SOYBEANS
2014
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2013-02

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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Table of Contents

2014 Planning Budgets

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, 9, and 10. 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
Soybeans, early-planted, RR, stale seedbed, 12R 30"
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	4.0000	24.00	_____
HARVEST AIDS					
Paraquat	oz	0.22	16.0000	3.52	_____
Sodium Chlorate 3L	gal	3.45	1.0000	3.45	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	24.00	1.0000	24.00	_____
Potash (60% K2O)	cwt	23.75	1.2000	28.50	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Headline EC	oz	2.81	3.0000	8.43	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	6.0000	12.00	_____
2,4-D Amine 4	pt	2.94	2.0000	5.88	_____
Valor SX	oz	5.49	2.0000	10.98	_____
Prefix	pt	6.13	2.0000	12.26	_____
INSECTICIDES					
Karate Z	oz	2.73	0.9600	2.62	_____
Acephate 90SP	lb	6.85	0.7500	5.14	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.11	50.0000	55.50	_____
ADJUVANTS					
Surfactant	pt	3.68	0.2000	0.74	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.2000	9.60	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.3723	4.66	_____
Harvesters	hour	12.50	0.1021	1.28	_____
HAND LABOR					
Implements	hour	9.06	0.1379	1.25	_____
UNALLOCATED LABOR	hour	12.50	0.4271	5.34	_____
DIESEL FUEL					
Tractors	gal	3.30	3.6418	12.02	_____
Harvesters	gal	3.30	1.3935	4.60	_____
REPAIR & MAINTENANCE					
Implements	acre	4.46	1.0000	4.46	_____
Tractors	acre	1.86	1.0000	1.86	_____
Harvesters	acre	2.92	1.0000	2.92	_____
INTEREST ON OP. CAP.	acre	5.59	1.0000	5.59	_____

TOTAL DIRECT EXPENSES				269.70	_____
FIXED EXPENSES					
Implements	acre	8.78	1.0000	8.78	_____
Tractors	acre	11.35	1.0000	11.35	_____
Harvesters	acre	11.16	1.0000	11.16	_____

TOTAL FIXED EXPENSES				31.29	_____

TOTAL SPECIFIED EXPENSES				300.99	_____

Note: Cost of production estimates are based on 2013 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 1.B Summary of estimated costs and returns per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Delta Area, Mississippi, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.41	42.0000	479.22	_____
TOTAL INCOME				479.22	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	24.00	1.0000	24.00	_____
HARVEST AIDS	acre	6.97	1.0000	6.97	_____
FERTILIZERS	acre	52.50	1.0000	52.50	_____
FUNGICIDES	acre	14.94	1.0000	14.94	_____
HERBICIDES	acre	41.12	1.0000	41.12	_____
INSECTICIDES	acre	7.76	1.0000	7.76	_____
SEED/PLANTS	acre	55.50	1.0000	55.50	_____
ADJUVANTS	acre	0.74	1.0000	0.74	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	9.60	1.0000	9.60	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1379	1.25	_____
OPERATOR LABOR	hour	12.50	0.4745	5.94	_____
UNALLOCATED LABOR	hour	12.50	0.4271	5.34	_____
DIESEL FUEL	gal	3.30	5.0354	16.62	_____
REPAIR & MAINTENANCE	acre	9.24	1.0000	9.24	_____
INTEREST ON OP. CAP.	acre	5.59	1.0000	5.59	_____
TOTAL DIRECT EXPENSES				269.70	_____
RETURNS ABOVE DIRECT EXPENSES				209.52	_____
TOTAL FIXED EXPENSES				31.29	_____
TOTAL SPECIFIED EXPENSES				300.99	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				178.23	_____

Note: Cost of production estimates are based on 2013 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 1.C Estimated resource use for field operations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
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	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.20	Oct	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.0000				
Potash (60% K2O)	cwt					1.2000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
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				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Nitrastick S	lbseed					50.0000				
Valor SX	oz					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Headline EC	oz					3.0000				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					0.9600				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 3L	gal					1.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.47	0.47	0.61	0.42

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 1.D Estimated costs for field operations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
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		1.32	0.25	0.97		0.10	2.64	1.36	4.00
Lime (Spread)	ton	9.60					0.36	9.96		9.96
Spin Spreader	5 ton		1.36	0.48	1.38		0.12	3.34	1.80	5.14
Phosphorus(46% P2O5)	cwt	24.00					0.90	24.90		24.90
Potash (60% K2O)	cwt	28.50					1.07	29.57		29.57
Disk Harrow	24'		2.64	1.23	1.94		0.22	6.03	4.15	10.18
Field Cultivate Fld	24'		2.01	0.71	1.48		0.16	4.36	3.55	7.91
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
Plant & Pre-Folding	12R-30		2.18	1.98	2.22		0.12	6.50	5.09	11.59
Soybean Seed RR2	lb	55.50					1.04	56.54		56.54
CruiserMaxx	oz	6.51					0.12	6.63		6.63
Nitrastick S	lbseed	1.25					0.02	1.27		1.27
Valor SX	oz	10.98					0.21	11.19		11.19
Spray (Broadcast)	60'		0.91	0.28	0.80		0.03	2.02	1.02	3.04
Glyphosate 3lbs a.e	pt	4.00					0.06	4.06		4.06
Prefix	pt	12.26					0.19	12.45		12.45
Spray (Broadcast)	60'		0.91	0.28	0.80		0.03	2.02	1.02	3.04
Glyphosate 3lbs a.e	pt	4.00					0.06	4.06		4.06
App by Air (5 gal)	appl	3.00					0.03	3.03		3.03
Headline EC	oz	8.43					0.08	8.51		8.51
App by Air (5 gal)	appl	3.00					0.03	3.03		3.03
Karate Z	oz	2.62					0.02	2.64		2.64
App by Air (5 gal)	appl	6.00					0.04	6.04		6.04
Acephate 90SP	lb	5.14					0.03	5.17		5.17
App by Air (5 gal)	appl	6.00					0.04	6.04		6.04
Paraquat	oz	3.52					0.02	3.54		3.54
Sodium Chlorate 3L	gal	3.45					0.02	3.47		3.47
Surfactant	pt	0.74						0.74		0.74
Header -Soybean	25' Flex		4.60	3.72	2.43		0.03	10.78	12.32	23.10
Haul Soybeans	bu	11.34					0.04	11.38		11.38
Grain Cart Soybean	700 bu		0.69	0.31	0.51			1.51	0.98	2.49
TOTALS		225.72	16.62	9.24	12.53	0.00	5.59	269.70	31.29	300.99

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 1.E Estimated monthly income and expense flows per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
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	479.22
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	6.00	12.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.97	0.00
FERTILIZERS	52.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	0.00	8.43	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.88	0.00	10.98	20.26	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	0.00	2.62	5.14	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	55.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	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	11.34
CUSTOM LIME	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
LABOR	5.77	0.00	0.00	0.00	0.00	0.00	2.22	1.60	0.00	0.00	0.00	2.94
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	7.33	0.00	0.00	0.00	0.00	0.00	2.18	1.82	0.00	0.00	0.00	5.29
REPAIR & MAINTENANCE	2.67	0.00	0.00	0.00	0.00	0.00	1.98	0.56	0.00	0.00	0.00	4.03
INTEREST ON OP. CAP.	2.93	0.00	0.00	0.00	0.40	0.00	1.51	0.37	0.00	0.16	0.15	0.07
TOTAL DIRECT EXPENSES	80.80	0.00	0.00	0.00	16.28	0.00	82.13	24.61	0.00	17.21	25.00	23.67
NET INCOME	-80.80	0.00	0.00	0.00	-16.28	0.00	-82.13	-24.61	0.00	-17.21	-25.00	455.55
NET INCOME TO DATE	-80.80	-80.80	-80.80	-80.80	-97.08	-97.08	-179.21	-203.82	-203.82	-221.03	-246.03	209.52

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 1.F Estimated returns for various price/yield combinations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Delta Area, Mississippi, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.55	9.12	9.69	10.26	10.83	11.41	11.98	12.55	13.12	13.69	14.26
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-84	-72	-60	-48	-36	-24	-12	-0	11	23	35
			-115	-103	-91	-79	-67	-55	-43	-31	-19	-7	4
60	25.20	bu	-49	-35	-20	-6	8	22	36	51	65	79	94
			-80	-66	-52	-37	-23	-8	5	19	34	48	62
70	29.40	bu	-14	2	18	35	52	69	85	102	119	136	153
			-45	-29	-12	4	21	37	54	71	88	104	121
80	33.60	bu	20	39	58	77	96	115	135	154	173	192	211
			-11	7	27	46	65	84	103	123	142	161	180
90	37.80	bu	54	76	98	119	141	162	184	205	227	248	270
			23	45	66	88	109	131	153	174	196	217	239
100	42.00	bu	89	113	137	161	185	209	233	257	281	305	329
			58	82	106	130	154	178	202	226	250	274	298
110	46.20	bu	124	150	177	203	229	256	282	309	335	361	388
			93	119	145	172	198	225	251	277	304	330	356
120	50.40	bu	159	188	216	245	274	303	331	360	389	418	446
			128	156	185	214	243	271	300	329	358	386	415
130	54.60	bu	194	225	256	287	318	349	381	412	443	474	505
			162	193	225	256	287	318	349	380	412	443	474
140	58.80	bu	228	262	296	329	363	396	430	463	497	530	564
			197	231	264	298	331	365	398	432	466	499	533
150	63.00	bu	263	299	335	371	407	443	479	515	551	587	623
			232	268	304	340	376	412	448	484	519	555	591

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
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Furrow irrigated, 9 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	4.2500	25.50	_____
HARVEST AIDS					
Paraquat	oz	0.22	16.0000	3.52	_____
Sodium Chlorate 3L	gal	3.45	1.0000	3.45	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	24.00	1.0000	24.00	_____
Potash (60% K2O)	cwt	23.75	1.2000	28.50	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.53	3.0000	7.59	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	6.0000	12.00	_____
2,4-D Amine 4	pt	2.94	2.0000	5.88	_____
Valor SX	oz	5.49	2.0000	10.98	_____
Prefix	pt	6.13	2.0000	12.26	_____
INSECTICIDES					
Karate Z	oz	2.73	0.9600	2.62	_____
Acephate 90SP	lb	6.85	0.7500	5.14	_____
Intrepid 2F	oz	1.84	1.0000	1.84	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.11	50.0000	55.50	_____
ADJUVANTS					
Surfactant	pt	3.68	0.2250	0.83	_____
HAULING					
Haul Soybeans	bu	0.27	65.0000	17.55	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.2000	9.60	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.5134	6.42	_____
Harvesters	hour	12.50	0.1021	1.28	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1379	1.25	_____
UNALLOCATED LABOR	hour	12.49	0.4833	6.04	_____
DIESEL FUEL					
Tractors	gal	3.30	4.8957	16.16	_____
Harvesters	gal	3.30	1.3935	4.60	_____
Roll-Out Pipe Irr.	gal	3.30	7.3316	24.18	_____
REPAIR & MAINTENANCE					
Implements	acre	5.07	1.0000	5.07	_____
Tractors	acre	2.49	1.0000	2.49	_____
Harvesters	acre	2.92	1.0000	2.92	_____
Roll-Out Pipe Irr.	acre	5.98	1.0000	5.98	_____
INTEREST ON OP. CAP.	acre	6.34	1.0000	6.34	_____

TOTAL DIRECT EXPENSES				329.13	_____
FIXED EXPENSES					
Implements	acre	10.77	1.0000	10.77	_____
Tractors	acre	15.11	1.0000	15.11	_____
Harvesters	acre	11.16	1.0000	11.16	_____
Roll-Out Pipe Irr.	acre	45.14	1.0000	45.14	_____

TOTAL FIXED EXPENSES				82.18	_____

TOTAL SPECIFIED EXPENSES				411.31	_____

Note: Cost of production estimates are based on 2013 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 2.B Summary of estimated costs and returns per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.41	65.0000	741.65	_____
TOTAL INCOME				741.65	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	25.50	1.0000	25.50	_____
HARVEST AIDS	acre	6.97	1.0000	6.97	_____
FERTILIZERS	acre	52.50	1.0000	52.50	_____
FUNGICIDES	acre	14.10	1.0000	14.10	_____
HERBICIDES	acre	41.12	1.0000	41.12	_____
INSECTICIDES	acre	9.60	1.0000	9.60	_____
IRRIGATION SUPPLIES	acre	8.58	1.0000	8.58	_____
SEED/PLANTS	acre	55.50	1.0000	55.50	_____
ADJUVANTS	acre	0.83	1.0000	0.83	_____
HAULING	acre	17.55	1.0000	17.55	_____
CUSTOM LIME	acre	9.60	1.0000	9.60	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1379	1.25	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	12.50	0.6155	7.70	_____
UNALLOCATED LABOR	hour	12.49	0.4833	6.04	_____
DIESEL FUEL	gal	3.30	13.6209	44.94	_____
REPAIR & MAINTENANCE	acre	16.46	1.0000	16.46	_____
INTEREST ON OP. CAP.	acre	6.34	1.0000	6.34	_____
TOTAL DIRECT EXPENSES				329.13	_____
RETURNS ABOVE DIRECT EXPENSES				412.52	_____
TOTAL FIXED EXPENSES				82.18	_____
TOTAL SPECIFIED EXPENSES				411.31	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				330.34	_____

Note: Cost of production estimates are based on 2013 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 2.C Estimated resource use for field operations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., 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	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.20	Oct	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.0000				
Potash (60% K2O)	cwt					1.2000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed-Roll-Fold.	12R-30	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
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				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Nitrastick S	lbseed					50.0000				
Valor SX	oz					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Quadris	oz					3.0000				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					0.9600				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			0.25	Aug	0.2500				
Intrepid 2F	oz					1.0000				
Surfactant	pt					0.0250				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 3L	gal					1.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					65.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.61	0.61	1.11	0.48

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 2.D Estimated costs for field operations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., 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		1.32	0.25	0.97		0.10	2.64	1.36	4.00
Lime (Spread)	ton	9.60					0.36	9.96		9.96
Spin Spreader	5 ton		1.36	0.48	1.38		0.12	3.34	1.80	5.14
Phosphorus(46% P2O5)	cwt	24.00					0.90	24.90		24.90
Potash (60% K2O)	cwt	28.50					1.07	29.57		29.57
Disk Harrow	24'		2.64	1.23	1.94		0.22	6.03	4.15	10.18
Field Cultivate Fld	24'		2.01	0.71	1.48		0.16	4.36	3.55	7.91
Bed-Roll-Fold.	12R-30		2.02	0.75	1.48		0.16	4.41	3.01	7.42
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
Plant & Pre-Folding	12R-30		2.18	1.98	2.22		0.12	6.50	5.09	11.59
Soybean Seed RR2	lb	55.50					1.04	56.54		56.54
CruiserMaxx	oz	6.51					0.12	6.63		6.63
Nitrastick S	lbseed	1.25					0.02	1.27		1.27
Valor SX	oz	10.98					0.21	11.19		11.19
Spray (Broadcast)	60'		0.91	0.28	0.80		0.03	2.02	1.02	3.04
Glyphosate 3lbs a.e	pt	4.00					0.06	4.06		4.06
Prefix	pt	12.26					0.19	12.45		12.45
Spray (Broadcast)	60'		0.91	0.28	0.80		0.03	2.02	1.02	3.04
Glyphosate 3lbs a.e	pt	4.00					0.06	4.06		4.06
App by Air (5 gal)	appl	3.00					0.03	3.03		3.03
Quadris	oz	7.59					0.07	7.66		7.66
App by Air (5 gal)	appl	3.00					0.03	3.03		3.03
Karate Z	oz	2.62					0.02	2.64		2.64
App by Air (5 gal)	appl	6.00					0.04	6.04		6.04
Acephate 90SP	lb	5.14					0.03	5.17		5.17
App by Air (5 gal)	appl	1.50					0.01	1.51		1.51
Intrepid 2F	oz	1.84					0.01	1.85		1.85
Surfactant	pt	0.09						0.09		0.09
App by Air (5 gal)	appl	6.00					0.04	6.04		6.04
Paraquat	oz	3.52					0.02	3.54		3.54
Sodium Chlorate 3L	gal	3.45					0.02	3.47		3.47
Surfactant	pt	0.74						0.74		0.74
Header -Soybean	25' Flex		4.60	3.72	2.43		0.03	10.78	12.32	23.10
Haul Soybeans	bu	17.55					0.05	17.60		17.60
Grain Cart Soybean	700 bu		0.69	0.31	0.51			1.51	0.98	2.49
Roll-Out Pipe Irr.	acre	8.58	26.30	6.47	4.28		0.57	46.20	47.88	94.08
TOTALS		243.10	44.94	16.46	18.29	0.00	6.34	329.13	82.18	411.31

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 2.E Estimated monthly income and expense flows per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Furrow irrigated, 9 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	741.65
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	6.00	13.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.97	0.00
FERTILIZERS	52.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	0.00	7.59	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.88	0.00	10.98	20.26	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	0.00	2.62	6.98	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	0.00	55.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	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	17.55
CUSTOM LIME	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
LABOR	7.72	0.00	0.00	0.00	0.00	0.00	2.22	1.83	2.78	0.23	0.00	3.51
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	10.57	0.00	0.00	0.00	0.00	0.00	2.18	1.82	16.61	8.06	0.00	5.70
REPAIR & MAINTENANCE	3.70	0.00	0.00	0.00	0.00	0.00	1.98	0.56	4.91	1.18	0.00	4.13
INTEREST ON OP. CAP.	3.16	0.00	0.00	0.00	0.40	0.00	1.51	0.37	0.41	0.24	0.17	0.08
TOTAL DIRECT EXPENSES	87.25	0.00	0.00	0.00	16.28	0.00	82.13	24.84	33.29	25.92	28.45	30.97
NET INCOME	-87.25	0.00	0.00	0.00	-16.28	0.00	-82.13	-24.84	-33.29	-25.92	-28.45	710.68
NET INCOME TO DATE	-87.25	-87.25	-87.25	-87.25	-103.53	-103.53	-185.66	-210.50	-243.79	-269.71	-298.16	412.52

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.55	9.12	9.69	10.26	10.83	11.41	11.98	12.55	13.12	13.69	14.26
PERCENT	YIELD	UNIT	dollars										
50	32.50	bu	-42	-23	-5	13	31	50	69	87	106	124	143
			-124	-105	-87	-68	-50	-31	-13	5	23	42	61
60	39.00	bu	11	33	56	78	100	122	145	167	189	211	234
			-70	-48	-26	-3	18	40	62	85	107	129	151
70	45.50	bu	65	91	117	143	169	195	221	247	273	299	325
			-16	9	35	61	87	113	139	165	190	216	242
80	52.00	bu	119	149	178	208	238	267	297	327	356	386	416
			37	66	96	126	155	185	215	244	274	304	333
90	58.50	bu	173	206	239	273	306	340	373	406	440	473	506
			91	124	157	191	224	257	291	324	358	391	424
100	65.00	bu	227	264	301	338	375	412	449	486	523	560	597
			144	182	219	256	293	330	367	404	441	478	515
110	71.50	bu	280	321	362	403	444	484	525	566	607	648	688
			198	239	280	321	361	402	443	484	525	565	606
120	78.00	bu	334	379	423	468	512	557	601	646	690	735	779
			252	297	341	386	430	475	519	564	608	653	697
130	84.50	bu	388	436	485	533	581	629	677	726	774	822	870
			306	354	402	451	499	547	595	643	692	740	788
140	91.00	bu	442	494	546	598	650	702	754	805	857	909	961
			360	412	464	516	568	619	671	723	775	827	879
150	97.50	bu	496	552	607	663	718	774	830	885	941	997	1052
			414	469	525	581	636	692	747	803	859	914	970

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
Soybeans, May-planted, RR, 12R 30"
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	3.5000	21.00	_____
HARVEST AIDS					
Paraquat	oz	0.22	16.0000	3.52	_____
Sodium Chlorate 3L	gal	3.45	1.0000	3.45	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	24.00	1.0000	24.00	_____
Potash (60% K2O)	cwt	23.75	1.2000	28.50	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.53	4.5000	11.39	_____
HERBICIDES					
Valor SX	oz	5.49	2.0000	10.98	_____
Glyphosate 3lbs a.e	pt	2.00	4.0000	8.00	_____
Prefix	pt	6.13	2.0000	12.26	_____
INSECTICIDES					
Karate Z	oz	2.73	1.4400	3.93	_____
Acephate 90SP	lb	6.85	0.7500	5.14	_____
Intrepid 2F	oz	1.84	3.0000	5.52	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.11	50.0000	55.50	_____
ADJUVANTS					
Surfactant	pt	3.68	0.2750	1.01	_____
HAULING					
Haul Soybeans	bu	0.27	30.0000	8.10	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.2000	9.60	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.3928	4.92	_____
Harvesters	hour	12.50	0.1021	1.28	_____
HAND LABOR					
Implements	hour	9.06	0.1379	1.25	_____
UNALLOCATED LABOR	hour	12.50	0.4455	5.57	_____
DIESEL FUEL					
Tractors	gal	3.30	3.8419	12.68	_____
Harvesters	gal	3.30	1.3935	4.60	_____
REPAIR & MAINTENANCE					
Implements	acre	4.66	1.0000	4.66	_____
Tractors	acre	1.96	1.0000	1.96	_____
Harvesters	acre	2.92	1.0000	2.92	_____
INTEREST ON OP. CAP.	acre	5.35	1.0000	5.35	_____

TOTAL DIRECT EXPENSES				264.86	_____
FIXED EXPENSES					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	11.97	1.0000	11.97	_____
Harvesters	acre	11.16	1.0000	11.16	_____

TOTAL FIXED EXPENSES				32.33	_____

TOTAL SPECIFIED EXPENSES				297.19	_____

Note: Cost of production estimates are based on 2013 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 3.B Summary of estimated costs and returns per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.41	30.0000	342.30	_____
TOTAL INCOME				342.30	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
HARVEST AIDS	acre	6.97	1.0000	6.97	_____
FERTILIZERS	acre	52.50	1.0000	52.50	_____
FUNGICIDES	acre	17.90	1.0000	17.90	_____
HERBICIDES	acre	31.24	1.0000	31.24	_____
INSECTICIDES	acre	14.59	1.0000	14.59	_____
SEED/PLANTS	acre	55.50	1.0000	55.50	_____
ADJUVANTS	acre	1.02	1.0000	1.02	_____
HAULING	acre	8.10	1.0000	8.10	_____
CUSTOM LIME	acre	9.60	1.0000	9.60	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1379	1.25	_____
OPERATOR LABOR	hour	12.50	0.4950	6.20	_____
UNALLOCATED LABOR	hour	12.50	0.4455	5.57	_____
DIESEL FUEL	gal	3.30	5.2355	17.28	_____
REPAIR & MAINTENANCE	acre	9.54	1.0000	9.54	_____
INTEREST ON OP. CAP.	acre	5.35	1.0000	5.35	_____
TOTAL DIRECT EXPENSES				264.86	_____
RETURNS ABOVE DIRECT EXPENSES				77.44	_____
TOTAL FIXED EXPENSES				32.33	_____
TOTAL SPECIFIED EXPENSES				297.19	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				45.11	_____

Note: Cost of production estimates are based on 2013 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 3.C Estimated resource use for field operations, per acre
Soybeans, May-planted, RR, 12R 30"
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	0.20	Nov		0.04	0.04	0.04	0.03
Disk Harrow	24'	MFWD 190	0.081	0.25	Nov		0.02	0.02	0.02	0.01
Lime (Spread)	ton			0.20	Nov	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Nov		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.0000				
Potash (60% K2O)	cwt					1.2000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May		0.06	0.06	0.06	0.05
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Nitrastick S	lbseed					50.0000				
Valor SX	oz					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
App by Air (5 gal)	appl			0.75	Jul	0.7500				
Quadris	oz					4.5000				
Karate Z	oz					1.4400				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			0.75	Aug	0.7500				
Intrepid 2F	oz					3.0000				
Surfactant	pt					0.0750				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 3L	gal					1.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					30.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.49	0.49	0.63	0.44

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 3.D Estimated costs for field operations, per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2014

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Subsoiler	3 shank		1.32	0.25	0.97		0.10	2.64	1.36	4.00
Disk Harrow	24'		0.66	0.30	0.49		0.05	1.50	1.04	2.54
Lime (Spread)	ton	9.60					0.36	9.96		9.96
Spin Spreader	5 ton		1.36	0.48	1.38		0.12	3.34	1.80	5.14
Phosphorus(46% P2O5)	cwt	24.00					0.90	24.90		24.90
Potash (60% K2O)	cwt	28.50					1.07	29.57		29.57
Disk Harrow	24'		2.64	1.23	1.94		0.13	5.94	4.15	10.09
Field Cultivate Fld	24'		2.01	0.71	1.48		0.08	4.28	3.55	7.83
Plant & Pre-Folding	12R-30		2.18	1.98	2.22		0.12	6.50	5.09	11.59
Soybean Seed RR2	lb	55.50					1.04	56.54		56.54
CruiserMaxx	oz	6.51					0.12	6.63		6.63
Nitrastick S	lbseed	1.25					0.02	1.27		1.27
Valor SX	oz	10.98					0.21	11.19		11.19
Spray (Broadcast)	60'		0.91	0.28	0.80		0.04	2.03	1.02	3.05
Glyphosate 3lbs a.e	pt	4.00					0.08	4.08		4.08
Prefix	pt	12.26					0.23	12.49		12.49
Spray (Broadcast)	60'		0.91	0.28	0.80		0.03	2.02	1.02	3.04
Glyphosate 3lbs a.e	pt	4.00					0.06	4.06		4.06
App by Air (5 gal)	appl	4.50					0.06	4.56		4.56
Quadris	oz	11.39					0.14	11.53		11.53
Karate Z	oz	3.93					0.05	3.98		3.98
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Acephate 90SP	lb	5.14					0.05	5.19		5.19
App by Air (5 gal)	appl	4.50					0.04	4.54		4.54
Intrepid 2F	oz	5.52					0.05	5.57		5.57
Surfactant	pt	0.28						0.28		0.28
App by Air (5 gal)	appl	6.00					0.04	6.04		6.04
Paraquat	oz	3.52					0.02	3.54		3.54
Sodium Chlorate 3L	gal	3.45					0.02	3.47		3.47
Surfactant	pt	0.74						0.74		0.74
Header -Soybean	25' Flex		4.60	3.72	2.43		0.03	10.78	12.32	23.10
Haul Soybeans	bu	8.10					0.03	8.13		8.13
Grain Cart Soybean	700 bu		0.69	0.31	0.51			1.51	0.98	2.49
TOTALS		219.67	17.28	9.54	13.02	0.00	5.35	264.86	32.33	297.19

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 3.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2014

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	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	342.30
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.50	10.50	6.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.97	0.00
FERTILIZERS	52.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	11.39	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	27.24	4.00	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	3.93	10.66	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	55.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.74	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	8.10
CUSTOM LIME	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
LABOR	2.84	0.00	0.00	0.00	0.00	1.94	4.50	0.80	0.00	0.00	0.00	2.94
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	3.34	0.00	0.00	0.00	0.00	2.64	5.10	0.91	0.00	0.00	0.00	5.29
REPAIR & MAINTENANCE	1.03	0.00	0.00	0.00	0.00	1.23	2.97	0.28	0.00	0.00	0.00	4.03
INTEREST ON OP. CAP.	2.60	0.00	0.00	0.00	0.00	0.13	1.94	0.09	0.25	0.20	0.08	0.06
TOTAL DIRECT EXPENSES	71.91	0.00	0.00	0.00	0.00	5.94	105.01	6.08	20.07	21.64	13.79	20.42
NET INCOME	-71.91	0.00	0.00	0.00	0.00	-5.94	-105.01	-6.08	-20.07	-21.64	-13.79	321.88
NET INCOME TO DATE	-71.91	-71.91	-71.91	-71.91	-71.91	-77.85	-182.86	-188.94	-209.01	-230.65	-244.44	77.44

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.
* Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.55	9.12	9.69	10.26	10.83	11.41	11.98	12.55	13.12	13.69	14.26
PERCENT	YIELD	UNIT	dollars										
50	15.00	bu	-132	-123	-115	-106	-98	-89	-81	-72	-63	-55	-46
			-164	-156	-147	-139	-130	-121	-113	-104	-96	-87	-79
60	18.00	bu	-107	-97	-87	-76	-66	-56	-45	-35	-25	-15	-4
			-139	-129	-119	-109	-98	-88	-78	-68	-57	-47	-37
70	21.00	bu	-82	-70	-58	-46	-34	-22	-10	1	13	25	37
			-115	-103	-91	-79	-67	-55	-43	-31	-19	-7	4
80	24.00	bu	-57	-44	-30	-16	-3	10	24	37	51	65	79
			-90	-76	-62	-49	-35	-21	-8	5	19	33	46
90	27.00	bu	-32	-17	-2	13	28	44	59	74	90	105	121
			-65	-49	-34	-19	-3	11	27	42	57	73	88
100	30.00	bu	-8	8	26	43	60	77	94	111	128	145	163
			-40	-23	-6	10	27	45	62	79	96	113	130
110	33.00	bu	16	35	54	73	92	110	129	148	167	186	204
			-15	3	22	40	59	78	97	116	135	153	172
120	36.00	bu	41	62	82	103	123	144	164	185	205	226	246
			9	29	50	70	91	111	132	153	173	194	214
130	39.00	bu	66	88	110	133	155	177	199	222	244	266	288
			34	56	78	100	123	145	167	189	212	234	256
140	42.00	bu	91	115	139	163	187	211	235	259	282	306	330
			58	82	106	130	154	178	202	226	250	274	298
150	45.00	bu	116	141	167	193	218	244	270	295	321	347	372
			83	109	135	160	186	212	237	263	289	314	340

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
Soybeans, May-planted, RR, 12R 30"
Flood irrigated, 13.5 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	4.0000	24.00	_____
HARVEST AIDS					
Paraquat	oz	0.22	16.0000	3.52	_____
Sodium Chlorate 3L	gal	3.45	1.0000	3.45	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	24.00	1.0000	24.00	_____
Potash (60% K2O)	cwt	23.75	1.2000	28.50	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.53	6.0000	15.18	_____
HERBICIDES					
Valor SX	oz	5.49	2.0000	10.98	_____
Glyphosate 3lbs a.e	pt	2.00	4.0000	8.00	_____
Prefix	pt	6.13	2.0000	12.26	_____
INSECTICIDES					
Karate Z	oz	2.73	1.9200	5.24	_____
Acephate 90SP	lb	6.85	0.7500	5.14	_____
Intrepid 2F	oz	1.84	4.0000	7.36	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.11	50.0000	55.50	_____
ADJUVANTS					
Surfactant	pt	3.68	0.3000	1.10	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.2000	9.60	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.6162	7.72	_____
Harvesters	hour	12.50	0.1021	1.28	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1379	1.25	_____
UNALLOCATED LABOR	hour	12.50	0.4639	5.80	_____
DIESEL FUEL					
Tractors	gal	3.30	5.6297	18.56	_____
Harvesters	gal	3.30	1.3935	4.60	_____
Contour Flood Irr.	gal	3.30	10.9974	36.30	_____
REPAIR & MAINTENANCE					
Implements	acre	5.41	1.0000	5.41	_____
Tractors	acre	2.88	1.0000	2.88	_____
Harvesters	acre	2.92	1.0000	2.92	_____
Contour Flood Irr.	acre	11.96	1.0000	11.96	_____
INTEREST ON OP. CAP.	acre	6.37	1.0000	6.37	_____

TOTAL DIRECT EXPENSES				346.03	_____
FIXED EXPENSES					
Implements	acre	11.18	1.0000	11.18	_____
Tractors	acre	17.36	1.0000	17.36	_____
Harvesters	acre	11.16	1.0000	11.16	_____
Contour Flood Irr.	acre	34.79	1.0000	34.79	_____

TOTAL FIXED EXPENSES				74.49	_____

TOTAL SPECIFIED EXPENSES				420.52	_____

Note: Cost of production estimates are based on 2013 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 4.B Summary of estimated costs and returns per acre
Soybeans, May-planted, RR, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.41	53.0000	604.73	
TOTAL INCOME				604.73	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	24.00	1.0000	24.00	
HARVEST AIDS	acre	6.97	1.0000	6.97	
FERTILIZERS	acre	52.50	1.0000	52.50	
FUNGICIDES	acre	21.69	1.0000	21.69	
HERBICIDES	acre	31.24	1.0000	31.24	
INSECTICIDES	acre	17.74	1.0000	17.74	
SEED/PLANTS	acre	55.50	1.0000	55.50	
ADJUVANTS	acre	1.11	1.0000	1.11	
HAULING	acre	14.31	1.0000	14.31	
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	
CUSTOM LIME	acre	9.60	1.0000	9.60	
INOCULANT	acre	1.25	1.0000	1.25	
HAND LABOR	hour	9.06	0.1379	1.25	
IRRIGATE LABOR	hour	9.06	0.3125	2.82	
OPERATOR LABOR	hour	12.50	0.7183	9.00	
UNALLOCATED LABOR	hour	12.50	0.4639	5.80	
DIESEL FUEL	gal	3.30	18.0207	59.46	
REPAIR & MAINTENANCE	acre	23.17	1.0000	23.17	
INTEREST ON OP. CAP.	acre	6.37	1.0000	6.37	
TOTAL DIRECT EXPENSES				346.03	
RETURNS ABOVE DIRECT EXPENSES				258.70	
TOTAL FIXED EXPENSES				74.49	
TOTAL SPECIFIED EXPENSES				420.52	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				184.21	

Note: Cost of production estimates are based on 2013 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 4.C Estimated resource use for field operations, per acre
Soybeans, May-planted, RR, 12R 30"
Flood irrigated, 13.5 ac-in., 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			
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.20	Nov	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Nov		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.0000				
Potash (60% K2O)	cwt					1.2000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May		0.06	0.06	0.06	0.05
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Nitrastick S	lbseed					50.0000				
Valor SX	oz					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris	oz					6.0000				
Karate Z	oz					1.9200				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Intrepid 2F	oz					4.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 3L	gal					1.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.71	0.71	1.16	0.46

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 4.D Estimated costs for field operations, per acre
Soybeans, May-planted, RR, 12R 30"
Flood irrigated, 13.5 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								
Disk Harrow	24'		2.64	1.23	1.94		0.22	6.03	4.15	10.18
Lime (Spread)	ton	9.60					0.36	9.96		9.96
Spin Spreader	5 ton		1.36	0.48	1.38		0.12	3.34	1.80	5.14
Phosphorus(46% P2O5)	cwt	24.00					0.90	24.90		24.90
Potash (60% K2O)	cwt	28.50					1.07	29.57		29.57
Disk Harrow	24'		2.64	1.23	1.94		0.13	5.94	4.15	10.09
Field Cultivate Fld	24'		2.01	0.71	1.48		0.08	4.28	3.55	7.83
Plant & Pre-Folding	12R-30		2.18	1.98	2.22		0.12	6.50	5.09	11.59
Soybean Seed RR2	lb	55.50					1.04	56.54		56.54
CruiserMaxx	oz	6.51					0.12	6.63		6.63
Nitrastick S	lbseed	1.25					0.02	1.27		1.27
Valor SX	oz	10.98					0.21	11.19		11.19
Spray (Broadcast)	60'		0.91	0.28	0.80		0.04	2.03	1.02	3.05
Glyphosate 3lbs a.e	pt	4.00					0.08	4.08		4.08
Prefix	pt	12.26					0.23	12.49		12.49
Spray (Broadcast)	60'		0.91	0.28	0.80		0.03	2.02	1.02	3.04
Glyphosate 3lbs a.e	pt	4.00					0.06	4.06		4.06
App by Air (5 gal)	appl	6.00					0.07	6.07		6.07
Quadris	oz	15.18					0.19	15.37		15.37
Karate Z	oz	5.24					0.07	5.31		5.31
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Acephate 90SP	lb	5.14					0.05	5.19		5.19
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Intrepid 2F	oz	7.36					0.07	7.43		7.43
Surfactant	pt	0.37						0.37		0.37
App by Air (5 gal)	appl	6.00					0.04	6.04		6.04
Paraquat	oz	3.52					0.02	3.54		3.54
Sodium Chlorate 3L	gal	3.45					0.02	3.47		3.47
Surfactant	pt	0.74						0.74		0.74
Header -Soybean	25' Flex		4.60	3.72	2.43		0.03	10.78	12.32	23.10
Haul Soybeans	bu	14.31					0.04	14.35		14.35
Grain Cart Soybean	700 bu		0.69	0.31	0.51			1.51	0.98	2.49
Contour Flood Irr.	acre	2.25	41.52	12.95	5.37		0.82	62.91	40.41	103.32
TOTALS		238.16	59.46	23.17	18.87	0.00	6.37	346.03	74.49	420.52

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 4.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, RR, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2014

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	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	604.73
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	12.00	6.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.97	0.00
FERTILIZERS	52.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	15.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	27.24	4.00	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	5.24	12.50	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	55.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.74	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	14.31
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
LABOR	3.32	0.00	0.00	0.00	0.00	1.94	4.95	2.52	1.52	1.52	0.16	2.94
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	4.00	0.00	0.00	0.00	0.00	2.64	5.10	14.95	13.58	13.58	0.32	5.29
REPAIR & MAINTENANCE	1.71	0.00	0.00	0.00	0.00	1.23	2.97	7.89	2.64	2.64	0.06	4.03
INTEREST ON OP. CAP.	2.67	0.00	0.00	0.00	0.00	0.13	1.95	0.50	0.55	0.42	0.08	0.07
TOTAL DIRECT EXPENSES	73.80	0.00	0.00	0.00	0.00	5.94	105.47	32.11	44.71	43.03	14.33	26.64
NET INCOME	-73.80	0.00	0.00	0.00	0.00	-5.94	-105.47	-32.11	-44.71	-43.03	-14.33	578.09
NET INCOME TO DATE	-73.80	-73.80	-73.80	-73.80	-73.80	-79.74	-185.21	-217.32	-262.03	-305.06	-319.39	258.70

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre
Soybeans, May-planted, RR, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.55	9.12	9.69	10.26	10.83	11.41	11.98	12.55	13.12	13.69	14.26
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-112	-96	-81	-66	-51	-36	-21	-6	8	23	39
			-186	-171	-156	-141	-126	-110	-95	-80	-65	-50	-35
60	31.80	bu	-68	-50	-31	-13	4	22	40	58	76	95	113
			-142	-124	-106	-88	-70	-51	-33	-15	2	20	38
70	37.10	bu	-24	-3	18	39	60	81	102	123	145	166	187
			-98	-77	-56	-35	-14	7	28	49	70	91	112
80	42.40	bu	19	43	68	92	116	140	164	189	213	237	261
			-54	-30	-6	17	41	66	90	114	138	162	187
90	47.70	bu	63	90	118	145	172	199	226	254	281	308	335
			-10	16	43	70	97	125	152	179	206	234	261
100	53.00	bu	107	137	167	198	228	258	288	319	349	379	409
			33	63	93	123	153	184	214	244	274	305	335
110	58.30	bu	151	184	217	251	284	317	350	384	417	450	484
			76	110	143	176	209	243	276	309	343	376	409
120	63.60	bu	195	231	267	304	340	376	413	449	485	521	558
			120	157	193	229	266	302	338	374	411	447	483
130	68.90	bu	239	278	317	357	396	435	475	514	553	593	632
			164	204	243	282	322	361	400	439	479	518	557
140	74.20	bu	283	325	367	410	452	494	537	579	621	664	706
			208	251	293	335	378	420	462	505	547	589	632
150	79.50	bu	327	372	417	463	508	553	599	644	689	735	780
			252	297	343	388	434	479	524	570	615	660	706

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
Soybeans after wheat, RR, 12R 30"
Pivot irrigated, 7.5 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	3.0000	18.00	
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	24.00	1.0000	24.00	
Potash (60% K2O)	cwt	23.75	1.2000	28.50	
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	
Quadris	oz	2.53	6.0000	15.18	
HERBICIDES					
Valor SX	oz	5.49	2.0000	10.98	
Paraquat	oz	0.22	48.0000	10.56	
Prefix	pt	6.13	2.0000	12.26	
Glyphosate 3lbs a.e	pt	2.00	1.0000	2.00	
INSECTICIDES					
Karate Z	oz	2.73	1.7000	4.64	
Acephate 90SP	lb	6.85	0.7500	5.14	
Intrepid 2F	oz	1.84	4.0000	7.36	
Baythroid XL	oz	2.15	2.1300	4.58	
SEED/PLANTS					
Soybean Seed RR2	lb	1.11	50.0000	55.50	
ADJUVANTS					
Surfactant	pt	3.68	0.1000	0.37	
HAULING					
Haul Soybeans	bu	0.27	45.0000	12.15	
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.2000	9.60	
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	
OPERATOR LABOR					
Tractors	hour	12.50	0.1733	2.18	
Harvesters	hour	12.50	0.1021	1.28	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	
HAND LABOR					
Implements	hour	9.06	0.1309	1.18	
UNALLOCATED LABOR	hour	12.49	0.2369	2.96	
DIESEL FUEL					
Tractors	gal	3.30	1.6952	5.60	
Harvesters	gal	3.30	1.3935	4.60	
1/2-mi Pivot Irr.	gal	3.30	16.4057	54.14	
REPAIR & MAINTENANCE					
Implements	acre	3.12	1.0000	3.12	
Tractors	acre	0.87	1.0000	0.87	
Harvesters	acre	2.92	1.0000	2.92	
1/2-mi Pivot Irr.	acre	9.90	1.0000	9.90	
INTEREST ON OP. CAP.	acre	5.56	1.0000	5.56	

TOTAL DIRECT EXPENSES				323.36	
FIXED EXPENSES					
Implements	acre	5.28	1.0000	5.28	
Tractors	acre	5.28	1.0000	5.28	
Harvesters	acre	11.16	1.0000	11.16	
1/2-mi Pivot Irr.	acre	33.37	1.0000	33.37	

TOTAL FIXED EXPENSES				55.09	

TOTAL SPECIFIED EXPENSES				378.45	

Note: Cost of production estimates are based on 2013 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 5.B Summary of estimated costs and returns per acre
Soybeans after wheat, RR, 12R 30"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.41	45.0000	513.45	_____
TOTAL INCOME				513.45	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	18.00	1.0000	18.00	_____
FERTILIZERS	acre	52.50	1.0000	52.50	_____
FUNGICIDES	acre	21.69	1.0000	21.69	_____
HERBICIDES	acre	35.80	1.0000	35.80	_____
INSECTICIDES	acre	21.72	1.0000	21.72	_____
SEED/PLANTS	acre	55.50	1.0000	55.50	_____
ADJUVANTS	acre	0.37	1.0000	0.37	_____
HAULING	acre	12.15	1.0000	12.15	_____
CUSTOM LIME	acre	9.60	1.0000	9.60	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1309	1.18	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	12.50	0.2755	3.46	_____
UNALLOCATED LABOR	hour	12.49	0.2369	2.96	_____
DIESEL FUEL	gal	3.30	19.4945	64.34	_____
REPAIR & MAINTENANCE	acre	16.81	1.0000	16.81	_____
INTEREST ON OP. CAP.	acre	5.56	1.0000	5.56	_____
TOTAL DIRECT EXPENSES				323.36	_____
RETURNS ABOVE DIRECT EXPENSES				190.09	_____
TOTAL FIXED EXPENSES				55.09	_____
TOTAL SPECIFIED EXPENSES				378.45	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				135.00	_____

Note: Cost of production estimates are based on 2013 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 5.C Estimated resource use for field operations, per acre
Soybeans after wheat, RR, 12R 30"
Pivot irrigated, 7.5 ac-in., 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			
Lime (Spread)	ton			0.20	Nov	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Nov		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.0000				
Potash (60% K2O)	cwt					1.2000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Nitrastick S	lbseed					50.0000				
Valor SX	oz					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Paraquat	oz					48.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Quadris	oz					6.0000				
Karate Z	oz					1.7000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Intrepid 2F	oz					4.0000				
Surfactant	pt					0.1000				
Baythroid XL	oz					2.1300				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					45.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.27	0.27	0.45	0.23

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 5.D Estimated costs for field operations, per acre
Soybeans after wheat, RR, 12R 30"
Pivot irrigated, 7.5 ac-in., 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	9.60					0.36	9.96		9.96
Spin Spreader	5 ton		1.36	0.48	1.36		0.12	3.32	1.80	5.12
Phosphorus(46% P2O5)	cwt	24.00					0.90	24.90		24.90
Potash (60% K2O)	cwt	28.50					1.07	29.57		29.57
Plant & Pre-Folding	12R-30		2.18	1.98	2.19		0.10	6.45	5.09	11.54
Soybean Seed RR2	lb	55.50					0.87	56.37		56.37
CruiserMaxx	oz	6.51					0.10	6.61		6.61
Nitrastick S	lbseed	1.25					0.02	1.27		1.27
Valor SX	oz	10.98					0.17	11.15		11.15
Spray (Broadcast)	60'		0.91	0.28	0.78		0.03	2.00	1.02	3.02
Paraquat	oz	10.56					0.17	10.73		10.73
Prefix	pt	12.26					0.19	12.45		12.45
Spray (Broadcast)	60'		0.46	0.14	0.39		0.01	1.00	0.51	1.51
Glyphosate 3lbs a.e	pt	2.00					0.03	2.03		2.03
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Quadris	oz	15.18					0.14	15.32		15.32
Karate Z	oz	4.64					0.04	4.68		4.68
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Acephate 90SP	lb	5.14					0.05	5.19		5.19
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Intrepid 2F	oz	7.36					0.07	7.43		7.43
Surfactant	pt	0.37						0.37		0.37
Baythroid XL	oz	4.58					0.04	4.62		4.62
Header -Soybean	25' Flex		4.60	3.72	2.38		0.03	10.73	12.32	23.05
Haul Soybeans	bu	12.15					0.04	12.19		12.19
Grain Cart Soybean	700 bu		0.69	0.31	0.50			1.50	0.98	2.48
1/2-mi Pivot Irr.	acre		54.14	9.90	0.47		0.83	65.34	33.37	98.71
TOTALS		228.58	64.34	16.81	8.07	0.00	5.56	323.36	55.09	378.45

Note: Cost of production estimates are based on 2013 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 5.E Estimated monthly income and expense flows per acre
Soybeans after wheat, RR, 12R 30"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2014

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	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	513.45
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.00	0.00	0.00
FERTILIZERS	52.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	15.18	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.80	2.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.72	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	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	12.15
CUSTOM LIME	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00
LABOR	1.36	0.00	0.00	0.00	0.00	0.00	0.34	3.01	0.44	0.04	0.00	2.88
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	1.36	0.00	0.00	0.00	0.00	0.00	0.00	19.33	22.12	16.24	0.00	5.29
REPAIR & MAINTENANCE	0.48	0.00	0.00	0.00	0.00	0.00	0.00	10.71	0.97	0.62	0.00	4.03
INTEREST ON OP. CAP.	2.45	0.00	0.00	0.00	0.00	0.00	0.01	2.03	0.32	0.68	0.00	0.07
TOTAL DIRECT EXPENSES	67.75	0.00	0.00	0.00	0.00	0.00	0.35	132.14	25.85	72.85	0.00	24.42
NET INCOME	-67.75	0.00	0.00	0.00	0.00	0.00	-0.35	-132.14	-25.85	-72.85	0.00	489.03
NET INCOME TO DATE	-67.75	-67.75	-67.75	-67.75	-67.75	-67.75	-68.10	-200.24	-226.09	-298.94	-298.94	190.09

Note: Cost of production estimates are based on 2013 input prices..
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 5.F Estimated returns for various price/yield combinations, per acre
Soybeans after wheat, RR, 12R 30"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.55	9.12	9.69	10.26	10.83	11.41	11.98	12.55	13.12	13.69	14.26
PERCENT	YIELD	UNIT	dollars										
50	22.50	bu	-124	-111	-99	-86	-73	-60	-47	-34	-22	-9	3
			-179	-166	-154	-141	-128	-115	-102	-89	-77	-64	-51
60	27.00	bu	-87	-72	-56	-41	-25	-10	4	20	35	51	66
			-142	-127	-111	-96	-80	-65	-50	-34	-19	-3	11
70	31.50	bu	-50	-32	-14	3	21	39	57	75	93	111	129
			-105	-87	-69	-51	-33	-15	2	20	38	56	74
80	36.00	bu	-12	7	28	48	69	89	110	130	151	171	192
			-67	-47	-26	-6	14	34	55	75	96	116	137
90	40.50	bu	24	47	70	93	116	139	163	186	209	232	255
			-30	-7	15	38	61	84	107	131	154	177	200
100	45.00	bu	61	87	113	138	164	190	215	241	267	292	318
			6	32	57	83	109	135	160	186	212	237	263
110	49.50	bu	99	127	155	183	211	240	268	296	324	353	381
			43	72	100	128	156	185	213	241	269	298	326
120	54.00	bu	136	167	197	228	259	290	321	351	382	413	444
			81	112	142	173	204	235	266	296	327	358	389
130	58.50	bu	173	206	240	273	307	340	373	407	440	473	507
			118	151	185	218	252	285	318	352	385	418	452
140	63.00	bu	210	246	282	318	354	390	426	462	498	534	570
			155	191	227	263	299	335	371	407	443	479	515
150	67.50	bu	248	286	325	363	402	440	479	517	556	594	633
			193	231	270	308	347	385	424	462	501	539	578

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
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-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	2.0000	12.00	_____
HARVEST AIDS					
Paraquat	oz	0.22	16.0000	3.52	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	24.00	0.6600	15.84	_____
Potash (60% K2O)	cwt	23.75	1.0000	23.75	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Headline EC	oz	2.81	3.0000	8.43	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	6.0000	12.00	_____
2,4-D Amine 4	pt	2.94	2.0000	5.88	_____
Valor SX	oz	5.49	2.0000	10.98	_____
Dual Magnum	pt	12.62	1.0000	12.62	_____
Tricor DF	lb	14.75	0.3000	4.43	_____
INSECTICIDES					
Acephate 90SP	lb	6.85	0.7500	5.14	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.11	50.0000	55.50	_____
ADJUVANTS					
Surfactant	pt	3.68	0.2000	0.74	_____
HAULING					
Haul Soybeans	bu	0.27	43.0000	11.61	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.2500	12.00	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.3690	4.62	_____
Harvesters	hour	12.50	0.1021	1.28	_____
HAND LABOR					
Implements	hour	9.06	0.1543	1.40	_____
UNALLOCATED LABOR	hour	12.52	0.4240	5.31	_____
DIESEL FUEL					
Tractors	gal	3.30	3.6087	11.92	_____
Harvesters	gal	3.30	1.3935	4.60	_____
REPAIR & MAINTENANCE					
Implements	acre	4.38	1.0000	4.38	_____
Tractors	acre	1.84	1.0000	1.84	_____
Harvesters	acre	2.92	1.0000	2.92	_____
INTEREST ON OP. CAP.	acre	5.00	1.0000	5.00	_____

TOTAL DIRECT EXPENSES				244.22	_____
FIXED EXPENSES					
Implements	acre	8.46	1.0000	8.46	_____
Tractors	acre	11.25	1.0000	11.25	_____
Harvesters	acre	11.16	1.0000	11.16	_____

TOTAL FIXED EXPENSES				30.87	_____

TOTAL SPECIFIED EXPENSES				275.09	_____

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 6.B Summary of estimated costs and returns per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.41	43.0000	490.63	_____
TOTAL INCOME				490.63	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	12.00	1.0000	12.00	_____
HARVEST AIDS	acre	3.52	1.0000	3.52	_____
FERTILIZERS	acre	39.59	1.0000	39.59	_____
FUNGICIDES	acre	14.94	1.0000	14.94	_____
HERBICIDES	acre	45.91	1.0000	45.91	_____
INSECTICIDES	acre	5.14	1.0000	5.14	_____
SEED/PLANTS	acre	55.50	1.0000	55.50	_____
ADJUVANTS	acre	0.74	1.0000	0.74	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	12.00	1.0000	12.00	_____
HAND LABOR	hour	9.06	0.1543	1.40	_____
OPERATOR LABOR	hour	12.50	0.4711	5.90	_____
UNALLOCATED LABOR	hour	12.52	0.4240	5.31	_____
DIESEL FUEL	gal	3.30	5.0023	16.52	_____
REPAIR & MAINTENANCE	acre	9.14	1.0000	9.14	_____
INTEREST ON OP. CAP.	acre	5.00	1.0000	5.00	_____
TOTAL DIRECT EXPENSES				244.22	_____
RETURNS ABOVE DIRECT EXPENSES				246.41	_____
TOTAL FIXED EXPENSES				30.87	_____
TOTAL SPECIFIED EXPENSES				275.09	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				215.54	_____

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 6.C Estimated resource use for field operations, per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-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	0.2500				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
2,4-D Amine 4	pt					2.0000				
Valor SX	oz					2.0000				
Plant - Folding	12R-30	MFWD 190	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Dual Magnum	pt					1.0000				
Tricor DF	lb					0.3000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Headline EC	oz					3.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Paraquat	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					43.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Sep		0.02	0.02	0.02	0.01
							-------	-------	-------	-------
TOTALS							0.47	0.47	0.62	0.42

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 6.D Estimated costs for field operations, per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-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	12.00					0.45	12.45		12.45
Spin Spreader	5 ton		1.36	0.48	1.38		0.12	3.34	1.80	5.14
Phosphorus(46% P2O5)	cwt	15.84					0.59	16.43		16.43
Potash (60% K2O)	cwt	23.75					0.89	24.64		24.64
Disk Harrow	24'		2.64	1.23	1.94		0.22	6.03	4.15	10.18
Field Cultivate Fld	24'		2.01	0.71	1.48		0.16	4.36	3.55	7.91
App by Air (5 gal)	appl	6.00					0.13	6.13		6.13
Glyphosate 3lbs a.e	pt	4.00					0.09	4.09		4.09
2,4-D Amine 4	pt	5.88					0.13	6.01		6.01
Valor SX	oz	10.98					0.24	11.22		11.22
Plant - Folding	12R-30		2.03	1.71	2.07		0.11	5.92	4.50	10.42
Soybean Seed RR2	lb	55.50					1.04	56.54		56.54
CruiserMaxx	oz	6.51					0.12	6.63		6.63
Spray (Broadcast)	60'		0.91	0.28	0.80		0.03	2.02	1.02	3.04
Glyphosate 3lbs a.e	pt	4.00					0.06	4.06		4.06
Dual Magnum	pt	12.62					0.20	12.82		12.82
Tricor DF	lb	4.43					0.07	4.50		4.50
Spray (Broadcast)	60'		0.91	0.28	0.80		0.03	2.02	1.02	3.04
Glyphosate 3lbs a.e	pt	4.00					0.06	4.06		4.06
Spray (Broadcast)	60'		0.46	0.14	0.40		0.01	1.01	0.51	1.52
Headline EC	oz	8.43					0.08	8.51		8.51
Spray (Broadcast)	60'		0.91	0.28	0.80		0.01	2.00	1.02	3.02
Acephate 90SP	lb	5.14					0.03	5.17		5.17
App by Air (5 gal)	appl	6.00					0.04	6.04		6.04
Paraquat	oz	3.52					0.02	3.54		3.54
Surfactant	pt	0.74						0.74		0.74
Header -Soybean	25' Flex		4.60	3.72	2.43		0.03	10.78	12.32	23.10
Haul Soybeans	bu	11.61					0.04	11.65		11.65
Grain Cart Soybean	700 bu		0.69	0.31	0.51			1.51	0.98	2.49
TOTALS		200.95	16.52	9.14	12.61	0.00	5.00	244.22	30.87	275.09

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 6.E Estimated monthly income and expense flows per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-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	490.63
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	6.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	0.00
FERTILIZERS	39.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	0.00	8.43	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	20.86	0.00	25.05	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	0.00	0.00	5.14	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	55.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	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	11.61
CUSTOM LIME	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.80	0.00	0.00	0.00	0.00	0.00	2.07	1.60	0.00	0.40	0.80	2.94
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	6.01	0.00	0.00	0.00	0.00	0.00	2.03	1.82	0.00	0.46	0.91	5.29
REPAIR & MAINTENANCE	2.42	0.00	0.00	0.00	0.00	0.00	1.71	0.56	0.00	0.14	0.28	4.03
INTEREST ON OP. CAP.	2.43	0.00	0.00	0.00	0.00	0.59	1.27	0.45	0.00	0.09	0.10	0.07
TOTAL DIRECT EXPENSES	67.25	0.00	0.00	0.00	0.00	27.45	69.09	29.48	0.00	9.52	17.49	23.94
NET INCOME	-67.25	0.00	0.00	0.00	0.00	-27.45	-69.09	-29.48	0.00	-9.52	-17.49	466.69
NET INCOME TO DATE	-67.25	-67.25	-67.25	-67.25	-67.25	-94.70	-163.79	-193.27	-193.27	-202.79	-220.28	246.41

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.
* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.55	9.12	9.69	10.26	10.83	11.41	11.98	12.55	13.12	13.69	14.26
PERCENT	YIELD	UNIT	dollars										
50	21.50	bu	-54	-42	-29	-17	-5	6	19	31	43	55	68
			-85	-73	-60	-48	-36	-23	-11	0	12	25	37
60	25.80	bu	-18	-4	10	25	40	54	69	84	98	113	128
			-49	-34	-20	-5	9	23	38	53	68	82	97
70	30.10	bu	16	34	51	68	85	102	119	137	154	171	188
			-14	3	20	37	54	71	89	106	123	140	157
80	34.40	bu	52	72	91	111	130	150	170	189	209	229	248
			21	41	60	80	100	119	139	158	178	198	217
90	38.70	bu	88	110	132	154	176	198	220	242	264	286	308
			57	79	101	123	145	167	189	211	233	255	278
100	43.00	bu	123	148	172	197	221	246	270	295	320	344	369
			92	117	141	166	191	215	240	264	289	313	338
110	47.30	bu	159	186	213	240	267	294	321	348	375	402	429
			128	155	182	209	236	263	290	317	344	371	398
120	51.60	bu	195	224	253	283	312	342	371	401	430	459	489
			164	193	223	252	281	311	340	370	399	429	458
130	55.90	bu	230	262	294	326	358	390	421	453	485	517	549
			199	231	263	295	327	359	391	423	454	486	518
140	60.20	bu	266	300	334	369	403	438	472	506	541	575	609
			235	269	304	338	372	407	441	475	510	544	578
150	64.50	bu	301	338	375	412	449	485	522	559	596	633	669
			271	307	344	381	418	455	491	528	565	602	639

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2013 input prices.

Estimated costs per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-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	_____
HARVEST AIDS					
Paraquat	oz	0.22	16.0000	3.52	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	24.00	0.6600	15.84	_____
Potash (60% K2O)	cwt	23.75	1.0000	23.75	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.53	3.0000	7.59	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.00	4.0000	8.00	_____
Tricor DF	lb	14.75	0.3000	4.43	_____
Dual Magnum	pt	12.62	1.0000	12.62	_____
INSECTICIDES					
Dimilin 2L	oz	2.02	1.0000	2.02	_____
Acephate 90SP	lb	6.85	0.7500	5.14	_____
Intrepid 2F	oz	1.84	2.0000	3.68	_____
Baythroid XL	oz	2.15	1.0650	2.29	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.11	50.0000	55.50	_____
ADJUVANTS					
Surfactant	pt	3.68	0.2500	0.92	_____
HAULING					
Haul Soybeans	bu	0.27	30.0000	8.10	_____
CUSTOM LIME					
Lime (Spread)	ton	48.00	0.2500	12.00	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.3879	4.86	_____
Harvesters	hour	12.50	0.1021	1.28	_____
HAND LABOR					
Implements	hour	9.06	0.1662	1.50	_____
UNALLOCATED LABOR	hour	12.51	0.4410	5.52	_____
DIESEL FUEL					
Tractors	gal	3.30	3.7939	12.53	_____
Harvesters	gal	3.30	1.3935	4.60	_____
REPAIR & MAINTENANCE					
Implements	acre	4.69	1.0000	4.69	_____
Tractors	acre	1.94	1.0000	1.94	_____
Harvesters	acre	2.92	1.0000	2.92	_____
INTEREST ON OP. CAP.	acre	3.79	1.0000	3.79	_____

TOTAL DIRECT EXPENSES				221.54	_____
FIXED EXPENSES					
Implements	acre	8.99	1.0000	8.99	_____
Tractors	acre	11.82	1.0000	11.82	_____
Harvesters	acre	11.16	1.0000	11.16	_____

TOTAL FIXED EXPENSES				31.97	_____

TOTAL SPECIFIED EXPENSES				253.51	_____

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 7.B Summary of estimated costs and returns per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.41	30.0000	342.30	_____
TOTAL INCOME				342.30	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.00	1.0000	6.00	_____
HARVEST AIDS	acre	3.52	1.0000	3.52	_____
FERTILIZERS	acre	39.59	1.0000	39.59	_____
FUNGICIDES	acre	14.10	1.0000	14.10	_____
HERBICIDES	acre	25.05	1.0000	25.05	_____
INSECTICIDES	acre	13.13	1.0000	13.13	_____
SEED/PLANTS	acre	55.50	1.0000	55.50	_____
ADJUVANTS	acre	0.92	1.0000	0.92	_____
HAULING	acre	8.10	1.0000	8.10	_____
CUSTOM LIME	acre	12.00	1.0000	12.00	_____
HAND LABOR	hour	9.06	0.1662	1.50	_____
OPERATOR LABOR	hour	12.50	0.4901	6.14	_____
UNALLOCATED LABOR	hour	12.51	0.4410	5.52	_____
DIESEL FUEL	gal	3.30	5.1875	17.13	_____
REPAIR & MAINTENANCE	acre	9.55	1.0000	9.55	_____
INTEREST ON OP. CAP.	acre	3.79	1.0000	3.79	_____
TOTAL DIRECT EXPENSES				221.54	_____
RETURNS ABOVE DIRECT EXPENSES				120.76	_____
TOTAL FIXED EXPENSES				31.97	_____
TOTAL SPECIFIED EXPENSES				253.51	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				88.79	_____

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 7.C Estimated resource use for field operations, per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-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	Nov	0.2500				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Apr		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May		0.06	0.06	0.06	0.05
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Tricor DF	lb					0.3000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Dimilin 2L	oz					1.0000				
Quadris	oz					3.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Acephate 90SP	lb					0.7500				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Aug		0.01	0.01	0.02	0.01
Intrepid 2F	oz					2.0000				
Baythroid XL	oz					1.0650				
Surfactant	pt					0.0500				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					30.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.49	0.49	0.65	0.44

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 7.D Estimated costs for field operations, per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-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	12.00					0.45	12.45		12.45
Spin Spreader	5 ton		1.36	0.48	1.38		0.07	3.29	1.80	5.09
Phosphorus(46% P2O5)	cwt	15.84					0.35	16.19		16.19
Potash (60% K2O)	cwt	23.75					0.52	24.27		24.27
Disk Harrow	24'		2.64	1.23	1.94		0.13	5.94	4.15	10.09
Field Cultivate Fld	24'		2.01	0.71	1.48		0.08	4.28	3.55	7.83
Plant & Pre-Folding	12R-30		2.18	1.98	2.22		0.12	6.50	5.09	11.59
Soybean Seed RR2	lb	55.50					1.04	56.54		56.54
CruiserMaxx	oz	6.51					0.12	6.63		6.63
Spray (Broadcast)	60'		0.91	0.28	0.80		0.04	2.03	1.02	3.05
Glyphosate 3lbs a.e	pt	4.00					0.08	4.08		4.08
Tricor DF	lb	4.43					0.08	4.51		4.51
Dual Magnum	pt	12.62					0.24	12.86		12.86
Spray (Broadcast)	60'		0.91	0.28	0.80		0.03	2.02	1.02	3.04
Glyphosate 3lbs a.e	pt	4.00					0.06	4.06		4.06
Spray (Broadcast)	60'		0.46	0.14	0.40		0.01	1.01	0.51	1.52
Dimilin 2L	oz	2.02					0.03	2.05		2.05
Quadris	oz	7.59					0.09	7.68		7.68
Spray (Broadcast)	60'		0.91	0.28	0.80		0.02	2.01	1.02	3.03
Acephate 90SP	lb	5.14					0.05	5.19		5.19
Spray (Broadcast)	60'		0.46	0.14	0.40		0.01	1.01	0.51	1.52
Intrepid 2F	oz	3.68					0.03	3.71		3.71
Baythroid XL	oz	2.29					0.02	2.31		2.31
Surfactant	pt	0.18						0.18		0.18
App by Air (5 gal)	appl	6.00					0.04	6.04		6.04
Paraquat	oz	3.52					0.02	3.54		3.54
Surfactant	pt	0.74						0.74		0.74
Header -Soybean	25' Flex		4.60	3.72	2.43		0.03	10.78	12.32	23.10
Haul Soybeans	bu	8.10					0.03	8.13		8.13
Grain Cart Soybean	700 bu		0.69	0.31	0.51			1.51	0.98	2.49
TOTALS		177.91	17.13	9.55	13.16	0.00	3.79	221.54	31.97	253.51

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 7.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2014

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	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	342.30
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	39.59	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	7.59	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	21.05	4.00	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	2.02	11.11	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	55.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.74	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	8.10
CUSTOM LIME	12.00	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	3.32	4.50	0.80	0.40	1.20	0.00	2.94
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	4.00	5.10	0.91	0.46	1.37	0.00	5.29
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	1.71	2.97	0.28	0.14	0.42	0.00	4.03
INTEREST ON OP. CAP.	0.45	0.00	0.00	0.00	0.00	1.07	1.80	0.09	0.13	0.13	0.06	0.06
TOTAL DIRECT EXPENSES	12.45	0.00	0.00	0.00	0.00	49.69	97.43	6.08	10.74	14.41	10.32	20.42
NET INCOME	-12.45	0.00	0.00	0.00	0.00	-49.69	-97.43	-6.08	-10.74	-14.41	-10.32	321.88
NET INCOME TO DATE	-12.45	-12.45	-12.45	-12.45	-12.45	-62.14	-159.57	-165.65	-176.39	-190.80	-201.12	120.76

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.
* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.55	9.12	9.69	10.26	10.83	11.41	11.98	12.55	13.12	13.69	14.26
PERCENT	YIELD	UNIT	dollars										
50	15.00	bu	-89	-80	-71	-63	-54	-46	-37	-29	-20	-12	-3
			-121	-112	-103	-95	-86	-78	-69	-61	-52	-44	-35
60	18.00	bu	-64	-53	-43	-33	-23	-12	-2	7	17	28	38
			-96	-85	-75	-65	-55	-44	-34	-24	-14	-3	6
70	21.00	bu	-39	-27	-15	-3	8	20	32	44	56	68	80
			-71	-59	-47	-35	-23	-11	0	12	24	36	48
80	24.00	bu	-14	-0	12	26	40	53	67	81	95	108	122
			-46	-32	-19	-5	8	21	35	49	63	76	90
90	27.00	bu	10	25	41	56	71	87	102	118	133	148	164
			-21	-6	9	24	39	55	70	86	101	116	132
100	30.00	bu	35	52	69	86	103	120	137	154	172	189	206
			3	20	37	54	71	88	105	123	140	157	174
110	33.00	bu	60	78	97	116	135	154	173	191	210	229	248
			28	46	65	84	103	122	141	159	178	197	216
120	36.00	bu	84	105	125	146	167	187	208	228	249	269	290
			52	73	94	114	135	155	176	196	217	237	258
130	39.00	bu	109	132	154	176	198	221	243	265	287	310	332
			77	100	122	144	166	189	211	233	255	278	300
140	42.00	bu	134	158	182	206	230	254	278	302	326	350	374
			102	126	150	174	198	222	246	270	294	318	342
150	45.00	bu	159	185	210	236	262	287	313	339	364	390	416
			127	153	178	204	230	255	281	307	332	358	384

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
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	24.00	0.6600	15.84	_____
Potash (60% K2O)	cwt	23.75	1.0000	23.75	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.53	3.0000	7.59	_____
HERBICIDES					
Paraquat	oz	0.22	48.0000	10.56	_____
Tricor DF	lb	14.75	0.3000	4.43	_____
Dual Magnum	pt	12.62	1.0000	12.62	_____
Glyphosate 3lbs a.e	pt	2.00	1.0000	2.00	_____
INSECTICIDES					
Dimilin 2L	oz	2.02	1.0000	2.02	_____
Acephate 90SP	lb	6.85	0.7500	5.14	_____
Intrepid 2F	oz	1.84	3.0000	5.52	_____
Baythroid XL	oz	2.15	1.5975	3.43	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.11	50.0000	55.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
OPERATOR LABOR					
Tractors	hour	12.50	0.2396	3.00	_____
Harvesters	hour	12.50	0.1021	1.28	_____
HAND LABOR					
Implements	hour	9.06	0.1654	1.50	_____
UNALLOCATED LABOR	hour	12.48	0.2939	3.67	_____
DIESEL FUEL					
Tractors	gal	3.30	2.3436	7.75	_____
Harvesters	gal	3.30	1.3935	4.60	_____
REPAIR & MAINTENANCE					
Implements	acre	3.57	1.0000	3.57	_____
Tractors	acre	1.20	1.0000	1.20	_____
Harvesters	acre	2.92	1.0000	2.92	_____
INTEREST ON OP. CAP.	acre	3.49	1.0000	3.49	_____

TOTAL DIRECT EXPENSES				194.64	_____
FIXED EXPENSES					
Implements	acre	5.90	1.0000	5.90	_____
Tractors	acre	7.30	1.0000	7.30	_____
Harvesters	acre	11.16	1.0000	11.16	_____

TOTAL FIXED EXPENSES				24.36	_____

TOTAL SPECIFIED EXPENSES				219.00	_____

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 8.B Summary of estimated costs and returns per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2014

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.41	25.0000	285.25	
TOTAL INCOME				285.25	
DIRECT EXPENSES					
FERTILIZERS	acre	39.59	1.0000	39.59	
FUNGICIDES	acre	14.10	1.0000	14.10	
HERBICIDES	acre	29.61	1.0000	29.61	
INSECTICIDES	acre	16.11	1.0000	16.11	
SEED/PLANTS	acre	55.50	1.0000	55.50	
HAULING	acre	6.75	1.0000	6.75	
HAND LABOR	hour	9.06	0.1654	1.50	
OPERATOR LABOR	hour	12.50	0.3418	4.28	
UNALLOCATED LABOR	hour	12.48	0.2939	3.67	
DIESEL FUEL	gal	3.30	3.7372	12.35	
REPAIR & MAINTENANCE	acre	7.69	1.0000	7.69	
INTEREST ON OP. CAP.	acre	3.49	1.0000	3.49	
TOTAL DIRECT EXPENSES				194.64	
RETURNS ABOVE DIRECT EXPENSES				90.61	
TOTAL FIXED EXPENSES				24.36	
TOTAL SPECIFIED EXPENSES				219.00	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				66.25	

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 8.C Estimated resource use for field operations, per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-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			
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Nov		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
NT Plant&Pre-Folding	12R-30	MFWD 190	0.070	1.00	Jun		0.07	0.07	0.14	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Paraquat	oz					48.0000				
Tricor DF	lb					0.3000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Aug		0.01	0.01	0.02	0.01
Dimilin 2L	oz					1.0000				
Quadris	oz					3.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Acephate 90SP	lb					0.7500				
Spray (Broadcast)	60'	MFWD 190	0.028	0.75	Aug		0.02	0.02	0.03	0.01
Intrepid 2F	oz					3.0000				
Baythroid XL	oz					1.5975				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					25.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.34	0.34	0.50	0.29

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 8.D Estimated costs for field operations, per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-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								
Spin Spreader	5 ton		1.36	0.48	1.36		0.12	3.32	1.80	5.12
Phosphorus(46% P2O5)	cwt	15.84					0.59	16.43		16.43
Potash (60% K2O)	cwt	23.75					0.89	24.64		24.64
NT Plant&Pre-Folding	12R-30		2.28	2.13	2.28		0.10	6.79	5.44	12.23
Soybean Seed RR2	lb	55.50					0.87	56.37		56.37
CruiserMaxx	oz	6.51					0.10	6.61		6.61
Spray (Broadcast)	60'		0.91	0.28	0.78		0.03	2.00	1.02	3.02
Paraquat	oz	10.56					0.17	10.73		10.73
Tricor DF	lb	4.43					0.07	4.50		4.50
Dual Magnum	pt	12.62					0.20	12.82		12.82
Spray (Broadcast)	60'		0.46	0.14	0.39		0.01	1.00	0.51	1.51
Glyphosate 3lbs a.e	pt	2.00					0.03	2.03		2.03
Spray (Broadcast)	60'		0.46	0.14	0.39		0.01	1.00	0.51	1.51
Dimilin 2L	oz	2.02					0.02	2.04		2.04
Quadris	oz	7.59					0.07	7.66		7.66
Spray (Broadcast)	60'		0.91	0.28	0.78		0.02	1.99	1.02	3.01
Acephate 90SP	lb	5.14					0.05	5.19		5.19
Spray (Broadcast)	60'		0.68	0.21	0.59		0.01	1.49	0.76	2.25
Intrepid 2F	oz	5.52					0.05	5.57		5.57
Baythroid XL	oz	3.43					0.03	3.46		3.46
Header -Soybean	25' Flex		4.60	3.72	2.38		0.03	10.73	12.32	23.05
Haul Soybeans	bu	6.75					0.02	6.77		6.77
Grain Cart Soybean	700 bu		0.69	0.31	0.50			1.50	0.98	2.48
TOTALS		161.66	12.35	7.69	9.45	0.00	3.49	194.64	24.36	219.00

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.

Table 8.E Estimated monthly income and expense flows per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2014

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	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	285.25
DIRECT EXPENSES												
FERTILIZERS	39.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	7.59	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.61	2.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.11	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.50	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	6.75
LABOR	1.36	0.00	0.00	0.00	0.00	0.00	0.00	3.06	0.39	1.76	0.00	2.88
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	1.36	0.00	0.00	0.00	0.00	0.00	0.00	3.19	0.46	2.05	0.00	5.29
REPAIR & MAINTENANCE	0.48	0.00	0.00	0.00	0.00	0.00	0.00	2.41	0.14	0.63	0.00	4.03
INTEREST ON OP. CAP.	1.60	0.00	0.00	0.00	0.00	0.00	0.00	1.54	0.04	0.26	0.00	0.05
TOTAL DIRECT EXPENSES	44.39	0.00	0.00	0.00	0.00	0.00	0.00	99.82	3.03	28.40	0.00	19.00
NET INCOME	-44.39	0.00	0.00	0.00	0.00	0.00	0.00	-99.82	-3.03	-28.40	0.00	266.25
NET INCOME TO DATE	-44.39	-44.39	-44.39	-44.39	-44.39	-44.39	-44.39	-144.21	-147.24	-175.64	-175.64	90.61

Note: Cost of production estimates are based on 2013 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $14 plus application cost per acre.
* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2014

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.55	9.12	9.69	10.26	10.83	11.41	11.98	12.55	13.12	13.69	14.26
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-84	-77	-70	-62	-55	-48	-41	-34	-27	-20	-12
			-108	-101	-94	-87	-80	-72	-65	-58	-51	-44	-37
60	15.00	bu	-63	-55	-46	-37	-29	-20	-12	-3	4	13	22
			-87	-79	-70	-62	-53	-45	-36	-28	-19	-10	-2
70	17.50	bu	-42	-32	-22	-12	-2	7	17	27	37	47	56
			-67	-57	-47	-37	-27	-17	-7	2	12	22	32
80	20.00	bu	-22	-10	0	12	23	34	46	57	69	80	91
			-46	-35	-23	-12	-0	10	21	33	44	56	67
90	22.50	bu	-1	11	24	37	49	62	75	88	101	114	126
			-25	-12	-0	12	25	38	51	64	76	89	102
100	25.00	bu	19	33	47	62	76	90	104	119	133	147	161
			-5	9	23	37	51	66	80	94	109	123	137
110	27.50	bu	40	55	71	87	102	118	134	149	165	181	196
			15	31	47	62	78	94	109	125	141	156	172
120	30.00	bu	60	77	94	112	129	146	163	180	197	214	231
			36	53	70	87	104	121	139	156	173	190	207
130	32.50	bu	81	99	118	137	155	174	192	211	229	248	266
			57	75	94	112	131	149	168	186	205	223	242
140	35.00	bu	102	122	142	162	182	202	221	241	261	281	301
			77	97	117	137	157	177	197	217	237	257	277
150	37.50	bu	122	144	165	187	208	229	251	272	294	315	336
			98	119	141	162	184	205	226	248	269	291	312

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.	R&M P.U.	Total Direct	Fixed Imp.	Fixed 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			
Surpass EC	qt	25.00	Malathion 5E	pt	4.76
Synchrony XP	oz	10.98	Malathion 8E	pt	5.50
Touchdown Total	qt	5.93	Methyl Parathion 4	pt	5.79
Treflan 4D	pt	3.34	Monitor 4	pt	16.33
Tricor DF	lb	14.75	Mustang Max	oz	1.60
Trifluralin 4EC	pt	3.28	Oberon 4 SC	pt	76.19
Valor SX	oz	5.49	Orthene 90S	lb	6.50
Valor XLT	oz	4.06	Penncap-M	pt	6.71
Verdict	oz	1.51	Phorate	lb	3.00
Zidua	oz	7.27	Pounce 25WP	lb	12.77
Zorial Rapid 80DF	lb	13.99	Prolex	oz	2.62
INOCULANT			Respect .8EC	pt	33.79
Nitrastick	lbseed	0.02	Sevin 4F	pt	6.01
Nitro Fix	lbseed	0.03	Sevin 80S	lb	7.35
Optimize LIFT	oz	0.54	Sevin XLR Plus	qt	12.39
INSECT SCOUTING			Sniper	oz	1.05
Insect Scouting	acre	7.00	Steward	pt	29.30
INSECTICIDES			Temik 15G Grit	lb	4.00
Acephate 90%	lb	6.68	Temik 15G Gypsum	lb	4.00
Acephate 90SP	lb	6.85	Thimet 20-G Lock N L	lb	3.50
Acramite-4SC	oz	1.91	Thionex 3 EC	pt	4.46
Asana .66 XL	oz	0.72	Thionex 50W	lb	10.51
Aztec 2.1% G	lb	3.64	Tombstone Helios	pt	43.75
Baythroid XL	oz	2.15	Tracer 4SC	oz	8.17
Bidrin 8WM	oz	0.98	Trimax Pro	oz	1.85
Bidrin XP	oz	0.78	Tundra	oz	0.78
Bifenthrin	oz	0.78	Vydate C-LV	oz	0.73
Bifenture 2EC	pt	12.50	Zeal Miticid I	oz	17.83
Brigade EC	pt	14.01	Zephyr	oz	0.78
Brigade WSB	lb	22.22	IRRIGATION SUPPLIES		
Capture 2EC	oz	1.76	Roll-Out Pipe	ft	0.26
Capture LFR	oz	2.15	SEED/PLANTS		
Carbaryl 4L	pt	5.27	Corn Seed BtRR	thous	3.21
Carbine 50WG	oz	5.25	Corn Seed Conv.	thous	2.53
Centric 40WG	oz	4.70	Corn Seed RR2	thous	3.05
Comite ll	pt	8.21	Corn Seed VT3	thous	3.48
Confirm 2F	oz	2.06	Corn Seed VT3Pro	thous	3.45
Counter 15G	lb	2.55	Cotton Seed B2RF	thous	0.72
Cruiser Maxx Rice	lbseed	0.129	Cotton Seed LLB2	thous	1.17
Curacron 8E	pt	10.78	Peanut Seed	lb	0.74
Cypermethrin	oz	0.55	Rice Clearfield	lb	0.99
Denim 0.16 EC	pt	32.63	Rice Clearfield Hyb	lb	6.12
Diamond .83EC	pt	14.83	Rice Conv. Hybrid	lb	5.80
Dimethoate 4E	pt	6.24	Rice Seed (Levees)	lb	0.44
Dimilin 2L	oz	2.02	Rice Seed CF(Levees)	lb	0.99
Dipel DF	lb	12.25	Rice Seed CFH(Levee)	lb	6.12
Dipel ES	pt	4.63	Rice Seed Conv.	lb	0.44
Discipline 2 EC	oz	0.78	Sorghum Concept	lb	2.11
Endigo ZC	pt	26.88	Soybean Seed LL	lb	1.03
Fanfare 2EC	oz	0.78	Soybean Seed RR2	lb	1.11
Force 3G	lb	6.25	Wheat Seed Private	lb	0.37
Furadan 4F	pt	9.81	SURVEY & MARK LEVEES		
Furadan 4FLFR	pt	9.81	Survey & Mark Levees	acre	4.50
Gaucho 600	oz	5.86	Survey & Mark Levees	acre	4.50
Hero	pt	22.50	TECHNOLOGY FEE		
Holster	pt	14.38	B2 Cot Tech Fee	thous	0.76
Imidan 70 WSB	oz	0.74	B2 Cot Tech Fee	cap/ac	31.91
Incidental Pest Trt	acre	12.00	B2RF Cot Tech Fee	thous	1.49
Intrepid 2F	oz	1.84	B2RF Cot Tech Fee	cap/ac	62.69
Intruder 70WSP	oz	9.65	LLB2 Cot Tech Fee	thous	0.76
Karate Z	oz	2.73	RF Cot Tech Fee	thous	1.04
Kelthane MF 4EC	pt	5.03	RF Cot Tech Fee	cap/ac	43.66
Lannate LV	pt	9.72	WRF Cot Tech Fee	thous	1.45
Lannate SP	oz	1.68	WS Cotton Tech Fee	cap/ac	24.00
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
Early soybeans irrigated with roll-out pipe
160-acre system, 9 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
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.41	0.10	0.57			1.08	0.70	1.78
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, ESB	each								7.26	7.26
1st June Irrigation	ac-in		8.06	1.18			0.12	9.36		9.36
2nd June Irrigation	ac-in		8.06	1.18			0.12	9.36		9.36
July Irrigation	ac-in		8.06	1.18			0.09	9.33		9.33
TOTALS		8.58	26.30	6.47	4.28	0.00	0.57	46.20	47.88	94.08

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

Appendix Table 9. Estimated costs for field operations, per acre
Irrigation with a contour flood system
80-acre system, 13.5 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								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.46	0.09	0.20		0.01	0.76	0.57	1.33
Survey & Mark Levees	acre	2.25					0.04	2.29		2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.62	0.13	0.27		0.02	1.04	0.76	1.80
Butt Levees										
Blade-Box	6'-7'		0.44	0.07	0.25		0.01	0.77	0.36	1.13
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Apply Water										
IRRIGATE LABOR	hour				0.11			0.11		0.11
Tear Down Levees										
Levee Splitter (1/80	32"		0.42	0.08	0.21		0.01	0.72	0.45	1.17
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.62	0.13	0.27		0.01	1.03	0.76	1.79
Butt Levees										
Blade-Box	6'-7'		0.44	0.07	0.25		0.01	0.77	0.36	1.13
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Apply Water										
IRRIGATE LABOR	hour				0.11			0.11		0.11
Tear Down Levees										
Levee Splitter (1/80	32"		0.42	0.08	0.21		0.01	0.72	0.45	1.17
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.62	0.13	0.27		0.01	1.03	0.76	1.79
Butt Levees										
Blade-Box	6'-7'		0.44	0.07	0.25		0.01	0.77	0.36	1.13
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Apply Water										
IRRIGATE LABOR	hour				0.11			0.11		0.11
Tear Down Levees										
Levee Splitter (1/80	32"		0.42	0.08	0.21		0.01	0.72	0.45	1.17
Tear Down Levees										
Levee Splitter (1/80	32"		0.32	0.06	0.16			0.54	0.34	0.88
Land Forming ($75)	each								6.58	6.58
Well & Pump, Flood	each			4.88			0.08	4.96	13.70	18.66
Engine, CF, 75	each								14.51	14.51
June Irrigation	ac-in		12.10	2.36			0.23	14.69		14.69
July Irrigation	ac-in		12.10	2.36			0.18	14.64		14.64
August Irrigation	ac-in		12.10	2.36			0.14	14.60		14.60
TOTALS		2.25	41.52	12.95	5.37	0.00	0.82	62.91	40.41	103.32

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

Appendix Table 10. Estimated costs for field operations, per acre
Irrigation with a 1/2-mile center pivot system
530-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				0.07			0.07		0.07
Maintenance										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Apply Water										
IRRIGATE LABOR	hour				0.04			0.04		0.04
Apply Water										
IRRIGATE LABOR	hour				0.05			0.05		0.05
Apply Water										
IRRIGATE LABOR	hour				0.04			0.04		0.04
Pivot, 1/2 CP	each			6.88			0.11	6.99	26.44	33.43
Well & Pump, 1/2 CP	each			0.95			0.01	0.96	2.67	3.63
Engine, 1/2 CP, 264	each								4.26	4.26
June Irr. 3app@.75"	ac-in		16.24	0.62			0.26	17.12		17.12
July Irr. 4app@.75"	ac-in		21.66	0.83			0.28	22.77		22.77
Aug Irr. 3app@.75"	ac-in		16.24	0.62			0.16	17.02		17.02
TOTALS		0.00	54.14	9.90	0.47	0.00	0.83	65.34	33.37	98.71

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

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MISSISSIPPI STATE UNIVERSITY

Mark E. Keenum, President

Division of Agriculture, Forestry, and Veterinary Medicine
Gregory Bohach, Vice President

Department of Agricultural Economics
Steven C. Turner, Head