SOYBEANS
2011
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2010-11

December 2010

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 2011 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses**."

Acknowledgments

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

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

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

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Table of Contents

2011 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 2010. (Appendix Tables 1, 2, and 3).

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

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

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

Estimates of Direct Costs

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

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

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

where:

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

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

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

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

Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

$$CRCPA = CRCPH \times PR$$

where:

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

Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2010 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, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	5.50	3.5000	19.25	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.25	8.0000	2.00	_____
Sodium Chlorate 3L	gal	3.35	0.5000	1.68	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	22.00	0.2800	6.16	_____
Potash (60% K2O)	cwt	23.00	0.4000	9.20	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.74	2.5000	1.85	_____
Headline	oz	2.60	3.0000	7.80	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	1.75	6.0000	10.50	_____
2,4-D Amine 4	pt	1.74	2.0000	3.48	_____
Valor SX	oz	4.72	2.0000	9.44	_____
Dual Magnum	pt	12.64	1.0000	12.64	_____
INSECTICIDES					
Gaucho 600	oz	6.56	1.0000	6.56	_____
Karate Z	oz	2.87	0.9600	2.76	_____
Acephate 90SP	lb	6.46	0.7500	4.85	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.99	50.0000	49.50	_____
ADJUVANTS					
Surfactant	pt	2.44	0.1000	0.24	_____
HAULING					
Haul Soybeans/Field	bu	0.26	42.0000	10.92	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.2000	9.20	_____
INOCULANT					
Nitragin S	oz	0.27	2.7500	0.74	_____
OPERATOR LABOR					
Tractors	hour	11.35	0.3524	4.00	_____
Harvesters	hour	11.35	0.1021	1.16	_____
HAND LABOR					
Implements	hour	9.06	0.1393	1.26	_____
UNALLOCATED LABOR	hour	11.36	0.4091	4.65	_____
DIESEL FUEL					
Tractors	gal	2.39	3.4472	8.23	_____
Harvesters	gal	2.39	1.3935	3.33	_____
REPAIR & MAINTENANCE					
Implements	acre	3.57	1.0000	3.57	_____
Tractors	acre	1.41	1.0000	1.41	_____
Harvesters	acre	2.46	1.0000	2.46	_____
INTEREST ON OP. CAP.	acre	4.39	1.0000	4.39	_____

TOTAL DIRECT EXPENSES				203.23	_____
FIXED EXPENSES					
Implements	acre	7.66	1.0000	7.66	_____
Tractors	acre	9.13	1.0000	9.13	_____
Harvesters	acre	9.99	1.0000	9.99	_____

TOTAL FIXED EXPENSES				26.78	_____

TOTAL SPECIFIED EXPENSES				230.01	_____

Note: Cost of production estimates are based on 2010 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, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.00	42.0000	462.00	_____
TOTAL INCOME				462.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.25	1.0000	19.25	_____
HARVEST AIDS	acre	3.68	1.0000	3.68	_____
FERTILIZERS	acre	15.36	1.0000	15.36	_____
FUNGICIDES	acre	9.65	1.0000	9.65	_____
HERBICIDES	acre	36.06	1.0000	36.06	_____
INSECTICIDES	acre	14.17	1.0000	14.17	_____
SEED/PLANTS	acre	49.50	1.0000	49.50	_____
ADJUVANTS	acre	0.24	1.0000	0.24	_____
HAULING	acre	10.92	1.0000	10.92	_____
CUSTOM LIME	acre	9.20	1.0000	9.20	_____
INOCULANT	acre	0.74	1.0000	0.74	_____
HAND LABOR	hour	9.06	0.1393	1.26	_____
OPERATOR LABOR	hour	11.35	0.4546	5.16	_____
UNALLOCATED LABOR	hour	11.36	0.4091	4.65	_____
DIESEL FUEL	gal	2.39	4.8408	11.56	_____
REPAIR & MAINTENANCE	acre	7.44	1.0000	7.44	_____
INTEREST ON OP. CAP.	acre	4.39	1.0000	4.39	_____
TOTAL DIRECT EXPENSES				203.23	_____
RETURNS ABOVE DIRECT EXPENSES				258.77	_____
TOTAL FIXED EXPENSES				26.78	_____
TOTAL SPECIFIED EXPENSES				230.01	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				231.99	_____

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Subsoiler	3 shank	MFWD 190	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.20	Oct	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Oct		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.2800				
Potash (60% K2O)	cwt					0.4000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e.	pt					2.0000				
2,4-D Amine 4	pt					2.0000				
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 RR	lb					50.0000				
Apron Maxx RTA	oz					2.5000				
Nitragin S	oz					2.7500				
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				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Headline	oz					3.0000				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					0.9600				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			0.50	Aug	0.5000				
Gramoxone Inteon	oz					8.0000				
Sodium Chlorate 3L	gal					0.5000				
Surfactant	pt					0.1000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					42.0000				
TOTALS							0.45	0.45	0.59	0.40

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Subsoiler	3 shank		0.96	0.21	0.88		0.09	2.14	1.18	3.32
Lime (Spread)	ton	9.20					0.40	9.60		9.60
Spin Spreader	5 ton		0.39	0.17	0.51		0.05	1.12	0.65	1.77
Phosphorus(46% P2O5)	cwt	6.16					0.27	6.43		6.43
Potash (60% K2O)	cwt	9.20					0.40	9.60		9.60
Disk Harrow	24'		1.91	1.08	1.77		0.21	4.97	3.77	8.74
Field Cultivate Fld	24'		1.45	0.62	1.35		0.15	3.57	3.22	6.79
App by Air (5 gal)	appl	5.50					0.16	5.66		5.66
Glyphosate 3lbs a.e.	pt	3.50					0.10	3.60		3.60
2,4-D Amine 4	pt	3.48					0.10	3.58		3.58
Valor SX	oz	9.44					0.27	9.71		9.71
Plant - Rigid	12R-20		2.20	1.72	2.88		0.15	6.95	5.10	12.05
Soybean Seed RR	lb	49.50					1.07	50.57		50.57
Apron Maxx RTA	oz	1.85					0.04	1.89		1.89
Nitragin S	oz	0.74					0.02	0.76		0.76
Gaucho 600	oz	6.56					0.14	6.70		6.70
Spray (Broadcast)	60'		0.66	0.24	0.74		0.03	1.67	0.89	2.56
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
Dual Magnum	pt	12.64					0.23	12.87		12.87
Spray (Broadcast)	60'		0.66	0.24	0.74		0.03	1.67	0.89	2.56
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
App by Air (5 gal)	appl	2.75					0.03	2.78		2.78
Headline	oz	7.80					0.08	7.88		7.88
App by Air (5 gal)	appl	2.75					0.03	2.78		2.78
Karate Z	oz	2.76					0.03	2.79		2.79
App by Air (5 gal)	appl	5.50					0.04	5.54		5.54
Acephate 90SP	lb	4.85					0.04	4.89		4.89
App by Air (5 gal)	appl	2.75					0.02	2.77		2.77
Gramoxone Inteon	oz	2.00					0.01	2.01		2.01
Sodium Chlorate 3L	gal	1.68					0.01	1.69		1.69
Surfactant	pt	0.24						0.24		0.24
Header -Soybean	25' Flex		3.33	3.16	2.20		0.03	8.72	11.08	19.80
Haul Soybeans/Field	bu	10.92					0.04	10.96		10.96
TOTALS		168.77	11.56	7.44	11.07	0.00	4.39	203.23	26.78	230.01

Note: Cost of production estimates are based on 2010 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, 2011

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	462.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	5.50	0.00	0.00	0.00	0.00	5.50	8.25	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.00
FERTILIZERS	15.36	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	1.85	0.00	0.00	7.80	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	16.42	0.00	0.00	19.64	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.56	0.00	0.00	2.76	4.85	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	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	10.92
CUSTOM LIME	9.20	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	0.74	0.00	0.00	0.00	0.00	0.00
LABOR	4.51	0.00	0.00	0.00	0.00	0.00	2.88	1.48	0.00	0.00	0.00	2.20
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.71	0.00	0.00	0.00	0.00	0.00	2.20	1.32	0.00	0.00	0.00	3.33
REPAIR & MAINTENANCE	2.08	0.00	0.00	0.00	0.00	0.00	1.72	0.48	0.00	0.00	0.00	3.16
INTEREST ON OP. CAP.	1.57	0.00	0.00	0.00	0.63	0.00	1.42	0.41	0.00	0.17	0.12	0.07
TOTAL DIRECT EXPENSES	37.43	0.00	0.00	0.00	22.55	0.00	66.87	23.33	0.00	16.23	17.14	19.68
NET INCOME	-37.43	0.00	0.00	0.00	-22.55	0.00	-66.87	-23.33	0.00	-16.23	-17.14	442.32
NET INCOME TO DATE	-37.43	-37.43	-37.43	-37.43	-59.98	-59.98	-126.85	-150.18	-150.18	-166.41	-183.55	258.77

Note: Cost of production estimates are based on 2010 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, 2011

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.25	8.80	9.35	9.90	10.45	11.00	11.55	12.10	12.65	13.20	13.75
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-24	-12	-1	10	21	33	44	56	67	79	91
			-51	-39	-28	-16	-5	6	18	29	41	52	64
60	25.20	bu	9	22	36	50	64	78	92	106	119	133	147
			-17	-3	9	23	37	51	65	79	93	107	120
70	29.40	bu	42	58	74	91	107	123	139	155	171	188	204
			15	31	48	64	80	96	112	129	145	161	177
80	33.60	bu	76	94	113	131	150	168	187	205	224	242	260
			49	67	86	104	123	141	160	178	197	215	234
90	37.80	bu	109	130	151	172	192	213	234	255	276	296	317
			82	103	124	145	166	186	207	228	249	270	290
100	42.00	bu	143	166	189	212	235	258	281	304	328	351	374
			116	139	162	185	208	231	255	278	301	324	347
110	46.20	bu	176	202	227	253	278	303	329	354	380	405	430
			150	175	200	226	251	277	302	327	353	378	404
120	50.40	bu	210	238	265	293	321	348	376	404	432	459	487
			183	211	239	266	294	322	349	377	405	433	460
130	54.60	bu	243	273	303	334	364	394	424	454	484	514	544
			217	247	277	307	337	367	397	427	457	487	517
140	58.80	bu	277	309	342	374	406	439	471	503	536	568	600
			250	283	315	347	380	412	444	477	509	541	574
150	63.00	bu	311	345	380	414	449	484	518	553	588	622	657
			284	318	353	388	422	457	492	526	561	596	630

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 2010 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, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	5.50	3.5000	19.25	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.25	4.0000	1.00	_____
Sodium Chlorate 3L	gal	3.35	0.2500	0.84	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	22.00	0.4000	8.80	_____
Potash (60% K2O)	cwt	23.00	0.6000	13.80	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.74	2.5000	1.85	_____
Quadris	oz	2.52	3.0000	7.56	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	1.75	6.0000	10.50	_____
2,4-D Amine 4	pt	1.74	2.0000	3.48	_____
Valor SX	oz	4.72	2.0000	9.44	_____
Dual Magnum	pt	12.64	1.0000	12.64	_____
INSECTICIDES					
Gaucho 600	oz	6.56	1.0000	6.56	_____
Karate Z	oz	2.87	0.9600	2.76	_____
Acephate 90SP	lb	6.46	0.7500	4.85	_____
Intrepid 2F	oz	1.66	1.0000	1.66	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.20	33.0000	6.60	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.99	50.0000	49.50	_____
ADJUVANTS					
Surfactant	pt	2.44	0.0750	0.18	_____
HAULING					
Haul Soybeans/Field	bu	0.26	65.0000	16.90	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.2000	9.20	_____
INOCULANT					
Nitragin S	oz	0.27	2.7500	0.74	_____
OPERATOR LABOR					
Tractors	hour	11.35	0.5051	5.73	_____
Harvesters	hour	11.35	0.1021	1.16	_____
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	11.36	0.4758	5.41	_____
DIESEL FUEL					
Tractors	gal	2.39	4.8145	11.50	_____
Harvesters	gal	2.39	1.3935	3.33	_____
Roll-Out Pipe Irr.	gal	2.39	7.3316	17.52	_____
REPAIR & MAINTENANCE					
Implements	acre	4.16	1.0000	4.16	_____
Tractors	acre	1.97	1.0000	1.97	_____
Harvesters	acre	2.46	1.0000	2.46	_____
Roll-Out Pipe Irr.	acre	5.16	1.0000	5.16	_____
INTEREST ON OP. CAP.	acre	5.42	1.0000	5.42	_____

TOTAL DIRECT EXPENSES				256.50	_____
FIXED EXPENSES					
Implements	acre	9.76	1.0000	9.76	_____
Tractors	acre	12.71	1.0000	12.71	_____
Harvesters	acre	9.99	1.0000	9.99	_____
Roll-Out Pipe Irr.	acre	46.78	1.0000	46.78	_____

TOTAL FIXED EXPENSES				79.24	_____

TOTAL SPECIFIED EXPENSES				335.74	_____

Note: Cost of production estimates are based on 2010 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, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.00	65.0000	715.00	_____
TOTAL INCOME				715.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.26	1.0000	19.26	_____
HARVEST AIDS	acre	1.84	1.0000	1.84	_____
FERTILIZERS	acre	22.60	1.0000	22.60	_____
FUNGICIDES	acre	9.41	1.0000	9.41	_____
HERBICIDES	acre	36.06	1.0000	36.06	_____
INSECTICIDES	acre	15.83	1.0000	15.83	_____
IRRIGATION SUPPLIES	acre	6.60	1.0000	6.60	_____
SEED/PLANTS	acre	49.50	1.0000	49.50	_____
ADJUVANTS	acre	0.18	1.0000	0.18	_____
HAULING	acre	16.90	1.0000	16.90	_____
CUSTOM LIME	acre	9.20	1.0000	9.20	_____
INOCULANT	acre	0.74	1.0000	0.74	_____
HAND LABOR	hour	9.06	0.1393	1.26	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	11.35	0.6072	6.89	_____
UNALLOCATED LABOR	hour	11.36	0.4758	5.41	_____
DIESEL FUEL	gal	2.39	13.5398	32.35	_____
REPAIR & MAINTENANCE	acre	13.75	1.0000	13.75	_____
INTEREST ON OP. CAP.	acre	5.42	1.0000	5.42	_____
TOTAL DIRECT EXPENSES				256.50	_____
RETURNS ABOVE DIRECT EXPENSES				458.50	_____
TOTAL FIXED EXPENSES				79.24	_____
TOTAL SPECIFIED EXPENSES				335.74	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				379.26	_____

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Subsoiler	3 shank	MFWD 190	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.20	Oct	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Oct		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.4000				
Potash (60% K2O)	cwt					0.6000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bedder Roller Fold.	8R-38	MFWD 190	0.074	1.00	Oct		0.07	0.07	0.07	0.06
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e.	pt					2.0000				
2,4-D Amine 4	pt					2.0000				
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 RR	lb					50.0000				
Apron Maxx RTA	oz					2.5000				
Nitragin S	oz					2.7500				
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				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Quadris	oz					3.0000				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					0.9600				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			0.25	Aug	0.2500				
Intrepid 2F	oz					1.0000				
Surfactant	pt					0.0250				
App by Air (5 gal)	appl			0.25	Aug	0.2500				
Gramoxone Inteon	oz					4.0000				
Sodium Chlorate 3L	gal					0.2500				
Surfactant	pt					0.0500				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					65.0000				
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.60	0.60	1.10	0.47

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Subsoiler	3 shank		0.96	0.21	0.88		0.09	2.14	1.18	3.32
Lime (Spread)	ton	9.20					0.40	9.60		9.60
Spin Spreader	5 ton		0.39	0.17	0.51		0.05	1.12	0.65	1.77
Phosphorus(46% P2O5)	cwt	8.80					0.38	9.18		9.18
Potash (60% K2O)	cwt	13.80					0.60	14.40		14.40
Disk Harrow	24'		1.91	1.08	1.77		0.21	4.97	3.77	8.74
Field Cultivate Fld	24'		1.45	0.62	1.35		0.15	3.57	3.22	6.79
Bedder Roller Fold.	8R-38		1.73	0.73	1.60		0.18	4.24	3.09	7.33
App by Air (5 gal)	appl	5.50					0.16	5.66		5.66
Glyphosate 3lbs a.e.	pt	3.50					0.10	3.60		3.60
2,4-D Amine 4	pt	3.48					0.10	3.58		3.58
Valor SX	oz	9.44					0.27	9.71		9.71
Plant - Rigid	12R-20		2.20	1.72	2.88		0.15	6.95	5.10	12.05
Soybean Seed RR	lb	49.50					1.07	50.57		50.57
Apron Maxx RTA	oz	1.85					0.04	1.89		1.89
Nitragin S	oz	0.74					0.02	0.76		0.76
Gaucho 600	oz	6.56					0.14	6.70		6.70
Spray (Broadcast)	60'		0.66	0.24	0.74		0.03	1.67	0.89	2.56
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
Dual Magnum	pt	12.64					0.23	12.87		12.87
Spray (Broadcast)	60'		0.66	0.24	0.74		0.03	1.67	0.89	2.56
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
App by Air (5 gal)	appl	2.75					0.03	2.78		2.78
Quadris	oz	7.56					0.08	7.64		7.64
App by Air (5 gal)	appl	2.75					0.03	2.78		2.78
Karate Z	oz	2.76					0.03	2.79		2.79
App by Air (5 gal)	appl	5.50					0.04	5.54		5.54
Acephate 90SP	lb	4.85					0.04	4.89		4.89
App by Air (5 gal)	appl	1.38					0.01	1.39		1.39
Intrepid 2F	oz	1.66					0.01	1.67		1.67
Surfactant	pt	0.06						0.06		0.06
App by Air (5 gal)	appl	1.38					0.01	1.39		1.39
Gramoxone Inteon	oz	1.00					0.01	1.01		1.01
Sodium Chlorate 3L	gal	0.84					0.01	0.85		0.85
Surfactant	pt	0.12						0.12		0.12
Header -Soybean	25' Flex		3.33	3.16	2.20		0.03	8.72	11.08	19.80
Haul Soybeans/Field	bu	16.90					0.06	16.96		16.96
Roll-Out Pipe Irr.	acre	6.60	19.06	5.58	4.19		0.51	35.94	49.37	85.31
TOTALS		188.12	32.35	13.75	16.86	0.00	5.42	256.50	79.24	335.74

Note: Cost of production estimates are based on 2010 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, 2011

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	715.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	5.50	0.00	0.00	0.00	0.00	5.50	8.26	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.84	0.00
FERTILIZERS	22.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.85	0.00	0.00	7.56	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	16.42	0.00	0.00	19.64	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.56	0.00	0.00	2.76	6.51	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	49.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	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	16.90
CUSTOM LIME	9.20	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	0.74	0.00	0.00	0.00	0.00	0.00
LABOR	6.54	0.00	0.00	0.00	0.00	0.00	2.88	1.71	2.75	0.23	0.00	2.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	7.33	0.00	0.00	0.00	0.00	0.00	2.20	1.32	12.03	5.84	0.00	3.63
REPAIR & MAINTENANCE	3.04	0.00	0.00	0.00	0.00	0.00	1.72	0.48	4.34	0.92	0.00	3.25
INTEREST ON OP. CAP.	2.13	0.00	0.00	0.00	0.63	0.00	1.42	0.41	0.37	0.24	0.13	0.09
TOTAL DIRECT EXPENSES	50.84	0.00	0.00	0.00	22.55	0.00	66.87	23.56	26.09	23.05	16.92	26.62
NET INCOME	-50.84	0.00	0.00	0.00	-22.55	0.00	-66.87	-23.56	-26.09	-23.05	-16.92	688.38
NET INCOME TO DATE	-50.84	-50.84	-50.84	-50.84	-73.39	-73.39	-140.26	-163.82	-189.91	-212.96	-229.88	458.50

Note: Cost of production estimates are based on 2010 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, 2011

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.25	8.80	9.35	9.90	10.45	11.00	11.55	12.10	12.65	13.20	13.75
PERCENT	YIELD	UNIT	dollars										
50	32.50	bu	20	37	55	73	91	109	127	145	163	180	198
			-59	-41	-23	-5	12	30	48	65	83	101	119
60	39.00	bu	72	93	114	136	157	179	200	222	243	265	286
			-7	14	35	57	78	100	121	142	164	185	207
70	45.50	bu	123	148	174	199	224	249	274	299	324	349	374
			44	69	94	119	144	169	194	219	244	269	294
80	52.00	bu	175	204	233	261	290	318	347	376	404	433	461
			96	125	153	182	211	239	268	296	325	354	382
90	58.50	bu	227	259	292	324	356	388	420	453	485	517	549
			148	180	212	245	277	309	341	373	405	438	470
100	65.00	bu	279	315	351	387	422	458	494	530	565	601	637
			200	236	272	307	343	379	415	450	486	522	558
110	71.50	bu	331	371	410	449	488	528	567	606	646	685	724
			252	291	331	370	409	449	488	527	567	606	645
120	78.00	bu	383	426	469	512	555	598	641	683	726	769	812
			304	347	390	433	475	518	561	604	647	690	733
130	84.50	bu	435	482	528	574	621	667	714	760	807	853	900
			356	402	449	495	542	588	635	681	728	774	821
140	91.00	bu	487	537	587	637	687	737	787	837	887	937	987
			408	458	508	558	608	658	708	758	808	858	908
150	97.50	bu	539	593	646	700	753	807	861	914	968	1022	1075
			460	513	567	621	674	728	781	835	889	942	996

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 2010 input prices.

Table 3.A Estimated costs per acre
Soybeans, May-planted, RR, 12R 20"
Delta Area, Mississippi, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	5.50	2.5000	13.75	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	22.00	0.2800	6.16	_____
Potash (60% K2O)	cwt	23.00	0.4000	9.20	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.74	2.5000	1.85	_____
Quadris	oz	2.52	4.5000	11.34	_____
HERBICIDES					
Dual Magnum	pt	12.64	1.0000	12.64	_____
Glyphosate 3lbs a.e.	pt	1.75	4.0000	7.00	_____
INSECTICIDES					
Gaucho 600	oz	6.56	1.0000	6.56	_____
Karate Z	oz	2.87	1.4400	4.13	_____
Acephate 90SP	lb	6.46	0.7500	4.85	_____
Intrepid 2F	oz	1.66	3.0000	4.98	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.99	50.0000	49.50	_____
ADJUVANTS					
Surfactant	pt	2.44	0.0750	0.18	_____
HAULING					
Haul Soybeans/Field	bu	0.26	30.0000	7.80	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.2000	9.20	_____
INOCULANT					
Nitragin S	oz	0.27	2.7500	0.74	_____
OPERATOR LABOR					
Tractors	hour	11.35	0.3801	4.31	_____
Harvesters	hour	11.35	0.1021	1.16	_____
HAND LABOR					
Implements	hour	9.06	0.1465	1.33	_____
UNALLOCATED LABOR	hour	11.37	0.4341	4.94	_____
DIESEL FUEL					
Tractors	gal	2.39	3.7182	8.88	_____
Harvesters	gal	2.39	1.3935	3.33	_____
REPAIR & MAINTENANCE					
Implements	acre	4.05	1.0000	4.05	_____
Tractors	acre	1.51	1.0000	1.51	_____
Harvesters	acre	2.46	1.0000	2.46	_____
INTEREST ON OP. CAP.	acre	3.90	1.0000	3.90	_____

TOTAL DIRECT EXPENSES				185.76	_____
FIXED EXPENSES					
Implements	acre	8.65	1.0000	8.65	_____
Tractors	acre	9.85	1.0000	9.85	_____
Harvesters	acre	9.99	1.0000	9.99	_____

TOTAL FIXED EXPENSES				28.49	_____

TOTAL SPECIFIED EXPENSES				214.25	_____

Note: Cost of production estimates are based on 2010 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, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.00	30.0000	330.00	
TOTAL INCOME				330.00	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.76	1.0000	13.76	
FERTILIZERS	acre	15.36	1.0000	15.36	
FUNGICIDES	acre	13.19	1.0000	13.19	
HERBICIDES	acre	19.64	1.0000	19.64	
INSECTICIDES	acre	20.52	1.0000	20.52	
SEED/PLANTS	acre	49.50	1.0000	49.50	
ADJUVANTS	acre	0.18	1.0000	0.18	
HAULING	acre	7.80	1.0000	7.80	
CUSTOM LIME	acre	9.20	1.0000	9.20	
INOCULANT	acre	0.74	1.0000	0.74	
HAND LABOR	hour	9.06	0.1465	1.33	
OPERATOR LABOR	hour	11.35	0.4823	5.47	
UNALLOCATED LABOR	hour	11.37	0.4341	4.94	
DIESEL FUEL	gal	2.39	5.1118	12.21	
REPAIR & MAINTENANCE	acre	8.02	1.0000	8.02	
INTEREST ON OP. CAP.	acre	3.90	1.0000	3.90	
TOTAL DIRECT EXPENSES				185.76	
RETURNS ABOVE DIRECT EXPENSES				144.24	
TOTAL FIXED EXPENSES				28.49	
TOTAL SPECIFIED EXPENSES				214.25	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				115.75	

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Subsoiler	3 shank	MFWD 190	0.204	0.20	Nov		0.04	0.04	0.04	0.03
Disk Harrow	24'	MFWD 190	0.081	0.25	Nov		0.02	0.02	0.02	0.01
Lime (Spread)	ton			0.20	Nov	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Nov		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.2800				
Potash (60% K2O)	cwt					0.4000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May		0.06	0.06	0.06	0.05
Plant & Pre-Rigid	12R-20	MFWD 190	0.101	1.00	May		0.10	0.10	0.20	0.09
Soybean Seed RR	lb					50.0000				
Apron Maxx RTA	oz					2.5000				
Nitragin S	oz					2.7500				
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				
App by Air (5 gal)	appl			0.75	Jul	0.7500				
Quadris	oz					4.5000				
Karate Z	oz					1.4400				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			0.75	Aug	0.7500				
Intrepid 2F	oz					3.0000				
Surfactant	pt					0.0750				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					30.0000				
TOTALS							0.48	0.48	0.62	0.43

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Subsoiler	3 shank		0.96	0.21	0.88		0.09	2.14	1.18	3.32
Disk Harrow	24'		0.48	0.27	0.44		0.05	1.24	0.94	2.18
Lime (Spread)	ton	9.20					0.40	9.60		9.60
Spin Spreader	5 ton		0.39	0.17	0.51		0.05	1.12	0.65	1.77
Phosphorus(46% P2O5)	cwt	6.16					0.27	6.43		6.43
Potash (60% K2O)	cwt	9.20					0.40	9.60		9.60
Disk Harrow	24'		1.91	1.08	1.77		0.12	4.88	3.77	8.65
Field Cultivate Fld	24'		1.45	0.62	1.35		0.07	3.49	3.22	6.71
Plant & Pre-Rigid	12R-20		2.37	2.03	3.11		0.16	7.67	5.87	13.54
Soybean Seed RR	lb	49.50					1.07	50.57		50.57
Apron Maxx RTA	oz	1.85					0.04	1.89		1.89
Nitragin S	oz	0.74					0.02	0.76		0.76
Gaucho 600	oz	6.56					0.14	6.70		6.70
Dual Magnum	pt	12.64					0.27	12.91		12.91
Spray (Broadcast)	60'		0.66	0.24	0.74		0.04	1.68	0.89	2.57
Glyphosate 3lbs a.e.	pt	3.50					0.08	3.58		3.58
Spray (Broadcast)	60'		0.66	0.24	0.74		0.03	1.67	0.89	2.56
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
App by Air (5 gal)	appl	4.13					0.06	4.19		4.19
Quadris	oz	11.34					0.16	11.50		11.50
Karate Z	oz	4.13					0.06	4.19		4.19
App by Air (5 gal)	appl	5.50					0.06	5.56		5.56
Acephate 90SP	lb	4.85					0.05	4.90		4.90
App by Air (5 gal)	appl	4.13					0.04	4.17		4.17
Intrepid 2F	oz	4.98					0.05	5.03		5.03
Surfactant	pt	0.18						0.18		0.18
Header -Soybean	25' Flex		3.33	3.16	2.20		0.03	8.72	11.08	19.80
Haul Soybeans/Field	bu	7.80					0.03	7.83		7.83
TOTALS		149.89	12.21	8.02	11.74	0.00	3.90	185.76	28.49	214.25

Note: Cost of production estimates are based on 2010 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, 2011

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	330.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.13	9.63	0.00	0.00
FERTILIZERS	15.36	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	1.85	0.00	11.34	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	16.14	3.50	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.56	0.00	4.13	9.83	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	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	7.80
CUSTOM LIME	9.20	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	0.74	0.00	0.00	0.00	0.00	0.00
LABOR	1.83	0.00	0.00	0.00	0.00	1.77	5.20	0.74	0.00	0.00	0.00	2.20
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	1.83	0.00	0.00	0.00	0.00	1.91	4.48	0.66	0.00	0.00	0.00	3.33
REPAIR & MAINTENANCE	0.65	0.00	0.00	0.00	0.00	1.08	2.89	0.24	0.00	0.00	0.00	3.16
INTEREST ON OP. CAP.	1.26	0.00	0.00	0.00	0.00	0.12	1.89	0.09	0.28	0.20	0.00	0.06
TOTAL DIRECT EXPENSES	30.13	0.00	0.00	0.00	0.00	4.88	89.25	5.23	19.88	19.84	0.00	16.55
NET INCOME	-30.13	0.00	0.00	0.00	0.00	-4.88	-89.25	-5.23	-19.88	-19.84	0.00	313.45
NET INCOME TO DATE	-30.13	-30.13	-30.13	-30.13	-30.13	-35.01	-124.26	-129.49	-149.37	-169.21	-169.21	144.24

Note: Cost of production estimates are based on 2010 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, 2011

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.25	8.80	9.35	9.90	10.45	11.00	11.55	12.10	12.65	13.20	13.75
PERCENT	YIELD	UNIT	dollars										
50	15.00	bu	-58	-49	-41	-33	-25	-16	-8	-0	7	16	24
			-86	-78	-70	-61	-53	-45	-37	-28	-20	-12	-4
60	18.00	bu	-34	-24	-14	-4	5	15	25	35	45	54	64
			-62	-52	-42	-32	-23	-13	-3	6	16	26	36
70	21.00	bu	-10	1	12	24	36	47	59	70	82	93	105
			-38	-27	-15	-4	7	19	30	42	53	65	76
80	24.00	bu	13	27	40	53	66	79	93	106	119	132	145
			-14	-1	11	24	38	51	64	77	90	104	117
90	27.00	bu	37	52	67	82	97	112	126	141	156	171	186
			9	24	38	53	68	83	98	113	128	142	157
100	30.00	bu	61	78	94	111	127	144	160	177	193	210	226
			33	49	66	82	99	115	132	148	165	181	198
110	33.00	bu	85	103	122	140	158	176	194	212	230	249	267
			57	75	93	111	129	147	166	184	202	220	238
120	36.00	bu	109	129	149	169	188	208	228	248	268	287	307
			81	100	120	140	160	180	199	219	239	259	279
130	39.00	bu	133	155	176	197	219	240	262	283	305	326	348
			105	126	148	169	190	212	233	255	276	298	319
140	42.00	bu	157	180	203	226	250	273	296	319	342	365	388
			129	152	175	198	221	244	267	290	313	337	360
150	45.00	bu	181	206	231	255	280	305	330	354	379	404	429
			153	177	202	227	252	276	301	326	351	375	400

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 2010 input prices.

Table 4.A Estimated costs per acre
Soybeans, May-planted, RR, 12R 20"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	5.50	3.0000	16.50	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	22.00	0.4000	8.80	_____
Potash (60% K2O)	cwt	23.00	0.6000	13.80	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.74	2.5000	1.85	_____
Quadris	oz	2.52	6.0000	15.12	_____
HERBICIDES					
Dual Magnum	pt	12.64	1.0000	12.64	_____
Glyphosate 3lbs a.e.	pt	1.75	4.0000	7.00	_____
INSECTICIDES					
Gaucho 600	oz	6.56	1.0000	6.56	_____
Karate Z	oz	2.87	1.9200	5.51	_____
Acephate 90SP	lb	6.46	0.7500	4.85	_____
Intrepid 2F	oz	1.66	4.0000	6.64	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.99	50.0000	49.50	_____
ADJUVANTS					
Surfactant	pt	2.44	0.1000	0.24	_____
HAULING					
Haul Soybeans/Field	bu	0.26	53.0000	13.78	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.2000	9.20	_____
INOCULANT					
Nitragin S	oz	0.27	2.7500	0.74	_____
OPERATOR LABOR					
Tractors	hour	11.35	0.6035	6.85	_____
Harvesters	hour	11.35	0.1021	1.16	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1465	1.33	_____
UNALLOCATED LABOR	hour	11.37	0.4525	5.15	_____
DIESEL FUEL					
Tractors	gal	2.39	5.5059	13.16	_____
Harvesters	gal	2.39	1.3935	3.33	_____
Contour Flood Irr.	gal	2.39	10.9974	26.28	_____
REPAIR & MAINTENANCE					
Implements	acre	4.78	1.0000	4.78	_____
Tractors	acre	2.27	1.0000	2.27	_____
Harvesters	acre	2.46	1.0000	2.46	_____
Contour Flood Irr.	acre	10.32	1.0000	10.32	_____
INTEREST ON OP. CAP.	acre	5.16	1.0000	5.16	_____

TOTAL DIRECT EXPENSES				260.05	_____
FIXED EXPENSES					
Implements	acre	10.85	1.0000	10.85	_____
Tractors	acre	14.71	1.0000	14.71	_____
Harvesters	acre	9.99	1.0000	9.99	_____
Contour Flood Irr.	acre	34.52	1.0000	34.52	_____

TOTAL FIXED EXPENSES				70.07	_____

TOTAL SPECIFIED EXPENSES				330.12	_____

Note: Cost of production estimates are based on 2010 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, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.00	53.0000	583.00	_____
TOTAL INCOME				583.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	16.50	1.0000	16.50	_____
FERTILIZERS	acre	22.60	1.0000	22.60	_____
FUNGICIDES	acre	16.97	1.0000	16.97	_____
HERBICIDES	acre	19.64	1.0000	19.64	_____
INSECTICIDES	acre	23.56	1.0000	23.56	_____
SEED/PLANTS	acre	49.50	1.0000	49.50	_____
ADJUVANTS	acre	0.24	1.0000	0.24	_____
HAULING	acre	13.78	1.0000	13.78	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	9.20	1.0000	9.20	_____
INOCULANT	acre	0.74	1.0000	0.74	_____
HAND LABOR	hour	9.06	0.1465	1.33	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	11.35	0.7057	8.01	_____
UNALLOCATED LABOR	hour	11.37	0.4525	5.15	_____
DIESEL FUEL	gal	2.39	17.8970	42.77	_____
REPAIR & MAINTENANCE	acre	19.83	1.0000	19.83	_____
INTEREST ON OP. CAP.	acre	5.16	1.0000	5.16	_____
TOTAL DIRECT EXPENSES				260.05	_____
RETURNS ABOVE DIRECT EXPENSES				322.95	_____
TOTAL FIXED EXPENSES				70.07	_____
TOTAL SPECIFIED EXPENSES				330.12	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				252.88	_____

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.20	Nov	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Nov		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.4000				
Potash (60% K2O)	cwt					0.6000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May		0.06	0.06	0.06	0.05
Plant & Pre-Rigid	12R-20	MFWD 190	0.101	1.00	May		0.10	0.10	0.20	0.09
Soybean Seed RR	lb					50.0000				
Apron Maxx RTA	oz					2.5000				
Nitragin S	oz					2.7500				
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				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris	oz					6.0000				
Karate Z	oz					1.9200				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Intrepid 2F	oz					4.0000				
Surfactant	pt					0.1000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					53.0000				
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.70	0.70	1.16	0.45

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Disk Harrow	24'		1.91	1.08	1.77		0.21	4.97	3.77	8.74
Lime (Spread)	ton	9.20					0.40	9.60		9.60
Spin Spreader	5 ton		0.39	0.17	0.51		0.05	1.12	0.65	1.77
Phosphorus(46% P2O5)	cwt	8.80					0.38	9.18		9.18
Potash (60% K2O)	cwt	13.80					0.60	14.40		14.40
Disk Harrow	24'		1.91	1.08	1.77		0.12	4.88	3.77	8.65
Field Cultivate Fld	24'		1.45	0.62	1.35		0.07	3.49	3.22	6.71
Plant & Pre-Rigid	12R-20		2.37	2.03	3.11		0.16	7.67	5.87	13.54
Soybean Seed RR	lb	49.50					1.07	50.57		50.57
Apron Maxx RTA	oz	1.85					0.04	1.89		1.89
Nitragin S	oz	0.74					0.02	0.76		0.76
Gaucho 600	oz	6.56					0.14	6.70		6.70
Dual Magnum	pt	12.64					0.27	12.91		12.91
Spray (Broadcast)	60'		0.66	0.24	0.74		0.04	1.68	0.89	2.57
Glyphosate 3lbs a.e.	pt	3.50					0.08	3.58		3.58
Spray (Broadcast)	60'		0.66	0.24	0.74		0.03	1.67	0.89	2.56
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
App by Air (5 gal)	appl	5.50					0.08	5.58		5.58
Quadris	oz	15.12					0.22	15.34		15.34
Karate Z	oz	5.51					0.08	5.59		5.59
App by Air (5 gal)	appl	5.50					0.06	5.56		5.56
Acephate 90SP	lb	4.85					0.05	4.90		4.90
App by Air (5 gal)	appl	5.50					0.06	5.56		5.56
Intrepid 2F	oz	6.64					0.07	6.71		6.71
Surfactant	pt	0.24						0.24		0.24
Header -Soybean	25' Flex		3.33	3.16	2.20		0.03	8.72	11.08	19.80
Haul Soybeans/Field	bu	13.78					0.05	13.83		13.83
Contour Flood Irr.	acre	2.25	30.09	11.21	5.12		0.72	49.39	39.93	89.32
TOTALS		174.98	42.77	19.83	17.31	0.00	5.16	260.05	70.07	330.12

Note: Cost of production estimates are based on 2010 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, 2011

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	583.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.50	11.00	0.00	0.00
FERTILIZERS	22.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.85	0.00	15.12	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	16.14	3.50	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.56	0.00	5.51	11.49	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	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	13.78
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	9.20	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	0.74	0.00	0.00	0.00	0.00	0.00
LABOR	2.28	0.00	0.00	0.00	0.00	1.77	5.65	2.37	1.45	1.45	0.14	2.20
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	2.30	0.00	0.00	0.00	0.00	1.91	4.48	10.84	9.84	9.84	0.23	3.33
REPAIR & MAINTENANCE	1.25	0.00	0.00	0.00	0.00	1.08	2.89	7.21	2.09	2.09	0.06	3.16
INTEREST ON OP. CAP.	1.64	0.00	0.00	0.00	0.00	0.12	1.90	0.46	0.57	0.39	0.00	0.08
TOTAL DIRECT EXPENSES	39.27	0.00	0.00	0.00	0.00	4.88	89.71	26.63	40.08	36.50	0.43	22.55
NET INCOME	-39.27	0.00	0.00	0.00	0.00	-4.88	-89.71	-26.63	-40.08	-36.50	-0.43	560.45
NET INCOME TO DATE	-39.27	-39.27	-39.27	-39.27	-39.27	-44.15	-133.86	-160.49	-200.57	-237.07	-237.50	322.95

Note: Cost of production estimates are based on 2010 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, 2011

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.25	8.80	9.35	9.90	10.45	11.00	11.55	12.10	12.65	13.20	13.75
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-34	-19	-5	9	23	38	52	67	82	96	111
			-104	-90	-75	-60	-46	-31	-17	-2	12	26	41
60	31.80	bu	7	25	42	60	77	95	112	130	147	165	182
			-62	-44	-27	-9	7	25	42	60	77	95	112
70	37.10	bu	50	70	90	111	131	152	172	193	213	233	254
			-19	0	20	41	61	82	102	122	143	163	184
80	42.40	bu	92	115	139	162	185	209	232	255	279	302	325
			22	45	69	92	115	139	162	185	209	232	255
90	47.70	bu	134	161	187	213	239	266	292	318	344	370	397
			64	91	117	143	169	195	222	248	274	300	327
100	53.00	bu	177	206	235	264	293	322	352	381	410	439	468
			107	136	165	194	223	252	282	311	340	369	398
110	58.30	bu	219	251	283	315	347	379	411	443	476	508	540
			149	181	213	245	277	309	341	373	405	438	470
120	63.60	bu	261	296	331	366	401	436	471	506	541	576	611
			191	226	261	296	331	366	401	436	471	506	541
130	68.90	bu	304	342	380	417	455	493	531	569	607	645	683
			234	272	309	347	385	423	461	499	537	575	613
140	74.20	bu	346	387	428	468	509	550	591	632	673	713	754
			276	317	358	398	439	480	521	562	602	643	684
150	79.50	bu	388	432	476	520	563	607	651	694	738	782	826
			318	362	406	450	493	537	581	624	668	712	756

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 2010 input prices.

Table 5.A Estimated costs per acre
Soybeans after wheat, RR, 12R 20"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	5.50	3.0000	16.50	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	22.00	0.4000	8.80	_____
Potash (60% K2O)	cwt	23.00	0.6000	13.80	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.74	2.5000	1.85	_____
Quadris	oz	2.52	6.0000	15.12	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	1.75	5.0000	8.75	_____
Dual Magnum	pt	12.64	1.0000	12.64	_____
INSECTICIDES					
Gaucho 600	oz	6.56	1.0000	6.56	_____
Karate Z	oz	2.87	1.7000	4.88	_____
Acephate 90SP	lb	6.46	0.7500	4.85	_____
Intrepid 2F	oz	1.66	4.0000	6.64	_____
Baythroid XL	oz	2.17	2.1300	4.62	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.99	50.0000	49.50	_____
ADJUVANTS					
Surfactant	pt	2.44	0.1000	0.24	_____
HAULING					
Haul Soybeans/Field	bu	0.26	45.0000	11.70	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.2000	9.20	_____
INOCULANT					
Nitragin S	oz	0.27	2.7500	0.74	_____
OPERATOR LABOR					
Tractors	hour	11.35	0.1889	2.14	_____
Harvesters	hour	11.35	0.1021	1.16	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.1536	1.39	_____
UNALLOCATED LABOR	hour	11.38	0.2503	2.85	_____
DIESEL FUEL					
Tractors	gal	2.39	1.8474	4.41	_____
Harvesters	gal	2.39	1.3935	3.33	_____
1/2-mi Pivot Irr.	gal	2.39	14.0014	33.47	_____
REPAIR & MAINTENANCE					
Implements	acre	2.75	1.0000	2.75	_____
Tractors	acre	0.75	1.0000	0.75	_____
Harvesters	acre	2.46	1.0000	2.46	_____
1/2-mi Pivot Irr.	acre	9.32	1.0000	9.32	_____
INTEREST ON OP. CAP.	acre	4.32	1.0000	4.32	_____
TOTAL DIRECT EXPENSES				245.21	_____
FIXED EXPENSES					
Implements	acre	4.94	1.0000	4.94	_____
Tractors	acre	4.90	1.0000	4.90	_____
Harvesters	acre	9.99	1.0000	9.99	_____
1/2-mi Pivot Irr.	acre	34.33	1.0000	34.33	_____
TOTAL FIXED EXPENSES				54.16	_____
TOTAL SPECIFIED EXPENSES				299.37	_____

Note: Cost of production estimates are based on 2010 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, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.00	45.0000	495.00	_____
TOTAL INCOME				495.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	16.50	1.0000	16.50	_____
FERTILIZERS	acre	22.60	1.0000	22.60	_____
FUNGICIDES	acre	16.97	1.0000	16.97	_____
HERBICIDES	acre	21.39	1.0000	21.39	_____
INSECTICIDES	acre	27.55	1.0000	27.55	_____
SEED/PLANTS	acre	49.50	1.0000	49.50	_____
ADJUVANTS	acre	0.24	1.0000	0.24	_____
HAULING	acre	11.70	1.0000	11.70	_____
CUSTOM LIME	acre	9.20	1.0000	9.20	_____
INOCULANT	acre	0.74	1.0000	0.74	_____
HAND LABOR	hour	9.06	0.1536	1.39	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	11.35	0.2910	3.30	_____
UNALLOCATED LABOR	hour	11.38	0.2503	2.85	_____
DIESEL FUEL	gal	2.39	17.2424	41.21	_____
REPAIR & MAINTENANCE	acre	15.28	1.0000	15.28	_____
INTEREST ON OP. CAP.	acre	4.32	1.0000	4.32	_____
TOTAL DIRECT EXPENSES				245.21	_____
RETURNS ABOVE DIRECT EXPENSES				249.79	_____
TOTAL FIXED EXPENSES				54.16	_____
TOTAL SPECIFIED EXPENSES				299.37	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				195.63	_____

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Lime (Spread)	ton			0.20	Nov	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Nov		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.4000				
Potash (60% K2O)	cwt					0.6000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e.	pt					2.0000				
Plant & Pre-Rigid	12R-20	MFWD 190	0.101	1.00	Jun		0.10	0.10	0.20	0.08
Soybean Seed RR	lb					50.0000				
Apron Maxx RTA	oz					2.5000				
Nitragin S	oz					2.7500				
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 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Lime (Spread)	ton	9.20					0.40	9.60		9.60
Spin Spreader	5 ton		0.39	0.17	0.50		0.05	1.11	0.65	1.76
Phosphorus(46% P2O5)	cwt	8.80					0.38	9.18		9.18
Potash (60% K2O)	cwt	13.80					0.60	14.40		14.40
Spray (Broadcast)	60'		0.66	0.24	0.73		0.03	1.66	0.89	2.55
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
Plant & Pre-Rigid	12R-20		2.37	2.03	3.06		0.13	7.59	5.87	13.46
Soybean Seed RR	lb	49.50					0.89	50.39		50.39
Apron Maxx RTA	oz	1.85					0.03	1.88		1.88
Nitragin S	oz	0.74					0.01	0.75		0.75
Gaucho 600	oz	6.56					0.12	6.68		6.68
Dual Magnum	pt	12.64					0.23	12.87		12.87
Spray (Broadcast)	60'		0.66	0.24	0.73		0.02	1.65	0.89	2.54
Glyphosate 3lbs a.e.	pt	3.50					0.05	3.55		3.55
Spray (Broadcast)	60'		0.33	0.12	0.36		0.01	0.82	0.45	1.27
Glyphosate 3lbs a.e.	pt	1.75					0.03	1.78		1.78
App by Air (5 gal)	appl	5.50					0.06	5.56		5.56
Quadris	oz	15.12					0.16	15.28		15.28
Karate Z	oz	4.88					0.05	4.93		4.93
App by Air (5 gal)	appl	5.50					0.06	5.56		5.56
Acephate 90SP	lb	4.85					0.05	4.90		4.90
App by Air (5 gal)	appl	5.50					0.06	5.56		5.56
Intrepid 2F	oz	6.64					0.07	6.71		6.71
Surfactant	pt	0.24						0.24		0.24
Baythroid XL	oz	4.62					0.05	4.67		4.67
Header -Soybean	25' Flex		3.33	3.16	2.16		0.03	8.68	11.08	19.76
Haul Soybeans/Field	bu	11.70					0.04	11.74		11.74
1/2-mi Pivot Irr.	acre		33.47	9.32	0.47		0.65	43.91	34.33	78.24
TOTALS		176.39	41.21	15.28	8.01	0.00	4.32	245.21	54.16	299.37

Note: Cost of production estimates are based on 2010 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, 2011

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	495.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.50	0.00	0.00
FERTILIZERS	22.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85	0.00	15.12	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.14	5.25	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.56	0.00	20.99	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	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	11.70
CUSTOM LIME	9.20	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	0.74	0.00	0.00	0.00	0.00
LABOR	0.50	0.00	0.00	0.00	0.00	0.00	0.34	3.83	1.14	0.04	0.00	2.16
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	0.39	0.00	0.00	0.00	0.00	0.00	0.00	13.07	14.38	10.04	0.00	3.33
REPAIR & MAINTENANCE	0.17	0.00	0.00	0.00	0.00	0.00	0.00	10.28	1.11	0.56	0.00	3.16
INTEREST ON OP. CAP.	1.43	0.00	0.00	0.00	0.00	0.00	0.01	1.83	0.31	0.67	0.00	0.07
TOTAL DIRECT EXPENSES	34.29	0.00	0.00	0.00	0.00	0.00	0.35	103.80	22.19	64.16	0.00	20.42
NET INCOME	-34.29	0.00	0.00	0.00	0.00	0.00	-0.35	-103.80	-22.19	-64.16	0.00	474.58
NET INCOME TO DATE	-34.29	-34.29	-34.29	-34.29	-34.29	-34.29	-34.64	-138.44	-160.63	-224.79	-224.79	249.79

Note: Cost of production estimates are based on 2010 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, 2011

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.25	8.80	9.35	9.90	10.45	11.00	11.55	12.10	12.65	13.20	13.75
PERCENT	YIELD	UNIT	dollars										
50	22.50	bu	-53	-41	-28	-16	-4	8	20	32	45	57	70
			-107	-95	-83	-70	-58	-46	-33	-21	-8	3	15
60	27.00	bu	-17	-2	11	26	41	56	71	86	101	115	130
			-71	-57	-42	-27	-12	2	17	32	46	61	76
70	31.50	bu	18	35	52	70	87	104	122	139	156	174	191
			-35	-18	-1	16	33	50	67	85	102	119	137
80	36.00	bu	54	73	93	113	133	153	172	192	212	232	252
			-0	19	39	59	79	98	118	138	158	178	197
90	40.50	bu	90	112	134	156	179	201	223	246	268	290	312
			35	58	80	102	125	147	169	191	214	236	258
100	45.00	bu	126	150	175	200	225	249	274	299	324	348	373
			71	96	121	146	170	195	220	245	269	294	319
110	49.50	bu	161	189	216	243	270	298	325	352	379	407	434
			107	135	162	189	216	243	271	298	325	352	380
120	54.00	bu	197	227	257	287	316	346	376	405	435	465	494
			143	173	203	232	262	292	321	351	381	411	440
130	58.50	bu	233	266	298	330	362	394	426	459	491	523	555
			179	211	244	276	308	340	372	404	437	469	501
140	63.00	bu	269	304	339	373	408	443	477	512	547	581	616
			215	250	284	319	354	388	423	458	492	527	562
150	67.50	bu	305	342	380	417	454	491	528	565	602	639	677
			251	288	325	363	400	437	474	511	548	585	622

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 2010 input prices.

Table 6.A Estimated costs per acre
Soybeans, early-planted, RR, reduced tillage, 12R 20"
Non-Delta Area, Mississippi, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	5.50	1.5000	8.25	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.25	8.0000	2.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	22.00	0.6600	14.52	_____
Potash (60% K2O)	cwt	23.00	1.0000	23.00	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.74	2.5000	1.85	_____
Headline	oz	2.60	3.0000	7.80	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	1.75	6.0000	10.50	_____
2,4-D Amine 4	pt	1.74	2.0000	3.48	_____
Valor SX	oz	4.72	2.0000	9.44	_____
Dual Magnum	pt	12.64	1.0000	12.64	_____
INSECTICIDES					
Gaucho 600	oz	6.56	1.0000	6.56	_____
Acephate 90SP	lb	6.46	0.7500	4.85	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.99	50.0000	49.50	_____
ADJUVANTS					
Surfactant	pt	2.44	0.1000	0.24	_____
HAULING					
Haul Soybeans/Field	bu	0.26	43.0000	11.18	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.2500	11.50	_____
OPERATOR LABOR					
Tractors	hour	11.35	0.3791	4.31	_____
Harvesters	hour	11.35	0.1021	1.16	_____
HAND LABOR					
Implements	hour	9.06	0.1857	1.68	_____
UNALLOCATED LABOR	hour	11.35	0.4332	4.92	_____
DIESEL FUEL					
Tractors	gal	2.39	3.7083	8.85	_____
Harvesters	gal	2.39	1.3935	3.33	_____
REPAIR & MAINTENANCE					
Implements	acre	3.86	1.0000	3.86	_____
Tractors	acre	1.52	1.0000	1.52	_____
Harvesters	acre	2.46	1.0000	2.46	_____
INTEREST ON OP. CAP.	acre	5.22	1.0000	5.22	_____

TOTAL DIRECT EXPENSES				214.62	_____
FIXED EXPENSES					
Implements	acre	8.09	1.0000	8.09	_____
Tractors	acre	9.82	1.0000	9.82	_____
Harvesters	acre	9.99	1.0000	9.99	_____

TOTAL FIXED EXPENSES				27.90	_____

TOTAL SPECIFIED EXPENSES				242.52	_____

Note: Cost of production estimates are based on 2010 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, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.00	43.0000	473.00	_____
TOTAL INCOME				473.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.25	1.0000	8.25	_____
HARVEST AIDS	acre	2.00	1.0000	2.00	_____
FERTILIZERS	acre	37.52	1.0000	37.52	_____
FUNGICIDES	acre	9.65	1.0000	9.65	_____
HERBICIDES	acre	36.06	1.0000	36.06	_____
INSECTICIDES	acre	11.41	1.0000	11.41	_____
SEED/PLANTS	acre	49.50	1.0000	49.50	_____
ADJUVANTS	acre	0.24	1.0000	0.24	_____
HAULING	acre	11.18	1.0000	11.18	_____
CUSTOM LIME	acre	11.50	1.0000	11.50	_____
HAND LABOR	hour	9.06	0.1857	1.68	_____
OPERATOR LABOR	hour	11.35	0.4813	5.47	_____
UNALLOCATED LABOR	hour	11.35	0.4332	4.92	_____
DIESEL FUEL	gal	2.39	5.1019	12.18	_____
REPAIR & MAINTENANCE	acre	7.84	1.0000	7.84	_____
INTEREST ON OP. CAP.	acre	5.22	1.0000	5.22	_____
TOTAL DIRECT EXPENSES				214.62	_____
RETURNS ABOVE DIRECT EXPENSES				258.38	_____
TOTAL FIXED EXPENSES				27.90	_____
TOTAL SPECIFIED EXPENSES				242.52	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				230.48	_____

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Lime (Spread)	ton			0.25	Oct	0.2500				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Glyphosate 3lbs a.e.	pt					2.0000				
2,4-D Amine 4	pt					2.0000				
Valor SX	oz					2.0000				
Plant - Rigid	12R-20	MFWD 190	0.094	1.00	Apr		0.09	0.09	0.18	0.08
Soybean Seed RR	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	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 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	11.50					0.50	12.00		12.00
Spin Spreader	5 ton		0.98	0.42	1.29		0.12	2.81	1.61	4.42
Phosphorus(46% P2O5)	cwt	14.52					0.63	15.15		15.15
Potash (60% K2O)	cwt	23.00					1.00	24.00		24.00
Disk Harrow	24'		1.91	1.08	1.77		0.21	4.97	3.77	8.74
Field Cultivate Fld	24'		1.45	0.62	1.35		0.15	3.57	3.22	6.79
App by Air (5 gal)	appl	5.50					0.14	5.64		5.64
Glyphosate 3lbs a.e.	pt	3.50					0.09	3.59		3.59
2,4-D Amine 4	pt	3.48					0.09	3.57		3.57
Valor SX	oz	9.44					0.24	9.68		9.68
Plant - Rigid	12R-20		2.20	1.72	2.88		0.15	6.95	5.10	12.05
Soybean Seed RR	lb	49.50					1.07	50.57		50.57
Apron Maxx RTA	oz	1.85					0.04	1.89		1.89
Gaucho 600	oz	6.56					0.14	6.70		6.70
Spray (Broadcast)	60'		0.66	0.24	0.74		0.03	1.67	0.89	2.56
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
Dual Magnum	pt	12.64					0.23	12.87		12.87
Spray (Broadcast)	60'		0.66	0.24	0.74		0.03	1.67	0.89	2.56
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
Spray (Broadcast)	60'		0.33	0.12	0.36		0.01	0.82	0.45	1.27
Headline	oz	7.80					0.08	7.88		7.88
Spray (Broadcast)	60'		0.66	0.24	0.74		0.01	1.65	0.89	2.54
Acephate 90SP	lb	4.85					0.04	4.89		4.89
App by Air (5 gal)	appl	2.75					0.02	2.77		2.77
Gramoxone Inteon	oz	2.00					0.01	2.01		2.01
Surfactant	pt	0.24						0.24		0.24
Header -Soybean	25' Flex		3.33	3.16	2.20		0.03	8.72	11.08	19.80
Haul Soybeans/Field	bu	11.18					0.04	11.22		11.22
TOTALS		177.31	12.18	7.84	12.07	0.00	5.22	214.62	27.90	242.52

Note: Cost of production estimates are based on 2010 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, 2011

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	473.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	5.50	0.00	0.00	0.00	0.00	2.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
FERTILIZERS	37.52	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	1.85	0.00	0.00	7.80	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	16.42	0.00	19.64	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.56	0.00	0.00	0.00	4.85	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.18
CUSTOM LIME	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.41	0.00	0.00	0.00	0.00	0.00	2.88	1.48	0.00	0.36	0.74	2.20
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.34	0.00	0.00	0.00	0.00	0.00	2.20	1.32	0.00	0.33	0.66	3.33
REPAIR & MAINTENANCE	2.12	0.00	0.00	0.00	0.00	0.00	1.72	0.48	0.00	0.12	0.24	3.16
INTEREST ON OP. CAP.	2.61	0.00	0.00	0.00	0.00	0.56	1.40	0.41	0.00	0.09	0.08	0.07
TOTAL DIRECT EXPENSES	62.50	0.00	0.00	0.00	0.00	22.48	66.11	23.33	0.00	8.70	11.56	19.94
NET INCOME	-62.50	0.00	0.00	0.00	0.00	-22.48	-66.11	-23.33	0.00	-8.70	-11.56	453.06
NET INCOME TO DATE	-62.50	-62.50	-62.50	-62.50	-62.50	-84.98	-151.09	-174.42	-174.42	-183.12	-194.68	258.38

Note: Cost of production estimates are based on 2010 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, 2011

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.25	8.80	9.35	9.90	10.45	11.00	11.55	12.10	12.65	13.20	13.75
PERCENT	YIELD	UNIT	dollars										
50	21.50	bu	-31	-19	-7	3	15	27	39	51	62	74	86
			-59	-47	-35	-24	-12	-0	11	23	35	46	58
60	25.80	bu	2	16	31	45	59	73	87	102	116	130	144
			-25	-10	3	17	31	45	59	74	88	102	116
70	30.10	bu	37	53	70	86	103	119	136	152	169	186	202
			9	25	42	58	75	91	108	125	141	158	174
80	34.40	bu	71	90	109	128	147	166	184	203	222	241	260
			43	62	81	100	119	138	157	175	194	213	232
90	38.70	bu	105	127	148	169	190	212	233	254	276	297	318
			77	99	120	141	163	184	205	226	248	269	290
100	43.00	bu	140	163	187	211	234	258	282	305	329	352	376
			112	135	159	183	206	230	254	277	301	325	348
110	47.30	bu	174	200	226	252	278	304	330	356	382	408	434
			146	172	198	224	250	276	302	328	354	380	406
120	51.60	bu	208	237	265	293	322	350	379	407	435	464	492
			180	209	237	266	294	322	351	379	407	436	464
130	55.90	bu	243	273	304	335	366	396	427	458	489	519	550
			215	246	276	307	338	369	399	430	461	491	522
140	60.20	bu	277	310	343	376	409	443	476	509	542	575	608
			249	282	315	348	382	415	448	481	514	547	580
150	64.50	bu	311	347	382	418	453	489	524	560	595	631	666
			283	319	354	390	425	461	496	532	567	603	638

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 2010 input prices.

Table 7.A Estimated costs per acre
Soybeans, May-planted, RR, convent. tillage, 12R 20"
Non-Delta Area, Mississippi, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	22.00	0.6600	14.52	_____
Potash (60% K2O)	cwt	23.00	1.0000	23.00	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.74	2.5000	1.85	_____
Quadris	oz	2.52	3.0000	7.56	_____
HERBICIDES					
Dual Magnum	pt	12.64	1.0000	12.64	_____
Glyphosate 3lbs a.e.	pt	1.75	4.0000	7.00	_____
INSECTICIDES					
Gaucho 600	oz	6.56	1.0000	6.56	_____
Dimilin 2L	oz	1.73	1.0000	1.73	_____
Acephate 90SP	lb	6.46	0.7500	4.85	_____
Intrepid 2F	oz	1.66	2.0000	3.32	_____
Baythroid XL	oz	2.17	1.0650	2.31	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.99	50.0000	49.50	_____
ADJUVANTS					
Surfactant	pt	2.44	0.0500	0.12	_____
HAULING					
Haul Soybeans/Field	bu	0.26	30.0000	7.80	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.2500	11.50	_____
OPERATOR LABOR					
Tractors	hour	11.35	0.4005	4.55	_____
Harvesters	hour	11.35	0.1021	1.16	_____
HAND LABOR					
Implements	hour	9.06	0.2000	1.81	_____
UNALLOCATED LABOR	hour	11.36	0.4524	5.14	_____
DIESEL FUEL					
Tractors	gal	2.39	3.9172	9.35	_____
Harvesters	gal	2.39	1.3935	3.33	_____
REPAIR & MAINTENANCE					
Implements	acre	4.21	1.0000	4.21	_____
Tractors	acre	1.60	1.0000	1.60	_____
Harvesters	acre	2.46	1.0000	2.46	_____
INTEREST ON OP. CAP.	acre	3.95	1.0000	3.95	_____

TOTAL DIRECT EXPENSES				191.82	_____
FIXED EXPENSES					
Implements	acre	8.75	1.0000	8.75	_____
Tractors	acre	10.38	1.0000	10.38	_____
Harvesters	acre	9.99	1.0000	9.99	_____

TOTAL FIXED EXPENSES				29.12	_____

TOTAL SPECIFIED EXPENSES				220.94	_____

Note: Cost of production estimates are based on 2010 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, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.00	30.0000	330.00	_____
TOTAL INCOME				330.00	_____
DIRECT EXPENSES					
FERTILIZERS	acre	37.52	1.0000	37.52	_____
FUNGICIDES	acre	9.41	1.0000	9.41	_____
HERBICIDES	acre	19.64	1.0000	19.64	_____
INSECTICIDES	acre	18.77	1.0000	18.77	_____
SEED/PLANTS	acre	49.50	1.0000	49.50	_____
ADJUVANTS	acre	0.12	1.0000	0.12	_____
HAULING	acre	7.80	1.0000	7.80	_____
CUSTOM LIME	acre	11.50	1.0000	11.50	_____
HAND LABOR	hour	9.06	0.2000	1.81	_____
OPERATOR LABOR	hour	11.35	0.5027	5.71	_____
UNALLOCATED LABOR	hour	11.36	0.4524	5.14	_____
DIESEL FUEL	gal	2.39	5.3107	12.68	_____
REPAIR & MAINTENANCE	acre	8.27	1.0000	8.27	_____
INTEREST ON OP. CAP.	acre	3.95	1.0000	3.95	_____
TOTAL DIRECT EXPENSES				191.82	_____
RETURNS ABOVE DIRECT EXPENSES				138.18	_____
TOTAL FIXED EXPENSES				29.12	_____
TOTAL SPECIFIED EXPENSES				220.94	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				109.06	_____

Note: Cost of production estimates are based on 2010 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $7 to $12 per acre.

Table 7.C Estimated resource use for field operations, per acre
Soybeans, May-planted, RR, convent. tillage, 12R 20"
Non-Delta Area, Mississippi, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Lime (Spread)	ton			0.25	Nov	0.2500				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Apr		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May		0.06	0.06	0.06	0.05
Plant & Pre-Rigid	12R-20	MFWD 190	0.101	1.00	May		0.10	0.10	0.20	0.09
Soybean Seed RR	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 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Lime (Spread)	ton	11.50					0.50	12.00		12.00
Spin Spreader	5 ton		0.98	0.42	1.29		0.07	2.76	1.61	4.37
Phosphorus(46% P2O5)	cwt	14.52					0.37	14.89		14.89
Potash (60% K2O)	cwt	23.00					0.58	23.58		23.58
Disk Harrow	24'		1.91	1.08	1.77		0.12	4.88	3.77	8.65
Field Cultivate Fld	24'		1.45	0.62	1.35		0.07	3.49	3.22	6.71
Plant & Pre-Rigid	12R-20		2.37	2.03	3.11		0.16	7.67	5.87	13.54
Soybean Seed RR	lb	49.50					1.07	50.57		50.57
Apron Maxx RTA	oz	1.85					0.04	1.89		1.89
Gaucho 600	oz	6.56					0.14	6.70		6.70
Dual Magnum	pt	12.64					0.27	12.91		12.91
Spray (Broadcast)	60'		0.66	0.24	0.74		0.04	1.68	0.89	2.57
Glyphosate 3lbs a.e.	pt	3.50					0.08	3.58		3.58
Spray (Broadcast)	60'		0.66	0.24	0.74		0.03	1.67	0.89	2.56
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
Spray (Broadcast)	60'		0.33	0.12	0.36		0.01	0.82	0.45	1.27
Dimilin 2L	oz	1.73					0.02	1.75		1.75
Quadris	oz	7.56					0.11	7.67		7.67
Spray (Broadcast)	60'		0.66	0.24	0.74		0.02	1.66	0.89	2.55
Acephate 90SP	lb	4.85					0.05	4.90		4.90
Spray (Broadcast)	60'		0.33	0.12	0.36		0.01	0.82	0.45	1.27
Intrepid 2F	oz	3.32					0.04	3.36		3.36
Baythroid XL	oz	2.31					0.03	2.34		2.34
Surfactant	pt	0.12						0.12		0.12
Header -Soybean	25' Flex		3.33	3.16	2.20		0.03	8.72	11.08	19.80
Haul Soybeans/Field	bu	7.80					0.03	7.83		7.83
TOTALS		154.26	12.68	8.27	12.66	0.00	3.95	191.82	29.12	220.94

Note: Cost of production estimates are based on 2010 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, 2011

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	330.00
DIRECT EXPENSES												
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	37.52	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	1.85	0.00	7.56	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	16.14	3.50	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.56	0.00	1.73	10.48	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	49.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	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	7.80
CUSTOM LIME	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	3.06	5.20	0.74	0.36	1.10	0.00	2.20
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	2.89	4.48	0.66	0.33	0.99	0.00	3.33
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	1.50	2.89	0.24	0.12	0.36	0.00	3.16
INTEREST ON OP. CAP.	0.50	0.00	0.00	0.00	0.00	1.14	1.87	0.09	0.14	0.15	0.00	0.06
TOTAL DIRECT EXPENSES	12.00	0.00	0.00	0.00	0.00	46.11	88.49	5.23	10.24	13.20	0.00	16.55
NET INCOME	-12.00	0.00	0.00	0.00	0.00	-46.11	-88.49	-5.23	-10.24	-13.20	0.00	313.45
NET INCOME TO DATE	-12.00	-12.00	-12.00	-12.00	-12.00	-58.11	-146.60	-151.83	-162.07	-175.27	-175.27	138.18

Note: Cost of production estimates are based on 2010 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, 2011

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.25	8.80	9.35	9.90	10.45	11.00	11.55	12.10	12.65	13.20	13.75
PERCENT	YIELD	UNIT	dollars										
50	15.00	bu	-64	-55	-47	-39	-31	-22	-14	-6	1	10	18
			-93	-85	-76	-68	-60	-52	-43	-35	-27	-19	-10
60	18.00	bu	-40	-30	-20	-10	-0	9	19	29	39	48	58
			-69	-59	-49	-39	-29	-19	-9	-0	9	19	29
70	21.00	bu	-16	-4	6	18	29	41	53	64	76	87	99
			-45	-33	-22	-10	0	12	23	35	47	58	70
80	24.00	bu	7	20	34	47	60	73	86	100	113	126	139
			-21	-8	5	18	31	44	57	71	84	97	110
90	27.00	bu	31	46	61	76	91	105	120	135	150	165	180
			2	17	32	47	61	76	91	106	121	136	151
100	30.00	bu	55	72	88	105	121	138	154	171	187	204	220
			26	43	59	76	92	109	125	142	158	175	191
110	33.00	bu	79	97	115	134	152	170	188	206	224	242	261
			50	68	86	104	123	141	159	177	195	213	232
120	36.00	bu	103	123	143	163	182	202	222	242	262	281	301
			74	94	114	133	153	173	193	213	232	252	272
130	39.00	bu	127	149	170	191	213	234	256	277	299	320	342
			98	119	141	162	184	205	227	248	270	291	312
140	42.00	bu	151	174	197	220	243	267	290	313	336	359	382
			122	145	168	191	214	237	261	284	307	330	353
150	45.00	bu	175	200	225	249	274	299	324	348	373	398	423
			146	171	195	220	245	270	294	319	344	369	393

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 2010 input prices.

Table 8.A Estimated costs per acre
Soybeans after wheat, RR, no-till, 12R 20"
Non-Delta Area, Mississippi, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	22.00	0.6600	14.52	_____
Potash (60% K2O)	cwt	23.00	1.0000	23.00	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.74	2.5000	1.85	_____
Quadris	oz	2.52	3.0000	7.56	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	1.75	5.0000	8.75	_____
Dual Magnum	pt	12.64	1.0000	12.64	_____
INSECTICIDES					
Gaucho 600	oz	6.56	1.0000	6.56	_____
Dimilin 2L	oz	1.73	1.0000	1.73	_____
Acephate 90SP	lb	6.46	0.7500	4.85	_____
Intrepid 2F	oz	1.66	3.0000	4.98	_____
Baythroid XL	oz	2.17	1.5975	3.47	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.99	50.0000	49.50	_____
HAULING					
Haul Soybeans/Field	bu	0.26	25.0000	6.50	_____
OPERATOR LABOR					
Tractors	hour	11.35	0.2818	3.20	_____
Harvesters	hour	11.35	0.1021	1.16	_____
HAND LABOR					
Implements	hour	9.06	0.2148	1.95	_____
UNALLOCATED LABOR	hour	11.41	0.3302	3.77	_____
DIESEL FUEL					
Tractors	gal	2.39	2.7565	6.58	_____
Harvesters	gal	2.39	1.3935	3.33	_____
REPAIR & MAINTENANCE					
Implements	acre	3.51	1.0000	3.51	_____
Tractors	acre	1.12	1.0000	1.12	_____
Harvesters	acre	2.46	1.0000	2.46	_____
INTEREST ON OP. CAP.	acre	3.69	1.0000	3.69	_____

TOTAL DIRECT EXPENSES				176.68	_____
FIXED EXPENSES					
Implements	acre	6.24	1.0000	6.24	_____
Tractors	acre	7.31	1.0000	7.31	_____
Harvesters	acre	9.99	1.0000	9.99	_____

TOTAL FIXED EXPENSES				23.54	_____

TOTAL SPECIFIED EXPENSES				200.22	_____

Note: Cost of production estimates are based on 2010 input prices.
Fertilization decisions should be based on soil tests.
The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $7 to $12 per acre.

Table 8.B Summary of estimated costs and returns per acre
Soybeans after wheat, RR, no-till, 12R 20"
Non-Delta Area, Mississippi, 2011

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	11.00	25.0000	275.00	
TOTAL INCOME				275.00	
DIRECT EXPENSES					
FERTILIZERS	acre	37.52	1.0000	37.52	
FUNGICIDES	acre	9.41	1.0000	9.41	
HERBICIDES	acre	21.39	1.0000	21.39	
INSECTICIDES	acre	21.59	1.0000	21.59	
SEED/PLANTS	acre	49.50	1.0000	49.50	
HAULING	acre	6.50	1.0000	6.50	
HAND LABOR	hour	9.06	0.2148	1.95	
OPERATOR LABOR	hour	11.35	0.3840	4.36	
UNALLOCATED LABOR	hour	11.41	0.3302	3.77	
DIESEL FUEL	gal	2.39	4.1501	9.91	
REPAIR & MAINTENANCE	acre	7.09	1.0000	7.09	
INTEREST ON OP. CAP.	acre	3.69	1.0000	3.69	
TOTAL DIRECT EXPENSES				176.68	
RETURNS ABOVE DIRECT EXPENSES				98.32	
TOTAL FIXED EXPENSES				23.54	
TOTAL SPECIFIED EXPENSES				200.22	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				74.78	

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Nov		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e.	pt					2.0000				
NT Plant&Pre-Rigid	12R-20	MFWD 190	0.105	1.00	Jun		0.10	0.10	0.21	0.09
Soybean Seed RR	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 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Spin Spreader	5 ton		0.98	0.42	1.27		0.12	2.79	1.61	4.40
Phosphorus(46% P2O5)	cwt	14.52					0.63	15.15		15.15
Potash (60% K2O)	cwt	23.00					1.00	24.00		24.00
Spray (Broadcast)	60'		0.66	0.24	0.73		0.03	1.66	0.89	2.55
Glyphosate 3lbs a.e.	pt	3.50					0.06	3.56		3.56
NT Plant&Pre-Rigid	12R-20		2.47	2.37	3.19		0.14	8.17	6.61	14.78
Soybean Seed RR	lb	49.50					0.89	50.39		50.39
Apron Maxx RTA	oz	1.85					0.03	1.88		1.88
Gaucho 600	oz	6.56					0.12	6.68		6.68
Dual Magnum	pt	12.64					0.23	12.87		12.87
Spray (Broadcast)	60'		0.66	0.24	0.73		0.02	1.65	0.89	2.54
Glyphosate 3lbs a.e.	pt	3.50					0.05	3.55		3.55
Spray (Broadcast)	60'		0.33	0.12	0.36		0.01	0.82	0.45	1.27
Glyphosate 3lbs a.e.	pt	1.75					0.03	1.78		1.78
Spray (Broadcast)	60'		0.33	0.12	0.36		0.01	0.82	0.45	1.27
Dimilin 2L	oz	1.73					0.02	1.75		1.75
Quadris	oz	7.56					0.08	7.64		7.64
Spray (Broadcast)	60'		0.66	0.24	0.73		0.02	1.65	0.89	2.54
Acephate 90SP	lb	4.85					0.05	4.90		4.90
Spray (Broadcast)	60'		0.49	0.18	0.55		0.01	1.23	0.67	1.90
Intrepid 2F	oz	4.98					0.05	5.03		5.03
Baythroid XL	oz	3.47					0.04	3.51		3.51
Header -Soybean	25' Flex		3.33	3.16	2.16		0.03	8.68	11.08	19.76
Haul Soybeans/Field	bu	6.50					0.02	6.52		6.52
TOTALS		145.91	9.91	7.09	10.08	0.00	3.69	176.68	23.54	200.22

Note: Cost of production estimates are based on 2010 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, 2011

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	275.00
DIRECT EXPENSES												
FERTILIZERS	37.52	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	1.85	0.00	7.56	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.14	5.25	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.56	0.00	15.03	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.50	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50
LABOR	1.27	0.00	0.00	0.00	0.00	0.00	0.00	3.92	1.09	1.64	0.00	2.16
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	0.98	0.00	0.00	0.00	0.00	0.00	0.00	3.13	0.99	1.48	0.00	3.33
REPAIR & MAINTENANCE	0.42	0.00	0.00	0.00	0.00	0.00	0.00	2.61	0.36	0.54	0.00	3.16
INTEREST ON OP. CAP.	1.75	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.11	0.28	0.00	0.05
TOTAL DIRECT EXPENSES	41.94	0.00	0.00	0.00	0.00	0.00	0.00	85.21	7.80	26.53	0.00	15.20
NET INCOME	-41.94	0.00	0.00	0.00	0.00	0.00	0.00	-85.21	-7.80	-26.53	0.00	259.80
NET INCOME TO DATE	-41.94	-41.94	-41.94	-41.94	-41.94	-41.94	-41.94	-127.15	-134.95	-161.48	-161.48	98.32

Note: Cost of production estimates are based on 2010 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, 2011

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			8.25	8.80	9.35	9.90	10.45	11.00	11.55	12.10	12.65	13.20	13.75
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-70	-63	-56	-49	-42	-35	-29	-22	-15	-8	-1
			-93	-86	-80	-73	-66	-59	-52	-45	-38	-31	-25
60	15.00	bu	-50	-42	-33	-25	-17	-9	-0	7	15	23	32
			-73	-65	-57	-49	-40	-32	-24	-16	-7	0	8
70	17.50	bu	-30	-20	-11	-1	8	17	27	37	46	56	65
			-53	-44	-34	-25	-15	-5	3	13	23	32	42
80	20.00	bu	-10	0	11	22	33	44	55	66	77	88	99
			-33	-22	-11	-0	10	21	32	43	54	65	76
90	22.50	bu	9	21	34	46	59	71	83	96	108	120	133
			-13	-1	10	23	35	47	60	72	85	97	109
100	25.00	bu	29	43	57	70	84	98	112	125	139	153	167
			6	19	33	47	61	74	88	102	116	129	143
110	27.50	bu	49	64	79	94	110	125	140	155	170	185	200
			26	41	56	71	86	101	116	131	147	162	177
120	30.00	bu	69	86	102	119	135	152	168	185	201	218	234
			45	62	78	95	111	128	144	161	177	194	210
130	32.50	bu	89	107	125	143	160	178	196	214	232	250	268
			65	83	101	119	137	155	173	191	208	226	244
140	35.00	bu	109	128	147	167	186	205	224	244	263	282	301
			85	105	124	143	162	182	201	220	239	259	278
150	37.50	bu	129	150	170	191	211	232	253	273	294	315	335
			105	126	147	167	188	209	229	250	270	291	312

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2010 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, 2011

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	$/hour					
Combine (250-299 hp)	265 hp	231,000	300	8	13.64	11.35	32.59	24.06	68.01	97.79	165.80
Combine (300-349 hp)	325 hp	251,000	300	8	16.73	11.35	39.98	26.14	77.48	106.26	183.74
Combine (350-399 hp)	355 hp	269,000	300	8	18.27	11.35	43.66	28.02	83.03	113.88	196.91
Combine (400-449 hp)	425 hp	302,000	300	8	21.87	11.35	52.28	31.45	95.09	127.85	222.94
Combine (450-499hp)	475 hp	337,000	300	8	24.44	11.35	58.43	35.10	104.88	142.66	247.55
Cotton Stripper	173 hp	145,000	200	8	8.08	11.35	19.31	22.65	53.31	92.07	145.39
Tractor(20-39hp)CB	MFWD 30	23,500	600	8	1.54	11.35	3.69	0.73	15.77	4.57	20.34
Tractor(20-39hp)RB	MFWD 30	17,600	600	8	1.54	11.35	3.69	0.55	15.59	3.42	19.01
Tractor(40-59hp)CB	2WD 50	29,300	600	8	2.57	11.35	6.15	0.91	18.41	5.69	24.11
Tractor(40-59hp)CB	MFWD 50	31,900	600	8	2.57	11.35	6.15	0.99	18.49	6.20	24.70
Tractor(40-59hp)RB	2WD 50	22,500	600	8	2.57	11.35	6.15	0.70	18.20	4.37	22.58
Tractor(40-59hp)RB	MFWD 50	26,600	600	8	2.57	11.35	6.15	0.83	18.33	5.17	23.50
Tractor(60-89hp)CB	2WD 75	40,100	600	8	3.86	11.35	9.22	1.25	21.82	7.80	29.63
Tractor(60-89hp)CB	MFWD 75	43,900	600	8	3.86	11.35	9.22	1.37	21.94	8.53	30.48
Tractor(60-89hp)RB	2WD 75	32,100	600	8	3.86	11.35	9.22	1.00	21.57	6.24	27.82
Tractor(60-89hp)RB	MFWD 75	35,900	600	8	3.86	11.35	9.22	1.12	21.69	6.98	28.68
Tractor(90-119hp)CB	2WD 105	62,800	600	8	5.40	11.35	12.91	1.96	26.22	12.21	38.44
Tractor(90-119hp)CB	MFWD 105	67,600	600	8	5.40	11.35	12.91	2.11	26.37	13.15	39.52
Tractor(90-119hp)RB	2WD 105	48,600	600	8	5.40	11.35	12.91	1.51	25.78	9.45	35.23
Tractor(90-119hp)RB	MFWD 105	53,400	600	8	5.40	11.35	12.91	1.66	25.93	10.38	36.32
Tractor(120-139hp)CB	2WD 130	85,400	600	8	6.69	11.35	15.99	2.66	30.01	16.61	46.62
Tractor(120-139hp)CB	MFWD 130	92,200	600	8	6.69	11.35	15.99	2.88	30.22	17.93	48.15
Tractor(140-159hp)CB	2WD 150	103,300	600	8	7.72	11.35	18.45	3.22	33.03	20.09	53.12
Tractor(140-159hp)CB	MFWD 150	109,900	600	8	7.72	11.35	18.45	3.43	33.23	21.37	54.61
Tractor(160-179hp)CB	2WD 170	109,400	600	8	8.75	11.35	20.91	3.41	35.68	22.21	57.90
Tractor(160-179hp)CB	MFWD 170	128,400	600	8	8.75	11.35	20.91	4.01	36.27	26.07	62.35
Tractor(180-199hp)CB	MFWD 190	127,500	600	8	9.77	11.35	23.37	3.98	38.70	25.89	64.60
Tractor(200-249hp)CB	MFWD 225	161,400	600	8	11.58	11.35	27.67	5.04	44.07	32.78	76.85
Tractor(200-249hp)CB	Track 225	201,400	600	8	11.58	11.35	27.67	6.29	45.32	40.90	86.22
Tractor(250-349hp)CB	4WD 300	196,500	600	8	15.44	11.35	36.90	6.14	54.39	39.90	94.30
Tractor(250-349hp)CB	MFWD 300	200,500	600	8	15.44	11.35	36.90	6.26	54.52	40.72	95.24
Tractor(250-349hp)CB	Track 300	214,200	600	8	15.44	11.35	36.90	6.69	54.94	43.50	98.45
Tractor(350-449hp)CB	4WD 400	231,800	600	8	20.58	11.35	49.20	7.24	67.80	47.07	114.88
Tractor(350-449hp)CB	Track 400	264,700	600	8	20.58	11.35	49.20	8.27	68.82	53.76	122.59
Tractor(450-550hp)CB	4WD 500	272,200	600	8	25.73	11.35	61.50	8.50	81.36	55.28	136.64
Tractor(450-550hp)CB	Track 500	288,300	600	8	25.73	11.35	61.50	9.00	81.86	58.55	140.42
Utility Vehicle	500 CC	6,200	200	8	0.40	11.35	1.04	0.96	13.36	3.93	17.29
Utility Vehicle	600 CC	9,500	200	8	0.50	11.35	1.30	1.48	14.13	6.03	20.17
Utility Vehicle	800 CC	10,800	200	8	0.70	11.35	1.82	1.68	14.86	6.85	21.72

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, 2011

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	75,200	0	0	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Cotton Picker	4R-30(250)	262,000	200	8	12.86	0.327	6.68	10.06	13.40	30.15	54.46	84.62
Cotton Picker	4R-30(350)	350,000	200	8	18.01	0.327	6.68	14.09	17.90	38.68	72.76	111.44
Cotton Picker	4R-38(255)	291,000	200	8	13.12	0.257	5.26	8.08	11.72	25.06	47.63	72.70
Cotton Picker	4R-38(350)	351,000	200	8	18.01	0.257	5.26	11.09	14.13	30.49	57.45	87.95
Cotton Picker	4R2x1(350)	380,000	200	8	18.01	0.172	3.51	7.41	10.23	21.16	41.57	62.74
Cotton Picker	5R-30(250)	285,000	200	8	12.86	0.261	5.34	8.05	11.66	25.06	47.39	72.46
Cotton Picker	5R-36(250)	290,000	200	8	12.86	0.207	4.22	6.37	9.38	19.99	38.15	58.14
Cotton Picker	6R-30(355)	418,000	200	8	18.27	0.218	4.45	9.53	14.25	28.24	57.93	86.17
Cotton Picker	6R-38(355)	417,000	200	8	18.27	0.172	3.51	7.52	11.22	22.26	45.62	67.89
Cotton Picker/Module	4R-38(365)	470,000	200	8	18.78	0.257	5.26	11.57	18.93	35.76	76.93	112.70
Cotton Picker/Module	6R-30(365)	523,000	200	8	18.78	0.218	4.45	9.79	17.83	32.08	72.48	104.57
Cotton Picker/Module	6R-30(500)	570,000	200	8	25.73	0.218	4.45	13.42	19.43	37.31	78.99	116.31
Cotton Picker/Module	6R-38(365)	521,000	200	8	18.78	0.172	3.51	7.73	14.02	25.28	57.00	82.28
Cotton Picker/Module	6R-38(500)	571,000	200	8	25.73	0.172	3.51	10.59	15.37	29.48	62.47	91.96
Dry Applicator SP	70'300cuft	257,000	350	8	16.98	0.015	0.23	0.61	0.20	1.06	1.40	2.47
Sprayer 110Gal	30' 50hp	44,000	350	8	2.41	0.035	0.55	0.20	0.08	0.84	0.56	1.40
Sprayer 300-450gal	60' 125hp	96,400	350	8	5.66	0.017	0.27	0.23	0.09	0.60	0.61	1.22
Sprayer 300-450gal	80' 125hp	98,700	350	8	6.43	0.013	0.20	0.20	0.06	0.48	0.47	0.95
Sprayer 600-750gal	60' 175hp	149,000	350	8	9.00	0.017	0.27	0.37	0.14	0.79	0.95	1.75
Sprayer 600-825gal	80' 175hp	149,000	350	8	11.81	0.013	0.20	0.37	0.10	0.68	0.71	1.40
Sprayer 600-825gal	90' 250hp	216,000	350	8	12.73	0.011	0.18	0.35	0.13	0.68	0.92	1.60
Sprayer 800gal	100' 250hp	217,000	350	8	14.15	0.010	0.16	0.35	0.12	0.64	0.83	1.48
Sprayer 800gal	80' 250hp	206,000	350	8	12.86	0.013	0.20	0.40	0.14	0.76	0.98	1.75
Sprayer 1000-1400gal	90' 275hp	240,000	350	8	14.15	0.010	0.16	0.35	0.13	0.66	0.92	1.58
Sprayer 1000gal	100' 300hp	242,000	350	8	15.44	0.010	0.16	0.39	0.13	0.69	0.92	1.62
Sprayer 1200+gal	120' 300hp	258,000	350	8	15.44	0.008	0.13	0.32	0.12	0.58	0.82	1.41
Utility Vehicle	20'	10,750	200	8	0.50	0.052	0.83	0.06	0.08	0.99	0.36	1.35
Utility Vehicle	75"ropewic	6,740	200	8	0.40	0.170	2.70	0.17	0.17	3.06	0.73	3.79

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, 2011

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	R&M Imp.	R&M P.U.	Total Direct	Fixed Imp.	Fixed P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Bed/Cond./Roll-Fold.	26'	MFWD 190	21,900	160	10	0.072	0.81	1.68	0.39	0.28	3.18	1.07	1.86	6.13
Bed/Cond./Roll-Fold.	30'	MFWD 190	30,400	160	10	0.062	0.70	1.46	0.47	0.24	2.89	1.29	1.61	5.81
Bed/Cond./Roll-Fold.	40'	MFWD 225	30,700	160	10	0.046	0.53	1.29	0.35	0.23	2.42	0.98	1.53	4.94
Bed/Cond./Roll-Rigid	21'	MFWD 190	16,500	160	10	0.089	1.01	2.08	0.36	0.35	3.82	1.00	2.31	7.14
Bed/Cond./Roll-Rigid	26'	MFWD 190	18,800	160	10	0.072	0.81	1.68	0.33	0.28	3.13	0.92	1.86	5.92
Bedder Roller Fold.	8R-38	MFWD 190	23,000	160	10	0.074	0.84	1.73	0.42	0.29	3.29	1.16	1.91	6.37
Bedder Roller Fold.	12R-30	MFWD 225	24,800	160	10	0.062	0.70	1.72	0.38	0.31	3.14	1.05	2.04	6.25
Bedder Roller-Fold.	12R-38	MFWD 225	27,000	160	10	0.049	0.56	1.36	0.33	0.24	2.50	0.91	1.61	5.03
Bedder Roller-Fold.	16R-30	MFWD 225	28,200	160	10	0.046	0.53	1.29	0.33	0.23	2.39	0.90	1.53	4.83
Bedder Roller-Rigid	8R-38	MFWD 190	17,100	160	10	0.074	0.84	1.73	0.31	0.29	3.18	0.86	1.91	5.97
Blade-Box	6'-7'	2WD 130	1,000	200	20	0.020	0.22	0.31	0.00	0.05	0.60	0.00	0.33	0.94
Blade-Box	8'-10'	2WD 50	4,440	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box	12'-16'	2WD 50	6,170	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	6'-7'	2WD 50	1,150	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	8'-10'	2WD 50	3,060	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	12'-16'	2WD 50	5,930	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy	4R-30(250)	MFWD 190	23,000	200	10	0.327	3.71	7.65	1.88	1.30	14.55	3.97	8.47	27.00
Boll Buggy	4R-30(325)	MFWD 190	23,000	200	10	0.327	3.71	7.65	1.88	1.30	14.55	3.97	8.47	27.00
Boll Buggy	4R-38(255)	MFWD 190	23,000	200	10	0.257	2.92	6.02	1.48	1.02	11.46	3.12	6.67	21.26
Boll Buggy	4R-38(325)	MFWD 190	23,000	200	10	0.257	2.92	6.02	1.48	1.02	11.46	3.12	6.67	21.26
Boll Buggy	4R2x1(350)	MFWD 190	23,000	200	10	0.172	1.95	4.02	0.99	0.68	7.66	2.09	4.46	14.21
Boll Buggy	5R-30(255)	MFWD 190	23,000	200	10	0.261	2.97	6.12	1.50	1.04	11.64	3.17	6.78	21.60
Boll Buggy	5R-38(250)	MFWD 190	23,000	200	10	0.207	2.35	4.84	1.19	0.82	9.21	2.51	5.36	17.09
Boll Buggy	6R-30(325)	MFWD 190	23,000	200	10	0.218	2.47	5.10	1.25	0.86	9.70	2.64	5.65	18.00
Boll Buggy	6R-38(330)	MFWD 190	23,000	200	10	0.172	1.95	4.02	0.99	0.68	7.66	2.09	4.46	14.21
Boll Buggy-Stripper	13' Bcast	MFWD 150	23,000	200	10	0.251	2.85	4.64	1.44	0.86	9.81	3.05	5.38	18.25
Boll Buggy-Stripper	16' Bcast	MFWD 150	23,000	200	10	0.204	2.32	3.77	1.17	0.70	7.97	2.48	4.37	14.83
Boll Buggy-Stripper	19' Bcast	MFWD 150	23,000	200	10	0.172	1.95	3.17	0.99	0.59	6.71	2.09	3.68	12.49
Boll Buggy-Stripper	4R-30 2x1	MFWD 150	23,000	200	10	0.218	2.47	4.02	1.25	0.74	8.50	2.64	4.66	15.82
Boll Buggy-Stripper	4R-36	MFWD 150	23,000	200	10	0.272	3.09	5.03	1.56	0.93	10.63	3.30	5.83	19.77
Boll Buggy-Stripper	4R-38	MFWD 150	23,000	200	10	0.257	2.92	4.75	1.48	0.88	10.05	3.12	5.51	18.68
Boll Buggy-Stripper	4R-38 2x1	MFWD 150	23,000	200	10	0.172	1.95	3.17	0.99	0.59	6.71	2.09	3.68	12.49
Boll Buggy-Stripper	5R-30	MFWD 150	23,000	200	10	0.261	2.97	4.83	1.50	0.89	10.21	3.17	5.59	18.98
Boll Buggy-Stripper	5R-38	MFWD 150	23,000	200	10	0.207	2.35	3.82	1.19	0.71	8.07	2.51	4.42	15.02
Boll Buggy-Stripper	6R-30	MFWD 150	23,000	200	10	0.218	2.47	4.02	1.25	0.74	8.50	2.64	4.66	15.82
Boll Buggy-Stripper	6R-38	MFWD 150	23,000	200	10	0.172	1.95	3.17	0.99	0.59	6.71	2.09	3.68	12.49
Boll Buggy-Stripper	8R-30	MFWD 150	23,000	200	10	0.163	1.85	3.02	0.94	0.56	6.38	1.98	3.49	11.86
Boll Buggy-Stripper	8R-36/38	MFWD 150	23,000	200	10	0.129	1.46	2.38	0.74	0.44	5.04	1.56	2.76	9.38
Chisel Plow-Folding	16'	2WD 130	19,900	150	12	0.115	1.31	1.84	0.83	0.30	4.29	1.49	1.91	7.71
Chisel Plow-Folding	24'	MFWD 190	30,300	150	12	0.076	0.86	1.78	0.83	0.30	3.79	1.50	1.97	7.28
Chisel Plow-Folding	32'	MFWD 225	35,100	150	12	0.057	0.65	1.59	0.73	0.29	3.27	1.32	1.89	6.49
Chisel Plow-Folding	42'	MFWD 225	39,300	150	12	0.044	0.49	1.21	0.62	0.22	2.56	1.12	1.44	5.13
Chisel Plow-Folding	50'	MFWD 225	50,000	150	10	0.036	0.41	1.02	0.80	0.18	2.43	1.34	1.21	4.99
Chisel Plow-Folding	61'	MFWD 225	64,700	150	12	0.030	0.34	0.83	0.70	0.15	2.04	1.27	0.99	4.31
Chisel Plow-Rigid	10'	MFWD 170	7,808	150	12	0.184	2.09	3.86	0.52	0.74	7.22	0.94	4.82	12.98
Chisel Plow-Rigid	15'	2WD 130	8,072	150	12	0.123	1.39	1.97	0.35	0.32	4.05	0.64	2.04	6.75
Chisel Plow-Rigid	20'	MFWD 225	8,271	150	12	0.102	1.16	2.84	0.30	0.51	4.83	0.55	3.36	8.75
Chisel Plow-Rigid	24'	MFWD 190	9,865	150	12	0.077	0.87	1.80	0.27	0.30	3.25	0.49	1.99	5.74
Chisel-Harrow	21 shank	2WD 190	9,500	150	12	0.088	0.99	2.05	0.30	0.30	3.66	0.54	1.96	6.17
Chisel-Harrow	27 shank	MFWD 225	11,600	150	12	0.068	0.77	1.89	0.28	0.34	3.30	0.51	2.24	6.06
Coulter-Chisel-Harro	21 shank	2WD 190	17,200	150	12	0.088	0.99	2.05	0.54	0.30	3.90	0.98	1.96	6.85
Coulter-Chisel-Harro	27 shank	MFWD 225	21,500	150	12	0.068	0.77	1.89	0.53	0.34	3.54	0.95	2.24	6.75
Cultivate	4R-30	2WD 105	9,370	150	10	0.206	2.34	2.66	0.51	0.40	5.92	1.40	2.51	9.85
Cultivate	4R-38	2WD 105	9,440	150	10	0.162	1.84	2.09	0.40	0.24	4.59	1.11	1.53	7.24
Cultivate	6R-30	MFWD 150	13,190	150	10	0.137	1.56	2.53	0.48	0.47	5.05	1.32	2.93	9.31
Cultivate	6R-38	MFWD 150	13,900	150	10	0.108	1.23	2.00	0.40	0.37	4.01	1.10	2.32	7.43
Cultivate	8R-30	MFWD 190	17,400	150	10	0.103	1.17	2.41	0.47	0.41	4.47	1.30	2.67	8.44
Cultivate	8R-38	MFWD 190	19,600	150	10	0.073	0.83	1.72	0.38	0.29	3.23	1.05	1.90	6.19
Cultivate	8R-38 2x1	MFWD 190	26,600	150	10	0.054	0.61	1.26	0.38	0.21	2.48	1.05	1.40	4.94
Cultivate	10R-30	MFWD 225	24,900	150	10	0.082	0.93	2.28	0.54	0.41	4.18	1.49	2.70	8.38
Cultivate	12R-30	MFWD 225	33,200	150	10	0.068	0.78	1.90	0.60	0.34	3.63	1.66	2.25	7.55
Cultivate	12R-38	MFWD 225	32,000	150	10	0.054	0.61	1.50	0.46	0.27	2.85	1.26	1.77	5.90
Cultivate	16R-30	MFWD 225	39,300	150	10	0.051	0.58	1.42	0.54	0.26	2.81	1.47	1.69	5.98
Cultivate & Post	4R-30	2WD 105	14,400	150	10	0.220	3.49	2.84	0.84	0.33	7.51	2.30	2.07	11.90
Cultivate & Post	4R-38	2WD 105	14,400	150	10	0.173	2.75	2.23	0.66	0.26	5.91	1.81	1.63	9.37
Cultivate & Post	6R-30	MFWD 150	18,200	150	10	0.146	2.32	2.70	0.71	0.50	6.25	1.94	3.13	11.33
Cultivate & Post	6R-38	MFWD 150	18,900	150	10	0.115	1.83	2.13	0.58	0.39	4.95	1.59	2.47	9.02
Cultivate & Post	8R-30	MFWD 190	22,400	150	10	0.110	1.74	2.57	0.65	0.43	5.41	1.79	2.84	10.05
Cultivate & Post	8R-38	MFWD 190	24,600	150	10	0.086	1.38	2.03	0.57	0.34	4.33	1.55	2.25	8.14
Cultivate & Post	8R-38 2x1	MFWD 190	33,100	150	10	0.057	0.91	1.35	0.51	0.23	3.01	1.39	1.49	5.91
Cultivate & Post	10R-30	MFWD 225	29,900	150	10	0.088	1.39	2.43	0.70	0.44	4.97	1.91	2.88	9.78
Cultivate & Post	12R-30	MFWD 225	38,100	150	10	0.073	1.16	2.02	0.74	0.36	4.30	2.03	2.40	8.74
Cultivate & Post	12R-38	MFWD 225	38,500	150	10	0.057	0.91	1.60	0.59	0.29	3.40	1.62	1.89	6.93
Cultivate & Post	16R-30	MFWD 225	44,300	150	10	0.055	0.87	1.52	0.64	0.27	3.32	1.77	1.80	6.90
Disk & Incorporate	14'	2WD 130	25,600	200	10	0.149	2.37	2.39	1.14	0.39	6.31	2.09	2.48	10.90
Disk & Incorporate	20'	MFWD 190	35,900	180	10	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Disk & Incorporate	24'	MFWD 190	38,000	200	10	0.087	1.38	2.04	0.99	0.34	4.76	1.81	2.26	8.84

(continuted)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2011 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Disk & Incorporate	28'	MFWD 225	44,200	200	10	0.074	1.18	2.07	0.99	0.37	4.62	1.80	2.45	8.89
Disk & Incorporate	32'	MFWD 225	49,800	200	10	0.065	1.03	1.81	0.97	0.33	4.16	1.78	2.14	8.09
Disk Bed (Hipper)	4R-38	MFWD 150	8,420	160	10	0.147	1.67	2.72	0.31	0.50	5.21	0.84	3.15	9.22
Disk Bed (Hipper)	6R-30	MFWD 170	11,200	160	10	0.125	1.41	2.61	0.35	0.50	4.88	0.95	3.25	9.10
Disk Bed (Hipper)	6R-38	MFWD 170	11,200	160	10	0.098	1.12	2.06	0.27	0.39	3.85	0.75	2.57	7.18
Disk Bed (Hipper)	8R-30	MFWD 190	14,200	160	10	0.093	1.06	2.19	0.33	0.37	3.96	0.90	2.42	7.29
Disk Bed (Hipper)	8R-38 2x1	MFWD 190	23,200	160	10	0.049	0.56	1.15	0.28	0.19	2.19	0.78	1.27	4.25
Disk Bed (Hipper)	10R-30	MFWD 225	19,000	160	10	0.075	0.85	2.07	0.35	0.37	3.66	0.97	2.45	7.09
Disk Bed (Hipper)	10R-38	MFWD 225	19,600	160	10	0.059	0.67	1.63	0.28	0.29	2.89	0.79	1.93	5.62
Disk Bed (Hipper)	12R-30	MFWD 225	22,300	160	10	0.062	0.70	1.72	0.34	0.31	3.10	0.95	2.04	6.10
Disk Bed (Hipper)	12R-38	MFWD 225	23,200	160	10	0.049	0.56	1.36	0.28	0.24	2.46	0.78	1.61	4.86
Disk Bed (Hipper)Fld	8R-38	MFWD 190	15,000	160	10	0.074	0.84	1.73	0.27	0.29	3.14	0.75	1.91	5.82
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	15,300	160	10	0.074	0.84	1.73	0.28	0.29	3.15	0.77	1.91	5.84
Disk Bed w/roller	8R-30	MFWD 190	18,000	160	10	0.093	1.06	2.19	0.42	0.37	4.05	1.15	2.42	7.63
Disk Bed w/roller	12R-30	MFWD 225	30,700	160	10	0.062	0.70	1.72	0.47	0.31	3.23	1.31	2.04	6.59
Disk Bed w/roller	8R-38	MFWD 190	18,000	160	10	0.074	0.84	1.73	0.33	0.29	3.20	0.91	1.91	6.03
Disk Harrow	14'	2WD 130	20,600	180	10	0.140	1.59	2.24	0.80	0.37	5.01	1.75	2.33	9.10
Disk Harrow	20'	MFWD 190	30,943	180	10	0.098	1.11	2.29	0.84	0.39	4.64	1.84	2.54	9.03
Disk Harrow	24'	MFWD 190	33,100	180	10	0.081	0.92	1.91	0.75	0.32	3.92	1.64	2.11	7.68
Disk Harrow	28'	MFWD 225	39,200	180	10	0.070	0.79	1.94	0.76	0.35	3.85	1.67	2.29	7.82
Disk Harrow	32'	MFWD 225	44,800	180	10	0.061	0.69	1.69	0.76	0.30	3.46	1.67	2.01	7.15
Disk Harrow	42'	MFWD 225	87,000	180	10	0.046	0.53	1.29	1.13	0.23	3.19	2.47	1.53	7.19
Disk Harrow 40-100hp	14'	2WD 75	14,200	180	10	0.140	1.59	1.29	0.55	0.14	3.58	1.21	0.87	5.66
Disk Heavy	14'	MFWD 150	20,600	180	10	0.145	1.65	2.69	0.83	0.50	5.68	1.82	3.12	10.63
Disk Heavy	20'	MFWD 170	30,943	180	10	0.097	1.10	2.03	0.83	0.39	4.36	1.82	2.53	8.73
Disk Heavy	28'	MFWD 190	39,200	180	10	0.075	0.85	1.76	0.82	0.30	3.75	1.80	1.95	7.51
Disk Ripper	15'	MFWD 225	35,200	180	10	0.136	1.54	3.77	1.33	0.68	7.33	2.91	4.46	14.71
Ditcher		2WD 130	4,390	200	10	0.020	0.22	0.31	0.03	0.05	0.63	0.04	0.33	1.01
Ditcher (1m/160a)		2WD 130	4,390	200	10	0.009	0.10	0.14	0.01	0.02	0.29	0.02	0.15	0.47
Fert Appl (Liquid)	4R-38	MFWD 150	13,500	150	8	0.154	2.45	2.85	1.39	0.53	7.23	1.62	3.30	12.16
Fert Appl (Liquid)	6R-30	MFWD 170	16,600	150	8	0.130	2.07	2.73	1.44	0.52	6.79	1.69	3.41	11.89
Fert Appl (Liquid)	6R-38	MFWD 170	14,300	150	8	0.103	1.64	2.16	0.98	0.41	5.20	1.15	2.69	9.05
Fert Appl (Liquid)	8R-30	MFWD 190	14,400	150	8	0.098	1.55	2.29	0.94	0.39	5.18	1.10	2.54	8.83
Fert Appl (Liquid)	8R-38	MFWD 190	16,000	150	8	0.077	1.23	1.81	0.82	0.30	4.18	0.96	2.01	7.16
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	15,500	150	8	0.051	0.82	1.20	0.53	0.20	2.76	0.62	1.33	4.73
Fert Appl (Liquid)	10R-30	MFWD 225	15,000	150	8	0.078	1.24	2.17	0.78	0.39	4.60	0.91	2.57	8.09
Fert Appl (Liquid)	10R-38	MFWD 225	18,100	150	8	0.061	0.98	1.71	0.74	0.31	3.75	0.87	2.03	6.66
Fert Appl (Liquid)	12R-30	MFWD 225	18,100	150	8	0.078	1.24	2.17	0.94	0.39	4.76	1.10	2.57	8.44
Fert Appl (Liquid)	12R-38	MFWD 225	15,500	150	8	0.051	0.82	1.43	0.53	0.26	3.04	0.62	1.69	5.36
Field Cult & Inc	42'	MFWD 225	54,200	100	10	0.037	0.59	1.04	0.51	0.19	2.34	2.23	1.23	5.82
Field Cult & Inc	50'	MFWD 225	64,000	100	10	0.031	0.50	0.87	0.50	0.16	2.04	2.22	1.04	5.31
Field Cult & Inc Fld	24'	MFWD 170	28,600	100	10	0.066	1.04	1.38	0.47	0.26	3.17	2.06	1.72	6.96
Field Cult & Inc Fld	32'	MFWD 190	38,500	100	10	0.049	0.78	1.15	0.47	0.19	2.62	2.08	1.28	5.99
Field Cult & Inc Rdg	12'	2WD 150	15,600	100	10	0.132	2.09	2.43	0.51	0.42	5.48	2.25	2.65	10.39
Field Cultivate Fld	24'	MFWD 170	23,600	100	10	0.062	0.70	1.30	0.36	0.24	2.62	1.60	1.62	5.85
Field Cultivate Fld	32'	MFWD 190	33,500	100	10	0.046	0.52	1.09	0.39	0.18	2.19	1.70	1.20	5.11
Field Cultivate Fld	42'	MFWD 225	47,600	100	10	0.035	0.40	0.98	0.42	0.17	1.98	1.85	1.16	5.00
Field Cultivate Fld	50'	MFWD 225	56,500	100	10	0.029	0.33	0.82	0.42	0.15	1.73	1.84	0.97	4.56
Field Cultivate Rdg	12'	2WD 150	10,600	100	10	0.124	1.41	2.29	0.32	0.40	4.43	1.44	2.50	8.38
Grain Cart Corn	500 bu	MFWD 190	21,300	200	12	0.031	0.36	0.74	0.18	0.12	1.42	0.33	0.82	2.57
Grain Cart Corn	700 bu	MFWD 190	27,600	200	12	0.025	0.28	0.58	0.18	0.09	1.15	0.33	0.64	2.13
Grain Cart Corn	1000 bu	MFWD 225	46,800	200	12	0.025	0.28	0.69	0.31	0.12	1.41	0.57	0.81	2.80
Grain Cart Rice	500 bu	MFWD 190	21,300	200	12	0.062	0.70	1.46	0.36	0.24	2.77	0.65	1.61	5.04
Grain Cart Rice	700 bu	MFWD 190	27,600	200	12	0.055	0.62	1.28	0.41	0.21	2.54	0.74	1.42	4.70
Grain Cart Rice	1000 bu	MFWD 190	46,800	200	12	0.045	0.52	1.07	0.58	0.18	2.35	1.04	1.18	4.58
Grain Cart Soybean	500 bu	MFWD 190	21,300	200	12	0.025	0.28	0.59	0.14	0.10	1.13	0.26	0.66	2.05
Grain Cart Soybean	700 bu	MFWD 190	27,600	200	12	0.021	0.24	0.49	0.15	0.08	0.98	0.28	0.55	1.81
Grain Cart Soybean	1000 bu	MFWD 190	46,800	200	12	0.021	0.24	0.49	0.26	0.08	1.09	0.48	0.55	2.12
Grain Cart Wht/Sor	500 bu	MFWD 190	21,300	200	12	0.025	0.28	0.59	0.14	0.10	1.13	0.26	0.66	2.05
Grain Cart Wht/Sor	700 bu	MFWD 190	27,600	200	12	0.021	0.24	0.49	0.15	0.08	0.98	0.28	0.55	1.81
Grain Cart Wht/Sor	1000 bu	MFWD 190	46,800	200	12	0.021	0.24	0.49	0.26	0.08	1.09	0.48	0.55	2.12
Grain Drill	8'	2WD 130	15,300	150	8	0.235	4.81	3.76	1.35	0.62	10.56	2.68	3.91	17.16
Grain Drill	10'	2WD 130	16,500	150	8	0.188	3.84	3.01	1.16	0.50	8.53	2.31	3.13	13.98
Grain Drill	12'	2WD 130	17,500	150	8	0.157	3.20	2.51	1.03	0.41	7.17	2.04	2.61	11.82
Grain Drill	15'	MFWD 150	21,700	150	8	0.125	2.56	2.31	1.02	0.43	6.34	2.02	2.68	11.05
Grain Drill	20'	MFWD 170	31,300	150	8	0.094	1.92	1.97	1.10	0.37	5.38	2.19	2.45	10.03
Grain Drill	24'	MFWD 190	51,300	150	8	0.078	1.60	1.83	1.51	0.31	5.26	2.99	2.03	10.29
Grain Drill	30'	MFWD 225	51,900	150	8	0.062	1.28	1.73	1.22	0.31	4.56	2.42	2.06	9.05
Grain Drill	35'	MFWD 225	67,500	150	8	0.053	1.09	1.49	1.36	0.27	4.22	2.70	1.76	8.69
Grain Drill & Pre	8'	2WD 130	20,300	150	8	0.253	5.18	4.05	1.93	0.67	11.85	3.83	4.21	19.90
Grain Drill & Pre	10'	2WD 130	21,500	150	8	0.203	4.14	3.24	1.63	0.54	9.57	3.24	3.37	16.19
Grain Drill & Pre	12'	2WD 130	22,500	150	8	0.169	3.45	2.70	1.42	0.45	8.03	2.83	2.81	13.68
Grain Drill & Pre	15'	MFWD 150	26,700	150	8	0.135	2.76	2.49	1.35	0.46	7.08	2.68	2.89	12.66
Grain Drill & Pre	20'	MFWD 170	36,300	150	8	0.101	2.07	2.12	1.38	0.40	5.98	2.74	2.64	11.37
Grain Drill & Pre	24'	MFWD 190	56,200	150	8	0.084	1.72	1.97	1.78	0.33	5.82	3.53	2.19	11.55
Grain Drill & Pre	30'	MFWD 225	56,900	150	8	0.067	1.38	1.87	1.44	0.34	5.04	2.86	2.21	10.12
Grain Drill & Pre	35'	MFWD 225	72,500	150	8	0.058	1.18	1.60	1.57	0.29	4.66	3.12	1.90	9.69
Grain Drill & Pre T	8R-38	MFWD 225	45,800	150	8	0.062	1.28	1.73	1.07	0.31	4.41	2.14	2.06	8.62
Harrow - Rigid	21'	2WD 150	3,880	200	10	0.073	0.83	1.36	0.10	0.23	2.54	0.15	1.48	4.18
Harrow - Folding	16'	MFWD 190	5,000	200	10	0.097	1.10	2.26	0.16	0.38	3.92	0.26	2.51	6.70

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2011 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	R&M Imp.	R&M P.U.	Total Direct	Fixed Imp.	Fixed P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Harrow - Folding	24'	MFWD 190	9,020	200	10	0.064	0.73	1.51	0.20	0.25	2.70	0.31	1.67	4.70
Harrow - Folding	30'	MFWD 190	9,750	200	10	0.051	0.58	1.20	0.17	0.20	2.18	0.27	1.34	3.79
Harrow - Folding	40'	MFWD 190	12,000	200	10	0.038	0.44	0.90	0.16	0.15	1.66	0.25	1.00	2.92
Harrow - Folding	48'	MFWD 225	17,500	200	10	0.032	0.36	0.89	0.19	0.16	1.62	0.30	1.06	2.99
Harrow - Rigid	13'	2WD 130	2,760	200	10	0.119	1.35	1.91	0.11	0.31	3.70	0.18	1.98	5.86
Header - Corn	6R-30	265 hp	37,000	300	8	0.170	1.93	5.55	1.57	4.09	13.15	2.45	16.65	32.25
Header - Corn	6R-38	265 hp	38,500	300	8	0.134	1.52	4.38	1.29	3.23	10.43	2.01	13.14	25.59
Header - Corn	8R-30	265 hp	49,100	300	8	0.127	1.44	4.16	1.56	3.07	10.25	2.43	12.48	25.18
Header - Corn	8R-38	325 hp	49,200	300	8	0.100	1.14	4.03	1.24	2.63	9.06	1.93	10.72	21.72
Header - Corn	12R-20	325 hp	66,700	300	8	0.127	1.44	5.10	2.12	3.33	12.02	3.31	13.57	28.90
Header - Corn	12R-30	325 hp	75,300	300	8	0.085	0.96	3.40	1.60	2.22	8.19	2.49	9.04	19.74
Header - Draper (CL)	25' Rigid	265 hp	35,000	300	8	0.203	2.30	6.62	1.62	4.88	15.44	2.64	19.85	37.94
Header - Draper (CL)	30' Rigid	325 hp	35,700	300	8	0.169	1.92	6.76	1.38	4.42	14.49	2.24	17.98	34.72
Header - Draper (CL)	36' Rigid	355 hp	40,400	300	8	0.141	1.60	6.15	1.30	3.95	13.01	2.11	16.06	31.19
Header - Draper (SL)	25' Rigid	325 hp	35,000	300	8	0.176	1.99	7.03	1.41	4.60	15.04	2.29	18.70	36.04
Header - Draper (SL)	30' Rigid	325 hp	35,700	300	8	0.146	1.66	5.86	1.19	3.83	12.56	1.94	15.58	30.09
Header - Draper (SL)	36' Rigid	355 hp	40,400	300	8	0.122	1.38	5.33	1.13	3.42	11.28	1.83	13.91	27.03
Header - Rice (CL)	25' Rigid	325 hp	32,051	300	8	0.253	2.88	10.15	2.03	6.63	21.70	3.16	26.97	51.84
Header - Rice (CL)	30' Rigid	325 hp	41,263	300	8	0.211	2.40	8.45	2.18	5.53	18.57	3.39	22.47	44.44
Header - Rice (SL)	25' Rigid	325 hp	32,051	300	8	0.220	2.49	8.79	1.76	5.75	18.80	2.74	23.37	44.92
Header - Rice (SL)	30' Rigid	325 hp	41,263	300	8	0.183	2.08	7.33	1.89	4.79	16.09	2.94	19.48	38.51
Header -RiceStrp(CL)	20'	265 hp	39,100	300	8	0.253	2.88	8.27	2.48	6.10	19.74	3.86	24.82	48.43
Header -RiceStrp(CL)	24'	325 hp	43,000	300	8	0.211	2.40	8.45	2.27	5.53	18.66	3.53	22.47	44.68
Header -RiceStrp(CL)	32'	325 hp	47,400	300	8	0.158	1.80	6.34	1.88	4.14	14.17	2.92	16.85	33.95
Header -RiceStrp(SL)	20'	265 hp	39,100	300	8	0.220	2.49	7.17	2.15	5.29	17.11	3.34	21.51	41.97
Header -RiceStrp(SL)	24'	325 hp	43,000	300	8	0.183	2.08	7.33	1.97	4.79	16.17	3.06	19.48	38.72
Header -RiceStrp(SL)	32'	325 hp	47,400	300	8	0.137	1.56	5.49	1.62	3.59	12.28	2.53	14.61	29.42
Header -Soybean	22' Flex	265 hp	25,200	300	8	0.116	1.31	3.78	0.73	2.79	8.62	1.13	11.35	21.11
Header -Soybean	25' Flex	325 hp	27,300	300	8	0.102	1.15	4.08	0.69	2.67	8.61	1.08	10.85	20.55
Header -Soybean	30' Flex	325 hp	31,600	300	8	0.085	0.96	3.40	0.67	2.22	7.26	1.04	9.04	17.36
Header -Soybean	35' Flex	355 hp	36,700	300	8	0.072	0.82	3.18	0.66	2.04	6.72	1.04	8.31	16.08
Header Wheat/Sorghum	22' Rigid	265 hp	22,700	300	8	0.116	1.31	3.78	0.65	2.79	8.55	1.02	11.35	20.93
Header Wheat/Sorghum	25' Rigid	325 hp	23,900	300	8	0.102	1.15	4.08	0.61	2.67	8.52	0.95	10.85	20.33
Header Wheat/Sorghum	30' Rigid	325 hp	27,200	300	8	0.085	0.96	3.40	0.57	2.22	7.17	0.90	9.04	17.12
Header-Cotton Bcast	13'	173 hp	18,000	200	8	0.251	5.13	4.86	0.84	5.70	16.55	2.64	23.18	42.39
Header-Cotton-Bcast	16'	173 hp	21,100	200	8	0.204	4.17	3.95	0.80	4.63	13.57	2.51	18.84	34.93
Header-Cotton-Bcast	19'	173 hp	22,800	200	8	0.172	3.51	3.32	0.73	3.90	11.48	2.29	15.86	29.64
Header-Cotton-Brush	4R-30 2x1	173 hp	28,900	200	8	0.218	4.45	4.21	1.18	4.94	14.79	3.68	20.09	38.57
Header-Cotton-Brush	4R-36	173 hp	28,000	200	8	0.272	5.56	5.26	1.43	6.18	18.45	4.45	25.12	48.02
Header-Cotton-Brush	4R-38	173 hp	27,900	200	8	0.257	5.26	4.97	1.34	5.84	17.42	4.19	23.73	45.36
Header-Cotton-Brush	4R-38 2x1	173 hp	29,300	200	8	0.172	3.51	3.32	0.94	3.90	11.69	2.94	15.86	30.50
Header-Cotton-Brush	5R-30	173 hp	35,200	200	8	0.261	5.34	5.05	1.72	5.93	18.06	5.38	24.11	47.56
Header-Cotton-Brush	5R-38	173 hp	36,200	200	8	0.207	4.22	4.00	1.40	4.69	14.33	4.37	19.07	37.78
Header-Cotton-Brush	6R-30	173 hp	43,300	200	8	0.218	4.45	4.21	1.77	4.94	15.38	5.51	20.09	40.99
Header-Cotton-Brush	6R-38	173 hp	44,500	200	8	0.172	3.51	3.32	1.43	3.90	12.18	4.47	15.86	32.52
Header-Cotton-Brush	8R-30	173 hp	59,600	200	8	0.163	3.34	3.16	1.82	3.70	12.03	5.69	15.07	32.80
Header-Cotton-Brush	8R-36/38	173 hp	61,200	200	8	0.129	2.64	2.49	1.48	2.93	9.55	4.62	11.91	26.09
Land Plane	50'x16'	MFWD 190	10,300	200	10	0.151	1.72	3.54	0.31	0.60	6.18	0.85	3.92	10.96
Levee Pull & Seed	8 Blade	MFWD 170	7,540	100	10	0.003	0.04	0.07	0.00	0.01	0.13	0.02	0.09	0.25
Levee Pull (1m/80a)	8 blade	MFWD 170	6,760	100	10	0.003	0.04	0.07	0.00	0.01	0.13	0.02	0.09	0.25
Levee Splitter (1/80	8 blade	MFWD 150	6,760	100	10	0.004	0.04	0.07	0.00	0.01	0.14	0.03	0.08	0.26
Middle Buster	4R-38	MFWD 150	9,550	160	8	0.228	2.59	4.21	0.51	0.78	8.10	1.66	4.88	14.64
Middle Buster	6R-38	MFWD 150	11,700	160	8	0.120	1.36	2.21	0.32	0.41	4.32	1.07	2.56	7.96
Middle Buster	8R-30	MFWD 190	17,110	160	8	0.114	1.29	2.66	0.45	0.45	4.87	1.48	2.95	9.32
Middle Buster	8R-38	MFWD 190	15,500	160	8	0.090	1.02	2.10	0.32	0.35	3.82	1.06	2.33	7.22
Middle Buster	8R-38 2x1	MFWD 190	25,900	160	8	0.060	0.68	1.40	0.36	0.23	2.69	1.18	1.55	5.43
Middle Buster	10R-30	MFWD 225	27,000	160	8	0.091	1.03	2.52	0.57	0.46	4.60	1.87	2.99	9.47
Middle Buster	10R-38	MFWD 225	29,500	160	8	0.072	0.81	1.99	0.49	0.36	3.67	1.61	2.36	7.65
Middle Buster	12R-38	MFWD 225	25,900	160	8	0.060	0.68	1.66	0.36	0.30	3.01	1.18	1.97	6.16
Module Builder	4R-30(250)	MFWD 190	30,500	200	10	0.327	6.68	7.65	2.49	1.30	18.13	5.26	8.47	31.87
Module Builder	4R-30(325)	MFWD 190	30,500	200	10	0.327	6.68	7.65	2.49	1.30	18.13	5.26	8.47	31.87
Module Builder	4R-38(255)	MFWD 190	30,500	200	10	0.257	5.26	6.02	1.96	1.02	14.27	4.14	6.67	25.10
Module Builder	4R-38(325)	MFWD 190	30,500	200	10	0.257	5.26	6.02	1.96	1.02	14.27	4.14	6.67	25.10
Module Builder	4R2x1(350)	MFWD 190	30,500	200	10	0.172	3.51	4.02	1.31	0.68	9.54	2.77	4.46	16.77
Module Builder	5R-30(255)	MFWD 190	30,500	200	10	0.261	5.34	6.12	1.99	1.04	14.50	4.21	6.78	25.50
Module Builder	5R-38(250)	MFWD 190	30,500	200	10	0.207	4.22	4.84	1.57	0.82	11.47	3.33	5.36	20.17
Module Builder	6R-30(325)	MFWD 190	30,500	200	10	0.218	4.45	5.10	1.66	0.86	12.08	3.51	5.65	21.25
Module Builder	6R-38(330)	MFWD 190	30,500	200	10	0.172	3.51	4.02	1.31	0.68	9.54	2.77	4.46	16.77
Module Builder-Strip	13' Bcast	MFWD 150	30,500	200	10	0.251	5.13	4.64	1.92	0.86	12.57	4.05	5.38	22.00
Module Builder-Strip	16' Bcast	MFWD 150	30,500	200	10	0.204	4.17	3.77	1.56	0.70	10.21	3.29	4.37	17.88
Module Builder-Strip	19' Bcast	MFWD 150	30,500	200	10	0.172	3.51	3.17	1.31	0.59	8.60	2.77	3.68	15.05
Module Builder-Strip	4R-30 2x1	MFWD 150	30,500	200	10	0.218	4.45	4.02	1.66	0.74	10.89	3.51	4.66	19.07
Module Builder-Strip	4R-36	MFWD 150	30,500	200	10	0.272	5.56	5.03	2.08	0.93	13.61	4.38	5.83	23.84
Module Builder-Strip	4R-38	MFWD 150	30,500	200	10	0.257	5.26	4.75	1.96	0.88	12.86	4.14	5.51	22.52
Module Builder-Strip	4R-38 2x1	MFWD 150	30,500	200	10	0.172	3.51	3.17	1.31	0.59	8.60	2.77	3.68	15.05
Module Builder-Strip	5R-30	MFWD 150	30,500	200	10	0.261	5.34	4.83	1.99	0.89	13.07	4.21	5.59	22.88
Module Builder-Strip	5R-38	MFWD 150	30,500	200	10	0.207	4.22	3.82	1.57	0.71	10.34	3.33	4.42	18.10
Module Builder-Strip	6R-30	MFWD 150	30,500	200	10	0.218	4.45	4.02	1.66	0.74	10.89	3.51	4.66	19.07

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2011 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Module Builder-Strip	6R-38	MFWD 190	30,500	200	10	0.172	3.51	4.02	1.31	0.68	9.54	2.77	4.46	16.77
Module Builder-Strip	8R-36/38	MFWD 190	30,500	200	10	0.129	2.64	3.02	0.98	0.51	7.16	2.08	3.35	12.60
NT Grain Drill	6'	MFWD 170	18,800	150	8	0.327	6.68	6.84	2.30	1.31	17.15	4.57	8.53	30.26
NT Grain Drill	10'	2WD 130	28,500	150	8	0.235	4.81	3.76	2.51	0.62	11.72	4.99	3.91	20.64
NT Grain Drill	12'	2WD 130	35,100	150	8	0.163	3.34	2.61	2.15	0.43	8.55	4.27	2.71	15.54
NT Grain Drill	15'	MFWD 150	38,600	150	8	0.130	2.67	2.41	1.89	0.44	7.43	3.75	2.79	13.99
NT Grain Drill	20'	MFWD 170	55,200	150	8	0.098	2.00	2.05	2.03	0.39	6.48	4.03	2.56	13.07
NT Grain Drill	24'	MFWD 190	74,200	150	8	0.081	1.67	1.91	2.27	0.32	6.18	4.51	2.11	12.82
NT Grain Drill	30'	MFWD 225	94,400	150	8	0.065	1.33	1.81	2.31	0.33	5.79	4.59	2.14	12.54
NT Grain Drill & Pre	6'	MFWD 170	23,800	150	8	0.352	7.19	7.37	3.14	1.41	19.13	6.24	9.19	34.56
NT Grain Drill & Pre	10'	2WD 130	33,400	150	8	0.211	4.31	3.38	2.64	0.56	10.91	5.25	3.51	19.68
NT Grain Drill & Pre	12'	2WD 130	40,100	150	8	0.176	3.59	2.81	2.65	0.47	9.53	5.25	2.92	17.72
NT Grain Drill & Pre	15'	MFWD 150	43,600	150	8	0.141	2.87	2.60	2.30	0.48	8.27	4.57	3.01	15.85
NT Grain Drill & Pre	20'	MFWD 170	60,100	150	8	0.105	2.15	2.21	2.38	0.42	7.17	4.72	2.75	14.66
NT Grain Drill & Pre	24'	MFWD 190	79,100	150	8	0.088	1.79	2.06	2.61	0.35	6.82	5.18	2.28	14.29
NT Grain Drill & Pre	30'	MFWD 225	99,400	150	8	0.070	1.43	1.95	2.62	0.35	6.37	5.21	2.31	13.89
NT Plant&Pre-Folding	8R-38	MFWD 170	44,300	150	8	0.083	1.70	1.74	1.38	0.33	5.17	2.75	2.18	10.11
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	72,400	150	8	0.055	1.13	1.16	1.51	0.22	4.03	2.99	1.45	8.48
NT Plant&Pre-Folding	12R-20	MFWD 190	66,700	150	8	0.105	2.15	2.47	2.64	0.42	7.69	5.24	2.73	15.68
NT Plant&Pre-Folding	12R-30	MFWD 190	69,100	150	8	0.070	1.43	1.64	1.82	0.28	5.19	3.62	1.82	10.64
NT Plant&Pre-Folding	12R-38	MFWD 190	72,400	150	8	0.055	1.13	1.30	1.51	0.22	4.17	2.99	1.44	8.61
NT Plant&Pre-Folding	16R-30	MFWD 190	96,400	150	8	0.052	1.07	1.23	1.91	0.21	4.43	3.79	1.36	9.59
NT Plant&Pre-Folding	23R-15	MFWD 190	101,000	150	8	0.073	1.49	1.71	2.78	0.29	6.29	5.51	1.90	13.71
NT Plant&Pre-Folding	24R-15	MFWD 225	117,000	150	8	0.070	1.43	1.95	3.09	0.35	6.84	6.13	2.31	15.28
NT Plant&Pre-Folding	24R-20	MFWD 190	127,000	150	8	0.052	1.07	1.23	2.51	0.21	5.04	4.99	1.36	11.40
NT Plant&Pre-Folding	24R-30	MFWD 190	151,000	150	8	0.035	0.71	0.82	1.99	0.14	3.68	3.96	0.91	8.55
NT Plant&Pre-Folding	31R-15	MFWD 225	137,000	150	8	0.054	1.11	1.51	2.80	0.27	5.71	5.57	1.79	13.07
NT Plant&Pre-Folding	32R-15	MFWD 225	149,000	150	8	0.052	1.07	1.46	2.95	0.26	5.76	5.86	1.73	13.35
NT Plant&Pre-Folding	36R-20	MFWD 225	167,000	150	8	0.035	0.71	0.97	2.20	0.17	4.08	4.38	1.15	9.61
NT Plant&Pre-Rigid	4R-30	2WD 130	25,100	150	8	0.211	4.31	3.38	1.99	0.56	10.25	3.94	3.51	17.72
NT Plant&Pre-Rigid	4R-38	2WD 130	26,600	150	8	0.166	3.39	2.66	1.66	0.44	8.16	3.29	2.76	14.23
NT Plant&Pre-Rigid	6R-30	MFWD 150	33,600	150	8	0.141	2.87	2.60	1.77	0.48	7.74	3.52	3.01	14.28
NT Plant&Pre-Rigid	6R-38	MFWD 150	31,700	150	8	0.111	2.27	2.05	1.32	0.38	6.03	2.62	2.38	11.03
NT Plant&Pre-Rigid	8R-30	MFWD 170	40,200	150	8	0.105	2.15	2.21	1.59	0.42	6.38	3.16	2.75	12.31
NT Plant&Pre-Rigid	8R-38	MFWD 170	37,100	150	8	0.083	1.70	1.74	1.16	0.33	4.95	2.30	2.18	9.44
NT Plant&Pre-Rigid	10R-30	MFWD 190	39,600	150	8	0.084	1.72	1.97	1.25	0.33	5.29	2.49	2.19	9.98
NT Plant&Pre-Rigid	11R-15	MFWD 170	45,100	150	8	0.143	2.93	3.00	2.43	0.57	8.95	4.82	3.75	17.53
NT Plant&Pre-Rigid	11R-20	MFWD 170	42,500	150	8	0.115	2.35	2.41	1.84	0.46	7.08	3.65	3.01	13.75
NT Plant&Pre-Rigid	12R-20	MFWD 190	49,200	150	8	0.105	2.15	2.47	1.95	0.42	7.00	3.87	2.73	13.61
NT Plant&Pre-Rigid	12R-30	MFWD 190	55,300	150	8	0.070	1.43	1.64	1.46	0.28	4.83	2.90	1.82	9.55
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	47,400	150	8	0.097	1.98	2.69	1.73	0.49	6.91	3.43	3.19	13.54
NT Plant&Pre-Rigid	15R-15	MFWD 190	57,700	150	8	0.113	2.30	2.64	2.44	0.45	7.85	4.85	2.92	15.63
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	108,000	150	8	0.055	1.13	1.54	2.25	0.28	5.21	4.47	1.82	11.50
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	86,600	150	8	0.083	1.70	2.31	2.71	0.42	7.15	5.38	2.74	15.28
NT Plant-Folding	8R-38	MFWD 170	39,300	150	8	0.077	1.58	1.62	1.14	0.31	4.66	2.26	2.02	8.95
NT Plant-Folding	8R-38 2x1	MFWD 170	65,700	150	8	0.051	1.05	1.08	1.27	0.20	3.61	2.52	1.34	7.49
NT Plant-Folding	12R-20	MFWD 190	61,800	150	8	0.098	2.00	2.29	2.27	0.39	6.96	4.51	2.54	14.02
NT Plant-Folding	12R-30	MFWD 190	64,100	150	8	0.065	1.33	1.53	1.57	0.26	4.70	3.12	1.69	9.51
NT Plant-Folding	12R-38	MFWD 190	65,900	150	8	0.051	1.05	1.20	1.27	0.20	3.74	2.53	1.33	7.61
NT Plant-Folding	16R-30	MFWD 190	89,800	150	8	0.049	1.00	1.14	1.65	0.19	3.99	3.28	1.27	8.55
NT Plant-Folding	23R-15	MFWD 190	106,000	150	8	0.068	1.39	1.59	2.71	0.27	5.96	5.37	1.76	13.11
NT Plant-Folding	24R-15	MFWD 225	112,000	150	8	0.065	1.33	1.81	2.75	0.33	6.22	5.45	2.14	13.83
NT Plant-Folding	24R-20	MFWD 190	120,000	150	8	0.049	1.00	1.14	2.20	0.19	4.55	4.38	1.27	10.21
NT Plant-Folding	24R-30	MFWD 190	141,000	150	8	0.032	0.66	0.76	1.73	0.13	3.29	3.43	0.84	7.57
NT Plant-Folding	31R-15	MFWD 225	128,000	150	8	0.050	1.03	1.40	2.43	0.25	5.13	4.83	1.66	11.63
NT Plant-Folding	32R-15	MFWD 225	139,000	150	8	0.049	1.00	1.35	2.55	0.24	5.16	5.07	1.60	11.85
NT Plant-Folding	36R-20	MFWD 225	157,000	150	8	0.032	0.66	0.90	1.92	0.16	3.66	3.82	1.07	8.56
NT Plant-Rigid	4R-30	2WD 130	20,100	150	8	0.196	4.00	3.14	1.48	0.52	9.15	2.93	3.26	15.35
NT Plant-Rigid	4R-38	2WD 130	21,600	150	8	0.154	3.15	2.47	1.25	0.41	7.29	2.48	2.56	12.35
NT Plant-Rigid	6R-30	MFWD 150	28,700	150	8	0.130	2.67	2.41	1.40	0.44	6.94	2.79	2.79	12.54
NT Plant-Rigid	6R-38	MFWD 150	26,700	150	8	0.103	2.10	1.90	1.03	0.35	5.40	2.05	2.21	9.67
NT Plant-Rigid	8R-30	MFWD 170	35,200	150	8	0.098	2.00	2.05	1.29	0.39	5.74	2.57	2.56	10.88
NT Plant-Rigid	8R-38	MFWD 170	32,100	150	8	0.077	1.58	1.62	0.93	0.31	4.45	1.85	2.02	8.33
NT Plant-Rigid	10R-30	MFWD 190	34,700	150	8	0.078	1.60	1.83	1.02	0.31	4.77	2.02	2.03	8.83
NT Plant-Rigid	11R-15	MFWD 170	40,100	150	8	0.133	2.72	2.79	2.00	0.53	8.06	3.98	3.48	15.53
NT Plant-Rigid	11R-20	MFWD 170	37,600	150	8	0.107	2.19	2.24	1.51	0.43	6.37	3.00	2.79	12.18
NT Plant-Rigid	12R-20	MFWD 190	44,200	150	8	0.098	2.00	2.29	1.62	0.39	6.31	3.22	2.54	12.09
NT Plant-Rigid	12R-30	MFWD 190	50,300	150	8	0.065	1.33	1.53	1.23	0.26	4.36	2.44	1.69	8.50
NT Plant-Rigid	13R-18/20	MFWD 225	41,380	150	8	0.090	1.85	2.51	1.41	0.45	6.24	2.79	2.98	12.02
NT Plant-Rigid	15R-15	MFWD 190	51,100	150	8	0.105	2.14	2.45	2.01	0.41	7.03	3.99	2.72	13.74
NT Plant-TwinRow	12R-30/40	MFWD 225	101,000	150	8	0.051	1.05	1.43	1.95	0.26	4.70	3.88	1.69	10.28
NT Plant-TwinRow	8R-30/40	MFWD 225	81,600	150	8	0.077	1.58	2.14	2.37	0.39	6.50	4.71	2.54	13.75
One Trip Plow	4R-38	MFWD 170	20,000	150	10	0.146	1.66	3.06	1.36	0.58	6.69	2.13	3.82	12.65
One Trip Plow	6R-38	MFWD 190	24,000	150	10	0.097	1.10	2.27	1.08	0.38	4.85	1.70	2.51	9.07
One Trip Plow	8R-38	MFWD 225	35,700	150	10	0.073	0.83	2.04	1.23	0.37	4.49	1.92	2.42	8.84
Paratill & Bed Fold.	8R-38	MFWD 225	50,300	150	12	0.080	0.91	2.23	1.46	0.40	5.02	2.64	2.64	10.32
Paratill & Bed Fold.	8R-38 2x1	MFWD 225	63,900	150	12	0.053	0.61	1.48	1.24	0.27	3.61	2.23	1.76	7.61
Paratill & Bed Fold.	10R-30	MFWD 225	32,100	150	12	0.081	0.92	2.26	0.94	0.41	4.54	1.70	2.67	8.93

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2011 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	R&M Imp.	R&M P.U.	Total Direct	Fixed Imp.	Fixed P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Paratill & Bed Fold.	12R-38	MFWD 225	63,900	150	12	0.053	0.61	1.48	1.24	0.27	3.61	2.23	1.76	7.61
Paratill & Bed Rigid	4R-30	MFWD 225	12,200	150	12	0.204	2.31	5.65	0.90	1.03	9.90	1.62	6.69	18.22
Paratill & Bed Rigid	4R-38	MFWD 225	12,200	150	12	0.160	1.82	4.45	0.70	0.81	7.79	1.27	5.27	14.35
Paratill & Bed Rigid	6R-30	MFWD 225	16,000	150	12	0.136	1.54	3.77	0.78	0.68	6.79	1.41	4.46	12.67
Paratill & Bed Rigid	6R-38	MFWD 225	17,000	150	12	0.107	1.22	2.97	0.66	0.54	5.39	1.19	3.52	10.11
Paratill & Bed Rigid	8R-30	MFWD 225	21,100	150	12	0.102	1.15	2.82	0.77	0.51	5.28	1.40	3.34	10.03
Paratill & Bed Rigid	8R-38	MFWD 225	22,200	150	12	0.080	0.91	2.23	0.64	0.40	4.20	1.16	2.64	8.02
Paratill & Bed Rigid	10R-30	MFWD 225	24,400	150	12	0.081	0.92	2.26	0.72	0.41	4.32	1.29	2.67	8.30
Peanut Cond.& Lifter	6-Row	MFWD 190	11,000	300	20	0.100	1.13	2.33	0.18	0.39	4.05	0.28	2.58	6.92
Peanut Conditioner	6-Row	MFWD 190	11,500	300	20	0.100	1.13	2.33	0.23	0.39	4.10	0.26	2.58	6.95
Peanut Dig/Invertor	4R-30	MFWD 190	20,900	300	15	0.235	2.67	5.51	1.22	0.93	10.35	1.52	6.10	17.99
Peanut Dig/Invertor	4R-38	MFWD 190	20,900	300	15	0.186	2.11	4.35	0.96	0.74	8.17	1.20	4.82	14.20
Peanut Dig/Invertor	6R-38	MFWD 190	30,300	300	15	0.124	1.40	2.89	0.65	0.49	5.46	1.16	3.21	9.83
Peanut Dump Cart	6-Row	MFWD 190	34,900	300	20	0.310	3.51	7.24	0.63	1.23	12.63	2.70	8.02	23.36
Peanut Harvester	4R-30	MFWD 225	95,400	300	20	0.849	9.64	23.52	4.59	4.28	42.05	18.74	27.86	88.66
Peanut Harvester	4R-38	MFWD 225	95,400	300	20	0.934	10.60	25.86	5.05	4.71	46.24	21.45	30.63	98.33
Peanut Harvester	6R-38	MFWD 225	118,000	300	20	0.625	7.09	17.29	3.56	3.15	31.11	17.75	20.48	69.34
Peanut Lifter	6-Row	MFWD 225	4,000	300	20	0.100	1.13	2.76	0.08	0.50	4.48	0.09	3.27	7.86
Peanut Plt&Pre Fold.	12R-38	MFWD 190	66,100	150	8	0.080	1.64	1.87	1.99	0.32	5.83	3.95	2.08	11.87
Peanut Plt&Pre Rigid	8R-30	MFWD 190	36,000	150	8	0.152	3.11	3.57	2.06	0.60	9.36	4.09	3.95	17.40
Peanut Plt&Pre Rigid	8R-38	MFWD 190	32,900	150	8	0.120	2.46	2.82	1.49	0.48	7.25	2.95	3.12	13.34
Pipe Spool 160ac	1/4m roll	2WD 130	3,470	15	12	0.003	0.09	0.04	0.00	0.00	0.15	0.07	0.05	0.27
Pipe Trailer 1m/160a	30'	2WD 130	1,100	100	15	0.003	0.17	0.05	0.00	0.01	0.24	0.00	0.06	0.31
Plant & Pre-Folding	8R-38	MFWD 170	40,000	150	8	0.080	1.63	1.67	1.20	0.32	4.84	2.38	2.09	9.32
Plant & Pre-Folding	8R-38 2x1	MFWD 170	66,100	150	8	0.053	1.09	1.11	1.32	0.21	3.74	2.62	1.39	7.76
Plant & Pre-Folding	12R-20	MFWD 190	60,400	150	8	0.101	2.07	2.37	2.29	0.40	7.15	4.56	2.62	14.34
Plant & Pre-Folding	12R-30	MFWD 190	62,800	150	8	0.067	1.38	1.58	1.59	0.26	4.82	3.16	1.75	9.74
Plant & Pre-Folding	12R-38	MFWD 190	66,100	150	8	0.053	1.09	1.24	1.32	0.21	3.87	2.62	1.38	7.88
Plant & Pre-Folding	16R-30	MFWD 190	88,000	150	8	0.050	1.03	1.18	1.67	0.20	4.10	3.32	1.31	8.73
Plant & Pre-Folding	23R-15	MFWD 190	98,500	150	8	0.070	1.43	1.64	2.60	0.28	5.97	5.16	1.82	12.96
Plant & Pre-Folding	24R-15	MFWD 225	104,000	150	8	0.067	1.38	1.87	2.63	0.34	6.23	5.23	2.21	13.69
Plant & Pre-Folding	24R-20	MFWD 190	114,000	150	8	0.050	1.03	1.18	2.17	0.20	4.59	4.30	1.31	10.21
Plant & Pre-Folding	24R-30	MFWD 190	138,000	150	8	0.033	0.69	0.79	1.75	0.13	3.36	3.47	0.87	7.71
Plant & Pre-Folding	31R-15	MFWD 225	121,000	150	8	0.052	1.07	1.45	2.38	0.26	5.16	4.72	1.72	11.61
Plant & Pre-Folding	32R-15	MFWD 225	132,000	150	8	0.050	1.03	1.40	2.51	0.25	5.21	4.98	1.66	11.85
Plant & Pre-Folding	36R-20	MFWD 225	148,000	150	8	0.033	0.69	0.93	1.87	0.17	3.67	3.72	1.10	8.51
Plant & Pre-Rigid	4R-30	2WD 130	23,000	150	8	0.203	4.14	3.24	1.75	0.54	9.68	3.47	3.37	16.53
Plant & Pre-Rigid	4R-38	2WD 130	24,500	150	8	0.159	3.26	2.55	1.46	0.42	7.71	2.91	2.65	13.28
Plant & Pre-Rigid	6R-30	MFWD 150	31,500	150	8	0.135	2.76	2.49	1.59	0.46	7.32	3.17	2.89	13.39
Plant & Pre-Rigid	6R-38	MFWD 150	28,500	150	8	0.106	2.18	1.97	1.14	0.36	5.66	2.26	2.28	10.21
Plant & Pre-Rigid	8R-30	MFWD 170	36,000	150	8	0.101	2.07	2.12	1.37	0.40	5.97	2.71	2.64	11.34
Plant & Pre-Rigid	8R-38	MFWD 170	32,900	150	8	0.080	1.63	1.67	0.99	0.32	4.62	1.96	2.09	8.68
Plant & Pre-Rigid	10R-30	MFWD 190	34,400	150	8	0.081	1.65	1.89	1.04	0.32	4.92	2.07	2.10	9.11
Plant & Pre-Rigid	11R-15	MFWD 170	39,300	150	8	0.148	3.02	3.09	2.18	0.59	8.90	4.33	3.86	17.10
Plant & Pre-Rigid	11R-20	MFWD 170	36,800	150	8	0.110	2.26	2.32	1.53	0.44	6.56	3.03	2.89	12.49
Plant & Pre-Rigid	12R-20	MFWD 190	42,900	150	8	0.101	2.07	2.37	1.63	0.40	6.48	3.24	2.62	12.35
Plant & Pre-Rigid	12R-30	MFWD 190	49,000	150	8	0.067	1.38	1.58	1.24	0.26	4.47	2.46	1.75	8.69
Plant & Pre-Rigid	13R-18/20	MFWD 225	41,375	150	8	0.093	1.90	2.59	1.45	0.47	6.42	2.88	3.06	12.37
Plant & Pre-Rigid	15R-15	MFWD 190	49,800	150	8	0.108	2.21	2.53	2.02	0.43	7.21	4.02	2.81	14.05
Plant & Pre-TwinRow	12R-30/40	MFWD 225	101,000	150	8	0.053	1.09	1.47	2.02	0.26	4.86	4.01	1.75	10.63
Plant & Pre-TwinRow	8R-30/40	MFWD 225	82,400	150	8	0.080	1.63	2.22	2.48	0.40	6.74	4.91	2.63	14.29
Plant - Folding	8R-38	MFWD 170	35,100	150	8	0.074	1.52	1.55	0.98	0.29	4.35	1.94	1.94	8.24
Plant - Folding	8R-38 2x1	MFWD 170	59,600	150	8	0.049	1.01	1.03	1.10	0.19	3.35	2.19	1.29	6.85
Plant - Folding	12R-20	MFWD 190	55,400	150	8	0.094	1.92	2.20	1.95	0.37	6.46	3.88	2.44	12.79
Plant - Folding	12R-30	MFWD 190	57,800	150	8	0.062	1.28	1.46	1.36	0.25	4.36	2.70	1.62	8.69
Plant - Folding	12R-38	MFWD 190	59,600	150	8	0.049	1.01	1.15	1.10	0.19	3.47	2.19	1.28	6.96
Plant - Folding	16R-30	MFWD 190	81,400	150	8	0.047	0.96	1.10	1.43	0.18	3.69	2.85	1.22	7.76
Plant - Folding	23R-15	MFWD 190	93,500	150	8	0.065	1.33	1.53	2.29	0.26	5.42	4.55	1.69	11.67
Plant - Folding	24R-15	MFWD 225	99,000	150	8	0.062	1.28	1.73	2.33	0.31	5.67	4.62	2.06	12.36
Plant - Folding	24R-20	MFWD 190	108,000	150	8	0.047	0.96	1.10	1.90	0.18	4.16	3.78	1.22	9.16
Plant - Folding	24R-30	MFWD 190	128,100	150	8	0.031	0.64	0.73	1.50	0.12	3.01	2.99	0.81	6.81
Plant - Folding	31R-15	MFWD 225	111,000	150	8	0.048	0.99	1.34	2.02	0.24	4.61	4.02	1.59	10.23
Plant - Folding	32R-15	MFWD 225	123,000	150	8	0.047	0.96	1.30	2.17	0.23	4.67	4.31	1.54	10.53
Plant - Folding	36R-20	MFWD 225	138,000	150	8	0.031	0.64	0.86	1.62	0.15	3.29	3.22	1.03	7.55
Plant - Rigid	4R-30	2WD 130	18,000	150	8	0.188	3.84	3.01	1.27	0.50	8.64	2.52	3.13	14.29
Plant - Rigid	4R-38	2WD 130	19,500	150	8	0.148	3.03	2.37	1.08	0.39	6.88	2.15	2.46	11.50
Plant - Rigid	6R-30	MFWD 150	26,600	150	8	0.125	2.56	2.31	1.25	0.43	6.57	2.48	2.68	11.74
Plant - Rigid	6R-38	MFWD 150	23,500	150	8	0.099	2.02	1.83	0.87	0.34	5.07	1.73	2.12	8.92
Plant - Rigid	8R-30	MFWD 170	31,000	150	8	0.094	1.92	1.97	1.09	0.37	5.37	2.17	2.45	10.00
Plant - Rigid	8R-38	MFWD 170	27,900	150	8	0.074	1.52	1.55	0.77	0.29	4.15	1.54	1.94	7.64
Plant - Rigid	10R-30	MFWD 190	29,400	150	8	0.075	1.53	1.76	0.83	0.30	4.43	1.64	1.95	8.03
Plant - Rigid	11R-15	MFWD 170	34,300	150	8	0.137	2.80	2.87	1.77	0.55	8.01	3.51	3.58	15.11
Plant - Rigid	11R-20	MFWD 170	31,800	150	8	0.103	2.10	2.15	1.22	0.41	5.90	2.43	2.68	11.02
Plant - Rigid	12R-20	MFWD 190	37,900	150	8	0.094	1.92	2.20	1.34	0.37	5.84	2.65	2.44	10.94
Plant - Rigid	12R-30	MFWD 190	44,000	150	8	0.062	1.28	1.46	1.03	0.25	4.03	2.05	1.62	7.72
Plant - Rigid	13R-18/20	MFWD 225	41,100	150	8	0.086	1.77	2.40	1.33	0.43	5.95	2.65	2.84	11.46
Plant - Rigid	15R-15	2WD 150	43,200	150	8	0.094	1.92	1.73	1.52	0.30	5.49	3.02	1.89	10.42
Plant - TwinRow	12R-30/40	MFWD 225	94,700	150	8	0.049	1.01	1.37	1.76	0.25	4.39	3.49	1.62	9.52
Plant - TwinRow	8R-30/40	MFWD 225	77,400	150	8	0.074	1.52	2.06	2.16	0.37	6.12	4.29	2.44	12.85

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2011 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Ridge Till Cult + PD	8R-30	2WD 150	27,000	200	12	0.110	1.74	2.02	1.42	0.35	5.55	1.49	2.21	9.26
Ridge Till Cult + PD	12R-30	2WD 190	37,600	200	12	0.073	1.16	1.71	1.32	0.25	4.45	1.38	1.63	7.47
Ridge Till Cultivate	8R-30	2WD 170	22,000	200	12	0.103	1.17	2.15	1.08	0.35	4.76	1.14	2.29	8.20
Ridge Till Cultivate	12R-30	2WD 190	32,600	200	12	0.068	0.78	1.60	1.07	0.23	3.69	1.12	1.53	6.36
Rip/Bed/Till-Fold.	8R-38	MFWD 190	30,300	300	20	0.073	0.82	1.70	0.11	0.29	2.93	0.55	1.89	5.38
Rip/Bed/Till-Fold.	12R-30	MFWD 225	45,700	300	20	0.061	0.69	1.70	0.14	0.31	2.85	0.70	2.01	5.58
Rip/Bed/Till-Fold.	12R-38	MFWD 225	45,700	300	20	0.046	0.52	1.27	0.10	0.23	2.14	0.52	1.51	4.18
Rip/Bed/Till-Rigid	4R-30	MFWD 190	12,900	300	20	0.184	2.09	4.32	0.11	0.73	7.27	0.59	4.78	12.65
Rip/Bed/Till-Rigid	4R-38	MFWD 190	12,900	300	20	0.146	1.66	3.42	0.09	0.58	5.77	0.47	3.79	10.04
Rip/Bed/Till-Rigid	6R-38	MFWD 190	19,800	300	20	0.097	1.10	2.27	0.09	0.38	3.86	0.48	2.51	6.86
Rip/Bed/Till-Rigid	8R-30	MFWD 190	25,300	300	20	0.139	1.57	3.24	0.17	0.55	5.55	0.88	3.59	10.03
Rip/Bed/Till-Rigid	8R-38	MFWD 190	25,300	300	20	0.073	0.82	1.70	0.09	0.29	2.92	0.46	1.89	5.27
Rip/Bed/Till-Rigid	6R-30	MFWD 190	19,800	300	20	0.123	1.39	2.88	0.12	0.49	4.89	0.61	3.19	8.69
Ripper Conditioner	6-Row	MFWD 225	18,200	150	12	0.107	1.22	2.97	0.70	0.54	5.44	1.27	3.52	10.24
Ripper Conditioner	8-Row	MFWD 225	19,000	150	12	0.080	0.91	2.23	0.55	0.40	4.11	0.99	2.64	7.76
Roller/Cultipacker	12'	2WD 130	5,020	300	12	0.124	1.41	1.98	0.14	0.33	3.88	0.20	2.06	6.15
Roller/Cultipacker	20'	MFWD 150	14,700	300	12	0.074	0.84	1.37	0.25	0.25	2.74	0.36	1.59	4.70
Roller/Cultipacker	30'	MFWD 170	14,900	300	12	0.049	0.56	1.04	0.17	0.19	1.98	0.24	1.29	3.52
Roller/Cultipacker	38'	MFWD 225	16,100	300	12	0.039	0.44	1.08	0.14	0.19	1.88	0.21	1.28	3.38
Roller/Stubble	20'	2WD 50	10,900	300	12	0.074	0.84	0.45	0.19	0.05	1.55	0.27	0.32	2.15
Roller/Stubble	32'	MFWD 225	18,500	300	12	0.046	0.52	1.29	0.20	0.23	2.26	0.28	1.52	4.07
Rotary Cutter	7'	MFWD 130	3,920	185	10	0.168	1.91	2.69	0.53	0.48	5.62	0.39	3.01	9.03
Rotary Cutter	12'	2WD 150	10,100	185	10	0.098	1.11	1.81	0.80	0.31	4.04	0.58	1.97	6.60
Rotary Cutter-Flex	15'	MFWD 150	17,500	185	10	0.078	0.89	1.44	1.11	0.26	3.72	0.81	1.67	6.21
Rotary Cutter-Flex	20'	MFWD 150	25,000	185	10	0.058	0.66	1.08	1.19	0.20	3.15	0.87	1.25	5.28
Row Cond & Inc-Fold.	26'	MFWD 190	22,300	100	10	0.063	1.00	1.48	0.35	0.25	3.09	1.54	1.64	6.28
Row Cond & Inc-Fold.	38'	MFWD 225	27,900	100	10	0.043	0.68	1.20	0.30	0.21	2.41	1.32	1.42	5.16
Row Cond & Inc-Rigid	13'	2WD 130	11,100	100	10	0.126	2.01	2.02	0.35	0.33	4.73	1.54	2.10	8.38
Row Cond & Inc-Rigid	21'	2WD 170	14,600	100	10	0.078	1.24	1.64	0.28	0.26	3.44	1.25	1.74	6.44
Row Cond & Inc-Rigid	26'	MFWD 190	16,600	100	10	0.026	0.42	0.62	0.11	0.10	1.26	0.48	0.68	2.43
Row Cond Folding	26'	MFWD 225	17,300	100	10	0.059	0.67	1.65	0.25	0.30	2.89	1.13	1.95	5.97
Row Cond Folding	38'	MFWD 225	21,100	100	10	0.040	0.46	1.13	0.21	0.20	2.01	0.94	1.33	4.29
Row Cond Rigid	13'	2WD 130	6,100	100	10	0.119	1.35	1.91	0.18	0.31	3.76	0.79	1.98	6.54
Row Cond Rigid	21'	2WD 170	9,600	100	10	0.073	0.83	1.54	0.17	0.25	2.81	0.77	1.64	5.23
Row Cond Rigid	26'	MFWD 190	11,600	100	10	0.059	0.67	1.39	0.17	0.23	2.48	0.75	1.54	4.78
Spin Spreader	5 ton	MFWD 190	10,600	100	8	0.042	0.85	0.98	0.25	0.16	2.26	0.52	1.08	3.87
Spray (ATV Ropewick)	75"	800 CC	540	200	8	0.260	4.13	0.47	0.06	0.43	5.11	0.08	1.78	6.98
Spray (ATV)	12'/17'	800 CC	550	200	8	0.112	1.79	0.20	0.02	0.19	2.21	0.03	0.77	3.02
Spray (ATV)	20'	800 CC	1,250	200	8	0.084	1.34	0.15	0.04	0.14	1.69	0.06	0.58	2.33
Spray (Band)	27' Fold	MFWD 170	4,990	200	8	0.062	0.99	1.31	0.14	0.25	2.70	0.18	1.63	4.52
Spray (Band)	40' Fold	MFWD 170	6,560	200	8	0.042	0.67	0.88	0.13	0.16	1.85	0.16	1.10	3.12
Spray (Band)	50' Fold	MFWD 170	7,140	200	8	0.033	0.53	0.70	0.11	0.13	1.49	0.14	0.88	2.51
Spray (Band)	53' Fold	MFWD 170	7,500	200	8	0.031	0.50	0.66	0.11	0.12	1.41	0.13	0.83	2.38
Spray (Band)	60' Fold	MFWD 170	9,580	200	8	0.028	0.44	0.58	0.12	0.11	1.27	0.15	0.73	2.17
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,070	200	8	0.130	2.06	2.40	0.30	0.44	5.22	0.38	2.78	8.39
Spray (Bcast/HB)	20' Rigid	MFWD 150	5,960	200	8	0.084	1.34	1.56	0.23	0.29	3.43	0.29	1.80	5.53
Spray (Bcast/HB)	27' Fold	MFWD 170	9,910	200	8	0.062	0.99	1.31	0.29	0.25	2.84	0.36	1.63	4.84
Spray (Bcast/HB)	27' Rigid	MFWD 170	6,850	200	8	0.062	0.99	1.31	0.20	0.25	2.75	0.25	1.63	4.64
Spray (Bcast/HB)	30' Fold	MFWD 170	13,000	200	8	0.056	0.89	1.17	0.34	0.22	2.64	0.42	1.47	4.54
Spray (Bcast/HB)	40' Fold	MFWD 170	13,800	200	8	0.042	0.67	0.88	0.27	0.16	2.00	0.34	1.10	3.44
Spray (Bcast/HB/HD)	27'	MFWD 170	20,500	200	8	0.062	0.99	1.31	0.60	0.25	3.16	0.74	1.63	5.54
Spray (Bcast/HB/HD)	40'	MFWD 170	24,400	200	8	0.042	0.67	0.88	0.48	0.16	2.21	0.60	1.10	3.91
Spray (Broadcast)	27'	MFWD 170	4,990	200	8	0.062	0.99	1.31	0.14	0.25	2.70	0.18	1.63	4.52
Spray (Broadcast)	40'	MFWD 170	6,560	200	8	0.042	0.67	0.88	0.13	0.16	1.85	0.16	1.10	3.12
Spray (Broadcast)	50'	MFWD 170	7,140	200	8	0.033	0.53	0.70	0.11	0.13	1.49	0.14	0.88	2.51
Spray (Broadcast)	53'	MFWD 170	7,500	200	8	0.031	0.50	0.66	0.11	0.12	1.41	0.13	0.83	2.38
Spray (Broadcast)	60'	MFWD 170	9,580	200	8	0.028	0.44	0.58	0.12	0.11	1.27	0.15	0.73	2.17
Spray (Direct/Hood)	8R-30	MFWD 170	14,500	200	8	0.084	1.34	1.76	0.57	0.33	4.02	0.71	2.20	6.95
Spray (Direct/Hood)	8R-38	MFWD 170	15,700	200	8	0.066	1.06	1.39	0.49	0.26	3.22	0.61	1.74	5.57
Spray (Direct/Hood)	12R-30	MFWD 170	18,400	200	8	0.056	0.89	1.17	0.48	0.22	2.78	0.60	1.47	4.86
Spray (Direct/Hood)	12R-38	MFWD 170	18,800	200	8	0.044	0.70	0.93	0.39	0.17	2.20	0.48	1.16	3.85
Spray (Direct/Layby)	8R-30	MFWD 170	10,500	200	8	0.084	1.34	1.76	0.41	0.33	3.86	0.51	2.20	6.59
Spray (Direct/Layby)	8R-38	MFWD 170	11,000	200	8	0.066	1.06	1.39	0.34	0.26	3.07	0.42	1.74	5.24
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	21,100	200	8	0.044	0.70	0.93	0.44	0.17	2.25	0.54	1.16	3.96
Spray (Direct/Layby)	10R-30	MFWD 170	12,200	200	8	0.067	1.07	1.41	0.38	0.27	3.14	0.48	1.76	5.39
Spray (Direct/Layby)	12R-30	MFWD 170	15,400	200	8	0.056	0.89	1.17	0.40	0.22	2.70	0.50	1.47	4.68
Spray (Direct/Layby)	12R-38	MFWD 170	21,100	200	8	0.044	0.70	0.93	0.44	0.17	2.25	0.54	1.16	3.96
Spray (Direct/Layby)	16R-20	MFWD 170	9,840	200	8	0.063	1.00	1.32	0.29	0.25	2.87	0.36	1.65	4.89
Spray (Levee Leaper)	50'	MFWD 225	11,500	200	8	0.033	0.53	0.93	0.18	0.17	1.82	0.22	1.10	3.16
Spray (Pull Type)	60'	MFWD 225	26,500	200	8	0.028	0.44	0.78	0.35	0.14	1.72	0.43	0.92	3.08
Spray (Pull Type)	80'	MFWD 225	36,400	200	8	0.021	0.33	0.58	0.36	0.10	1.38	0.44	0.69	2.53
Spray (Pull Type)	90'	2WD 50	36,800	200	8	0.018	0.29	0.11	0.32	0.01	0.75	0.40	0.08	1.23
Spray (Pull Type)	100'	MFWD 225	39,000	200	8	0.016	0.26	0.46	0.30	0.08	1.13	0.38	0.55	2.07
Spray (Pull Type)	120'	MFWD 225	48,800	200	8	0.014	0.22	0.39	0.32	0.07	1.00	0.40	0.46	1.87
Spray (Ropewick)	20'	MFWD 190	2,390	200	8	0.084	1.34	1.97	0.09	0.33	3.75	0.11	2.19	6.06
Spray (Spot)	27'	MFWD 170	4,990	200	8	0.062	0.99	1.31	0.14	0.25	2.70	0.18	1.63	4.52
Spray (Spot)	40'	MFWD 170	6,560	200	8	0.042	0.67	0.88	0.13	0.16	1.85	0.16	1.10	3.12

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2011 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	R&M Imp.	R&M P.U.	Total Direct	Fixed Imp.	Fixed P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Spray (Spot)	50'	MFWD 170	7,140	200	8	0.033	0.53	0.70	0.11	0.13	1.49	0.14	0.88	2.51
Spray (Spot)	53'	MFWD 170	7,500	200	8	0.031	0.50	0.66	0.11	0.12	1.41	0.13	0.83	2.38
Spray (Spot)	60'	MFWD 225	9,580	200	8	0.028	0.44	0.78	0.12	0.14	1.49	0.15	0.92	2.58
Stalk Shredder	14'	MFWD 150	12,000	200	10	0.117	1.33	2.17	1.23	0.40	5.15	0.77	2.51	8.44
Stalk Shredder	20'	MFWD 150	30,200	200	10	0.082	0.93	1.52	2.18	0.28	4.92	1.36	1.76	8.04
Stalk Shredder-Flail	12'	MFWD 150	14,400	200	10	0.137	1.56	2.53	1.73	0.47	6.30	1.08	2.93	10.32
Stalk Shredder-Flail	15'	MFWD 150	18,100	200	10	0.110	1.24	2.02	1.74	0.37	5.39	1.08	2.35	8.83
Stalk Shredder-Flail	18'	MFWD 150	22,700	200	10	0.091	1.04	1.69	1.82	0.31	4.86	1.13	1.95	7.96
Stalk Shredder-Flail	20'	MFWD 150	23,100	200	10	0.082	0.93	1.52	1.66	0.28	4.40	1.04	1.76	7.21
Stalk Shredder-Flail	25'	MFWD 150	30,800	200	10	0.066	0.74	1.21	1.77	0.22	3.97	1.11	1.41	6.49
Strip Till	12R-30	MFWD 225	28,600	150	10	0.061	0.69	1.70	0.76	0.31	3.47	1.28	2.01	6.78
Subsoiler	3 shank	MFWD 190	3,360	100	15	0.204	2.31	4.77	0.22	0.81	8.13	0.59	5.29	14.02
Subsoiler	4 shank	MFWD 225	6,390	100	15	0.153	1.74	4.25	0.32	0.77	7.09	0.84	5.03	12.98
Subsoiler	5 shank	MFWD 225	6,610	100	15	0.122	1.38	3.38	0.26	0.61	5.66	0.69	4.01	10.37
Subsoiler low-till	4 shank	MFWD 225	1,060	100	15	0.153	1.74	4.25	0.05	0.77	6.82	0.14	5.03	12.00
Subsoiler low-till	6 shank	MFWD 225	15,100	100	15	0.102	1.15	2.82	0.51	0.51	5.01	1.33	3.34	9.69
Subsoiler low-till	8 shank	MFWD 225	18,000	100	15	0.076	0.86	2.11	0.45	0.38	3.83	1.18	2.50	7.52
TerraTill Bed w/roll	4R-30	MFWD 225	14,300	150	12	0.204	2.31	5.65	1.05	1.03	10.06	1.90	6.69	18.66
TerraTill Bed w/roll	4R-38	MFWD 225	14,300	150	12	0.160	1.82	4.45	0.83	0.81	7.92	1.49	5.27	14.69
TerraTill Bed w/roll	6R-38	MFWD 225	19,400	150	12	0.107	1.22	2.97	0.75	0.54	5.49	1.35	3.52	10.37

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, 2011

ITEM NAME	UNIT	PRICE
		dollars
ADJUVANTS		
Crop Oil Conc.(Pet.)	pt	1.41
Crop Oil Conc.(Veg.)	pt	3.33
Drift/Defoamer	pt	5.75
Spreader Sticker	pt	3.77
Surfactant	pt	2.44
CLEANING		
Cleaning Peanuts	ton	18.00
CROP CONSULTANT		
Rice Consultant	acre	7.50
CUSTOM FERTILIZE		
App Fert by Air	cwt	6.25
App Fert by Air(Min)	appl	6.25
Custom Apply Fert	acre	6.25
CUSTOM LIME		
Lime (Spread)	ton	46.00
CUSTOM PLANT		
Custom Plant	acre	7.00
Custom Plant Air	cwt	6.25
CUSTOM SPRAY		
App by Air (2 gal)	appl	3.50
App by Air (3 gal)	appl	4.00
App by Air (5 gal)	appl	5.50
App by Air (10 gal)	appl	7.25
Custom Spray	acre	6.00
DRYING		
Dry Corn	bu	0.19
Dry Grain Sorghum	cwt	0.25
Dry Peanuts	ton	24.00
Dry Rice	bu	0.40
ERADICATION FEE		
Eradication	acre	2.00
FERTILIZERS		
Amm Nitrate (34% N)	cwt	18.00
Amm Sulfate (21% N)	cwt	14.00
Anhy Ammonia (82%	cwt	28.00
Boron 15G	lb	0.42
Boron Plus	pt	3.99
DAP	cwt	25.00
Fert 10-34-0	cwt	22.00
Fert 11-37-0	cwt	23.50
Fert 33-0-0-12s	cwt	19.00
Fert 41-0-0-4	cwt	18.50
MAP	cwt	27.00
Phosphorus(46% P2O5)	cwt	22.00
Potash (60% K2O)	cwt	23.00
Sulfur 90%	lb	0.20
Sulfur Plus	pt	2.37
UAN (32% N)	cwt	12.50
UAN + Sulfur (28%)	cwt	12.00
Urea, Solid (46% N)	cwt	19.00
Zinc Sulfate 31%	lb	0.55
FUNGICIDES		
Abound	pt	29.97
Absolute 500SC	pt	53.42
Allegiance Flowable	pt	49.74
Apron Maxx RTA	oz	0.74
Apron Maxx RTA+Moly	pt	15.01
Apron XL LS	oz	8.51
Artisan	oz	.85
Bravo Ultrex	lb	6.83
Bravo Weather Stick	pt	5.69
Captan 50 WP	lb	5.62
Cotton Seed Trt.	acre	20.00
Dithane F-45	qt	7.11
Dithane Rainshield	lb	2.54
Folicur 3.6	oz	1.08
Fungicide	lb	2.82
Gem 25 WG	oz	3.70
Headline	oz	2.60
Manzate 75 DF	lb	3.48
Manzate Flowable	pt	4.60
Moncut 70 DF	lb	24.85
Prevail	lb	27.24
Provost	oz	2.16
Quadris	oz	2.52
Quadris Ridomil Gold	oz	3.26
Quilt	pt	20.25
Ridomil Gold PC GR	lb	2.24
Rovral 4F	pt	17.83
Stiletto	oz	0.56
Stratego	pt	17.77
Terrachlor 2EC	pt	1.87
Terraclor Super X G	lb	2.82
Tilt 3.6 EC	oz	2.15
Tilt/ Bravo SE	oz	0.45
Uniform	oz	2.96
Vitavax 200	oz	0.47
Vitavax RTU-Thiram	oz	0.35
GINNING		
Gin & Haul	lb	0.09
GROWTH REGULATORS		
Early Harvest PGR	oz	1.55
Mepex	oz	0.10
Mepex Gin Out	oz	0.23
Mepichlor 4.2% Liq	oz	0.25
Mepiquat	oz	0.08
Mepiquat Extra	oz	0.10
Pentia	pt	4.36
PGR IV	oz	1.55
Stance	oz	1.10
SuperBoll	pt	3.07
HARVEST AIDS		
Aim 2EC	oz	6.56
Ammonium Sulfate	lb	0.14
Boll Buster	pt	3.27
CottonQuik	pt	4.25
Def 6	pt	6.50
Def/Folex	pt	6.53
Defol 3	gal	3.35
Defol 5	gal	5.82
Defol 6	gal	4.69
Defol 750	pt	1.22
Dropp 50 WP	lb	45.45
Dropp SC	oz	1.74
ET	pt	43.31
Ethephon 6E	pt	2.85
Finish 6	pt	7.29
First Pick	pt	3.21
Folex 6EC	pt	6.56
Freefall SC	oz	1.52
Ginstar EC	pt	27.36
Gramoxone Inteon	oz	0.25
Gramoxone Max	pt	5.46
Harvade 5F	oz	0.67
Prep	pt	3.19
Shed-a-leaf	gal	3.60
Sodium Chlorate 3L	gal	3.35
Sodium Chlorate 5L	gal	5.82
Solium Chlorate 6L	gal	4.69
TDZ SC	oz	1.37
Thidiazuron 4lb	oz	1.74
Tribufos 6lb	pt	6.53
HAULING		
Haul Corn/Bin	bu	0.18
Haul Corn/Field	bu	0.26
Haul Cotton	lb	0.02
Haul Peanuts	ton	14.50
Haul Rice/Bin	bu	0.18

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2011(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Haul Rice/Field	bu	0.27	Expert	pt	3.68
Haul Sorghum/Bin	bu	0.18	Facet 75DF	lb	49.92
Haul Sorghum/Field	bu	0.26	Finesse	oz	16.36
Haul Soybeans/Bin	bu	0.18	First Rate	oz	37.48
Haul Soybeans/Field	bu	0.26	Flexstar HL	pt	15.24
Haul Wheat/Bin	bu	0.18	FloMet 4L	pt	4.74
Haul Wheat/Field	bu	0.26	Flomet DF	lb	6.61
HERBICIDES			Fluometuron 4lb	pt	4.81
2,4-D Amine 4	pt	1.74	Frontier 6.0	oz	0.63
2,4-D LV 4Ester	pt	2.10	Fultime	pt	4.27
2,4-D Weedar 64	pt	1.72	Fusilade DX	oz	1.46
2,4-DB 200	pt	4.34	Fusion	pt	23.84
AAtrex 4L	pt	2.58	Glyfos	pt	1.66
AAtrex NINE-O	lb	4.57	Glyfos Xtra	pt	1.69
Accent Gold	oz	6.12	Glyphosate 3lbs a.e.	pt	1.75
Accent Q	oz	28.05	Glyphosate 3lbs a.e.	oz	0.11
Accent SP	oz	29.01	Glystar	pt	1.66
Aim 2EC	oz	6.56	Glystar Plus	pt	1.69
Assure II	oz	1.08	Goal 2XL	pt	9.58
Atrazine 4L	pt	2.10	Gramoxone Inteon	oz	0.25
Atrazine 90DF	lb	4.14	Gramoxone Max	pt	5.46
Axial	pt	14.08	Grandstand R	qt	25.10
Axiom 68DF	lb	25.74	Guardsman Max	pt	6.29
Banvel	pt	6.31	Halex GT	pt	5.29
Basagran	pt	12.16	Harmony Extra SG	oz	12.76
Basis Gold	lb	9.00	Harmony Extra XP	oz	11.75
Beacon 75% WSP	oz	31.45	Harmony GT	oz	19.35
Beyond	oz	4.47	Harness	pt	11.88
Bicep II	pt	4.00	Harness XTRA	pt	7.31
Bicep II Magnum	qt	10.57	Hoelon 3EC	pt	11.03
Bicep Lite Magnum	pt	7.07	Honcho Plus	pt	3.98
Blazer Ultra	pt	8.56	Hornet WDG	lb	65.62
Bolero 8EC	pt	5.73	Ignite 280	pt	6.57
Boundary 6.5 EC	pt	10.09	Impact	oz	21.39
Buccaneer Plus	pt	1.81	Karmex XP	lb	6.41
Buctril 2EC	pt	15.80	Lariat	qt	5.71
Buctril 4EC	pt	16.40	Layby Pro	qt	11.68
Bullet	pt	2.97	Lexar	pt	5.56
Butoxone 200(2,4-DB)	pt	4.04	Liberty	pt	8.31
Butyrac 200 (2,4-DB)	pt	4.09	Lightning	oz	13.28
Cadre	oz	4.20	Linex 4L	pt	8.65
Callisto 4SC	oz	4.63	Londax 60DF	oz	14.29
Canopy 75%	oz	3.15	Lorox 50DF	lb	18.83
Canopy EX	oz	6.31	Me-Too-Lachlor	pt	6.43
Caparol 4L	pt	3.36	MSMA 6.6	pt	2.69
Celebrity Plus	lb	84.50	MSMA6 Plus	pt	2.63
Clarity	pt	11.86	Newpath 2SL	oz	3.84
Classic	oz	14.55	Option	oz	9.92
Clearpath	lb	59.94	Ordram 15-GM	lb	1.34
Clincher SF	oz	1.98	Ordram 8-E	pt	9.42
Cobra 2EC	oz	1.26	Osprey	oz	3.27
Command 3ME	pt	15.45	Outlook	pt	21.29
Cornerstone Plus	pt	1.50	Parrlay	pt	9.15
Cotoran 4L	pt	4.88	Peak Accu Pak	oz	12.63
Cotoran DF	lb	7.92	Pendimax 3.3	pt	2.47
Cotton Pro	pt	3.13	Permit 75 DF	oz	19.00
Credit Extra	pt	1.69	Poast 1.53	pt	9.47
Direx 4L	pt	3.54	Poast Plus	pt	7.37
Diuron 4L	pt	2.91	Prefix	pt	6.13
Diuron 80 DF	lb	4.55	Prometryne	pt	2.87
Diuron 80%	lb	4.55	Propimax EC	pt	36.08
DSMA 3.6lb Liq	pt	1.24	Prowl 3.3 EC	pt	4.29
Dual II Magnum	pt	13.26	Prowl H20	pt	4.65
Dual Magnum	pt	12.64	Pursuit 2S	oz	4.56
Duet	pt	4.39	Pursuit DG	oz	11.59
Envoke	oz	82.50	Pursuit Plus EC	pt	7.10
Equip	oz	10.65	Python WDG	oz	12.48
Evik DF 80W	lb	8.66	Raptor	oz	4.62
Exceed	oz	10.71			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2011 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Reflex 2LC	pt	14.68	Confirm 2F	oz	1.62
Regiment 80WP	oz	35.02	Counter 15G	lb	2.58
Remedy Ultra	pt	11.86	Cruiser 5FS	oz	13.25
Resource .86EC	pt	23.91	Curacron 8E	pt	10.37
RicePro	pt	4.50	Cypermethrin	oz	0.63
Riceshot	pt	2.98	Declare	pt	4.08
Ricestar HT	pt	20.64	Delta Gold	pt	40.47
Rifel	pt	5.66	Denim 0.16 EC	pt	26.42
Roundup Original Max	oz	0.45	Di-Syston 15G	lb	3.48
Roundup Original Max	pt	7.25	Di-Syston 8	pt	14.32
Roundup Power Max	oz	0.26	Diamond .83EC	pt	16.28
Roundup PowerMax	pt	4.14	Dimethoate 4E	pt	5.63
Roundup WeatherMax	oz	0.28	Dimilin 2L	oz	1.73
Roundup WeatherMax	pt	4.43	Dipel DF	lb	11.75
Scepter 70 DG	oz	3.81	Dipel ES	pt	4.56
Select 2EC	oz	1.53	Discipline 2 EC	oz	0.78
Select Max	pt	16.95	Endigo ZC	pt	25.82
Sencor 4F	pt	14.74	Fanfare 2EC	oz	0.78
Sencor DF	lb	14.85	Force 3G	lb	5.06
Sequence	pt	5.57	Furadan 4F	pt	10.36
Simazine 4L	pt	2.95	Gaucho 600	oz	6.56
Stalwart	pt	5.87	Hero	pt	22.11
Stam 80 EDF	lb	5.30	Holster	pt	8.76
Stam M4	qt	6.93	Imidan 70 WSB	oz	0.60
Staple	oz	16.01	Incidental Pest Trt	acre	12.00
Staple LX	oz	7.09	Intrepid 2F	oz	1.66
Steadfast	oz	22.59	Intruder 70WSP	oz	8.43
Sterling Blue	pt	9.48	Karate Z	oz	2.87
Storm	pt	11.18	Kelthane MF 4EC	pt	5.03
Strada WG	oz	5.94	Lannate LV	pt	8.81
Strongarm	oz	43.49	Lannate SP	oz	1.69
Superwham	qt	7.62	Larvin 3.2	oz	0.57
Suprend	lb	11.18	Leverage 2.7	oz	1.37
Surpass EC	qt	23.75	Lorsban 15G	lb	1.80
Synchrony XP	oz	9.47	Lorsban 4E	pt	6.20
Touchdown HiTech	qt	9.12	Malathion 57EC	pt	4.23
Touchdown Total	qt	7.66	Malathion 5E	pt	4.09
Treflan HFP	pt	3.16	Malathion 8E	pt	5.50
Treflan TR-10	lb	0.92	Methyl 4EC	pt	4.84
Trifluralin 4EC	pt	2.97	Methyl Parathion 4	pt	4.63
Ultra Blazer	pt	9.19	Monitor 4	pt	16.33
Valor SX	oz	4.72	Mustang Max	oz	1.30
Valor XLT	oz	3.59	Oberon 4 SC	pt	71.82
Weedone LV4	pt	2.97	Orthene 90S	lb	3.25
Whip 360	pt	25.08	Penncap-M	pt	3.50
Zorial Rapid 80DF	lb	13.95	Phorate	lb	2.69
INOCULANT			Pounce 25WP	lb	10.63
Vault	oz	1.65	Prolex	oz	2.94
Optimize Lift	oz	.56	Provado 1.6F	oz	1.94
INSECT SCOUTING			Respect .8EC	pt	29.04
Insect Scouting	acre	7.00	Sevin 4F	pt	4.97
INSECTICIDES			Sevin 80S	lb	7.35
Acephate 90%	lb	8.21	Sevin XLR Plus	qt	10.56
Acephate 90SP	lb	6.46	Sniper	oz	0.86
Acramite-4SC	oz	1.37	Steward	pt	25.71
Ambush 2E	oz	0.27	Temik 15G Grit	lb	3.80
Ammo 2.5 EC	oz	0.92	Temik 15G Gypsum	lb	3.14
Asana .66 XL	oz	0.68	Thimet 20-G Lock N L	lb	2.84
Aztec 2.1% G	lb	2.84	Thionex 3 EC	pt	3.47
Baythroid XL	oz	2.17	Thionex 50W	lb	8.20
Bidrin 8WM	oz	0.85	Tombstone 2E	pt	29.00
Bidrin XP	oz	1.84	Tracer 4SC	oz	7.64
Bifenture 2EC	pt	12.50	Trimax	oz	3.11
Brigade EC	pt	15.10	Trimax Pro	oz	2.73
Brigade WSB	lb	21.00	Vydate C-LV	oz	0.62
Capture 2EC	oz	1.50	Warrior Z	oz	1.85
Carbaryl 4L	pt	4.34	Wrangler	oz	1.70
Carbine 50WG	oz	4.44	Zeal	oz	18.06
Centric 40WG	oz	4.22	Zephyr	oz	2.79
Comite ll	pt	6.00			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2011 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
IRRIGATION SUPPLIES			Soybean Seed LL	lb	0.89
Roll-Out Pipe	ft	0.20	Soybean Seed RR	lb	0.99
SEED/PLANTS			Soybean Seed Stack	lb	1.28
Corn Seed BtRR	thous	2.90	Wheat Seed Private	lb	0.27
Corn Seed RR	thous	2.56	SURVEY & MARK LEVEES		
Corn Seed VT3	thous	2.84	Survey & Mark Levees	acre	4.50
Corn Seed VT3Pro	thous	3.12	Survey & Mark Levees	acre	3.50
Cotton Seed B2RF	thous	0.61	TECHNOLOGY FEE		
Cotton Seed LL	thous	1.05	B2 Tech Fee	thous	.76
Cotton Seed LLB2	thous	1.53	B2 Tech Fee	cap/ac	35.25
Cotton Seed RF	thous	0.57	B2RF Tech Fee	thous	1.49
Cotton Seed W	thous	0.49	B2RF Tech Fee	cap/ac	69.25
Cotton Seed WRF	thous	0.59	RF Cotton Tech Fee	thous	1.04
Peanut Seed	lb	0.75	RF Cotton Tech Fee	cap/ac	48.25
Rice Clearfield	lb	0.89	WS Cotton Tech Fee	thous	.41
Rice Clearfield Hyb	lb	5.44	WS Cotton Tech Fee	cap/ac	24.00
Rice Conv. Hybrid	lb	2.61	WRF Cotton Tech Fee	thous	1.45
Rice Seed (Levees)	lb	0.36			
Rice Seed CF(Levees)	lb	0.89			
Rice Seed CFH(Levee)	lb	1.74			
Rice Seed Conv.	lb	0.36			
Sorghum Concept	lb	1.77			
Sorghum Hybrid Sudax	lb	1.20			

Appendix Table 5. Estimated fuel prices and interest rates, Mississippi, 2011

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	2.39
Gasoline	gal	2.61
LP Gas	gal	2.50
INTEREST RATES		
Short-term	%	4.33
Intermediate-term	%	5.50

Appendix Table 6. Labor types, wage rates and unallocated labor multipliers for crop enterprises, Mississippi, 2011

Item name		
LABOR TYPES		WAGE RATE ($/HR)
OPERATOR LABOR	hour	11.35
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, 2011

	Unit	Futures Contract Month	Futures Contract Price[a]	Basis[b]	Forward Contract Price[c]	Loan Rate[d]	Budget Price[e]
Corn	bu	Dec '11	5.12	-0.2712	4.85	2.08	4.85
Cotton Lint	lb	Dec '11	0.872	-0.0264	0.846	.524	0.846
Cottonseed	lb						0.069[f]
Grain Sorghum	bu				4.56	2.02	4.56
Peanuts	ton				550.00	355.00	550.00
Soybeans	bu	Nov '11	11.32	-0.3070	11.00	5.17	11.00
Rice	bu	Sep '11	6.44	-0.7570	5.68	2.96	5.68
Wheat	bu	Jul '11	7.45	-0.6942	6.75	1.90	6.75

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

[b] The basis is computed by subtracting the 2001-2010 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 94% 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 2010 crop year for soybeans, corn, grain sorghum, and wheat. 2010 Mississippi base loan rate for the Delta area for cotton. 2010 Mississippi loan rate for long grain rice. 2010 national average loan rate for peanuts.

[e] Price used in the 2011 MAFES Planning Budgets.

[f] Cottonseed price is the marketing year average price averaged over the years 2005-2009, 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, 2011

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'		0.89	0.23	0.43		0.07	1.62	1.19	2.81
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.15	0.05	0.11			0.31	0.18	0.49
Roll-Out Pipe	ft	6.60					0.10	6.70		6.70
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.20	0.05	0.37		0.01	0.63	0.49	1.12
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		0.30	0.09	0.55			0.94	0.73	1.67
Land Forming ($300)	each								29.07	29.07
Well & Pump, Furrow	each			2.40			0.03	2.43	7.45	9.88
Main Line Pipe	each								4.09	4.09
Engine, RPF, ESB	each								6.17	6.17
1st June Irrigation	ac-in		5.84	0.92			0.10	6.86		6.86
2nd June Irrigation	ac-in		5.84	0.92			0.10	6.86		6.86
July Irrigation	ac-in		5.84	0.92			0.07	6.83		6.83
TOTALS		6.60	19.06	5.58	4.19	0.00	0.51	35.94	49.37	85.31

Note: Cost of production estimates are based on 2010 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, 2011

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.34	0.08	0.18		0.01	0.61	0.54	1.15
Survey & Mark Levees	acre	2.25					0.04	2.29		2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.45	0.12	0.24		0.01	0.82	0.72	1.54
Butt Levees										
Blade-Box	6'-7'		0.32	0.06	0.23		0.01	0.62	0.34	0.96
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		0.31	0.07	0.19		0.01	0.58	0.45	1.03
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.45	0.12	0.24		0.01	0.82	0.72	1.54
Butt Levees										
Blade-Box	6'-7'		0.32	0.06	0.23		0.01	0.62	0.34	0.96
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		0.31	0.07	0.19		0.01	0.58	0.45	1.03
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.45	0.12	0.24		0.01	0.82	0.72	1.54
Butt Levees										
Blade-Box	6'-7'		0.32	0.06	0.23		0.01	0.62	0.34	0.96
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		0.31	0.07	0.19		0.01	0.58	0.45	1.03
Tear Down Levees										
Levee Splitter (1/80	8 blade		0.23	0.06	0.14			0.43	0.34	0.77
Land Forming ($75)	each								7.27	7.27
Well & Pump, Flood	each			4.80			0.09	4.89	14.91	19.80
Engine, CF, 75	each								12.34	12.34
June Irrigation	ac-in		8.76	1.84			0.19	10.79		10.79
July Irrigation	ac-in		8.76	1.84			0.15	10.75		10.75
August Irrigation	ac-in		8.76	1.84			0.11	10.71		10.71
TOTALS		2.25	30.09	11.21	5.12	0.00	0.72	49.39	39.93	89.32

Note: Cost of production estimates are based on 2010 input prices.

Appendix Table 10. Table 2.C 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, 2011

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			6.49			0.12	6.61	27.16	33.77
Well & Pump, 1/2 CP	each			0.95			0.02	0.97	2.95	3.92
Engine, 1/2 CP, 225	each								4.18	4.18
June Irr. 3app@.75"	ac-in		10.04	0.56			0.19	10.79		10.79
July Irr. 4app@.75"	ac-in		13.39	0.75			0.20	14.34		14.34
Aug Irr. 3app@.75"	ac-in		10.04	0.56			0.11	10.71		10.71
TOTALS		0.00	33.47	9.31	0.47	0.00	0.65	43.90	34.29	78.19

Note: Cost of production estimates are based on 2010 input prices.

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