

SOYBEANS

2012

PLANNING BUDGETS

**Mississippi State University
Department of Agricultural Economics
Budget Report 2011-02**

December 2011

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 2012 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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2012 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 2011. (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.

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

where:

CRF = Capital recovery factor

IIR = Intermediate-term interest rate

TYL = Total years of life

$$\text{CRCPY} = [(RLC - SV) \times \text{CRF}]$$

$$+ (SV \times \text{IIR})$$

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 2011 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 20"
 Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	5.75	3.5000	20.13	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.30	8.0000	2.40	_____
Sodium Chlorate 3L	gal	3.00	0.5000	1.50	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	28.65	0.2800	8.02	_____
Potash (60% K2O)	cwt	29.19	0.4000	11.68	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.83	2.5000	2.07	_____
Headline EC	oz	2.66	3.0000	7.98	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	1.75	6.0000	10.50	_____
2,4-D Amine 4	pt	2.01	2.0000	4.02	_____
Valor SX	oz	4.58	2.0000	9.16	_____
Dual Magnum	pt	12.25	1.0000	12.25	_____
INSECTICIDES					
Gaucho 600	oz	5.75	1.0000	5.75	_____
Karate Z	oz	2.73	0.9600	2.62	_____
Acephate 90SP	lb	6.63	0.7500	4.97	_____
SEED/PLANTS					
Soybean Seed RR2	lb	0.98	50.0000	49.00	_____
ADJUVANTS					
Surfactant	pt	2.62	0.1000	0.26	_____
HAULING					
Haul Soybeans/Field	bu	0.24	42.0000	10.08	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.2000	8.80	_____
INOCULANT					
Nitrapin S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.3524	4.09	_____
Harvesters	hour	11.60	0.1021	1.19	_____
HAND LABOR					
Implements	hour	9.06	0.1393	1.26	_____
UNALLOCATED LABOR					
hour	11.58	0.4091	4.74	_____	
DIESEL FUEL					
Tractors	gal	3.40	3.4472	11.73	_____
Harvesters	gal	3.40	1.3935	4.74	_____
REPAIR & MAINTENANCE					
Implements	acre	3.64	1.0000	3.64	_____
Tractors	acre	1.59	1.0000	1.59	_____
Harvesters	acre	2.56	1.0000	2.56	_____
INTEREST ON OP. CAP.	acre	4.59	1.0000	4.59	_____
TOTAL DIRECT EXPENSES					
				212.58	_____
FIXED EXPENSES					
Implements	acre	7.62	1.0000	7.62	_____
Tractors	acre	10.09	1.0000	10.09	_____
Harvesters	acre	10.27	1.0000	10.27	_____
TOTAL FIXED EXPENSES					
				27.98	_____
TOTAL SPECIFIED EXPENSES					
				240.56	_____

Note: Cost of production estimates are based on 2011 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 20"
 Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	11.86	42.0000	498.12	_____
TOTAL INCOME				498.12	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	20.14	1.0000	20.14	_____
HARVEST AIDS	acre	3.90	1.0000	3.90	_____
FERTILIZERS	acre	19.70	1.0000	19.70	_____
FUNGICIDES	acre	10.05	1.0000	10.05	_____
HERBICIDES	acre	35.93	1.0000	35.93	_____
INSECTICIDES	acre	13.34	1.0000	13.34	_____
SEED/PLANTS	acre	49.00	1.0000	49.00	_____
ADJUVANTS	acre	0.26	1.0000	0.26	_____
HAULING	acre	10.08	1.0000	10.08	_____
CUSTOM LIME	acre	8.80	1.0000	8.80	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1393	1.26	_____
OPERATOR LABOR	hour	11.60	0.4546	5.28	_____
UNALLOCATED LABOR	hour	11.58	0.4091	4.74	_____
DIESEL FUEL	gal	3.40	4.8408	16.47	_____
REPAIR & MAINTENANCE	acre	7.79	1.0000	7.79	_____
INTEREST ON OP. CAP.	acre	4.59	1.0000	4.59	_____
TOTAL DIRECT EXPENSES				212.58	_____
RETURNS ABOVE DIRECT EXPENSES				285.54	_____
TOTAL FIXED EXPENSES				27.98	_____
TOTAL SPECIFIED EXPENSES				240.56	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				257.56	_____

Note: Cost of production estimates are based on 2011 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 20"
 Delta Area, Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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
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
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
Field Cultivate Fld	24'	MFWD	190	0.062	1.00	Oct			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				
Valor SX	oz						2.0000				
Plant - Rigid	12R-20	MFWD	190	0.094	1.00	Apr			0.09	0.09	0.18
Soybean Seed RR2	lb						50.0000				
Apron Maxx RTA	oz						2.5000				
Nitrapack S	lbseed						50.0000				
Gaucho 600	oz						1.0000				
Spray (Broadcast)	60'	MFWD	190	0.028	1.00	May			0.02	0.02	0.04
Glyphosate 3lbs a.e.	pt						2.0000				
Dual Magnum	pt						1.0000				
Spray (Broadcast)	60'	MFWD	190	0.028	1.00	May			0.02	0.02	0.04
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					Aug	1.0000				
Acephate 90SP	lb						0.7500				
App by Air (5 gal)	appl				0.50	Aug	0.5000				
Gramoxone Inteon	oz						8.0000				
Sodium Chlorate 3L	gal						0.5000				
Surfactant	pt						0.1000				
Header -Soybean Haul	25' Flex bu	265 hp		0.102	1.00	Sep			0.10	0.10	0.10
							42.0000				
TOTALS									0.45	0.45	0.59
											0.40

Note: Cost of production estimates are based on 2011 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 20"
 Delta Area, Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Subsoiler	3 shank		1.36	0.22	0.90		0.11	2.59	1.28
Lime (Spread)	ton	8.80					0.37	9.17	9.17
Spin Spreader	5 ton		0.56	0.19	0.53		0.05	1.33	0.70
Phosphorus(46% P205)	cwt	8.02					0.34	8.36	8.36
Potash (60% K2O)	cwt	11.68					0.50	12.18	12.18
Disk Harrow	24'		2.72	1.12	1.80		0.24	5.88	3.95
Field Cultivate Fld	24'		2.07	0.65	1.37		0.17	4.26	3.35
App by Air (5 gal)	appl	5.75					0.16	5.91	5.91
Glyphosate 3lbs a.e.	pt	3.50					0.10	3.60	3.60
2,4-D Amine 4	pt	4.02					0.11	4.13	4.13
Valor SX	oz	9.16					0.26	9.42	9.42
Plant - Rigid	12R-20		3.14	1.80	2.92		0.17	8.03	5.39
Soybean Seed RR2	lb	49.00					1.04	50.04	50.04
Apron Maxx RTA	oz	2.07					0.04	2.11	2.11
Nitrapstick S	lbseed	1.25					0.03	1.28	1.28
Gaucho 600	oz	5.75					0.12	5.87	5.87
Spray (Broadcast)	60'		0.94	0.28	0.75		0.03	2.00	0.99
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56	3.56
Dual Magnum	pt	12.25					0.22	12.47	12.47
Spray (Broadcast)	60'		0.94	0.28	0.75		0.03	2.00	0.99
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56	3.56
App by Air (5 gal)	appl	2.88					0.03	2.91	2.91
Headline EC	oz	7.98					0.08	8.06	8.06
App by Air (5 gal)	appl	2.88					0.03	2.91	2.91
Karate Z	oz	2.62					0.03	2.65	2.65
App by Air (5 gal)	appl	5.75					0.04	5.79	5.79
Acephate 90SP	lb	4.97					0.04	5.01	5.01
App by Air (5 gal)	appl	2.88					0.02	2.90	2.90
Gramoxone Inteon	oz	2.40					0.02	2.42	2.42
Sodium Chlorate 3L	gal	1.50					0.01	1.51	1.51
Surfactant	pt	0.26						0.26	0.26
Header -Soybean	25' Flex		4.74	3.25	2.26		0.04	10.29	11.33
Haul Soybeans/Field	bu	10.08					0.04	10.12	10.12
TOTALS		172.45	16.47	7.79	11.28	0.00	4.59	212.58	27.98
									240.56

Note: Cost of production estimates are based on 2011 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 20"
 Delta Area, Mississippi, 2012

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	498.12
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	5.75	0.00	0.00	0.00	0.00	5.76	8.63	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.90	0.00
FERTILIZERS	19.70	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	2.07	0.00	0.00	7.98	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	16.68	0.00	0.00	19.25	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.75	0.00	0.00	2.62	4.97	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.00	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	0.26	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	10.08
CUSTOM LIME	8.80	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	4.60	0.00	0.00	0.00	0.00	0.00	2.92	1.50	0.00	0.00	0.00	2.26
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	6.71	0.00	0.00	0.00	0.00	0.00	3.14	1.88	0.00	0.00	0.00	4.74
REPAIR & MAINTENANCE	2.18	0.00	0.00	0.00	0.00	0.00	1.80	0.56	0.00	0.00	0.00	3.25
INTEREST ON OP. CAP.	1.78	0.00	0.00	0.00	0.63	0.00	1.40	0.40	0.00	0.17	0.13	0.08
TOTAL DIRECT EXPENSES	43.77	0.00	0.00	0.00	23.06	0.00	67.33	23.59	0.00	16.53	17.89	20.41
NET INCOME	-43.77	0.00	0.00	0.00	-23.06	0.00	-67.33	-23.59	0.00	-16.53	-17.89	477.71
NET INCOME TO DATE	-43.77	-43.77	-43.77	-43.77	-66.83	-66.83	-134.16	-157.75	-157.75	-174.28	-192.17	285.54

Note: Cost of production estimates are based on 2011 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 20"
 Delta Area, Mississippi, 2012

PRODUCT	PERCENT	PRODUCT PRICE											
		75	80	85	90	95	100	105	110	115	120	125	
Soybeans		8.89	9.48	10.08	10.67	11.26	11.86	12.45	13.04	13.63	14.23	14.82	
PERCENT YIELD UNIT dollars													
50	21.00	bu	-20 -48	-8 -36	4 -23	16 -11	29 1	41 13	53 26	66 38	78 50	91 63	103 75
60	25.20	bu	15 -12	30 2	45 17	60 32	75 47	90 62	105 77	120 92	135 107	150 122	165 137
70	29.40	bu	51 23	69 41	86 58	104 76	121 93	139 111	156 128	174 146	191 163	208 180	226 198
80	33.60	bu	88 60	108 80	128 100	148 120	168 140	187 159	207 179	227 199	247 219	267 239	287 259
90	37.80	bu	124 96	147 119	169 141	191 163	214 186	236 208	259 231	281 253	303 276	326 298	348 320
100	42.00	bu	161 133	185 157	210 182	235 207	260 232	285 257	310 282	335 307	360 332	385 357	410 382
110	46.20	bu	197 169	224 196	252 224	279 251	306 278	334 306	361 333	389 361	416 388	443 415	471 443
120	50.40	bu	233 205	263 235	293 265	323 295	353 325	383 355	413 385	442 414	472 444	502 474	532 504
130	54.60	bu	270 242	302 274	334 306	367 339	399 371	431 403	464 436	496 468	529 501	561 533	593 565
140	58.80	bu	306 278	341 313	376 348	411 383	445 417	480 452	515 487	550 522	585 557	620 592	655 627
150	63.00	bu	342 314	380 352	417 389	454 426	492 464	529 501	566 538	604 576	641 613	678 650	716 688

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 2011 input prices.

Table 2.A Estimated costs per acre
 Soybeans, early-planted, RR, stale seedbed, 12R 20"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES					
CUSTOME SPRAY					
App by Air (5 gal)	appl	5.75	3.5000	20.13	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.30	4.0000	1.20	_____
Sodium Chlorate 3L	gal	3.00	0.2500	0.75	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	28.65	0.4000	11.46	_____
Potash (60% K2O)	cwt	29.19	0.6000	17.51	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.83	2.5000	2.07	_____
Quadris	oz	2.24	3.0000	6.72	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	1.75	6.0000	10.50	_____
2,4-D Amine 4	pt	2.01	2.0000	4.02	_____
Valor SX	oz	4.58	2.0000	9.16	_____
Dual Magnum	pt	12.25	1.0000	12.25	_____
INSECTICIDES					
Gaucho 600	oz	5.75	1.0000	5.75	_____
Karate Z	oz	2.73	0.9600	2.62	_____
Acephate 90SP	lb	6.63	0.7500	4.97	_____
Intrepid 2F	oz	1.79	1.0000	1.79	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.20	33.0000	6.60	_____
SEED/PLANTS					
Soybean Seed RR2	lb	0.98	50.0000	49.00	_____
ADJUVANTS					
Surfactant	pt	2.62	0.0750	0.20	_____
HAULING					
Haul Soybeans/Field	bu	0.24	65.0000	15.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.2000	8.80	_____
INOCULANT					
Nitrapin S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.5051	5.86	_____
Harvesters	hour	11.60	0.1021	1.19	_____
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	0.1393	1.26	_____
UNALLOCATED LABOR					
hour	11.57	0.4758	5.51	_____	
DIESEL FUEL					
Tractors	gal	3.40	4.8145	16.37	_____
Harvesters	gal	3.40	1.3935	4.74	_____
Roll-Out Pipe Irr.	gal	3.40	7.3316	24.93	_____
REPAIR & MAINTENANCE					
Implements	acre	4.24	1.0000	4.24	_____
Tractors	acre	2.22	1.0000	2.22	_____
Harvesters	acre	2.56	1.0000	2.56	_____
Roll-Out Pipe Irr.	acre	5.77	1.0000	5.77	_____
INTEREST ON OP. CAP.	acre	5.81	1.0000	5.81	_____
TOTAL DIRECT EXPENSES					
				276.12	_____
FIXED EXPENSES					
Implements	acre	9.72	1.0000	9.72	_____
Tractors	acre	14.04	1.0000	14.04	_____
Harvesters	acre	10.27	1.0000	10.27	_____
Roll-Out Pipe Irr.	acre	48.19	1.0000	48.19	_____
TOTAL FIXED EXPENSES					
				82.22	_____
TOTAL SPECIFIED EXPENSES					
				358.34	_____

Note: Cost of production estimates are based on 2011 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 20"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	11.86	65.0000	770.90	-----
TOTAL INCOME				770.90	-----
DIRECT EXPENSES					
CUSTOM SPRAY	acre	20.14	1.0000	20.14	-----
HARVEST AIDS	acre	1.95	1.0000	1.95	-----
FERTILIZERS	acre	28.97	1.0000	28.97	-----
FUNGICIDES	acre	8.79	1.0000	8.79	-----
HERBICIDES	acre	35.93	1.0000	35.93	-----
INSECTICIDES	acre	15.13	1.0000	15.13	-----
IRRIGATION SUPPLIES	acre	6.60	1.0000	6.60	-----
SEED/PLANTS	acre	49.00	1.0000	49.00	-----
ADJUVANTS	acre	0.20	1.0000	0.20	-----
HAULING	acre	15.60	1.0000	15.60	-----
CUSTOM LIME	acre	8.80	1.0000	8.80	-----
INOCULANT	acre	1.25	1.0000	1.25	-----
HAND LABOR	hour	9.06	0.1393	1.26	-----
IRRIGATE LABOR	hour	9.06	0.3625	3.30	-----
OPERATOR LABOR	hour	11.60	0.6072	7.05	-----
UNALLOCATED LABOR	hour	11.57	0.4758	5.51	-----
DIESEL FUEL	gal	3.40	13.5398	46.04	-----
REPAIR & MAINTENANCE	acre	14.79	1.0000	14.79	-----
INTEREST ON OP. CAP.	acre	5.81	1.0000	5.81	-----
TOTAL DIRECT EXPENSES				276.12	-----
RETURNS ABOVE DIRECT EXPENSES				494.78	-----
TOTAL FIXED EXPENSES				82.22	-----
TOTAL SPECIFIED EXPENSES				358.34	-----
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				412.56	-----

Note: Cost of production estimates are based on 2011 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 20"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2012

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
Lime (Spread)	ton			0.20	Oct	0.2000				0.03
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Oct			0.01	0.01	0.03
Phosphorus(46% P2O5)	cwt					0.4000				0.01
Potash (60% K2O)	cwt					0.6000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct			0.08	0.08	0.08
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct			0.06	0.06	0.05
Bed-Roll-Fold.	8R-38	MFWD 190	0.074	1.00	Oct			0.07	0.07	0.06
App by Air (5 gal)	appl				Feb	1.0000				
Glyphosate 3lbs a.e.	pt					2.0000				
2,4-D Amine 4	pt					2.0000				
Valor SX	oz					2.0000				
Plant - Rigid	12R-20	MFWD 190	0.094	1.00	Apr			0.09	0.09	0.18
Soybean Seed RR2	lb					50.0000				0.08
Apron Maxx RTA	oz					2.5000				
Nitristick S	lbseed					50.0000				
Gaucho 600	oz					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May			0.02	0.02	0.04
Glyphosate 3lbs a.e.	pt					2.0000				0.02
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May			0.02	0.02	0.04
Glyphosate 3lbs a.e.	pt					2.0000				0.02
App by Air (5 gal)	appl				Jul	0.50				
Quadris	oz					3.0000				
App by Air (5 gal)	appl				Jul	0.50				
Karate Z	oz					0.9600				
App by Air (5 gal)	appl					1.00				
Acephate 90SP	lb					1.0000				
App by Air (5 gal)	appl					0.25				
Intrepid 2F	oz					0.2500				
Surfactant	pt					1.0000				
App by Air (5 gal)	appl					0.25				
Gramoxone Inteon	oz					0.0250				
Sodium Chlorate 3L	gal					0.0500				
Surfactant	pt					0.0500				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep			0.10	0.10	0.10
Haul Soybeans/Field	bu					65.0000				0.09
Roll-Out Pipe Irr.	acre				Jul	1.0000		0.07	0.07	0.44

TOTALS								0.60	0.60	1.10
										0.47

Note: Cost of production estimates are based on 2011 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 20"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Subsoiler	3 shank		1.36	0.22	0.90		0.11	2.59
Lime (Spread)	ton	8.80					0.37	9.17
Spin Spreader	5 ton		0.56	0.19	0.53		0.05	1.33
Phosphorus(46% P205)	cwt	11.46					0.49	11.95
Potash (60% K2O)	cwt	17.51					0.74	18.25
Disk Harrow	24'		2.72	1.12	1.80		0.24	5.88
Field Cultivate Fld	24'		2.07	0.65	1.37		0.17	4.26
Bed-Roll-Fold.	8R-38		2.46	0.77	1.63		0.21	5.07
App by Air (5 gal)	appl	5.75					0.16	5.91
Glyphosate 3lbs a.e.	pt	3.50					0.10	3.60
2,4-D Amine 4	pt	4.02					0.11	4.13
Valor SX	oz	9.16					0.26	9.42
Plant - Rigid	12R-20		3.14	1.80	2.92		0.17	8.03
Soybean Seed RR2	lb	49.00					1.04	50.04
Apron Maxx RTA	oz	2.07					0.04	2.11
Nitrapack S	lbseed	1.25					0.03	1.28
Gaucho 600	oz	5.75					0.12	5.87
Spray (Broadcast)	60'		0.94	0.28	0.75		0.03	2.00
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56
Dual Magnum	pt	12.25					0.22	12.47
Spray (Broadcast)	60'		0.94	0.28	0.75		0.03	2.00
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56
App by Air (5 gal)	appl	2.88					0.03	2.91
Quadris	oz	6.72					0.07	6.79
App by Air (5 gal)	appl	2.88					0.03	2.91
Karate Z	oz	2.62					0.03	2.65
App by Air (5 gal)	appl	5.75					0.04	5.79
Acephate 90SP	lb	4.97					0.04	5.01
App by Air (5 gal)	appl	1.44					0.01	1.45
Intrepid 2F	oz	1.79					0.01	1.80
Surfactant	pt	0.07					0.07	0.07
App by Air (5 gal)	appl	1.44					0.01	1.45
Gramoxone Inteon	oz	1.20					0.01	1.21
Sodium Chlorate 3L	gal	0.75					0.01	0.76
Surfactant	pt	0.13					0.13	0.13
Header -Soybean	25' Flex		4.74	3.25	2.26		0.04	10.29
Haul Soybeans/Field	bu	15.60					0.06	15.66
Roll-Out Pipe Irr.	acre	6.60	27.11	6.23	4.21		0.61	44.76
TOTALS		192.36	46.04	14.79	17.12	0.00	5.81	276.12
								82.22
								358.34

Note: Cost of production estimates are based on 2011 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 20"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2012

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	770.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	5.75	0.00	0.00	0.00	0.00	5.76	8.63	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	0.00
FERTILIZERS	28.97	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	2.07	0.00	0.00	6.72	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	16.68	0.00	0.00	19.25	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.75	0.00	0.00	2.62	6.76	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.60	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.00	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	0.20	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	15.60
CUSTOM LIME	8.80	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	6.67	0.00	0.00	0.00	0.00	0.00	2.92	1.73	2.75	0.23	0.00	2.82
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	10.43	0.00	0.00	0.00	0.00	0.00	3.14	1.88	17.11	8.31	0.00	5.17
REPAIR & MAINTENANCE	3.20	0.00	0.00	0.00	0.00	0.00	1.80	0.56	4.77	1.11	0.00	3.35
INTEREST ON OP. CAP.	2.46	0.00	0.00	0.00	0.63	0.00	1.40	0.40	0.43	0.26	0.13	0.10
TOTAL DIRECT EXPENSES	60.53	0.00	0.00	0.00	23.06	0.00	67.33	23.82	31.66	25.01	17.67	27.04
NET INCOME	-60.53	0.00	0.00	0.00	-23.06	0.00	-67.33	-23.82	-31.66	-25.01	-17.67	743.86
NET INCOME TO DATE	-60.53	-60.53	-60.53	-60.53	-83.59	-83.59	-150.92	-174.74	-206.40	-231.41	-249.08	494.78

Note: Cost of production estimates are based on 2011 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 20"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2012

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
PRODUCT PRICE													
Soybeans		8.89	9.48	10.08	10.67	11.26	11.86	12.45	13.04	13.63	14.23	14.82	
dollars													
50	32.50	bu	20 -61	40 -42	59 -22	78 -3	97 15	117 34	136 54	155 73	174 92	194 112	213 131
60	39.00	bu	77 -5	100 17	123 41	146 64	169 87	192 110	215 133	238 156	262 179	285 202	308 226
70	45.50	bu	133 51	160 78	187 105	214 132	241 159	268 185	295 212	322 239	349 266	376 293	403 320
80	52.00	bu	189 107	220 138	251 169	282 199	312 230	343 261	374 292	405 323	436 354	467 384	497 415
90	58.50	bu	245 163	280 198	315 232	349 267	384 302	419 337	453 371	488 406	523 441	558 475	592 510
100	65.00	bu	302 219	340 258	379 296	417 335	456 374	494 412	533 451	571 489	610 528	648 566	687 605
110	71.50	bu	358 276	400 318	443 360	485 403	527 445	570 488	612 530	655 572	697 615	739 657	782 700
120	78.00	bu	414 332	460 378	507 424	553 471	599 517	645 563	692 609	738 656	784 702	830 748	877 794
130	84.50	bu	470 388	520 438	571 488	621 538	671 589	721 639	771 689	821 739	871 789	921 839	971 889
140	91.00	bu	527 444	581 498	634 552	688 606	742 660	796 714	850 768	904 822	958 876	1012 930	1066 984
150	97.50	bu	583 501	641 558	698 616	756 674	814 732	872 790	930 847	988 905	1045 963	1103 1021	1161 1079

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 2011 input prices

Table 3.A Estimated costs per acre
 Soybeans, May-planted, RR, 12R 20"
 Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
CUSTOM SPRAY							
App by Air (5 gal)	appl	5.75	2.5000	14.38	_____		
FERTILIZERS							
Phosphorus(46% P2O5)	cwt	28.65	0.2800	8.02	_____		
Potash (60% K2O)	cwt	29.19	0.4000	11.68	_____		
FUNGICIDES							
Apron Maxx RTA	oz	0.83	2.5000	2.07	_____		
Quadris	oz	2.24	4.5000	10.08	_____		
HERBICIDES							
Dual Magnum	pt	12.25	1.0000	12.25	_____		
Glyphosate 3lbs a.e.	pt	1.75	4.0000	7.00	_____		
INSECTICIDES							
Gaucho 600	oz	5.75	1.0000	5.75	_____		
Karate Z	oz	2.73	1.4400	3.93	_____		
Acephate 90SP	lb	6.63	0.7500	4.97	_____		
Intrepid 2F	oz	1.79	3.0000	5.37	_____		
SEED/PLANTS							
Soybean Seed RR2	lb	0.98	50.0000	49.00	_____		
ADJUVANTS							
Surfactant	pt	2.62	0.0750	0.20	_____		
HAULING							
Haul Soybeans/Field	bu	0.24	30.0000	7.20	_____		
CUSTOM LIME							
Lime (Spread)	ton	44.00	0.2000	8.80	_____		
INOCULANT							
Nitrapin S	lbseed	0.02	50.0000	1.25	_____		
OPERATOR LABOR							
Tractors	hour	11.60	0.3801	4.42	_____		
Harvesters	hour	11.60	0.1021	1.19	_____		
HAND LABOR							
Implements	hour	9.06	0.1465	1.33	_____		
UNALLOCATED LABOR							
hour	11.58	0.4341	5.03	_____			
DIESEL FUEL							
Tractors	gal	3.40	3.7182	12.65	_____		
Harvesters	gal	3.40	1.3935	4.74	_____		
REPAIR & MAINTENANCE							
Implements	acre	4.13	1.0000	4.13	_____		
Tractors	acre	1.71	1.0000	1.71	_____		
Harvesters	acre	2.56	1.0000	2.56	_____		
INTEREST ON OP. CAP.	acre	4.08	1.0000	4.08	_____		

TOTAL DIRECT EXPENSES				193.78	_____		
FIXED EXPENSES							
Implements	acre	8.60	1.0000	8.60	_____		
Tractors	acre	10.88	1.0000	10.88	_____		
Harvesters	acre	10.27	1.0000	10.27	_____		

TOTAL FIXED EXPENSES				29.75	_____		
TOTAL SPECIFIED EXPENSES							
				223.53	_____		

Note: Cost of production estimates are based on 2011 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 20"
 Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.86	30.0000	355.80	_____
TOTAL INCOME				355.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	14.37	1.0000	14.37	_____
FERTILIZERS	acre	19.70	1.0000	19.70	_____
FUNGICIDES	acre	12.15	1.0000	12.15	_____
HERBICIDES	acre	19.25	1.0000	19.25	_____
INSECTICIDES	acre	20.02	1.0000	20.02	_____
SEED/PLANTS	acre	49.00	1.0000	49.00	_____
ADJUVANTS	acre	0.20	1.0000	0.20	_____
HAULING	acre	7.20	1.0000	7.20	_____
CUSTOM LIME	acre	8.80	1.0000	8.80	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1465	1.33	_____
OPERATOR LABOR	hour	11.60	0.4823	5.61	_____
UNALLOCATED LABOR	hour	11.58	0.4341	5.03	_____
DIESEL FUEL	gal	3.40	5.1118	17.39	_____
REPAIR & MAINTENANCE	acre	8.40	1.0000	8.40	_____
INTEREST ON OP. CAP.	acre	4.08	1.0000	4.08	_____
TOTAL DIRECT EXPENSES				193.78	_____
RETURNS ABOVE DIRECT EXPENSES				162.02	_____
TOTAL FIXED EXPENSES				29.75	_____
TOTAL SPECIFIED EXPENSES				223.53	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				132.27	_____

Note: Cost of production estimates are based on 2011 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 20"
 Delta Area, Mississippi, 2012

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
Disk Harrow	24'	MFWD 190	0.081	0.25	Nov			0.02	0.02	0.02
Lime (Spread)	ton			0.20	Nov	0.2000				0.01
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Nov			0.01	0.01	0.03
Phosphorus(46% P2O5)	cwt					0.2800				0.01
Potash (60% K2O)	cwt					0.4000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr			0.08	0.08	0.08
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May			0.06	0.06	0.06
Plant & Pre-Rigid	12R-20	MFWD 190	0.101	1.00	May			0.10	0.10	0.09
Soybean Seed RR2	lb					50.0000				
Apron Maxx RTA	oz					2.5000				
Nitrapin S	lbseed					50.0000				
Gaucho 600	oz					1.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May			0.02	0.02	0.04
Glyphosate 3lbs a.e.	pt					2.0000				0.02
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun			0.02	0.02	0.04
Glyphosate 3lbs a.e.	pt					2.0000				0.02
App by Air (5 gal)	appl				Jul	0.7500				
Quadris	oz					4.5000				
Karate Z	oz					1.4400				
App by Air (5 gal)	appl				Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl				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
Haul Soybeans/Field	bu					30.0000				0.09

TOTALS								0.48	0.48	0.62
										0.43

Note: Cost of production estimates are based on 2011 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 20"
 Delta Area, Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Subsoiler	3 shank		1.36	0.22	0.90		0.11	2.59	1.28
Disk Harrow	24'		0.68	0.28	0.45		0.06	1.47	0.99
Lime (Spread)	ton	8.80					0.37	9.17	
Spin Spreader	5 ton		0.56	0.19	0.53		0.05	1.33	0.70
Phosphorus (46% P2O5)	cwt	8.02					0.34	8.36	
Potash (60% K2O)	cwt	11.68					0.50	12.18	
Disk Harrow	24'		2.72	1.12	1.80		0.14	5.78	3.95
Field Cultivate Fld	24'		2.07	0.65	1.37		0.09	4.18	3.35
Plant & Pre-Rigid	12R-20		3.38	2.13	3.16		0.18	8.85	6.17
Soybean Seed RR2	lb	49.00					1.04	50.04	
Apron Maxx RTA	oz	2.07					0.04	2.11	
Nitrapastick S	lbseed	1.25					0.03	1.28	
Gaucho 600	oz	5.75					0.12	5.87	
Dual Magnum	pt	12.25					0.26	12.51	
Spray (Broadcast)	60'		0.94	0.28	0.75		0.04	2.01	0.99
Glyphosate 3lbs a.e.	pt	3.50					0.07	3.57	
Spray (Broadcast)	60'		0.94	0.28	0.75		0.03	2.00	0.99
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56	
App by Air (5 gal)	appl	4.31					0.06	4.37	
Quadris	oz	10.08					0.14	10.22	
Karate Z	oz	3.93					0.06	3.99	
App by Air (5 gal)	appl	5.75					0.06	5.81	
Acephate 90SP	lb	4.97					0.05	5.02	
App by Air (5 gal)	appl	4.31					0.05	4.36	
Intrepid 2F	oz	5.37					0.06	5.43	
Surfactant	pt	0.20						0.20	
Header -Soybean	25' Flex		4.74	3.25	2.26		0.04	10.29	11.33
Haul Soybeans/Field	bu	7.20					0.03	7.23	
TOTALS		151.94	17.39	8.40	11.97	0.00	4.08	193.78	29.75
									223.53

Note: Cost of production estimates are based on 2011 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 20"
 Delta Area, Mississippi, 2012

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dolars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	355.80
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.31	10.06	0.00	0.00
FERTILIZERS	19.70	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	2.07	0.00	10.08	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	15.75	3.50	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.75	0.00	3.93	10.34	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.00	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	0.20	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	7.20
CUSTOM LIME	8.80	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	1.88	0.00	0.00	0.00	0.00	1.80	5.28	0.75	0.00	0.00	0.00	2.26
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	2.60	0.00	0.00	0.00	0.00	2.72	6.39	0.94	0.00	0.00	0.00	4.74
REPAIR & MAINTENANCE	0.69	0.00	0.00	0.00	0.00	1.12	3.06	0.28	0.00	0.00	0.00	3.25
INTEREST ON OP. CAP.	1.43	0.00	0.00	0.00	0.00	0.14	1.87	0.09	0.26	0.22	0.00	0.07
TOTAL DIRECT EXPENSES	35.10	0.00	0.00	0.00	0.00	5.78	90.42	5.56	18.58	20.82	0.00	17.52
NET INCOME	-35.10	0.00	0.00	0.00	0.00	-5.78	-90.42	-5.56	-18.58	-20.82	0.00	338.28
NET INCOME TO DATE	-35.10	-35.10	-35.10	-35.10	-35.10	-40.88	-131.30	-136.86	-155.44	-176.26	-176.26	162.02

Note: Cost of production estimates are based on 2011 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 20"
 Delta Area, Mississippi, 2012

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Soybeans		8.89	9.48	10.08	10.67	11.26	11.86	12.45	13.04	13.63	14.23	14.82	
PERCENT	YIELD	UNIT	dollars										
50	15.00	bu	-56	-47	-38	-30	-21	-12	-3	5	14	23	32
			-86	-77	-68	-59	-50	-42	-33	-24	-15	-6	2
60	18.00	bu	-30	-20	-9	1	11	22	33	43	54	65	75
			-60	-49	-39	-28	-17	-7	3	14	24	35	46
70	21.00	bu	-4	7	20	32	44	57	69	82	94	107	119
			-34	-22	-9	2	15	27	40	52	65	77	89
80	24.00	bu	21	35	49	63	78	92	106	120	135	149	163
			-8	5	19	34	48	62	76	91	105	119	133
90	27.00	bu	47	63	79	95	111	127	143	159	175	191	207
			17	33	49	65	81	97	113	129	145	161	177
100	30.00	bu	73	90	108	126	144	162	179	197	215	233	250
			43	61	78	96	114	132	150	167	185	203	221
110	33.00	bu	99	118	138	157	177	196	216	236	255	275	294
			69	88	108	127	147	167	186	206	225	245	264
120	36.00	bu	124	146	167	189	210	231	253	274	295	317	338
			95	116	137	159	180	201	223	244	266	287	308
130	39.00	bu	150	174	197	220	243	266	289	312	335	359	382
			121	144	167	190	213	236	259	283	306	329	352
140	42.00	bu	176	201	226	251	276	301	326	351	376	401	425
			147	172	196	221	246	271	296	321	346	371	396
150	45.00	bu	202	229	256	282	309	336	362	389	416	443	469
			173	199	226	253	279	306	333	359	386	413	439

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 2011 input prices.

Table 4.A Estimated costs per acre
 Soybeans, May-planted, RR, 12R 20"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
CUSTOM SPRAY							
App by Air (5 gal)	appl	5.75	3.0000	17.25	_____		
FERTILIZERS							
Phosphorus(46% P2O5)	cwt	28.65	0.4000	11.46	_____		
Potash (60% K2O)	cwt	29.19	0.6000	17.51	_____		
FUNGICIDES							
Apron Maxx RTA	oz	0.83	2.5000	2.07	_____		
Quadris	oz	2.24	6.0000	13.44	_____		
HERBICIDES							
Dual Magnum	pt	12.25	1.0000	12.25	_____		
Glyphosate 3lbs a.e.	pt	1.75	4.0000	7.00	_____		
INSECTICIDES							
Gaucho 600	oz	5.75	1.0000	5.75	_____		
Karate Z	oz	2.73	1.9200	5.24	_____		
Acephate 90SP	lb	6.63	0.7500	4.97	_____		
Intrepid 2F	oz	1.79	4.0000	7.16	_____		
SEED/PLANTS							
Soybean Seed RR2	lb	0.98	50.0000	49.00	_____		
ADJUVANTS							
Surfactant	pt	2.62	0.1000	0.26	_____		
HAULING							
Haul Soybeans/Field	bu	0.24	53.0000	12.72	_____		
SURVEY & MARK LEVEES							
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____		
CUSTOM LIME							
Lime (Spread)	ton	44.00	0.2000	8.80	_____		
INOCULANT							
Nitrostick S	lbseed	0.02	50.0000	1.25	_____		
OPERATOR LABOR							
Tractors	hour	11.60	0.6035	7.00	_____		
Harvesters	hour	11.60	0.1021	1.19	_____		
IRRIGATE LABOR							
Special Labor	hour	9.06	0.3125	2.82	_____		
HAND LABOR							
Implements	hour	9.06	0.1465	1.33	_____		
UNALLOCATED LABOR							
hour	11.57	0.4525	5.24	_____			
DIESEL FUEL							
Tractors	gal	3.40	5.5059	18.76	_____		
Harvesters	gal	3.40	1.3935	4.74	_____		
Contour Flood Irr.	gal	3.40	10.9974	37.38	_____		
REPAIR & MAINTENANCE							
Implements	acre	4.87	1.0000	4.87	_____		
Tractors	acre	2.55	1.0000	2.55	_____		
Harvesters	acre	2.56	1.0000	2.56	_____		
Contour Flood Irr.	acre	11.54	1.0000	11.54	_____		
INTEREST ON OP. CAP.	acre	5.58	1.0000	5.58	_____		
<hr/>							
TOTAL DIRECT EXPENSES				283.94	_____		
FIXED EXPENSES							
Implements	acre	10.78	1.0000	10.78	_____		
Tractors	acre	16.09	1.0000	16.09	_____		
Harvesters	acre	10.27	1.0000	10.27	_____		
Contour Flood Irr.	acre	36.42	1.0000	36.42	_____		
<hr/>							
TOTAL FIXED EXPENSES				73.56	_____		
<hr/>							
TOTAL SPECIFIED EXPENSES				357.50	_____		

Note: Cost of production estimates are based on 2011 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 20"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	11.86	53.0000	628.58	_____

TOTAL INCOME				628.58	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	17.25	1.0000	17.25	_____
FERTILIZERS	acre	28.97	1.0000	28.97	_____
FUNGICIDES	acre	15.51	1.0000	15.51	_____
HERBICIDES	acre	19.25	1.0000	19.25	_____
INSECTICIDES	acre	23.12	1.0000	23.12	_____
SEED/PLANTS	acre	49.00	1.0000	49.00	_____
ADJUVANTS	acre	0.26	1.0000	0.26	_____
HAULING	acre	12.72	1.0000	12.72	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	8.80	1.0000	8.80	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1465	1.33	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	11.60	0.7057	8.19	_____
UNALLOCATED LABOR	hour	11.57	0.4525	5.24	_____
DIESEL FUEL	gal	3.40	17.8970	60.88	_____
REPAIR & MAINTENANCE	acre	21.52	1.0000	21.52	_____
INTEREST ON OP. CAP.	acre	5.58	1.0000	5.58	_____

TOTAL DIRECT EXPENSES				283.94	_____
RETURNS ABOVE DIRECT EXPENSES				344.64	_____

TOTAL FIXED EXPENSES				73.56	_____

TOTAL SPECIFIED EXPENSES				357.50	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				271.08	_____

Note: Cost of production estimates are based on 2011 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 20"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2012

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
Lime (Spread)	ton			0.20	Nov	0.2000				0.07
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Nov			0.01	0.01	0.03
Phosphorus(46% P2O5)	cwt					0.4000				0.01
Potash (60% K2O)	cwt					0.6000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr			0.08	0.08	0.08
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May			0.06	0.06	0.06
Plant & Pre-Rigid	12R-20	MFWD 190	0.101	1.00	May			0.10	0.10	0.20
Soybean Seed RR2	lb					50.0000				
Apron Maxx RTA	oz					2.5000				
Nitrapristick S	lbseed					50.0000				
Gaucho 600	oz					1.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May			0.02	0.02	0.04
Glyphosate 3lbs a.e.	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun			0.02	0.02	0.04
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
Haul Soybeans/Field	bu					53.0000				0.09
Contour Flood Irr.	acre				Jul	1.0000		0.20	0.20	0.51

TOTALS								0.70	0.70	1.16
										0.45

Note: Cost of production estimates are based on 2011 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 20"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Disk Harrow	24'		2.72	1.12	1.80		0.24	5.88
Lime (Spread)	ton	8.80					0.37	9.17
Spin Spreader	5 ton		0.56	0.19	0.53		0.05	1.33
Phosphorus(46% P205)	cwt	11.46					0.49	11.95
Potash (60% K20)	cwt	17.51					0.74	18.25
Disk Harrow	24'		2.72	1.12	1.80		0.14	5.78
Field Cultivate Fld	24'		2.07	0.65	1.37		0.09	4.18
Plant & Pre-Rigid	12R-20		3.38	2.13	3.16		0.18	8.85
Soybean Seed RR2	lb	49.00					1.04	50.04
Apron Maxx RTA	oz	2.07					0.04	2.11
Nitrapastick S	lbseed	1.25					0.03	1.28
Gaucho 600	oz	5.75					0.12	5.87
Dual Magnum	pt	12.25					0.26	12.51
Spray (Broadcast)	60'		0.94	0.28	0.75		0.04	2.01
Glyphosate 3lbs a.e.	pt	3.50					0.07	3.57
Spray (Broadcast)	60'		0.94	0.28	0.75		0.03	2.00
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56
App by Air (5 gal)	appl	5.75					0.08	5.83
Quadris	oz	13.44					0.19	13.63
Karate Z	oz	5.24					0.07	5.31
App by Air (5 gal)	appl	5.75					0.06	5.81
Acephate 90SP	lb	4.97					0.05	5.02
App by Air (5 gal)	appl	5.75					0.06	5.81
Intrepid 2F	oz	7.16					0.08	7.24
Surfactant	pt	0.26						0.26
Header -Soybean	25' Flex		4.74	3.25	2.26		0.04	10.29
Haul Soybeans/Field	bu	12.72					0.05	12.77
Contour Flood Irr.	acre	2.25	42.81	12.50	5.16		0.91	63.63
TOTALS		178.38	60.88	21.52	17.58	0.00	5.58	283.94
								73.56
								357.50

Note: Cost of production estimates are based on 2011 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 20"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2012

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dolars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	628.58
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.75	11.50	0.00	0.00
FERTILIZERS	28.97	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	2.07	0.00	13.44	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	15.75	3.50	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.75	0.00	5.24	12.13	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.00	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	12.72
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	8.80	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	2.33	0.00	0.00	0.00	0.00	1.80	5.73	2.40	1.46	1.46	0.14	2.26
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	3.28	0.00	0.00	0.00	0.00	2.72	6.39	15.42	14.00	14.00	0.33	4.74
REPAIR & MAINTENANCE	1.31	0.00	0.00	0.00	0.00	1.12	3.06	7.74	2.49	2.49	0.06	3.25
INTEREST ON OP. CAP.	1.89	0.00	0.00	0.00	0.00	0.14	1.88	0.54	0.59	0.45	0.00	0.09
TOTAL DIRECT EXPENSES	46.58	0.00	0.00	0.00	0.00	5.78	90.88	31.85	42.97	42.29	0.53	23.06
NET INCOME	-46.58	0.00	0.00	0.00	0.00	-5.78	-90.88	-31.85	-42.97	-42.29	-0.53	605.52
NET INCOME TO DATE	-46.58	-46.58	-46.58	-46.58	-46.58	-52.36	-143.24	-175.09	-218.06	-260.35	-260.88	344.64

Note: Cost of production estimates are based on 2011 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 20"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2012

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
PRODUCT PRICE													
Soybeans		8.89	9.48	10.08	10.67	11.26	11.86	12.45	13.04	13.63	14.23	14.82	
PERCENT YIELD UNIT dollars													
50	26.50	bu	-41 -115	-26 -99	-10 -83	5 -68	21 -52	36 -36	52 -21	68 -5	83 10	99 26	115 41
60	31.80	bu	4 -69	22 -50	41 -31	60 -12	79 5	98 24	117 43	136 62	154 81	173 100	192 119
70	37.10	bu	49 -23	71 -1	93 20	115 42	137 64	159 86	181 108	203 130	225 152	247 174	269 196
80	42.40	bu	95 22	120 47	146 72	171 97	196 122	221 147	246 173	271 198	296 223	322 248	347 273
90	47.70	bu	141 68	169 96	198 124	226 152	254 181	283 209	311 237	339 266	367 294	396 322	424 350
100	53.00	bu	187 113	218 145	250 176	281 208	313 239	344 271	376 302	407 333	438 365	470 396	501 428
110	58.30	bu	233 159	267 194	302 228	337 263	371 298	406 332	440 367	475 401	509 436	544 470	579 505
120	63.60	bu	279 205	316 243	354 281	392 318	430 356	467 394	505 431	543 469	580 507	618 545	656 582
130	68.90	bu	325 251	365 292	406 333	447 374	488 414	529 455	570 496	611 537	651 578	692 619	733 660
140	74.20	bu	370 297	414 341	458 385	502 429	546 473	590 517	634 561	678 605	722 649	766 693	810 737
150	79.50	bu	416 343	463 390	511 437	558 484	605 531	652 578	699 626	746 673	793 720	841 767	888 814

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 2011 input prices.

Table 5.A Estimated costs per acre
 Soybeans after wheat, RR, 12R 20"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	5.75	3.0000	17.25	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	28.65	0.4000	11.46	_____
Potash (60% K2O)	cwt	29.19	0.6000	17.51	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.83	2.5000	2.07	_____
Quadris	oz	2.24	6.0000	13.44	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	1.75	5.0000	8.75	_____
Dual Magnum	pt	12.25	1.0000	12.25	_____
INSECTICIDES					
Gaucho 600	oz	5.75	1.0000	5.75	_____
Karate Z	oz	2.73	1.7000	4.64	_____
Acephate 90SP	lb	6.63	0.7500	4.97	_____
Intrepid 2F	oz	1.79	4.0000	7.16	_____
Baythroid XL	oz	2.19	2.1300	4.66	_____
SEED/PLANTS					
Soybean Seed RR2	lb	0.98	50.0000	49.00	_____
ADJUVANTS					
Surfactant	pt	2.62	0.1000	0.26	_____
HAULING					
Haul Soybeans/Field	bu	0.24	45.0000	10.80	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.2000	8.80	_____
INOCULANT					
Nitrapin S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.1889	2.20	_____
Harvesters	hour	11.60	0.1021	1.19	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.1536	1.39	_____
UNALLOCATED LABOR					
hour	hour	11.58	0.2503	2.90	_____
DIESEL FUEL					
Tractors	gal	3.40	1.8474	6.29	_____
Harvesters	gal	3.40	1.3935	4.74	_____
1/2-mi Pivot Irr.	gal	3.40	16.4057	55.77	_____
REPAIR & MAINTENANCE					
Implements	acre	2.85	1.0000	2.85	_____
Tractors	acre	0.85	1.0000	0.85	_____
Harvesters	acre	2.56	1.0000	2.56	_____
1/2-mi Pivot Irr.	acre	9.71	1.0000	9.71	_____
INTEREST ON OP. CAP.	acre	4.85	1.0000	4.85	_____

TOTAL DIRECT EXPENSES				275.79	_____
FIXED EXPENSES					
Implements	acre	5.00	1.0000	5.00	_____
Tractors	acre	5.40	1.0000	5.40	_____
Harvesters	acre	10.27	1.0000	10.27	_____
1/2-mi Pivot Irr.	acre	34.85	1.0000	34.85	_____

TOTAL FIXED EXPENSES				55.52	_____

TOTAL SPECIFIED EXPENSES				331.31	_____

Note: Cost of production estimates are based on 2011 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 20"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	11.86	45.0000	533.70	_____
TOTAL INCOME				533.70	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	17.25	1.0000	17.25	_____
FERTILIZERS	acre	28.97	1.0000	28.97	_____
FUNGICIDES	acre	15.51	1.0000	15.51	_____
HERBICIDES	acre	21.00	1.0000	21.00	_____
INSECTICIDES	acre	27.18	1.0000	27.18	_____
SEED/PLANTS	acre	49.00	1.0000	49.00	_____
ADJUVANTS	acre	0.26	1.0000	0.26	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	8.80	1.0000	8.80	_____
INOCULANT	acre	1.25	1.0000	1.25	_____
HAND LABOR	hour	9.06	0.1536	1.39	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	11.60	0.2910	3.39	_____
UNALLOCATED LABOR	hour	11.58	0.2503	2.90	_____
DIESEL FUEL	gal	3.40	19.6467	66.80	_____
REPAIR & MAINTENANCE	acre	15.97	1.0000	15.97	_____
INTEREST ON OP. CAP.	acre	4.85	1.0000	4.85	_____
TOTAL DIRECT EXPENSES				275.79	_____
RETURNS ABOVE DIRECT EXPENSES				257.91	_____
TOTAL FIXED EXPENSES				55.52	_____
TOTAL SPECIFIED EXPENSES				331.31	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				202.39	_____

Note: Cost of production estimates are based on 2011 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 20"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2012

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% P205)	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-Rigid	12R-20	MFWD 190	0.101	1.00	Jun		0.10	0.10	0.20	0.08
Soybean Seed RR2	lb					50.0000				
Apron Maxx RTA	oz					2.5000				
Nitrapstick S	lbseed					50.0000				
Gaucho 600	oz					1.0000				
Dual Magnum	pt					1.0000				
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				
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							0.29	0.29	0.49	0.25

Note: Cost of production estimates are based on 2011 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 20"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Lime (Spread)	ton	8.80				0.37	9.17	9.17
Spin Spreader	5 ton		0.56	0.19	0.52	0.05	1.32	0.70
Phosphorus (46% P2O5)	cwt	11.46				0.49	11.95	11.95
Potash (60% K2O)	cwt	17.51				0.74	18.25	18.25
Spray (Broadcast)	60'		0.94	0.28	0.74	0.03	1.99	0.99
Glyphosate 3lbs a.e.	pt	3.50				0.06	3.56	3.56
Plant & Pre-Rigid	12R-20		3.38	2.13	3.11	0.15	8.77	6.17
Soybean Seed RR2	lb	49.00				0.87	49.87	49.87
Apron Maxx RTA	oz	2.07				0.04	2.11	2.11
Nitrapastick S	lbseed	1.25				0.02	1.27	1.27
Gaucho 600	oz	5.75				0.10	5.85	5.85
Dual Magnum	pt	12.25				0.22	12.47	12.47
Spray (Broadcast)	60'		0.94	0.28	0.74	0.03	1.99	0.99
Glyphosate 3lbs a.e.	pt	3.50				0.05	3.55	3.55
Spray (Broadcast)	60'		0.47	0.13	0.36	0.01	0.97	0.49
Glyphosate 3lbs a.e.	pt	1.75				0.02	1.77	1.77
App by Air (5 gal)	appl	5.75				0.06	5.81	5.81
Quadris	oz	13.44				0.14	13.58	13.58
Karate Z	oz	4.64				0.05	4.69	4.69
App by Air (5 gal)	appl	5.75				0.06	5.81	5.81
Acephate 90SP	lb	4.97				0.05	5.02	5.02
App by Air (5 gal)	appl	5.75				0.06	5.81	5.81
Intrepid 2F	oz	7.16				0.08	7.24	7.24
Surfactant	pt	0.26					0.26	0.26
Baythroid XL	oz	4.66				0.05	4.71	4.71
Header -Soybean	25' Flex		4.74	3.25	2.21	0.04	10.24	11.33
Haul Soybeans/Field	bu	10.80				0.04	10.84	10.84
1/2-mi Pivot Irr.	acre		55.77	9.71	0.47	0.97	66.92	34.85
TOTALS		180.02	66.80	15.97	8.15	0.00	4.85	275.79
								55.52
								331.31

Note: Cost of production estimates are based on 2011 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 20"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2012

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dolars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	533.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.25	0.00	0.00
FERTILIZERS	28.97	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	2.07	0.00	13.44	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.75	5.25	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.75	0.00	21.43	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.00	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	10.80
CUSTOM LIME	8.80	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	3.89	1.15	0.04	0.00	2.21
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	0.56	0.00	0.00	0.00	0.00	0.00	0.00	21.05	23.72	16.73	0.00	4.74
REPAIR & MAINTENANCE	0.19	0.00	0.00	0.00	0.00	0.00	0.00	10.67	1.24	0.62	0.00	3.25
INTEREST ON OP. CAP.	1.65	0.00	0.00	0.00	0.00	0.00	0.01	1.94	0.44	0.73	0.00	0.08
TOTAL DIRECT EXPENSES	40.69	0.00	0.00	0.00	0.00	0.00	0.35	111.37	31.80	70.50	0.00	21.08
NET INCOME	-40.69	0.00	0.00	0.00	0.00	0.00	-0.35	-111.37	-31.80	-70.50	0.00	512.62
NET INCOME TO DATE	-40.69	-40.69	-40.69	-40.69	-40.69	-40.69	-41.04	-152.41	-184.21	-254.71	-254.71	257.91

Note: Cost of production estimates are based on 2011 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 20"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2012

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
PRODUCT PRICE													
Soybeans		8.89	9.48	10.08	10.67	11.26	11.86	12.45	13.04	13.63	14.23	14.82	
PERCENT YIELD UNIT dollars													
50	22.50	bu	-70 -125	-56 -112	-43 -99	-30 -85	-16 -72	-3 -59	9 -45	23 -32	36 -19	49 -5	63 7
60	27.00	bu	-31 -86	-15 -70	0 -54	16 -38	32 -22	48 -6	64 9	80 25	96 41	112 57	128 73
70	31.50	bu	7 -47	26 -29	45 -10	63 8	82 26	101 45	119 64	138 82	157 101	175 120	194 138
80	36.00	bu	46 -8	67 12	89 33	110 55	131 76	153 97	174 119	196 140	217 161	238 183	260 204
90	40.50	bu	85 30	109 54	133 78	157 102	181 126	205 150	229 174	253 198	277 222	301 246	325 270
100	45.00	bu	124 68	151 95	177 122	204 149	231 175	257 202	284 229	311 255	337 282	364 309	391 335
110	49.50	bu	163 107	192 137	222 166	251 195	280 225	310 254	339 284	368 313	398 342	427 372	456 401
120	54.00	bu	202 146	234 178	266 210	298 242	330 274	362 306	394 338	426 371	458 403	490 435	522 467
130	58.50	bu	241 185	276 220	310 255	345 289	380 324	414 359	449 393	484 428	518 463	553 498	588 532
140	63.00	bu	280 224	317 262	354 299	392 336	429 374	467 411	504 448	541 486	579 523	616 560	653 598
150	67.50	bu	319 263	359 303	399 343	439 383	479 423	519 463	559 503	599 543	639 583	679 623	719 663

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 2011 input prices.

Table 6.A Estimated costs per acre
 Soybeans, early-planted, RR, reduced tillage, 12R 20"
 Non-Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars dollars					
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	5.75	1.5000	8.63	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.30	8.0000	2.40	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	28.65	0.6600	18.91	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.83	2.5000	2.07	_____
Headline EC	oz	2.66	3.0000	7.98	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	1.75	6.0000	10.50	_____
2,4-D Amine 4	pt	2.01	2.0000	4.02	_____
Valor SX	oz	4.58	2.0000	9.16	_____
Dual Magnum	pt	12.25	1.0000	12.25	_____
INSECTICIDES					
Gaucho 600	oz	5.75	1.0000	5.75	_____
Acephate 90SP	lb	6.63	0.7500	4.97	_____
SEED/PLANTS					
Soybean Seed RR2	lb	0.98	50.0000	49.00	_____
ADJUVANTS					
Surfactant	pt	2.62	0.1000	0.26	_____
HAULING					
Haul Soybeans/Field	bu	0.24	43.0000	10.32	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.2500	11.00	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.3791	4.40	_____
Harvesters	hour	11.60	0.1021	1.19	_____
HAND LABOR					
Implements	hour	9.06	0.1857	1.68	_____
UNALLOCATED LABOR					
hour	11.56	0.4332	5.01	_____	
DIESEL FUEL					
Tractors	gal	3.40	3.7083	12.62	_____
Harvesters	gal	3.40	1.3935	4.74	_____
REPAIR & MAINTENANCE					
Implements	acre	3.98	1.0000	3.98	_____
Tractors	acre	1.71	1.0000	1.71	_____
Harvesters	acre	2.56	1.0000	2.56	_____
INTEREST ON OP. CAP.	acre	5.64	1.0000	5.64	_____

TOTAL DIRECT EXPENSES				229.94	_____
FIXED EXPENSES					
Implements	acre	8.11	1.0000	8.11	_____
Tractors	acre	10.85	1.0000	10.85	_____
Harvesters	acre	10.27	1.0000	10.27	_____

TOTAL FIXED EXPENSES				29.23	_____

TOTAL SPECIFIED EXPENSES				259.17	_____

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	11.86	43.0000	509.98	_____
TOTAL INCOME				509.98	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.63	1.0000	8.63	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	48.10	1.0000	48.10	_____
FUNGICIDES	acre	10.05	1.0000	10.05	_____
HERBICIDES	acre	35.93	1.0000	35.93	_____
INSECTICIDES	acre	10.72	1.0000	10.72	_____
SEED/PLANTS	acre	49.00	1.0000	49.00	_____
ADJUVANTS	acre	0.26	1.0000	0.26	_____
HAULING	acre	10.32	1.0000	10.32	_____
CUSTOM LIME	acre	11.00	1.0000	11.00	_____
HAND LABOR	hour	9.06	0.1857	1.68	_____
OPERATOR LABOR	hour	11.60	0.4813	5.59	_____
UNALLOCATED LABOR	hour	11.56	0.4332	5.01	_____
DIESEL FUEL	gal	3.40	5.1019	17.36	_____
REPAIR & MAINTENANCE	acre	8.25	1.0000	8.25	_____
INTEREST ON OP. CAP.	acre	5.64	1.0000	5.64	_____
TOTAL DIRECT EXPENSES				229.94	_____
RETURNS ABOVE DIRECT EXPENSES				280.04	_____
TOTAL FIXED EXPENSES				29.23	_____
TOTAL SPECIFIED EXPENSES				259.17	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				250.81	_____

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

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% P205)	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 - Rigid	12R-20	MFWD 190	0.094	1.00	Apr		0.09	0.09	0.18	0.08
Soybean Seed RR2	lb					50.0000				
Apron Maxx RTA	oz					2.5000				
Gaucho 600	oz					1.0000				
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				
Dual Magnum	pt					1.0000				
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				
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				
Gramoxone Inteon	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							0.48	0.48	0.66	0.43

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			
-----dollars-----										
Lime (Spread)	ton	11.00				0.47	11.47		11.47	
Spin Spreader	5 ton		1.40	0.46	1.31	0.13	3.30	1.75	5.05	
Phosphorus (46% P2O5)	cwt	18.91				0.80	19.71		19.71	
Potash (60% K2O)	cwt	29.19				1.24	30.43		30.43	
Disk Harrow	24'		2.72	1.12	1.80	0.24	5.88	3.95	9.83	
Field Cultivate Fld	24'		2.07	0.65	1.37	0.17	4.26	3.35	7.61	
App by Air (5 gal)	appl	5.75				0.14	5.89		5.89	
Glyphosate 3lbs a.e.	pt	3.50				0.09	3.59		3.59	
2,4-D Amine 4	pt	4.02				0.10	4.12		4.12	
Valor SX	oz	9.16				0.23	9.39		9.39	
Plant - Rigid	12R-20		3.14	1.80	2.92	0.17	8.03	5.39	13.42	
Soybean Seed RR2	lb	49.00				1.04	50.04		50.04	
Apron Maxx RTA	oz	2.07				0.04	2.11		2.11	
Gaucho 600	oz	5.75				0.12	5.87		5.87	
Spray (Broadcast)	60'		0.94	0.28	0.75	0.03	2.00	0.99	2.99	
Glyphosate 3lbs a.e.	pt	3.50				0.06	3.56		3.56	
Dual Magnum	pt	12.25				0.22	12.47		12.47	
Spray (Broadcast)	60'		0.94	0.28	0.75	0.03	2.00	0.99	2.99	
Glyphosate 3lbs a.e.	pt	3.50				0.06	3.56		3.56	
Spray (Broadcast)	60'		0.47	0.13	0.37	0.01	0.98	0.49	1.47	
Headline EC	oz	7.98				0.08	8.06		8.06	
Spray (Broadcast)	60'		0.94	0.28	0.75	0.01	1.98	0.99	2.97	
Acephate 90SP	lb	4.97				0.04	5.01		5.01	
App by Air (5 gal)	appl	2.88				0.02	2.90		2.90	
Gramoxone Inteon	oz	2.40				0.02	2.42		2.42	
Surfactant	pt	0.26					0.26		0.26	
Header -Soybean	25' Flex		4.74	3.25	2.26	0.04	10.29	11.33	21.62	
Haul Soybeans/Field	bu	10.32				0.04	10.36		10.36	
TOTALS		186.41	17.36	8.25	12.28	0.00	5.64	229.94	29.23	259.17

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

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	509.98
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	5.75	0.00	0.00	0.00	0.00	2.88	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00
FERTILIZERS	48.10	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	2.07	0.00	0.00	7.98	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	16.68	0.00	19.25	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.75	0.00	0.00	0.00	4.97	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.00	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	0.26	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	10.32
CUSTOM LIME	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.48	0.00	0.00	0.00	0.00	0.00	2.92	1.50	0.00	0.37	0.75	2.26
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	6.19	0.00	0.00	0.00	0.00	0.00	3.14	1.88	0.00	0.47	0.94	4.74
REPAIR & MAINTENANCE	2.23	0.00	0.00	0.00	0.00	0.00	1.80	0.56	0.00	0.13	0.28	3.25
INTEREST ON OP. CAP.	3.05	0.00	0.00	0.00	0.00	0.56	1.37	0.40	0.00	0.09	0.09	0.08
TOTAL DIRECT EXPENSES	75.05	0.00	0.00	0.00	0.00	22.99	66.05	23.59	0.00	9.04	12.57	20.65
NET INCOME	-75.05	0.00	0.00	0.00	0.00	-22.99	-66.05	-23.59	0.00	-9.04	-12.57	489.33
NET INCOME TO DATE	-75.05	-75.05	-75.05	-75.05	-75.05	-98.04	-164.09	-187.68	-187.68	-196.72	-209.29	280.04

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

PRODUCT	PERCENT	PRODUCT PRICE											
		75	80	85	90	95	100	105	110	115	120	125	
Soybeans		8.89	9.48	10.08	10.67	11.26	11.86	12.45	13.04	13.63	14.23	14.82	
PERCENT YIELD UNIT dollars													
50	21.50	bu	-33 -62	-20 -49	-8 -37	4 -24	17 -11	30 1	42 13	55 26	68 39	81 51	93 64
60	25.80	bu	3 -25	18 -10	34 5	49 20	64 35	80 50	95 66	110 81	126 96	141 112	156 127
70	30.10	bu	40 11	58 29	76 47	94 65	112 83	130 100	148 118	165 136	183 154	201 172	219 190
80	34.40	bu	78 48	98 69	118 89	139 110	159 130	180 150	200 171	220 191	241 212	261 232	282 252
90	38.70	bu	115 86	138 109	161 132	184 154	207 177	230 200	253 223	275 246	298 269	321 292	344 315
100	43.00	bu	152 123	178 148	203 174	229 199	254 225	280 250	305 276	331 301	356 327	382 352	407 378
110	47.30	bu	189 160	217 188	245 216	273 244	301 272	330 300	358 328	386 356	414 384	442 412	470 441
120	51.60	bu	226 197	257 228	288 258	318 289	349 320	379 350	410 381	441 411	471 442	502 473	532 503
130	55.90	bu	264 234	297 268	330 301	363 334	396 367	429 400	463 433	496 466	529 500	562 533	595 566
140	60.20	bu	301 272	337 307	372 343	408 379	444 414	479 450	515 486	551 522	586 557	622 593	658 629
150	64.50	bu	338 309	376 347	415 385	453 424	491 462	529 500	568 538	606 577	644 615	682 653	721 691

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 2011 input prices.

Table 7.A Estimated costs per acre
 Soybeans, May-planted, RR, convent. tillage, 12R 20"
 Non-Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars dollars					
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	28.65	0.6600	18.91	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.83	2.5000	2.07	_____
Quadrис	oz	2.24	3.0000	6.72	_____
HERBICIDES					
Dual Magnum	pt	12.25	1.0000	12.25	_____
Glyphosate 3lbs a.e.	pt	1.75	4.0000	7.00	_____
INSECTICIDES					
Gaucho 600	oz	5.75	1.0000	5.75	_____
Dimilin 2L	oz	1.76	1.0000	1.76	_____
Acephate 90SP	lb	6.63	0.7500	4.97	_____
Intrepid 2F	oz	1.79	2.0000	3.58	_____
Baythroid XL	oz	2.19	1.0650	2.33	_____
SEED/PLANTS					
Soybean Seed RR2	lb	0.98	50.0000	49.00	_____
ADJUVANTS					
Surfactant	pt	2.62	0.0500	0.13	_____
HAULING					
Haul Soybeans/Field	bu	0.24	30.0000	7.20	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.2500	11.00	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.4005	4.65	_____
Harvesters	hour	11.60	0.1021	1.19	_____
HAND LABOR					
Implements	hour	9.06	0.2000	1.81	_____
UNALLOCATED LABOR					
hour		11.58	0.4524	5.24	_____
DIESEL FUEL					
Tractors	gal	3.40	3.9172	13.33	_____
Harvesters	gal	3.40	1.3935	4.74	_____
REPAIR & MAINTENANCE					
Implements	acre	4.35	1.0000	4.35	_____
Tractors	acre	1.80	1.0000	1.80	_____
Harvesters	acre	2.56	1.0000	2.56	_____
INTEREST ON OP. CAP.	acre	4.15	1.0000	4.15	_____

TOTAL DIRECT EXPENSES				205.68	_____
FIXED EXPENSES					
Implements	acre	8.78	1.0000	8.78	_____
Tractors	acre	11.45	1.0000	11.45	_____
Harvesters	acre	10.27	1.0000	10.27	_____

TOTAL FIXED EXPENSES				30.50	_____

TOTAL SPECIFIED EXPENSES				236.18	_____

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	11.86	30.0000	355.80	_____
TOTAL INCOME				355.80	_____
DIRECT EXPENSES					
FERTILIZERS	acre	48.10	1.0000	48.10	_____
FUNGICIDES	acre	8.79	1.0000	8.79	_____
HERBICIDES	acre	19.25	1.0000	19.25	_____
INSECTICIDES	acre	18.39	1.0000	18.39	_____
SEED/PLANTS	acre	49.00	1.0000	49.00	_____
ADJUVANTS	acre	0.13	1.0000	0.13	_____
HAULING	acre	7.20	1.0000	7.20	_____
CUSTOM LIME	acre	11.00	1.0000	11.00	_____
HAND LABOR	hour	9.06	0.2000	1.81	_____
OPERATOR LABOR	hour	11.60	0.5027	5.84	_____
UNALLOCATED LABOR	hour	11.58	0.4524	5.24	_____
DIESEL FUEL	gal	3.40	5.3107	18.07	_____
REPAIR & MAINTENANCE	acre	8.71	1.0000	8.71	_____
INTEREST ON OP. CAP.	acre	4.15	1.0000	4.15	_____
TOTAL DIRECT EXPENSES				205.68	_____
RETURNS ABOVE DIRECT EXPENSES				150.12	_____
TOTAL FIXED EXPENSES				30.50	_____
TOTAL SPECIFIED EXPENSES				236.18	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				119.62	_____

Note: Cost of production estimates are based on 2011 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, convert. tillage, 12R 20"
 Non-Delta Area, Mississippi, 2012

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% P205)	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-Rigid	12R-20	MFWD 190	0.101	1.00	May		0.10	0.10	0.20	0.09
Soybean Seed RR2	lb					50.0000				
Apron Maxx RTA	oz					2.5000				
Gaucho 600	oz					1.0000				
Dual Magnum	pt					1.0000				
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				
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							0.50	0.50	0.70	0.45

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Lime (Spread)	ton	11.00					0.47	11.47	11.47
Spin Spreader	5 ton		1.40	0.46	1.31		0.08	3.25	1.75 5.00
Phosphorus(46% P2O5)	cwt	18.91					0.47	19.38	19.38
Potash (60% K2O)	cwt	29.19					0.72	29.91	29.91
Disk Harrow	24'		2.72	1.12	1.80		0.14	5.78	3.95 9.73
Field Cultivate Fld	24'		2.07	0.65	1.37		0.09	4.18	3.35 7.53
Plant & Pre-Rigid	12R-20		3.38	2.13	3.16		0.18	8.85	6.17 15.02
Soybean Seed RR2	lb	49.00					1.04	50.04	50.04
Apron Maxx RTA	oz	2.07					0.04	2.11	2.11
Gaucho 600	oz	5.75					0.12	5.87	5.87
Dual Magnum	pt	12.25					0.26	12.51	12.51
Spray (Broadcast)	60'		0.94	0.28	0.75		0.04	2.01	0.99 3.00
Glyphosate 3lbs a.e.	pt	3.50					0.07	3.57	3.57
Spray (Broadcast)	60'		0.94	0.28	0.75		0.03	2.00	0.99 2.99
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56	3.56
Spray (Broadcast)	60'		0.47	0.13	0.37		0.01	0.98	0.49 1.47
Dimilin 2L	oz	1.76					0.02	1.78	1.78
Quadrис	oz	6.72					0.10	6.82	6.82
Spray (Broadcast)	60'		0.94	0.28	0.75		0.02	1.99	0.99 2.98
Acephate 90SP	lb	4.97					0.05	5.02	5.02
Spray (Broadcast)	60'		0.47	0.13	0.37		0.01	0.98	0.49 1.47
Intrepid 2F	oz	3.58					0.04	3.62	3.62
Baythroid XL	oz	2.33					0.02	2.35	2.35
Surfactant	pt	0.13						0.13	0.13
Header -Soybean	25' Flex		4.74	3.25	2.26		0.04	10.29	11.33 21.62
Haul Soybeans/Field	bu	7.20					0.03	7.23	7.23
TOTALS		161.86	18.07	8.71	12.89	0.00	4.15	205.68	30.50 236.18

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

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	355.80
DIRECT EXPENSES												
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	48.10	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	2.07	0.00	6.72	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	15.75	3.50	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.75	0.00	1.76	10.88	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.00	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	0.13	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	7.20
CUSTOM LIME	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	3.11	5.28	0.75	0.37	1.12	0.00	2.26
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	4.12	6.39	0.94	0.47	1.41	0.00	4.74
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	1.58	3.06	0.28	0.13	0.41	0.00	3.25
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.00	1.41	1.84	0.09	0.13	0.14	0.00	0.07
TOTAL DIRECT EXPENSES	11.47	0.00	0.00	0.00	0.00	58.32	89.14	5.56	9.58	14.09	0.00	17.52
NET INCOME	-11.47	0.00	0.00	0.00	0.00	-58.32	-89.14	-5.56	-9.58	-14.09	0.00	338.28
NET INCOME TO DATE	-11.47	-11.47	-11.47	-11.47	-11.47	-69.79	-158.93	-164.49	-174.07	-188.16	-188.16	150.12

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

PRODUCT	PERCENT											
	75	80	85	90	95	100	105	110	115	120	125	
PRODUCT PRICE												
Soybeans	8.89	9.48	10.08	10.67	11.26	11.86	12.45	13.04	13.63	14.23	14.82	
PERCENT YIELD UNIT dollars												
50 15.00 bu	-68 -99	-59 -90	-50 -81	-41 -72	-33 -63	-24 -54	-15 -45	-6 -36	2 -27	11 -19	20 -10	
60 18.00 bu	-42 -73	-32 -62	-21 -51	-10 -41	0 -30	10 -19	21 -9	32 1	42 12	53 22	64 33	
70 21.00 bu	-16 -47	-4 -34	8 -22	20 -9	33 2	45 15	58 27	70 39	82 52	95 64	107 77	
80 24.00 bu	9 -21	23 -7	37 7	51 21	66 35	80 49	94 64	108 78	123 92	137 106	151 121	
90 27.00 bu	35 4	51 20	67 36	83 52	99 68	115 84	131 100	147 116	163 132	179 148	195 164	
100 30.00 bu	61 30	78 48	96 66	114 84	132 101	150 119	167 137	185 155	203 172	221 190	239 208	
110 33.00 bu	87 56	106 76	126 95	145 115	165 134	184 154	204 174	224 193	243 213	263 232	282 252	
120 36.00 bu	113 82	134 103	155 125	177 146	198 167	219 189	241 210	262 232	283 253	305 274	326 296	
130 39.00 bu	139 108	162 131	185 154	208 177	231 201	254 224	277 247	300 270	324 293	347 316	370 339	
140 42.00 bu	165 134	189 159	214 184	239 209	264 234	289 259	314 283	339 308	364 333	389 358	414 383	
150 45.00 bu	190 160	217 187	244 213	271 240	297 267	324 293	351 320	377 347	404 373	431 400	457 427	

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 2011 input prices.

Table 8.A Estimated costs per acre
 Soybeans after wheat, RR, no-till, 12R 20"
 Non-Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	28.65	0.6600	18.91	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.83	2.5000	2.07	_____
Quadris	oz	2.24	3.0000	6.72	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	1.75	5.0000	8.75	_____
Dual Magnum	pt	12.25	1.0000	12.25	_____
INSECTICIDES					
Gaucho 600	oz	5.75	1.0000	5.75	_____
Dimilin 2L	oz	1.76	1.0000	1.76	_____
Acephate 90SP	lb	6.63	0.7500	4.97	_____
Intrepid 2F	oz	1.79	3.0000	5.37	_____
Baythroid XL	oz	2.19	1.5975	3.50	_____
SEED/PLANTS					
Soybean Seed RR2	lb	0.98	50.0000	49.00	_____
HAULING					
Haul Soybeans/Field	bu	0.24	25.0000	6.00	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.2818	3.28	_____
Harvesters	hour	11.60	0.1021	1.19	_____
HAND LABOR					
Implements	hour	9.06	0.2148	1.95	_____
UNALLOCATED LABOR					
hour	hour	11.59	0.3302	3.83	_____
DIESEL FUEL					
Tractors	gal	3.40	2.7565	9.38	_____
Harvesters	gal	3.40	1.3935	4.74	_____
REPAIR & MAINTENANCE					
Implements	acre	3.66	1.0000	3.66	_____
Tractors	acre	1.26	1.0000	1.26	_____
Harvesters	acre	2.56	1.0000	2.56	_____
INTEREST ON OP. CAP.	acre	4.11	1.0000	4.11	_____
TOTAL DIRECT EXPENSES				190.20	_____
FIXED EXPENSES					
Implements	acre	6.35	1.0000	6.35	_____
Tractors	acre	8.05	1.0000	8.05	_____
Harvesters	acre	10.27	1.0000	10.27	_____
TOTAL FIXED EXPENSES				24.67	_____
TOTAL SPECIFIED EXPENSES				214.87	_____

Note: Cost of production estimates are based on 2011 input prices. Fertilization decisions should be based on soil tests.

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 20"
 Non-Delta Area, Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	11.86	25.0000	296.50	_____
TOTAL INCOME				296.50	_____
DIRECT EXPENSES					
FERTILIZERS	acre	48.10	1.0000	48.10	_____
FUNGICIDES	acre	8.79	1.0000	8.79	_____
HERBICIDES	acre	21.00	1.0000	21.00	_____
INSECTICIDES	acre	21.35	1.0000	21.35	_____
SEED/PLANTS	acre	49.00	1.0000	49.00	_____
HAULING	acre	6.00	1.0000	6.00	_____
HAND LABOR	hour	9.06	0.2148	1.95	_____
OPERATOR LABOR	hour	11.60	0.3840	4.47	_____
UNALLOCATED LABOR	hour	11.59	0.3302	3.83	_____
DIESEL FUEL	gal	3.40	4.1501	14.12	_____
REPAIR & MAINTENANCE	acre	7.48	1.0000	7.48	_____
INTEREST ON OP. CAP.	acre	4.11	1.0000	4.11	_____
TOTAL DIRECT EXPENSES				190.20	_____
RETURNS ABOVE DIRECT EXPENSES				106.30	_____
TOTAL FIXED EXPENSES				24.67	_____
TOTAL SPECIFIED EXPENSES				214.87	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				81.63	_____

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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-Rigid	12R-20	MFWD 190	0.105	1.00	Jun			0.10	0.10	0.21	0.09
Soybean Seed RR2	lb						50.0000				
Apron Maxx RTA	oz						2.5000				
Gaucho 600	oz						1.0000				
Dual Magnum	pt						1.0000				
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				
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								0.38	0.38	0.59	0.33

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

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		1.40	0.46	1.29		0.13	3.28	1.75	5.03
Phosphorus (46% P2O5)	cwt	18.91					0.80	19.71		19.71
Potash (60% K2O)	cwt	29.19					1.24	30.43		30.43
Spray (Broadcast)	60'		0.94	0.28	0.74		0.03	1.99	0.99	2.98
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
NT Plant&Pre-Rigid	12R-20		3.52	2.47	3.25		0.16	9.40	6.91	16.31
Soybean Seed RR2	lb	49.00					0.87	49.87		49.87
Apron Maxx RTA	oz	2.07					0.04	2.11		2.11
Gaucho 600	oz	5.75					0.10	5.85		5.85
Dual Magnum	pt	12.25					0.22	12.47		12.47
Spray (Broadcast)	60'		0.94	0.28	0.74		0.03	1.99	0.99	2.98
Glyphosate 3lbs a.e.	pt	3.50					0.05	3.55		3.55
Spray (Broadcast)	60'		0.47	0.13	0.36		0.01	0.97	0.49	1.46
Glyphosate 3lbs a.e.	pt	1.75					0.02	1.77		1.77
Spray (Broadcast)	60'		0.47	0.13	0.36		0.01	0.97	0.49	1.46
Dimilin 2L	oz	1.76					0.02	1.78		1.78
Quadris	oz	6.72					0.07	6.79		6.79
Spray (Broadcast)	60'		0.94	0.28	0.74		0.02	1.98	0.99	2.97
Acephate 90SP	lb	4.97					0.05	5.02		5.02
Spray (Broadcast)	60'		0.70	0.20	0.56		0.02	1.48	0.73	2.21
Intrepid 2F	oz	5.37					0.06	5.43		5.43
Baythroid XL	oz	3.50					0.04	3.54		3.54
Header -Soybean	25' Flex		4.74	3.25	2.21		0.04	10.24	11.33	21.57
Haul Soybeans/Field	bu	6.00					0.02	6.02		6.02
TOTALS		154.24	14.12	7.48	10.25	0.00	4.11	190.20	24.67	214.87

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

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	296.50
DIRECT EXPENSES												
FERTILIZERS	48.10	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	2.07	0.00	6.72	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.75	5.25	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.75	0.00	15.60	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.00	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	6.00
LABOR	1.29	0.00	0.00	0.00	0.00	0.00	0.00	3.99	1.10	1.66	0.00	2.21
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	1.40	0.00	0.00	0.00	0.00	0.00	0.00	4.46	1.41	2.11	0.00	4.74
REPAIR & MAINTENANCE	0.46	0.00	0.00	0.00	0.00	0.00	0.00	2.75	0.41	0.61	0.00	3.25
INTEREST ON OP. CAP.	2.17	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.11	0.29	0.00	0.06
TOTAL DIRECT EXPENSES	53.42	0.00	0.00	0.00	0.00	0.00	0.00	85.25	8.28	26.99	0.00	16.26
NET INCOME	-53.42	0.00	0.00	0.00	0.00	0.00	0.00	-85.25	-8.28	-26.99	0.00	280.24
NET INCOME TO DATE	-53.42	-53.42	-53.42	-53.42	-53.42	-53.42	-53.42	-138.67	-146.95	-173.94	-173.94	106.30

Note: Cost of production estimates are based on 2011 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 20"
 Non-Delta Area, Mississippi, 2012

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Soybeans		8.89	9.48	10.08	10.67	11.26	11.86	12.45	13.04	13.63	14.23	14.82	
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-76 -100	-68 -93	-61 -85	-53 -78	-46 -71	-38 -63	-31 -56	-24 -48	-16 -41	-9 -33	-1 -26
60	15.00	bu	-54 -79	-45 -70	-36 -61	-27 -52	-18 -43	-9 -34	-0 -25	7 -16	16 -7	25 1	34 9
70	17.50	bu	-32 -57	-22 -47	-11 -36	-1 -26	8 -15	19 -5	29 4	39 15	50 25	60 35	71 46
80	20.00	bu	-11 -35	0 -23	12 -12	24 -0	36 11	48 23	60 35	71 47	83 59	95 70	107 82
90	22.50	bu	10 -14	23 -0	37 12	50 25	63 39	77 52	90 65	103 79	117 92	130 105	143 119
100	25.00	bu	32 7	47 22	61 37	76 51	91 66	106 81	121 96	135 111	150 126	165 140	180 155
110	27.50	bu	53 29	70 45	86 61	102 78	119 94	135 110	151 126	167 143	184 159	200 175	216 192
120	30.00	bu	75 50	93 68	111 86	128 104	146 121	164 139	182 157	199 175	217 193	235 210	253 228
130	32.50	bu	97 72	116 91	135 110	154 130	174 149	193 168	212 188	231 207	251 226	270 245	289 265
140	35.00	bu	118 94	139 114	160 135	180 156	201 177	222 197	243 218	264 239	284 260	305 280	326 301
150	37.50	bu	140 115	162 137	184 160	207 182	229 204	251 226	273 249	296 271	318 293	340 315	362 338

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 2011 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, 2012

Item Name	Size	Purchase	Annual	Useful	Fuel	Labor	Fuel	R&M	Total	Fixed	Total
		Price	Use	Life	Use				Direct		Cost
		dollars	hours	years	gal/hr				-----\$/hour-----		
Combine (250-299 hp)	265 hp	241,000	300	8	13.64	11.60	46.37	25.10	83.08	100.53	183.61
Combine (300-349 hp)	325 hp	269,000	300	8	16.73	11.60	56.88	28.02	96.50	112.22	208.72
Combine (350-399 hp)	355 hp	288,000	300	8	18.27	11.60	62.11	30.00	103.71	120.14	223.86
Combine (400-449 hp)	425 hp	321,000	300	8	21.87	11.60	74.37	33.43	119.41	133.91	253.32
Combine (450-499hp)	475 hp	342,000	300	8	24.44	11.60	83.12	35.62	130.35	142.67	273.02
Cotton Stripper	173 hp	157,000	200	8	8.08	11.60	27.47	24.53	63.60	98.24	161.84
Tractor(20-39hp)CB	MFWD 30	24,700	600	8	1.54	11.60	5.24	0.77	17.62	4.72	22.34
Tractor(20-39hp)RB	MFWD 30	19,000	600	8	1.54	11.60	5.24	0.59	17.44	3.63	21.07
Tractor(40-59hp)CB	2WD 50	31,500	600	8	2.57	11.60	8.75	0.98	21.33	6.02	27.36
Tractor(40-59hp)CB	MFWD 50	32,900	600	8	2.57	11.60	8.75	1.02	21.37	6.29	27.67
Tractor(40-59hp)RB	2WD 50	25,500	600	8	2.57	11.60	8.75	0.79	21.14	4.87	26.02
Tractor(40-59hp)RB	MFWD 50	30,100	600	8	2.57	11.60	8.75	0.94	21.29	5.75	27.04
Tractor(60-89hp)CB	2WD 75	42,100	600	8	3.86	11.60	13.12	1.31	26.04	8.05	34.09
Tractor(60-89hp)CB	MFWD 75	46,600	600	8	3.86	11.60	13.12	1.45	26.18	8.91	35.09
Tractor(60-89hp)RB	2WD 75	35,600	600	8	3.86	11.60	13.12	1.11	25.83	6.80	32.64
Tractor(60-89hp)RB	MFWD 75	39,300	600	8	3.86	11.60	13.12	1.22	25.95	7.51	33.47
Tractor(90-119hp)CB	2WD 105	65,300	600	8	5.40	11.60	18.37	2.04	32.01	12.49	44.50
Tractor(90-119hp)CB	MFWD 105	69,600	600	8	5.40	11.60	18.37	2.17	32.15	13.31	45.46
Tractor(90-119hp)RB	2WD 105	52,700	600	8	5.40	11.60	18.37	1.64	31.62	10.08	41.70
Tractor(90-119hp)RB	MFWD 105	55,500	600	8	5.40	11.60	18.37	1.73	31.71	10.61	42.32
Tractor(120-139hp)CB	2WD 130	97,500	600	8	6.69	11.60	22.75	3.04	37.39	18.65	56.04
Tractor(120-139hp)CB	MFWD 130	98,000	600	8	6.69	11.60	22.75	3.06	37.41	18.74	56.15
Tractor(140-159hp)CB	2WD 150	113,000	600	8	7.72	11.60	26.25	3.53	41.38	21.61	62.99
Tractor(140-159hp)CB	MFWD 150	122,000	600	8	7.72	11.60	26.25	3.81	41.66	23.33	65.00
Tractor(160-179hp)CB	2WD 170	119,000	600	8	8.75	11.60	29.75	3.71	45.06	23.79	68.86
Tractor(160-179hp)CB	MFWD 170	135,000	600	8	8.75	11.60	29.75	4.21	45.56	26.99	72.56
Tractor(180-199hp)CB	MFWD 190	143,000	600	8	9.77	11.60	33.25	4.46	49.32	28.59	77.91
Tractor(200-249hp)CB	MFWD 225	191,000	600	8	11.58	11.60	39.37	5.96	56.94	38.18	95.13
Tractor(200-249hp)CB	Track 225	212,000	600	8	11.58	11.60	39.37	6.62	57.60	42.38	99.98
Tractor(250-349hp)CB	4WD 300	211,000	600	8	15.44	11.60	52.50	6.59	70.69	42.18	112.88
Tractor(250-349hp)CB	MFWD 300	246,000	600	8	15.44	11.60	52.50	7.68	71.78	49.18	120.97
Tractor(250-349hp)CB	Track 300	225,000	600	8	15.44	11.60	52.50	7.03	71.13	44.98	116.11
Tractor(350-449hp)CB	4WD 400	245,000	600	8	20.58	11.60	70.00	7.65	89.25	48.98	138.24
Tractor(350-449hp)CB	Track 400	305,000	600	8	20.58	11.60	70.00	9.53	91.13	60.98	152.11
Tractor(450-550hp)CB	4WD 500	294,000	600	8	25.73	11.60	87.50	9.18	108.28	58.78	167.07
Tractor(450-550hp)CB	Track 500	347,000	600	8	25.73	11.60	87.50	10.84	109.94	69.37	179.32
Utility Vehicle	500 CC	6,500	200	8	0.40	11.60	1.40	1.01	14.01	4.06	18.08
Utility Vehicle	800 CC	7,600	200	8	0.70	11.60	2.45	1.18	15.23	4.75	19.99
Utility Vehicle-mule	600 CC	9,800	200	8	0.50	11.60	1.75	1.53	14.88	6.13	21.01

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, 2012

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	75,218	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	20.05	17.90	44.71	71.70	116.42	
Cotton Picker	4R-38 (255)	267,000	200	8	13.12	0.257	5.32	11.50	10.75	27.58	43.06	70.65	
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	5.32	15.78	14.13	35.25	56.61	91.87	
Cotton Picker	4R2x1 (350)	274,000	200	8	18.01	0.172	3.55	10.55	7.37	21.49	29.54	51.03	
Cotton Picker	6R-30 (355)	429,000	200	8	18.27	0.218	4.50	13.55	14.62	32.69	58.58	91.28	
Cotton Picker	6R-38 (355)	429,000	200	8	18.27	0.172	3.55	10.70	11.55	25.81	46.25	72.07	
Cotton Picker/Module	4R-38 (365)	470,000	200	8	18.78	0.257	5.32	16.46	18.93	40.72	75.81	116.53	
Cotton Picker/Module	6R-30 (365)	521,000	200	8	18.78	0.218	4.50	13.94	17.76	36.21	71.15	107.37	
Cotton Picker/Module	6R-30 (500)	600,000	200	8	25.73	0.218	4.50	19.09	20.46	44.06	81.94	126.01	
Cotton Picker/Module	6R-38 (365)	523,000	200	8	18.78	0.172	3.55	11.00	14.08	28.64	56.39	85.03	
Cotton Picker/Module	6R-38 (500)	601,000	200	8	25.73	0.172	3.55	15.07	16.18	34.81	64.80	99.62	
Dry Applicator SP	70' 300cuft	282,000	350	8	16.98	0.015	0.24	0.87	0.22	1.34	1.52	2.86	
Sprayer	110Gal	30' 50hp	40,300	350	8	2.41	0.035	0.56	0.29	0.07	0.93	0.50	1.44
Sprayer	300-450gal	60' 125hp	98,100	350	8	5.66	0.017	0.28	0.33	0.09	0.71	0.61	1.33
Sprayer	300-450gal	80' 125hp	102,000	350	8	6.43	0.013	0.21	0.28	0.07	0.57	0.48	1.05
Sprayer	600-750gal	60' 175hp	154,000	350	8	9.00	0.017	0.28	0.53	0.14	0.96	0.97	1.94
Sprayer	600-825gal	80' 175hp	154,000	350	8	11.81	0.013	0.21	0.53	0.10	0.85	0.72	1.58
Sprayer	600-825gal	90' 250hp	223,000	350	8	12.73	0.011	0.18	0.50	0.14	0.83	0.93	1.77
Sprayer	800gal	100' 250hp	224,000	350	8	14.15	0.010	0.17	0.50	0.12	0.80	0.84	1.65
Sprayer	800gal	80' 250hp	213,000	350	8	12.86	0.013	0.21	0.57	0.15	0.94	1.00	1.94
Sprayer	1000-1400gal	90' 275hp	256,000	350	8	14.15	0.010	0.17	0.50	0.14	0.82	0.96	1.79
Sprayer	1000gal	100' 300hp	257,000	350	8	15.44	0.010	0.17	0.55	0.14	0.87	0.97	1.84
Sprayer	1200+gal	120' 300hp	266,000	350	8	15.44	0.008	0.14	0.46	0.12	0.73	0.83	1.56
Utility Vehicle	20'	11,100	200	8	0.50	0.052	0.85	0.09	0.09	1.03	0.36	1.40	
Utility Vehicle	75"ropewic	7,100	200	8	0.40	0.170	2.75	0.23	0.18	3.17	0.75	3.93	

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, 2012

Item Name	Size	Power Unit	Purchase	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Imp.	Total P.U.	--Fixed-- Total Cost							
			Price						Imp.	P.U.	Direct	Imp.	P.U.							
			dollars	hours	years	hr/ac			\$/acre											
Bed-Disk (Hipper)	4R-38	MFWD 150	7,970	160	10	0.147	1.71	3.87	0.29	0.56	6.44	0.79	3.44	10.68						
Bed-Disk (Hipper)	6R-30	MFWD 170	10,904	160	10	0.125	1.45	3.71	0.34	0.52	6.03	0.91	3.37	10.32						
Bed-Disk (Hipper)	6R-38	MFWD 170	12,600	160	10	0.098	1.14	2.93	0.31	0.41	4.80	0.83	2.66	8.30						
Bed-Disk (Hipper)	8R-30	MFWD 190	14,400	160	10	0.093	1.08	3.11	0.33	0.41	4.96	0.90	2.68	8.54						
Bed-Disk (Hipper)	8R-38 2x1	MFWD 190	27,700	160	10	0.049	0.57	1.64	0.34	0.22	2.77	0.91	1.41	5.10						
Bed-Disk (Hipper)	10R-30	MFWD 225	22,900	160	10	0.075	0.87	2.95	0.42	0.44	4.70	1.15	2.86	8.71						
Bed-Disk (Hipper)	10R-38	MFWD 225	23,700	160	10	0.059	0.68	2.32	0.35	0.35	3.71	0.94	2.25	6.91						
Bed-Disk (Hipper)	12R-30	MFWD 225	27,300	160	10	0.062	0.72	2.46	0.42	0.37	3.98	1.14	2.38	7.51						
Bed-Disk (Hipper)	12R-38	MFWD 225	27,700	160	10	0.049	0.57	1.94	0.34	0.29	3.15	0.91	1.88	5.95						
Bed-Disk (Hipper)F1	8R-38	MFWD 190	17,700	160	10	0.074	0.85	2.46	0.32	0.33	3.98	0.88	2.11	6.98						
Bed-Disk (Hipper)Rd	8R-38	MFWD 190	15,100	160	10	0.074	0.85	2.46	0.27	0.33	3.93	0.75	2.11	6.80						
Bed-Disk w/roller	8R-30	MFWD 190	20,700	160	10	0.093	1.08	3.11	0.48	0.41	5.10	1.30	2.68	9.09						
Bed-Disk w/roller	12R-30	MFWD 225	34,500	160	10	0.062	0.72	2.46	0.53	0.37	4.09	1.44	2.38	7.93						
Bed-Disk w/roller	8R-38	MFWD 190	23,100	160	10	0.074	0.85	2.46	0.42	0.33	4.08	1.15	2.11	7.35						
Bed-Middle Buster	4R-38	MFWD 150	10,600	160	8	0.228	2.64	5.99	0.56	0.87	10.08	1.81	5.32	17.22						
Bed-Middle Buster	6R-38	MFWD 150	12,700	160	8	0.120	1.39	3.15	0.35	0.45	5.36	1.14	2.80	9.31						
Bed-Middle Buster	8R-30	MFWD 190	20,600	160	8	0.114	1.32	3.79	0.55	0.51	6.18	1.76	3.26	11.21						
Bed-Middle Buster	8R-38	MFWD 190	18,000	160	8	0.090	1.04	3.00	0.38	0.40	4.83	1.21	2.58	8.63						
Bed-Middle Buster	8R-38 2x1	MFWD 190	28,900	160	8	0.060	0.69	1.99	0.40	0.26	3.37	1.30	1.71	6.39						
Bed-Middle Buster	10R-30	MFWD 225	29,300	160	8	0.091	1.05	3.59	0.62	0.54	5.82	2.00	3.48	11.32						
Bed-Middle Buster	10R-38	MFWD 225	32,100	160	8	0.072	0.83	2.83	0.54	0.42	4.64	1.73	2.75	9.12						
Bed-Middle Buster	12R-38	MFWD 225	28,900	160	8	0.060	0.69	2.36	0.40	0.35	3.82	1.30	2.29	7.42						
Bed-Paratill Fold	8R-38	MFWD 225	54,000	150	12	0.080	0.93	3.18	1.57	0.48	6.17	2.78	3.08	12.04						
Bed-Paratill Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.62	2.11	1.34	0.32	4.40	2.37	2.05	8.83						
Bed-Paratill Fold	10R-30	MFWD 225	32,100	150	12	0.081	0.94	3.21	0.94	0.48	5.60	1.67	3.12	10.39						
Bed-Paratill Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.62	2.11	1.34	0.32	4.40	2.37	2.05	8.83						
Bed-Paratill Rigid	4R-30	MFWD 225	14,300	150	12	0.204	2.37	8.04	1.05	1.21	12.69	1.86	7.80	22.36						
Bed-Paratill Rigid	4R-38	MFWD 225	13,200	150	12	0.160	1.86	6.33	0.76	0.96	9.92	1.35	6.14	17.42						
Bed-Paratill Rigid	6R-30	MFWD 225	19,000	150	12	0.136	1.58	5.36	0.93	0.81	8.69	1.65	5.20	15.54						
Bed-Paratill Rigid	6R-38	MFWD 225	18,400	150	12	0.107	1.24	4.23	0.71	0.64	6.83	1.26	4.10	12.20						
Bed-Paratill Rigid	8R-30	MFWD 225	24,300	150	12	0.102	1.18	4.02	0.89	0.60	6.71	1.58	3.90	12.20						
Bed-Paratill Rigid	8R-38	MFWD 225	24,800	150	12	0.080	0.93	3.18	0.72	0.48	5.32	1.27	3.08	9.68						
Bed-Paratill Rigid	10R-30	MFWD 225	24,400	150	12	0.081	0.94	3.21	0.72	0.48	5.37	1.27	3.12	9.76						
Bed-Paratill w/rol	4R-30	MFWD 225	16,400	150	12	0.204	2.37	8.04	1.21	1.21	12.84	2.14	7.80	22.78						
Bed-Paratill w/rol	4R-38	MFWD 225	16,400	150	12	0.160	1.86	6.33	0.95	0.96	10.11	1.68	6.14	17.94						
Bed-Paratill w/rol	6R-38	MFWD 225	22,200	150	12	0.107	1.24	4.23	0.86	0.64	6.98	1.52	4.10	12.61						
Bed-Rip/Disk Fold.	8R-38	MFWD 190	30,300	300	20	0.073	0.84	2.42	0.11	0.32	3.71	0.53	2.08	6.34						
Bed-Rip/Disk Fold.	12R-30	MFWD 225	45,700	300	20	0.061	0.71	2.42	0.14	0.36	3.64	0.68	2.35	6.68						
Bed-Rip/Disk Fold.	12R-38	MFWD 225	45,700	300	20	0.046	0.53	1.81	0.10	0.27	2.73	0.51	1.76	5.01						
Bed-Rip/Disk Rigid	4R-30	MFWD 190	12,900	300	20	0.184	2.14	6.14	0.11	0.82	9.23	0.58	5.28	15.10						
Bed-Rip/Disk Rigid	4R-38	MFWD 190	12,900	300	20	0.146	1.70	4.87	0.09	0.65	7.33	0.46	4.19	11.98						
Bed-Rip/Disk Rigid	6R-38	MFWD 190	19,800	300	20	0.097	1.12	3.23	0.09	0.43	4.89	0.46	2.78	8.14						
Bed-Rip/Disk Rigid	8R-30	MFWD 190	25,300	300	20	0.139	1.61	4.62	0.17	0.62	7.03	0.85	3.97	11.86						
Bed-Rip/Disk Rigid	8R-38	MFWD 190	25,300	300	20	0.073	0.84	2.42	0.09	0.32	3.69	0.45	2.08	6.23						
Bed-Rip/Disk Rigid	6R-30	MFWD 190	19,800	300	20	0.123	1.42	4.09	0.12	0.55	6.20	0.59	3.52	10.31						
Bed-Rip/Disk Cond.	6-Row	MFWD 225	18,700	150	12	0.107	1.24	4.23	0.72	0.64	6.85	1.28	4.10	12.24						
Bed-Rip/Disk Cond.	8-Row	MFWD 225	22,400	150	12	0.080	0.93	3.18	0.65	0.48	5.25	1.15	3.08	9.49						
Bed-Roll-Fold.	8R-38	MFWD 190	23,800	160	10	0.074	0.85	2.46	0.44	0.33	4.09	1.09	1.18	7.40						
Bed-Roll-Fold.	12R-30	MFWD 225	25,600	160	10	0.062	0.72	2.46	0.40	0.37	3.95	1.07	2.38	7.42						
Bed-Roll-Fold.	12R-38	MFWD 225	27,900	160	10	0.049	0.57	1.94	0.34	0.29	3.15	0.92	1.88	5.96						
Bed-Roll-Fold.	16R-30	MFWD 225	29,100	160	10	0.046	0.54	1.84	0.34	0.27	3.01	0.91	1.79	5.71						
Bed-Roll-Rigid	8R-38	MFWD 190	17,500	160	10	0.074	0.85	2.46	0.32	0.33	3.97	0.87	2.11	6.96						
Blade-Box	6'-7'	2WD 130	1,020	200	20	0.020	0.23	0.45	0.00	0.06	0.75	0.00	0.37	1.13						
Boll Buggy	4R-30 (325)	MFWD 190	24,300	200	10	0.327	3.79	10.88	1.98	1.46	18.13	4.11	9.36	31.61						
Boll Buggy	4R-38 (255)	MFWD 190	24,300	200	10	0.257	2.99	8.57	1.56	1.15	14.27	3.24	7.37	24.89						
Boll Buggy	4R-38 (325)	MFWD 190	24,300	200	10	0.257	2.99	8.57	1.56	1.15	14.27	3.24	7.37	24.89						
Boll Buggy	4R-38 (150)	MFWD 190	24,300	200	10	0.172	1.99	5.72	1.04	0.77	9.54	2.16	4.92	16.64						
Boll Buggy	6R-30 (325)	MFWD 190	24,300	200	10	0.218	2.53	7.25	1.32	0.97	12.08	2.74	6.24	21.07						
Boll Buggy	6R-38 (330)	MFWD 190	24,300	200	10	0.172	1.99	5.72	1.04	0.77	9.54	2.16	4.92	16.64						
Boll Buggy-Stripper	13' Bcast	MFWD 150	24,300	200	10	0.251	2.92	6.61	1.52	0.96	12.02	3.16	5.87	21.06						
Boll Buggy-Stripper	16' Bcast	MFWD 150	24,300	200	10	0.204	2.37	5.37	1.24	0.78	9.76	2.57	4.77	17.11						
Boll Buggy-Stripper	19' Bcast	MFWD 150	24,300	200	10	0.172	1.99	4.52	1.04	0.65	8.22	2.16	4.02	14.41						
Boll Buggy-Stripper	4R-30 2x1	MFWD 150	24,300	200	10	0.218	2.53	5.72	1.32	0.83	10.41	2.74	5.09	18.25						
Boll Buggy-Stripper	4R-36	MFWD 150	24,300	200	10	0.272	3.16	7.16	1.65	1.04	13.02	3.43	6.36	22.82						
Boll Buggy-Stripper	4R-38	MFWD 150	24,300	200	10	0.257	2.99	6.76	1.56	0.98	12.30	3.24	6.01	21.56						
Boll Buggy-Stripper	4R-38 2x1	MFWD 150	24,300	200	10	0.172	1.99	4.52	1.04	0.65	8.22	2.16	4.02	14.41						
Boll Buggy-Stripper	5R-30	MFWD 150	24,300	200	10	0.261	3.03	6.87	1.59	0.99	12.50	3.29	6.11	21.91						
Boll Buggy-Stripper	5R-38	MFWD 150	24,300	200	10	0.207	2.40	5.43	1.25	0.78	9.89	2.60	4.83	17.33						
Boll Buggy-Stripper	6R-30	MFWD 150	24,300	200	10	0.218	2.53	5.72	1.32	0.83	10.41	2.74	5.09	18.25						
Boll Buggy-Stripper	6R-38	MFWD 150	24,300	200	10	0.172	1.99	4.52	1.04	0.65	8.22	2.16	4.02	14.41						
Boll Buggy-Stripper	8R-30	MFWD 150	24,300	200	10	0.163	1.89	4.29	0.99	0.62	7.81	2.05	3.82	13.69						
Boll Buggy-Stripper	8R-36/38	MFWD 150	24,300	200	10	0.129	1.50													

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2012 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total Imp.	Total P.U.	Total Direct	--Fixed--		Total Cost
									Imp.	P.U.	Direct				Imp.	P.U.	
			dollars	hours	years	hr/ac			-----\$/acre-----								
Chisel Plow-Folding	50'	MFWD 225	65,000	150	10	0.036	0.42	1.45	1.04	0.22	3.14	1.72	1.41	6.28			
Chisel Plow-Folding	61'	MFWD 225	71,600	150	12	0.030	0.35	1.19	0.78	0.18	2.50	1.38	1.15	5.05			
Chisel Plow-Rigid	10'	MFWD 170	8,030	150	12	0.184	2.14	5.50	0.53	0.77	8.96	0.94	4.98	14.89			
Chisel Plow-Rigid	15'	2WD 130	8,280	150	12	0.123	1.42	2.80	0.36	0.37	4.97	0.65	2.29	7.92			
Chisel Plow-Rigid	20'	MFWD 225	9,210	150	12	0.102	1.19	4.04	0.34	0.61	6.19	0.60	3.92	10.71			
Chisel Plow-Rigid	24'	MFWD 190	10,800	150	12	0.077	0.89	2.56	0.30	0.34	4.09	0.53	2.20	6.83			
Chisel-Harrow	21 shank	2WD 190	11,900	150	12	0.088	1.02	2.92	0.37	0.30	4.62	0.66	1.93	7.23			
Chisel-Harrow	27 shank	MFWD 225	13,400	150	12	0.068	0.79	2.69	0.33	0.40	4.23	0.58	2.61	7.43			
Coulter-Chisel-Harro	21 shank	2WD 190	18,600	150	12	0.088	1.02	2.92	0.59	0.30	4.84	1.04	1.93	7.82			
Coulter-Chisel-Harro	27 shank	MFWD 225	23,200	150	12	0.068	0.79	2.69	0.57	0.40	4.47	1.01	2.61	8.10			
Cult & PD Ridge Till	8R-30	2WD 150	28,000	200	12	0.110	1.77	2.88	1.47	0.38	6.52	1.52	2.37	10.42			
Cult & PD Ridge Till	12R-30	2WD 190	40,400	200	12	0.073	1.18	2.43	1.41	0.25	5.29	1.46	1.61	8.37			
Cultivate	4R-30	2WD 105	10,300	150	10	0.206	2.39	3.78	0.56	0.42	7.16	1.52	2.57	11.26			
Cultivate	4R-38	2WD 105	10,400	150	10	0.162	1.88	2.98	0.45	0.26	5.58	1.21	1.63	8.43			
Cultivate	6R-30	MFWD 150	14,900	150	10	0.137	1.59	3.60	0.54	0.52	6.27	1.46	3.20	10.95			
Cultivate	6R-38	MFWD 150	15,800	150	10	0.108	1.25	2.84	0.45	0.41	4.97	1.22	2.53	8.74			
Cultivate	8R-30	MFWD 190	19,000	150	10	0.103	1.19	3.42	0.52	0.46	5.60	1.40	2.94	9.96			
Cultivate	8R-38	MFWD 190	20,400	150	10	0.073	0.85	2.44	0.40	0.32	4.03	1.07	2.10	7.21			
Cultivate	8R-38 2x1	MFWD 190	29,000	150	10	0.054	0.62	1.80	0.41	0.24	3.09	1.12	1.55	5.77			
Cultivate	10R-30	MFWD 225	26,100	150	10	0.082	0.95	3.24	0.57	0.49	5.27	1.54	3.15	9.96			
Cultivate	12R-30	MFWD 225	35,600	150	10	0.068	0.79	2.70	0.65	0.41	4.56	1.75	2.62	8.94			
Cultivate	12R-38	MFWD 225	34,600	150	10	0.054	0.62	2.13	0.50	0.32	3.59	1.34	2.07	7.01			
Cultivate	16R-30	MFWD 225	41,100	150	10	0.051	0.59	2.03	0.56	0.30	3.50	1.51	1.96	6.98			
Cultivate & Post	4R-30	2WD 105	15,400	150	10	0.220	3.54	4.04	0.90	0.36	8.85	2.42	2.21	13.50			
Cultivate & Post	4R-38	2WD 105	15,500	150	10	0.173	2.79	3.18	0.71	0.28	6.97	1.92	1.74	10.64			
Cultivate & Post	6R-30	MFWD 150	20,000	150	10	0.146	2.36	3.85	0.78	0.55	7.55	2.10	3.42	13.08			
Cultivate & Post	6R-38	MFWD 150	20,900	150	10	0.115	1.86	3.03	0.64	0.44	5.99	1.73	2.70	10.43			
Cultivate & Post	8R-30	MFWD 190	24,100	150	10	0.110	1.77	3.65	0.70	0.49	6.63	1.90	3.14	11.67			
Cultivate & Post	8R-38	MFWD 190	25,500	150	10	0.086	1.40	2.89	0.59	0.38	5.27	1.58	2.48	9.34			
Cultivate & Post	8R-38 2x1	MFWD 190	34,100	150	10	0.057	0.93	1.92	0.52	0.25	3.64	1.41	1.65	6.71			
Cultivate & Post	10R-30	MFWD 225	31,200	150	10	0.088	1.41	3.46	0.73	0.52	6.14	1.96	3.36	11.47			
Cultivate & Post	12R-30	MFWD 225	40,700	150	10	0.073	1.18	2.88	0.79	0.43	5.30	2.13	2.80	10.24			
Cultivate & Post	12R-38	MFWD 225	39,700	150	10	0.057	0.93	2.27	0.61	0.34	4.17	1.64	2.21	8.02			
Cultivate & Post	16R-30	MFWD 225	46,200	150	10	0.055	0.88	2.16	0.67	0.32	4.05	1.82	2.10	7.98			
Cultivate Ridge Till	8R-30	2WD 170	22,900	200	12	0.103	1.19	3.06	1.13	0.38	5.77	1.16	2.45	9.40			
Cultivate Ridge Till	12R-30	2WD 190	35,300	200	12	0.068	0.79	2.28	1.16	0.23	4.48	1.20	1.51	7.19			
Disk & Incorporate	14'	2WD 130	26,200	200	10	0.149	2.41	3.40	1.17	0.45	7.45	2.10	2.79	12.35			
Disk & Incorporate	24'	MFWD 190	38,100	200	10	0.087	1.40	2.90	0.99	0.39	5.69	1.78	2.49	9.98			
Disk & Incorporate	28'	MFWD 225	44,200	200	10	0.074	1.20	2.94	0.99	0.44	5.59	1.77	2.85	10.22			
Disk & Incorporate	32'	MFWD 225	50,800	200	10	0.065	1.05	2.57	0.99	0.39	5.02	1.78	2.50	9.31			
Disk Harrow	14'	2WD 130	21,100	180	10	0.140	1.62	3.19	0.82	0.42	6.06	1.76	2.61	10.45			
Disk Harrow	20'	MFWD 190	29,700	180	10	0.098	1.13	3.26	0.81	0.43	5.65	1.74	2.80	10.20			
Disk Harrow	24'	MFWD 190	33,000	180	10	0.081	0.94	2.72	0.75	0.36	4.78	1.61	2.34	8.74			
Disk Harrow	28'	MFWD 225	39,100	180	10	0.070	0.81	2.76	0.76	0.41	4.75	1.63	2.67	9.07			
Disk Harrow	32'	MFWD 225	45,700	180	10	0.061	0.71	2.41	0.77	0.36	4.27	1.67	2.34	8.29			
Disk Harrow	42'	MFWD 225	88,200	180	10	0.046	0.54	1.84	1.14	0.27	3.80	2.46	1.78	8.05			
Disk Harrow 40-100hp	14'	2WD 75	14,400	180	10	0.140	1.62	1.84	0.56	0.15	4.18	1.20	0.95	6.34			
Disk Heavy	14'	MFWD 150	21,100	180	10	0.145	1.69	3.83	0.85	0.55	6.93	1.83	3.40	12.18			
Disk Heavy	20'	MFWD 170	29,700	180	10	0.097	1.12	2.89	0.80	0.41	5.23	1.72	2.62	9.58			
Disk Heavy	28'	MFWD 190	39,100	180	10	0.075	0.87	2.51	0.82	0.33	4.55	1.76	2.16	8.48			
Disk Ripper	15'	MFWD 225	37,100	180	10	0.136	1.58	5.36	1.40	0.81	9.16	3.01	5.20	17.38			
Ditcher	2WD 130		4,390	200	10	0.020	0.23	0.45	0.03	0.06	0.78	0.04	0.37	1.20			
Ditcher (1m/160a)	2WD 130		4,390	200	10	0.009	0.10	0.21	0.01	0.02	0.36	0.02	0.17	0.56			
Fert Appl (Liquid)	4R-38	MFWD 150	14,000	150	8	0.154	2.49	4.06	1.44	0.58	8.58	1.65	3.60	13.85			
Fert Appl (Liquid)	6R-30	MFWD 170	16,900	150	8	0.130	2.11	3.89	1.47	0.55	8.03	1.69	3.53	13.26			
Fert Appl (Liquid)	6R-38	MFWD 170	14,700	150	8	0.103	1.66	3.07	1.01	0.43	6.19	1.16	2.79	10.14			
Fert Appl (Liquid)	8R-30	MFWD 190	15,400	150	8	0.098	1.58	3.26	1.00	0.43	6.29	1.15	2.80	10.26			
Fert Appl (Liquid)	8R-38	MFWD 190	17,400	150	8	0.077	1.25	2.58	0.90	0.34	5.08	1.03	2.21	8.33			
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	15,400	150	8	0.051	0.83	1.71	0.53	0.23	3.31	0.60	1.47	5.40			
Fert Appl (Liquid)	10R-30	MFWD 225	16,000	150	8	0.078	1.26	3.09	0.83	0.46	5.66	0.96	3.00	9.63			
Fert Appl (Liquid)	10R-38	MFWD 225	18,900	150	8	0.061	0.99	2.43	0.78	0.36	4.58	0.89	2.36	7.85			
Fert Appl (Liquid)	12R-30	MFWD 225	18,500	150	8	0.078	1.26	3.09	0.96	0.46	5.79	1.11	3.00	9.91			
Fert Appl (Liquid)	12R-38	MFWD 225	16,600	150	8	0.051	0.83	2.03	0.57	0.30	3.74	0.65	1.97	6.38			
Field Cult & Inc	42'	MFWD 225	52,800	100	10	0.037	0.60	1.48	0.49	0.22	2.82	2.14	1.44	6.40			
Field Cult & Inc	50'	MFWD 225	61,900	100	10	0.031	0.51	1.24	0.49	0.18	2.44	2.11	1.21	5.76			
Field Cult & Inc Fld	24'	MFWD 170	28,600	100	10	0.066	1.06	1.96	0.47	0.27	3.78	2.03	1.78	7.60			
Field Cult & Inc Fld	32'	MFWD 190	37,800	100	10	0.049	0.79	1.64	0.46	0.22	3.13	2.01	1.41	6.57			
Field Cult & Inc Rdg	12'	2WD 150	15,400	100	10	0.132	2.13	3.47	0.50	0.46	6.57	2.18	2.85	11.62			
Field Cultivate Fld	24'	MFWD 170	23,500	100	10	0.062	0.72	1.85	0.36	0.26	3.20	1.57	1.67	6.			

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2012 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---		Total	--Fixed---		Total Cost
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Grain Cart Rice	700 bu	MFWD 190	28,300	200	12	0.055	0.63	1.82	0.42	0.24	3.13	0.74	1.57	5.45
Grain Cart Rice	1000 bu	MFWD 190	40,500	200	12	0.045	0.53	1.52	0.50	0.20	2.76	0.88	1.31	4.96
Grain Cart Soybean	500 bu	MFWD 190	22,100	200	12	0.025	0.29	0.84	0.15	0.11	1.41	0.27	0.72	2.40
Grain Cart Soybean	700 bu	MFWD 190	28,300	200	12	0.021	0.24	0.70	0.16	0.09	1.21	0.28	0.60	2.10
Grain Cart Soybean	1000 bu	MFWD 190	40,500	200	12	0.021	0.24	0.70	0.23	0.09	1.28	0.41	0.60	2.30
Grain Cart Wht/Sor	500 bu	MFWD 190	22,100	200	12	0.025	0.29	0.84	0.15	0.11	1.41	0.27	0.72	2.40
Grain Cart Wht/Sor	700 bu	MFWD 190	28,300	200	12	0.021	0.24	0.70	0.16	0.09	1.21	0.28	0.60	2.10
Grain Cart Wht/Sor	1000 bu	MFWD 190	40,500	200	12	0.021	0.24	0.70	0.23	0.09	1.28	0.41	0.60	2.30
Grain Drill	8'	2WD 130	15,400	150	8	0.235	4.86	5.36	1.36	0.71	12.31	2.65	4.39	19.35
Grain Drill	10'	2WD 130	16,700	150	8	0.188	3.89	4.29	1.18	0.57	9.94	2.30	3.51	15.75
Grain Drill	12'	2WD 130	17,900	150	8	0.157	3.24	3.57	1.05	0.47	8.35	2.05	2.93	13.34
Grain Drill	15'	MFWD 150	21,800	150	8	0.125	2.59	3.30	1.02	0.47	7.40	2.00	2.93	12.33
Grain Drill	20'	MFWD 170	29,000	150	8	0.094	1.94	2.80	1.02	0.39	6.17	1.99	2.54	10.71
Grain Drill	24'	MFWD 190	50,800	150	8	0.078	1.62	2.61	1.49	0.35	6.08	2.91	2.24	11.24
Grain Drill	30'	MFWD 225	53,300	150	8	0.062	1.29	2.47	1.25	0.37	5.40	2.44	2.40	10.25
Grain Drill	35'	MFWD 225	69,900	150	8	0.053	1.11	2.12	1.41	0.32	4.96	2.75	2.05	9.77
Grain Drill & Pre	8'	2WD 130	20,600	150	8	0.253	5.24	5.77	1.96	0.77	13.75	3.82	4.73	22.30
Grain Drill & Pre	10'	2WD 130	21,800	150	8	0.203	4.19	4.62	1.66	0.61	11.09	3.23	3.78	18.11
Grain Drill & Pre	12'	2WD 130	23,000	150	8	0.169	3.49	3.85	1.45	0.51	9.32	2.84	3.15	15.32
Grain Drill & Pre	15'	MFWD 150	26,900	150	8	0.135	2.79	3.55	1.36	0.51	8.23	2.66	3.15	14.05
Grain Drill & Pre	20'	MFWD 170	34,100	150	8	0.101	2.09	3.02	1.29	0.42	6.84	2.52	2.74	12.11
Grain Drill & Pre	24'	MFWD 190	55,900	150	8	0.084	1.74	2.81	1.77	0.37	6.71	3.45	2.41	12.58
Grain Drill & Pre	30'	MFWD 225	58,400	150	8	0.067	1.39	2.66	1.48	0.40	5.95	2.88	2.58	11.42
Grain Drill & Pre	35'	MFWD 225	75,000	150	8	0.058	1.19	2.28	1.63	0.34	5.46	3.17	2.21	10.85
Grain Drill & Pre T	8R-38	MFWD 225	43,500	150	8	0.062	1.29	2.47	1.02	0.37	5.17	1.99	2.40	9.57
Harrow - Rigid	21'	2WD 150	4,990	200	10	0.073	0.85	1.94	0.12	0.26	3.18	0.19	1.59	4.98
Harrow - Folding	16'	MFWD 190	5,000	200	10	0.097	1.12	3.22	0.16	0.43	4.95	0.26	2.77	7.99
Harrow - Folding	24'	MFWD 190	11,400	200	10	0.064	0.75	2.15	0.25	0.28	3.44	0.39	1.85	5.69
Harrow - Folding	30'	MFWD 190	11,900	200	10	0.051	0.60	1.72	0.21	0.23	2.76	0.33	1.47	4.57
Harrow - Folding	40'	MFWD 190	15,400	200	10	0.038	0.45	1.29	0.20	0.17	2.12	0.32	1.10	3.55
Harrow - Folding	48'	MFWD 225	18,100	200	10	0.032	0.37	1.27	0.20	0.19	2.04	0.31	1.23	3.59
Harrow - Rigid	13'	2WD 130	3,810	200	10	0.119	1.38	2.71	0.15	0.36	4.62	0.24	2.22	7.09
Header - Corn	6R-30	265 hp	39,300	300	8	0.170	1.97	7.89	1.67	4.27	15.81	2.56	17.11	35.49
Header - Corn	6R-38	265 hp	40,400	300	8	0.134	1.55	6.23	1.35	3.37	12.52	2.07	13.51	28.11
Header - Corn	8R-30	265 hp	50,700	300	8	0.127	1.48	5.92	1.61	3.20	12.22	2.47	12.83	27.54
Header - Corn	8R-38	325 hp	51,600	300	8	0.100	1.17	5.74	1.30	2.82	11.04	1.99	11.32	24.36
Header - Corn	12R-20	325 hp	66,800	300	8	0.127	1.48	7.26	2.13	3.57	14.45	3.26	14.33	32.05
Header - Corn	12R-30	325 hp	77,600	300	8	0.085	0.98	4.84	1.65	2.38	9.86	2.52	9.55	21.95
Header - Draper (CL)	25' Rigid	265 hp	49,500	300	8	0.203	2.35	9.41	2.30	5.09	19.17	3.67	20.41	43.26
Header - Draper (CL)	30' Rigid	325 hp	55,100	300	8	0.169	1.96	9.62	2.13	4.74	18.46	3.40	18.99	40.86
Header - Draper (CL)	36' Rigid	355 hp	59,500	300	8	0.141	1.63	8.76	1.92	4.23	16.55	3.06	16.94	36.55
Header - Draper (SL)	25' Rigid	325 hp	49,500	300	8	0.176	2.04	10.01	1.99	4.93	18.98	3.18	19.75	41.91
Header - Draper (SL)	30' Rigid	325 hp	55,100	300	8	0.146	1.70	8.34	1.85	4.10	16.00	2.95	16.45	35.41
Header - Draper (SL)	36' Rigid	355 hp	59,500	300	8	0.122	1.41	7.59	1.66	3.66	14.34	2.65	14.68	31.68
Header - Rice (CL)	25' Rigid	325 hp	50,400	300	8	0.253	2.94	14.43	3.19	7.11	27.69	4.89	28.48	61.07
Header - Rice (CL)	30' Rigid	325 hp	57,500	300	8	0.211	2.45	12.03	3.04	5.92	23.45	4.65	23.73	51.84
Header - Rice (SL)	25' Rigid	325 hp	50,400	300	8	0.220	2.55	12.51	2.77	6.16	24.00	4.24	24.68	52.93
Header - Rice (SL)	30' Rigid	325 hp	57,500	300	8	0.183	2.12	10.42	2.63	5.13	20.32	4.03	20.57	44.93
Header - RiceStrp(CL)	20'	265 hp	40,700	300	8	0.253	2.94	11.77	2.58	6.37	23.67	3.95	25.52	53.14
Header - RiceStrp(CL)	24'	325 hp	44,700	300	8	0.211	2.45	12.03	2.36	5.92	22.77	3.61	23.73	50.13
Header - RiceStrp(CL)	32'	325 hp	49,300	300	8	0.158	1.84	9.02	1.95	4.44	17.26	2.99	17.80	38.06
Header - RiceStrp(SL)	20'	265 hp	40,700	300	8	0.220	2.55	10.20	2.23	5.52	20.51	3.42	22.11	46.06
Header - RiceStrp(SL)	24'	325 hp	44,700	300	8	0.183	2.12	10.42	2.04	5.13	19.74	3.13	20.57	43.44
Header - RiceStrp(SL)	32'	325 hp	49,300	300	8	0.137	1.59	7.82	1.69	3.85	14.96	2.59	15.43	32.98
Header - Soybean	22' Flex	265 hp	25,100	300	8	0.116	1.34	5.38	0.72	2.91	10.37	1.11	11.67	23.16
Header - Soybean	25' Flex	325 hp	27,100	300	8	0.102	1.18	5.81	0.69	2.86	10.55	1.05	11.46	23.07
Header - Soybean	30' Flex	325 hp	30,700	300	8	0.085	0.98	4.84	0.65	2.38	8.86	0.99	9.55	19.42
Header - Soybean	35' Flex	355 hp	36,100	300	8	0.072	0.84	4.53	0.65	2.18	8.22	1.00	8.76	18.00
Header - Wheat/Sorghum	22' Rigid	265 hp	19,300	300	8	0.116	1.34	5.38	0.56	2.91	10.20	0.85	11.67	22.73
Header - Wheat/Sorghum	25' Rigid	325 hp	23,500	300	8	0.102	1.18	5.81	0.60	2.86	10.45	0.91	11.46	22.84
Header - Wheat/Sorghum	30' Rigid	325 hp	26,300	300	8	0.085	0.98	4.84	0.55	2.38	8.77	0.85	9.55	19.18
Header - Cotton Bcast	13'	173 hp	19,800	200	8	0.251	5.20	6.91	0.93	6.17	19.23	2.86	24.74	46.83
Header - Cotton-Bcast	16'	173 hp	23,200	200	8	0.204	4.22	5.62	0.89	5.01	15.75	2.72	20.10	38.58
Header - Cotton-Bcast	19'	173 hp	25,000	200	8	0.172	3.55	4.73	0.80	4.22	13.32	2.47	16.92	32.72
Header - Cotton-Brush	4R-30 2x1	173 hp	30,100	200	8	0.218	4.50	5.99	1.23	5.35	17.09	3.76	21.44	42.30
Header - Cotton-Brush	4R-36	173 hp	29,800	200	8	0.272	5.63	7.49	1.52	6.69	21.34	4.66	26.80	52.81
Header - Cotton-Brush	4R-38	173 hp	29,700	200	8	0.257	5.32	7.08	1.43	6.32	20.16	4.39	25.32	49.88
Header - Cotton-Brush	4R-38 2x1	173 hp	31,500	200	8	0.172	3.55	4.73	1.01	4.22	13.53	3.11	16.92	33.58
Header - Cotton-Brush	5R-30	173 hp	37,400	200	8	0.261	5.41	7.19	1.83	6.42	20.86	5.62	25.73	52.21
Header - Cotton-Brush	5R-38	173 hp	38,800	200	8	0.207	4.28	5.69	1.50	5.08	16.56	4.61	20.35	41.53
Header - Cotton-Brush	6R-30	173 hp	46,100	200	8	0.218	4.50	5.99	1.88	5.35	17.74	5.77	21.44	44.96
Header - Cotton-Brush	6R-38	173 hp	47,500	200	8	0.172	3.55	4.73	1.53	4.22	14.05	4.69	16.92	35.68
Header - Cotton-Brush	8R-30	173 hp	63,600	200	8	0.163	3.38	4.49	1.95	4.01	13.84	5.97	16.08	35.90
Header - Cotton-Brush	8R-36/38	173 hp	65,000	200	8	0.129	2.67	3.55	1.57	3.17	10.97	4.82	12.71	28.51
Land Plane	50'x16'	MFWD 190	10											

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2012 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---		Total	--Fixed--		Total					
			Price	Use	Life	Rate		Imp.	P.U.	Direct	Imp.	P.U.	Cost						
				dollars	hours	years	hr/ac	-----\$/acre-----											
Module Builder	4R-38(255)	MFWD 190	30,500	200	10	0.257	5.32	8.57	1.96	1.15	17.01	4.07	7.37	28.45					
Module Builder	4R-38(325)	MFWD 190	30,500	200	10	0.257	5.32	8.57	1.96	1.15	17.01	4.07	7.37	28.45					
Module Builder	4R2x1(350)	MFWD 190	30,500	200	10	0.172	3.55	5.72	1.31	0.77	11.37	2.72	4.92	19.02					
Module Builder	6R-30(325)	MFWD 190	30,500	200	10	0.218	4.50	7.25	1.66	0.97	14.40	3.44	6.24	24.09					
Module Builder	6R-38(330)	MFWD 190	30,500	200	10	0.172	3.55	5.72	1.31	0.77	11.37	2.72	4.92	19.02					
Module Builder-Strip	13' Bcast	MFWD 150	30,500	200	10	0.251	5.20	6.61	1.92	0.96	14.69	3.97	5.87	24.54					
Module Builder-Strip	16' Bcast	MFWD 150	30,500	200	10	0.204	4.22	5.37	1.56	0.78	11.93	3.23	4.77	19.94					
Module Builder-Strip	19' Bcast	MFWD 150	30,500	200	10	0.172	3.55	4.52	1.31	0.65	10.05	2.72	4.02	16.79					
Module Builder-Strip	4R-30 2x1	MFWD 150	30,500	200	10	0.218	4.50	5.72	1.66	0.83	12.73	3.44	5.09	21.27					
Module Builder-Strip	4R-36	MFWD 150	30,500	200	10	0.272	5.63	7.16	2.08	1.04	15.91	4.30	6.36	26.59					
Module Builder-Strip	4R-38	MFWD 150	30,500	200	10	0.257	5.32	6.76	1.96	0.98	15.04	4.07	6.01	25.12					
Module Builder-Strip	4R-38 2x1	MFWD 150	30,500	200	10	0.172	3.55	4.52	1.31	0.65	10.05	2.72	4.02	16.79					
Module Builder-Strip	5R-30	MFWD 150	30,500	200	10	0.261	5.41	6.87	1.99	0.99	15.28	4.13	6.11	25.53					
Module Builder-Strip	5R-38	MFWD 150	30,500	200	10	0.207	4.28	5.43	1.57	0.78	12.08	3.27	4.83	20.19					
Module Builder-Strip	6R-30	MFWD 150	30,500	200	10	0.218	4.50	5.72	1.66	0.83	12.73	3.44	5.09	21.27					
Module Builder-Strip	6R-38	MFWD 190	30,500	200	10	0.172	3.55	5.72	1.31	0.77	11.37	2.72	4.92	19.02					
Module Builder-Strip	8R-36/38	MFWD 190	30,500	200	10	0.129	2.67	4.30	0.98	0.57	8.54	2.04	3.69	14.28					
NT Grain Drill	6'	MFWD 170	19,100	150	8	0.327	6.76	9.73	2.34	1.38	20.22	4.56	8.83	33.63					
NT Grain Drill	10'	2WD 130	28,300	150	8	0.235	4.86	5.36	2.50	0.71	13.45	4.87	4.39	22.72					
NT Grain Drill	12'	2WD 130	35,900	150	8	0.163	3.38	3.72	2.20	0.49	9.80	4.29	3.05	17.15					
NT Grain Drill	15'	MFWD 150	40,100	150	8	0.130	2.70	3.43	1.96	0.49	8.61	3.83	3.05	15.50					
NT Grain Drill	20'	MFWD 170	56,900	150	8	0.098	2.02	2.92	2.09	0.41	7.46	4.08	2.65	14.19					
NT Grain Drill	24'	MFWD 190	75,400	150	8	0.081	1.69	2.72	2.31	0.36	7.09	4.50	2.34	13.94					
NT Grain Drill	30'	MFWD 225	88,000	150	8	0.065	1.35	2.57	2.16	0.39	6.48	4.20	2.50	13.19					
NT Grain Drill & Pre	6'	MFWD 170	24,200	150	8	0.352	7.28	10.48	3.19	1.48	22.45	6.23	9.51	38.20					
NT Grain Drill & Pre	10'	2WD 130	33,500	150	8	0.211	4.37	4.81	2.65	0.64	12.48	5.17	3.94	21.60					
NT Grain Drill & Pre	12'	2WD 130	41,000	150	8	0.176	3.64	4.01	2.71	0.53	10.89	5.28	3.28	19.46					
NT Grain Drill & Pre	15'	MFWD 150	45,200	150	8	0.141	2.91	3.70	2.39	0.53	9.54	4.65	3.29	17.49					
NT Grain Drill & Pre	20'	MFWD 170	62,100	150	8	0.105	2.18	3.14	2.46	0.44	8.24	4.79	2.85	15.89					
NT Grain Drill & Pre	24'	MFWD 190	80,500	150	8	0.088	1.82	2.93	2.66	0.39	7.80	5.18	2.52	15.50					
NT Grain Drill & Pre	30'	MFWD 225	93,100	150	8	0.070	1.45	2.77	2.46	0.42	7.11	4.79	2.69	14.60					
NT Plant&Pre-Folding	8R-38	MFWD 170	44,300	150	8	0.083	1.72	2.48	1.38	0.35	5.95	2.70	2.25	10.91					
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	70,600	150	8	0.055	1.15	1.65	1.47	0.23	4.51	2.87	1.50	8.88					
NT Plant&Pre-Folding	12R-20	MFWD 190	67,800	150	8	0.105	2.18	3.51	2.68	0.47	8.86	5.23	3.02	17.12					
NT Plant&Pre-Folding	12R-30	MFWD 190	70,600	150	8	0.070	1.45	2.34	1.86	0.31	5.98	3.63	2.01	11.63					
NT Plant&Pre-Folding	12R-38	MFWD 190	70,600	150	8	0.055	1.15	1.85	1.47	0.24	4.72	2.87	1.59	9.18					
NT Plant&Pre-Folding	16R-30	MFWD 190	92,900	150	8	0.052	1.09	1.75	1.84	0.23	4.92	3.58	1.51	10.03					
NT Plant&Pre-Folding	23R-15	MFWD 190	117,000	150	8	0.073	1.51	2.44	3.22	0.32	7.51	6.27	2.10	15.88					
NT Plant&Pre-Folding	24R-15	MFWD 225	126,000	150	8	0.070	1.45	2.77	3.33	0.42	7.98	6.49	2.69	17.16					
NT Plant&Pre-Folding	24R-20	MFWD 190	134,000	150	8	0.052	1.09	1.75	2.65	0.23	5.74	5.17	1.51	12.43					
NT Plant&Pre-Folding	24R-30	MFWD 190	152,000	150	8	0.035	0.72	1.17	2.00	0.15	4.06	3.91	1.00	8.99					
NT Plant&Pre-Folding	31R-15	MFWD 225	143,000	150	8	0.054	1.12	2.15	2.93	0.32	6.53	5.71	2.08	14.33					
NT Plant&Pre-Folding	32R-15	MFWD 225	158,000	150	8	0.052	1.09	2.08	3.13	0.31	6.62	6.10	2.01	14.74					
NT Plant&Pre-Folding	36R-20	MFWD 225	167,000	150	8	0.035	0.72	1.38	2.20	0.21	4.53	4.30	1.34	10.18					
NT Plant&Pre-Rigid	4R-30	2WD 130	25,600	150	8	0.211	4.37	4.81	2.03	0.64	11.85	3.95	3.94	19.76					
NT Plant&Pre-Rigid	4R-38	2WD 130	27,100	150	8	0.166	3.44	3.78	1.69	0.50	9.43	3.29	3.10	15.83					
NT Plant&Pre-Rigid	6R-30	MFWD 150	34,500	150	8	0.141	2.91	3.70	1.82	0.53	8.97	3.55	3.29	15.82					
NT Plant&Pre-Rigid	6R-38	MFWD 150	32,000	150	8	0.111	2.30	2.92	1.33	0.42	6.98	2.60	2.59	12.18					
NT Plant&Pre-Rigid	8R-30	MFWD 170	41,200	150	8	0.105	2.18	3.14	1.63	0.44	7.41	3.18	2.85	13.45					
NT Plant&Pre-Rigid	8R-38	MFWD 170	37,500	150	8	0.083	1.72	2.48	1.17	0.35	5.74	2.29	2.25	10.29					
NT Plant&Pre-Rigid	10R-30	MFWD 190	39,600	150	8	0.084	1.74	2.81	1.25	0.37	6.19	2.44	2.41	11.06					
NT Plant&Pre-Rigid	11R-15	MFWD 170	46,600	150	8	0.143	2.97	4.28	2.51	0.60	10.37	4.89	3.88	19.15					
NT Plant&Pre-Rigid	11R-20	MFWD 170	43,900	150	8	0.115	2.38	3.43	1.90	0.48	8.21	3.70	3.11	15.04					
NT Plant&Pre-Rigid	12R-20	MFWD 190	50,400	150	8	0.105	2.18	3.51	1.99	0.47	8.17	3.89	3.02	15.09					
NT Plant&Pre-Rigid	12R-30	MFWD 190	57,200	150	8	0.070	1.45	2.34	1.51	0.31	5.62	2.94	2.01	10.59					
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	50,400	150	8	0.097	2.01	3.83	1.84	0.58	8.27	3.58	3.72	15.58					
NT Plant&Pre-Rigid	15R-15	MFWD 190	59,600	150	8	0.113	2.33	3.76	2.52	0.50	9.13	4.92	3.23	17.29					
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	108,000	150	8	0.055	1.15	2.19	2.25	0.33	5.92	4.39	2.12	12.44					
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	87,900	150	8	0.083	1.72	3.29	2.75	0.49	8.27	5.36	3.19	16.83					
NT Plant-Folding	8R-38	MFWD 170	39,300	150	8	0.077	1.60	2.30	1.14	0.32	5.38	2.22	2.09	9.71					
NT Plant-Folding	8R-38 2x1	MFWD 170	64,000	150	8	0.051	1.06	1.53	1.24	0.21	4.06	2.41	1.39	7.87					
NT Plant-Folding	12R-20	MFWD 190	62,800	150	8	0.098	2.02	3.26	2.31	0.43	8.04	4.50	2.80	15.36					
NT Plant-Folding	12R-30	MFWD 190	65,600	150	8	0.065	1.35	2.17	1.61	0.29	5.43	3.13	1.87	10.44					
NT Plant-Folding	12R-38	MFWD 190	64,000	150	8	0.051	1.06	1.71	1.24	0.23	4.25	2.41	1.47	8.15					
NT Plant-Folding	16R-30	MFWD 190	86,400	150	8	0.049	1.01	1.63	1.59	0.21	4.45	3.09	1.40	8.96					
NT Plant-Folding	23R-15	MFWD 190	112,000	150	8	0.068	1.40	2.26	2.86	0.30	6.84	5.58	1.94	14.37					
NT Plant-Folding	24R-15	MFWD 225	121,000	150	8	0.065	1.35	2.57	2.97	0.39	7.29	5.78	2.50	15.58					
NT Plant-Folding	24R-20	MFWD 190	127,000	150	8	0.049	1.01	1.63	2.33	0.21	5.20	4.55	1.40	11.16					
NT Plant-Folding	24R-30	MFWD 190	143,000	150	8	0.032	0.67	1.08	1.75	0.14	3.66	3.42	0.93	8.02					
NT Plant-Folding	31R-15	MFWD 225	134,000	150	8	0.050	1.04	1.99	2.55	0.30	5.90	4.96	1.93	12.80					
NT Plant-Folding	32R-15	MFWD 225	148,000	150	8	0.049	1.01	1.93	2.72	0.29	5.96	5.30	1.87	13.15					
NT Plant-Folding	36R-20	MFWD 225	158,000	150	8	0.032	0.67	1.28	1.93	0.19	4.10	3.77	1.25	9.13					
NT Plant-Rigid	4R-30	2WD 130	20,600	150	8	0.196	4.05	4.46	1										

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2012 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total Imp.	Total P.U.	Total Cost
									Imp.	P.U.	Direct			
			dollars	hours	years	hr/ac			-----\$/acre-----					
NT Plant-Rigid	10R-30	MFWD 190	34,700	150	8	0.078	1.62	2.61	1.02	0.35	5.60	1.99	2.24	9.84
NT Plant-Rigid	11R-15	MFWD 170	41,600	150	8	0.133	2.76	3.97	2.08	0.56	9.38	4.06	3.60	17.05
NT Plant-Rigid	11R-20	MFWD 170	39,000	150	8	0.107	2.21	3.19	1.56	0.45	7.43	3.05	2.89	13.38
NT Plant-Rigid	12R-20	MFWD 190	45,400	150	8	0.098	2.02	3.26	1.67	0.43	7.40	3.25	2.80	13.47
NT Plant-Rigid	12R-30	MFWD 190	52,200	150	8	0.065	1.35	2.17	1.28	0.29	5.10	2.49	1.87	9.47
NT Plant-Rigid	13R-18/20	MFWD 225	45,400	150	8	0.090	1.87	3.58	1.54	0.54	7.55	3.01	3.47	14.03
NT Plant-Rigid	15R-15	MFWD 190	53,000	150	8	0.105	2.17	3.49	2.08	0.46	8.21	4.06	3.00	15.29
NT Plant-TwinRow	12R-30/40	MFWD 225	102,000	150	8	0.051	1.06	2.03	1.97	0.30	5.38	3.85	1.97	11.21
NT Plant-TwinRow	8R-30/40	MFWD 225	82,900	150	8	0.077	1.60	3.05	2.41	0.46	7.53	4.70	2.96	15.20
One-Trip Prep	4R-38	MFWD 170	20,000	150	10	0.146	1.70	4.36	1.36	0.61	8.05	2.10	3.96	14.11
One-Trip Prep	6R-38	MFWD 190	24,000	150	10	0.097	1.12	3.23	1.08	0.43	5.88	1.67	2.78	10.34
One-Trip Prep	8R-38	MFWD 225	35,700	150	10	0.073	0.85	2.91	1.23	0.44	5.44	1.89	2.82	10.15
Peanut Cond. & Lifter	6-Row	MFWD 190	11,000	300	20	0.100	1.16	3.32	0.18	0.44	5.11	0.27	2.85	8.25
Peanut Conditioner	6-Row	MFWD 190	12,000	300	20	0.100	1.16	3.32	0.24	0.44	5.17	0.26	2.85	8.30
Peanut Dig/Invertor	4R-30	MFWD 190	21,200	300	15	0.235	2.73	7.84	1.24	1.05	12.87	1.51	6.74	21.13
Peanut Dig/Invertor	4R-38	MFWD 190	21,200	300	15	0.186	2.16	6.19	0.98	0.83	10.16	1.19	5.32	16.69
Peanut Dig/Invertor	6R-38	MFWD 190	30,800	300	15	0.124	1.43	4.12	0.67	0.55	6.78	1.16	3.54	11.49
Peanut Dump Cart	6-Row	MFWD 190	37,400	300	20	0.310	3.59	10.30	0.67	1.38	15.96	2.82	8.86	27.65
Peanut Harvester	4R-30	MFWD 225	107,000	300	20	0.849	9.85	33.46	5.15	5.07	53.55	20.38	32.45	106.39
Peanut Harvester	4R-38	MFWD 225	107,000	300	20	0.934	10.84	36.80	5.66	5.57	58.88	23.39	35.68	117.96
Peanut Harvester	6R-38	MFWD 225	122,000	300	20	0.625	7.25	24.61	3.68	3.73	39.27	17.83	23.86	80.97
Peanut Lifter	6-Row	MFWD 225	4,140	300	20	0.100	1.16	3.93	0.08	0.59	5.78	0.09	3.81	9.69
Peanut Plt&Pre Fold.	12R-38	MFWD 190	64,200	150	8	0.080	1.66	2.67	1.93	0.35	6.63	3.77	2.29	12.70
Peanut Plt&Pre Rigid	8R-30	MFWD 190	37,000	150	8	0.152	3.15	5.08	2.11	0.68	11.03	4.12	4.36	19.53
Peanut Plt&Pre Rigid	8R-38	MFWD 190	33,300	150	8	0.120	2.49	4.01	1.50	0.53	8.55	2.93	3.45	14.94
Pipe Spool 160ac	1/4m roll	2WD 130	3,380	15	12	0.003	0.09	0.07	0.00	0.00	0.17	0.06	0.05	0.30
Pipe Trailer 1m/160a	30'	2WD 130	1,240	100	15	0.003	0.17	0.08	0.00	0.01	0.27	0.00	0.06	0.35
Plant & Pre-Folding	8R-38	MFWD 170	40,100	150	8	0.080	1.65	2.38	1.20	0.33	5.59	2.35	2.16	10.11
Plant & Pre-Folding	8R-38 2x1	MFWD 170	64,200	150	8	0.053	1.10	1.58	1.28	0.22	4.20	2.50	1.44	8.15
Plant & Pre-Folding	12R-20	MFWD 190	61,500	150	8	0.101	2.09	3.37	2.34	0.45	8.26	4.56	2.90	15.73
Plant & Pre-Folding	12R-30	MFWD 190	64,300	150	8	0.067	1.39	2.25	1.63	0.30	5.58	3.17	1.93	10.69
Plant & Pre-Folding	12R-38	MFWD 190	64,200	150	8	0.053	1.10	1.77	1.28	0.23	4.40	2.50	1.52	8.44
Plant & Pre-Folding	16R-30	MFWD 190	84,500	150	8	0.050	1.04	1.68	1.60	0.22	4.57	3.13	1.45	9.15
Plant & Pre-Folding	23R-15	MFWD 190	105,000	150	8	0.070	1.45	2.34	2.77	0.31	6.89	5.40	2.01	14.31
Plant & Pre-Folding	24R-15	MFWD 225	113,000	150	8	0.067	1.39	2.66	2.86	0.40	7.33	5.58	2.58	15.50
Plant & Pre-Folding	24R-20	MFWD 190	121,000	150	8	0.050	1.04	1.68	2.30	0.22	5.26	4.48	1.45	11.20
Plant & Pre-Folding	24R-30	MFWD 190	140,000	150	8	0.033	0.69	1.12	1.77	0.15	3.75	3.46	0.96	8.18
Plant & Pre-Folding	31R-15	MFWD 225	127,000	150	8	0.052	1.08	2.06	2.49	0.31	5.96	4.86	2.00	12.83
Plant & Pre-Folding	32R-15	MFWD 225	141,000	150	8	0.050	1.04	1.99	2.68	0.30	6.03	5.22	1.93	13.20
Plant & Pre-Folding	36R-20	MFWD 225	148,000	150	8	0.033	0.69	1.33	1.87	0.20	4.11	3.65	1.29	9.06
Plant & Pre-Rigid	4R-30	2WD 130	23,500	150	8	0.203	4.19	4.62	1.78	0.61	11.22	3.48	3.78	18.49
Plant & Pre-Rigid	4R-38	2WD 130	25,000	150	8	0.159	3.30	3.63	1.49	0.48	8.92	2.92	2.98	14.83
Plant & Pre-Rigid	6R-30	MFWD 150	32,400	150	8	0.135	2.79	3.55	1.64	0.51	8.51	3.20	3.15	14.87
Plant & Pre-Rigid	6R-38	MFWD 150	28,900	150	8	0.106	2.20	2.80	1.15	0.40	6.57	2.25	2.49	11.33
Plant & Pre-Rigid	8R-30	MFWD 170	37,000	150	8	0.101	2.09	3.02	1.40	0.42	6.95	2.74	2.74	12.44
Plant & Pre-Rigid	8R-38	MFWD 170	33,300	150	8	0.080	1.65	2.38	1.00	0.33	5.38	1.95	2.16	9.50
Plant & Pre-Rigid	10R-30	MFWD 190	34,400	150	8	0.081	1.67	2.70	1.04	0.36	5.79	2.04	2.32	10.15
Plant & Pre-Rigid	11R-15	MFWD 170	40,800	150	8	0.148	3.06	4.40	2.26	0.62	10.36	4.41	4.00	18.78
Plant & Pre-Rigid	11R-20	MFWD 170	38,200	150	8	0.110	2.29	3.30	1.58	0.46	7.65	3.09	2.99	13.74
Plant & Pre-Rigid	12R-20	MFWD 190	44,100	150	8	0.101	2.09	3.37	1.67	0.45	7.60	3.27	2.90	13.78
Plant & Pre-Rigid	12R-30	MFWD 190	50,900	150	8	0.067	1.39	2.25	1.29	0.30	5.24	2.51	1.93	9.69
Plant & Pre-Rigid	13R-18/20	MFWD 225	43,600	150	8	0.093	1.93	3.68	1.53	0.55	7.70	2.98	3.57	14.26
Plant & Pre-Rigid	15R-15	MFWD 190	51,700	150	8	0.108	2.24	3.61	2.10	0.48	8.44	4.10	3.10	15.65
Plant & Pre-TwinRow	12R-30/40	MFWD 225	102,000	150	8	0.053	1.10	2.10	2.04	0.31	5.57	3.98	2.04	11.59
Plant - Folding	8R-30/40	MFWD 225	83,700	150	8	0.080	1.65	3.16	2.51	0.47	7.81	4.90	3.06	15.79
Plant - Folding	8R-38	MFWD 170	35,100	150	8	0.074	1.53	2.21	0.98	0.31	5.05	1.91	2.01	8.97
Plant - Folding	8R-38 2x1	MFWD 170	57,700	150	8	0.049	1.02	1.47	1.07	0.20	3.78	2.09	1.33	7.21
Plant - Folding	12R-20	MFWD 190	56,500	150	8	0.094	1.94	3.13	1.99	0.42	7.50	3.89	2.69	14.09
Plant - Folding	12R-30	MFWD 190	59,300	150	8	0.062	1.29	2.09	1.39	0.28	5.06	2.72	1.79	9.58
Plant - Folding	12R-38	MFWD 190	57,700	150	8	0.049	1.02	1.64	1.07	0.22	3.97	2.09	1.41	7.48
Plant - Folding	16R-30	MFWD 190	77,900	150	8	0.047	0.97	1.56	1.37	0.21	4.12	2.68	1.34	8.15
Plant - Folding	23R-15	MFWD 190	99,600	150	8	0.065	1.35	2.17	2.44	0.29	6.26	4.76	1.87	12.90
Plant - Folding	24R-15	MFWD 225	108,000	150	8	0.062	1.29	2.47	2.54	0.37	6.69	4.95	2.40	14.05
Plant - Folding	24R-20	MFWD 190	115,000	150	8	0.047	0.97	1.56	2.03	0.21	4.78	3.96	1.34	10.09
Plant - Folding	24R-30	MFWD 190	130,000	150	8	0.031	0.64	1.04	1.53	0.14	3.36	2.98	0.89	7.25
Plant - Folding	31R-15	MFWD 225	117,000	150	8	0.048	1.00	1.91	2.13	0.29	5.35	4.16	1.86	11.38
Plant - Folding	32R-15	MFWD 225	131,000	150	8	0.047	0.97	1.85	2.31	0.28	5.42	4.51	1.80	11.73
Plant - Folding	36R-20	MFWD 225	139,000	150	8	0.031	0.64	1.23	1.63	0.18	3.71	3.19	1.20	8.10
Plant - Rigid	4R-30	2WD 130	18,500	150	8	0.188	3.89	4.29	1.30	0.57	10.06	2.54	3.51	16.13
Plant - Rigid	4R-38	2WD 130	20,000	150	8	0.148	3.06	3.37	1.11	0.45	8.01	2.16	2.76	12.95
Plant - Rigid	6R-30	MFWD 150	27,400	150	8	0.125	2.59	3.30	1.29	0.47	7.66	2.51	2.93	13.11
Plant - Rigid	6R-38	MFWD 150	23,900	150	8	0.099	2.05	2.60	0.88	0.37	5.92	1.73	2.31	9.97
Plant - Rigid	8R-30													

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2012 (continued)

Item Name	Size	Power Unit	Purchase Annual Useful			Perf Rate	Labor	Fuel	---R&M---		Total Imp.	--Fixed-- Total P.U.	Total Cost	
			Price	Use	Life				Imp.	P.U.				
				dollars	hours	years	hr/ac					\$/acre		
Plant - Rigid	13R-18/20	MFWD 225	38,600	150	8	0.086	1.79	3.42	1.25	0.51	6.99	2.45	3.31	12.76
Plant - Rigid	15R-15	2WD 150	45,100	150	8	0.094	1.94	2.47	1.59	0.33	6.35	3.10	2.03	11.49
Plant - TwinRow	12R-30/40	MFWD 225	95,500	150	8	0.049	1.02	1.95	1.77	0.29	5.05	3.46	1.89	10.40
Plant - TwinRow	8R-30/40	MFWD 225	78,700	150	8	0.074	1.53	2.93	2.19	0.44	7.11	4.28	2.84	14.25
Roller/Cultipacker	12'	2WD 130	4,846	300	12	0.124	1.44	2.83	0.14	0.37	4.79	0.19	2.32	7.31
Roller/Cultipacker	20'	MFWD 150	15,200	300	12	0.074	0.86	1.95	0.26	0.28	3.37	0.37	1.74	5.49
Roller/Cultipacker	30'	MFWD 170	16,100	300	12	0.049	0.57	1.48	0.18	0.20	2.45	0.26	1.34	4.06
Roller/Cultipacker	38'	MFWD 225	17,100	300	12	0.039	0.45	1.54	0.15	0.23	2.39	0.22	1.50	4.11
Roller/Stubble	20'	2WD 50	11,500	300	12	0.074	0.86	0.65	0.20	0.05	1.78	0.28	0.36	2.42
Roller/Stubble	32'	MFWD 225	19,500	300	12	0.046	0.54	1.83	0.21	0.27	2.87	0.30	1.78	4.95
Rotary Cutter	7'	MFWD 130	3,950	185	10	0.168	1.95	3.83	0.53	0.51	6.83	0.38	3.15	10.38
Rotary Cutter	12'	2WD 150	10,800	185	10	0.098	1.13	2.57	0.86	0.34	4.92	0.61	2.12	7.66
Rotary Cutter-Flex	15'	MFWD 150	17,700	185	10	0.078	0.91	2.06	1.12	0.29	4.40	0.80	1.83	7.04
Rotary Cutter-Flex	20'	MFWD 150	24,500	185	10	0.058	0.68	1.54	1.17	0.22	3.62	0.83	1.37	5.84
Row Cond & Inc-Fold.	26'	MFWD 190	23,200	100	10	0.063	1.02	2.11	0.36	0.28	3.78	1.58	1.81	7.18
Row Cond & Inc-Fold.	38'	MFWD 225	27,300	100	10	0.043	0.70	1.70	0.29	0.25	2.96	1.27	1.65	5.89
Row Cond & Inc-Rigid	13'	2WD 130	11,400	100	10	0.126	2.04	2.88	0.36	0.38	5.68	1.55	2.36	9.60
Row Cond & Inc-Rigid	21'	2WD 170	15,200	100	10	0.078	1.26	2.33	0.29	0.29	4.19	1.28	1.86	7.34
Row Cond & Inc-Rigid	26'	MFWD 190	16,600	100	10	0.026	0.42	0.88	0.11	0.11	1.54	0.47	0.76	2.77
Row Cond Folding	26'	MFWD 225	18,100	100	10	0.059	0.69	2.35	0.27	0.35	3.67	1.16	2.28	7.11
Row Cond Folding	38'	MFWD 225	22,200	100	10	0.040	0.47	1.60	0.22	0.24	2.55	0.97	1.56	5.09
Row Cond Rigid	13'	2WD 130	6,310	100	10	0.119	1.38	2.71	0.18	0.36	4.65	0.81	2.22	7.69
Row Cond Rigid	21'	2WD 170	10,100	100	10	0.073	0.85	2.20	0.18	0.27	3.51	0.80	1.75	6.08
Row Cond Rigid	26'	MFWD 190	11,500	100	10	0.059	0.69	1.98	0.17	0.26	3.11	0.73	1.70	5.56
Row Cond./Roll-Fold.	26'	MFWD 190	25,900	160	10	0.072	0.83	2.39	0.46	0.32	4.02	1.25	2.06	7.34
Row Cond./Roll-Fold.	30'	MFWD 190	35,400	160	10	0.062	0.72	2.07	0.55	0.27	3.63	1.48	1.78	6.90
Row Cond./Roll-Fold.	40'	MFWD 225	36,100	160	10	0.046	0.54	1.84	0.42	0.27	3.09	1.13	1.79	6.02
Row Cond./Roll-Rigid	21'	MFWD 190	19,700	160	10	0.089	1.03	2.96	0.43	0.39	4.84	1.18	2.55	8.57
Row Cond./Roll-Rigid	26'	MFWD 190	22,200	160	10	0.072	0.83	2.39	0.40	0.32	3.95	1.07	2.06	7.09
Spin Spreader	5 ton	MFWD 190	11,300	100	8	0.042	0.86	1.39	0.26	0.18	2.72	0.54	1.20	4.47
Spray (ATV Ropewick)	75"	800 CC	550	200	8	0.260	4.19	0.63	0.06	0.30	5.21	0.08	1.23	6.53
Spray (ATV)	12' / 17'	800 CC	580	200	8	0.112	1.81	0.27	0.03	0.13	2.26	0.03	0.53	2.83
Spray (ATV)	20'	800 CC	1,280	200	8	0.084	1.36	0.20	0.05	0.10	1.72	0.06	0.40	2.18
Spray (Band)	27' Fold	MFWD 170	5,110	200	8	0.062	1.01	1.86	0.15	0.26	3.29	0.18	1.69	5.16
Spray (Band)	40' Fold	MFWD 170	6,350	200	8	0.042	0.68	1.25	0.12	0.17	2.24	0.15	1.14	3.54
Spray (Band)	50' Fold	MFWD 170	8,820	200	8	0.033	0.54	1.00	0.13	0.14	1.83	0.17	0.91	2.92
Spray (Band)	53' Fold	MFWD 170	5,800	200	8	0.031	0.51	0.94	0.08	0.13	1.68	0.10	0.86	2.65
Spray (Band)	60' Fold	MFWD 170	11,100	200	8	0.028	0.45	0.83	0.14	0.11	1.56	0.17	0.76	2.50
Spray (Bcast/HB)	13' Rigid	MFWD 150	4,860	200	8	0.130	2.09	3.41	0.29	0.49	6.31	0.36	3.03	9.71
Spray (Bcast/HB)	20' Rigid	MFWD 150	5,570	200	8	0.084	1.36	2.22	0.22	0.32	4.12	0.27	1.97	6.37
Spray (Bcast/HB)	27' Fold	MFWD 170	9,640	200	8	0.062	1.01	1.86	0.28	0.26	3.42	0.34	1.69	5.46
Spray (Bcast/HB)	27' Rigid	MFWD 170	6,410	200	8	0.062	1.01	1.86	0.18	0.26	3.32	0.23	1.69	5.25
Spray (Bcast/HB)	30' Fold	MFWD 170	13,300	200	8	0.056	0.90	1.67	0.35	0.23	3.17	0.43	1.52	5.13
Spray (Bcast/HB)	40' Fold	MFWD 170	13,500	200	8	0.042	0.68	1.25	0.26	0.17	2.38	0.32	1.14	3.85
Spray (Bcast/HB/HD)	27'	MFWD 170	20,500	200	8	0.062	1.01	1.86	0.60	0.26	3.74	0.73	1.69	6.17
Spray (Bcast/HB/HD)	40'	MFWD 170	24,400	200	8	0.042	0.68	1.25	0.48	0.17	2.60	0.59	1.14	4.33
Spray (Broadcast)	27'	MFWD 170	5,110	200	8	0.062	1.01	1.86	0.15	0.26	3.29	0.18	1.69	5.16
Spray (Broadcast)	40'	MFWD 170	6,350	200	8	0.042	0.68	1.25	0.12	0.17	2.24	0.15	1.14	3.54
Spray (Broadcast)	50'	MFWD 170	8,820	200	8	0.033	0.54	1.00	0.13	0.14	1.83	0.17	0.91	2.92
Spray (Broadcast)	53'	MFWD 170	5,800	200	8	0.031	0.51	0.94	0.08	0.13	1.68	0.10	0.86	2.65
Spray (Broadcast)	60'	MFWD 170	11,100	200	8	0.028	0.45	0.83	0.14	0.11	1.56	0.17	0.76	2.50
Spray (Direct/Hood)	8R-30	MFWD 170	14,700	200	8	0.084	1.36	2.51	0.58	0.35	4.82	0.71	2.28	7.82
Spray (Direct/Hood)	8R-38	MFWD 170	16,000	200	8	0.066	1.07	1.99	0.50	0.28	3.85	0.61	1.80	6.27
Spray (Direct/Hood)	12R-30	MFWD 170	18,700	200	8	0.056	0.90	1.67	0.49	0.23	3.32	0.60	1.52	5.44
Spray (Direct/Hood)	12R-38	MFWD 170	19,200	200	8	0.044	0.71	1.32	0.40	0.18	2.63	0.49	1.20	4.32
Spray (Direct/Layby)	8R-30	MFWD 170	10,500	200	8	0.084	1.36	2.51	0.41	0.35	4.65	0.50	2.28	7.44
Spray (Direct/Layby)	8R-38	MFWD 170	11,300	200	8	0.066	1.07	1.99	0.35	0.28	3.70	0.43	1.80	5.94
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	16,700	200	8	0.044	0.71	1.32	0.34	0.18	2.57	0.42	1.20	4.20
Spray (Direct/Layby)	10R-30	MFWD 170	12,200	200	8	0.067	1.09	2.01	0.38	0.28	3.77	0.47	1.82	6.07
Spray (Direct/Layby)	12R-30	MFWD 170	14,700	200	8	0.056	0.90	1.67	0.38	0.23	3.21	0.47	1.52	5.21
Spray (Direct/Layby)	12R-38	MFWD 170	16,700	200	8	0.044	0.71	1.32	0.34	0.18	2.57	0.42	1.20	4.20
Spray (Direct/Layby)	16R-20	MFWD 170	9,840	200	8	0.063	1.02	1.88	0.29	0.26	3.46	0.35	1.71	5.53
Spray (Levee Leaper)	50'	MFWD 225	11,600	200	8	0.033	0.54	1.33	0.18	0.20	2.26	0.22	1.29	3.78
Spray (Pull Type)	60'	MFWD 225	26,900	200	8	0.028	0.45	1.11	0.35	0.16	2.08	0.43	1.07	3.60
Spray (Pull Type)	80'	MFWD 225	36,800	200	8	0.021	0.34	0.83	0.36	0.12	1.66	0.44	0.80	2.91
Spray (Pull Type)	90'	2WD 50	35,500	200	8	0.018	0.30	0.16	0.31	0.01	0.79	0.38	0.09	1.27
Spray (Pull Type)	100'	MFWD 225	36,800	200	8	0.016	0.27	0.66	0.29	0.10	1.33	0.35	0.64	2.33
Spray (Pull Type)	120'	MFWD 225	50,700	200	8	0.014	0.22	0.55	0.33	0.08	1.20	0.41	0.53	2.15
Spray (Ropewick)	20'	MFWD 190	2,450	200	8	0.084	1.36	2.81	0.09	0.37	4.65	0.11	2.41	7.19
Spray (Spot)	27'	MFWD 170	5,110	200	8	0.062	1.01	1.86	0.15	0.26	3.29	0.18	1.69	5.16
Spray (Spot)	40'	MFWD 170	6,350	200	8	0.042	0.68	1.25	0.12	0.17	2.24	0.15	1.14	3.54
Spray (Spot)	50'	MFWD 170	8,820	200	8	0.033	0.54	1.00	0.13	0.14	1.83	0.17	0.91	2.92
Spray (Spot)	53'	MFWD 170	5,800	200	8	0.031	0.51	0.94	0.08	0.13	1.68	0.10	0.86	2.65
Spray (Spot)	60'	MFWD 225	11,100	200	8	0.028	0.45	1.11	0.14	0.16	1.88	0.17	1.07	3.13
Stalk Shredder	14'	MFWD 150	12,400	200	10	0.117	1.36	3.09	1.27	0.44	6.18	0.78	2.75	9.72</td

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2012 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---		Total	--Fixed--	Total	
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	Cost
			dollars	hours	years	hr/ac			\$/acre-----					
Stalk Shredder-Flail	15'	MFWD 150	18,700	200	10	0.110	1.27	2.88	1.79	0.41	6.38	1.10	2.56	10.05
Stalk Shredder-Flail	18'	MFWD 150	23,100	200	10	0.091	1.06	2.40	1.85	0.34	5.67	1.13	2.13	8.94
Stalk Shredder-Flail	20'	MFWD 150	24,100	200	10	0.082	0.95	2.16	1.73	0.31	5.17	1.06	1.92	8.17
Stalk Shredder-Flail	25'	MFWD 150	31,400	200	10	0.066	0.76	1.73	1.81	0.25	4.56	1.11	1.54	7.21
Strip Till	12R-30	MFWD 225	28,600	150	10	0.061	0.71	2.42	0.76	0.36	4.27	1.26	2.35	7.88
Subsoiler	3 shank	MFWD 190	3,250	100	15	0.204	2.37	6.79	0.22	0.91	10.29	0.56	5.84	16.70
Subsoiler	4 shank	MFWD 225	7,340	100	15	0.153	1.78	6.04	0.37	0.91	9.12	0.95	5.86	15.94
Subsoiler	5 shank	MFWD 225	7,070	100	15	0.122	1.41	4.81	0.28	0.73	7.25	0.72	4.67	12.65
Subsoiler low-till	4 shank	MFWD 225	1,060	100	15	0.153	1.78	6.04	0.05	0.91	8.80	0.13	5.86	14.80
Subsoiler low-till	6 shank	MFWD 225	15,100	100	15	0.102	1.18	4.02	0.51	0.60	6.33	1.30	3.90	11.53
Subsoiler low-till	8 shank	MFWD 225	19,250	100	15	0.076	0.88	3.01	0.49	0.45	4.84	1.24	2.92	9.01

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, 2012

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Enable 2F	oz	1.90
Crop Oil Conc.(Pet.)	pt	1.55	Folicur 3.6	oz	1.08
Crop Oil Conc.(Veg.)	pt	3.36	Gem 25 WG	oz	3.70
Drift/Defoamer	pt	5.75	Headline EC	oz	2.66
Spreader Sticker	pt	3.78	Manzate 75 DF	lb	3.49
Surfactant	pt	2.62	Manzate Flowable	pt	4.60
CLEANING			Moncut 70 DF	lb	24.85
Cleaning Peanuts	ton	18.00	Prevail	lb	28.25
CROP CONSULTANT			Provost	oz	2.16
Crop Consultant	acre	5.00	Quadris	oz	2.24
Rice Consultant	acre	7.00	Quadris Ridomil Gold	oz	3.26
CUSTOM FERTILIZE			Quilt	pt	16.88
App Fert by Air	cwt	6.25	Quilt XCEL	pt	22.06
App Fert by Air(Min)	appl	6.25	Ridomil Gold	oz	6.25
Custom Apply Fert	acre	7.00	Ridomil Gold PC GR	lb	2.35
CUSTOM LIME			Rovral 4F	pt	16.88
Lime (Spread)	ton	44.00	Stiletto	oz	0.56
CUSTOM PLANT			Stratego	pt	19.31
Custom Plant	acre	7.00	Terrachlor 2EC	pt	1.87
Custom Plant Air	cwt	6.25	Tilt 3.6 EC	oz	1.25
CUSTOM SPRAY			Tilt/ Bravo SE	oz	0.30
App by Air (2 gal)	appl	3.75	Uniform	oz	3.07
App by Air (3 gal)	appl	4.50	Vitavax RTU-Thiram	oz	0.35
App by Air (5 gal)	appl	5.75	GINNING		
App by Air (10 gal)	appl	7.75	Gin & Haul	lb	0.09
Custom Spray	acre	6.50	GROWTH REGULATORS		
DRYING			Early Harvest PGR	oz	1.55
Dry Corn	bu	0.19	Mepex	oz	0.08
Dry Grain Sorghum	cwt	0.25	Mepex Gin Out	oz	0.14
Dry Peanuts	ton	24.00	Mepiquat	oz	0.08
Dry Rice	bu	0.40	Mepiquat Extra	oz	0.09
ERADICATION FEE			Pentia	pt	4.44
Eradication	acre	1.50	Stance	oz	1.15
FERTILIZERS			SuperBoll	pt	3.00
Amm Nitrate (34% N)	cwt	20.58	HARVEST AIDS		
Amm Sulfate (21% N)	cwt	18.90	Adios	oz	1.29
Amm Sulfate dry/mix	lb	0.28	Aim 2EC	oz	6.70
Boron 15G	lb	0.40	Ammonium Sulfate	lb	0.28
Boron Plus	pt	4.00	Boll Buster	pt	3.27
DAP	cwt	32.46	CottonQuik	pt	4.25
Fert 10-34-0	cwt	29.25	Def 6	pt	7.34
Fert 11-37-0	cwt	30.25	Def/Folex	pt	7.92
Fert 30-0-0-5	cwt	18.32	Defol 3	gal	3.00
Fert 33-0-0-12s	cwt	21.50	Defol 5	gal	5.95
Fert 41-0-0-4	cwt	21.88	Defol 750	pt	1.24
Lime	ton	34.00	Dropp SC	oz	1.74
MAP	cwt	33.33	ET	pt	46.88
Phosphorus(46% P2O5)	cwt	28.65	Ethephon 6E	pt	3.55
Potash (60% K2O)	cwt	29.19	Finish 6	pt	7.29
Sulfur 90%	lb	0.30	First Pick	pt	3.12
Sulfur Plus	pt	2.37	Folex 6EC	pt	8.49
SuperMax AMS	pt	2.47	Freefall SC	oz	1.41
UAN (32% N)	cwt	18.54	Ginstar EC	pt	27.36
UAN + Sulfur (28%)	cwt	18.54	Gramoxone Inteon	oz	0.30
Urea, Solid (46% N)	cwt	22.29	Prep	pt	3.00
Zinc Plus	pt	2.62	Shed-a-leaf	gal	3.60
Zinc Sulfate 31%	lb	0.55	Sodium Chlorate 3L	gal	3.00
FUNGICIDES			Sodium Chlorate 5L	gal	5.95
Abound	pt	31.25	HAULING		
Absolute 500SC	pt	53.42	TDZ SC	oz	1.37
Allegiance Flowable	pt	50.63	Thidiazuron 4lb	oz	1.41
Apron Maxx RTA	oz	0.83	Tribufos 6lb	pt	7.92
Apron Maxx RTA+Moly	pt	14.84	Haul Corn/Bin	bu	0.16
Apron XL LS	oz	8.51	Haul Corn/Field	bu	0.24
Artisan	oz	0.85	Haul Cotton	lb	0.02
Bravo Ultrex	lb	6.83	Haul Peanuts	ton	14.50
Bravo Weather Stick	pt	3.72	Haul Rice/Bin	bu	0.32
Captan 50 WP	lb	5.05	Haul Rice/Field	bu	0.26
Cotton Seed Trt.	acre	20.00	Haul Sorghum/Bin	bu	0.16
Dithane F-45	qt	8.13			(continued)
Dithane Rainshield	lb	2.25			

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2012(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Haul Sorghum/Field	bu	0.24	Fusilade DX	oz	1.13
Haul Soybeans/Bin	bu	0.16	Fusion	pt	24.31
Haul Soybeans/Field	bu	0.24	Glyfos	pt	1.66
Haul Wheat/Bin	bu	0.16	Glyfos Xtra	pt	1.56
Haul Wheat/Field	bu	0.24	Glyphosate 3lbs a.e.	pt	1.75
HERBICIDES			Glyphosate 3lbs a.e.	oz	0.11
2,4-D Amine 4	pt	2.01	Glystar	pt	1.66
2,4-D LV 4Ester	pt	2.31	Glystar Plus	pt	1.56
2,4-D Weedar 64	pt	1.99	Goal 2XL	pt	9.31
2,4-DB 200	pt	4.34	Gramoxone Inteon	oz	0.25
AAtrex 4L	pt	2.12	Grandstand R	qt	24.63
AAtrex NINE-O	lb	4.60	Guardsman Max	pt	6.66
Accent Q	oz	28.05	Halex GT	pt	5.00
Accent SP	oz	36.25	Harmony Extra SG	oz	12.50
Aim 2EC	oz	10.38	Harmony Extra XP	oz	14.40
Assure II	oz	0.84	Harmony GT	oz	19.35
Atrazine 4L	pt	2.04	Harness	pt	11.88
Atrazine 90DF	lb	4.25	Harness XTRA	pt	7.31
Axial	pt	14.94	Hoelon 3EC	pt	11.03
Axiom 68DF	lb	26.95	Hornet WDG	lb	65.62
Banvel	pt	4.94	Ignite 280	oz	0.40
Basagran	pt	11.69	Impact	oz	18.25
Basis	oz	17.50	Karmex XP	lb	6.50
Beacon 75% WSP	oz	34.87	Lariat	qt	5.71
Beyond	oz	4.20	Layby Pro	qt	12.75
Bicep II Magnum	qt	11.01	Lexar	pt	5.72
Bicep Lite Magnum	pt	7.07	Lightning	oz	14.25
Blazer Ultra	pt	8.94	Linex 4L	pt	8.87
Bolero 8EC	pt	6.50	Londax 60DF	oz	14.50
Boundary 6.5 EC	pt	8.72	Lorox 50DF	lb	18.83
Buccaneer Plus	pt	1.81	Makaze	pt	1.50
Buctril 4EC	pt	17.06	MSMA 6.6	pt	2.69
Bullet	pt	2.97	MSMA6 Plus	pt	2.81
Butoxone	pt	4.12	Newpath 2SL	oz	3.29
Butyrac 200 (2,4-DB)	pt	3.84	Option	oz	9.95
Cadre	oz	3.16	Ordram 15-GM	lb	1.34
Callisto 4SC	oz	4.77	Osprey	oz	3.05
Canopy 75%	oz	3.13	Outlook	pt	20.63
Canopy EX	oz	6.50	Parrlay	pt	8.13
Caparol 4L	pt	3.59	Peak Accu Pak	oz	13.75
Celebrity Plus	lb	84.50	Permit 75 DF	oz	17.88
Clarity	pt	10.31	Poast 1.53	pt	10.22
Classic	oz	15.28	Poast Plus	pt	7.84
Clearpath	lb	50.00	Prefix	pt	6.14
Clincher SF	oz	1.97	Propimax EC	pt	
Cobra 2EC	oz	1.30	Prowl 3.3 EC	pt	4.29
Command 3ME	pt	14.75	Prowl H2O	pt	5.13
Cornerstone Plus	pt	1.50	Pursuit 2S	oz	4.73
Cotoran 4L	pt	4.69	Python WDG	oz	12.44
Cotton Pro	pt	3.44	Raptor	oz	4.62
Credit Extra	pt	1.69	Reflex 2LC	pt	15.44
Direx 4L	pt	3.00	Regiment 80WP	oz	36.63
Diuron 4L	pt	3.28	Remedy Ultra	pt	11.86
Diuron 80 DF	lb	5.25	Resolve SG	oz	7.20
Diuron 80%	lb	5.25	Resource .86EC	pt	24.30
Dual II Magnum	pt	12.25	Ricebeaux	pt	5.04
Dual Magnum	pt	12.25	RicePro	pt	4.94
Duet	pt	4.45	Riceshot	pt	3.34
Envoke	oz	83.08	Ricestar HT	pt	20.59
Equip	oz	10.65	Rifel	pt	4.38
Evik DF 80W	lb	9.75	Roundup Power Max	oz	0.14
Exceed	oz	10.71	Roundup PowerMax	pt	2.28
Expert	pt	3.69	Roundup WeatherMax	oz	0.21
Facet 75DF	lb	45.50	Roundup WeatherMax	pt	3.28
Finesse	oz	14.75	Salvo	pt	3.56
First Rate	oz	38.60	Scepter 70 DG	oz	3.91
Flexstar HL	pt	15.63	Select Max	pt	11.80
Fluometuron 4lb	pt	4.50	Sequence	pt	5.53
Frontier 6.0	oz	0.63			(continued)
Fultime	pt	4.56			

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2012 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE		
dollars					dollars		
Simazine 4L	pt	3.14	Imidan 70 WSB	oz	0.66		
Stalwart	pt	6.25	Incidental Pest Trt	acre	12.00		
Stam 80 EDF	lb	6.25	Intrepid 2F	oz	1.79		
Stam M4	qt	6.69	Intruder 70WSP	oz	9.03		
Staple LX	oz	7.35	Karate Z	oz	2.73		
Steadfast	oz	23.95	Kelthane MF 4EC	pt	5.03		
Sterling Blue	pt	9.81	Lannate LV	pt	9.56		
Storm	pt	11.56	Lannate SP	oz	1.68		
Strada WG	oz	6.30	Larvin 3.2	oz	0.60		
Strongarm	oz	47.50	Leverage 2.7	oz	1.33		
Superwham	qt	8.26	Lorsban 15G	lb	1.85		
Suprend	lb	11.50	Lorsban 4E	pt	5.00		
Surpass EC	qt	23.00	Malathion 5E	pt	4.44		
Synchrony XP	oz	9.98	Malathion 8E	pt	5.50		
Touchdown Total	qt	4.25	Methyl Parathion 4	pt	5.44		
Treflan HFP	pt	3.12	Monitor 4	pt	16.33		
Treflan TR-10	lb	0.92	Mustang Max	oz	1.43		
Trifluralin 4EC	pt	3.19	Oberon 4 SC	pt	71.22		
Ultra Blazer	pt	10.23	Orthene 90S	lb	3.25		
Valor SX	oz	4.58	PennCap-M	pt	4.59		
Valor XLT	oz	3.73	Phorate	lb	2.69		
Whip 360	pt	25.08	Pounce 25WP	lb	10.63		
Zorial Rapid 80DF	lb	13.95	Prolex	oz	2.62		
INOCULANT			Provado 1.6F	oz	1.94		
Nitrapstick S	lbseed	0.02	Respect .8EC	pt	29.04		
Optimize LIFT	oz	0.58	Sevin 4F	pt	5.22		
INSECT SCOUTING			Sevin 80S	lb	7.35		
Insect Scouting	acre	7.00	Sevin XLR Plus	qt	11.13		
INSECTICIDES			Sniper	oz	0.70		
Acephate 90%	lb	6.63	Steward	pt	28.13		
Acephate 90SP	lb	6.63	Temik 15G Grit	lb	4.00		
Acramite-4SC	oz	1.37	Temik 15G Gypsum	lb	3.90		
Ambush 2E	oz	0.27	Thimet 20-G Lock N L	lb	3.10		
Asana .66 XL	oz	0.71	Thionex 3 EC	pt	3.47		
Aztec 2.1% G	lb	2.65	Thionex 50W	lb	8.20		
Baythroid XL	oz	2.19	Tombstone Helios	pt	36.30		
Bidrin 8WM	oz	0.91	Tracer 4SC	oz	8.20		
Bidrin XP	oz	0.78	Trimax Pro	oz	2.30		
Bifenture 2EC	pt	12.50	Tundra	oz	0.80		
Brigade EC	pt	12.50	Vydate C-LV	oz	0.70		
Brigade WSB	lb	21.00	Warrior Z	oz	1.80		
Capture 2EC	oz	1.76	Wrangler	oz	1.70		
Capture LFR	oz	1.80	Zeal	oz	14.50		
Carbaryl 4L	pt	4.34	Zephyr	oz	2.20		
Carbine 50WG	oz	5.11	IRRIGATION SUPPLIES				
Centric 40WG	oz	3.58	Roll-Out Pipe	ft	0.20		
Comite 11	pt	6.00	SEED/PLANTS				
Confirm 2F	oz	1.68	Corn Seed BtRR	thous	2.93		
Counter 15G	lb	2.50	Corn Seed RR2	thous	2.78		
Cruiser 5FS	oz	13.25	Corn Seed VT3	thous	2.97		
Curacron 8E	pt	10.78	Corn Seed VT3Pro	thous	3.23		
Cypermethrin	oz	0.47	Cotton Seed B2RF	thous	0.62		
Delta Gold	pt	40.47	Cotton Seed LL	thous	1.05		
Denim 0.16 EC	pt	27.19	Cotton Seed LLB2	thous	1.10		
Di-Syston 15G	lb	3.48	Cotton Seed RF	thous	0.57		
Di-Syston 8	pt	14.32	Cotton Seed W	thous	0.49		
Diamond .83EC	pt	16.74	Cotton Seed WRF	thous	0.63		
Dimethoate 4E	pt	5.50	Peanut Seed	lb	1.25		
Dimilin 2L	oz	1.76	Rice Clearfield	lb	0.94		
Dipel DF	lb	12.25	Rice Clearfield Hyb	lb	5.70		
Dipel ES	pt	4.56	Rice Conv. Hybrid	lb	1.00		
Discipline 2 EC	oz	0.78	Rice Seed (Levees)	lb	0.45		
Endigo ZC	pt	26.25	Rice Seed CF(Levees)	lb	0.94		
Fanfare 2EC	oz	0.78	Rice Seed CFH(Levee)	lb	5.70		
Force 3G	lb	4.85	Rice Seed Conv.	lb	0.45		
Furadan 4F	pt	9.81	Sorghum Concept	lb	1.82		
Furadan 4FLFR	pt	9.70	Soybean Seed LL	lb	0.99		
Gaucho 600	oz	5.75	Soybean Seed RR2	lb	0.98		
Hero	pt	21.88	Wheat Seed Private	lb	0.32		
Holster	pt	0.80	(continued)				

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2012 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
SURVEY & MARK LEVEES			LLB2 Cot Tech Fee	thous	0.76
Survey & Mark Levees acre	acre	4.50	RF Cot Tech Fee	thous	1.04
Survey & Mark Levees acre	acre	4.50	RF Cot Tech Fee	cap/ac	48.25
TECHNOLOGY FEE			WRF Cot Tech Fee	thous	1.45
B2 Cot Tech Fee	thous	0.76	WS Cot Tech Fee	thous	0.41
B2 Cot Tech Fee	cap/ac	35.25	WS Cotton Tech Fee	cap/ac	24.00
B2RF Cot Tech Fee	thous	1.49			
B2RF Cot Tech Fee	cap/ac	69.25			

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2012

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	3.40
Gasoline	gal	3.50
LP Gas	gal	2.60
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, 2012

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	11.60
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, 2012

	Unit	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '12	5.93	-0.2894	5.64	2.09	5.64
Cotton Lint	lb	Dec '12	0.939	-0.0263	0.913	.524	0.913
Cottonseed	lb						0.076 ^f
Grain Sorghum	bu				5.36	6.31	5.36
Peanuts	ton				750.00	355.00	750.00
Soybeans	bu	Nov '12	12.17	-0.3120	11.86	5.20	11.86
Rice	bu	Sep '12	7.47	-0.8030	6.67	2.96	6.67
Wheat	bu	Jul '12	6.99	-0.7008	6.29	2.29	6.29

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

^b The basis is computed by subtracting the 2001-2011 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 2011 crop year for soybeans, corn, grain sorghum, and wheat. 2011 Mississippi base loan rate for the Delta area for cotton. 2011 Mississippi loan rate for long grain rice. 2011 national average loan rate for peanuts.

^e Price used in the 2012 MAFES Planning Budgets.

^f Cottonseed price is the marketing year average price averaged over the years 2006-2010, 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, 2012

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'		1.26	0.25	0.44		0.08	2.03	1.30	3.33
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.21	0.05	0.11		0.01	0.38	0.19	0.57
Roll-Out Pipe	ft	6.60					0.09	6.69		6.69
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.28	0.06	0.37		0.01	0.72	0.50	1.22
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		0.43	0.10	0.56			1.09	0.75	1.84
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								5.16	5.16
Engine, RPF, ESB	each								7.27	7.27
1st June Irrigation	ac-in		8.31	1.11			0.13	9.55		9.55
2nd June Irrigation	ac-in		8.31	1.11			0.13	9.55		9.55
July Irrigation	ac-in		8.31	1.11			0.10	9.52		9.52
TOTALS		6.60	27.11	6.23	4.21	0.00	0.61	44.76	50.93	95.69

Note: Cost of production estimates are based on 2011 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, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Set Up Engine									
IRRIGATE LABOR	hour				0.45		0.01	0.46	0.46
Build Outside Levee									
Levee Pull (1m/80a)	8 blade		0.48	0.09	0.19		0.01	0.77	0.55
Survey & Mark Levees	acre	2.25					0.04	2.29	2.29
Build Inside Levees									
Levee Pull (1m/80a)	8 blade		0.64	0.12	0.25		0.02	1.03	0.74
Butt Levees									
Blade-Box	6'-7'		0.46	0.07	0.23		0.01	0.77	0.38
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	8 blade		0.44	0.08	0.19		0.01	0.72	0.48
Build Inside Levees									
Levee Pull (1m/80a)	8 blade		0.64	0.12	0.25		0.01	1.02	0.74
Butt Levees									
Blade-Box	6'-7'		0.46	0.07	0.23		0.01	0.77	0.38
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	8 blade		0.44	0.08	0.19		0.01	0.72	0.48
Build Inside Levees									
Levee Pull (1m/80a)	8 blade		0.64	0.12	0.25		0.01	1.02	0.74
Butt Levees									
Blade-Box	6'-7'		0.46	0.07	0.23		0.01	0.77	0.38
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	8 blade		0.44	0.08	0.19		0.01	0.72	0.48
Tear Down Levees									
Levee Splitter (1/80	8 blade		0.33	0.06	0.14			0.53	0.36
Land Forming (\$75)	each								7.09
Well & Pump, Flood	each				4.88		0.09	4.97	14.78
Engine, CF, 75	each								19.75
June Irrigation	ac-in	12.46	2.22			0.26		14.94	14.94
July Irrigation	ac-in	12.46	2.22			0.21		14.89	14.89
August Irrigation	ac-in	12.46	2.22			0.16		14.84	14.84
TOTALS		2.25	42.81	12.50	5.16	0.00	0.91	63.63	42.13
									105.76

Note: Cost of production estimates are based on 2011 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, 2012

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			6.69			0.12	6.81	27.42	34.23
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	16.73	0.62			0.31	17.66		17.66	
July Irr. 4app@.75"	ac-in	22.31	0.83			0.33	23.47		23.47	
Aug Irr. 3app@.75"	ac-in	16.73	0.62			0.18	17.53		17.53	
TOTALS		0.00	55.77	9.71	0.47	0.00	0.97	66.92	34.85	101.77

Note: Cost of production estimates are based on 2011 input prices.

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