154.48	-244.55	-244.55	-244.55	-244.55	149.70

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Grain Sorghum			3.22	3.44	3.65	3.87	4.08	4.30	4.51	4.73	4.94	5.16	5.37
PERCENT	YIELD	UNIT	dollars										
50	50.00	bu	-106	-95	-85	-74	-63	-52	-42	-31	-20	-9	0
			-135	-124	-113	-102	-92	-81	-70	-59	-49	-38	-27
60	60.00	bu	-76	-63	-50	-38	-25	-12	0	13	26	39	52
			-105	-92	-79	-66	-53	-40	-28	-15	-2	10	23
70	70.00	bu	-47	-31	-16	-1	13	28	43	58	73	88	103
			-75	-60	-45	-30	-15	-0	14	29	44	59	74
80	80.00	bu	-17	-0	17	34	51	68	85	103	120	137	154
			-45	-28	-11	5	22	40	57	74	91	108	126
90	90.00	bu	12	31	51	70	89	109	128	147	167	186	205
			-16	3	22	41	61	80	99	119	138	157	177
100	100.00	bu	42	63	85	106	128	149	171	192	214	235	257
			13	35	56	78	99	121	142	164	185	207	228
110	110.00	bu	71	95	119	142	166	190	213	237	261	284	308
			43	66	90	114	137	161	185	208	232	256	279
120	120.00	bu	101	127	153	179	204	230	256	282	308	333	359
			73	98	124	150	176	202	227	253	279	305	331
130	130.00	bu	131	159	187	215	243	271	299	327	355	382	410
			102	130	158	186	214	242	270	298	326	354	382
140	140.00	bu	161	191	221	251	281	311	341	371	401	432	462
			132	162	192	222	252	283	313	343	373	403	433
150	150.00	bu	190	223	255	287	319	352	384	416	448	481	513
			162	194	226	259	291	323	355	388	420	452	484

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 2013 input prices.

Table 8.A Estimated costs per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2014

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	25.75	1.0000	25.75	_____
Potash (60% K2O)	cwt	23.75	0.7500	17.81	_____
Fert 41-0-0-4	cwt	20.50	2.8000	57.40	_____
FUNGICIDES					
Quilt	pt	19.55	0.8750	17.11	_____
HERBICIDES					
Axiom 68DF	oz	1.65	10.0000	16.50	_____
Axial XL	oz	0.98	16.4000	16.07	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.37	90.0000	33.30	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	2.8000	19.60	_____
HAULING					
Haul Wheat	bu	0.26	70.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.5000	24.00	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.2648	3.31	_____
Harvesters	hour	12.50	0.1021	1.28	_____
HAND LABOR					
Implements	hour	9.06	0.1363	1.23	_____
UNALLOCATED LABOR	hour	12.49	0.2936	3.67	_____
DIESEL FUEL					
Tractors	gal	3.30	2.3178	7.65	_____
Harvesters	gal	3.30	1.3935	4.60	_____
REPAIR & MAINTENANCE					
Implements	acre	3.50	1.0000	3.50	_____
Tractors	acre	1.23	1.0000	1.23	_____
Harvesters	acre	2.92	1.0000	2.92	_____
INTEREST ON OP. CAP.	acre	5.98	1.0000	5.98	_____

TOTAL DIRECT EXPENSES				299.11	_____
FIXED EXPENSES					
Implements	acre	7.37	1.0000	7.37	_____
Tractors	acre	7.48	1.0000	7.48	_____
Harvesters	acre	11.16	1.0000	11.16	_____

TOTAL FIXED EXPENSES				26.01	_____

TOTAL SPECIFIED EXPENSES				325.12	_____

Note: Cost of production estimates are based on 2013 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, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	6.29	70.0000	440.30	_____
TOTAL INCOME				440.30	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	18.00	1.0000	18.00	_____
FERTILIZERS	acre	100.96	1.0000	100.96	_____
FUNGICIDES	acre	17.11	1.0000	17.11	_____
HERBICIDES	acre	32.57	1.0000	32.57	_____
SEED/PLANTS	acre	33.30	1.0000	33.30	_____
CUSTOM FERTILIZE	acre	19.60	1.0000	19.60	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	24.00	1.0000	24.00	_____
HAND LABOR	hour	9.06	0.1363	1.23	_____
OPERATOR LABOR	hour	12.50	0.3670	4.59	_____
UNALLOCATED LABOR	hour	12.49	0.2936	3.67	_____
DIESEL FUEL	gal	3.30	3.7114	12.25	_____
REPAIR & MAINTENANCE	acre	7.65	1.0000	7.65	_____
INTEREST ON OP. CAP.	acre	5.98	1.0000	5.98	_____
TOTAL DIRECT EXPENSES				299.11	_____
RETURNS ABOVE DIRECT EXPENSES				141.19	_____
TOTAL FIXED EXPENSES				26.01	_____
TOTAL SPECIFIED EXPENSES				325.12	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				115.18	_____

Note: Cost of production estimates are based on 2013 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, 2014

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 2013 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, 2014

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	DIRECT COST FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	24.00					0.75	24.75		24.75
Disk Harrow	24'		2.36	1.20	1.84		0.17	5.57	3.97	9.54
Spin Spreader	5 ton		1.22	0.46	1.33		0.09	3.10	1.71	4.81
DAP	cwt	25.75					0.80	26.55		26.55
Potash (60% K2O)	cwt	17.81					0.56	18.37		18.37
Field Cultivate Fld	32'		1.35	0.68	1.05		0.10	3.18	3.20	6.38
Grain Drill	20'		2.72	1.70	2.97		0.21	7.60	4.97	12.57
Wheat Seed Private	lb	33.30					0.94	34.24		34.24
App by Air (5 gal)	appl	6.00					0.15	6.15		6.15
Axiom 68DF	oz	16.50					0.41	16.91		16.91
App by Air (5 gal)	appl	6.00					0.11	6.11		6.11
Axial XL	oz	16.07					0.30	16.37		16.37
App Fert by Air	cwt	9.80					0.15	9.95		9.95
Fert 41-0-0-4	cwt	28.70					0.45	29.15		29.15
App Fert by Air	cwt	9.80					0.12	9.92		9.92
Fert 41-0-0-4	cwt	28.70					0.36	29.06		29.06
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Quilt	pt	17.11					0.16	17.27		17.27
Header Wheat/Sorghum	25' Rigid		4.60	3.61	2.30		0.03	10.54	12.16	22.70
Haul Wheat	bu	18.20					0.06	18.26		18.26
TOTALS		263.74	12.25	7.65	9.49	0.00	5.98	299.11	26.01	325.12

Note: Cost of production estimates are based on 2013 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, 2014

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	440.30
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	43.56	0.00	0.00	0.00	0.00	28.70	28.70	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	17.11	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	16.50	0.00	16.07	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	33.30	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	9.80	9.80	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	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	4.22	2.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.30
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	4.93	2.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.60
REPAIR & MAINTENANCE	0.00	0.00	2.34	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.61
INTEREST ON OP. CAP.	0.00	0.00	2.47	1.15	0.56	0.00	0.41	0.60	0.48	0.22	0.00	0.09
TOTAL DIRECT EXPENSES	0.00	0.00	81.52	41.84	23.06	0.00	22.48	39.10	38.98	23.33	0.00	28.80
NET INCOME	0.00	0.00	-81.52	-41.84	-23.06	0.00	-22.48	-39.10	-38.98	-23.33	0.00	411.50
NET INCOME TO DATE	0.00	0.00	-81.52	-123.36	-146.42	-146.42	-168.90	-208.00	-246.98	-270.31	-270.31	141.19

Note: Cost of production estimates are based on 2013 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, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Wheat			4.71	5.03	5.34	5.66	5.97	6.29	6.60	6.91	7.23	7.54	7.86
PERCENT	YIELD	UNIT	dollars										
50	35.00	bu	-124	-113	-102	-91	-80	-69	-58	-47	-36	-25	-14
			-150	-139	-128	-117	-106	-95	-84	-73	-62	-51	-40
60	42.00	bu	-93	-80	-67	-54	-40	-27	-14	-1	12	25	38
			-119	-106	-93	-80	-66	-53	-40	-27	-14	-0	12
70	49.00	bu	-62	-47	-31	-16	-0	14	29	45	60	76	91
			-88	-73	-57	-42	-26	-11	3	19	34	50	65
80	56.00	bu	-31	-13	3	21	39	56	74	92	109	127	144
			-57	-39	-22	-4	13	30	48	65	83	101	118
90	63.00	bu	-0	19	39	59	79	98	118	138	158	178	198
			-26	-6	13	33	53	72	92	112	132	152	172
100	70.00	bu	31	53	75	97	119	141	163	185	207	229	251
			5	27	49	71	93	115	137	159	181	203	225
110	77.00	bu	62	86	110	134	159	183	207	231	256	280	304
			36	60	84	108	133	157	181	205	230	254	278
120	84.00	bu	93	119	146	172	199	225	252	278	304	331	357
			67	93	120	146	173	199	226	252	278	305	331
130	91.00	bu	124	153	181	210	239	267	296	325	353	382	410
			98	127	155	184	213	241	270	299	327	356	384
140	98.00	bu	155	186	217	248	279	310	340	371	402	433	464
			129	160	191	222	253	283	314	345	376	407	438
150	105.00	bu	187	220	253	286	319	352	385	418	451	484	517
			161	194	227	260	293	326	359	392	425	458	491

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 2013 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, 2014

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	274,000	300	8	13.64	12.50	45.01	28.54	86.05	109.25	195.31
Combine (300-349 hp)	325 hp	313,000	300	8	16.73	12.50	55.20	32.60	100.31	124.81	225.12
Combine (350-399 hp)	355 hp	344,000	300	8	18.27	12.50	60.29	35.83	108.62	137.17	245.79
Combine (400-449 hp)	425 hp	356,000	300	8	21.87	12.50	72.19	37.08	121.77	141.95	263.73
Combine (450-499hp)	475 hp	378,000	300	8	24.44	12.50	80.68	39.37	132.55	150.72	283.28
Cotton Stripper	173 hp	166,000	200	8	8.08	12.50	26.66	25.93	65.10	99.29	164.39
Tractor(20-39hp)CB	MFWD 30	29,900	600	8	1.54	12.50	5.09	0.93	18.52	5.43	23.95
Tractor(20-39hp)RB	MFWD 30	17,700	600	8	1.54	12.50	5.09	0.55	18.14	3.21	21.36
Tractor(40-59hp)CB	2WD 50	35,100	600	8	2.57	12.50	8.49	1.09	22.08	6.37	28.46
Tractor(40-59hp)CB	MFWD 50	37,500	600	8	2.57	12.50	8.49	1.17	22.16	6.81	28.97
Tractor(40-59hp)RB	2WD 50	19,300	600	8	2.57	12.50	8.49	0.60	21.59	3.50	25.10
Tractor(40-59hp)RB	MFWD 50	27,700	600	8	2.57	12.50	8.49	0.86	21.85	5.03	26.88
Tractor(60-89hp)CB	2WD 75	43,400	600	8	3.86	12.50	12.73	1.35	26.59	7.88	34.47
Tractor(60-89hp)CB	MFWD 75	49,200	600	8	3.86	12.50	12.73	1.53	26.77	8.93	35.71
Tractor(60-89hp)RB	2WD 75	32,200	600	8	3.86	12.50	12.73	1.00	26.24	5.84	32.09
Tractor(60-89hp)RB	MFWD 75	40,600	600	8	3.86	12.50	12.73	1.26	26.50	7.37	33.88
Tractor(90-119hp)CB	2WD 105	62,100	600	8	5.40	12.50	17.83	1.94	32.27	11.27	43.55
Tractor(90-119hp)CB	MFWD 105	73,400	600	8	5.40	12.50	17.83	2.29	32.62	13.33	45.95
Tractor(90-119hp)RB	2WD 105	50,200	600	8	5.40	12.50	17.83	1.56	31.90	9.11	41.02
Tractor(90-119hp)RB	MFWD 105	55,700	600	8	5.40	12.50	17.83	1.74	32.07	10.11	42.19
Tractor(120-139hp)CB	2WD 130	95,400	600	8	6.69	12.50	22.08	2.98	37.56	17.32	54.88
Tractor(120-139hp)CB	MFWD 130	106,000	600	8	6.69	12.50	22.08	3.31	37.89	19.25	57.14
Tractor(140-159hp)CB	2WD 150	130,000	600	8	7.72	12.50	25.47	4.06	42.04	23.60	65.65
Tractor(140-159hp)CB	MFWD 150	137,000	600	8	7.72	12.50	25.47	4.28	42.26	24.88	67.14
Tractor(160-179hp)CB	MFWD 170	148,000	600	8	8.75	12.50	28.87	4.62	46.00	28.19	74.19
Tractor(180-199hp)CB	MFWD 190	160,000	600	8	9.77	12.50	32.27	5.00	49.77	30.47	80.25
Tractor(200-249hp)CB	MFWD 225	218,000	600	8	11.58	12.50	38.21	6.81	57.53	41.52	99.05
Tractor(200-249hp)CB	Track 225	268,000	600	8	11.58	12.50	38.21	8.37	59.09	51.05	110.14
Tractor(250-349hp)CB	4WD 300	269,000	600	8	15.44	12.50	50.95	8.40	71.86	51.24	123.10
Tractor(250-349hp)CB	MFWD 300	242,000	600	8	15.44	12.50	50.95	7.56	71.02	46.09	117.11
Tractor(250-349hp)CB	Track 300	273,000	600	8	15.44	12.50	50.95	8.53	71.98	52.00	123.99
Tractor(350-449hp)CB	4WD 400	290,000	600	8	20.58	12.50	67.94	9.06	89.50	55.24	144.74
Tractor(350-449hp)CB	Track 400	340,000	600	8	20.58	12.50	67.94	10.62	91.06	64.76	155.83
Tractor(450-550hp)CB	4WD 500	346,000	600	8	25.73	12.50	84.92	10.81	108.24	65.91	174.15
Tractor(450-550hp)CB	Track 500	391,000	600	8	25.73	12.50	84.92	12.21	109.64	74.48	184.13
Utility Vehicle	800 CC	7,500	200	8	0.70	12.50	2.31	1.17	15.98	4.48	20.46
Utility Vehicle-mule	600 CC	6,200	200	8	0.50	12.50	1.65	0.96	15.11	3.70	18.82

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, 2014

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					
Backhoe	2WD Cab	73,000	0	0	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Cotton Picker	4R-30(350)	350,000	200	8	18.01	0.327	7.05	19.46	17.90	44.42	68.53	112.96
Cotton Picker	4R-38(255)	267,000	200	8	13.12	0.257	5.55	11.16	10.75	27.47	41.16	68.64
Cotton Picker	4R-38(350)	406,000	200	8	18.01	0.257	5.55	15.32	16.35	37.23	62.59	99.83
Cotton Picker	4R2x1(350)	413,000	200	8	18.01	0.172	3.71	10.24	11.11	25.07	42.56	67.64
Cotton Picker	6R-30(355)	465,000	200	8	18.27	0.218	4.70	13.16	15.85	33.72	60.70	94.42
Cotton Picker	6R-38(355)	478,000	200	8	18.27	0.172	3.71	10.39	12.86	26.97	49.26	76.23
Cotton Picker/Module	4R-38(365)	515,000	200	8	18.78	0.257	5.55	15.98	20.74	42.28	79.40	121.68
Cotton Picker/Module	6R-30(365)	608,000	200	8	18.78	0.218	4.70	13.53	20.73	38.97	79.36	118.34
Cotton Picker/Module	6R-30(500)	672,000	200	8	25.73	0.218	4.70	18.53	22.91	46.15	87.72	133.88
Cotton Picker/Module	6R-38(365)	571,000	200	8	18.78	0.172	3.71	10.68	15.37	29.77	58.84	88.62
Cotton Picker/Module	6R-38(500)	672,000	200	8	25.73	0.172	3.71	14.63	18.09	36.44	69.25	105.70
Dry Applicator SP	70'300cuft	270,000	350	8	16.98	0.015	0.25	0.84	0.21	1.32	1.39	2.71
Sprayer 110Gal	30' 50hp	43,300	350	8	2.41	0.035	0.60	0.28	0.08	0.96	0.52	1.48
Sprayer 300-450gal	60' 125hp	103,000	350	8	5.66	0.017	0.30	0.32	0.09	0.72	0.62	1.34
Sprayer 300-450gal	80' 125hp	103,000	350	8	6.43	0.013	0.22	0.28	0.07	0.57	0.46	1.04
Sprayer 600-750gal	60' 175hp	172,000	350	8	9.00	0.017	0.30	0.52	0.16	0.98	1.03	2.02
Sprayer 600-825gal	80' 175hp	174,000	350	8	11.81	0.013	0.22	0.51	0.12	0.86	0.78	1.64
Sprayer 600-825gal	90' 250hp	240,000	350	8	12.73	0.011	0.20	0.49	0.15	0.84	0.96	1.80
Sprayer 800gal	100' 250hp	242,000	350	8	14.15	0.010	0.18	0.49	0.13	0.81	0.87	1.68
Sprayer 800gal	80' 250hp	237,000	350	8	12.86	0.013	0.22	0.56	0.16	0.95	1.07	2.02
Sprayer 1000-1400gal	90' 275hp	286,000	350	8	14.15	0.010	0.18	0.49	0.16	0.83	1.03	1.87
Sprayer 1000gal	100' 300hp	288,000	350	8	15.44	0.010	0.18	0.53	0.16	0.88	1.04	1.92
Sprayer 1200+gal	120' 300hp	289,000	350	8	15.44	0.008	0.15	0.44	0.13	0.73	0.87	1.60
Utility Vehicle	20'	8,830	200	8	0.70	0.052	0.90	0.12	0.07	1.09	0.27	1.37
Utility Vehicle	75"ropewic	8,750	200	8	0.50	0.170	2.90	0.28	0.23	3.42	0.89	4.31

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, 2014

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-Disk (Hipper)	4R-38	MFWD 150	7,780	160	10	0.147	1.84	3.76	0.28	0.63	6.52	0.73	3.67	10.93
Bed-Disk (Hipper)	6R-30	MFWD 170	10,800	160	10	0.125	1.56	3.60	0.33	0.57	6.08	0.86	3.52	10.47
Bed-Disk (Hipper)	6R-38	MFWD 170	13,500	160	10	0.098	1.23	2.84	0.33	0.45	4.87	0.84	2.78	8.50
Bed-Disk (Hipper)	8R-30	MFWD 190	15,100	160	10	0.093	1.17	3.02	0.35	0.46	5.02	0.90	2.85	8.77
Bed-Disk (Hipper)	8R-38 2x1	MFWD 190	28,200	160	10	0.049	0.61	1.59	0.34	0.24	2.80	0.88	1.50	5.19
Bed-Disk (Hipper)	10R-30	MFWD 225	22,000	160	10	0.075	0.93	2.86	0.41	0.51	4.72	1.05	3.11	8.89
Bed-Disk (Hipper)	10R-38	MFWD 225	22,000	160	10	0.059	0.73	2.26	0.32	0.40	3.72	0.82	2.45	7.01
Bed-Disk (Hipper)	12R-30	MFWD 225	28,100	160	10	0.062	0.78	2.38	0.43	0.42	4.03	1.11	2.59	7.74
Bed-Disk (Hipper)	12R-38	MFWD 225	28,200	160	10	0.049	0.61	1.88	0.34	0.33	3.18	0.88	2.04	6.12
Bed-Disk (Hipper)Fl	8R-38	MFWD 190	20,600	160	10	0.074	0.92	2.39	0.38	0.37	4.07	0.97	2.25	7.30
Bed-Disk (Hipper)Rd	8R-38	MFWD 190	16,100	160	10	0.074	0.92	2.39	0.29	0.37	3.98	0.76	2.25	7.00
Bed-Disk w/roller	8R-30	MFWD 190	21,000	160	10	0.093	1.17	3.02	0.49	0.46	5.15	1.25	2.85	9.27
Bed-Disk w/roller	12R-30	MFWD 225	35,800	160	10	0.062	0.78	2.38	0.55	0.42	4.15	1.42	2.59	8.17
Bed-Disk w/roller	8R-38	MFWD 190	29,100	160	10	0.074	0.92	2.39	0.53	0.37	4.22	1.37	2.25	7.86
Bed-Middle Buster	4R-38	MFWD 150	10,800	160	8	0.228	2.85	5.81	0.57	0.97	10.22	1.76	5.68	17.67
Bed-Middle Buster	6R-38	MFWD 150	12,800	160	8	0.120	1.50	3.06	0.36	0.51	5.44	1.09	2.99	9.52
Bed-Middle Buster	8R-30	MFWD 190	20,800	160	8	0.114	1.42	3.68	0.55	0.57	6.24	1.69	3.48	11.41
Bed-Middle Buster	8R-38	MFWD 190	18,100	160	8	0.090	1.12	2.91	0.38	0.45	4.87	1.16	2.75	8.79
Bed-Middle Buster	8R-38 2x1	MFWD 190	29,200	160	8	0.060	0.75	1.93	0.41	0.30	3.40	1.25	1.83	6.48
Bed-Middle Buster	10R-30	MFWD 225	29,300	160	8	0.091	1.14	3.49	0.62	0.62	5.88	1.91	3.79	11.58
Bed-Middle Buster	10R-38	MFWD 225	32,100	160	8	0.072	0.90	2.75	0.54	0.49	4.68	1.65	2.99	9.33
Bed-Middle Buster	12R-38	MFWD 225	29,200	160	8	0.060	0.75	2.29	0.41	0.40	3.86	1.25	2.49	7.61
Bed-Paratill Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.00	3.08	1.58	0.55	6.23	2.64	3.35	12.23
Bed-Paratill Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.67	2.05	1.34	0.36	4.43	2.23	2.23	8.90
Bed-Paratill Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.67	2.05	1.34	0.36	4.43	2.23	2.23	8.90
Bed-Paratill Rigid	4R-30	MFWD 225	14,800	150	12	0.204	2.55	7.80	1.09	1.39	12.84	1.81	8.48	23.15
Bed-Paratill Rigid	4R-38	MFWD 225	14,100	150	12	0.160	2.01	6.14	0.81	1.09	10.07	1.36	6.68	18.12
Bed-Paratill Rigid	6R-30	MFWD 225	20,100	150	12	0.136	1.70	5.20	0.98	0.92	8.82	1.64	5.65	16.13
Bed-Paratill Rigid	6R-38	MFWD 225	19,000	150	12	0.107	1.34	4.10	0.73	0.73	6.92	1.22	4.46	12.62
Bed-Paratill Rigid	8R-30	MFWD 225	28,100	150	12	0.102	1.27	3.90	1.03	0.69	6.91	1.72	4.24	12.88
Bed-Paratill Rigid	8R-38	MFWD 225	27,200	150	12	0.080	1.00	3.08	0.79	0.55	5.43	1.32	3.35	10.11
Bed-Paratill w/rol	4R-30	MFWD 225	14,100	150	12	0.204	2.55	7.80	1.04	1.39	12.79	1.73	8.48	23.01
Bed-Paratill w/rol	4R-38	MFWD 225	14,100	150	12	0.160	2.01	6.14	0.81	1.09	10.07	1.36	6.68	18.12
Bed-Paratill w/rol	6R-38	MFWD 225	18,600	150	12	0.107	1.34	4.10	0.72	0.73	6.90	1.20	4.46	12.57
Bed-Rip/Disk Fold.	8R-38	MFWD 190	35,200	300	20	0.073	0.91	2.35	0.12	0.36	3.76	0.57	2.22	6.56
Bed-Rip/Disk Fold.	12R-30	MFWD 225	52,600	300	20	0.061	0.77	2.35	0.16	0.41	3.70	0.72	2.55	6.99
Bed-Rip/Disk Fold.	12R-38	MFWD 225	52,600	300	20	0.046	0.57	1.76	0.12	0.31	2.78	0.54	1.91	5.24
Bed-Rip/Disk Rigid	4R-30	MFWD 190	15,000	300	20	0.184	2.31	5.96	0.13	0.92	9.34	0.62	5.63	15.59
Bed-Rip/Disk Rigid	4R-38	MFWD 190	15,000	300	20	0.146	1.83	4.73	0.11	0.73	7.41	0.49	4.47	12.37
Bed-Rip/Disk Rigid	6R-38	MFWD 190	23,500	300	20	0.097	1.21	3.14	0.11	0.48	4.95	0.51	2.96	8.43
Bed-Rip/Disk Rigid	8R-30	MFWD 190	29,600	300	20	0.139	1.73	4.48	0.20	0.69	7.12	0.92	4.23	12.28
Bed-Rip/Disk Rigid	8R-38	MFWD 190	29,600	300	20	0.073	0.91	2.35	0.10	0.36	3.74	0.48	2.22	6.45
Bed-Rip/Disk Rigid	6R-30	MFWD 190	23,500	300	20	0.123	1.54	3.97	0.14	0.61	6.27	0.64	3.75	10.68
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	19,300	150	12	0.107	1.34	4.10	0.74	0.73	6.93	1.24	4.46	12.65
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	23,000	150	12	0.080	1.00	3.08	0.67	0.55	5.31	1.11	3.35	9.78
Bed-Roll-Fold.	8R-38	MFWD 190	26,100	160	10	0.074	0.92	2.39	0.48	0.37	4.17	1.23	2.25	7.66
Bed-Roll-Fold.	12R-30	MFWD 225	27,900	160	10	0.062	0.78	2.38	0.43	0.42	4.03	1.11	2.59	7.73
Bed-Roll-Fold.	12R-38	MFWD 225	31,000	160	10	0.049	0.61	1.88	0.38	0.33	3.22	0.97	2.04	6.24
Bed-Roll-Fold.	16R-30	MFWD 225	32,300	160	10	0.046	0.58	1.79	0.37	0.31	3.07	0.96	1.94	5.98
Bed-Roll-Rigid	8R-38	MFWD 190	19,400	160	10	0.074	0.92	2.39	0.35	0.37	4.04	0.91	2.25	7.22
Blade-Box	6'-7'	2WD 130	1,070	200	20	0.020	0.25	0.44	0.01	0.05	0.76	0.00	0.34	1.11
Blade-Box	8'-10'	2WD 50	4,970	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	7,170	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	1,030	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	3,300	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	6,590	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	30,500	200	10	0.327	4.09	10.56	2.49	1.63	18.79	4.88	9.97	33.65
Boll Buggy	4R-38(255)	MFWD 190	30,500	200	10	0.257	3.22	8.31	1.96	1.28	14.79	3.84	7.85	26.50
Boll Buggy	4R-38(350)	MFWD 190	30,500	200	10	0.257	3.22	8.31	1.96	1.28	14.79	3.84	7.85	26.50
Boll Buggy	4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.15	5.56	1.31	0.86	9.89	2.57	5.25	17.71
Boll Buggy	6R-30(355)	MFWD 190	30,500	200	10	0.218	2.72	7.04	1.66	1.09	12.52	3.25	6.65	22.43
Boll Buggy	6R-38(355)	MFWD 190	30,500	200	10	0.172	2.15	5.56	1.31	0.86	9.89	2.57	5.25	17.71
Boll Buggy-Stripper	13' Bcast	MFWD 150	30,500	200	10	0.251	3.14	6.41	1.92	1.07	12.56	3.75	6.26	22.58
Boll Buggy-Stripper	16' Bcast	MFWD 150	30,500	200	10	0.204	2.55	5.21	1.56	0.87	10.20	3.05	5.09	18.35
Boll Buggy-Stripper	19' Bcast	MFWD 150	30,500	200	10	0.172	2.15	4.39	1.31	0.73	8.59	2.57	4.28	15.45
Boll Buggy-Stripper	4R-30 2x1	MFWD 150	30,500	200	10	0.218	2.72	5.56	1.66	0.93	10.88	3.25	5.43	19.57
Boll Buggy-Stripper	4R-36	MFWD 150	30,500	200	10	0.272	3.41	6.95	2.08	1.16	13.60	4.07	6.78	24.47
Boll Buggy-Stripper	4R-38	MFWD 150	30,500	200	10	0.257	3.22	6.56	1.96	1.10	12.85	3.84	6.41	23.12
Boll Buggy-Stripper	4R-38 2x1	MFWD 150	30,500	200	10	0.172	2.15	4.39	1.31	0.73	8.59	2.57	4.28	15.45
Boll Buggy-Stripper	5R-30	MFWD 150	30,500	200	10	0.261	3.27	6.67	1.99	1.12	13.06	3.90	6.51	23.49
Boll Buggy-Stripper	5R-38	MFWD 150	30,500	200	10	0.207	2.59	5.27	1.57	0.88	10.33	3.09	5.15	18.58
Boll Buggy-Stripper	6R-30	MFWD 150	30,500	200	10	0.218	2.72	5.56	1.66	0.93	10.88	3.25	5.43	19.57
Boll Buggy-Stripper	6R-38	MFWD 150	30,500	200	10	0.172	2.15	4.39	1.31	0.73	8.59	2.57	4.28	15.45
Boll Buggy-Stripper	8R-30	MFWD 150	30,500	200	10	0.163	2.04	4.17	1.24	0.70	8.16	2.44	4.07	14.68
Boll Buggy-Stripper	8R-36/38	MFWD 150	30,500	200	10	0.129	1.61	3.29	0.98	0.55	6.45	1.93	3.21	11.60
Chisel Plow-Folding	16'	2WD 130	22,500	150	12	0.115	1.44	2.55	0.93	0.34	5.27	1.56	2.00	8.84
Chisel Plow-Folding	24'	MFWD 190	34,800	150	12	0.076	0.95	2.46	0.96	0.38	4.76	1.60	2.33	8.69
Chisel Plow-Folding	32'	MFWD 225	38,400	150	12	0.057	0.72	2.20	0.80	0.39	4.12	1.33	2.39	7.85
Chisel Plow-Folding	42'	MFWD 225	47,000	150	12	0.044	0.55	1.68	0.74	0.29	3.27	1.24	1.82	6.35

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2014 (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	50'	MFWD 225	69,700	150	10	0.036	0.46	1.41	1.11	0.25	3.24	1.75	1.53	6.53
Chisel Plow-Folding	61'	MFWD 225	77,200	150	12	0.030	0.37	1.15	0.84	0.20	2.58	1.40	1.25	5.25
Chisel Plow-Rigid	10'	MFWD 170	7,790	150	12	0.184	2.31	5.33	0.52	0.85	9.02	0.86	5.21	15.10
Chisel Plow-Rigid	15'	2WD 130	11,200	150	12	0.123	1.54	2.72	0.49	0.36	5.12	0.83	2.13	8.09
Chisel Plow-Rigid	20'	MFWD 225	9,900	150	12	0.102	1.28	3.92	0.36	0.69	6.27	0.61	4.26	11.15
Chisel Plow-Rigid	24'	MFWD 190	10,000	150	12	0.077	0.96	2.48	0.27	0.38	4.11	0.46	2.34	6.92
Chisel-Harrow	21 shank	2WD 190	12,100	150	12	0.088	1.10	2.84	0.38	0.30	4.62	0.64	1.84	7.11
Chisel-Harrow	27 shank	MFWD 225	13,600	150	12	0.068	0.85	2.61	0.33	0.46	4.27	0.56	2.84	7.67
Coulter-Chisel-Harro	21 shank	2WD 190	18,800	150	12	0.088	1.10	2.84	0.59	0.30	4.84	0.99	1.84	7.68
Coulter-Chisel-Harro	27 shank	MFWD 225	23,500	150	12	0.068	0.85	2.61	0.58	0.46	4.52	0.96	2.84	8.33
Cult & PD Ridge Till	8R-30	2WD 150	30,500	200	12	0.110	1.87	2.80	1.60	0.44	6.73	1.56	2.59	10.89
Cult & PD Ridge Till	12R-30	2WD 190	43,200	200	12	0.073	1.24	2.36	1.51	0.25	5.38	1.48	1.53	8.40
Cultivate	4R-30	2WD 105	11,200	150	10	0.206	2.57	3.67	0.61	0.40	7.27	1.57	2.32	11.16
Cultivate	4R-38	2WD 105	10,900	150	10	0.162	2.03	2.89	0.47	0.25	5.65	1.20	1.48	8.33
Cultivate	6R-30	MFWD 150	16,300	150	10	0.137	1.71	3.50	0.59	0.58	6.40	1.52	3.42	11.35
Cultivate	6R-38	MFWD 150	16,600	150	10	0.108	1.35	2.76	0.48	0.46	5.06	1.22	2.70	8.99
Cultivate	8R-30	MFWD 190	20,100	150	10	0.103	1.28	3.32	0.55	0.51	5.68	1.40	3.14	10.23
Cultivate	8R-38	MFWD 190	20,500	150	10	0.073	0.92	2.37	0.40	0.36	4.06	1.02	2.24	7.34
Cultivate	8R-38 2x1	MFWD 190	31,100	150	10	0.054	0.67	1.75	0.45	0.27	3.15	1.14	1.65	5.95
Cultivate	10R-30	MFWD 225	27,400	150	10	0.082	1.03	3.15	0.60	0.56	5.34	1.53	3.42	10.31
Cultivate	12R-30	MFWD 225	36,200	150	10	0.068	0.85	2.62	0.66	0.46	4.61	1.69	2.85	9.16
Cultivate	12R-38	MFWD 225	38,200	150	10	0.054	0.67	2.07	0.55	0.36	3.67	1.40	2.25	7.33
Cultivate	16R-30	MFWD 225	43,500	150	10	0.051	0.64	1.97	0.59	0.35	3.56	1.52	2.14	7.23
Cultivate & Post	4R-30	2WD 105	16,600	150	10	0.220	3.74	3.92	0.97	0.34	8.98	2.48	2.00	13.47
Cultivate & Post	4R-38	2WD 105	16,400	150	10	0.173	2.95	3.08	0.75	0.27	7.06	1.93	1.57	10.57
Cultivate & Post	6R-30	MFWD 150	21,800	150	10	0.146	2.49	3.73	0.85	0.62	7.71	2.17	3.64	13.53
Cultivate & Post	6R-38	MFWD 150	22,100	150	10	0.115	1.97	2.95	0.68	0.49	6.10	1.73	2.88	10.72
Cultivate & Post	8R-30	MFWD 190	25,600	150	10	0.110	1.87	3.55	0.75	0.55	6.72	1.91	3.35	11.99
Cultivate & Post	8R-38	MFWD 190	26,000	150	10	0.086	1.48	2.80	0.60	0.43	5.32	1.53	2.65	9.51
Cultivate & Post	8R-38 2x1	MFWD 190	38,400	150	10	0.057	0.98	1.86	0.59	0.28	3.73	1.51	1.76	7.01
Cultivate & Post	10R-30	MFWD 225	32,800	150	10	0.088	1.49	3.36	0.76	0.59	6.23	1.96	3.65	11.84
Cultivate & Post	12R-30	MFWD 225	41,700	150	10	0.073	1.24	2.80	0.81	0.49	5.36	2.07	3.04	10.49
Cultivate & Post	12R-38	MFWD 225	45,400	150	10	0.057	0.98	2.21	0.70	0.39	4.29	1.78	2.40	8.48
Cultivate & Post	16R-30	MFWD 225	50,700	150	10	0.055	0.93	2.10	0.74	0.37	4.15	1.89	2.28	8.33
Cultivate Ridge Till	8R-30	2WD 170	25,000	200	12	0.103	1.28	2.97	1.23	0.38	5.88	1.20	2.33	9.42
Cultivate Ridge Till	12R-30	2WD 190	37,700	200	12	0.068	0.85	2.21	1.24	0.23	4.55	1.21	1.44	7.20
Disk & Incorporate	14'	2WD 130	27,600	200	10	0.149	2.54	3.30	1.23	0.44	7.53	2.10	2.59	12.23
Disk & Incorporate	20'	MFWD 190	39,800	180	10	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Disk & Incorporate	24'	MFWD 190	41,400	200	10	0.087	1.48	2.81	1.08	0.43	5.82	1.84	2.66	10.32
Disk & Incorporate	28'	MFWD 225	47,600	200	10	0.074	1.27	2.85	1.06	0.50	5.71	1.81	3.10	10.63
Disk & Incorporate	32'	MFWD 225	54,100	200	10	0.065	1.11	2.50	1.06	0.44	5.12	1.80	2.71	9.65
Disk Harrow	14'	2WD 130	22,100	180	10	0.140	1.75	3.09	0.86	0.41	6.13	1.75	2.43	10.31
Disk Harrow	20'	MFWD 190	34,300	180	10	0.098	1.22	3.16	0.93	0.49	5.82	1.90	2.99	10.72
Disk Harrow	24'	MFWD 190	35,900	180	10	0.081	1.02	2.64	0.81	0.40	4.89	1.66	2.49	9.04
Disk Harrow	28'	MFWD 225	42,200	180	10	0.070	0.87	2.68	0.82	0.47	4.85	1.67	2.91	9.44
Disk Harrow	32'	MFWD 225	46,900	180	10	0.061	0.76	2.34	0.79	0.41	4.33	1.63	2.54	8.51
Disk Harrow	42'	MFWD 225	92,500	180	10	0.046	0.58	1.78	1.20	0.31	3.89	2.45	1.94	8.28
Disk Harrow 40-100hp	14'	2WD 75	15,700	180	10	0.140	1.75	1.78	0.61	0.14	4.29	1.24	0.82	6.36
Disk Heavy	14'	MFWD 150	22,100	180	10	0.145	1.82	3.71	0.89	0.62	7.06	1.82	3.63	12.52
Disk Heavy	20'	MFWD 170	34,300	180	10	0.097	1.21	2.80	0.92	0.45	5.40	1.89	2.74	10.03
Disk Heavy	28'	MFWD 190	42,200	180	10	0.075	0.94	2.44	0.88	0.37	4.65	1.80	2.30	8.76
Disk Ripper	15'	MFWD 225	45,400	180	10	0.136	1.70	5.20	1.71	0.92	9.55	3.50	5.65	18.71
Ditcher		2WD 130	4,860	200	10	0.020	0.25	0.44	0.03	0.05	0.79	0.04	0.34	1.18
Ditcher (1m/160a)		2WD 130	4,860	200	10	0.009	0.11	0.20	0.01	0.02	0.37	0.02	0.16	0.55
Fert Appl (Liquid)	4R-38	MFWD 150	13,100	150	8	0.154	2.63	3.94	1.35	0.66	8.58	1.47	3.84	13.90
Fert Appl (Liquid)	6R-30	MFWD 170	14,300	150	8	0.130	2.23	3.78	1.24	0.60	7.86	1.36	3.69	12.91
Fert Appl (Liquid)	6R-38	MFWD 170	14,200	150	8	0.103	1.76	2.98	0.97	0.47	6.20	1.06	2.91	10.18
Fert Appl (Liquid)	8R-30	MFWD 190	15,100	150	8	0.098	1.67	3.16	0.98	0.49	6.32	1.07	2.99	10.39
Fert Appl (Liquid)	8R-38	MFWD 190	15,800	150	8	0.077	1.32	2.50	0.81	0.38	5.03	0.89	2.36	8.29
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	17,400	150	8	0.051	0.88	1.66	0.59	0.25	3.40	0.65	1.57	5.63
Fert Appl (Liquid)	10R-30	MFWD 225	17,700	150	8	0.078	1.33	3.00	0.92	0.53	5.80	1.01	3.26	10.07
Fert Appl (Liquid)	10R-38	MFWD 225	17,700	150	8	0.061	1.05	2.36	0.73	0.42	4.57	0.79	2.57	7.94
Fert Appl (Liquid)	12R-30	MFWD 225	18,200	150	8	0.078	1.33	3.00	0.95	0.53	5.82	1.03	3.26	10.13
Fert Appl (Liquid)	12R-38	MFWD 225	17,400	150	8	0.051	0.88	1.97	0.59	0.35	3.80	0.65	2.14	6.60
Field Cult & Inc	42'	MFWD 225	58,700	100	10	0.037	0.64	1.44	0.55	0.25	2.89	2.26	1.56	6.72
Field Cult & Inc	50'	MFWD 225	68,700	100	10	0.031	0.54	1.21	0.54	0.21	2.51	2.22	1.31	6.05
Field Cult & Inc Fld	24'	MFWD 170	31,500	100	10	0.066	1.12	1.90	0.52	0.30	3.86	2.12	1.86	7.84
Field Cult & Inc Fld	32'	MFWD 190	45,000	100	10	0.049	0.84	1.60	0.55	0.24	3.25	2.27	1.51	7.03
Field Cult & Inc Rdg	12'	2WD 150	16,600	100	10	0.132	2.25	3.36	0.54	0.53	6.70	2.23	3.12	12.06
Field Cultivate Fld	24'	MFWD 170	26,000	100	10	0.062	0.77	1.79	0.40	0.28	3.26	1.64	1.75	6.67
Field Cultivate Fld	32'	MFWD 190	39,500	100	10	0.046	0.58	1.50	0.46	0.23	2.78	1.87	1.42	6.08
Field Cultivate Fld	42'	MFWD 225	51,500	100	10	0.035	0.44	1.35	0.45	0.24	2.50	1.86	1.47	5.84
Field Cultivate Fld	50'	MFWD 225	61,300	100	10	0.029	0.37	1.14	0.45	0.20	2.17	1.86	1.24	5.28
Field Cultivate Rdg	12'	2WD 150	11,100	100	10	0.124	1.55	3.17	0.34	0.50	5.57	1.40	2.93	9.92
Grain Cart Corn	500 bu	MFWD 190	23,700	200	12	0.031	0.39	1.03	0.20	0.15	1.79	0.34	0.97	3.10
Grain Cart Corn	700 bu	MFWD 190	34,000	200	12	0.025	0.31	0.80	0.23	0.12	1.47	0.38	0.76	2.62
Grain Cart Corn	1000 bu	MFWD 225	43,700	200	12	0.025	0.31	0.95	0.29	0.17	1.73	0.49	1.03	3.26
Grain Cart Rice	500 bu	MFWD 190	23,700	200	12	0.062	0.78	2.01	0.40	0.31	3.51	0.66	1.90	6.08
Grain Cart Rice	700 bu	MFWD 190	34,000	200	12	0.055	0.68	1.77	0.50	0.27	3.24	0.84	1.67	5.76
Grain Cart Rice	1000 bu	MFWD 190	43,700	200	12	0.045	0.57	1.47	0.54	0.22	2.82	0.90	1.39	5.12

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2014 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	R&M Imp.	R&M P.U.	Total Direct	Fixed Imp.	Fixed P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Grain Cart Soybean	500 bu	MFWD 190	23,700	200	12	0.025	0.31	0.82	0.16	0.12	1.43	0.27	0.77	2.48
Grain Cart Soybean	700 bu	MFWD 190	34,000	200	12	0.021	0.26	0.68	0.19	0.10	1.25	0.32	0.64	2.22
Grain Cart Soybean	1000 bu	MFWD 190	43,700	200	12	0.021	0.26	0.68	0.25	0.10	1.30	0.41	0.64	2.37
Grain Cart Wht/Sor	500 bu	MFWD 190	23,700	200	12	0.025	0.31	0.82	0.16	0.12	1.43	0.27	0.77	2.48
Grain Cart Wht/Sor	700 bu	MFWD 190	34,000	200	12	0.021	0.26	0.68	0.19	0.10	1.25	0.32	0.64	2.22
Grain Cart Wht/Sor	1000 bu	MFWD 190	43,700	200	12	0.021	0.26	0.68	0.25	0.10	1.30	0.41	0.64	2.37
Grain Drill	8'	2WD 130	19,700	150	8	0.235	5.08	5.20	1.74	0.70	12.73	3.20	4.08	20.02
Grain Drill	10'	2WD 130	23,600	150	8	0.188	4.06	4.16	1.66	0.56	10.46	3.07	3.26	16.80
Grain Drill	12'	2WD 130	22,000	150	8	0.157	3.38	3.46	1.29	0.46	8.62	2.38	2.72	13.73
Grain Drill	15'	MFWD 150	28,300	150	8	0.125	2.71	3.20	1.33	0.53	7.78	2.45	3.12	13.37
Grain Drill	20'	MFWD 170	35,500	150	8	0.094	2.03	2.72	1.25	0.43	6.44	2.31	2.65	11.41
Grain Drill	24'	MFWD 190	54,000	150	8	0.078	1.69	2.53	1.59	0.39	6.21	2.93	2.39	11.53
Grain Drill	30'	MFWD 225	58,600	150	8	0.062	1.35	2.40	1.38	0.42	5.56	2.54	2.61	10.72
Grain Drill	35'	MFWD 225	80,200	150	8	0.053	1.16	2.05	1.62	0.36	5.20	2.98	2.23	10.43
Grain Drill & Pre	8'	2WD 130	25,200	150	8	0.253	5.47	5.60	2.39	0.75	14.23	4.41	4.39	23.05
Grain Drill & Pre	10'	2WD 130	29,100	150	8	0.203	4.37	4.48	2.21	0.60	11.68	4.08	3.51	19.28
Grain Drill & Pre	12'	2WD 130	27,500	150	8	0.169	3.64	3.73	1.74	0.50	9.63	3.21	2.93	15.78
Grain Drill & Pre	15'	MFWD 150	33,800	150	8	0.135	2.91	3.44	1.71	0.57	8.66	3.16	3.36	15.19
Grain Drill & Pre	20'	MFWD 170	41,000	150	8	0.101	2.18	2.93	1.56	0.46	7.15	2.87	2.86	12.89
Grain Drill & Pre	24'	MFWD 190	59,500	150	8	0.084	1.82	2.73	1.88	0.42	6.86	3.47	2.57	12.92
Grain Drill & Pre	30'	MFWD 225	64,100	150	8	0.067	1.45	2.58	1.62	0.46	6.13	2.99	2.81	11.94
Grain Drill & Pre	35'	MFWD 225	85,700	150	8	0.058	1.25	2.21	1.86	0.39	5.72	3.43	2.40	11.57
Grain Drill & Pre T	8R-38	MFWD 225	44,000	150	8	0.062	1.35	2.40	1.03	0.42	5.22	1.91	2.61	9.74
Harrow - Rigid	21'	2WD 150	5,400	200	10	0.073	0.92	1.88	0.13	0.30	3.24	0.20	1.74	5.19
Harrow - Folding	16'	MFWD 190	5,000	200	10	0.097	1.21	3.13	0.16	0.48	5.00	0.24	2.95	8.20
Harrow - Folding	24'	MFWD 190	12,100	200	10	0.064	0.80	2.08	0.27	0.32	3.49	0.39	1.97	5.86
Harrow - Folding	30'	MFWD 190	13,600	200	10	0.051	0.64	1.67	0.24	0.25	2.82	0.35	1.57	4.75
Harrow - Folding	40'	MFWD 190	16,700	200	10	0.038	0.48	1.25	0.22	0.19	2.15	0.33	1.18	3.67
Harrow - Folding	48'	MFWD 225	21,000	200	10	0.032	0.40	1.23	0.23	0.22	2.09	0.34	1.34	3.78
Harrow - Rigid	13'	2WD 130	3,780	200	10	0.119	1.49	2.63	0.15	0.35	4.64	0.23	2.06	6.94
Header - Corn	6R-30	265 hp	42,300	300	8	0.170	2.12	7.66	1.80	4.86	16.45	2.61	18.60	37.67
Header - Corn	6R-38	265 hp	43,500	300	8	0.134	1.68	6.05	1.46	3.83	13.03	2.12	14.68	29.84
Header - Corn	8R-30	265 hp	54,700	300	8	0.127	1.59	5.74	1.74	3.64	12.73	2.53	13.95	29.22
Header - Corn	8R-38	325 hp	56,300	300	8	0.100	1.26	5.57	1.42	3.29	11.54	2.06	12.60	26.21
Header - Corn	12R-20	325 hp	76,200	300	8	0.127	1.59	7.05	2.43	4.16	15.24	3.53	15.93	34.71
Header - Corn	12R-30	325 hp	85,800	300	8	0.085	1.06	4.70	1.82	2.77	10.36	2.65	10.62	23.64
Header - Draper (CL)	25' Rigid	265 hp	52,000	300	8	0.203	2.53	9.14	2.42	5.79	19.89	3.64	22.18	45.73
Header - Draper (CL)	30' Rigid	325 hp	56,300	300	8	0.169	2.11	9.34	2.18	5.51	19.15	3.29	21.12	43.57
Header - Draper (CL)	36' Rigid	355 hp	61,600	300	8	0.141	1.76	8.50	1.99	5.05	17.31	3.00	19.34	39.65
Header - Draper (SL)	25' Rigid	325 hp	52,000	300	8	0.176	2.20	9.71	2.09	5.73	19.75	3.16	21.96	44.88
Header - Draper (SL)	30' Rigid	325 hp	56,300	300	8	0.146	1.83	8.09	1.89	4.78	16.60	2.85	18.30	37.76
Header - Draper (SL)	36' Rigid	355 hp	61,600	300	8	0.122	1.52	7.36	1.72	4.37	15.00	2.60	16.76	34.36
Header - Rice (CL)	25' Rigid	325 hp	51,600	300	8	0.253	3.17	14.01	3.27	8.27	28.73	4.75	31.68	65.18
Header - Rice (CL)	30' Rigid	325 hp	59,000	300	8	0.211	2.64	11.67	3.12	6.89	24.34	4.53	26.40	55.27
Header - Rice (SL)	25' Rigid	325 hp	51,600	300	8	0.220	2.75	12.14	2.83	7.17	24.90	4.12	27.45	56.48
Header - Rice (SL)	30' Rigid	325 hp	59,000	300	8	0.183	2.29	10.12	2.70	5.97	21.09	3.92	22.88	47.90
Header -RiceStrp(CL)	20'	265 hp	46,300	300	8	0.253	3.17	11.42	2.93	7.24	24.78	4.26	27.73	56.78
Header -RiceStrp(CL)	24'	325 hp	50,800	300	8	0.211	2.64	11.67	2.68	6.89	23.90	3.90	26.40	54.21
Header -RiceStrp(CL)	32'	325 hp	56,000	300	8	0.158	1.98	8.75	2.22	5.17	18.13	3.22	19.80	41.16
Header -RiceStrp(SL)	20'	265 hp	46,300	300	8	0.220	2.75	9.90	2.54	6.27	21.47	3.69	24.03	49.21
Header -RiceStrp(SL)	24'	325 hp	50,800	300	8	0.183	2.29	10.12	2.32	5.97	20.71	3.38	22.88	46.98
Header -RiceStrp(SL)	32'	325 hp	56,000	300	8	0.137	1.71	7.59	1.92	4.48	15.71	2.79	17.16	35.67
Header -Soybean	22' Flex	265 hp	28,900	300	8	0.116	1.45	5.22	0.83	3.31	10.82	1.21	12.68	24.73
Header -Soybean	25' Flex	325 hp	31,300	300	8	0.102	1.27	5.64	0.79	3.33	11.04	1.16	12.75	24.96
Header -Soybean	30' Flex	325 hp	27,900	300	8	0.085	1.06	4.70	0.59	2.77	9.13	0.86	10.62	20.62
Header -Soybean	35' Flex	355 hp	41,200	300	8	0.072	0.91	4.40	0.75	2.61	8.67	1.09	10.01	19.78
Header Wheat/Sorghum	22' Rigid	265 hp	23,100	300	8	0.116	1.45	5.22	0.67	3.31	10.66	0.97	12.68	24.32
Header Wheat/Sorghum	25' Rigid	325 hp	27,000	300	8	0.102	1.27	5.64	0.68	3.33	10.93	1.00	12.75	24.69
Header Wheat/Sorghum	30' Rigid	325 hp	30,000	300	8	0.085	1.06	4.70	0.63	2.77	9.17	0.92	10.62	20.73
Header-Cotton Bcast	13'	173 hp	19,400	200	8	0.251	5.42	6.71	0.91	6.53	19.59	2.66	25.00	47.25
Header-Cotton-Bcast	16'	173 hp	21,600	200	8	0.204	4.41	5.45	0.82	5.30	16.00	2.40	20.31	38.72
Header-Cotton-Bcast	19'	173 hp	23,900	200	8	0.172	3.71	4.59	0.77	4.46	13.55	2.24	17.10	32.90
Header-Cotton-Brush	4R-30 2x1	173 hp	33,400	200	8	0.218	4.70	5.81	1.36	5.66	17.55	3.97	21.67	43.19
Header-Cotton-Brush	4R-36	173 hp	33,300	200	8	0.272	5.88	7.27	1.70	7.07	21.93	4.94	27.08	53.97
Header-Cotton-Brush	4R-38	173 hp	33,300	200	8	0.257	5.55	6.87	1.60	6.68	20.72	4.67	25.59	50.99
Header-Cotton-Brush	4R-38 2x1	173 hp	35,200	200	8	0.172	3.71	4.59	1.13	4.46	13.91	3.30	17.10	34.32
Header-Cotton-Brush	5R-30	173 hp	41,900	200	8	0.261	5.64	6.98	2.05	6.79	21.48	5.97	26.00	53.46
Header-Cotton-Brush	5R-38	173 hp	43,300	200	8	0.207	4.46	5.52	1.68	5.37	17.04	4.88	20.57	42.50
Header-Cotton-Brush	6R-30	173 hp	51,500	200	8	0.218	4.70	5.81	2.10	5.66	18.29	6.12	21.67	46.08
Header-Cotton-Brush	6R-38	173 hp	53,100	200	8	0.172	3.71	4.59	1.71	4.46	14.49	4.98	17.10	36.58
Header-Cotton-Brush	8R-30	173 hp	71,100	200	8	0.163	3.52	4.36	2.18	4.24	14.32	6.34	16.25	36.91
Header-Cotton-Brush	8R-36/38	173 hp	72,600	200	8	0.129	2.78	3.45	1.76	3.35	11.35	5.11	12.84	29.32
Land Plane	50'x16'	MFWD 190	12,000	200	10	0.151	1.89	4.89	0.36	0.75	7.91	0.92	4.62	13.46
Levee Pull & Seed	8 Blade	MFWD 170	10,200	100	10	0.003	0.04	0.10	0.00	0.01	0.17	0.03	0.10	0.30
Levee Pull (1m/80a)	8 blade	MFWD 170	7,120	100	10	0.003	0.04	0.10	0.00	0.01	0.16	0.02	0.10	0.29
Levee Splitter (1/80	32"	MFWD 150	3,280	100	10	0.004	0.05	0.10	0.00	0.01	0.17	0.01	0.10	0.29
Module Builder	4R-30(350)	MFWD 190	33,500	200	10	0.327	7.05	10.56	2.74	1.63	22.00	5.36	9.97	37.34
Module Builder	4R-38(255)	MFWD 190	33,500	200	10	0.257	5.55	8.31	2.15	1.28	17.32	4.22	7.85	29.40
Module Builder	4R-38(350)	MFWD 190	33,500	200	10	0.257	5.55	8.31	2.15	1.28	17.32	4.22	7.85	29.40

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2014 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	R&M Imp.	R&M P.U.	Total Direct	Fixed Imp.	Fixed P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Module Builder	4R2x1(350)	MFWD 190	33,500	200	10	0.172	3.71	5.56	1.44	0.86	11.58	2.82	5.25	19.65
Module Builder	6R-30(355)	MFWD 190	33,500	200	10	0.218	4.70	7.04	1.82	1.09	14.66	3.57	6.65	24.89
Module Builder	6R-38(355)	MFWD 190	33,500	200	10	0.172	3.71	5.56	1.44	0.86	11.58	2.82	5.25	19.65
Module Builder-Strip	13' Bcast	MFWD 150	33,500	200	10	0.251	5.42	6.41	2.10	1.07	15.03	4.12	6.26	25.42
Module Builder-Strip	16' Bcast	MFWD 150	33,500	200	10	0.204	4.41	5.21	1.71	0.87	12.21	3.35	5.09	20.66
Module Builder-Strip	19' Bcast	MFWD 150	33,500	200	10	0.172	3.71	4.39	1.44	0.73	10.28	2.82	4.28	17.39
Module Builder-Strip	4R-30 2x1	MFWD 150	3,300	200	10	0.218	4.70	5.56	0.18	0.93	11.38	0.35	5.43	17.16
Module Builder-Strip	4R-36	MFWD 150	3,300	200	10	0.272	5.88	6.95	0.22	1.16	14.22	0.44	6.78	21.45
Module Builder-Strip	4R-38	MFWD 150	33,500	200	10	0.257	5.55	6.56	2.15	1.10	15.38	4.22	6.41	26.02
Module Builder-Strip	4R-38 2x1	MFWD 150	33,500	200	10	0.172	3.71	4.39	1.44	0.73	10.28	2.82	4.28	17.39
Module Builder-Strip	5R-30	MFWD 150	33,500	200	10	0.261	5.64	6.67	2.19	1.12	15.63	4.29	6.51	26.44
Module Builder-Strip	5R-38	MFWD 150	33,500	200	10	0.207	4.46	5.27	1.73	0.88	12.36	3.39	5.15	20.92
Module Builder-Strip	6R-30	MFWD 150	33,500	200	10	0.218	4.70	5.56	1.82	0.93	13.02	3.57	5.43	22.03
Module Builder-Strip	6R-38	MFWD 190	33,500	200	10	0.172	3.71	5.56	1.44	0.86	11.58	2.82	5.25	19.65
Module Builder-Strip	8R-36/38	MFWD 190	33,500	200	10	0.129	2.78	4.17	1.08	0.64	8.69	2.12	3.94	14.76
NT Grain Drill	6'	MFWD 170	21,100	150	8	0.327	7.05	9.45	2.59	1.51	20.61	4.77	9.22	34.61
NT Grain Drill	10'	2WD 130	33,300	150	8	0.235	5.08	5.20	2.94	0.70	13.93	5.42	4.08	23.43
NT Grain Drill	12'	2WD 130	34,000	150	8	0.163	3.52	3.61	2.08	0.48	9.71	3.84	2.83	16.39
NT Grain Drill	15'	MFWD 150	45,000	150	8	0.130	2.82	3.33	2.20	0.56	8.93	4.07	3.25	16.25
NT Grain Drill	20'	MFWD 170	62,600	150	8	0.098	2.11	2.83	2.30	0.45	7.71	4.24	2.76	14.72
NT Grain Drill	24'	MFWD 190	77,000	150	8	0.081	1.76	2.64	2.36	0.40	7.17	4.35	2.49	14.02
NT Grain Drill	30'	MFWD 225	88,000	150	8	0.065	1.41	2.50	2.16	0.44	6.52	3.98	2.71	13.22
NT Grain Drill & Pre	6'	MFWD 170	26,600	150	8	0.352	7.60	10.18	3.51	1.63	22.92	6.47	9.93	39.34
NT Grain Drill & Pre	10'	2WD 130	38,800	150	8	0.211	4.56	4.67	3.07	0.63	12.94	5.67	3.66	22.27
NT Grain Drill & Pre	12'	2WD 130	39,500	150	8	0.176	3.80	3.89	2.61	0.52	10.82	4.81	3.05	18.69
NT Grain Drill & Pre	15'	MFWD 150	50,500	150	8	0.141	3.04	3.59	2.67	0.60	9.90	4.92	3.50	18.33
NT Grain Drill & Pre	20'	MFWD 170	68,100	150	8	0.105	2.28	3.05	2.70	0.48	8.52	4.97	2.98	16.48
NT Grain Drill & Pre	24'	MFWD 190	82,500	150	8	0.088	1.90	2.84	2.72	0.44	7.91	5.02	2.68	15.62
NT Grain Drill & Pre	30'	MFWD 225	93,400	150	8	0.070	1.52	2.69	2.46	0.48	7.16	4.55	2.92	14.64
NT Plant&Pre-Folding	8R-38	MFWD 170	45,200	150	8	0.083	1.80	2.41	1.41	0.38	6.02	2.61	2.35	10.98
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	74,800	150	8	0.055	1.20	1.60	1.56	0.25	4.62	2.87	1.56	9.07
NT Plant&Pre-Folding	12R-20	MFWD 190	68,100	150	8	0.105	2.28	3.41	2.70	0.52	8.92	4.97	3.22	17.12
NT Plant&Pre-Folding	12R-30	MFWD 190	67,500	150	8	0.070	1.52	2.27	1.78	0.35	5.93	3.28	2.14	11.37
NT Plant&Pre-Folding	12R-38	MFWD 190	74,800	150	8	0.055	1.20	1.79	1.56	0.27	4.83	2.87	1.69	9.41
NT Plant&Pre-Folding	16R-30	MFWD 190	96,000	150	8	0.052	1.14	1.70	1.90	0.26	5.01	3.50	1.61	10.13
NT Plant&Pre-Folding	23R-15	MFWD 190	123,000	150	8	0.073	1.58	2.37	3.38	0.36	7.70	6.24	2.23	16.18
NT Plant&Pre-Folding	24R-15	MFWD 225	127,000	150	8	0.070	1.52	2.69	3.35	0.48	8.05	6.18	2.92	17.16
NT Plant&Pre-Folding	24R-20	MFWD 190	140,000	150	8	0.052	1.14	1.70	2.77	0.26	5.88	5.11	1.61	12.61
NT Plant&Pre-Folding	24R-30	MFWD 190	161,000	150	8	0.035	0.76	1.13	2.12	0.17	4.20	3.92	1.07	9.20
NT Plant&Pre-Folding	31R-15	MFWD 225	145,000	150	8	0.054	1.17	2.08	2.97	0.37	6.61	5.47	2.26	14.35
NT Plant&Pre-Folding	32R-15	MFWD 225	158,000	150	8	0.052	1.14	2.02	3.13	0.36	6.65	5.77	2.19	14.62
NT Plant&Pre-Folding	36R-20	MFWD 225	176,000	150	8	0.035	0.76	1.34	2.32	0.24	4.67	4.28	1.46	10.42
NT Plant&Pre-Rigid	4R-30	2WD 130	26,300	150	8	0.211	4.56	4.67	2.08	0.63	11.94	3.84	3.66	19.45
NT Plant&Pre-Rigid	4R-38	2WD 130	27,700	150	8	0.166	3.59	3.67	1.73	0.49	9.49	3.18	2.88	15.56
NT Plant&Pre-Rigid	6R-30	MFWD 150	34,400	150	8	0.141	3.04	3.59	1.81	0.60	9.05	3.35	3.50	15.91
NT Plant&Pre-Rigid	6R-38	MFWD 150	31,800	150	8	0.111	2.40	2.83	1.32	0.47	7.04	2.44	2.77	12.25
NT Plant&Pre-Rigid	8R-30	MFWD 170	39,800	150	8	0.105	2.28	3.05	1.57	0.48	7.40	2.90	2.98	13.29
NT Plant&Pre-Rigid	8R-38	MFWD 170	37,800	150	8	0.083	1.80	2.41	1.18	0.38	5.78	2.18	2.35	10.32
NT Plant&Pre-Rigid	10R-30	MFWD 190	44,300	150	8	0.084	1.82	2.73	1.40	0.42	6.38	2.58	2.57	11.55
NT Plant&Pre-Rigid	11R-15	MFWD 170	49,300	150	8	0.143	3.10	4.15	2.66	0.66	10.58	4.90	4.05	19.54
NT Plant&Pre-Rigid	11R-20	MFWD 170	43,300	150	8	0.115	2.49	3.33	1.87	0.53	8.24	3.45	3.25	14.95
NT Plant&Pre-Rigid	12R-20	MFWD 190	50,200	150	8	0.105	2.28	3.41	1.99	0.52	8.21	3.66	3.22	15.10
NT Plant&Pre-Rigid	12R-30	MFWD 190	61,900	150	8	0.070	1.52	2.27	1.63	0.35	5.78	3.01	2.14	10.94
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	53,300	150	8	0.097	2.10	3.72	1.94	0.66	8.43	3.58	4.04	16.07
NT Plant&Pre-Rigid	15R-15	MFWD 190	60,500	150	8	0.113	2.43	3.65	2.56	0.56	9.22	4.72	3.44	17.39
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	133,000	150	8	0.055	1.20	2.12	2.77	0.37	6.48	5.11	2.31	13.91
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	112,000	150	8	0.083	1.80	3.19	3.51	0.56	9.07	6.46	3.47	19.02
NT Plant-Folding	8R-38	MFWD 170	39,800	150	8	0.077	1.67	2.24	1.15	0.35	5.43	2.13	2.18	9.75
NT Plant-Folding	8R-38 2x1	MFWD 170	67,600	150	8	0.051	1.11	1.49	1.31	0.23	4.15	2.41	1.45	8.02
NT Plant-Folding	12R-20	MFWD 190	62,600	150	8	0.098	2.11	3.16	2.30	0.49	8.08	4.24	2.99	15.32
NT Plant-Folding	12R-30	MFWD 190	62,000	150	8	0.065	1.41	2.11	1.52	0.32	5.37	2.80	1.99	10.17
NT Plant-Folding	12R-38	MFWD 190	67,600	150	8	0.051	1.11	1.66	1.31	0.25	4.35	2.41	1.57	8.34
NT Plant-Folding	16R-30	MFWD 190	88,800	150	8	0.049	1.05	1.58	1.63	0.24	4.52	3.01	1.49	9.03
NT Plant-Folding	23R-15	MFWD 190	118,000	150	8	0.068	1.47	2.20	3.01	0.34	7.03	5.56	2.07	14.66
NT Plant-Folding	24R-15	MFWD 225	121,000	150	8	0.065	1.41	2.50	2.97	0.44	7.33	5.47	2.71	15.52
NT Plant-Folding	24R-20	MFWD 190	132,000	150	8	0.049	1.05	1.58	2.43	0.24	5.32	4.47	1.49	11.29
NT Plant-Folding	24R-30	MFWD 190	151,000	150	8	0.032	0.70	1.05	1.85	0.16	3.78	3.41	0.99	8.19
NT Plant-Folding	31R-15	MFWD 225	136,000	150	8	0.050	1.09	1.93	2.58	0.34	5.96	4.76	2.10	12.84
NT Plant-Folding	32R-15	MFWD 225	148,000	150	8	0.049	1.05	1.87	2.72	0.33	5.99	5.02	2.03	13.05
NT Plant-Folding	36R-20	MFWD 225	165,000	150	8	0.032	0.70	1.25	2.02	0.22	4.20	3.73	1.35	9.29
NT Plant-Rigid	4R-30	2WD 130	20,800	150	8	0.196	4.23	4.33	1.53	0.58	10.69	2.82	3.40	16.91
NT Plant-Rigid	4R-38	2WD 130	22,300	150	8	0.154	3.33	3.41	1.29	0.46	8.50	2.38	2.67	13.56
NT Plant-Rigid	6R-30	MFWD 150	29,000	150	8	0.130	2.82	3.33	1.42	0.56	8.14	2.62	3.25	14.02
NT Plant-Rigid	6R-38	MFWD 150	26,300	150	8	0.103	2.22	2.63	1.01	0.44	6.32	1.87	2.57	10.77
NT Plant-Rigid	8R-30	MFWD 170	34,300	150	8	0.098	2.11	2.83	1.26	0.45	6.67	2.32	2.76	11.76
NT Plant-Rigid	8R-38	MFWD 170	32,300	150	8	0.077	1.67	2.24	0.94	0.35	5.21	1.73	2.18	9.13
NT Plant-Rigid	10R-30	MFWD 190	38,800	150	8	0.078	1.69	2.53	1.14	0.39	5.76	2.10	2.39	10.26
NT Plant-Rigid	11R-15	MFWD 170	43,800	150	8	0.133	2.88	3.85	2.19	0.61	9.55	4.04	3.76	17.36

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2014 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	R&M Imp.	R&M P.U.	Total Direct	Fixed Imp.	Fixed P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
NT Plant-Rigid	11R-20	MFWD 170	38,000	150	8	0.107	2.31	3.09	1.52	0.49	7.43	2.81	3.02	13.28
NT Plant-Rigid	12R-20	MFWD 190	44,700	150	8	0.098	2.11	3.16	1.64	0.49	7.42	3.03	2.99	13.45
NT Plant-Rigid	12R-30	MFWD 190	53,400	150	8	0.065	1.41	2.11	1.31	0.32	5.16	2.41	1.99	9.57
NT Plant-Rigid	13R-18/20	MFWD 225	47,800	150	8	0.090	1.96	3.47	1.63	0.61	7.68	3.00	3.77	14.46
NT Plant-Rigid	15R-15	MFWD 190	53,300	150	8	0.105	2.26	3.38	2.09	0.52	8.27	3.86	3.20	15.34
NT Plant-TwinRow	12R-30/40	MFWD 225	126,000	150	8	0.051	1.11	1.97	2.44	0.35	5.88	4.49	2.14	12.53
NT Plant-TwinRow	8R-30/40	MFWD 225	106,000	150	8	0.077	1.67	2.96	3.08	0.52	8.25	5.68	3.22	17.16
One-Trip Prep	4R-38	MFWD 170	18,000	150	10	0.146	1.83	4.23	1.23	0.67	7.98	1.79	4.13	13.91
One-Trip Prep	6R-38	MFWD 190	21,600	150	10	0.097	1.21	3.14	0.98	0.48	5.82	1.42	2.96	10.21
One-Trip Prep	8R-38	MFWD 225	32,100	150	10	0.073	0.92	2.82	1.10	0.50	5.36	1.61	3.07	10.04
Peanut Cond.& Lifter	6-Row	MFWD 190	12,300	300	20	0.100	1.25	3.22	0.20	0.50	5.18	0.28	3.04	8.51
Peanut Conditioner	6-Row	MFWD 190	14,900	300	20	0.100	1.25	3.22	0.29	0.50	5.27	0.30	3.04	8.62
Peanut Dig/Invertor	4R-30	MFWD 190	25,800	300	15	0.235	2.94	7.61	1.51	1.17	13.25	1.74	7.18	22.18
Peanut Dig/Invertor	4R-38	MFWD 190	25,800	300	15	0.186	2.32	6.00	1.19	0.93	10.46	1.37	5.67	17.51
Peanut Dig/Invertor	6R-38	MFWD 190	37,700	300	15	0.124	1.55	4.00	0.82	0.62	6.99	1.33	3.78	12.11
Peanut Dump Cart	6-Row	MFWD 190	44,200	300	20	0.310	3.87	10.00	0.79	1.55	16.22	3.07	9.44	28.75
Peanut Harvester	4R-30	MFWD 225	117,000	300	20	0.849	10.62	32.48	5.63	5.79	54.53	20.20	35.29	110.03
Peanut Harvester	4R-38	MFWD 225	117,000	300	20	0.934	11.68	35.71	6.19	6.36	59.96	23.37	38.81	122.14
Peanut Harvester	6R-38	MFWD 225	134,000	300	20	0.625	7.81	23.88	4.04	4.25	40.00	17.90	25.95	83.86
Peanut Lifter	6-Row	MFWD 225	5,910	300	20	0.100	1.25	3.82	0.12	0.68	5.87	0.12	4.15	10.14
Peanut Plt&Pre Fold.	12R-38	MFWD 190	72,100	150	8	0.080	1.73	2.59	2.17	0.40	6.90	4.00	2.45	13.36
Peanut Plt&Pre Rigid	8R-30	MFWD 190	38,000	150	8	0.152	3.29	4.93	2.17	0.76	11.16	4.01	4.65	19.83
Peanut Plt&Pre Rigid	8R-38	MFWD 190	36,000	150	8	0.120	2.60	3.89	1.63	0.60	8.73	3.00	3.68	15.42
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	43,500	150	8	0.080	1.73	2.31	1.30	0.37	5.72	2.41	2.26	10.40
Plant & Pre-Folding	8R-38 2x1	MFWD 170	72,100	150	8	0.053	1.15	1.54	1.44	0.24	4.38	2.66	1.50	8.55
Plant & Pre-Folding	12R-20	MFWD 190	65,400	150	8	0.101	2.18	3.27	2.49	0.50	8.46	4.58	3.09	16.14
Plant & Pre-Folding	12R-30	MFWD 190	64,800	150	8	0.067	1.45	2.18	1.64	0.33	5.62	3.03	2.06	10.72
Plant & Pre-Folding	12R-38	MFWD 190	72,100	150	8	0.053	1.15	1.72	1.44	0.26	4.58	2.66	1.62	8.87
Plant & Pre-Folding	16R-30	MFWD 190	92,400	150	8	0.050	1.09	1.63	1.75	0.25	4.74	3.24	1.54	9.53
Plant & Pre-Folding	23R-15	MFWD 190	118,000	150	8	0.070	1.52	2.27	3.12	0.35	7.26	5.74	2.14	15.16
Plant & Pre-Folding	24R-15	MFWD 225	121,000	150	8	0.067	1.45	2.58	3.07	0.46	7.57	5.65	2.81	16.04
Plant & Pre-Folding	24R-20	MFWD 190	134,000	150	8	0.050	1.09	1.63	2.55	0.25	5.53	4.70	1.54	11.78
Plant & Pre-Folding	24R-30	MFWD 190	156,000	150	8	0.033	0.72	1.09	1.98	0.16	3.97	3.64	1.03	8.65
Plant & Pre-Folding	31R-15	MFWD 225	138,000	150	8	0.052	1.13	2.00	2.71	0.35	6.20	5.00	2.17	13.39
Plant & Pre-Folding	32R-15	MFWD 225	151,000	150	8	0.050	1.09	1.94	2.87	0.34	6.25	5.29	2.10	13.66
Plant & Pre-Folding	36R-20	MFWD 225	167,000	150	8	0.033	0.72	1.29	2.11	0.23	4.37	3.90	1.40	9.68
Plant & Pre-Rigid	4R-30	2WD 130	25,400	150	8	0.203	4.37	4.48	1.93	0.60	11.40	3.56	3.51	18.48
Plant & Pre-Rigid	4R-38	2WD 130	26,800	150	8	0.159	3.44	3.53	1.60	0.47	9.06	2.96	2.77	14.79
Plant & Pre-Rigid	6R-30	MFWD 150	33,100	150	8	0.135	2.91	3.44	1.68	0.57	8.62	3.09	3.36	15.09
Plant & Pre-Rigid	6R-38	MFWD 150	30,400	150	8	0.106	2.30	2.72	1.21	0.45	6.70	2.24	2.65	11.60
Plant & Pre-Rigid	8R-30	MFWD 170	38,000	150	8	0.101	2.18	2.93	1.44	0.46	7.03	2.66	2.86	12.56
Plant & Pre-Rigid	8R-38	MFWD 170	36,000	150	8	0.080	1.73	2.31	1.08	0.37	5.50	1.99	2.26	9.76
Plant & Pre-Rigid	10R-30	MFWD 190	42,000	150	8	0.081	1.75	2.62	1.27	0.40	6.05	2.35	2.47	10.89
Plant & Pre-Rigid	11R-15	MFWD 170	46,800	150	8	0.148	3.19	4.28	2.60	0.68	10.76	4.79	4.17	19.73
Plant & Pre-Rigid	11R-20	MFWD 170	41,000	150	8	0.110	2.39	3.20	1.70	0.51	7.81	3.14	3.12	14.08
Plant & Pre-Rigid	12R-20	MFWD 190	47,500	150	8	0.101	2.18	3.27	1.80	0.50	7.78	3.33	3.09	14.20
Plant & Pre-Rigid	12R-30	MFWD 190	59,200	150	8	0.067	1.45	2.18	1.50	0.33	5.48	2.76	2.06	10.31
Plant & Pre-Rigid	13R-18/20	MFWD 225	50,400	150	8	0.093	2.01	3.57	1.76	0.63	8.00	3.25	3.88	15.14
Plant & Pre-Rigid	15R-15	MFWD 190	57,100	150	8	0.108	2.34	3.50	2.32	0.54	8.71	4.28	3.31	16.30
Plant & Pre-TwinRow	12R-30/40	MFWD 225	128,000	150	8	0.053	1.15	2.04	2.56	0.36	6.12	4.72	2.21	13.06
Plant & Pre-TwinRow	8R-30/40	MFWD 225	108,000	150	8	0.080	1.73	3.06	3.25	0.54	8.59	5.98	3.33	17.91
Plant - Folding	8R-38	MFWD 170	38,000	150	8	0.074	1.60	2.15	1.06	0.34	5.16	1.95	2.10	9.22
Plant - Folding	8R-38 2x1	MFWD 170	64,900	150	8	0.049	1.06	1.43	1.20	0.22	3.93	2.22	1.39	7.56
Plant - Folding	12R-20	MFWD 190	59,900	150	8	0.094	2.03	3.04	2.11	0.47	7.66	3.90	2.87	14.44
Plant - Folding	12R-30	MFWD 190	59,300	150	8	0.062	1.35	2.02	1.39	0.31	5.09	2.57	1.91	9.58
Plant - Folding	12R-38	MFWD 190	64,900	150	8	0.049	1.06	1.60	1.20	0.24	4.12	2.22	1.51	7.86
Plant - Folding	16R-30	MFWD 190	85,200	150	8	0.047	1.01	1.52	1.50	0.23	4.27	2.77	1.43	8.49
Plant - Folding	23R-15	MFWD 190	112,000	150	8	0.065	1.41	2.11	2.75	0.32	6.60	5.06	1.99	13.66
Plant - Folding	24R-15	MFWD 225	116,000	150	8	0.062	1.35	2.40	2.73	0.42	6.92	5.03	2.61	14.56
Plant - Folding	24R-20	MFWD 190	127,000	150	8	0.047	1.01	1.52	2.24	0.23	5.01	4.13	1.43	10.59
Plant - Folding	24R-30	MFWD 190	145,000	150	8	0.031	0.67	1.01	1.70	0.15	3.55	3.14	0.95	7.66
Plant - Folding	31R-15	MFWD 225	128,000	150	8	0.048	1.05	1.86	2.33	0.33	5.58	4.30	2.02	11.91
Plant - Folding	32R-15	MFWD 225	141,000	150	8	0.047	1.01	1.80	2.49	0.32	5.63	4.59	1.95	12.18
Plant - Folding	36R-20	MFWD 225	157,000	150	8	0.031	0.67	1.20	1.85	0.21	3.94	3.40	1.30	8.65
Plant - Rigid	4R-30	2WD 130	19,900	150	8	0.188	4.06	4.16	1.40	0.56	10.19	2.59	3.26	16.05
Plant - Rigid	4R-38	2WD 130	21,400	150	8	0.148	3.20	3.27	1.19	0.44	8.11	2.19	2.57	12.88
Plant - Rigid	6R-30	MFWD 150	27,600	150	8	0.125	2.71	3.20	1.30	0.53	7.75	2.39	3.12	13.27
Plant - Rigid	6R-38	MFWD 150	25,000	150	8	0.099	2.13	2.52	0.93	0.42	6.02	1.71	2.46	10.20
Plant - Rigid	8R-30	MFWD 170	32,500	150	8	0.094	2.03	2.72	1.14	0.43	6.34	2.11	2.65	11.11
Plant - Rigid	8R-38	MFWD 170	30,500	150	8	0.074	1.60	2.15	0.85	0.34	4.95	1.57	2.10	8.62
Plant - Rigid	10R-30	MFWD 190	36,500	150	8	0.075	1.62	2.43	1.03	0.37	5.47	1.90	2.29	9.67
Plant - Rigid	11R-15	MFWD 170	41,300	150	8	0.137	2.96	3.97	2.13	0.63	9.71	3.92	3.88	17.51
Plant - Rigid	11R-20	MFWD 170	35,500	150	8	0.103	2.22	2.97	1.37	0.47	7.04	2.52	2.90	12.47
Plant - Rigid	12R-20	MFWD 190	42,000	150	8	0.094	2.03	3.04	1.48	0.47	7.03	2.73	2.87	12.64
Plant - Rigid	12R-30	MFWD 190	53,700	150	8	0.062	1.35	2.02	1.26	0.31	4.96	2.33	1.91	9.21
Plant - Rigid	13R-18/20	MFWD 225	44,900	150	8	0.086	1.87	3.32	1.46	0.59	7.24	2.69	3.60	13.55
Plant - Rigid	15R-15	2WD 150	49,900	150	8	0.094	2.03	2.40	1.76	0.38	6.58	3.25	2.22	12.05
Plant - TwinRow	12R-30/40	MFWD 225	121,000	150	8	0.049	1.06	1.89	2.25	0.33	5.55	4.14	2.06	11.76

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2014 (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 - 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
Roller/Cultipacker	12'	2WD 130	4,130	300	12	0.124	1.55	2.74	0.12	0.37	4.79	0.16	2.15	7.11
Roller/Cultipacker	20'	MFWD 150	15,700	300	12	0.074	0.93	1.90	0.27	0.31	3.43	0.36	1.85	5.65
Roller/Cultipacker	30'	MFWD 170	17,500	300	12	0.049	0.62	1.43	0.20	0.23	2.49	0.27	1.40	4.16
Roller/Cultipacker	38'	MFWD 225	19,100	300	12	0.039	0.49	1.50	0.17	0.26	2.43	0.23	1.63	4.30
Roller/Stubble	20'	2WD 50	12,800	300	12	0.074	0.93	0.63	0.22	0.04	1.83	0.29	0.26	2.39
Roller/Stubble	32'	MFWD 225	21,700	300	12	0.046	0.58	1.78	0.23	0.31	2.92	0.31	1.93	5.17
Rotary Cutter	7'	MFWD 130	4,250	185	10	0.168	2.10	3.71	0.58	0.55	6.96	0.39	3.24	10.59
Rotary Cutter	12'	2WD 150	12,900	185	10	0.098	1.22	2.50	1.02	0.39	5.15	0.69	2.31	8.17
Rotary Cutter-Flex	15'	MFWD 150	19,000	185	10	0.078	0.98	2.00	1.21	0.33	4.53	0.82	1.95	7.30
Rotary Cutter-Flex	20'	MFWD 150	26,700	185	10	0.058	0.73	1.50	1.27	0.25	3.76	0.86	1.46	6.09
Row Cond & Inc-Fold.	26'	MFWD 190	23,700	100	10	0.063	1.08	2.04	0.37	0.31	3.82	1.53	1.93	7.28
Row Cond & Inc-Fold.	38'	MFWD 225	34,300	100	10	0.043	0.73	1.65	0.37	0.29	3.06	1.51	1.80	6.38
Row Cond & Inc-Rigid	13'	2WD 130	12,600	100	10	0.126	2.16	2.80	0.39	0.37	5.74	1.63	2.19	9.57
Row Cond & Inc-Rigid	21'	2WD 170	17,200	100	10	0.078	1.33	2.26	0.33	0.29	4.23	1.37	1.78	7.39
Row Cond & Inc-Rigid	26'	MFWD 190	17,900	100	10	0.026	0.45	0.85	0.11	0.13	1.56	0.48	0.81	2.86
Row Cond Folding	26'	MFWD 225	18,200	100	10	0.059	0.74	2.28	0.27	0.40	3.70	1.10	2.48	7.29
Row Cond Folding	38'	MFWD 225	27,100	100	10	0.040	0.51	1.56	0.27	0.27	2.62	1.12	1.69	5.45
Row Cond Rigid	13'	2WD 130	7,120	100	10	0.119	1.49	2.63	0.21	0.35	4.69	0.86	2.06	7.63
Row Cond Rigid	21'	2WD 170	11,700	100	10	0.073	0.92	2.13	0.21	0.27	3.55	0.88	1.67	6.10
Row Cond Rigid	26'	MFWD 190	12,400	100	10	0.059	0.74	1.92	0.18	0.29	3.15	0.75	1.82	5.73
Row Cond./Roll-Fold.	26'	MFWD 190	26,300	160	10	0.072	0.90	2.32	0.47	0.36	4.06	1.20	2.19	7.47
Row Cond./Roll-Fold.	30'	MFWD 190	38,600	160	10	0.062	0.78	2.01	0.60	0.31	3.71	1.53	1.90	7.15
Row Cond./Roll-Fold.	40'	MFWD 225	36,700	160	10	0.046	0.58	1.79	0.43	0.31	3.12	1.09	1.94	6.17
Row Cond./Roll-Rigid	21'	MFWD 190	22,800	160	10	0.089	1.11	2.88	0.50	0.44	4.95	1.29	2.72	8.97
Row Cond./Roll-Rigid	26'	MFWD 190	22,800	160	10	0.072	0.90	2.32	0.41	0.36	4.00	1.04	2.19	7.24
Spin Spreader	5 ton	MFWD 190	11,300	100	8	0.042	0.90	1.35	0.26	0.21	2.74	0.51	1.28	4.54
Spray (ATV Ropewick)	75"	800 CC	600	200	8	0.260	4.43	0.60	0.07	0.30	5.41	0.08	1.16	6.66
Spray (ATV)	12'/17'	800 CC	530	200	8	0.112	1.92	0.26	0.02	0.13	2.34	0.03	0.50	2.88
Spray (ATV)	20'	800 CC	1,350	200	8	0.084	1.44	0.19	0.05	0.09	1.78	0.06	0.37	2.23
Spray (Band)	27' Fold	MFWD 170	5,480	200	8	0.062	1.06	1.80	0.16	0.28	3.32	0.18	1.76	5.28
Spray (Band)	40' Fold	MFWD 170	7,220	200	8	0.042	0.72	1.22	0.14	0.19	2.28	0.16	1.19	3.64
Spray (Band)	50' Fold	MFWD 170	7,410	200	8	0.033	0.57	0.97	0.11	0.15	1.82	0.13	0.95	2.91
Spray (Band)	53' Fold	MFWD 170	8,340	200	8	0.031	0.54	0.92	0.12	0.14	1.73	0.14	0.90	2.78
Spray (Band)	60' Fold	MFWD 170	10,400	200	8	0.028	0.48	0.81	0.13	0.13	1.56	0.15	0.79	2.51
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,800	200	8	0.130	2.21	3.31	0.35	0.55	6.44	0.41	3.23	10.09
Spray (Bcast/HB)	20' Rigid	MFWD 150	6,840	200	8	0.084	1.44	2.15	0.27	0.36	4.23	0.31	2.10	6.65
Spray (Bcast/HB)	27' Fold	MFWD 170	10,700	200	8	0.062	1.06	1.80	0.31	0.28	3.48	0.36	1.76	5.61
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,870	200	8	0.062	1.06	1.80	0.23	0.28	3.39	0.26	1.76	5.43
Spray (Bcast/HB)	30' Fold	MFWD 170	15,300	200	8	0.056	0.96	1.62	0.40	0.26	3.25	0.47	1.59	5.31
Spray (Bcast/HB)	40' Fold	MFWD 170	17,400	200	8	0.042	0.72	1.22	0.34	0.19	2.48	0.40	1.19	4.07
Spray (Bcast/HB/HD)	27'	MFWD 170	12,100	200	8	0.062	1.06	1.80	0.35	0.28	3.52	0.41	1.76	5.70
Spray (Bcast/HB/HD)	40'	MFWD 170	19,100	200	8	0.042	0.72	1.22	0.37	0.19	2.51	0.44	1.19	4.14
Spray (Broadcast)	27'	MFWD 170	5,480	200	8	0.062	1.06	1.80	0.16	0.28	3.32	0.18	1.76	5.28
Spray (Broadcast)	40'	MFWD 170	7,220	200	8	0.042	0.72	1.22	0.14	0.19	2.28	0.16	1.19	3.64
Spray (Broadcast)	50'	MFWD 170	7,410	200	8	0.033	0.57	0.97	0.11	0.15	1.82	0.13	0.95	2.91
Spray (Broadcast)	53'	MFWD 170	8,340	200	8	0.031	0.54	0.92	0.12	0.14	1.73	0.14	0.90	2.78
Spray (Broadcast)	60'	MFWD 170	10,400	200	8	0.028	0.48	0.81	0.13	0.13	1.56	0.15	0.79	2.51
Spray (Direct/Hood)	8R-30	MFWD 170	12,400	200	8	0.084	1.44	2.44	0.49	0.39	4.76	0.57	2.38	7.72
Spray (Direct/Hood)	8R-38	MFWD 170	13,700	200	8	0.066	1.13	1.93	0.42	0.30	3.80	0.49	1.88	6.19
Spray (Direct/Hood)	12R-30	MFWD 170	19,000	200	8	0.056	0.96	1.62	0.50	0.26	3.35	0.58	1.59	5.52
Spray (Direct/Hood)	12R-38	MFWD 170	19,300	200	8	0.044	0.75	1.28	0.40	0.20	2.65	0.46	1.25	4.37
Spray (Direct/Layby)	8R-38	MFWD 170	12,900	200	8	0.066	1.13	1.93	0.40	0.30	3.78	0.47	1.88	6.14
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	19,000	200	8	0.044	0.75	1.28	0.39	0.20	2.64	0.46	1.25	4.36
Spray (Direct/Layby)	12R-30	MFWD 170	17,000	200	8	0.056	0.96	1.62	0.44	0.26	3.29	0.52	1.59	5.41
Spray (Direct/Layby)	12R-38	MFWD 170	19,000	200	8	0.044	0.75	1.28	0.39	0.20	2.64	0.46	1.25	4.36
Spray (Levee Leaper)	50'	MFWD 225	13,500	200	8	0.033	0.57	1.29	0.21	0.23	2.31	0.24	1.40	3.96
Spray (Pull Type)	60'	MFWD 225	27,000	200	8	0.028	0.48	1.07	0.35	0.19	2.10	0.41	1.17	3.69
Spray (Pull Type)	80'	MFWD 225	38,000	200	8	0.021	0.36	0.80	0.37	0.14	1.68	0.43	0.87	3.00
Spray (Pull Type)	90'	2WD 50	38,500	200	8	0.018	0.32	0.15	0.33	0.01	0.83	0.39	0.06	1.29
Spray (Pull Type)	100'	MFWD 225	35,900	200	8	0.016	0.28	0.64	0.28	0.11	1.33	0.33	0.70	2.36
Spray (Pull Type)	120'	MFWD 225	50,800	200	8	0.014	0.24	0.53	0.33	0.09	1.21	0.39	0.58	2.18
Spray (Ropewick)	20'	MFWD 190	2,600	200	8	0.084	1.44	2.73	0.10	0.42	4.69	0.11	2.57	7.39
Spray (Spot)	27'	MFWD 170	5,480	200	8	0.062	1.06	1.80	0.16	0.28	3.32	0.18	1.76	5.28
Spray (Spot)	40'	MFWD 170	7,220	200	8	0.042	0.72	1.22	0.14	0.19	2.28	0.16	1.19	3.64
Spray (Spot)	50'	MFWD 170	7,410	200	8	0.033	0.57	0.97	0.11	0.15	1.82	0.13	0.95	2.91
Spray (Spot)	53'	MFWD 170	8,430	200	8	0.031	0.54	0.92	0.12	0.14	1.73	0.14	0.90	2.78
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

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2014

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	R&M Imp.	R&M P.U.	Total Direct	Fixed Imp.	Fixed P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Subsoiler	5 shank	MFWD 225	7,870	100	15	0.122	1.52	4.67	0.32	0.83	7.36	0.75	5.08	13.19
Subsoiler low-till	6 shank	MFWD 225	10,500	100	15	0.102	1.27	3.90	0.35	0.69	6.23	0.84	4.24	11.32
Subsoiler low-till	8 shank	MFWD 225	19,600	100	15	0.076	0.95	2.92	0.50	0.52	4.90	1.18	3.17	9.26

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, 2014

ITEM NAME	UNIT	PRICE
		dollars
ADJUVANTS		
Crop Oil Conc.(Pet.)	pt	3.72
Crop Oil Conc.(Veg.)	pt	4.68
Drift/Defoamer	pt	5.27
Spreader Sticker	pt	3.54
Surfactant	pt	3.68
CLEANING		
Cleaning Peanuts	ton	18.00
CROP CONSULTANT		
Crop Consultant	acre	7.00
Rice Consultant	acre	7.00
CUSTOM FERTILIZE		
App Fert by Air	cwt	7.00
App Fert by Air(Min)	appl	7.00
Custom Apply Fert	acre	7.50
CUSTOM LIME		
Lime (Spread)	ton	48.00
CUSTOM PLANT		
Custom Plant Air	cwt	7.00
Custom Plant Ground	acre	13.00
CUSTOM SPRAY		
App by Air (2 gal)	appl	4.00
App by Air (3 gal)	appl	5.00
App by Air (5 gal)	appl	6.00
App by Air (10 gal)	appl	7.75
Custom Spray Ground	acre	7.00
Custom Spray Self Pr	acre	6.25
Custom Spray Tractor	acre	7.50
DRYING		
Dry Corn	bu	0.19
Dry Grain Sorghum	cwt	0.25
Dry Peanuts	ton	24.00
Dry Rice	bu	0.40
ERADICATION FEE		
Eradication	acre	1.00
FERTILIZERS		
Amm Sulfate (21% N)	cwt	17.75
Amm Sulfate dry/mix	lb	0.20
Boron 15G	lb	0.75
Boron Plus	pt	4.25
DAP	cwt	25.75
Fert 10-34-0	cwt	28.25
Fert 11-37-0	cwt	33.50
Fert 30-0-0-5	cwt	18.00
Fert 41-0-0-4	cwt	20.50
Lime	ton	38.00
Phosphorus(46% P2O5)	cwt	24.00
Potash (60% K2O)	cwt	23.75
Sulfur 90%	lb	0.30
Sulfur Plus	pt	2.60
SuperMax AMS	pt	2.70
UAN (32% N)	cwt	19.50
UAN + Sulfur (28%)	cwt	19.50
Urea, Solid (46% N)	cwt	22.60
Zinc Plus	pt	3.00
Zinc Sulfate 31%	lb	0.50
FUNGICIDES		
Abound	pt	28.50
Allegiance Flowable	pt	58.75
Apron Maxx RTA	oz	0.74
Apron Maxx RTA+Moly	pt	13.63
Apron XL LS	oz	7.93
Artisan	oz	0.96
Bravo Ultrex	lb	5.80
Bravo Weather Stick	pt	4.29
Captan 50 WP	lb	6.00
Cotton Seed Trt.	acre	20.00
CruiserMaxx	oz	4.07
Dithane F-45	qt	8.63
Dithane Rainshield	lb	2.84
Enable 2F	oz	1.95
Folicur 3.6	oz	1.08
Headline EC	oz	2.81
Headline SC	oz	2.99
Manzate 75 DF	lb	5.25
Moncut 70 DF	lb	24.85
Prevail	lb	28.25
Provost	oz	2.01
Quadris	oz	2.53
Quilt	pt	19.55
Quilt XCEL	pt	26.16
Ridomil Gold	oz	6.22
Ridomil Gold PC GR	lb	2.42
Rovral 4F	pt	16.88
Stiletto	oz	0.56
Stratego	pt	22.50
Stratego YLD	oz	4.46
Terrachlor 2EC	pt	1.87
Tilt 3.6 EC	oz	0.90
Tilt/ Bravo SE	oz	0.37
Uniform	oz	4.95
Vitavax RTU-Thiram	oz	0.35
GINNING		
Gin & Haul	lb	0.11
GROWTH REGULATORS		
Early Harvest PGR	oz	1.55
Mepex	oz	0.08
Mepex Gin Out	oz	0.14
Mepichlor 4.2%	oz	0.08
Mepiquat	oz	0.10
Mepiquat Chloride	oz	o.08
Mepiquat Extra	oz	0.08
Pentia	pt	6.09
Pix Plus	oz	0.15
Stance	oz	1.18
SuperBoll	pt	3.00
HARVEST AIDS		
Adios	oz	1.29
Aim 2EC	oz	6.25
Ammonium Sulfate	lb	0.20
CottonQuik	pt	4.25
Def 6	pt	8.17
Def/Folex	pt	8.63
Defol 3	gal	3.45
Defol 5	gal	5.52
Defol 750	pt	1.26
Dropp SC	oz	1.46
ET	pt	44.69
Ethephon 6E	pt	3.00
Finish 6	pt	8.44
First Pick	pt	3.12
Folex 6EC	pt	9.08
Freefall SC	oz	1.41
Ginstar EC	pt	26.86
Gramoxone SL	oz	0.22
Paraquat	oz	0.22
Prep	pt	3.25
Sharpen	oz	5.16
Shed-a-leaf	gal	3.60
Sodium Chlorate 3L	gal	3.45
Sodium Chlorate 5L	gal	5.52
TDZ SC	oz	1.41
Thidiazuron 4lb	oz	1.41
Tribufos 6lb	pt	8.63
HAULING		
Haul Corn	bu	0.23
Haul Peanuts	ton	14.50
Haul Rice	bu	0.35
Haul Sorghum	bu	0.25
Haul Soybeans	bu	0.27
Haul Wheat	bu	0.26

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2014(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
HERBICIDES			Grandstand R	qt	28.38
2,4-D Amine 4	pt	2.94	Guardsman Max	pt	6.71
2,4-D Weedar 64	pt	2.28	Halex GT	pt	5.87
AAtrex 4L	pt	2.22	Halomax	oz	18.50
AAtrex NINE-O	lb	4.22	Harmony Extra SG	oz	11.80
Accent Q	oz	32.47	Harmony Extra XP	oz	14.40
Aim 2EC	oz	6.25	Harness XTRA	pt	6.28
Assure II	oz	0.70	Hoelon 3EC	pt	11.03
Atrazine 4L	pt	1.97	Impact	oz	16.83
Atrazine 90DF	lb	4.64	Karmex XP	lb	6.50
Axial XL	oz	0.98	Lariat	qt	7.46
Axiom 68DF	oz	1.65	Laudis	oz	4.88
Banvel	pt	7.69	Layby Pro	qt	14.27
Basagran	pt	11.88	Lexar	pt	6.54
Basis	oz	17.95	Liberty 280	oz	0.63
Beyond	oz	3.76	Linex 4L	pt	9.99
Bicep II Magnum	qt	11.22	Londax 60DF	oz	16.25
Bicep Lite Magnum	pt	7.12	Lorox 50DF	lb	18.70
Blazer Ultra	pt	9.37	Makaze	pt	1.88
Bolero 8EC	pt	7.25	MSMA 6.6	pt	3.16
Boundary 6.5 EC	9.37	9.37	MSMA6 Plus	pt	2.63
Buccaneer Plus	pt	2.19	Newpath 2SL	oz	3.24
Bullet	pt	3.73	Osprey	oz	3.08
Butyrac 175 (2,4-D	pt	3.24	Outlook	pt	14.34
Butyrac 200 (2,4-DB)	pt	3.92	Paraquat	oz	0.22
Cadre	oz	3.52	Parazone 3SL	oz	0.26
Callisto 4SC	oz	5.28	Parrlay	pt	8.13
Canopy 75%	oz	2.50	Peak Accu Pak	oz	14.46
Canopy EX	oz	7.38	Permit 75 DF	oz	19.25
Caparol 4L	pt	2.68	Poast 1.53	pt	11.26
Capreno	oz	5.71	Poast Plus	pt	8.41
Celebrity Plus	lb	84.50	Prefix	pt	6.13
Clarity	pt	10.19	Propimax EC	pt	18.13
Classic	oz	15.28	Prowl 3.3 EC	pt	5.51
Clearpath	lb	49.11	Prowl H20	pt	5.04
Clincher SF	oz	2.15	Pursuit 2S	oz	2.98
Cobra 2EC	oz	1.45	Python WDG	oz	12.55
Command 3ME	pt	17.11	Quinstar	lb	44.50
Cornerstone Plus	pt	1.56	Raptor	oz	4.05
Cotoran 4L	pt	5.80	Reflex 2LC	pt	7.51
Cotton Pro	pt	3.44	Regiment 80WP	oz	38.57
Credit Extra	pt	1.80	Remedy Ultra	pt	8.22
Direx 4L	pt	3.74	Resolve SG	oz	7.95
Diuron 4L	pt	3.49	Resource .86EC	pt	27.09
Diuron 80 DF	lb	4.88	Ricebeaux	pt	5.37
Diuron 80%	lb	4.88	RicePro	pt	4.70
Dual II Magnum	pt	13.57	Riceshot	pt	3.62
Dual Magnum	pt	12.62	Ricestar HT	pt	21.20
Duet	pt	4.99	Rifel	pt	8.24
Envoke	oz	88.37	Roundup Power Max	oz	0.19
Evik DF 80W	lb	10.60	Roundup PowerMax	pt	3.00
Exceed	oz	10.71	Roundup WeatherMax	oz	0.25
Expert	pt	4.16	Roundup WeatherMax	pt	4.01
Facet L	pt	12.72	Salvo	pt	4.36
Finesse	oz	14.16	Scepter 70 DG	oz	3.99
First Rate	oz	37.80	Select Max	pt	11.94
First Shot	oz	7.68	Sequence	pt	5.07
Flexstar	pt	11.37	Simazine 4L	pt	2.57
Frontier 6.0	oz	0.63	Stalwart	pt	6.56
Fultime	pt	5.21	Stam 80 EDF	lb	7.95
Fusilade DX	oz	1.15	Stam M4	qt	7.74
Fusion	pt	27.38	Staple LX	oz	8.55
Glyfos	pt	1.66	Steadfast	oz	17.20
Glyfos Xtra	pt	1.44	Sterling Blue	pt	9.81
Glyphosate 3lbs a.e	pt	2.00	Storm	pt	11.09
Glyphosate 3lbs a.e	oz	0.13	Strada WG	oz	6.30
Glystar Plus	pt	1.56	Strongarm	oz	51.20
Goal 2XL	pt	10.00	Superwham	qt	8.31
Gramonone SL 2.0	oz	0.22			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2014

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Suprend	lb	12.74	Malathion 5E	pt	4.76
Surpass EC	qt	25.00	Malathion 8E	pt	5.50
Synchrony XP	oz	10.98	Methyl Parathion 4	pt	5.79
Touchdown Total	qt	5.93	Monitor 4	pt	16.33
Treflan 4D	pt	3.34	Mustang Max	oz	1.60
Tricor DF	lb	14.75	Oberon 4 SC	pt	76.19
Trifluralin 4EC	pt	3.28	Orthene 90S	lb	6.50
Valor SX	oz	5.49	Penncap-M	pt	6.71
Valor XLT	oz	4.06	Phorate	lb	3.00
Verdict	oz	1.51	Pounce 25WP	lb	12.77
Zidua	oz	7.27	Prolex	oz	2.62
Zorial Rapid 80DF	lb	13.99	Respect .8EC	pt	33.79
INOCULANT			Sevin 4F	pt	6.01
Nitrastick	lbseed	0.02	Sevin 80S	lb	7.35
Nitro Fix	lbseed	0.03	Sevin XLR Plus	qt	12.39
Optimize LIFT	oz	0.54	Sniper	oz	1.05
INSECT SCOUTING			Steward	pt	29.30
Insect Scouting	acre	7.00	Temik 15G Grit	lb	4.00
INSECTICIDES			Temik 15G Gypsum	lb	4.00
Acephate 90%	lb	6.68	Thimet 20-G Lock N L	lb	3.50
Acephate 90SP	lb	6.85	Thionex 3 EC	pt	4.46
Acramite-4SC	oz	1.91	Thionex 50W	lb	10.51
Asana .66 XL	oz	0.72	Tombstone Helios	pt	43.75
Aztec 2.1% G	lb	3.64	Tracer 4SC	oz	8.17
Baythroid XL	oz	2.15	Trimax Pro	oz	1.85
Bidrin 8WM	oz	0.98	Tundra	oz	0.78
Bidrin XP	oz	0.78	Vydate C-LV	oz	0.73
Bifenthrin	oz	0.78	Zeal Miticid I	oz	17.83
Bifenture 2EC	pt	12.50	Zephyr	oz	0.78
Brigade EC	pt	14.01	IRRIGATION SUPPLIES		
Brigade WSB	lb	22.22	Roll-Out Pipe	ft	0.26
Capture 2EC	oz	1.76	SEED/PLANTS		
Capture LFR	oz	2.15	Corn Seed BtRR	thous	3.21
Carbaryl 4L	pt	5.27	Corn Seed Conv.	thous	2.53
Carbine 50WG	oz	5.25	Corn Seed RR2	thous	3.05
Centric 40WG	oz	4.70	Corn Seed VT3	thous	3.48
Comite ll	pt	8.21	Corn Seed VT3Pro	thous	3.45
Confirm 2F	oz	2.06	Cotton Seed B2RF	thous	0.72
Counter 15G	lb	2.55	Cotton Seed LLB2	thous	1.17
Cruiser Maxx Rice	lbseed	0.129	Peanut Seed	lb	0.74
Curacron 8E	pt	10.78	Rice Clearfield	lb	0.99
Cypermethrin	oz	0.55	Rice Clearfield Hyb	lb	6.12
Denim 0.16 EC	pt	32.63	Rice Conv. Hybrid	lb	5.80
Diamond .83EC	pt	14.83	Rice Seed (Levees)	lb	0.44
Dimethoate 4E	pt	6.24	Rice Seed CF(Levees)	lb	0.99
Dimilin 2L	oz	2.02	Rice Seed CFH(Levee)	lb	6.12
Dipel DF	lb	12.25	Rice Seed Conv.	lb	0.44
Dipel ES	pt	4.63	Sorghum Concept	lb	2.11
Discipline 2 EC	oz	0.78	Soybean Seed LL	lb	1.03
Endigo ZC	pt	26.88	Soybean Seed RR2	lb	1.11
Fanfare 2EC	oz	0.78	Wheat Seed Private	lb	0.37
Force 3G	lb	6.25	SURVEY & MARK LEVEES		
Furadan 4F	pt	9.81	Survey & Mark Levees	acre	4.50
Furadan 4FLFR	pt	9.81	Survey & Mark Levees	acre	4.50
Gaucho 600	oz	5.86	TECHNOLOGY FEE		
Hero	pt	22.50	B2 Cot Tech Fee	thous	0.76
Holster	pt	14.38	B2 Cot Tech Fee	cap/ac	31.91
Imidan 70 WSB	oz	0.74	B2RF Cot Tech Fee	thous	1.49
Incidental Pest Trt	acre	12.00	B2RF Cot Tech Fee	cap/ac	62.69
Intrepid 2F	oz	1.84	LLB2 Cot Tech Fee	thous	0.76
Intruder 70WSP	oz	9.65	RF Cot Tech Fee	thous	1.04
Karate Z	oz	2.73	RF Cot Tech Fee	cap/ac	43.66
Kelthane MF 4EC	pt	5.03	WRF Cot Tech Fee	thous	1.45
Lannate LV	pt	9.72	WS Cotton Tech Fee	cap/ac	24.00
Lannate SP	oz	1.68			
Larvin 3.2	oz	0.60			
Leverage 2.7	oz	1.61			
Lorsban 15G	lb	2.15			
Lorsban 4E	pt	5.63			

Appendix Table 5. Estimated fuel prices and interest rates, Mississippi, 2014

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	3.30
Gasoline	gal	3.30
LP Gas	gal	1.59
INTEREST RATES		
Short-term	%	3.75
Intermediate-term	%	4.50

Appendix Table 6. Labor types, wage rates and unallocated labor multipliers for crop enterprises, Mississippi, 2014

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	12.50
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, 2014

	Unit	Futures Contract Month	Futures Contract Price[a]	Basis[b]	Forward Contract Price[c]	Loan Rate[d]	Budget Price[e]
Corn	bu	Dec '14	4.80	-0.2760	4.53	2.09	4.53
Cotton Lint	lb	Dec '14	0.800	-0.0147	0.785	.520	0.79
Cottonseed	lb						0.107[f]
Grain Sorghum	bu				4.30	3.60	4.30
Peanuts	ton				550.00	355.00	550.00
Soybeans	bu	Nov '14	11.68	-0.2710	11.41	5.21	11.41
Rice	bu	Sep '14	6.62	-0.7510	5.86	3.02	5.86
Wheat	bu	Jul '14	6.93	-0.6441	6.29	2.69	6.29

[a] Average of the futures contract month closings in October.

[b] The basis is computed by subtracting the 2001-2013 average near futures contract month closings in October from the daily spot cash prices reported in October. Sources: Agricultural Marketing Service, Market News, USDA.

[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 2013 crop year for soybeans, corn, grain sorghum, and wheat. 2013 national average loan rate for cotton. 2013 Mississippi stored loan rate for long grain rice. 2013 national average loan rate for peanuts.

[e] Price used in the 2014 MAFES Planning Budgets.

[f] Cottonseed price is the marketing year average price averaged over the years 2009-2013, Agricultural Prices Summary, USDA.

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, 2014

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			0.18	11.41	43.18	54.59
Well & Pump, 1/4 CP	each			2.89			0.05	2.94	8.12	11.06
Engine, 1/4 CP, 65	each								8.60	8.60
June Irr. 3app@.75"	ac-in		11.09	1.26			0.19	12.54		12.54
July Irr. 4app@.75"	ac-in		14.79	1.68			0.21	16.68		16.68
Aug Irr. 3app@.75"	ac-in		11.09	1.26			0.12	12.47		12.47
TOTALS		0.00	36.97	18.32	1.84	0.00	0.78	57.91	59.90	117.81

Note: Cost of production estimates are based on 2013 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, 2014

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'		1.22	0.28	0.47		0.07	2.04	1.39	3.43
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.21	0.05	0.12			0.38	0.18	0.56
Roll-Out Pipe	ft	8.58					0.11	8.69		8.69
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.28	0.06	0.39		0.01	0.74	0.47	1.21
IRRIGATE LABOR	hour				1.81		0.02	1.83		1.83
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		0.41	0.10	0.57		0.01	1.09	0.70	1.79
Land Forming ($390)	each								26.30	26.30
Well & Pump, Furrow	each			2.44			0.03	2.47	6.85	9.32
Main Line Pipe	each								4.73	4.73
Engine, RPF, Corn	each								7.26	7.26
1st June Irrigation	ac-in		8.74	0.88			0.12	9.74		9.74
2nd June Irrigation	ac-in		8.74	0.88			0.12	9.74		9.74
3rd June Irrigation	ac-in		8.74	0.88			0.12	9.74		9.74
1st July Irrigation	ac-in		8.74	0.88			0.09	9.71		9.71
TOTALS		8.58	37.08	6.45	4.51	0.00	0.70	57.32	47.88	105.20

Note: Cost of production estimates are based on 2013 input prices.

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