

**SOYBEANS
2013
PLANNING BUDGETS**

**Mississippi State University
Department of Agricultural Economics
Budget Report 2012-03**

December 2012

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 2013 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.

The mention in this report of any commercial product does not imply its endorsement by MSU-ES, MAFES, or USDA over other products not named nor does the omission imply they are not satisfactory.

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2013 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 2012. (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:

$$RPH = \frac{RLC \times RP}{THL}$$

$$RPA = RPH \times PR$$

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

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

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:

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

$$\text{CRCPA} = \text{CRCPH} \times \text{PR}$$

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 2012 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, 2013

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	0.25	8.0000	2.00	_____
Sodium Chlorate 3L	gal	3.45	0.5000	1.73	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	29.30	0.2800	8.20	_____
Potash (60% K2O)	cwt	29.80	0.4000	11.92	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Headline EC	oz	2.81	3.0000	8.43	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.79	6.0000	10.74	_____
2,4-D Amine 4	pt	2.54	2.0000	5.08	_____
Valor SX	oz	5.55	2.0000	11.10	_____
Prefix	pt	6.84	2.0000	13.68	_____
INSECTICIDES					
Karate Z	oz	3.15	0.9600	3.02	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.1000	0.35	_____
HAULING					
Haul Soybeans/Field	bu	0.28	42.0000	11.76	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2000	9.00	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.3258	3.82	_____
Harvesters	hour	11.71	0.1021	1.20	_____
HAND LABOR					
Implements	hour	9.06	0.1127	1.02	_____
UNALLOCATED LABOR	hour	11.73	0.3852	4.52	_____
DIESEL FUEL					
Tractors	gal	3.50	3.1870	11.17	_____
Harvesters	gal	3.50	1.3935	4.88	_____
REPAIR & MAINTENANCE					
Implements	acre	4.10	1.0000	4.10	_____
Tractors	acre	1.58	1.0000	1.58	_____
Harvesters	acre	2.76	1.0000	2.76	_____
INTEREST ON OP. CAP.	acre	4.71	1.0000	4.71	_____
TOTAL DIRECT EXPENSES				222.45	_____
FIXED EXPENSES					
Implements	acre	8.57	1.0000	8.57	_____
Tractors	acre	10.04	1.0000	10.04	_____
Harvesters	acre	11.04	1.0000	11.04	_____
TOTAL FIXED EXPENSES				29.65	_____
TOTAL SPECIFIED EXPENSES				252.10	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 1.B Summary of estimated costs and returns per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Delta Area, Mississippi, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	13.05	42.0000	548.10	_____

TOTAL INCOME				548.10	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
HARVEST AIDS	acre	3.73	1.0000	3.73	_____
FERTILIZERS	acre	20.12	1.0000	20.12	_____
FUNGICIDES	acre	14.94	1.0000	14.94	_____
HERBICIDES	acre	40.60	1.0000	40.60	_____
INSECTICIDES	acre	7.94	1.0000	7.94	_____
SEED/PLANTS	acre	52.00	1.0000	52.00	_____
ADJUVANTS	acre	0.35	1.0000	0.35	_____
HAULING	acre	11.76	1.0000	11.76	_____
CUSTOM LIME	acre	9.00	1.0000	9.00	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1127	1.02	_____
OPERATOR LABOR	hour	11.71	0.4280	5.02	_____
UNALLOCATED LABOR	hour	11.73	0.3852	4.52	_____
DIESEL FUEL	gal	3.50	4.5806	16.05	_____
REPAIR & MAINTENANCE	acre	8.44	1.0000	8.44	_____
INTEREST ON OP. CAP.	acre	4.71	1.0000	4.71	_____

TOTAL DIRECT EXPENSES				222.45	_____
RETURNS ABOVE DIRECT EXPENSES				325.65	_____
TOTAL FIXED EXPENSES				29.65	_____

TOTAL SPECIFIED EXPENSES				252.10	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				296.00	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 1.C Estimated resource use for field operations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Delta Area, Mississippi, 2013

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	0.40	Oct		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.2800				
Potash (60% K2O)	cwt					0.4000				
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			0.50	Aug	0.5000				
Paraquat	oz					8.0000				
Sodium Chlorate 3L	gal					0.5000				
Surfactant	pt					0.1000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					42.0000				
TOTALS							0.42	0.42	0.54	0.38

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 1.D Estimated costs for field operations, per acre
 Soybeans, early-planted, RR, stale seedbed, 12R 30"
 Delta Area, Mississippi, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		1.40	0.25	0.91			0.11	2.67	1.38	4.05
Lime (Spread)	ton	9.00						0.38	9.38		9.38
Spin Spreader	5 ton		0.58	0.18	0.53			0.05	1.34	0.73	2.07
Phosphorus(46% P2O5)	cwt	8.20						0.35	8.55		8.55
Potash (60% K2O)	cwt	11.92						0.51	12.43		12.43
Disk Harrow	24'		2.80	1.18	1.82			0.25	6.05	4.23	10.28
Field Cultivate Fld	24'		2.13	0.68	1.39			0.18	4.38	3.57	7.95
App by Air (5 gal)	appl	6.00						0.17	6.17		6.17
Glyphosate 3lbs a.e	pt	3.58						0.10	3.68		3.68
2,4-D Amine 4	pt	5.08						0.14	5.22		5.22
Plant & Pre-Folding	12R-30		2.32	2.05	2.11			0.14	6.62	5.44	12.06
Soybean Seed RR2	lb	52.00						1.11	53.11		53.11
CruiserMaxx	oz	6.51						0.14	6.65		6.65
Nitrastick S	lbseed	1.25						0.03	1.28		1.28
Valor SX	oz	11.10						0.24	11.34		11.34
Spray (Broadcast)	60'		0.97	0.29	0.76			0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58						0.06	3.64		3.64
Prefix	pt	13.68						0.24	13.92		13.92
Spray (Broadcast)	60'		0.97	0.29	0.76			0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58						0.06	3.64		3.64
App by Air (5 gal)	appl	3.00						0.03	3.03		3.03
Headline EC	oz	8.43						0.09	8.52		8.52
App by Air (5 gal)	appl	3.00						0.03	3.03		3.03
Karate Z	oz	3.02						0.03	3.05		3.05
App by Air (5 gal)	appl	6.00						0.04	6.04		6.04
Acephate 90SP	lb	4.92						0.03	4.95		4.95
App by Air (5 gal)	appl	3.00						0.02	3.02		3.02
Paraquat	oz	2.00						0.01	2.01		2.01
Sodium Chlorate 3L	gal	1.73						0.01	1.74		1.74
Surfactant	pt	0.35							0.35		0.35
Header -Soybean	25' Flex		4.88	3.52	2.28			0.04	10.72	12.20	22.92
Haul Soybeans/Field	bu	11.76						0.04	11.80		11.80
TOTALS		182.69	16.05	8.44	10.56	0.00		4.71	222.45	29.65	252.10

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 1.E Estimated monthly income and expense flows per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Delta Area, Mississippi, 2013

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	548.10
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	6.00	9.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.73	0.00
FERTILIZERS	20.12	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	8.66	0.00	11.10	20.84	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	3.02	4.92	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	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	0.35	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	11.76
CUSTOM LIME	9.00	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	4.65	0.00	0.00	0.00	0.00	0.00	2.11	1.52	0.00	0.00	0.00	2.28
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	6.91	0.00	0.00	0.00	0.00	0.00	2.32	1.94	0.00	0.00	0.00	4.88
REPAIR & MAINTENANCE	2.29	0.00	0.00	0.00	0.00	0.00	2.05	0.58	0.00	0.00	0.00	3.52
INTEREST ON OP. CAP.	1.83	0.00	0.00	0.00	0.41	0.00	1.66	0.44	0.00	0.18	0.11	0.08
TOTAL DIRECT EXPENSES	44.80	0.00	0.00	0.00	15.07	0.00	79.00	25.32	0.00	17.63	18.11	22.52
NET INCOME	-44.80	0.00	0.00	0.00	-15.07	0.00	-79.00	-25.32	0.00	-17.63	-18.11	525.58
NET INCOME TO DATE	-44.80	-44.80	-44.80	-44.80	-59.87	-59.87	-138.87	-164.19	-164.19	-181.82	-199.93	325.65

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Soybeans			9.78	10.44	11.09	11.74	12.39	13.05	13.70	14.35	15.00	15.66	16.31
PERCENT	YIELD	UNIT	-----dollars-----										
50	21.00	bu	-11	2	16	30	43	57	71	84	98	112	126
			-40	-26	-13	0	14	27	41	55	68	82	96
60	25.20	bu	28	45	61	78	94	111	127	144	160	176	193
			-0	15	32	48	65	81	97	114	130	147	163
70	29.40	bu	68	88	107	126	145	164	183	203	222	241	260
			39	58	77	96	115	135	154	173	192	211	231
80	33.60	bu	108	130	152	174	196	218	240	262	284	306	328
			79	101	122	144	166	188	210	232	254	276	298
90	37.80	bu	148	173	198	222	247	272	296	321	346	370	395
			119	143	168	193	217	242	267	291	316	341	365
100	42.00	bu	188	216	243	270	298	325	353	380	407	435	462
			158	186	213	241	268	296	323	350	378	405	433
110	46.20	bu	228	258	288	318	349	379	409	439	469	499	530
			198	229	259	289	319	349	379	409	440	470	500
120	50.40	bu	268	301	334	367	400	432	465	498	531	564	597
			238	271	304	337	370	403	436	469	501	534	567
130	54.60	bu	308	344	379	415	450	486	522	557	593	629	664
			278	314	350	385	421	456	492	528	563	599	635
140	58.80	bu	348	386	425	463	501	540	578	616	655	693	732
			318	357	395	433	472	510	548	587	625	663	702
150	63.00	bu	388	429	470	511	552	593	634	676	717	758	799
			358	399	440	481	523	564	605	646	687	728	769

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 2012 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, 2013

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	0.25	4.0000	1.00	_____
Sodium Chlorate 3L	gal	3.45	0.2500	0.86	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	29.30	0.4000	11.72	_____
Potash (60% K2O)	cwt	29.80	0.6000	17.88	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.47	3.0000	7.41	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.79	6.0000	10.74	_____
2,4-D Amine 4	pt	2.54	2.0000	5.08	_____
Valor SX	oz	5.55	2.0000	11.10	_____
Prefix	pt	6.84	2.0000	13.68	_____
INSECTICIDES					
Karate Z	oz	3.15	0.9600	3.02	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
Intrepid 2F	oz	1.81	1.0000	1.81	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.0750	0.26	_____
HAULING					
Haul Soybeans/Field	bu	0.28	65.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2000	9.00	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.4785	5.61	_____
Harvesters	hour	11.71	0.1021	1.20	_____
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	0.1127	1.02	_____
UNALLOCATED LABOR	hour	11.72	0.4519	5.30	_____
DIESEL FUEL					
Tractors	gal	3.50	4.5544	15.96	_____
Harvesters	gal	3.50	1.3935	4.88	_____
Roll-Out Pipe Irr.	gal	3.50	7.3316	25.65	_____
REPAIR & MAINTENANCE					
Implements	acre	4.73	1.0000	4.73	_____
Tractors	acre	2.22	1.0000	2.22	_____
Harvesters	acre	2.76	1.0000	2.76	_____
Roll-Out Pipe Irr.	acre	5.80	1.0000	5.80	_____
INTEREST ON OP. CAP.	acre	6.00	1.0000	6.00	_____
TOTAL DIRECT EXPENSES				289.80	_____
FIXED EXPENSES					
Implements	acre	10.72	1.0000	10.72	_____
Tractors	acre	14.14	1.0000	14.14	_____
Harvesters	acre	11.04	1.0000	11.04	_____
Roll-Out Pipe Irr.	acre	48.18	1.0000	48.18	_____
TOTAL FIXED EXPENSES				84.08	_____
TOTAL SPECIFIED EXPENSES				373.88	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	13.05	65.0000	848.25	_____

TOTAL INCOME				848.25	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
HARVEST AIDS	acre	1.86	1.0000	1.86	_____
FERTILIZERS	acre	29.60	1.0000	29.60	_____
FUNGICIDES	acre	13.92	1.0000	13.92	_____
HERBICIDES	acre	40.60	1.0000	40.60	_____
INSECTICIDES	acre	9.75	1.0000	9.75	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	52.00	1.0000	52.00	_____
ADJUVANTS	acre	0.27	1.0000	0.27	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	9.00	1.0000	9.00	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1127	1.02	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	11.71	0.5806	6.81	_____
UNALLOCATED LABOR	hour	11.72	0.4519	5.30	_____
DIESEL FUEL	gal	3.50	13.2797	46.49	_____
REPAIR & MAINTENANCE	acre	15.51	1.0000	15.51	_____
INTEREST ON OP. CAP.	acre	6.00	1.0000	6.00	_____

TOTAL DIRECT EXPENSES				289.80	_____
RETURNS ABOVE DIRECT EXPENSES				558.45	_____
TOTAL FIXED EXPENSES				84.08	_____

TOTAL SPECIFIED EXPENSES				373.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				474.37	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

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	0.40	Oct		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.4000				
Potash (60% K2O)	cwt					0.6000				
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.	8R-38	MFWD 190	0.074	1.00	Oct		0.07	0.07	0.07	0.06
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
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			0.25	Aug	0.2500				
Paraquat	oz					4.0000				
Sodium Chlorate 3L	gal					0.2500				
Surfactant	pt					0.0500				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					65.0000				
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.58	0.58	1.05	0.45

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		1.40	0.25	0.91			0.11	2.67	1.38	4.05
Lime (Spread)	ton	9.00						0.38	9.38		9.38
Spin Spreader	5 ton		0.58	0.18	0.53			0.05	1.34	0.73	2.07
Phosphorus(46% P2O5)	cwt	11.72						0.50	12.22		12.22
Potash (60% K2O)	cwt	17.88						0.76	18.64		18.64
Disk Harrow	24'		2.80	1.18	1.82			0.25	6.05	4.23	10.28
Field Cultivate Fld	24'		2.13	0.68	1.39			0.18	4.38	3.57	7.95
Bed-Roll-Fold.	8R-38		2.54	0.82	1.65			0.21	5.22	3.51	8.73
App by Air (5 gal)	appl	6.00						0.17	6.17		6.17
Glyphosate 3lbs a.e	pt	3.58						0.10	3.68		3.68
2,4-D Amine 4	pt	5.08						0.14	5.22		5.22
Plant & Pre-Folding	12R-30		2.32	2.05	2.11			0.14	6.62	5.44	12.06
Soybean Seed RR2	lb	52.00						1.11	53.11		53.11
CruiserMaxx	oz	6.51						0.14	6.65		6.65
Nitrastick S	lbseed	1.25						0.03	1.28		1.28
Valor SX	oz	11.10						0.24	11.34		11.34
Spray (Broadcast)	60'		0.97	0.29	0.76			0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58						0.06	3.64		3.64
Prefix	pt	13.68						0.24	13.92		13.92
Spray (Broadcast)	60'		0.97	0.29	0.76			0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58						0.06	3.64		3.64
App by Air (5 gal)	appl	3.00						0.03	3.03		3.03
Quadris	oz	7.41						0.08	7.49		7.49
App by Air (5 gal)	appl	3.00						0.03	3.03		3.03
Karate Z	oz	3.02						0.03	3.05		3.05
App by Air (5 gal)	appl	6.00						0.04	6.04		6.04
Acephate 90SP	lb	4.92						0.03	4.95		4.95
App by Air (5 gal)	appl	1.50						0.01	1.51		1.51
Intrepid 2F	oz	1.81						0.01	1.82		1.82
Surfactant	pt	0.09							0.09		0.09
App by Air (5 gal)	appl	1.50						0.01	1.51		1.51
Paraquat	oz	1.00						0.01	1.01		1.01
Sodium Chlorate 3L	gal	0.86						0.01	0.87		0.87
Surfactant	pt	0.18							0.18		0.18
Header -Soybean	25' Flex		4.88	3.52	2.28			0.04	10.72	12.20	22.92
Haul Soybeans/Field	bu	18.20						0.06	18.26		18.26
Roll-Out Pipe Irr.	acre	7.92	27.90	6.25	4.22			0.66	46.95	50.92	97.87
TOTALS		205.37	46.49	15.51	16.43	0.00	6.00	289.80	84.08	373.88	

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

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	848.25
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	6.00	9.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.86	0.00
FERTILIZERS	29.60	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	7.41	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	8.66	0.00	11.10	20.84	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	3.02	6.73	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	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	0.27	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.20
CUSTOM LIME	9.00	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	6.74	0.00	0.00	0.00	0.00	0.00	2.11	1.75	2.76	0.23	0.00	2.84
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	10.75	0.00	0.00	0.00	0.00	0.00	2.32	1.94	17.61	8.55	0.00	5.32
REPAIR & MAINTENANCE	3.38	0.00	0.00	0.00	0.00	0.00	2.05	0.58	4.77	1.12	0.00	3.61
INTEREST ON OP. CAP.	2.53	0.00	0.00	0.00	0.41	0.00	1.66	0.44	0.47	0.27	0.12	0.10
TOTAL DIRECT EXPENSES	62.00	0.00	0.00	0.00	15.07	0.00	79.00	25.55	33.53	26.60	17.98	30.07
NET INCOME	-62.00	0.00	0.00	0.00	-15.07	0.00	-79.00	-25.55	-33.53	-26.60	-17.98	818.18
NET INCOME TO DATE	-62.00	-62.00	-62.00	-62.00	-77.07	-77.07	-156.07	-181.62	-215.15	-241.75	-259.73	558.45

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Soybeans			9.78	10.44	11.09	11.74	12.39	13.05	13.70	14.35	15.00	15.66	16.31
PERCENT	YIELD	UNIT	-----dollars-----										
50	32.50	bu	37 -46	58 -25	79 -4	101 16	122 38	143 59	164 80	185 101	207 122	228 144	249 165
60	39.00	bu	99 15	124 40	150 66	175 91	201 116	226 142	251 167	277 193	302 218	328 244	353 269
70	45.50	bu	161 76	190 106	220 136	250 165	279 195	309 225	339 255	368 284	398 314	428 344	457 373
80	52.00	bu	222 138	256 172	290 206	324 240	358 274	392 308	426 342	460 376	494 410	528 444	562 478
90	58.50	bu	284 200	322 238	360 276	399 315	437 353	475 391	513 429	551 467	589 505	628 544	666 582
100	65.00	bu	346 262	388 304	431 347	473 389	516 431	558 474	600 516	643 559	685 601	728 644	770 686
110	71.50	bu	408 324	454 370	501 417	548 464	594 510	641 557	688 604	734 650	781 697	828 743	874 790
120	78.00	bu	469 385	520 436	571 487	622 538	673 589	724 640	775 691	826 742	877 793	928 843	978 894
130	84.50	bu	531 447	586 502	642 557	697 613	752 668	807 723	862 778	917 833	972 888	1027 943	1083 999
140	91.00	bu	593 509	652 568	712 628	771 687	831 746	890 806	949 865	1009 925	1068 984	1127 1043	1187 1103
150	97.50	bu	655 571	718 634	782 698	846 762	909 825	973 889	1037 952	1100 1016	1164 1080	1227 1143	1291 1207

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 2012 input prices.

Table 3.A Estimated costs per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	2.5000	15.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	29.30	0.2800	8.20	_____
Potash (60% K2O)	cwt	29.80	0.4000	11.92	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.47	4.5000	11.12	_____
HERBICIDES					
Valor SX	oz	5.55	2.0000	11.10	_____
Glyphosate 3lbs a.e	pt	1.79	4.0000	7.16	_____
Prefix	pt	6.84	2.0000	13.68	_____
INSECTICIDES					
Karate Z	oz	3.15	1.4400	4.54	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
Intrepid 2F	oz	1.81	3.0000	5.43	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.0750	0.26	_____
HAULING					
Haul Soybeans/Field	bu	0.28	30.0000	8.40	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2000	9.00	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.3463	4.06	_____
Harvesters	hour	11.71	0.1021	1.20	_____
HAND LABOR					
Implements	hour	9.06	0.1127	1.02	_____
UNALLOCATED LABOR	hour	11.74	0.4036	4.74	_____
DIESEL FUEL					
Tractors	gal	3.50	3.3871	11.87	_____
Harvesters	gal	3.50	1.3935	4.88	_____
REPAIR & MAINTENANCE					
Implements	acre	4.30	1.0000	4.30	_____
Tractors	acre	1.68	1.0000	1.68	_____
Harvesters	acre	2.76	1.0000	2.76	_____
INTEREST ON OP. CAP.	acre	4.43	1.0000	4.43	_____
TOTAL DIRECT EXPENSES				211.43	_____
FIXED EXPENSES					
Implements	acre	9.00	1.0000	9.00	_____
Tractors	acre	10.67	1.0000	10.67	_____
Harvesters	acre	11.04	1.0000	11.04	_____
TOTAL FIXED EXPENSES				30.71	_____
TOTAL SPECIFIED EXPENSES				242.14	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 3.B Summary of estimated costs and returns per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	13.05	30.0000	391.50	_____

TOTAL INCOME				391.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.00	1.0000	15.00	_____
FERTILIZERS	acre	20.12	1.0000	20.12	_____
FUNGICIDES	acre	17.63	1.0000	17.63	_____
HERBICIDES	acre	31.94	1.0000	31.94	_____
INSECTICIDES	acre	14.89	1.0000	14.89	_____
SEED/PLANTS	acre	52.00	1.0000	52.00	_____
ADJUVANTS	acre	0.26	1.0000	0.26	_____
HAULING	acre	8.40	1.0000	8.40	_____
CUSTOM LIME	acre	9.00	1.0000	9.00	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1127	1.02	_____
OPERATOR LABOR	hour	11.71	0.4485	5.26	_____
UNALLOCATED LABOR	hour	11.74	0.4036	4.74	_____
DIESEL FUEL	gal	3.50	4.7807	16.75	_____
REPAIR & MAINTENANCE	acre	8.74	1.0000	8.74	_____
INTEREST ON OP. CAP.	acre	4.43	1.0000	4.43	_____

TOTAL DIRECT EXPENSES				211.43	_____
RETURNS ABOVE DIRECT EXPENSES				180.07	_____
TOTAL FIXED EXPENSES				30.71	_____

TOTAL SPECIFIED EXPENSES				242.14	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				149.36	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 3.C Estimated resource use for field operations, per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2013

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	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	0.40	Nov		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.2800				
Potash (60% K2O)	cwt					0.4000				
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				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					30.0000				
TOTALS							0.44	0.44	0.56	0.40

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 3.D Estimated costs for field operations, per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Subsoiler	3 shank		1.40	0.25	0.91		0.11	2.67	1.38	4.05
Disk Harrow	24'		0.70	0.30	0.46		0.06	1.52	1.06	2.58
Lime (Spread)	ton	9.00					0.38	9.38		9.38
Spin Spreader	5 ton		0.58	0.18	0.53		0.05	1.34	0.73	2.07
Phosphorus(46% P2O5)	cwt	8.20					0.35	8.55		8.55
Potash (60% K2O)	cwt	11.92					0.51	12.43		12.43
Disk Harrow	24'		2.80	1.18	1.82		0.14	5.94	4.23	10.17
Field Cultivate Fld	24'		2.13	0.68	1.39		0.09	4.29	3.57	7.86
Plant & Pre-Folding	12R-30		2.32	2.05	2.11		0.14	6.62	5.44	12.06
Soybean Seed RR2	lb	52.00					1.11	53.11		53.11
CruiserMaxx	oz	6.51					0.14	6.65		6.65
Nitrastick S	lbseed	1.25					0.03	1.28		1.28
Valor SX	oz	11.10					0.24	11.34		11.34
Spray (Broadcast)	60'		0.97	0.29	0.76		0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58					0.08	3.66		3.66
Prefix	pt	13.68					0.29	13.97		13.97
Spray (Broadcast)	60'		0.97	0.29	0.76		0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58					0.06	3.64		3.64
App by Air (5 gal)	appl	4.50					0.06	4.56		4.56
Quadris	oz	11.12					0.16	11.28		11.28
Karate Z	oz	4.54					0.06	4.60		4.60
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Acephate 90SP	lb	4.92					0.05	4.97		4.97
App by Air (5 gal)	appl	4.50					0.05	4.55		4.55
Intrepid 2F	oz	5.43					0.06	5.49		5.49
Surfactant	pt	0.26						0.26		0.26
Header -Soybean	25' Flex		4.88	3.52	2.28		0.04	10.72	12.20	22.92
Haul Soybeans/Field	bu	8.40					0.03	8.43		8.43
TOTALS		170.49	16.75	8.74	11.02	0.00	4.43	211.43	30.71	242.14

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 3.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2013

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	391.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.50	10.50	0.00	0.00
FERTILIZERS	20.12	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	11.12	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	28.36	3.58	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	4.54	10.35	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	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	0.26	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	8.40
CUSTOM LIME	9.00	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	1.90	0.00	0.00	0.00	0.00	1.82	4.26	0.76	0.00	0.00	0.00	2.28
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	2.68	0.00	0.00	0.00	0.00	2.80	5.42	0.97	0.00	0.00	0.00	4.88
REPAIR & MAINTENANCE	0.73	0.00	0.00	0.00	0.00	1.18	3.02	0.29	0.00	0.00	0.00	3.52
INTEREST ON OP. CAP.	1.46	0.00	0.00	0.00	0.00	0.14	2.16	0.10	0.28	0.22	0.00	0.07
TOTAL DIRECT EXPENSES	35.89	0.00	0.00	0.00	0.00	5.94	102.98	5.70	20.44	21.33	0.00	19.15
NET INCOME	-35.89	0.00	0.00	0.00	0.00	-5.94	-102.98	-5.70	-20.44	-21.33	0.00	372.35
NET INCOME TO DATE	-35.89	-35.89	-35.89	-35.89	-35.89	-41.83	-144.81	-150.51	-170.95	-192.28	-192.28	180.07

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Soybeans			9.78	10.44	11.09	11.74	12.39	13.05	13.70	14.35	15.00	15.66	16.31
			-----dollars-----										
PERCENT	YIELD	UNIT											
50	15.00	bu	-60	-50	-40	-31	-21	-11	-1	8	17	27	37
			-91	-81	-71	-61	-51	-42	-32	-22	-12	-3	6
60	18.00	bu	-31	-20	-8	3	15	26	38	50	62	73	85
			-62	-50	-39	-27	-15	-3	7	19	31	43	54
70	21.00	bu	-3	10	24	37	51	65	78	92	106	119	133
			-34	-20	-6	7	20	34	48	61	75	89	102
80	24.00	bu	25	40	56	72	87	103	119	134	150	166	181
			-5	10	25	41	57	72	88	104	119	135	151
90	27.00	bu	53	71	88	106	124	141	159	176	194	212	229
			22	40	58	75	93	111	128	146	163	181	199
100	30.00	bu	82	101	121	140	160	180	199	219	238	258	277
			51	71	90	110	129	149	168	188	208	227	247
110	33.00	bu	110	132	153	175	196	218	239	261	282	304	326
			80	101	123	144	166	187	209	230	252	273	295
120	36.00	bu	139	162	186	209	233	256	280	303	327	350	374
			108	132	155	178	202	225	249	272	296	319	343
130	39.00	bu	167	193	218	244	269	294	320	345	371	396	422
			137	162	187	213	238	264	289	315	340	366	391
140	42.00	bu	196	223	251	278	305	333	360	388	415	442	470
			165	192	220	247	275	302	329	357	384	412	439
150	45.00	bu	224	254	283	312	342	371	400	430	459	489	518
			194	223	252	282	311	340	370	399	428	458	487

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 2012 input prices.

Table 4. Estimated costs per acre
 Soybeans, May-planted, RR, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2013

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	29.30	0.4000	11.72	_____
Potash (60% K2O)	cwt	29.80	0.6000	17.88	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.47	6.0000	14.82	_____
HERBICIDES					
Valor SX	oz	5.55	2.0000	11.10	_____
Glyphosate 3lbs a.e	pt	1.79	4.0000	7.16	_____
Prefix	pt	6.84	2.0000	13.68	_____
INSECTICIDES					
Karate Z	oz	3.15	1.9200	6.05	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
Intrepid 2F	oz	1.81	4.0000	7.24	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.1000	0.35	_____
HAULING					
Haul Soybeans/Field	bu	0.28	53.0000	14.84	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2000	9.00	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.5697	6.68	_____
Harvesters	hour	11.71	0.1021	1.20	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1127	1.02	_____
UNALLOCATED LABOR	hour	11.72	0.4221	4.95	_____
DIESEL FUEL					
Tractors	gal	3.50	5.1749	18.14	_____
Harvesters	gal	3.50	1.3935	4.88	_____
Contour Flood Irr.	gal	3.50	10.9974	38.49	_____
REPAIR & MAINTENANCE					
Implements	acre	5.02	1.0000	5.02	_____
Tractors	acre	2.55	1.0000	2.55	_____
Harvesters	acre	2.76	1.0000	2.76	_____
Contour Flood Irr.	acre	11.57	1.0000	11.57	_____
INTEREST ON OP. CAP.	acre	5.99	1.0000	5.99	_____
TOTAL DIRECT EXPENSES				304.84	_____
FIXED EXPENSES					
Implements	acre	11.01	1.0000	11.01	_____
Tractors	acre	16.12	1.0000	16.12	_____
Harvesters	acre	11.04	1.0000	11.04	_____
Contour Flood Irr.	acre	36.52	1.0000	36.52	_____
TOTAL FIXED EXPENSES				74.69	_____
TOTAL SPECIFIED EXPENSES				379.53	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	13.05	53.0000	691.65	_____

TOTAL INCOME				691.65	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	18.00	1.0000	18.00	_____
FERTILIZERS	acre	29.60	1.0000	29.60	_____
FUNGICIDES	acre	21.33	1.0000	21.33	_____
HERBICIDES	acre	31.94	1.0000	31.94	_____
INSECTICIDES	acre	18.21	1.0000	18.21	_____
SEED/PLANTS	acre	52.00	1.0000	52.00	_____
ADJUVANTS	acre	0.35	1.0000	0.35	_____
HAULING	acre	14.84	1.0000	14.84	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	9.00	1.0000	9.00	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1127	1.02	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	11.71	0.6718	7.88	_____
UNALLOCATED LABOR	hour	11.72	0.4221	4.95	_____
DIESEL FUEL	gal	3.50	17.5659	61.51	_____
REPAIR & MAINTENANCE	acre	21.90	1.0000	21.90	_____
INTEREST ON OP. CAP.	acre	5.99	1.0000	5.99	_____

TOTAL DIRECT EXPENSES				304.84	_____
RETURNS ABOVE DIRECT EXPENSES				386.81	_____
TOTAL FIXED EXPENSES				74.69	_____

TOTAL SPECIFIED EXPENSES				379.53	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				312.12	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

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	0.40	Nov		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.4000				
Potash (60% K2O)	cwt					0.6000				
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				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					53.0000				
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.67	0.67	1.09	0.42

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Disk Harrow	24'		2.80	1.18	1.82		0.25	6.05	4.23	10.28
Lime (Spread)	ton	9.00					0.38	9.38		9.38
Spin Spreader	5 ton		0.58	0.18	0.53		0.05	1.34	0.73	2.07
Phosphorus(46% P2O5)	cwt	11.72					0.50	12.22		12.22
Potash (60% K2O)	cwt	17.88					0.76	18.64		18.64
Disk Harrow	24'		2.80	1.18	1.82		0.14	5.94	4.23	10.17
Field Cultivate Fld	24'		2.13	0.68	1.39		0.09	4.29	3.57	7.86
Plant & Pre-Folding	12R-30		2.32	2.05	2.11		0.14	6.62	5.44	12.06
Soybean Seed RR2	lb	52.00					1.11	53.11		53.11
CruiserMaxx	oz	6.51					0.14	6.65		6.65
Nitrastick S	lbseed	1.25					0.03	1.28		1.28
Valor SX	oz	11.10					0.24	11.34		11.34
Spray (Broadcast)	60'		0.97	0.29	0.76		0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58					0.08	3.66		3.66
Prefix	pt	13.68					0.29	13.97		13.97
Spray (Broadcast)	60'		0.97	0.29	0.76		0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58					0.06	3.64		3.64
App by Air (5 gal)	appl	6.00					0.09	6.09		6.09
Quadris	oz	14.82					0.21	15.03		15.03
Karate Z	oz	6.05					0.09	6.14		6.14
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Acephate 90SP	lb	4.92					0.05	4.97		4.97
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Intrepid 2F	oz	7.24					0.08	7.32		7.32
Surfactant	pt	0.35						0.35		0.35
Header -Soybean	25' Flex		4.88	3.52	2.28		0.04	10.72	12.20	22.92
Haul Soybeans/Field	bu	14.84					0.05	14.89		14.89
Contour Flood Irr.	acre	2.25	44.06	12.53	5.20		0.92	64.96	42.19	107.15
TOTALS		198.77	61.51	21.90	16.67	0.00	5.99	304.84	74.69	379.53

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

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	691.65
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	12.00	0.00	0.00
FERTILIZERS	29.60	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	14.82	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	28.36	3.58	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	6.05	12.16	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	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	0.35	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	14.84
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	9.00	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	2.35	0.00	0.00	0.00	0.00	1.82	4.71	2.42	1.47	1.47	0.15	2.28
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	3.38	0.00	0.00	0.00	0.00	2.80	5.42	15.87	14.41	14.41	0.34	4.88
REPAIR & MAINTENANCE	1.36	0.00	0.00	0.00	0.00	1.18	3.02	7.76	2.50	2.50	0.06	3.52
INTEREST ON OP. CAP.	1.94	0.00	0.00	0.00	0.00	0.14	2.17	0.56	0.64	0.45	0.00	0.09
TOTAL DIRECT EXPENSES	47.63	0.00	0.00	0.00	0.00	5.94	103.44	32.44	45.89	43.34	0.55	25.61
NET INCOME	-47.63	0.00	0.00	0.00	0.00	-5.94	-103.44	-32.44	-45.89	-43.34	-0.55	666.04
NET INCOME TO DATE	-47.63	-47.63	-47.63	-47.63	-47.63	-53.57	-157.01	-189.45	-235.34	-278.68	-279.23	386.81

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

PRODUCT	-----PERCENT-----												
	75	80	85	90	95	100	105	110	115	120	125		
-----	-----PRODUCT PRICE-----												
Soybeans	9.78	10.44	11.09	11.74	12.39	13.05	13.70	14.35	15.00	15.66	16.31		
PERCENT	YIELD	UNIT	-----dollars-----										
50	26.50	bu	-38	-20	-3	13	31	48	65	83	100	117	134
			-112	-95	-78	-60	-43	-26	-8	8	25	42	60
60	31.80	bu	12	33	53	74	95	116	136	157	178	199	219
			-62	-41	-20	-0	20	41	62	82	103	124	145
70	37.10	bu	62	86	111	135	159	183	207	232	256	280	304
			-11	12	36	60	84	109	133	157	181	205	230
80	42.40	bu	113	140	168	196	223	251	279	306	334	362	389
			38	66	93	121	149	176	204	232	259	287	315
90	47.70	bu	163	194	225	256	288	319	350	381	412	443	474
			88	119	151	182	213	244	275	306	337	368	400
100	53.00	bu	213	248	283	317	352	386	421	455	490	525	559
			139	173	208	242	277	312	346	381	415	450	485
110	58.30	bu	264	302	340	378	416	454	492	530	568	606	644
			189	227	265	303	341	379	417	455	493	531	570
120	63.60	bu	314	356	397	439	480	522	563	605	646	688	729
			239	281	322	364	405	447	488	530	571	613	654
130	68.90	bu	365	410	454	499	544	589	634	679	724	769	814
			290	335	380	425	470	515	560	605	650	694	739
140	74.20	bu	415	463	512	560	609	657	705	754	802	851	899
			340	389	437	485	534	582	631	679	728	776	824
150	79.50	bu	465	517	569	621	673	725	777	828	880	932	984
			391	443	494	546	598	650	702	754	806	857	909

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 2012 input prices.

Table 5.A Estimated costs per acre
Soybeans after wheat, RR, 12R 30"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2013

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	29.30	0.4000	11.72	_____
Potash (60% K2O)	cwt	29.80	0.6000	17.88	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.47	6.0000	14.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.79	5.0000	8.95	_____
Valor SX	oz	5.55	2.0000	11.10	_____
Prefix	pt	6.84	2.0000	13.68	_____
INSECTICIDES					
Karate Z	oz	3.15	1.7000	5.36	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
Intrepid 2F	oz	1.81	4.0000	7.24	_____
Baythroid XL	oz	2.27	2.1300	4.84	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.1000	0.35	_____
HAULING					
Haul Soybeans/Field	bu	0.28	45.0000	12.60	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2000	9.00	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.1550	1.82	_____
Harvesters	hour	11.71	0.1021	1.20	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.1197	1.08	_____
UNALLOCATED LABOR	hour	11.66	0.2212	2.58	_____
DIESEL FUEL					
Tractors	gal	3.50	1.5163	5.32	_____
Harvesters	gal	3.50	1.3935	4.88	_____
1/2-mi Pivot Irr.	gal	3.50	16.4057	57.43	_____
REPAIR & MAINTENANCE					
Implements	acre	2.95	1.0000	2.95	_____
Tractors	acre	0.76	1.0000	0.76	_____
Harvesters	acre	2.76	1.0000	2.76	_____
1/2-mi Pivot Irr.	acre	9.90	1.0000	9.90	_____
INTEREST ON OP. CAP.	acre	5.13	1.0000	5.13	_____
TOTAL DIRECT EXPENSES				296.50	_____
FIXED EXPENSES					
Implements	acre	5.18	1.0000	5.18	_____
Tractors	acre	4.77	1.0000	4.77	_____
Harvesters	acre	11.04	1.0000	11.04	_____
1/2-mi Pivot Irr.	acre	35.62	1.0000	35.62	_____
TOTAL FIXED EXPENSES				56.61	_____
TOTAL SPECIFIED EXPENSES				353.11	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	13.05	45.0000	587.25	_____

TOTAL INCOME				587.25	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	18.00	1.0000	18.00	_____
FERTILIZERS	acre	29.60	1.0000	29.60	_____
FUNGICIDES	acre	21.33	1.0000	21.33	_____
HERBICIDES	acre	33.73	1.0000	33.73	_____
INSECTICIDES	acre	22.36	1.0000	22.36	_____
SEED/PLANTS	acre	52.00	1.0000	52.00	_____
ADJUVANTS	acre	0.35	1.0000	0.35	_____
HAULING	acre	12.60	1.0000	12.60	_____
CUSTOM LIME	acre	9.00	1.0000	9.00	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1197	1.08	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	11.71	0.2572	3.02	_____
UNALLOCATED LABOR	hour	11.66	0.2212	2.58	_____
DIESEL FUEL	gal	3.50	19.3156	67.63	_____
REPAIR & MAINTENANCE	acre	16.37	1.0000	16.37	_____
INTEREST ON OP. CAP.	acre	5.13	1.0000	5.13	_____

TOTAL DIRECT EXPENSES				296.50	_____
RETURNS ABOVE DIRECT EXPENSES				290.75	_____
TOTAL FIXED EXPENSES				56.61	_____

TOTAL SPECIFIED EXPENSES				353.11	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				234.14	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

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	0.40	Nov		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.4000				
Potash (60% K2O)	cwt					0.6000				
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				
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	Jul		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	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/Field	bu					45.0000				
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.25	0.25	0.42	0.22

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Lime (Spread)	ton	9.00						0.38	9.38		9.38
Spin Spreader	5 ton		0.58	0.18	0.52			0.05	1.33	0.73	2.06
Phosphorus(46% P2O5)	cwt	11.72						0.50	12.22		12.22
Potash (60% K2O)	cwt	17.88						0.76	18.64		18.64
Spray (Broadcast)	60'		0.97	0.29	0.74			0.04	2.04	1.05	3.09
Glyphosate 3lbs a.e	pt	3.58						0.06	3.64		3.64
Plant & Pre-Folding	12R-30		2.32	2.05	2.08			0.11	6.56	5.44	12.00
Soybean Seed RR2	lb	52.00						0.92	52.92		52.92
CruiserMaxx	oz	6.51						0.12	6.63		6.63
Nitrastick S	lbseed	1.25						0.02	1.27		1.27
Valor SX	oz	11.10						0.20	11.30		11.30
Spray (Broadcast)	60'		0.97	0.29	0.74			0.03	2.03	1.05	3.08
Glyphosate 3lbs a.e	pt	3.58						0.05	3.63		3.63
Prefix	pt	13.68						0.19	13.87		13.87
Spray (Broadcast)	60'		0.48	0.14	0.37			0.01	1.00	0.52	1.52
Glyphosate 3lbs a.e	pt	1.79						0.03	1.82		1.82
App by Air (5 gal)	appl	6.00						0.06	6.06		6.06
Quadris	oz	14.82						0.16	14.98		14.98
Karate Z	oz	5.36						0.06	5.42		5.42
App by Air (5 gal)	appl	6.00						0.06	6.06		6.06
Acephate 90SP	lb	4.92						0.05	4.97		4.97
App by Air (5 gal)	appl	6.00						0.06	6.06		6.06
Intrepid 2F	oz	7.24						0.08	7.32		7.32
Surfactant	pt	0.35							0.35		0.35
Baythroid XL	oz	4.84						0.05	4.89		4.89
Header -Soybean	25' Flex		4.88	3.52	2.23			0.04	10.67	12.20	22.87
Haul Soybeans/Field	bu	12.60						0.04	12.64		12.64
1/2-mi Pivot Irr.	acre		57.43	9.90	0.47			1.00	68.80	35.62	104.42
TOTALS		200.22	67.63	16.37	7.15	0.00		5.13	296.50	56.61	353.11

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

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	587.25
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	29.60	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	14.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.68	19.05	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	22.36	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.00	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	0.35	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	12.60
CUSTOM LIME	9.00	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	0.52	0.00	0.00	0.00	0.00	0.00	0.34	2.86	1.16	0.04	0.00	2.23
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	0.58	0.00	0.00	0.00	0.00	0.00	0.00	20.52	24.42	17.23	0.00	4.88
REPAIR & MAINTENANCE	0.18	0.00	0.00	0.00	0.00	0.00	0.00	10.79	1.26	0.62	0.00	3.52
INTEREST ON OP. CAP.	1.69	0.00	0.00	0.00	0.00	0.00	0.01	1.93	0.65	0.77	0.00	0.08
TOTAL DIRECT EXPENSES	41.57	0.00	0.00	0.00	0.00	0.00	0.35	110.54	46.54	74.19	0.00	23.31
NET INCOME	-41.57	0.00	0.00	0.00	0.00	0.00	-0.35	-110.54	-46.54	-74.19	0.00	563.94
NET INCOME TO DATE	-41.57	-41.57	-41.57	-41.57	-41.57	-41.57	-41.92	-152.46	-199.00	-273.19	-273.19	290.75

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

PRODUCT	-----PERCENT-----												
	75	80	85	90	95	100	105	110	115	120	125		
-----	-----PRODUCT PRICE-----												
Soybeans	9.78	10.44	11.09	11.74	12.39	13.05	13.70	14.35	15.00	15.66	16.31		
PERCENT	YIELD	UNIT	-----dollars-----										
50	22.50	bu	-69	-55	-40	-25	-11	3	18	32	47	62	76
			-126	-111	-97	-82	-67	-53	-38	-23	-9	5	20
60	27.00	bu	-27	-9	8	25	43	60	78	96	113	131	148
			-83	-66	-48	-30	-13	4	21	39	57	74	92
70	31.50	bu	15	36	56	77	97	118	138	159	180	200	221
			-41	-20	0	20	41	61	82	102	123	143	164
80	36.00	bu	58	81	105	128	152	175	199	222	246	269	293
			1	25	48	72	95	119	142	166	189	213	236
90	40.50	bu	101	127	154	180	206	233	259	286	312	338	365
			44	70	97	123	150	176	203	229	255	282	308
100	45.00	bu	143	173	202	232	261	290	320	349	378	408	437
			87	116	146	175	204	234	263	292	322	351	380
110	49.50	bu	186	219	251	283	315	348	380	412	445	477	509
			130	162	194	227	259	291	323	356	388	420	453
120	54.00	bu	229	264	299	335	370	405	440	476	511	546	581
			172	208	243	278	313	349	384	419	454	490	525
130	58.50	bu	272	310	348	386	424	463	501	539	577	615	653
			215	253	292	330	368	406	444	482	521	559	597
140	63.00	bu	315	356	397	438	479	520	561	602	643	685	726
			258	299	340	381	422	463	505	546	587	628	669
150	67.50	bu	357	401	445	489	534	578	622	666	710	754	798
			301	345	389	433	477	521	565	609	653	697	741

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 2012 input prices.

Table 6.A Estimated costs per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	1.5000	9.00	_____
HARVEST AIDS					
Paraquat	oz	0.25	8.0000	2.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	29.30	0.6600	19.34	_____
Potash (60% K2O)	cwt	29.80	1.0000	29.80	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Headline EC	oz	2.81	3.0000	8.43	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.79	6.0000	10.74	_____
2,4-D Amine 4	pt	2.54	2.0000	5.08	_____
Valor SX	oz	5.55	2.0000	11.10	_____
Dual Magnum	pt	13.54	1.0000	13.54	_____
Tricor DF	lb	14.46	0.3000	4.34	_____
INSECTICIDES					
Acephate 90SP	lb	6.56	0.7500	4.92	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.1000	0.35	_____
HAULING					
Haul Soybeans/Field	bu	0.28	43.0000	12.04	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2500	11.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.3477	4.08	_____
Harvesters	hour	11.71	0.1021	1.20	_____
HAND LABOR					
Implements	hour	9.06	0.1543	1.40	_____
UNALLOCATED LABOR	hour	11.73	0.4049	4.75	_____
DIESEL FUEL					
Tractors	gal	3.50	3.4009	11.91	_____
Harvesters	gal	3.50	1.3935	4.88	_____
REPAIR & MAINTENANCE					
Implements	acre	3.95	1.0000	3.95	_____
Tractors	acre	1.68	1.0000	1.68	_____
Harvesters	acre	2.76	1.0000	2.76	_____
INTEREST ON OP. CAP.	acre	5.93	1.0000	5.93	_____
TOTAL DIRECT EXPENSES				242.98	_____
FIXED EXPENSES					
Implements	acre	8.10	1.0000	8.10	_____
Tractors	acre	10.72	1.0000	10.72	_____
Harvesters	acre	11.04	1.0000	11.04	_____
TOTAL FIXED EXPENSES				29.86	_____
TOTAL SPECIFIED EXPENSES				272.84	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	13.05	43.0000	561.15	_____

TOTAL INCOME				561.15	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	9.00	1.0000	9.00	_____
HARVEST AIDS	acre	2.00	1.0000	2.00	_____
FERTILIZERS	acre	49.14	1.0000	49.14	_____
FUNGICIDES	acre	14.94	1.0000	14.94	_____
HERBICIDES	acre	44.80	1.0000	44.80	_____
INSECTICIDES	acre	4.92	1.0000	4.92	_____
SEED/PLANTS	acre	52.00	1.0000	52.00	_____
ADJUVANTS	acre	0.35	1.0000	0.35	_____
HAULING	acre	12.04	1.0000	12.04	_____
CUSTOM LIME	acre	11.25	1.0000	11.25	_____
HAND LABOR	hour	9.06	0.1543	1.40	_____
OPERATOR LABOR	hour	11.71	0.4499	5.28	_____
UNALLOCATED LABOR	hour	11.73	0.4049	4.75	_____
DIESEL FUEL	gal	3.50	4.7945	16.79	_____
REPAIR & MAINTENANCE	acre	8.39	1.0000	8.39	_____
INTEREST ON OP. CAP.	acre	5.93	1.0000	5.93	_____

TOTAL DIRECT EXPENSES				242.98	_____
RETURNS ABOVE DIRECT EXPENSES				318.17	_____
TOTAL FIXED EXPENSES				29.86	_____

TOTAL SPECIFIED EXPENSES				272.84	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				288.31	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Lime (Spread)	ton			0.25	Oct	0.2500				
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			0.50	Aug	0.5000				
Paraquat	oz					8.0000				
Surfactant	pt					0.1000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					43.0000				
TOTALS							0.44	0.44	0.60	0.40

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 6.D Estimated costs for field operations, per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Lime (Spread)	ton	11.25						0.48	11.73		11.73
Spin Spreader	5 ton		1.44	0.46	1.31			0.14	3.35	1.83	5.18
Phosphorus(46% P2O5)	cwt	19.34						0.82	20.16		20.16
Potash (60% K2O)	cwt	29.80						1.27	31.07		31.07
Disk Harrow	24'		2.80	1.18	1.82			0.25	6.05	4.23	10.28
Field Cultivate Fld	24'		2.13	0.68	1.39			0.18	4.38	3.57	7.95
App by Air (5 gal)	appl	6.00						0.15	6.15		6.15
Glyphosate 3lbs a.e	pt	3.58						0.09	3.67		3.67
2,4-D Amine 4	pt	5.08						0.13	5.21		5.21
Valor SX	oz	11.10						0.28	11.38		11.38
Plant - Folding	12R-30		2.15	1.54	1.97			0.12	5.78	4.36	10.14
Soybean Seed RR2	lb	52.00						1.11	53.11		53.11
CruiserMaxx	oz	6.51						0.14	6.65		6.65
Spray (Broadcast)	60'		0.97	0.29	0.76			0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58						0.06	3.64		3.64
Dual Magnum	pt	13.54						0.24	13.78		13.78
Tricor DF	lb	4.34						0.08	4.42		4.42
Spray (Broadcast)	60'		0.97	0.29	0.76			0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58						0.06	3.64		3.64
Spray (Broadcast)	60'		0.48	0.14	0.38			0.01	1.01	0.52	1.53
Headline EC	oz	8.43						0.09	8.52		8.52
Spray (Broadcast)	60'		0.97	0.29	0.76			0.01	2.03	1.05	3.08
Acephate 90SP	lb	4.92						0.03	4.95		4.95
App by Air (5 gal)	appl	3.00						0.02	3.02		3.02
Paraquat	oz	2.00						0.01	2.01		2.01
Surfactant	pt	0.35							0.35		0.35
Header -Soybean	25' Flex		4.88	3.52	2.28			0.04	10.72	12.20	22.92
Haul Soybeans/Field	bu	12.04						0.04	12.08		12.08
TOTALS		200.44	16.79	8.39	11.43	0.00		5.93	242.98	29.86	272.84

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

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	561.15
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	3.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
FERTILIZERS	49.14	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	19.76	0.00	25.04	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	4.92	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	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	0.35	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	12.04
CUSTOM LIME	11.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.52	0.00	0.00	0.00	0.00	0.00	1.97	1.52	0.00	0.38	0.76	2.28
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	6.37	0.00	0.00	0.00	0.00	0.00	2.15	1.94	0.00	0.48	0.97	4.88
REPAIR & MAINTENANCE	2.32	0.00	0.00	0.00	0.00	0.00	1.54	0.58	0.00	0.14	0.29	3.52
INTEREST ON OP. CAP.	3.14	0.00	0.00	0.00	0.00	0.65	1.37	0.52	0.00	0.10	0.07	0.08
TOTAL DIRECT EXPENSES	76.74	0.00	0.00	0.00	0.00	26.41	65.54	29.60	0.00	9.53	12.36	22.80
NET INCOME	-76.74	0.00	0.00	0.00	0.00	-26.41	-65.54	-29.60	0.00	-9.53	-12.36	538.35
NET INCOME TO DATE	-76.74	-76.74	-76.74	-76.74	-76.74	-103.15	-168.69	-198.29	-198.29	-207.82	-220.18	318.17

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

PRODUCT	-----PERCENT-----												
	75	80	85	90	95	100	105	110	115	120	125		
-----	-----PRODUCT PRICE-----												
Soybeans	9.78	10.44	11.09	11.74	12.39	13.05	13.70	14.35	15.00	15.66	16.31		
PERCENT	YIELD	UNIT	-----dollars-----										
50	21.50	bu	-26	-12	1	15	29	43	57	71	85	99	113
			-56	-42	-28	-14	-0	13	27	41	55	69	83
60	25.80	bu	14	31	48	64	81	98	115	132	149	165	182
			-15	1	18	35	51	68	85	102	119	136	152
70	30.10	bu	55	74	94	114	133	153	173	192	212	232	251
			25	45	64	84	103	123	143	162	182	202	221
80	34.40	bu	96	118	141	163	185	208	230	253	275	298	320
			66	88	111	133	156	178	200	223	245	268	290
90	38.70	bu	137	162	187	212	238	263	288	313	339	364	389
			107	132	157	182	208	233	258	283	309	334	359
100	43.00	bu	177	205	233	262	290	318	346	374	402	430	458
			148	176	204	232	260	288	316	344	372	400	428
110	47.30	bu	218	249	280	311	342	373	403	434	465	496	527
			188	219	250	281	312	343	374	404	435	466	497
120	51.60	bu	259	293	326	360	394	427	461	495	528	562	596
			229	263	297	330	364	398	431	465	499	532	566
130	55.90	bu	300	336	373	409	446	482	519	555	592	628	665
			270	307	343	380	416	453	489	525	562	598	635
140	60.20	bu	341	380	419	459	498	537	577	616	655	694	734
			311	350	390	429	468	507	547	586	625	665	704
150	64.50	bu	382	424	466	508	550	592	634	676	718	761	803
			352	394	436	478	520	562	604	647	689	731	773

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 2012 input prices.

Table 7.A Estimated costs per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	29.30	0.6600	19.34	_____
Potash (60% K2O)	cwt	29.80	1.0000	29.80	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.47	3.0000	7.41	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.79	4.0000	7.16	_____
Tricor DF	lb	14.46	0.3000	4.34	_____
Dual Magnum	pt	13.54	1.0000	13.54	_____
INSECTICIDES					
Dimilin 2L	oz	1.84	1.0000	1.84	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
Intrepid 2F	oz	1.81	2.0000	3.62	_____
Baythroid XL	oz	2.27	1.0650	2.42	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.0500	0.18	_____
HAULING					
Haul Soybeans/Field	bu	0.28	30.0000	8.40	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2500	11.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.3666	4.30	_____
Harvesters	hour	11.71	0.1021	1.20	_____
HAND LABOR					
Implements	hour	9.06	0.1662	1.50	_____
UNALLOCATED LABOR	hour	11.73	0.4219	4.95	_____
DIESEL FUEL					
Tractors	gal	3.50	3.5861	12.56	_____
Harvesters	gal	3.50	1.3935	4.88	_____
REPAIR & MAINTENANCE					
Implements	acre	4.50	1.0000	4.50	_____
Tractors	acre	1.78	1.0000	1.78	_____
Harvesters	acre	2.76	1.0000	2.76	_____
INTEREST ON OP. CAP.	acre	4.36	1.0000	4.36	_____
TOTAL DIRECT EXPENSES				215.52	_____
FIXED EXPENSES					
Implements	acre	9.13	1.0000	9.13	_____
Tractors	acre	11.29	1.0000	11.29	_____
Harvesters	acre	11.04	1.0000	11.04	_____
TOTAL FIXED EXPENSES				31.46	_____
TOTAL SPECIFIED EXPENSES				246.98	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	13.05	30.0000	391.50	_____

TOTAL INCOME				391.50	_____
DIRECT EXPENSES					
FERTILIZERS	acre	49.14	1.0000	49.14	_____
FUNGICIDES	acre	13.92	1.0000	13.92	_____
HERBICIDES	acre	25.04	1.0000	25.04	_____
INSECTICIDES	acre	12.80	1.0000	12.80	_____
SEED/PLANTS	acre	52.00	1.0000	52.00	_____
ADJUVANTS	acre	0.18	1.0000	0.18	_____
HAULING	acre	8.40	1.0000	8.40	_____
CUSTOM LIME	acre	11.25	1.0000	11.25	_____
HAND LABOR	hour	9.06	0.1662	1.50	_____
OPERATOR LABOR	hour	11.71	0.4688	5.50	_____
UNALLOCATED LABOR	hour	11.73	0.4219	4.95	_____
DIESEL FUEL	gal	3.50	4.9797	17.44	_____
REPAIR & MAINTENANCE	acre	9.04	1.0000	9.04	_____
INTEREST ON OP. CAP.	acre	4.36	1.0000	4.36	_____

TOTAL DIRECT EXPENSES				215.52	_____
RETURNS ABOVE DIRECT EXPENSES				175.98	_____
TOTAL FIXED EXPENSES				31.46	_____

TOTAL SPECIFIED EXPENSES				246.98	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				144.52	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Lime (Spread)	ton			0.25	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				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					30.0000				
TOTALS							0.46	0.46	0.63	0.42

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 7.D Estimated costs for field operations, per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Lime (Spread)	ton	11.25						0.48	11.73		11.73
Spin Spreader	5 ton		1.44	0.46	1.31			0.08	3.29	1.83	5.12
Phosphorus(46% P2O5)	cwt	19.34						0.48	19.82		19.82
Potash (60% K2O)	cwt	29.80						0.74	30.54		30.54
Disk Harrow	24'		2.80	1.18	1.82			0.14	5.94	4.23	10.17
Field Cultivate Fld	24'		2.13	0.68	1.39			0.09	4.29	3.57	7.86
Plant & Pre-Folding	12R-30		2.32	2.05	2.11			0.14	6.62	5.44	12.06
Soybean Seed RR2	lb	52.00						1.11	53.11		53.11
CruiserMaxx	oz	6.51						0.14	6.65		6.65
Spray (Broadcast)	60'		0.97	0.29	0.76			0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58						0.08	3.66		3.66
Tricor DF	lb	4.34						0.09	4.43		4.43
Dual Magnum	pt	13.54						0.29	13.83		13.83
Spray (Broadcast)	60'		0.97	0.29	0.76			0.04	2.06	1.05	3.11
Glyphosate 3lbs a.e	pt	3.58						0.06	3.64		3.64
Spray (Broadcast)	60'		0.48	0.14	0.38			0.01	1.01	0.52	1.53
Dimilin 2L	oz	1.84						0.03	1.87		1.87
Quadris	oz	7.41						0.10	7.51		7.51
Spray (Broadcast)	60'		0.97	0.29	0.76			0.02	2.04	1.05	3.09
Acephate 90SP	lb	4.92						0.05	4.97		4.97
Spray (Broadcast)	60'		0.48	0.14	0.38			0.01	1.01	0.52	1.53
Intrepid 2F	oz	3.62						0.04	3.66		3.66
Baythroid XL	oz	2.42						0.03	2.45		2.45
Surfactant	pt	0.18							0.18		0.18
Header -Soybean	25' Flex		4.88	3.52	2.28			0.04	10.72	12.20	22.92
Haul Soybeans/Field	bu	8.40						0.03	8.43		8.43
TOTALS		172.73	17.44	9.04	11.95	0.00	4.36	215.52	31.46	246.98	

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

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	391.50
DIRECT EXPENSES												
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	49.14	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	7.41	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	21.46	3.58	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	1.84	10.96	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	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	0.00	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	8.40
CUSTOM LIME	11.25	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	3.13	4.26	0.76	0.38	1.14	0.00	2.28
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	4.24	5.42	0.97	0.48	1.45	0.00	4.88
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	1.64	3.02	0.29	0.14	0.43	0.00	3.52
INTEREST ON OP. CAP.	0.48	0.00	0.00	0.00	0.00	1.44	1.98	0.10	0.14	0.15	0.00	0.07
TOTAL DIRECT EXPENSES	11.73	0.00	0.00	0.00	0.00	59.59	94.65	5.70	10.39	14.31	0.00	19.15
NET INCOME	-11.73	0.00	0.00	0.00	0.00	-59.59	-94.65	-5.70	-10.39	-14.31	0.00	372.35
NET INCOME TO DATE	-11.73	-11.73	-11.73	-11.73	-11.73	-71.32	-165.97	-171.67	-182.06	-196.37	-196.37	175.98

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

PRODUCT	-----PERCENT-----												
	75	80	85	90	95	100	105	110	115	120	125		
-----PRODUCT PRICE-----													
Soybeans	9.78	10.44	11.09	11.74	12.39	13.05	13.70	14.35	15.00	15.66	16.31		
PERCENT	YIELD	UNIT	-----dollars-----										
50	15.00	bu	-64	-54	-44	-35	-25	-15	-5	4	13	23	33
			-95	-86	-76	-66	-56	-47	-37	-27	-17	-7	1
60	18.00	bu	-35	-24	-12	-0	11	22	34	46	57	69	81
			-67	-55	-43	-32	-20	-8	3	14	26	38	50
70	21.00	bu	-7	6	19	33	47	61	74	88	102	115	129
			-38	-25	-11	2	15	29	43	57	70	84	98
80	24.00	bu	21	36	52	68	83	99	115	130	146	162	177
			-10	5	20	36	52	67	83	99	114	130	146
90	27.00	bu	49	67	84	102	120	137	155	172	190	208	225
			18	35	53	70	88	106	123	141	159	176	194
100	30.00	bu	78	97	117	136	156	175	195	215	234	254	273
			46	66	85	105	124	144	164	183	203	222	242
110	33.00	bu	106	128	149	171	192	214	235	257	278	300	321
			75	96	118	139	161	182	204	225	247	268	290
120	36.00	bu	135	158	182	205	229	252	276	299	323	346	370
			103	127	150	174	197	221	244	268	291	315	338
130	39.00	bu	163	189	214	240	265	290	316	341	367	392	418
			132	157	183	208	233	259	284	310	335	361	386
140	42.00	bu	192	219	246	274	301	329	356	384	411	438	466
			160	188	215	242	270	297	325	352	379	407	434
150	45.00	bu	220	250	279	308	338	367	396	426	455	484	514
			189	218	247	277	306	336	365	394	424	453	482

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 2012 input prices.

Table 8.A Estimated costs per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	29.30	0.6600	19.34	_____
Potash (60% K2O)	cwt	29.80	1.0000	29.80	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.47	3.0000	7.41	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.79	5.0000	8.95	_____
Tricor DF	lb	14.46	0.3000	4.34	_____
Dual Magnum	pt	13.54	1.0000	13.54	_____
INSECTICIDES					
Dimilin 2L	oz	1.84	1.0000	1.84	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
Intrepid 2F	oz	1.81	3.0000	5.43	_____
Baythroid XL	oz	2.27	1.5975	3.63	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
HAULING					
Haul Soybeans/Field	bu	0.28	25.0000	7.00	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.2465	2.90	_____
Harvesters	hour	11.71	0.1021	1.20	_____
HAND LABOR					
Implements	hour	9.06	0.1795	1.63	_____
UNALLOCATED LABOR	hour	11.63	0.2999	3.49	_____
DIESEL FUEL					
Tractors	gal	3.50	2.4116	8.44	_____
Harvesters	gal	3.50	1.3935	4.88	_____
REPAIR & MAINTENANCE					
Implements	acre	3.68	1.0000	3.68	_____
Tractors	acre	1.20	1.0000	1.20	_____
Harvesters	acre	2.76	1.0000	2.76	_____
INTEREST ON OP. CAP.	acre	4.22	1.0000	4.22	_____

TOTAL DIRECT EXPENSES				199.11	_____
FIXED EXPENSES					
Implements	acre	6.36	1.0000	6.36	_____
Tractors	acre	7.59	1.0000	7.59	_____
Harvesters	acre	11.04	1.0000	11.04	_____

TOTAL FIXED EXPENSES				24.99	_____

TOTAL SPECIFIED EXPENSES				224.10	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	13.05	25.0000	326.25	_____

TOTAL INCOME				326.25	_____
DIRECT EXPENSES					
FERTILIZERS	acre	49.14	1.0000	49.14	_____
FUNGICIDES	acre	13.92	1.0000	13.92	_____
HERBICIDES	acre	26.83	1.0000	26.83	_____
INSECTICIDES	acre	15.82	1.0000	15.82	_____
SEED/PLANTS	acre	52.00	1.0000	52.00	_____
HAULING	acre	7.00	1.0000	7.00	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
OPERATOR LABOR	hour	11.71	0.3487	4.10	_____
UNALLOCATED LABOR	hour	11.63	0.2999	3.49	_____
DIESEL FUEL	gal	3.50	3.8052	13.32	_____
REPAIR & MAINTENANCE	acre	7.64	1.0000	7.64	_____
INTEREST ON OP. CAP.	acre	4.22	1.0000	4.22	_____

TOTAL DIRECT EXPENSES				199.11	_____
RETURNS ABOVE DIRECT EXPENSES				127.14	_____
TOTAL FIXED EXPENSES				24.99	_____

TOTAL SPECIFIED EXPENSES				224.10	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				102.15	_____

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	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				
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				
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	Jul		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	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/Field	bu					25.0000				
TOTALS							0.34	0.34	0.52	0.29

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 per acre.

Table 8.D Estimated costs for field operations, per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Spin Spreader	5 ton		1.44	0.46	1.29			0.14	3.33	1.83	5.16
Phosphorus(46% P2O5)	cwt	19.34						0.82	20.16		20.16
Potash (60% K2O)	cwt	29.80						1.27	31.07		31.07
Spray (Broadcast)	60'		0.97	0.29	0.74			0.04	2.04	1.05	3.09
Glyphosate 3lbs a.e	pt	3.58						0.06	3.64		3.64
NT Plant&Pre-Folding	12R-30		2.41	2.30	2.18			0.12	7.01	5.99	13.00
Soybean Seed RR2	lb	52.00						0.92	52.92		52.92
CruiserMaxx	oz	6.51						0.12	6.63		6.63
Spray (Broadcast)	60'		0.97	0.29	0.74			0.03	2.03	1.05	3.08
Glyphosate 3lbs a.e	pt	3.58						0.05	3.63		3.63
Tricor DF	lb	4.34						0.06	4.40		4.40
Dual Magnum	pt	13.54						0.19	13.73		13.73
Spray (Broadcast)	60'		0.48	0.14	0.37			0.01	1.00	0.52	1.52
Glyphosate 3lbs a.e	pt	1.79						0.03	1.82		1.82
Spray (Broadcast)	60'		0.48	0.14	0.37			0.01	1.00	0.52	1.52
Dimilin 2L	oz	1.84						0.02	1.86		1.86
Quadris	oz	7.41						0.08	7.49		7.49
Spray (Broadcast)	60'		0.97	0.29	0.74			0.02	2.02	1.05	3.07
Acephate 90SP	lb	4.92						0.05	4.97		4.97
Spray (Broadcast)	60'		0.72	0.21	0.56			0.02	1.51	0.78	2.29
Intrepid 2F	oz	5.43						0.06	5.49		5.49
Baythroid XL	oz	3.63						0.04	3.67		3.67
Header -Soybean	25' Flex		4.88	3.52	2.23			0.04	10.67	12.20	22.87
Haul Soybeans/Field	bu	7.00						0.02	7.02		7.02
TOTALS		164.71	13.32	7.64	9.22	0.00		4.22	199.11	24.99	224.10

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

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	326.25
DIRECT EXPENSES												
FERTILIZERS	49.14	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	7.41	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.58	23.25	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	15.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00
LABOR	1.29	0.00	0.00	0.00	0.00	0.00	0.00	2.92	1.11	1.67	0.00	2.23
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	1.44	0.00	0.00	0.00	0.00	0.00	0.00	3.38	1.45	2.17	0.00	4.88
REPAIR & MAINTENANCE	0.46	0.00	0.00	0.00	0.00	0.00	0.00	2.59	0.43	0.64	0.00	3.52
INTEREST ON OP. CAP.	2.23	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.37	0.30	0.00	0.06
TOTAL DIRECT EXPENSES	54.56	0.00	0.00	0.00	0.00	0.00	0.00	72.24	26.61	28.01	0.00	17.69
NET INCOME	-54.56	0.00	0.00	0.00	0.00	0.00	0.00	-72.24	-26.61	-28.01	0.00	308.56
NET INCOME TO DATE	-54.56	-54.56	-54.56	-54.56	-54.56	-54.56	-54.56	-126.80	-153.41	-181.42	-181.42	127.14

Note: Cost of production estimates are based on 2012 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 \$7 to \$12 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, 2013

PRODUCT	-----PERCENT-----												
	75	80	85	90	95	100	105	110	115	120	125		
-----	-----PRODUCT PRICE-----												
Soybeans	9.78	10.44	11.09	11.74	12.39	13.05	13.70	14.35	15.00	15.66	16.31		
PERCENT	YIELD	UNIT	-----dollars-----										
50	12.50	bu	-73	-65	-56	-48	-40	-32	-24	-16	-8	0	8
			-98	-90	-81	-73	-65	-57	-49	-41	-32	-24	-16
60	15.00	bu	-49	-39	-29	-20	-10	-0	9	19	28	38	48
			-74	-64	-54	-45	-35	-25	-15	-5	3	13	23
70	17.50	bu	-25	-14	-2	8	19	31	42	54	65	77	88
			-50	-39	-27	-16	-5	6	17	29	40	52	63
80	20.00	bu	-1	11	24	37	50	63	76	89	102	115	128
			-26	-13	-0	12	25	38	51	64	77	90	103
90	22.50	bu	21	36	51	65	80	95	109	124	139	153	168
			-3	11	26	40	55	70	84	99	114	128	143
100	25.00	bu	45	61	78	94	110	127	143	159	176	192	208
			20	36	53	69	85	102	118	134	151	167	183
110	27.50	bu	69	87	105	123	141	159	177	194	212	230	248
			44	62	80	98	116	134	152	169	187	205	223
120	30.00	bu	93	112	132	151	171	190	210	230	249	269	288
			68	87	107	126	146	165	185	205	224	244	263
130	32.50	bu	116	138	159	180	201	222	244	265	286	307	328
			91	113	134	155	176	197	219	240	261	282	303
140	35.00	bu	140	163	186	209	231	254	277	300	323	346	369
			115	138	161	184	207	229	252	275	298	321	344
150	37.50	bu	164	188	213	237	262	286	311	335	360	384	409
			139	163	188	212	237	261	286	310	335	359	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 2012 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, 2013

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	259,000	300	8	13.64	11.60	47.74	26.97	86.31	108.04	194.36
Combine (300-349 hp)	325 hp	298,000	300	8	16.73	11.60	58.55	31.04	101.19	124.31	225.51
Combine (350-399 hp)	355 hp	316,000	300	8	18.27	11.60	63.94	32.91	108.46	131.82	240.28
Combine (400-449 hp)	425 hp	339,000	300	8	21.87	11.60	76.56	35.31	123.47	141.42	264.90
Combine (450-499hp)	475 hp	356,000	300	8	24.44	11.60	85.57	37.08	134.25	148.51	282.76
Cotton Stripper	173 hp	170,000	200	8	8.08	11.60	28.28	26.56	66.44	106.37	172.82
Tractor(20-39hp)CB	MFWD 30	28,100	600	8	1.54	11.60	5.40	0.87	17.88	5.37	23.25
Tractor(20-39hp)RB	MFWD 30	17,400	600	8	1.54	11.60	5.40	0.54	17.54	3.32	20.87
Tractor(40-59hp)CB	2WD 50	35,200	600	8	2.57	11.60	9.00	1.10	21.70	6.73	28.44
Tractor(40-59hp)CB	MFWD 50	36,700	600	8	2.57	11.60	9.00	1.14	21.75	7.02	28.77
Tractor(40-59hp)RB	2WD 50	20,500	600	8	2.57	11.60	9.00	0.64	21.24	3.92	25.16
Tractor(40-59hp)RB	MFWD 50	29,000	600	8	2.57	11.60	9.00	0.90	21.51	5.54	27.06
Tractor(60-89hp)CB	2WD 75	45,300	600	8	3.86	11.60	13.51	1.41	26.52	8.66	35.19
Tractor(60-89hp)CB	MFWD 75	49,400	600	8	3.86	11.60	13.51	1.54	26.65	9.44	36.10
Tractor(60-89hp)RB	2WD 75	33,600	600	8	3.86	11.60	13.51	1.05	26.16	6.42	32.58
Tractor(60-89hp)RB	MFWD 75	40,300	600	8	3.86	11.60	13.51	1.25	26.37	7.70	34.07
Tractor(90-119hp)CB	2WD 105	57,700	600	8	5.40	11.60	18.91	1.80	32.31	11.03	43.35
Tractor(90-119hp)CB	MFWD 105	74,700	600	8	5.40	11.60	18.91	2.33	32.85	14.28	47.13
Tractor(90-119hp)RB	2WD 105	45,800	600	8	5.40	11.60	18.91	1.43	31.94	8.76	40.70
Tractor(90-119hp)RB	MFWD 105	51,800	600	8	5.40	11.60	18.91	1.61	32.13	9.90	42.04
Tractor(120-139hp)CB	2WD 130	82,300	600	8	6.69	11.60	23.41	2.57	37.59	15.74	53.33
Tractor(120-139hp)CB	MFWD 130	101,000	600	8	6.69	11.60	23.41	3.15	38.17	19.32	57.49
Tractor(140-159hp)CB	2WD 150	131,000	600	8	7.72	11.60	27.02	4.09	42.71	25.05	67.77
Tractor(140-159hp)CB	MFWD 150	133,000	600	8	7.72	11.60	27.02	4.15	42.77	25.44	68.22
Tractor(160-179hp)CB	MFWD 170	144,000	600	8	8.75	11.60	30.62	4.50	46.72	28.79	75.51
Tractor(180-199hp)CB	MFWD 190	154,000	600	8	9.77	11.60	34.22	4.81	50.64	30.79	81.43
Tractor(200-249hp)CB	MFWD 225	208,000	600	8	11.58	11.60	40.53	6.50	58.63	41.58	100.22
Tractor(200-249hp)CB	Track 225	258,000	600	8	11.58	11.60	40.53	8.06	60.19	51.58	111.78
Tractor(250-349hp)CB	4WD 300	262,000	600	8	15.44	11.60	54.04	8.18	73.83	52.38	126.21
Tractor(250-349hp)CB	MFWD 300	247,000	600	8	15.44	11.60	54.04	7.71	73.36	49.38	122.74
Tractor(250-349hp)CB	Track 300	260,000	600	8	15.44	11.60	54.04	8.12	73.77	51.98	125.75
Tractor(350-449hp)CB	4WD 400	300,000	600	8	20.58	11.60	72.06	9.37	93.03	59.98	153.01
Tractor(350-449hp)CB	Track 400	345,000	600	8	20.58	11.60	72.06	10.78	94.44	68.97	163.42
Tractor(450-550hp)CB	4WD 500	343,000	600	8	25.73	11.60	90.07	10.71	112.39	68.57	180.97
Tractor(450-550hp)CB	Track 500	376,000	600	8	25.73	11.60	90.07	11.75	113.42	75.17	188.60
Utility Vehicle	800 CC	7,400	200	8	0.70	11.60	2.38	1.15	15.13	4.63	19.76
Utility Vehicle-mule	600 CC	7,100	200	8	0.50	11.60	1.70	1.10	14.40	4.44	18.85

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, 2013

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	6.76	20.64	17.90	45.30	71.70	117.01
Cotton Picker	4R-38(255)	267,000	200	8	13.12	0.257	5.32	11.84	10.75	27.92	43.06	70.99
Cotton Picker	4R-38(350)	382,000	200	8	18.01	0.257	5.32	16.25	15.38	36.96	61.62	98.58
Cotton Picker	4R2x1(350)	388,000	200	8	18.01	0.172	3.55	10.86	10.44	24.87	41.83	66.70
Cotton Picker	6R-30(355)	441,000	200	8	18.27	0.218	4.50	13.95	15.03	33.50	60.22	93.73
Cotton Picker	6R-38(355)	441,000	200	8	18.27	0.172	3.55	11.02	11.87	26.45	47.55	74.00
Cotton Picker/Module	4R-38(365)	515,000	200	8	18.78	0.257	5.32	16.95	20.74	43.01	83.07	126.09
Cotton Picker/Module	6R-30(365)	572,000	200	8	18.78	0.218	4.50	14.35	19.50	38.36	78.11	116.48
Cotton Picker/Module	6R-30(500)	609,000	200	8	25.73	0.218	4.50	19.65	20.76	44.93	83.17	128.10
Cotton Picker/Module	6R-38(365)	571,000	200	8	18.78	0.172	3.55	11.33	15.37	30.26	61.56	91.83
Cotton Picker/Module	6R-38(500)	610,000	200	8	25.73	0.172	3.55	15.52	16.42	35.50	65.77	101.27
Dry Applicator SP	70'300cuft	281,000	350	8	16.98	0.015	0.24	0.89	0.22	1.36	1.51	2.88
Sprayer 110Gal	30' 50hp	43,300	350	8	2.41	0.035	0.56	0.29	0.08	0.94	0.54	1.49
Sprayer 300-450gal	60' 125hp	103,000	350	8	5.66	0.017	0.28	0.34	0.09	0.73	0.64	1.38
Sprayer 300-450gal	80' 125hp	103,000	350	8	6.43	0.013	0.21	0.29	0.07	0.58	0.48	1.07
Sprayer 600-750gal	60' 175hp	161,000	350	8	9.00	0.017	0.28	0.55	0.15	0.99	1.01	2.00
Sprayer 600-825gal	80' 175hp	161,000	350	8	11.81	0.013	0.21	0.54	0.11	0.87	0.76	1.63
Sprayer 600-825gal	90' 250hp	237,000	350	8	12.73	0.011	0.18	0.52	0.14	0.86	0.99	1.85
Sprayer 800gal	100' 250hp	232,000	350	8	14.15	0.010	0.17	0.52	0.13	0.82	0.87	1.70
Sprayer 800gal	80' 250hp	233,000	350	8	12.86	0.013	0.21	0.59	0.16	0.97	1.10	2.07
Sprayer 1000-1400gal	90' 275hp	272,000	350	8	14.15	0.010	0.17	0.52	0.15	0.84	1.02	1.87
Sprayer 1000gal	100' 300hp	274,000	350	8	15.44	0.010	0.17	0.57	0.15	0.89	1.03	1.93
Sprayer 1200+gal	120' 300hp	286,000	350	8	15.44	0.008	0.14	0.47	0.13	0.75	0.90	1.65
Utility Vehicle	20'	7,400	200	8	0.70	0.052	0.85	0.12	0.06	1.03	0.24	1.28
Utility Vehicle	75"ropewic	7,100	200	8	0.50	0.170	2.75	0.29	0.18	3.23	0.75	3.98

Notes:

Labor: includes allocated labor plus any additional labor from self-propelled machine.

Direct: Does not include interest on operating capital.

BB = Boll Buggy, Tr = Trailer

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2013

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Bed-Disk (Hipper)	4R-38	MFWD 150	7,700	160	10	0.147	1.71	3.98	0.28	0.61	6.60	0.76	3.75	11.12
Bed-Disk (Hipper)	6R-30	MFWD 170	10,700	160	10	0.125	1.45	3.82	0.33	0.56	6.17	0.89	3.59	10.67
Bed-Disk (Hipper)	6R-38	MFWD 170	12,600	160	10	0.098	1.14	3.02	0.31	0.44	4.92	0.83	2.84	8.59
Bed-Disk (Hipper)	8R-30	MFWD 190	14,800	160	10	0.093	1.08	3.20	0.34	0.45	5.09	0.93	2.88	8.91
Bed-Disk (Hipper)	8R-38 2x1	MFWD 190	27,700	160	10	0.049	0.57	1.68	0.34	0.23	2.84	0.91	1.51	5.27
Bed-Disk (Hipper)	10R-30	MFWD 225	22,900	160	10	0.075	0.87	3.04	0.42	0.48	4.82	1.15	3.11	9.10
Bed-Disk (Hipper)	10R-38	MFWD 225	23,700	160	10	0.059	0.68	2.39	0.35	0.38	3.81	0.94	2.45	7.22
Bed-Disk (Hipper)	12R-30	MFWD 225	27,900	160	10	0.062	0.72	2.53	0.43	0.40	4.10	1.17	2.59	7.87
Bed-Disk (Hipper)	12R-38	MFWD 225	27,700	160	10	0.049	0.57	1.99	0.34	0.32	3.23	0.91	2.05	6.20
Bed-Disk (Hipper)Fl	8R-38	MFWD 190	20,400	160	10	0.074	0.85	2.53	0.37	0.35	4.13	1.01	2.28	7.42
Bed-Disk (Hipper)Rd	8R-38	MFWD 190	15,100	160	10	0.074	0.85	2.53	0.27	0.35	4.03	0.75	2.28	7.06
Bed-Disk w/roller	8R-30	MFWD 190	21,000	160	10	0.093	1.08	3.20	0.49	0.45	5.23	1.32	2.88	9.44
Bed-Disk w/roller	12R-30	MFWD 225	35,800	160	10	0.062	0.72	2.53	0.55	0.40	4.22	1.50	2.59	8.32
Bed-Disk w/roller	8R-38	MFWD 190	24,100	160	10	0.074	0.85	2.53	0.44	0.35	4.19	1.20	2.28	7.68
Bed-Middle Buster	4R-38	MFWD 150	10,800	160	8	0.228	2.64	6.17	0.57	0.94	10.34	1.84	5.81	18.00
Bed-Middle Buster	6R-38	MFWD 150	12,800	160	8	0.120	1.39	3.24	0.36	0.49	5.50	1.15	3.05	9.71
Bed-Middle Buster	8R-30	MFWD 190	20,781	160	8	0.114	1.32	3.90	0.55	0.54	6.33	1.77	3.51	11.63
Bed-Middle Buster	8R-38	MFWD 190	18,100	160	8	0.090	1.04	3.08	0.38	0.43	4.95	1.22	2.77	8.95
Bed-Middle Buster	8R-38 2x1	MFWD 190	29,200	160	8	0.060	0.69	2.05	0.41	0.28	3.45	1.31	1.85	6.62
Bed-Middle Buster	10R-30	MFWD 225	29,300	160	8	0.091	1.05	3.70	0.62	0.59	5.98	2.00	3.79	11.78
Bed-Middle Buster	10R-38	MFWD 225	32,100	160	8	0.072	0.83	2.92	0.54	0.46	4.76	1.73	2.99	9.49
Bed-Middle Buster	12R-38	MFWD 225	29,200	160	8	0.060	0.69	2.43	0.41	0.39	3.93	1.31	2.49	7.75
Bed-Paratill Fold	8R-38	MFWD 225	54,400	150	12	0.080	0.93	3.27	1.58	0.52	6.32	2.80	3.35	12.48
Bed-Paratill Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.62	2.17	1.34	0.34	4.49	2.37	2.23	9.10
Bed-Paratill Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.62	2.17	1.34	0.34	4.49	2.37	2.23	9.10
Bed-Paratill Rigid	4R-30	MFWD 225	14,800	150	12	0.204	2.37	8.28	1.09	1.32	13.07	1.93	8.49	23.50
Bed-Paratill Rigid	4R-38	MFWD 225	13,900	150	12	0.160	1.86	6.52	0.80	1.04	10.24	1.42	6.69	18.36
Bed-Paratill Rigid	6R-30	MFWD 225	20,100	150	12	0.136	1.58	5.52	0.98	0.88	8.97	1.74	5.66	16.39
Bed-Paratill Rigid	6R-38	MFWD 225	18,800	150	12	0.107	1.24	4.35	0.73	0.69	7.03	1.29	4.47	12.79
Bed-Paratill Rigid	8R-30	MFWD 225	28,100	150	12	0.102	1.18	4.14	1.03	0.66	7.02	1.83	4.24	13.11
Bed-Paratill Rigid	8R-38	MFWD 225	26,900	150	12	0.080	0.93	3.27	0.78	0.52	5.51	1.38	3.35	10.26
Bed-Paratill w/rol	4R-30	MFWD 225	14,100	150	12	0.204	2.37	8.28	1.04	1.32	13.02	1.84	8.49	23.35
Bed-Paratill w/rol	4R-38	MFWD 225	14,100	150	12	0.160	1.86	6.52	0.81	1.04	10.25	1.44	6.69	18.39
Bed-Paratill w/rol	6R-38	MFWD 225	18,600	150	12	0.107	1.24	4.35	0.72	0.69	7.02	1.27	4.47	12.77
Bed-Rip/Disk Fold.	8R-38	MFWD 190	32,200	300	20	0.073	0.84	2.50	0.11	0.35	3.81	0.57	2.24	6.64
Bed-Rip/Disk Fold.	12R-30	MFWD 225	48,200	300	20	0.061	0.71	2.49	0.14	0.40	3.76	0.72	2.56	7.04
Bed-Rip/Disk Fold.	12R-38	MFWD 225	48,100	300	20	0.046	0.53	1.87	0.11	0.30	2.82	0.54	1.92	5.28
Bed-Rip/Disk Rigid	4R-30	MFWD 190	13,700	300	20	0.184	2.14	6.32	0.12	0.88	9.48	0.61	5.69	15.79
Bed-Rip/Disk Rigid	4R-38	MFWD 190	13,700	300	20	0.146	1.70	5.02	0.10	0.70	7.53	0.48	4.51	12.53
Bed-Rip/Disk Rigid	6R-38	MFWD 190	21,400	300	20	0.097	1.12	3.33	0.10	0.46	5.03	0.50	2.99	8.53
Bed-Rip/Disk Rigid	8R-30	MFWD 190	26,900	300	20	0.139	1.61	4.75	0.18	0.66	7.22	0.91	4.27	12.41
Bed-Rip/Disk Rigid	8R-38	MFWD 190	26,900	300	20	0.073	0.84	2.50	0.09	0.35	3.79	0.47	2.24	6.52
Bed-Rip/Disk Rigid	6R-30	MFWD 190	21,400	300	20	0.123	1.42	4.21	0.13	0.59	6.37	0.64	3.79	10.81
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	19,300	150	12	0.107	1.24	4.35	0.74	0.69	7.05	1.32	4.47	12.85
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	23,000	150	12	0.080	0.93	3.27	0.67	0.52	5.40	1.18	3.35	9.95
Bed-Roll-Fold.	8R-38	MFWD 190	24,700	160	10	0.074	0.85	2.53	0.45	0.35	4.21	1.22	2.28	7.72
Bed-Roll-Fold.	12R-30	MFWD 225	26,500	160	10	0.062	0.72	2.53	0.41	0.40	4.07	1.11	2.59	7.79
Bed-Roll-Fold.	12R-38	MFWD 225	29,700	160	10	0.049	0.57	1.99	0.36	0.32	3.25	0.98	2.05	6.29
Bed-Roll-Fold.	16R-30	MFWD 225	30,900	160	10	0.046	0.54	1.90	0.36	0.30	3.11	0.97	1.94	6.03
Bed-Roll-Rigid	8R-38	MFWD 190	18,400	160	10	0.074	0.85	2.53	0.34	0.35	4.09	0.91	2.28	7.29
Blade-Box	6'-7'	2WD 130	1,030	200	20	0.020	0.23	0.46	0.00	0.05	0.76	0.00	0.31	1.08
Blade-Box	8'-10'	2WD 50	4,880	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	6,970	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	1,090	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	3,030	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	6,220	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy	4R-30(325)	MFWD 190	26,200	200	10	0.327	3.79	11.20	2.14	1.57	18.72	4.44	10.08	33.24
Boll Buggy	4R-38(255)	MFWD 190	26,200	200	10	0.257	2.99	8.82	1.68	1.24	14.74	3.49	7.93	26.17
Boll Buggy	4R-38(325)	MFWD 190	26,200	200	10	0.257	2.99	8.82	1.68	1.24	14.74	3.49	7.93	26.17
Boll Buggy	4R2x1(350)	MFWD 190	26,200	200	10	0.172	1.99	5.89	1.12	0.82	9.85	2.33	5.30	17.49
Boll Buggy	6R-30(325)	MFWD 190	26,200	200	10	0.218	2.53	7.47	1.42	1.05	12.48	2.96	6.72	22.16
Boll Buggy	6R-38(330)	MFWD 190	26,200	200	10	0.172	1.99	5.89	1.12	0.82	9.85	2.33	5.30	17.49
Boll Buggy-Stripper	13' Bcast	MFWD 150	26,200	200	10	0.251	2.92	6.80	1.64	1.04	12.42	3.41	6.40	22.24
Boll Buggy-Stripper	16' Bcast	MFWD 150	26,200	200	10	0.204	2.37	5.52	1.34	0.85	10.09	2.77	5.20	18.07
Boll Buggy-Stripper	19' Bcast	MFWD 150	26,200	200	10	0.172	1.99	4.65	1.12	0.71	8.49	2.33	4.38	15.22
Boll Buggy-Stripper	4R-30 2x1	MFWD 150	26,200	200	10	0.218	2.53	5.89	1.42	0.90	10.76	2.96	5.55	19.28
Boll Buggy-Stripper	4R-36	MFWD 150	26,200	200	10	0.272	3.16	7.37	1.78	1.13	13.45	3.70	6.94	24.10
Boll Buggy-Stripper	4R-38	MFWD 150	26,200	200	10	0.257	2.99	6.96	1.68	1.07	12.71	3.49	6.55	22.77
Boll Buggy-Stripper	4R-38 2x1	MFWD 150	26,200	200	10	0.172	1.99	4.65	1.12	0.71	8.49	2.33	4.38	15.22
Boll Buggy-Stripper	5R-30	MFWD 150	26,200	200	10	0.261	3.03	7.07	1.71	1.08	12.91	3.55	6.66	23.13
Boll Buggy-Stripper	5R-38	MFWD 150	26,200	200	10	0.207	2.40	5.59	1.35	0.86	10.22	2.81	5.27	18.30
Boll Buggy-Stripper	6R-30	MFWD 150	26,200	200	10	0.218	2.53	5.89	1.42	0.90	10.76	2.96	5.55	19.28
Boll Buggy-Stripper	6R-38	MFWD 150	26,200	200	10	0.172	1.99	4.65	1.12	0.71	8.49	2.33	4.38	15.22
Boll Buggy-Stripper	8R-30	MFWD 150	26,200	200	10	0.163	1.89	4.42	1.07	0.68	8.07	2.22	4.16	14.46
Boll Buggy-Stripper	8R-36/38	MFWD 150	26,200	200	10	0.129	1.50	3.49	0.84	0.53	6.38	1.75	3.29	11.43
Chisel Plow-Folding	16'	2WD 130	21,300	150	12	0.115	1.34	2.70	0.88	0.29	5.23	1.57	1.81	8.62
Chisel Plow-Folding	24'	MFWD 190	33,200	150	12	0.076	0.88	2.61	0.91	0.36	4.78	1.62	2.35	8.76
Chisel Plow-Folding	32'	MFWD 225	37,000	150	12	0.057	0.67	2.34	0.77	0.37	4.15	1.36	2.40	7.92

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2013 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Chisel Plow-Folding	42'	MFWD 225	43,700	150	12	0.044	0.51	1.78	0.69	0.28	3.27	1.22	1.83	6.33
Chisel Plow-Folding	50'	MFWD 225	67,000	150	10	0.036	0.42	1.49	1.07	0.24	3.24	1.77	1.53	6.55
Chisel Plow-Folding	61'	MFWD 225	71,300	150	12	0.030	0.35	1.22	0.78	0.19	2.55	1.38	1.26	5.19
Chisel Plow-Rigid	10'	MFWD 170	7,300	150	12	0.184	2.14	5.66	0.48	0.83	9.12	0.86	5.32	15.31
Chisel Plow-Rigid	15'	2WD 130	8,600	150	12	0.123	1.42	2.88	0.38	0.31	5.01	0.67	1.94	7.63
Chisel Plow-Rigid	20'	MFWD 225	9,600	150	12	0.102	1.19	4.16	0.35	0.66	6.37	0.63	4.27	11.27
Chisel Plow-Rigid	24'	MFWD 190	10,000	150	12	0.077	0.89	2.63	0.27	0.37	4.17	0.49	2.37	7.04
Chisel-Harrow	21 shank	2WD 190	12,100	150	12	0.088	1.02	3.01	0.38	0.30	4.72	0.68	1.93	7.33
Chisel-Harrow	27 shank	MFWD 225	13,600	150	12	0.068	0.79	2.77	0.33	0.44	4.35	0.59	2.84	7.79
Coulter-Chisel-Harro	21 shank	2WD 190	18,800	150	12	0.088	1.02	3.01	0.59	0.30	4.93	1.05	1.93	7.92
Coulter-Chisel-Harro	27 shank	MFWD 225	23,500	150	12	0.068	0.79	2.77	0.58	0.44	4.59	1.02	2.84	8.47
Cult & PD Ridge Till	8R-30	2WD 150	30,000	200	12	0.110	1.77	2.97	1.58	0.45	6.77	1.63	2.75	11.16
Cult & PD Ridge Till	12R-30	2WD 190	43,100	200	12	0.073	1.18	2.51	1.51	0.25	5.45	1.56	1.61	8.63
Cultivate	4R-30	2WD 105	10,800	150	10	0.206	2.39	3.90	0.59	0.37	7.25	1.59	2.27	11.13
Cultivate	4R-38	2WD 105	10,600	150	10	0.162	1.88	3.07	0.45	0.23	5.64	1.23	1.42	8.30
Cultivate	6R-30	MFWD 150	16,000	150	10	0.137	1.59	3.71	0.58	0.57	6.46	1.57	3.49	11.54
Cultivate	6R-38	MFWD 150	16,000	150	10	0.108	1.25	2.93	0.46	0.45	5.10	1.24	2.76	9.11
Cultivate	8R-30	MFWD 190	19,700	150	10	0.103	1.19	3.53	0.54	0.49	5.76	1.45	3.17	10.39
Cultivate	8R-38	MFWD 190	21,200	150	10	0.073	0.85	2.52	0.41	0.35	4.14	1.11	2.26	7.53
Cultivate	8R-38 2x1	MFWD 190	30,600	150	10	0.054	0.62	1.85	0.44	0.26	3.19	1.19	1.67	6.05
Cultivate	10R-30	MFWD 225	26,900	150	10	0.082	0.95	3.34	0.59	0.53	5.42	1.59	3.43	10.45
Cultivate	12R-30	MFWD 225	35,800	150	10	0.068	0.79	2.78	0.65	0.44	4.68	1.76	2.85	9.31
Cultivate	12R-38	MFWD 225	35,500	150	10	0.054	0.62	2.20	0.51	0.35	3.69	1.38	2.25	7.33
Cultivate	16R-30	MFWD 225	42,600	150	10	0.051	0.59	2.08	0.58	0.33	3.60	1.57	2.14	7.32
Cultivate & Post	4R-30	2WD 105	16,100	150	10	0.220	3.54	4.16	0.94	0.31	8.96	2.53	1.92	13.43
Cultivate & Post	4R-38	2WD 105	15,900	150	10	0.173	2.79	3.27	0.73	0.24	7.05	1.97	1.51	10.54
Cultivate & Post	6R-30	MFWD 150	21,300	150	10	0.146	2.36	3.96	0.83	0.60	7.77	2.23	3.73	13.74
Cultivate & Post	6R-38	MFWD 150	21,400	150	10	0.115	1.86	3.12	0.66	0.48	6.13	1.77	2.94	10.86
Cultivate & Post	8R-30	MFWD 190	25,000	150	10	0.110	1.77	3.76	0.73	0.52	6.80	1.97	3.38	12.16
Cultivate & Post	8R-38	MFWD 190	26,500	150	10	0.086	1.40	2.97	0.61	0.41	5.41	1.65	2.67	9.74
Cultivate & Post	8R-38 2x1	MFWD 190	37,500	150	10	0.057	0.93	1.98	0.57	0.27	3.77	1.55	1.78	7.11
Cultivate & Post	10R-30	MFWD 225	32,200	150	10	0.088	1.41	3.56	0.75	0.57	6.31	2.03	3.65	12.00
Cultivate & Post	12R-30	MFWD 225	41,100	150	10	0.073	1.18	2.97	0.80	0.47	5.43	2.16	3.04	10.64
Cultivate & Post	12R-38	MFWD 225	42,500	150	10	0.057	0.93	2.34	0.65	0.37	4.31	1.76	2.40	8.48
Cultivate & Post	16R-30	MFWD 225	49,400	150	10	0.055	0.88	2.22	0.72	0.35	4.19	1.94	2.28	8.43
Cultivate Ridge Till	8R-30	2WD 170	24,700	200	12	0.103	1.19	3.15	1.22	0.38	5.95	1.26	2.45	9.67
Cultivate Ridge Till	12R-30	2WD 190	37,700	200	12	0.068	0.79	2.35	1.24	0.23	4.62	1.28	1.51	7.42
Disk & Incorporate	14'	2WD 130	27,300	200	10	0.149	2.41	3.50	1.22	0.38	7.52	2.19	2.35	12.08
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	40,200	200	10	0.087	1.40	2.98	1.05	0.42	5.86	1.88	2.68	10.44
Disk & Incorporate	28'	MFWD 225	46,700	200	10	0.074	1.20	3.03	1.04	0.48	5.77	1.87	3.11	10.76
Disk & Incorporate	32'	MFWD 225	54,400	200	10	0.065	1.05	2.65	1.06	0.42	5.20	1.91	2.72	9.84
Disk Harrow	14'	2WD 130	21,900	180	10	0.140	1.62	3.28	0.85	0.36	6.12	1.83	2.20	10.17
Disk Harrow	20'	MFWD 190	34,500	180	10	0.098	1.13	3.36	0.94	0.47	5.91	2.02	3.02	10.96
Disk Harrow	24'	MFWD 190	34,900	180	10	0.081	0.94	2.80	0.79	0.39	4.93	1.70	2.52	9.16
Disk Harrow	28'	MFWD 225	41,400	180	10	0.070	0.81	2.84	0.80	0.45	4.91	1.73	2.91	9.57
Disk Harrow	32'	MFWD 225	47,400	180	10	0.061	0.71	2.48	0.80	0.39	4.40	1.73	2.55	8.69
Disk Harrow	42'	MFWD 225	88,900	180	10	0.046	0.54	1.89	1.15	0.30	3.89	2.48	1.94	8.32
Disk Harrow 40-100hp	14'	2WD 75	15,300	180	10	0.140	1.62	1.89	0.59	0.14	4.26	1.28	0.90	6.45
Disk Heavy	14'	MFWD 150	21,900	180	10	0.145	1.69	3.94	0.88	0.60	7.13	1.90	3.71	12.75
Disk Heavy	20'	MFWD 170	34,500	180	10	0.097	1.12	2.97	0.93	0.43	5.47	2.00	2.80	10.28
Disk Heavy	28'	MFWD 190	41,400	180	10	0.075	0.87	2.59	0.87	0.36	4.70	1.87	2.33	8.90
Disk Ripper	15'	MFWD 225	37,500	180	10	0.136	1.58	5.52	1.41	0.88	9.40	3.05	5.66	18.12
Ditcher		2WD 130	4,630	200	10	0.020	0.23	0.46	0.03	0.05	0.78	0.04	0.31	1.15
Ditcher (1m/160a)		2WD 130	4,630	200	10	0.009	0.10	0.21	0.01	0.02	0.36	0.02	0.14	0.54
Fert Appl (Liquid)	4R-38	MFWD 150	12,800	150	8	0.154	2.49	4.17	1.31	0.64	8.63	1.51	3.93	14.08
Fert Appl (Liquid)	6R-30	MFWD 170	15,700	150	8	0.130	2.11	4.01	1.37	0.58	8.08	1.57	3.77	13.42
Fert Appl (Liquid)	6R-38	MFWD 170	13,800	150	8	0.103	1.66	3.16	0.95	0.46	6.24	1.09	2.97	10.31
Fert Appl (Liquid)	8R-30	MFWD 190	13,700	150	8	0.098	1.58	3.36	0.89	0.47	6.31	1.02	3.02	10.36
Fert Appl (Liquid)	8R-38	MFWD 190	16,600	150	8	0.077	1.25	2.65	0.85	0.37	5.14	0.98	2.39	8.51
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	17,000	150	8	0.051	0.83	1.76	0.58	0.24	3.43	0.67	1.59	5.70
Fert Appl (Liquid)	10R-30	MFWD 225	17,100	150	8	0.078	1.26	3.18	0.89	0.51	5.85	1.02	3.26	10.15
Fert Appl (Liquid)	10R-38	MFWD 225	19,600	150	8	0.061	0.99	2.51	0.80	0.40	4.72	0.92	2.57	8.22
Fert Appl (Liquid)	12R-30	MFWD 225	17,500	150	8	0.078	1.26	3.18	0.91	0.51	5.87	1.05	3.26	10.19
Fert Appl (Liquid)	12R-38	MFWD 225	17,000	150	8	0.051	0.83	2.09	0.58	0.33	3.85	0.67	2.14	6.67
Field Cult & Inc	42'	MFWD 225	56,100	100	10	0.037	0.60	1.53	0.52	0.24	2.91	2.27	1.57	6.76
Field Cult & Inc	50'	MFWD 225	69,000	100	10	0.031	0.51	1.28	0.54	0.20	2.55	2.35	1.31	6.22
Field Cult & Inc Fld	24'	MFWD 170	30,100	100	10	0.066	1.06	2.02	0.49	0.29	3.88	2.13	1.90	7.92
Field Cult & Inc Fld	32'	MFWD 190	37,200	100	10	0.049	0.79	1.69	0.46	0.23	3.19	1.98	1.52	6.70
Field Cult & Inc Rdg	12'	2WD 150	15,200	100	10	0.132	2.13	3.57	0.50	0.54	6.74	2.16	3.31	12.22
Field Cultivate Fld	24'	MFWD 170	24,700	100	10	0.062	0.72	1.90	0.38	0.27	3.29	1.65	1.79	6.73
Field Cultivate Fld	32'	MFWD 190	31,900	100	10	0.046	0.54	1.59	0.37	0.22	2.73	1.60	1.43	5.77
Field Cultivate Fld	42'	MFWD 225	49,100	100	10	0.035	0.41	1.44	0.43	0.23	2.52	1.87	1.47	5.87
Field Cultivate Fld	50'	MFWD 225	60,100	100	10	0.029	0.34	1.21	0.44	0.19	2.19	1.92	1.24	5.37
Field Cultivate Rdg	12'	2WD 150	9,890	100	10	0.124	1.44	3.36	0.30	0.50	5.62	1.32	3.11	10.06
Grain Cart Corn	500 bu	MFWD 190	25,100	200	12	0.031	0.37	1.09	0.21	0.15	1.83	0.38	0.98	3.20
Grain Cart Corn	700 bu	MFWD 190	29,900	200	12	0.025	0.29	0.85	0.20	0.12	1.46	0.35	0.76	2.59
Grain Cart Corn	1000 bu	MFWD 225	43,800	200	12	0.025	0.29	1.01	0.29	0.16	1.76	0.52	1.03	3.32
Grain Cart Rice	500 bu	MFWD 190	25,100	200	12	0.062	0.72	2.13	0.42	0.30	3.58	0.75	1.92	6.26

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2013 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Grain Cart Rice	700 bu	MFWD 190	29,900	200	12	0.055	0.63	1.88	0.44	0.26	3.23	0.78	1.69	5.71
Grain Cart Rice	1000 bu	MFWD 190	43,800	200	12	0.045	0.53	1.56	0.54	0.22	2.86	0.96	1.41	5.23
Grain Cart Soybean	500 bu	MFWD 190	25,100	200	12	0.025	0.29	0.87	0.17	0.12	1.46	0.30	0.78	2.55
Grain Cart Soybean	700 bu	MFWD 190	29,900	200	12	0.021	0.24	0.72	0.17	0.10	1.24	0.30	0.65	2.20
Grain Cart Soybean	1000 bu	MFWD 190	43,800	200	12	0.021	0.24	0.72	0.25	0.10	1.32	0.44	0.65	2.42
Grain Cart Wht/Sor	500 bu	MFWD 190	25,100	200	12	0.025	0.29	0.87	0.17	0.12	1.46	0.30	0.78	2.55
Grain Cart Wht/Sor	700 bu	MFWD 190	29,900	200	12	0.021	0.24	0.72	0.17	0.10	1.24	0.30	0.65	2.20
Grain Cart Wht/Sor	1000 bu	MFWD 190	43,800	200	12	0.021	0.24	0.72	0.25	0.10	1.32	0.44	0.65	2.42
Grain Drill	8'	2WD 130	19,000	150	8	0.235	4.86	5.52	1.67	0.60	12.67	3.27	3.71	19.65
Grain Drill	10'	2WD 130	22,700	150	8	0.188	3.89	4.41	1.60	0.48	10.40	3.12	2.96	16.49
Grain Drill	12'	2WD 130	22,400	150	8	0.157	3.24	3.68	1.31	0.40	8.65	2.57	2.47	13.69
Grain Drill	15'	MFWD 150	28,000	150	8	0.125	2.59	3.39	1.31	0.52	7.83	2.57	3.19	13.60
Grain Drill	20'	MFWD 170	36,700	150	8	0.094	1.94	2.88	1.29	0.42	6.55	2.52	2.71	11.80
Grain Drill	24'	MFWD 190	58,100	150	8	0.078	1.62	2.68	1.71	0.37	6.40	3.33	2.41	12.15
Grain Drill	30'	MFWD 225	61,300	150	8	0.062	1.29	2.54	1.44	0.40	5.70	2.81	2.61	11.12
Grain Drill	35'	MFWD 225	78,200	150	8	0.053	1.11	2.18	1.58	0.35	5.22	3.07	2.24	10.54
Grain Drill & Pre	8'	2WD 130	24,300	150	8	0.253	5.24	5.94	2.31	0.65	14.15	4.50	3.99	22.65
Grain Drill & Pre	10'	2WD 130	28,100	150	8	0.203	4.19	4.75	2.13	0.52	11.61	4.16	3.19	18.98
Grain Drill & Pre	12'	2WD 130	27,700	150	8	0.169	3.49	3.96	1.75	0.43	9.65	3.42	2.66	15.74
Grain Drill & Pre	15'	MFWD 150	33,300	150	8	0.135	2.79	3.65	1.69	0.56	8.70	3.29	3.44	15.44
Grain Drill & Pre	20'	MFWD 170	42,100	150	8	0.101	2.09	3.10	1.60	0.45	7.26	3.12	2.92	13.31
Grain Drill & Pre	24'	MFWD 190	63,500	150	8	0.084	1.74	2.89	2.01	0.40	7.06	3.92	2.60	13.59
Grain Drill & Pre	30'	MFWD 225	66,700	150	8	0.067	1.39	2.74	1.69	0.43	6.27	3.29	2.81	12.38
Grain Drill & Pre	35'	MFWD 225	83,500	150	8	0.058	1.19	2.35	1.81	0.37	5.74	3.53	2.41	11.69
Grain Drill & Pre T	8R-38	MFWD 225	45,700	150	8	0.062	1.29	2.54	1.07	0.40	5.33	2.09	2.61	10.04
Harrow - Rigid	21'	2WD 150	4,640	200	10	0.073	0.85	1.99	0.12	0.30	3.27	0.18	1.85	5.31
Harrow - Folding	16'	MFWD 190	5,000	200	10	0.097	1.12	3.32	0.16	0.46	5.08	0.26	2.98	8.33
Harrow - Folding	24'	MFWD 190	11,900	200	10	0.064	0.75	2.21	0.26	0.31	3.54	0.41	1.99	5.95
Harrow - Folding	30'	MFWD 190	12,900	200	10	0.051	0.60	1.77	0.23	0.24	2.85	0.35	1.59	4.80
Harrow - Folding	40'	MFWD 190	16,200	200	10	0.038	0.45	1.32	0.22	0.18	2.18	0.33	1.19	3.71
Harrow - Folding	48'	MFWD 225	20,000	200	10	0.032	0.37	1.31	0.22	0.21	2.12	0.34	1.34	3.81
Harrow - Rigid	13'	2WD 130	3,430	200	10	0.119	1.38	2.79	0.14	0.30	4.63	0.22	1.88	6.73
Header - Corn	6R-30	265 hp	40,700	300	8	0.170	1.97	8.12	1.73	4.59	16.43	2.65	18.39	37.48
Header - Corn	6R-38	265 hp	41,800	300	8	0.134	1.55	6.41	1.40	3.62	13.00	2.14	14.52	29.68
Header - Corn	8R-30	265 hp	52,600	300	8	0.127	1.48	6.09	1.67	3.44	12.70	2.56	13.79	29.07
Header - Corn	8R-38	325 hp	54,100	300	8	0.100	1.17	5.91	1.36	3.13	11.58	2.08	12.55	26.22
Header - Corn	12R-20	325 hp	73,800	300	8	0.127	1.48	7.47	2.35	3.96	15.28	3.60	15.87	34.76
Header - Corn	12R-30	325 hp	82,200	300	8	0.085	0.98	4.98	1.74	2.64	10.36	2.67	10.58	23.62
Header - Draper (CL)	25' Rigid	265 hp	50,100	300	8	0.203	2.35	9.69	2.33	5.47	19.86	3.71	21.94	45.52
Header - Draper (CL)	30' Rigid	325 hp	55,500	300	8	0.169	1.96	9.90	2.15	5.25	19.27	3.43	21.03	43.74
Header - Draper (CL)	36' Rigid	355 hp	59,400	300	8	0.141	1.63	9.01	1.91	4.64	17.21	3.06	18.59	38.86
Header - Draper (SL)	25' Rigid	325 hp	50,100	300	8	0.176	2.04	10.30	2.02	5.46	19.83	3.22	21.87	44.93
Header - Draper (SL)	30' Rigid	325 hp	55,500	300	8	0.146	1.70	8.58	1.86	4.55	16.70	2.97	18.23	37.91
Header - Draper (SL)	36' Rigid	355 hp	59,400	300	8	0.122	1.41	7.81	1.66	4.02	14.91	2.65	16.11	33.68
Header - Rice (CL)	25' Rigid	325 hp	51,600	300	8	0.253	2.94	14.86	3.27	7.87	28.96	5.01	31.55	65.53
Header - Rice (CL)	30' Rigid	325 hp	59,000	300	8	0.211	2.45	12.38	3.12	6.56	24.52	4.77	26.29	55.60
Header - Rice (SL)	25' Rigid	325 hp	51,600	300	8	0.220	2.55	12.88	2.83	6.82	25.10	4.34	27.34	56.79
Header - Rice (SL)	30' Rigid	325 hp	59,000	300	8	0.183	2.12	10.73	2.70	5.69	21.25	4.13	22.79	48.18
Header -RiceStrp(CL)	20'	265 hp	44,000	300	8	0.253	2.94	12.11	2.79	6.84	24.70	4.27	27.42	56.40
Header -RiceStrp(CL)	24'	325 hp	48,300	300	8	0.211	2.45	12.38	2.55	6.56	23.96	3.90	26.29	54.16
Header -RiceStrp(CL)	32'	325 hp	53,300	300	8	0.158	1.84	9.28	2.11	4.92	18.16	3.23	19.72	41.12
Header -RiceStrp(SL)	20'	265 hp	44,000	300	8	0.220	2.55	10.50	2.42	5.93	21.41	3.70	23.77	48.88
Header -RiceStrp(SL)	24'	325 hp	48,300	300	8	0.183	2.12	10.73	2.21	5.69	20.76	3.38	22.79	46.94
Header -RiceStrp(SL)	32'	325 hp	53,300	300	8	0.137	1.59	8.05	1.83	4.26	15.74	2.80	17.09	35.64
Header -Soybean	22' Flex	265 hp	27,700	300	8	0.116	1.34	5.54	0.80	3.13	10.82	1.23	12.54	24.60
Header -Soybean	25' Flex	325 hp	29,800	300	8	0.102	1.18	5.98	0.76	3.17	11.10	1.16	12.70	24.96
Header -Soybean	30' Flex	325 hp	26,700	300	8	0.085	0.98	4.98	0.56	2.64	9.18	0.86	10.58	20.63
Header -Soybean	35' Flex	355 hp	39,500	300	8	0.072	0.84	4.66	0.72	2.40	8.63	1.10	9.62	19.35
Header Wheat/Sorghum	22' Rigid	265 hp	21,900	300	8	0.116	1.34	5.54	0.63	3.13	10.65	0.97	12.54	24.17
Header Wheat/Sorghum	25' Rigid	325 hp	25,600	300	8	0.102	1.18	5.98	0.65	3.17	10.99	1.00	12.70	24.69
Header Wheat/Sorghum	30' Rigid	325 hp	28,500	300	8	0.085	0.98	4.98	0.60	2.64	9.22	0.92	10.58	20.73
Header-Cotton Bcast	13'	173 hp	19,400	200	8	0.251	5.20	7.12	0.91	6.68	19.92	2.80	26.78	49.52
Header-Cotton-Bcast	16'	173 hp	21,600	200	8	0.204	4.22	5.78	0.82	5.43	16.27	2.53	21.76	40.57
Header-Cotton-Bcast	19'	173 hp	23,900	200	8	0.172	3.55	4.87	0.77	4.57	13.78	2.36	18.33	34.47
Header-Cotton-Brush	4R-30 2x1	173 hp	32,500	200	8	0.218	4.50	6.17	1.32	5.79	17.80	4.07	23.21	45.09
Header-Cotton-Brush	4R-36	173 hp	32,200	200	8	0.272	5.63	7.71	1.64	7.24	22.24	5.04	29.02	56.30
Header-Cotton-Brush	4R-38	173 hp	32,100	200	8	0.257	5.32	7.29	1.55	6.84	21.01	4.74	27.42	53.18
Header-Cotton-Brush	4R-38 2x1	173 hp	34,000	200	8	0.172	3.55	4.87	1.09	4.57	14.10	3.36	18.33	35.80
Header-Cotton-Brush	5R-30	173 hp	40,400	200	8	0.261	5.41	7.40	1.98	6.95	21.75	6.07	27.86	55.69
Header-Cotton-Brush	5R-38	173 hp	41,900	200	8	0.207	4.28	5.85	1.62	5.50	17.27	4.98	22.04	44.29
Header-Cotton-Brush	6R-30	173 hp	49,800	200	8	0.218	4.50	6.17	2.03	5.79	18.51	6.23	23.21	47.97
Header-Cotton-Brush	6R-38	173 hp	51,300	200	8	0.172	3.55	4.87	1.65	4.57	14.66	5.07	18.33	38.07
Header-Cotton-Brush	8R-30	173 hp	68,700	200	8	0.163	3.38	4.62	2.10	4.34	14.46	6.45	17.41	38.33
Header-Cotton-Brush	8R-36/38	173 hp	70,100	200	8	0.129	2.67	3.65	1.70	3.43	11.47	5.20	13.76	30.44
Land Plane	50'x16'	MFWD 190	11,300	200	10	0.151	1.75	5.19	0.34	0.72	8.02	0.92	4.66	13.61
Levee Pull & Seed	8 Blade	MFWD 170	8,130	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	6,800	100	10	0.003	0.04	0.10	0.00	0.01	0.17	0.02	0.10	0.30
Levee Splitter (1/80	32"	MFWD 150	3,280	100	10	0.004	0.04	0.11	0.00	0.01	0.18	0.01	0.10	0.30

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2013 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Module Builder	4R-30(325)	MFWD 190	31,300	200	10	0.327	6.76	11.20	2.56	1.57	22.10	5.30	10.08	37.49
Module Builder	4R-38(255)	MFWD 190	31,300	200	10	0.257	5.32	8.82	2.01	1.24	17.40	4.17	7.93	29.52
Module Builder	4R-38(325)	MFWD 190	31,300	200	10	0.257	5.32	8.82	2.01	1.24	17.40	4.17	7.93	29.52
Module Builder	4R2x1(350)	MFWD 190	31,300	200	10	0.172	3.55	5.89	1.34	0.82	11.63	2.79	5.30	19.73
Module Builder	6R-30(325)	MFWD 190	31,300	200	10	0.218	4.50	7.47	1.70	1.05	14.73	3.53	6.72	24.99
Module Builder	6R-38(330)	MFWD 190	31,300	200	10	0.172	3.55	5.89	1.34	0.82	11.63	2.79	5.30	19.73
Module Builder-Strip	13' Bcast	MFWD 150	31,300	200	10	0.251	5.20	6.80	1.97	1.04	15.02	4.08	6.40	25.51
Module Builder-Strip	16' Bcast	MFWD 150	31,300	200	10	0.204	4.22	5.52	1.60	0.85	12.20	3.31	5.20	20.73
Module Builder-Strip	19' Bcast	MFWD 150	31,300	200	10	0.172	3.55	4.65	1.34	0.71	10.28	2.79	4.38	17.45
Module Builder-Strip	4R-30 2x1	MFWD 150	31,300	200	10	0.218	4.50	5.89	1.70	0.90	13.02	3.53	5.55	22.11
Module Builder-Strip	4R-36	MFWD 150	31,300	200	10	0.272	5.63	7.37	2.13	1.13	16.27	4.42	6.94	27.64
Module Builder-Strip	4R-38	MFWD 150	31,300	200	10	0.257	5.32	6.96	2.01	1.07	15.38	4.17	6.55	26.11
Module Builder-Strip	4R-38 2x1	MFWD 150	31,300	200	10	0.172	3.55	4.65	1.34	0.71	10.28	2.79	4.38	17.45
Module Builder-Strip	5R-30	MFWD 150	31,300	200	10	0.261	5.41	7.07	2.04	1.08	15.62	4.24	6.66	26.53
Module Builder-Strip	5R-38	MFWD 150	31,300	200	10	0.207	4.28	5.59	1.62	0.86	12.36	3.35	5.27	20.99
Module Builder-Strip	6R-30	MFWD 150	31,300	200	10	0.218	4.50	5.89	1.70	0.90	13.02	3.53	5.55	22.11
Module Builder-Strip	6R-38	MFWD 190	31,300	200	10	0.172	3.55	5.89	1.34	0.82	11.63	2.79	5.30	19.73
Module Builder-Strip	8R-36/38	MFWD 190	31,300	200	10	0.129	2.67	4.42	1.01	0.62	8.73	2.09	3.98	14.81
NT Grain Drill	6'	MFWD 170	19,800	150	8	0.327	6.76	10.02	2.43	1.47	20.69	4.73	9.42	34.85
NT Grain Drill	10'	2WD 130	30,300	150	8	0.235	4.86	5.52	2.67	0.60	13.67	5.21	3.71	22.60
NT Grain Drill	12'	2WD 130	38,500	150	8	0.163	3.38	3.83	2.36	0.42	9.99	4.60	2.57	17.18
NT Grain Drill	15'	MFWD 150	42,700	150	8	0.130	2.70	3.53	2.09	0.54	8.88	4.08	3.33	16.30
NT Grain Drill	20'	MFWD 170	60,400	150	8	0.098	2.02	3.00	2.22	0.44	7.70	4.33	2.82	14.86
NT Grain Drill	24'	MFWD 190	78,600	150	8	0.081	1.69	2.80	2.41	0.39	7.29	4.69	2.52	14.51
NT Grain Drill	30'	MFWD 225	91,800	150	8	0.065	1.35	2.65	2.25	0.42	6.68	4.39	2.72	13.80
NT Grain Drill & Pre	6'	MFWD 170	25,200	150	8	0.352	7.28	10.79	3.33	1.58	22.99	6.49	10.15	39.64
NT Grain Drill & Pre	10'	2WD 130	35,600	150	8	0.211	4.37	4.95	2.82	0.54	12.69	5.50	3.33	21.52
NT Grain Drill & Pre	12'	2WD 130	43,900	150	8	0.176	3.64	4.12	2.90	0.45	11.12	5.65	2.77	19.55
NT Grain Drill & Pre	15'	MFWD 150	48,100	150	8	0.141	2.91	3.81	2.54	0.58	9.85	4.95	3.58	18.39
NT Grain Drill & Pre	20'	MFWD 170	65,700	150	8	0.105	2.18	3.23	2.60	0.47	8.50	5.07	3.04	16.62
NT Grain Drill & Pre	24'	MFWD 190	83,900	150	8	0.088	1.82	3.01	2.77	0.42	8.03	5.40	2.71	16.15
NT Grain Drill & Pre	30'	MFWD 225	97,100	150	8	0.070	1.45	2.85	2.56	0.45	7.34	5.00	2.93	15.27
NT Plant&Pre-Folding	8R-38	MFWD 170	46,000	150	8	0.083	1.72	2.56	1.44	0.37	6.10	2.80	2.40	11.32
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	72,400	150	8	0.055	1.15	1.70	1.51	0.25	4.61	2.94	1.60	9.16
NT Plant&Pre-Folding	12R-20	MFWD 190	69,800	150	8	0.105	2.18	3.62	2.76	0.50	9.08	5.39	3.25	17.73
NT Plant&Pre-Folding	12R-30	MFWD 190	74,200	150	8	0.070	1.45	2.41	1.96	0.33	6.17	3.82	2.17	12.16
NT Plant&Pre-Folding	12R-38	MFWD 190	72,400	150	8	0.055	1.15	1.90	1.51	0.26	4.83	2.94	1.71	9.49
NT Plant&Pre-Folding	16R-30	MFWD 190	96,700	150	8	0.052	1.09	1.81	1.91	0.25	5.07	3.73	1.62	10.43
NT Plant&Pre-Folding	23R-15	MFWD 190	121,000	150	8	0.073	1.51	2.51	3.33	0.35	7.71	6.49	2.26	16.47
NT Plant&Pre-Folding	24R-15	MFWD 225	129,000	150	8	0.070	1.45	2.85	3.41	0.45	8.18	6.64	2.93	17.76
NT Plant&Pre-Folding	24R-20	MFWD 190	135,000	150	8	0.052	1.09	1.81	2.67	0.25	5.83	5.21	1.62	12.67
NT Plant&Pre-Folding	24R-30	MFWD 190	157,000	150	8	0.035	0.72	1.20	2.07	0.16	4.18	4.04	1.08	9.31
NT Plant&Pre-Folding	31R-15	MFWD 225	147,000	150	8	0.054	1.12	2.21	3.01	0.35	6.71	5.87	2.27	14.85
NT Plant&Pre-Folding	32R-15	MFWD 225	163,000	150	8	0.052	1.09	2.14	3.23	0.34	6.81	6.29	2.19	15.30
NT Plant&Pre-Folding	36R-20	MFWD 225	175,000	150	8	0.035	0.72	1.42	2.31	0.22	4.70	4.50	1.46	10.67
NT Plant&Pre-Rigid	4R-30	2WD 130	26,600	150	8	0.211	4.37	4.95	2.11	0.54	11.97	4.11	3.33	19.41
NT Plant&Pre-Rigid	4R-38	2WD 130	28,100	150	8	0.166	3.44	3.90	1.75	0.42	9.52	3.41	2.62	15.56
NT Plant&Pre-Rigid	6R-30	MFWD 150	34,300	150	8	0.141	2.91	3.81	1.81	0.58	9.12	3.53	3.58	16.24
NT Plant&Pre-Rigid	6R-38	MFWD 150	33,300	150	8	0.111	2.30	3.00	1.39	0.46	7.16	2.70	2.83	12.70
NT Plant&Pre-Rigid	8R-30	MFWD 170	41,600	150	8	0.105	2.18	3.23	1.65	0.47	7.55	3.21	3.04	13.81
NT Plant&Pre-Rigid	8R-38	MFWD 170	39,000	150	8	0.083	1.72	2.56	1.22	0.37	5.88	2.38	2.40	10.67
NT Plant&Pre-Rigid	10R-30	MFWD 190	42,300	150	8	0.084	1.74	2.89	1.34	0.40	6.39	2.61	2.60	11.61
NT Plant&Pre-Rigid	11R-15	MFWD 170	48,000	150	8	0.143	2.97	4.40	2.59	0.64	10.61	5.04	4.14	19.80
NT Plant&Pre-Rigid	11R-20	MFWD 170	45,300	150	8	0.115	2.38	3.54	1.96	0.52	8.41	3.82	3.32	15.56
NT Plant&Pre-Rigid	12R-20	MFWD 190	51,800	150	8	0.105	2.18	3.62	2.05	0.50	8.36	4.00	3.25	15.62
NT Plant&Pre-Rigid	12R-30	MFWD 190	58,900	150	8	0.070	1.45	2.41	1.55	0.33	5.76	3.03	2.17	10.97
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	51,900	150	8	0.097	2.01	3.95	1.89	0.63	8.49	3.69	4.05	16.24
NT Plant&Pre-Rigid	15R-15	MFWD 190	61,400	150	8	0.113	2.33	3.87	2.60	0.54	9.35	5.07	3.48	17.91
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	113,000	150	8	0.055	1.15	2.25	2.35	0.36	6.12	4.59	2.31	13.03
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	89,000	150	8	0.083	1.72	3.38	2.79	0.54	8.45	5.43	3.47	17.36
NT Plant-Folding	8R-38	MFWD 170	40,600	150	8	0.077	1.60	2.37	1.18	0.34	5.51	2.30	2.23	10.05
NT Plant-Folding	8R-38 2x1	MFWD 170	65,400	150	8	0.051	1.06	1.58	1.26	0.23	4.15	2.46	1.48	8.10
NT Plant-Folding	12R-20	MFWD 190	64,500	150	8	0.098	2.02	3.36	2.37	0.47	8.23	4.62	3.02	15.89
NT Plant-Folding	12R-30	MFWD 190	68,900	150	8	0.065	1.35	2.24	1.69	0.31	5.60	3.29	2.01	10.91
NT Plant-Folding	12R-38	MFWD 190	65,400	150	8	0.051	1.06	1.76	1.26	0.24	4.35	2.46	1.59	8.41
NT Plant-Folding	16R-30	MFWD 190	89,800	150	8	0.049	1.01	1.68	1.65	0.23	4.58	3.22	1.51	9.31
NT Plant-Folding	23R-15	MFWD 190	116,000	150	8	0.068	1.40	2.33	2.96	0.32	7.03	5.77	2.09	14.91
NT Plant-Folding	24R-15	MFWD 225	124,000	150	8	0.065	1.35	2.65	3.04	0.42	7.47	5.93	2.72	16.13
NT Plant-Folding	24R-20	MFWD 190	128,000	150	8	0.049	1.01	1.68	2.35	0.23	5.28	4.59	1.51	11.39
NT Plant-Folding	24R-30	MFWD 190	146,000	150	8	0.032	0.67	1.12	1.79	0.15	3.74	3.49	1.00	8.24
NT Plant-Folding	31R-15	MFWD 225	136,000	150	8	0.050	1.04	2.05	2.58	0.32	6.02	5.04	2.11	13.17
NT Plant-Folding	32R-15	MFWD 225	152,000	150	8	0.049	1.01	1.99	2.79	0.31	6.12	5.45	2.04	13.61
NT Plant-Folding	36R-20	MFWD 225	164,000	150	8	0.032	0.67	1.32	2.01	0.21	4.22	3.92	1.36	9.51
NT Plant-Rigid	4R-30	2WD 130	21,200	150	8	0.196	4.05	4.60	1.56	0.50	10.72	3.04	3.09	16.86
NT Plant-Rigid	4R-38	2WD 130	22,800	150	8	0.154	3.19	3.62	1.32	0.39	8.53	2.57	2.43	13.54
NT Plant-Rigid	6R-30	MFWD 150	29,000	150	8	0.130	2.70	3.53	1.42	0.54	8.21	2.77	3.33	14.31
NT Plant-Rigid	6R-38	MFWD 150	27,900	150	8	0.103	2.13	2.79	1.08	0.42	6.44	2.10	2.63	11.17
NT Plant-Rigid	8R-30	MFWD 170	36,200	150	8	0.098	2.02	3.00	1.33	0.44	6.81	2.59	2.82	12.23

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2013 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
NT Plant-Rigid	8R-38	MFWD 170	33,700	150	8	0.077	1.60	2.37	0.98	0.34	5.31	1.91	2.23	9.45
NT Plant-Rigid	10R-30	MFWD 190	37,000	150	8	0.078	1.62	2.68	1.09	0.37	5.78	2.12	2.41	10.32
NT Plant-Rigid	11R-15	MFWD 170	42,700	150	8	0.133	2.76	4.09	2.13	0.60	9.59	4.16	3.84	17.60
NT Plant-Rigid	11R-20	MFWD 170	40,000	150	8	0.107	2.21	3.28	1.61	0.48	7.59	3.13	3.09	13.82
NT Plant-Rigid	12R-20	MFWD 190	46,500	150	8	0.098	2.02	3.36	1.71	0.47	7.57	3.33	3.02	13.93
NT Plant-Rigid	12R-30	MFWD 190	53,600	150	8	0.065	1.35	2.24	1.31	0.31	5.22	2.56	2.01	9.80
NT Plant-Rigid	13R-18/20	MFWD 225	46,600	150	8	0.090	1.87	3.68	1.58	0.59	7.74	3.09	3.78	14.62
NT Plant-Rigid	15R-15	MFWD 190	54,400	150	8	0.105	2.17	3.59	2.14	0.50	8.41	4.17	3.23	15.82
NT Plant-TwinRow	12R-30/40	MFWD 225	106,000	150	8	0.051	1.06	2.09	2.05	0.33	5.55	4.00	2.14	11.70
NT Plant-TwinRow	8R-30/40	MFWD 225	84,000	150	8	0.077	1.60	3.14	2.44	0.50	7.70	4.76	3.22	15.69
One-Trip Prep	4R-38	MFWD 170	20,000	150	10	0.146	1.70	4.49	1.36	0.66	8.22	2.10	4.22	14.55
One-Trip Prep	6R-38	MFWD 190	24,000	150	10	0.097	1.12	3.33	1.08	0.46	6.01	1.67	2.99	10.68
One-Trip Prep	8R-38	MFWD 225	35,700	150	10	0.073	0.85	2.99	1.23	0.48	5.56	1.89	3.07	10.53
Peanut Cond. & Lifter	6-Row	MFWD 190	11,600	300	20	0.100	1.16	3.42	0.19	0.48	5.25	0.29	3.07	8.63
Peanut Conditioner	6-Row	MFWD 190	12,900	300	20	0.100	1.16	3.42	0.25	0.48	5.32	0.28	3.07	8.69
Peanut Dig/Invertor	4R-30	MFWD 190	23,800	300	15	0.235	2.73	8.07	1.39	1.13	13.34	1.70	7.26	22.30
Peanut Dig/Invertor	4R-38	MFWD 190	23,800	300	15	0.186	2.16	6.37	1.10	0.89	10.53	1.34	5.73	17.61
Peanut Dig/Invertor	6R-38	MFWD 190	34,700	300	15	0.124	1.43	4.24	0.75	0.59	7.03	1.30	3.82	12.16
Peanut Dump Cart	6-Row	MFWD 190	40,600	300	20	0.310	3.59	10.61	0.73	1.49	16.43	3.06	9.54	29.04
Peanut Harvester	4R-30	MFWD 225	114,000	300	20	0.849	9.85	34.45	5.49	5.52	55.33	21.71	35.34	112.39
Peanut Harvester	4R-38	MFWD 225	114,000	300	20	0.934	10.84	37.88	6.03	6.07	60.83	24.92	38.86	124.62
Peanut Harvester	6R-38	MFWD 225	132,000	300	20	0.625	7.25	25.33	3.98	4.06	40.63	19.29	25.99	85.92
Peanut Lifter	6-Row	MFWD 225	5,470	300	20	0.100	1.16	4.05	0.11	0.65	5.97	0.12	4.15	10.25
Peanut Plt&Pre Fold.	12R-38	MFWD 190	66,100	150	8	0.080	1.66	2.75	1.99	0.38	6.79	3.88	2.47	13.15
Peanut Plt&Pre Rigid	8R-30	MFWD 190	37,300	150	8	0.152	3.15	5.22	2.13	0.73	11.25	4.16	4.70	20.12
Peanut Plt&Pre Rigid	8R-38	MFWD 190	34,800	150	8	0.120	2.49	4.13	1.57	0.58	8.78	3.07	3.71	15.57
Pipe Spool 160ac	1/4m roll	2WD 130	3,370	15	12	0.003	0.09	0.07	0.00	0.00	0.17	0.06	0.04	0.29
Pipe Trailer 1m/160a	30'	2WD 130	7,300	100	15	0.003	0.17	0.08	0.00	0.00	0.28	0.02	0.05	0.36
Plant & Pre-Folding	8R-38	MFWD 170	41,800	150	8	0.080	1.65	2.45	1.25	0.36	5.73	2.45	2.31	10.49
Plant & Pre-Folding	8R-38 2x1	MFWD 170	66,100	150	8	0.053	1.10	1.63	1.32	0.24	4.30	2.58	1.53	8.42
Plant & Pre-Folding	12R-20	MFWD 190	63,500	150	8	0.101	2.09	3.47	2.41	0.48	8.48	4.71	3.12	16.31
Plant & Pre-Folding	12R-30	MFWD 190	67,900	150	8	0.067	1.39	2.31	1.72	0.32	5.76	3.35	2.08	11.20
Plant & Pre-Folding	12R-38	MFWD 190	66,100	150	8	0.053	1.10	1.82	1.32	0.25	4.51	2.58	1.64	8.74
Plant & Pre-Folding	16R-30	MFWD 190	88,300	150	8	0.050	1.04	1.73	1.68	0.24	4.71	3.27	1.56	9.55
Plant & Pre-Folding	23R-15	MFWD 190	109,000	150	8	0.070	1.45	2.41	2.88	0.33	7.09	5.61	2.17	14.87
Plant & Pre-Folding	24R-15	MFWD 225	117,000	150	8	0.067	1.39	2.74	2.96	0.43	7.55	5.78	2.81	16.15
Plant & Pre-Folding	24R-20	MFWD 190	122,000	150	8	0.050	1.04	1.73	2.32	0.24	5.35	4.52	1.56	11.44
Plant & Pre-Folding	24R-30	MFWD 190	144,000	150	8	0.033	0.69	1.15	1.82	0.16	3.84	3.56	1.04	8.45
Plant & Pre-Folding	31R-15	MFWD 225	131,000	150	8	0.052	1.08	2.12	2.57	0.34	6.12	5.02	2.18	13.33
Plant & Pre-Folding	32R-15	MFWD 225	146,000	150	8	0.050	1.04	2.05	2.77	0.33	6.21	5.41	2.11	13.74
Plant & Pre-Folding	36R-20	MFWD 225	156,000	150	8	0.033	0.69	1.37	1.98	0.22	4.27	3.85	1.40	9.53
Plant & Pre-Rigid	4R-30	2WD 130	24,500	150	8	0.203	4.19	4.75	1.86	0.52	11.33	3.63	3.19	18.17
Plant & Pre-Rigid	4R-38	2WD 130	26,000	150	8	0.159	3.30	3.74	1.55	0.41	9.01	3.03	2.51	14.57
Plant & Pre-Rigid	6R-30	MFWD 150	32,200	150	8	0.135	2.79	3.65	1.63	0.56	8.65	3.18	3.44	15.28
Plant & Pre-Rigid	6R-38	MFWD 150	30,100	150	8	0.106	2.20	2.88	1.20	0.44	6.74	2.35	2.71	11.81
Plant & Pre-Rigid	8R-30	MFWD 170	37,300	150	8	0.101	2.09	3.10	1.42	0.45	7.08	2.76	2.92	12.77
Plant & Pre-Rigid	8R-38	MFWD 170	34,800	150	8	0.080	1.65	2.45	1.04	0.36	5.52	2.04	2.31	9.87
Plant & Pre-Rigid	10R-30	MFWD 190	37,000	150	8	0.081	1.67	2.78	1.12	0.39	5.97	2.19	2.50	10.67
Plant & Pre-Rigid	11R-15	MFWD 170	42,200	150	8	0.148	3.06	4.53	2.34	0.66	10.61	4.56	4.26	19.45
Plant & Pre-Rigid	11R-20	MFWD 170	39,500	150	8	0.110	2.29	3.39	1.64	0.49	7.83	3.20	3.19	14.23
Plant & Pre-Rigid	12R-20	MFWD 190	45,500	150	8	0.101	2.09	3.47	1.73	0.48	7.79	3.37	3.12	14.29
Plant & Pre-Rigid	12R-30	MFWD 190	52,600	150	8	0.067	1.39	2.31	1.33	0.32	5.37	2.60	2.08	10.06
Plant & Pre-Rigid	13R-18/20	MFWD 225	45,100	150	8	0.093	1.93	3.79	1.58	0.60	7.91	3.08	3.89	14.89
Plant & Pre-Rigid	15R-15	MFWD 190	53,500	150	8	0.108	2.24	3.71	2.17	0.52	8.66	4.24	3.34	16.25
Plant & Pre-TwinRow	12R-30/40	MFWD 225	106,000	150	8	0.053	1.10	2.16	2.12	0.34	5.74	4.13	2.22	12.10
Plant & Pre-TwinRow	8R-30/40	MFWD 225	84,800	150	8	0.080	1.65	3.25	2.55	0.52	7.98	4.97	3.33	16.29
Plant - Folding	8R-38	MFWD 170	36,500	150	8	0.074	1.53	2.28	1.02	0.33	5.17	1.98	2.14	9.31
Plant - Folding	8R-38 2x1	MFWD 170	59,100	150	8	0.049	1.02	1.51	1.09	0.22	3.86	2.14	1.42	7.43
Plant - Folding	12R-20	MFWD 190	58,200	150	8	0.094	1.94	3.22	2.05	0.45	7.68	4.00	2.90	14.59
Plant - Folding	12R-30	MFWD 190	52,600	150	8	0.062	1.29	2.15	1.23	0.30	4.99	2.41	1.93	9.34
Plant - Folding	12R-38	MFWD 190	59,100	150	8	0.049	1.02	1.69	1.09	0.23	4.06	2.14	1.52	7.73
Plant - Folding	16R-30	MFWD 190	81,300	150	8	0.047	0.97	1.61	1.43	0.22	4.25	2.79	1.45	8.50
Plant - Folding	23R-15	MFWD 190	10,300	150	8	0.065	1.35	2.24	0.25	0.31	4.16	0.49	2.01	6.67
Plant - Folding	24R-15	MFWD 225	111,000	150	8	0.062	1.29	2.54	2.61	0.40	6.87	5.09	2.61	14.58
Plant - Folding	24R-20	MFWD 190	115,000	150	8	0.047	0.97	1.61	2.03	0.22	4.84	3.96	1.45	10.25
Plant - Folding	24R-30	MFWD 190	133,000	150	8	0.031	0.64	1.07	1.56	0.15	3.44	3.05	0.96	7.46
Plant - Folding	31R-15	MFWD 225	120,000	150	8	0.048	1.00	1.97	2.19	0.31	5.49	4.27	2.02	11.79
Plant - Folding	32R-15	MFWD 225	135,000	150	8	0.047	0.97	1.91	2.38	0.30	5.57	4.64	1.96	12.18
Plant - Folding	36R-20	MFWD 225	145,000	150	8	0.031	0.64	1.27	1.70	0.20	3.83	3.32	1.30	8.47
Plant - Rigid	4R-30	2WD 130	19,100	150	8	0.188	3.89	4.41	1.35	0.48	10.14	2.63	2.96	15.74
Plant - Rigid	4R-38	2WD 130	20,700	150	8	0.148	3.06	3.47	1.15	0.38	8.07	2.24	2.33	12.66
Plant - Rigid	6R-30	MFWD 150	26,900	150	8	0.125	2.59	3.39	1.26	0.52	7.78	2.47	3.19	13.45
Plant - Rigid	6R-38	MFWD 150	24,800	150	8	0.099	2.05	2.68	0.92	0.41	6.06	1.79	2.52	10.39
Plant - Rigid	8R-30	MFWD 170	32,000	150	8	0.094	1.94	2.88	1.13	0.42	6.39	2.20	2.71	11.31
Plant - Rigid	8R-38	MFWD 170	29,500	150	8	0.074	1.53	2.28	0.82	0.33	4.98	1.60	2.14	8.73
Plant - Rigid	10R-30	MFWD 190	31,700	150	8	0.075	1.55	2.58	0.89	0.36	5.39	1.74	2.32	9.46
Plant - Rigid	11R-15	MFWD 170	36,900	150	8	0.137	2.84	4.21	1.90	0.61	9.58	3.71	3.96	17.25
Plant - Rigid	11R-20	MFWD 170	34,200	150	8	0.103	2.12	3.15	1.32	0.46	7.06	2.57	2.96	12.61

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2013 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Plant - Rigid	12R-20	MFWD 190	40,200	150	8	0.094	1.94	3.22	1.42	0.45	7.05	2.76	2.90	12.72
Plant - Rigid	12R-30	MFWD 190	47,300	150	8	0.062	1.29	2.15	1.11	0.30	4.86	2.17	1.93	8.97
Plant - Rigid	13R-18/20	MFWD 225	39,800	150	8	0.086	1.79	3.52	1.29	0.56	7.17	2.52	3.61	13.32
Plant - Rigid	15R-15	2WD 150	46,500	150	8	0.094	1.94	2.54	1.64	0.38	6.52	3.20	2.36	12.09
Plant - TwinRow	12R-30/40	MFWD 225	99,400	150	8	0.049	1.02	2.01	1.84	0.32	5.20	3.60	2.06	10.87
Plant - TwinRow	8R-30/40	MFWD 225	79,800	150	8	0.074	1.53	3.02	2.23	0.48	7.27	4.34	3.09	14.72
Roller/Cultipacker	12'	2WD 130	5,030	300	12	0.124	1.44	2.91	0.14	0.32	4.82	0.20	1.95	6.99
Roller/Cultipacker	20'	MFWD 150	14,200	300	12	0.074	0.86	2.01	0.25	0.31	3.44	0.34	1.89	5.69
Roller/Cultipacker	30'	MFWD 170	16,700	300	12	0.049	0.57	1.52	0.19	0.22	2.52	0.27	1.43	4.22
Roller/Cultipacker	38'	MFWD 225	17,900	300	12	0.039	0.45	1.59	0.16	0.25	2.47	0.23	1.63	4.33
Roller/Stubble	20'	2WD 50	12,000	300	12	0.074	0.86	0.67	0.21	0.04	1.79	0.29	0.29	2.38
Roller/Stubble	32'	MFWD 225	20,400	300	12	0.046	0.54	1.89	0.22	0.30	2.96	0.31	1.94	5.21
Rotary Cutter	7'	MFWD 130	4,230	185	10	0.168	1.95	3.94	0.57	0.53	7.00	0.41	3.25	10.67
Rotary Cutter	12'	2WD 150	12,000	185	10	0.098	1.13	2.65	0.95	0.40	5.15	0.68	2.46	8.29
Rotary Cutter-Flex	15'	MFWD 150	18,000	185	10	0.078	0.91	2.12	1.14	0.32	4.50	0.82	1.99	7.32
Rotary Cutter-Flex	20'	MFWD 150	25,500	185	10	0.058	0.68	1.59	1.21	0.24	3.73	0.87	1.49	6.11
Row Cond & Inc-Fold.	26'	MFWD 190	23,300	100	10	0.063	1.02	2.17	0.36	0.30	3.87	1.58	1.95	7.41
Row Cond & Inc-Fold.	38'	MFWD 225	32,700	100	10	0.043	0.70	1.76	0.35	0.28	3.09	1.52	1.80	6.42
Row Cond & Inc-Rigid	13'	2WD 130	12,500	100	10	0.126	2.04	2.97	0.39	0.32	5.74	1.70	1.99	9.44
Row Cond & Inc-Rigid	21'	2WD 170	17,000	100	10	0.078	1.26	2.40	0.33	0.29	4.29	1.43	1.86	7.60
Row Cond & Inc-Rigid	26'	MFWD 190	17,700	100	10	0.026	0.42	0.91	0.11	0.12	1.58	0.50	0.81	2.91
Row Cond Folding	26'	MFWD 225	17,900	100	10	0.059	0.69	2.42	0.26	0.38	3.76	1.14	2.48	7.40
Row Cond Folding	38'	MFWD 225	25,700	100	10	0.040	0.47	1.65	0.26	0.26	2.65	1.12	1.69	5.48
Row Cond Rigid	13'	2WD 130	7,120	100	10	0.119	1.38	2.79	0.21	0.30	4.70	0.91	1.88	7.49
Row Cond Rigid	21'	2WD 170	11,700	100	10	0.073	0.85	2.26	0.21	0.27	3.61	0.93	1.75	6.30
Row Cond Rigid	26'	MFWD 190	12,400	100	10	0.059	0.69	2.04	0.18	0.28	3.21	0.79	1.83	5.84
Row Cond./Roll-Fold.	26'	MFWD 190	26,300	160	10	0.072	0.83	2.46	0.47	0.34	4.12	1.27	2.22	7.62
Row Cond./Roll-Fold.	30'	MFWD 190	35,400	160	10	0.062	0.72	2.13	0.55	0.30	3.71	1.48	1.92	7.12
Row Cond./Roll-Fold.	40'	MFWD 225	36,700	160	10	0.046	0.54	1.90	0.43	0.30	3.17	1.15	1.94	6.28
Row Cond./Roll-Rigid	21'	MFWD 190	11,800	160	10	0.089	1.03	3.05	0.26	0.42	4.78	0.70	2.74	8.24
Row Cond./Roll-Rigid	26'	MFWD 190	22,800	160	10	0.072	0.83	2.46	0.41	0.34	4.06	1.10	2.22	7.38
Spin Spreader	5 ton	MFWD 190	10,900	100	8	0.042	0.86	1.44	0.25	0.20	2.77	0.52	1.29	4.59
Spray (ATV Ropewick)	75"	800 CC	590	200	8	0.260	4.19	0.61	0.07	0.30	5.19	0.08	1.20	6.48
Spray (ATV)	12'/17'	800 CC	520	200	8	0.112	1.81	0.26	0.02	0.13	2.24	0.03	0.52	2.80
Spray (ATV)	20'	800 CC	1,330	200	8	0.084	1.36	0.20	0.05	0.09	1.71	0.06	0.39	2.17
Spray (Band)	27' Fold	MFWD 170	5,340	200	8	0.062	1.01	1.91	0.15	0.28	3.36	0.19	1.80	5.36
Spray (Band)	40' Fold	MFWD 170	6,970	200	8	0.042	0.68	1.29	0.13	0.19	2.30	0.16	1.21	3.69
Spray (Band)	50' Fold	MFWD 170	8,940	200	8	0.033	0.54	1.03	0.14	0.15	1.87	0.17	0.97	3.02
Spray (Band)	53' Fold	MFWD 170	8,100	200	8	0.031	0.51	0.97	0.12	0.14	1.75	0.14	0.91	2.82
Spray (Band)	60' Fold	MFWD 170	11,100	200	8	0.028	0.45	0.86	0.14	0.12	1.59	0.17	0.81	2.58
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,600	200	8	0.130	2.09	3.51	0.34	0.54	6.50	0.41	3.31	10.23
Spray (Bcast/HB)	20' Rigid	MFWD 150	6,610	200	8	0.084	1.36	2.28	0.26	0.35	4.26	0.32	2.15	6.73
Spray (Bcast/HB)	27' Fold	MFWD 170	11,300	200	8	0.062	1.01	1.91	0.33	0.28	3.54	0.40	1.80	5.75
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,590	200	8	0.062	1.01	1.91	0.22	0.28	3.43	0.27	1.80	5.51
Spray (Bcast/HB)	30' Fold	MFWD 170	12,800	200	8	0.056	0.90	1.72	0.33	0.25	3.22	0.41	1.62	5.26
Spray (Bcast/HB)	40' Fold	MFWD 170	13,500	200	8	0.042	0.68	1.29	0.26	0.19	2.43	0.32	1.21	3.98
Spray (Bcast/HB/HD)	27'	MFWD 170	12,100	200	8	0.062	1.01	1.91	0.35	0.28	3.56	0.43	1.80	5.80
Spray (Bcast/HB/HD)	40'	MFWD 170	12,785	200	8	0.042	0.68	1.29	0.25	0.19	2.42	0.31	1.21	3.95
Spray (Broadcast)	27'	MFWD 170	5,340	200	8	0.062	1.01	1.91	0.15	0.28	3.36	0.19	1.80	5.36
Spray (Broadcast)	40'	MFWD 170	6,970	200	8	0.042	0.68	1.29	0.13	0.19	2.30	0.16	1.21	3.69
Spray (Broadcast)	50'	MFWD 170	8,940	200	8	0.033	0.54	1.03	0.14	0.15	1.87	0.17	0.97	3.02
Spray (Broadcast)	53'	MFWD 170	8,100	200	8	0.031	0.51	0.97	0.12	0.14	1.75	0.14	0.91	2.82
Spray (Broadcast)	60'	MFWD 170	11,100	200	8	0.028	0.45	0.86	0.14	0.12	1.59	0.17	0.81	2.58
Spray (Direct/Hood)	8R-30	MFWD 170	12,200	200	8	0.084	1.36	2.59	0.48	0.38	4.82	0.59	2.43	7.84
Spray (Direct/Hood)	8R-38	MFWD 170	13,400	200	8	0.066	1.07	2.04	0.42	0.30	3.84	0.51	1.92	6.28
Spray (Direct/Hood)	12R-30	MFWD 170	15,400	200	8	0.056	0.90	1.72	0.40	0.25	3.29	0.49	1.62	5.42
Spray (Direct/Hood)	12R-38	MFWD 170	15,700	200	8	0.044	0.71	1.36	0.32	0.20	2.61	0.40	1.28	4.29
Spray (Direct/Layby)	8R-38	MFWD 170	12,300	200	8	0.066	1.07	2.04	0.38	0.30	3.81	0.47	1.92	6.21
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	18,100	200	8	0.044	0.71	1.36	0.37	0.20	2.66	0.46	1.28	4.40
Spray (Direct/Layby)	12R-30	MFWD 170	16,200	200	8	0.056	0.90	1.72	0.42	0.25	3.31	0.52	1.62	5.46
Spray (Direct/Layby)	12R-38	MFWD 170	18,100	200	8	0.044	0.71	1.36	0.37	0.20	2.66	0.46	1.28	4.40
Spray (Levee Leaper)	50'	MFWD 225	11,700	200	8	0.033	0.54	1.37	0.18	0.22	2.32	0.22	1.40	3.95
Spray (Pull Type)	60'	MFWD 225	27,800	200	8	0.028	0.45	1.14	0.36	0.18	2.14	0.45	1.17	3.77
Spray (Pull Type)	80'	MFWD 225	38,600	200	8	0.021	0.34	0.85	0.38	0.13	1.71	0.46	0.87	3.06
Spray (Pull Type)	90'	2WD 50	39,000	200	8	0.018	0.30	0.16	0.34	0.01	0.82	0.42	0.07	1.32
Spray (Pull Type)	100'	MFWD 225	35,900	200	8	0.016	0.27	0.68	0.28	0.10	1.35	0.34	0.70	2.40
Spray (Pull Type)	120'	MFWD 225	50,800	200	8	0.014	0.22	0.57	0.33	0.09	1.22	0.41	0.58	2.22
Spray (Ropewick)	20'	MFWD 190	2,550	200	8	0.084	1.36	2.89	0.10	0.40	4.76	0.12	2.60	7.49
Spray (Spot)	27'	MFWD 170	5,340	200	8	0.062	1.01	1.91	0.15	0.28	3.36	0.19	1.80	5.36
Spray (Spot)	40'	MFWD 170	6,970	200	8	0.042	0.68	1.29	0.13	0.19	2.30	0.16	1.21	3.69
Spray (Spot)	50'	MFWD 170	8,940	200	8	0.033	0.54	1.03	0.14	0.15	1.87	0.17	0.97	3.02
Spray (Spot)	53'	MFWD 170	8,100	200	8	0.031	0.51	0.97	0.12	0.14	1.75	0.14	0.91	2.82
Spray (Spot)	60'	MFWD 225	11,100	200	8	0.028	0.45	1.14	0.14	0.18	1.92	0.17	1.17	3.28
Stalk Shredder	14'	MFWD 150	12,900	200	10	0.117	1.36	3.18	1.33	0.48	6.37	0.81	2.99	10.18
Stalk Shredder Flex	20'	MFWD 150	30,500	200	10	0.082	0.95	2.22	2.20	0.34	5.73	1.35	2.09	9.18
Stalk Shredder-Flail	12'	MFWD 150	15,300	200	10	0.137	1.59	3.71	1.84	0.57	7.72	1.13	3.49	12.35
Stalk Shredder-Flail	15'	MFWD 150	19,300	200	10	0.110	1.27	2.97	1.85	0.45	6.56	1.14	2.79	10.50

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2013 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Stalk Shredder-Flail	18'	MFWD 150	24,900	200	10	0.091	1.06	2.47	1.99	0.38	5.91	1.22	2.33	9.47
Stalk Shredder-Flail	20'	MFWD 150	25,600	200	10	0.082	0.95	2.22	1.84	0.34	5.37	1.13	2.09	8.61
Stalk Shredder-Flail	25'	MFWD 150	34,100	200	10	0.066	0.76	1.78	1.96	0.27	4.79	1.20	1.67	7.68
Strip Till	8R38/12R30	MFWD 225	32,000	150	10	0.061	0.71	2.49	0.85	0.40	4.46	1.41	2.56	8.44
Subsoiler	3 shank	MFWD 190	3,390	100	15	0.204	2.37	6.99	0.23	0.98	10.57	0.58	6.29	17.45
Subsoiler	4 shank	MFWD 225	7,610	100	15	0.153	1.78	6.22	0.38	0.99	9.39	0.98	6.38	16.77
Subsoiler	5 shank	MFWD 225	7,300	100	15	0.122	1.41	4.95	0.29	0.79	7.47	0.75	5.08	13.31
Subsoiler low-till	6 shank	MFWD 225	10,200	100	15	0.102	1.18	4.14	0.34	0.66	6.33	0.87	4.24	11.46
Subsoiler low-till	8 shank	MFWD 225	19,600	100	15	0.076	0.88	3.10	0.50	0.49	4.98	1.26	3.18	9.43

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, 2013

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Dithane Rainshield	lb	2.84
Crop Oil Conc.(Pet.)	pt	3.75	Enable 2F	oz	1.93
Crop Oil Conc.(Veg.)	pt	4.34	Folicur 3.6	oz	1.08
Drift/Defoamer	pt	5.25	Headline EC	oz	2.81
Spreader Sticker	pt	3.28	Headline SC	oz	3.06
Surfactant	pt	3.50	Manzate 75 DF	lb	4.93
CLEANING			Moncut 70 DF	lb	24.85
Cleaning Peanuts	ton	18.00	Prevail	lb	28.26
CROP CONSULTANT			Provost	oz	2.18
Crop Consultant	acre	5.50	Quadris	oz	2.47
Rice Consultant	acre	8.00	Quilt	pt	19.37
CUSTOM FERTILIZE			Quilt XCEL	pt	26.52
App Fert by Air	cwt	6.50	Ridomil Gold	oz	6.22
App Fert by Air(Min)	appl	6.50	Ridomil Gold PC GR	lb	2.42
Custom Apply Fert	acre	7.00	Rovral 4F	pt	17.72
CUSTOM LIME			Stiletto	oz	0.56
Lime (Spread)	ton	45.00	Stratego	pt	21.97
CUSTOM PLANT			Stratego YLD	oz	4.60
Custom Plant	acre	7.00	Terrachlor 2EC	pt	1.87
Custom Plant Air	cwt	6.50	Tilt 3.6 EC	oz	1.17
CUSTOM SPRAY			Tilt/ Bravo SE	oz	0.38
App by Air (2 gal)	appl	4.00	Uniform	oz	4.42
App by Air (3 gal)	appl	4.75	Vitavax RTU-Thiram	oz	0.35
App by Air (5 gal)	appl	6.00	GINNING		
App by Air (10 gal)	appl	7.75	Gin & Haul	lb	0.11
Custom Spray	acre	6.50	GROWTH REGULATORS		
DRYING			Early Harvest PGR	oz	1.55
Dry Corn	bu	0.19	Mepex	oz	0.10
Dry Grain Sorghum	cwt	0.25	Mepex Gin Out	oz	0.15
Dry Peanuts	ton	24.00	Mepichlor 4.2%	oz	0.13
Dry Rice	bu	0.40	Mepiquat	oz	0.11
ERADICATION FEE			Mepiquat Extra	oz	0.08
Eradication	acre	1.00	Pentia	pt	5.72
FERTILIZERS			Pix Plus	oz	0.25
Amm Nitrate (34% N)	cwt	22.50	Stance	oz	1.24
Amm Sulfate (21% N)	cwt	20.70	SuperBoll	pt	3.24
Amm Sulfate dry/mix	lb	0.28	HARVEST AIDS		
Boron 15G	lb	0.40	Adios	oz	1.30
Boron Plus	pt	4.00	Aim 2EC	oz	7.38
DAP	cwt	32.00	Ammonium Sulfate	lb	0.28
Fert 10-34-0	cwt	35.00	CottonQuik	pt	4.25
Fert 11-37-0	cwt	36.50	Def 6	pt	7.34
Fert 30-0-0-5	cwt	18.32	Def/Folex	pt	8.42
Fert 33-0-0-12s	cwt	21.50	Defol 3	gal	3.45
Fert 41-0-0-4	cwt	26.30	Defol 5	gal	6.11
Lime	ton	35.00	Defol 750	pt	1.72
MAP	cwt	33.33	Dropp SC	oz	2.34
Phosphorus(46% P2O5)	cwt	29.30	ET	pt	47.80
Potash (60% K2O)	cwt	29.80	Ethephon 6E	pt	3.34
Sulfur 90%	lb	0.27	Finish 6	pt	9.22
Sulfur 90%	lb	0.27	First Pick	pt	3.66
Sulfur Plus	pt	2.37	Folex 6EC	pt	9.50
SuperMax AMS	pt	2.47	Freefall SC	oz	1.57
UAN (32% N)	cwt	21.10	Ginstar EC	pt	31.92
UAN + Sulfur (28%)	cwt	20.90	Gramoxone SL	oz	0.25
Urea, Solid (46% N)	cwt	28.40	Paraquat	oz	0.25
Zinc Plus	pt	2.62	Prep	pt	3.00
Zinc Sulfate 31%	lb	0.55	Sharpen	oz	5.30
FUNGICIDES			Shed-a-leaf	gal	3.60
Abound	pt	30.16	Sodium Chlorate 3L	gal	3.45
Allegiance Flowable	pt	59.52	Sodium Chlorate 5L	gal	6.11
Apron Maxx RTA	oz	0.87	TDZ SC	oz	1.41
Apron Maxx RTA+Moly	pt	15.47	Thidiazuron 4lb	oz	1.80
Apron XL LS	oz	7.93	Tribufos 6lb	pt	8.42
Artisan	oz	0.96	HAULING		
Bravo Ultrex	lb	5.48	Haul Corn/Bin	bu	0.23
Bravo Weather Stick	pt	4.42	Haul Corn/Field	bu	0.28
Captan 50 WP	lb	6.00	Haul Cotton	lb	0.02
Cotton Seed Trt.	acre	20.00	Haul Peanuts	ton	14.50
CruiserMaxx	oz	4.07	Haul Rice/Bin	bu	0.30
Dithane F-45	qt	8.17			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2013(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Haul Rice/Field	bu	0.31	Fusion	pt	26.64
Haul Sorghum/Bin	bu	0.23	Glyfos	pt	1.94
Haul Sorghum/Field	bu	0.28	Glyfos Xtra	pt	1.80
Haul Soybeans/Bin	bu	0.23	Glyphosate 3lbs a.e	pt	1.79
Haul Soybeans/Field	bu	0.28	Glyphosate 3lbs a.e	oz	0.13
Haul Wheat/Bin	bu	0.23	Glystar	pt	1.81
Haul Wheat/Field	bu	0.28	Glystar Plus	pt	1.80
HERBICIDES			Goal 2XL	pt	9.87
2,4-D Amine 4	pt	2.54	Gramonone SL 2.0	oz	0.25
2,4-D LV 4Ester	pt	2.31	Grandstand R	qt	28.37
2,4-D Weedar 64	pt	2.54	Guardman Max	pt	6.92
AAtrex 4L	pt	2.28	Halex GT	pt	6.16
AAtrex NINE-O	lb	4.22	Halomax	oz	18.42
Accent Q	oz	32.47	Harmony Extra SG	oz	13.27
Aim 2EC	oz	7.38	Harmony Extra XP	oz	14.40
Armezon	oz	0.00	Harmony GT	oz	20.72
Assure II	oz	0.90	Harness	pt	11.88
Atrazine 4L	pt	1.72	Harness XTRA	pt	7.00
Atrazine 90DF	lb	3.24	Hoelon 3EC	pt	11.03
Axial	oz	0.98	Impact	oz	20.34
Axiom 68DF	oz	1.73	Karmex XP	lb	6.81
Banvel	pt	6.98	Lariat	qt	7.29
Basagran	pt	13.23	Laudis	oz	4.89
Basis	oz	18.57	Layby Pro	qt	13.87
Beyond	oz	3.90	Lexar	pt	6.85
Bicep II Magnum	qt	11.82	Liberty 280	pt	8.84
Bicep Lite Magnum	pt	7.95	Linex 4L	pt	9.92
Blazer Ultra	pt	9.40	Londax 60DF	oz	14.75
Bolero 8EC	pt	7.30	Lorox 50DF	lb	20.60
Boundary 6.5 EC	pt	9.67	Makaze	pt	1.50
Buccaneer Plus	pt	1.74	MSMA 6.6	pt	2.79
Bullet	pt	3.65	MSMA6 Plus	pt	2.71
Butoxone 200(2,4-D	pt	3.21	Newpath 2SL	oz	3.15
Butyrac 200 (2,4-DB)	pt	4.18	Osprey	oz	3.20
Cadre	oz	3.65	Outlook	pt	22.99
Callisto 4SC	oz	5.50	Paraquat	oz	0.25
Canopy 75%	oz	2.21	Parazone 3SL	oz	0.26
Canopy EX	oz	7.76	Parrlay	pt	8.13
Caparol 4L	pt	2.54	Peak Accu Pak	oz	14.69
Capreno	oz	5.78	Permit 75 DF	oz	19.79
Celebrity Plus	lb	84.50	Poast 1.53	pt	11.25
Clarity	pt	10.83	Poast Plus	pt	8.42
Classic	oz	16.06	Prefix	pt	6.84
Clearpath	lb	48.09	Propimax EC	pt	20.31
Clincher SF	oz	2.10	Prowl 3.3 EC	pt	5.51
Cobra 2EC	oz	1.47	Prowl H20	pt	5.37
Command 3ME	pt	17.08	Pursuit 2S	oz	3.93
Cornerstone Plus	pt	1.56	Python WDG	oz	13.22
Cotoran 4L	pt	6.12	Quinstar	lb	48.70
Cotton Pro	pt	3.44	Raptor	oz	4.05
Credit Extra	pt	2.04	Reflex 2LC	pt	16.10
Direx 4L	pt	4.05	Regiment 80WP	oz	40.64
Diuron 4L	pt	3.85	Remedy Ultra	pt	8.45
Diuron 80 DF	lb	5.13	Resolve SG	oz	7.77
Diuron 80%	lb	5.13	Resource .86EC	pt	27.28
Dual II Magnum	pt	14.43	Ricebeaux	pt	5.17
Dual Magnum	pt	13.54	RicePro	pt	4.85
Duet	pt	4.78	Riceshot	pt	3.48
Envoke	oz	88.92	Ricestar HT	pt	22.25
Evik DF 80W	lb	10.11	Rifel	pt	4.38
Exceed	oz	10.71	Roundup Power Max	oz	0.18
Expert	pt	4.19	Roundup PowerMax	pt	2.83
Facet L	pt	14.25	Roundup WeatherMax	oz	0.24
Finesse	oz	15.34	Roundup WeatherMax	pt	3.77
First Rate	oz	39.68	Salvo	pt	3.56
Flexstar	pt	16.78	Scepter 70 DG	oz	4.33
Frontier 6.0	oz	0.63	Select Max	pt	12.59
Fultime	pt	5.21	Sequence	pt	5.08
Fusilade DX	oz	1.23			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2013 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Simazine 4L	pt	2.86	Intrepid 2F	oz	1.81
Stalwart	pt	6.25	Intruder 70WSP	oz	8.75
Stam 80 EDF	lb	7.13	Karate Z	oz	3.15
Stam M4	qt	7.51	Kelthane MF 4EC	pt	5.03
Staple LX	oz	8.25	Lannate LV	pt	9.87
Steadfast	oz	23.95	Lannate SP	oz	1.83
Steadfast ATZ	oz	0.00	Larvin 3.2	oz	0.62
Sterling Blue	pt	9.81	Leverage 2.7	oz	1.33
Storm	pt	10.62	Lorsban 15G	lb	2.24
Strada WG	oz	5.96	Lorsban 4E	pt	5.54
Strongarm	oz	47.07	Malathion 5E	pt	4.60
Superwham	qt	8.49	Malathion 8E	pt	5.50
Suprend	lb		Methyl Parathion 4	pt	5.58
Surpass EC	qt	25.92	Monitor 4	pt	16.33
Synchrony XP	oz	11.75	Mustang Max	oz	1.58
Touchdown Total	qt	5.49	Oberon 4 SC	pt	76.18
Treflan TR-10	lb	1.10	Orthene 90S	lb	6.50
Tricor DF	lb	14.46	Penncap-M	pt	5.90
Trifluralin 4EC	pt	3.19	Phorate	lb	3.00
Valor SX	oz	5.55	Pounce 25WP	lb	12.77
Valor XLT	oz	4.10	Prolex	oz	2.62
Verdict	oz	1.58	Respect .8EC	pt	33.79
Zidua	oz	0.00	Sevin 4F	pt	6.01
Zorial Rapid 80DF	lb	13.95	Sevin 80S	lb	7.35
INOCULANT			Sevin XLR Plus	qt	12.39
Nitrastick S	lbseed	0.02	Sniper	oz	0.70
Nitro Fix	lbseed	0.03	Steward	pt	31.20
Optimize LIFT	oz	0.70	Temik 15G Grit	lb	4.11
INSECT SCOUTING			Temik 15G Gypsum	lb	4.11
Insect Scouting	acre	7.00	Thimet 20-G Lock N L	lb	3.33
INSECTICIDES			Thionex 3 EC	pt	4.46
Acephate 90%	lb	6.53	Thionex 50W	lb	10.51
Acephate 90SP	lb	6.56	Tombstone Helios	pt	36.30
Acramite-4SC	oz	1.37	Tracer 4SC	oz	8.45
Ambush 25 WP	.66	0.00	Trimax Pro	oz	1.85
Asana .66 XL	oz	0.75	Tundra	oz	0.78
Aztec 2.1% G	lb	3.40	Vydate C-LV	oz	0.83
Baythroid XL	oz	2.27	Warrior Z	oz	1.80
Bidrin 8WM	oz	1.01	Zeal	oz	18.59
Bidrin XP	oz	0.78	Zephyr	oz	2.20
Bifenture 2EC	pt	12.50	IRRIGATION SUPPLIES		
Brigade EC	pt	14.58	Roll-Out Pipe	ft	0.24
Brigade WSB	lb	22.22	SEED/PLANTS		
Capture 2EC	oz	1.76	Corn Seed Bt	thous	2.60
Capture LFR	oz	2.16	Corn Seed BtRR	thous	3.34
Carbaryl 4L	pt	4.88	Corn Seed Conv.	thous	2.57
Carbine 50WG	oz	5.50	Corn Seed RR2	thous	3.11
Centric 40WG	oz	4.46	Corn Seed VT3	thous	3.29
Comite 1l	pt	7.23	Corn Seed VT3Pro	thous	3.38
Confirm 2F	oz	1.94	Corn Seed YGCB	thous	2.60
Counter 15G	lb	2.55	Cotton Seed B2RF	thous	0.68
Curacron 8E	pt	10.74	Cotton Seed LL	thous	1.15
Cypermethrin	oz	0.47	Cotton Seed LLB2	thous	1.16
Denim 0.16 EC	pt	30.23	Cotton Seed RF	thous	0.63
Diamond .83EC	pt	17.83	Cotton Seed W	thous	0.67
Dimethoate 4E	pt	5.45	Cotton Seed WRF	thous	0.67
Dimilin 2L	oz	1.84	Peanut Seed	lb	1.13
Dipel DF	lb	13.98	Rice Clearfield	lb	0.85
Dipel ES	pt	5.28	Rice Clearfield Hyb	lb	6.90
Discipline 2 EC	oz	0.78	Rice Conv. Hybrid	lb	5.34
Endigo ZC	pt	29.19	Rice Seed (Levees)	lb	0.29
Fanfare 2EC	oz	0.78	Rice Seed CF(Levees)	lb	0.85
Force 3G	lb	6.25	Rice Seed CFH(Levee)	lb	6.90
Furadan 4F	pt	9.81	Rice Seed Conv.	lb	0.29
Furadan 4FLFR	pt	9.81	Rice Seed Std.Blend	lb	2.30
Gaicho 600	oz	5.75	Sorghum Concept	lb	2.03
Hero	pt	23.05	Soybean Seed LL	lb	1.13
Holster	pt	0.80	Soybean Seed RR2	lb	1.04
Imidan 70 WSB	oz	0.70	Wheat Seed Private	lb	0.37
Incidental Pest Trt	acre	12.00			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2013 (continued)

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

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2013

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	3.50
Gasoline	gal	3.40
LP Gas	gal	2.00
INTEREST RATES		
Short-term	%	4.25
Intermediate-term	%	5.25

Appendix Table 6. Labor types, wage rates and unallocated labor
multipliers for crop enterprises, Mississippi, 2013

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	11.71
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, 2013

	Unit	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '13	6.32	-0.3012	6.02	2.09	6.02
Cotton Lint	lb	Dec '13	0.770	-0.0276	0.743	.524	0.74
Cottonseed	lb						0.103 ^f
Grain Sorghum	bu				5.72	3.61	5.72
Peanuts	ton				575.00	355.00	575.00
Soybeans	bu	Nov '13	13.35	-0.3030	13.05	5.21	13.05
Rice	bu	Sep '13	7.07	-0.8110	6.25	2.97	6.25
Wheat	bu	Jul '13	8.51	-0.6908	7.82	2.87	7.82

^a Average of the futures contract month closings in October.

^b The basis is computed by subtracting the 2001-2012 average near futures contract month closings in October from the daily spot cash prices reported in October.
Sources: Arkansas Farm Bureau Commodity Report and Daily Grain Report, Mississippi Department of Ag-USDA Market News.

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

^d Average Mississippi loan rate for the 2012 crop year for soybeans, corn, grain sorghum, and wheat. 2012 Mississippi base loan rate for the Delta area for cotton. 2012 Mississippi loan rate for long grain rice. 2012 national average loan rate for peanuts.

^e Price used in the 2013 MAFES Planning Budgets.

^f Cottonseed price is the marketing year average price averaged over the years 2008-2012, 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, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Land Plane	50'x16'		1.30	0.27	0.44			0.09	2.10	1.40	3.50
Set Up Engine											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Ditcher (1m/160a)			0.22	0.04	0.11			0.01	0.38	0.17	0.55
Roll-Out Pipe	ft	7.92						0.11	8.03		8.03
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.29	0.05	0.38			0.01	0.73	0.47	1.20
IRRIGATE LABOR	hour				1.81			0.03	1.84		1.84
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Pick Up Pipe											
Pipe Spool 160ac	1/4m roll		0.44	0.09	0.56				1.09	0.70	1.79
Land Forming (\$390)	each									28.37	28.37
Well & Pump, Furrow	each			2.44				0.03	2.47	7.39	9.86
Main Line Pipe	each									5.10	5.10
Engine, RPF, ESB	each									7.32	7.32
1st June Irrigation	ac-in		8.55	1.12				0.14	9.81		9.81
2nd June Irrigation	ac-in		8.55	1.12				0.14	9.81		9.81
July Irrigation	ac-in		8.55	1.12				0.10	9.77		9.77
TOTALS		7.92	27.90	6.25	4.22	0.00		0.66	46.95	50.92	97.87

Note: Cost of production estimates are based on 2012 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, 2013

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				0.45			0.01	0.46	0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.49	0.09	0.19			0.01	0.78	1.36
Survey & Mark Levees	acre	2.25						0.04	2.29	2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.66	0.13	0.25			0.02	1.06	1.84
Butt Levees										
Blade-Box	6'-7'		0.47	0.06	0.23			0.01	0.77	1.09
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"		0.45	0.08	0.20			0.01	0.74	1.22
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.66	0.13	0.25			0.01	1.05	1.83
Butt Levees										
Blade-Box	6'-7'		0.47	0.06	0.23			0.01	0.77	1.09
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"		0.45	0.08	0.20			0.01	0.74	1.22
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.66	0.13	0.25			0.01	1.05	1.83
Butt Levees										
Blade-Box	6'-7'		0.47	0.06	0.23			0.01	0.77	1.09
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"		0.45	0.08	0.20			0.01	0.74	1.22
Tear Down Levees										
Levee Splitter (1/80)	32"		0.34	0.06	0.15				0.55	0.90
Land Forming (\$75)	each								7.09	7.09
Well & Pump, Flood	each			4.88				0.09	4.97	14.78
Engine, CF, 75	each								14.65	14.65
June Irrigation	ac-in		12.83	2.23				0.27	15.33	15.33
July Irrigation	ac-in		12.83	2.23				0.21	15.27	15.27
August Irrigation	ac-in		12.83	2.23				0.16	15.22	15.22
TOTALS		2.25	44.06	12.53	5.20	0.00	0.92	64.96	42.19	107.15

Note: Cost of production estimates are based on 2012 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, 2013

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			0.12	7.00	28.19	35.19
Well & Pump, 1/2 CP	each			0.95			0.02	0.97	2.88	3.85
Engine, 1/2 CP, 264	each								4.55	4.55
June Irr. 3app@.75"	ac-in		17.23	0.62			0.32	18.17		18.17
July Irr. 4app@.75"	ac-in		22.97	0.83			0.34	24.14		24.14
Aug Irr. 3app@.75"	ac-in		17.23	0.62			0.19	18.04		18.04
TOTALS		0.00	57.43	9.90	0.47	0.00	1.00	68.80	35.62	104.42

Note: Cost of production estimates are based on 2012 input prices.

Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.
2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.
3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968."
4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961
5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.
6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.
7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.
8. "Corn, Grain Sorghum & Wheat 2012 Planning Budgets." Budget Report No. 2011-03, Department of Agricultural Economics, Mississippi State University, December 2011.
9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.
10. "Cotton 2012 Planning Budgets." Budget Report No. 2011-01, Department of Agricultural Economics, Mississippi State University, December 2011.
11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.
12. "Forage 2012 Planning Budgets." Budget Report No. 2012-01, Department of Agricultural Economics, Mississippi State University, May 2012.
13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.
14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.
15. "Mississippi Agricultural Statistics." Mississippi Department of Agriculture and Commerce and Department of Agriculture, Mississippi Agriculture Statistical Service, Jackson, Mississippi.
16. "Rice 2012 Planning Budgets." Budget Report No. 2011-04, Department of Agricultural Economics, Mississippi State University, December 2011.
17. "Soybeans 2012 Planning Budgets." Budget Report No. 2011-02, Department of Agricultural Economics, Mississippi State University, December 2011.
18. "Vegetables 2012 Planning Budgets." Budget Report No. 2011-08, Department of Agricultural Economics, Mississippi State University December 2011.
19. "Peanuts 2012 Planning Budgets." Budget Report No. 2011-07, Department of Agricultural Economics, Mississippi State University, December 2011.



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