SOYBEANS
2009
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2008-03

December 2008

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 2009 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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2009 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 2008. (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 2008 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, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	3.2500	19.50	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.23	4.0000	0.92	_____
Sodium Chlorate 3L	gal	3.04	0.2500	0.76	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	46.00	0.2800	12.88	_____
Potash (60% K2O)	cwt	44.00	0.4000	17.60	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.85	2.5000	2.13	_____
Headline	oz	2.08	3.0000	6.24	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	4.00	6.0000	24.00	_____
2,4-D Amine 4	pt	1.82	1.5000	2.73	_____
Valor SX	oz	4.31	2.0000	8.62	_____
INSECTICIDES					
Gaucho 600	oz	6.25	1.0000	6.25	_____
Karate Z	oz	3.09	0.9600	2.97	_____
Acephate 90SP	lb	7.51	0.7500	5.63	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.74	50.0000	37.00	_____
ADJUVANTS					
Surfactant	pt	1.68	0.0500	0.08	_____
HAULING					
Haul Soybeans	bu	0.20	42.0000	8.40	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.2000	7.60	_____
INOCULANT					
Nitragin S	oz	0.27	2.7500	0.74	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.3524	3.85	_____
Harvesters	hour	10.91	0.1021	1.11	_____
HAND LABOR					
Implements	hour	8.19	0.1393	1.15	_____
UNALLOCATED LABOR	hour	10.92	0.4091	4.47	_____
DIESEL FUEL					
Tractors	gal	2.46	3.4472	8.49	_____
Harvesters	gal	2.46	1.4457	3.56	_____
REPAIR & MAINTENANCE					
Implements	acre	3.41	1.0000	3.41	_____
Tractors	acre	1.29	1.0000	1.29	_____
Harvesters	acre	2.07	1.0000	2.07	_____
INTEREST ON OP. CAP.	acre	6.49	1.0000	6.49	_____

TOTAL DIRECT EXPENSES				199.94	_____
FIXED EXPENSES					
Implements	acre	7.88	1.0000	7.88	_____
Tractors	acre	9.13	1.0000	9.13	_____
Harvesters	acre	9.04	1.0000	9.04	_____

TOTAL FIXED EXPENSES				26.05	_____

TOTAL SPECIFIED EXPENSES				225.99	_____

Note: Cost of production estimates are based on 2008 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, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.22	42.0000	387.24	_____
TOTAL INCOME				387.24	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
HARVEST AIDS	acre	1.68	1.0000	1.68	_____
FERTILIZERS	acre	30.48	1.0000	30.48	_____
FUNGICIDES	acre	8.37	1.0000	8.37	_____
HERBICIDES	acre	35.35	1.0000	35.35	_____
INSECTICIDES	acre	14.85	1.0000	14.85	_____
SEED/PLANTS	acre	37.00	1.0000	37.00	_____
ADJUVANTS	acre	0.08	1.0000	0.08	_____
HAULING	acre	8.40	1.0000	8.40	_____
CUSTOM LIME	acre	7.60	1.0000	7.60	_____
INOCULANT	acre	0.74	1.0000	0.74	_____
HAND LABOR	hour	8.19	0.1393	1.15	_____
OPERATOR LABOR	hour	10.91	0.4546	4.96	_____
UNALLOCATED LABOR	hour	10.92	0.4091	4.47	_____
DIESEL FUEL	gal	2.46	4.8929	12.05	_____
REPAIR & MAINTENANCE	acre	6.77	1.0000	6.77	_____
INTEREST ON OP. CAP.	acre	6.49	1.0000	6.49	_____
TOTAL DIRECT EXPENSES				199.94	_____
RETURNS ABOVE DIRECT EXPENSES				187.30	_____
TOTAL FIXED EXPENSES				26.05	_____
TOTAL SPECIFIED EXPENSES				225.99	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				161.25	_____

Note: Cost of production estimates are based on 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Subsoiler	3 shank	MFWD 190	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.20	Oct	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Oct		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.2800				
Potash (60% K2O)	cwt					0.4000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
2,4-D Amine 4	pt					1.5000				
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				
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			0.25	Aug	0.2500				
Gramoxone Inteon	oz					4.0000				
Sodium Chlorate 3L	gal					0.2500				
Surfactant	pt					0.0500				
Header - Soybean	25' Flex	275 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					42.0000				
TOTALS							0.45	0.45	0.59	0.40

Note: Cost of production estimates are based on 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Subsoiler	3 shank		0.98	0.20	0.85		0.12	2.15	1.21	3.36
Lime (Spread)	ton	7.60					0.46	8.06		8.06
Spin Spreader	5 ton		0.41	0.17	0.49		0.06	1.13	0.69	1.82
Phosphorus(46% P2O5)	cwt	12.88					0.77	13.65		13.65
Potash (60% K2O)	cwt	17.60					1.06	18.66		18.66
Disk Harrow	24'		1.97	0.97	1.69		0.28	4.91	3.71	8.62
Field Cultivate Fld	24'		1.50	0.53	1.29		0.20	3.52	3.03	6.55
App by Air (5 gal)	appl	6.00					0.24	6.24		6.24
Glyphosate 3lbs a.e	pt	8.00					0.32	8.32		8.32
2,4-D Amine 4	pt	2.73					0.11	2.84		2.84
Valor SX	oz	8.62					0.34	8.96		8.96
Plant - Rigid	12R-20		2.27	1.80	2.73		0.20	7.00	5.56	12.56
Soybean Seed RR	lb	37.00					1.11	38.11		38.11
Apron Maxx RTA	oz	2.13					0.06	2.19		2.19
Nitragin S	oz	0.74					0.02	0.76		0.76
Gaucho 600	oz	6.25					0.19	6.44		6.44
Spray (Broadcast)	60'		0.68	0.20	0.71		0.04	1.63	0.87	2.50
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
Spray (Broadcast)	60'		0.68	0.20	0.71		0.04	1.63	0.87	2.50
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
App by Air (5 gal)	appl	3.00					0.05	3.05		3.05
Headline	oz	6.24					0.09	6.33		6.33
App by Air (5 gal)	appl	3.00					0.05	3.05		3.05
Karate Z	oz	2.97					0.04	3.01		3.01
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Acephate 90SP	lb	5.63					0.06	5.69		5.69
App by Air (5 gal)	appl	1.50					0.02	1.52		1.52
Gramoxone Inteon	oz	0.92					0.01	0.93		0.93
Sodium Chlorate 3L	gal	0.76					0.01	0.77		0.77
Surfactant	pt	0.08						0.08		0.08
Header - Soybean	25' Flex		3.56	2.70	2.11		0.04	8.41	10.11	18.52
Haul Soybeans	bu	8.40					0.04	8.44		8.44
TOTALS		164.05	12.05	6.77	10.58	0.00	6.49	199.94	26.05	225.99

Note: Cost of production estimates are based on 2008 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, 2009

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	387.24
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	6.00	7.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68	0.00
FERTILIZERS	30.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.13	0.00	0.00	6.24	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	19.35	0.00	0.00	16.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.25	0.00	0.00	2.97	5.63	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40
CUSTOM LIME	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00
LABOR	4.32	0.00	0.00	0.00	0.00	0.00	2.73	1.42	0.00	0.00	0.00	2.11
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	4.86	0.00	0.00	0.00	0.00	0.00	2.27	1.36	0.00	0.00	0.00	3.56
REPAIR & MAINTENANCE	1.87	0.00	0.00	0.00	0.00	0.00	1.80	0.40	0.00	0.00	0.00	2.70
INTEREST ON OP. CAP.	2.95	0.00	0.00	0.00	1.01	0.00	1.58	0.48	0.00	0.23	0.16	0.08
TOTAL DIRECT EXPENSES	52.08	0.00	0.00	0.00	26.36	0.00	54.50	19.66	0.00	15.44	15.05	16.85
NET INCOME	-52.08	0.00	0.00	0.00	-26.36	0.00	-54.50	-19.66	0.00	-15.44	-15.05	370.39
NET INCOME TO DATE	-52.08	-52.08	-52.08	-52.08	-78.44	-78.44	-132.94	-152.60	-152.60	-168.04	-183.09	187.30

Note: Cost of production estimates are based on 2008 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, 2009

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			6.91	7.37	7.83	8.29	8.75	9.22	9.68	10.14	10.60	11.06	11.52
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-50	-40	-31	-21	-11	-2	7	17	26	36	46
			-76	-66	-57	-47	-37	-28	-18	-8	0	10	20
60	25.20	bu	-22	-10	0	12	24	35	47	59	70	82	93
			-48	-36	-25	-13	-1	9	21	32	44	56	67
70	29.40	bu	5	19	33	46	60	73	87	100	114	127	141
			-20	-6	6	20	34	47	61	74	88	101	115
80	33.60	bu	34	49	65	80	96	111	127	142	158	173	188
			8	23	39	54	70	85	100	116	131	147	162
90	37.80	bu	62	79	97	114	131	149	166	184	201	219	236
			36	53	71	88	105	123	140	158	175	193	210
100	42.00	bu	90	109	129	148	167	187	206	226	245	264	284
			64	83	103	122	141	161	180	199	219	238	258
110	46.20	bu	118	139	161	182	203	225	246	267	289	310	331
			92	113	135	156	177	199	220	241	263	284	305
120	50.40	bu	146	170	193	216	239	263	286	309	332	355	379
			120	144	167	190	213	237	260	283	306	329	353
130	54.60	bu	175	200	225	250	275	300	326	351	376	401	426
			149	174	199	224	249	274	300	325	350	375	400
140	58.80	bu	203	230	257	284	311	338	365	393	420	447	474
			177	204	231	258	285	312	339	366	394	421	448
150	63.00	bu	231	260	289	318	347	376	405	434	463	492	521
			205	234	263	292	321	350	379	408	437	466	495

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 2008 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, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	3.2500	19.50	_____
HARVEST AIDS					
Gramoxone Inteon	oz	0.23	4.0000	0.92	_____
Sodium Chlorate 3L	gal	3.04	0.2500	0.76	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	46.00	0.4000	18.40	_____
Potash (60% K2O)	cwt	44.00	0.6000	26.40	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.85	2.5000	2.13	_____
Quadris	oz	2.16	4.5000	9.72	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	4.00	6.0000	24.00	_____
2,4-D Amine 4	pt	1.82	1.5000	2.73	_____
Valor SX	oz	4.31	2.0000	8.62	_____
INSECTICIDES					
Gaucho 600	oz	6.25	1.0000	6.25	_____
Karate Z	oz	3.09	1.4400	4.45	_____
Acephate 90SP	lb	7.51	0.7500	5.63	_____
Intrepid 2F	oz	1.97	1.0000	1.97	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.20	33.0000	6.60	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.74	50.0000	37.00	_____
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	1.05	1.5000	1.58	_____
Surfactant	pt	1.68	0.0750	0.13	_____
HAULING					
Haul Soybeans	bu	0.20	65.0000	13.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.2000	7.60	_____
INOCULANT					
Nitragin S	oz	0.27	2.7500	0.74	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.5051	5.51	_____
Harvesters	hour	10.91	0.1021	1.11	_____
IRRIGATE LABOR					
Special Labor	hour	8.19	0.3000	2.44	_____
Implements	hour	8.19	0.0625	0.51	_____
HAND LABOR					
Implements	hour	8.19	0.1393	1.15	_____
UNALLOCATED LABOR	hour	10.92	0.4758	5.20	_____
DIESEL FUEL					
Tractors	gal	2.46	4.8145	11.85	_____
Harvesters	gal	2.46	1.4457	3.56	_____
Roll-Out Pipe Irr.	gal	2.46	7.3316	18.03	_____
REPAIR & MAINTENANCE					
Implements	acre	3.90	1.0000	3.90	_____
Tractors	acre	1.79	1.0000	1.79	_____
Harvesters	acre	2.07	1.0000	2.07	_____
Roll-Out Pipe Irr.	acre	4.37	1.0000	4.37	_____
INTEREST ON OP. CAP.	acre	8.43	1.0000	8.43	_____

TOTAL DIRECT EXPENSES				268.04	_____
FIXED EXPENSES					
Implements	acre	9.95	1.0000	9.95	_____
Tractors	acre	12.68	1.0000	12.68	_____
Harvesters	acre	9.04	1.0000	9.04	_____
Roll-Out Pipe Irr.	acre	43.02	1.0000	43.02	_____

TOTAL FIXED EXPENSES				74.69	_____

TOTAL SPECIFIED EXPENSES				342.73	_____

Note: Cost of production estimates are based on 2008 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, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.22	65.0000	599.30	_____
TOTAL INCOME				599.30	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
HARVEST AIDS	acre	1.68	1.0000	1.68	_____
FERTILIZERS	acre	44.80	1.0000	44.80	_____
FUNGICIDES	acre	11.85	1.0000	11.85	_____
HERBICIDES	acre	35.35	1.0000	35.35	_____
INSECTICIDES	acre	18.30	1.0000	18.30	_____
IRRIGATION SUPPLIES	acre	6.60	1.0000	6.60	_____
SEED/PLANTS	acre	37.00	1.0000	37.00	_____
ADJUVANTS	acre	1.70	1.0000	1.70	_____
HAULING	acre	13.00	1.0000	13.00	_____
CUSTOM LIME	acre	7.60	1.0000	7.60	_____
INOCULANT	acre	0.74	1.0000	0.74	_____
HAND LABOR	hour	8.19	0.1393	1.15	_____
IRRIGATE LABOR	hour	8.19	0.3625	2.95	_____
OPERATOR LABOR	hour	10.91	0.6072	6.62	_____
UNALLOCATED LABOR	hour	10.92	0.4758	5.20	_____
DIESEL FUEL	gal	2.46	13.5919	33.44	_____
REPAIR & MAINTENANCE	acre	12.13	1.0000	12.13	_____
INTEREST ON OP. CAP.	acre	8.43	1.0000	8.43	_____
TOTAL DIRECT EXPENSES				268.04	_____
RETURNS ABOVE DIRECT EXPENSES				331.26	_____
TOTAL FIXED EXPENSES				74.69	_____
TOTAL SPECIFIED EXPENSES				342.73	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				256.57	_____

Note: Cost of production estimates are based on 2008 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, 2009

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
Roller/Bed Shaper Fl	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					1.5000				
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				
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			0.75	Jul	0.7500				
Quadris	oz					4.5000				
Crop Oil Conc.(Pet.)	pt					1.5000				
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			0.25	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	275 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	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 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Subsoiler	3 shank		0.98	0.20	0.85		0.12	2.15	1.21	3.36
Lime (Spread)	ton	7.60					0.46	8.06		8.06
Spin Spreader	5 ton		0.41	0.17	0.49		0.06	1.13	0.69	1.82
Phosphorus(46% P2O5)	cwt	18.40					1.10	19.50		19.50
Potash (60% K2O)	cwt	26.40					1.58	27.98		27.98
Disk Harrow	24'		1.97	0.97	1.69		0.28	4.91	3.71	8.62
Field Cultivate Fld	24'		1.50	0.53	1.29		0.20	3.52	3.03	6.55
Roller/Bed Shaper Fl	8R-38		1.78	0.61	1.54		0.24	4.17	2.93	7.10
App by Air (5 gal)	appl	6.00					0.24	6.24		6.24
Glyphosate 3lbs a.e	pt	8.00					0.32	8.32		8.32
2,4-D Amine 4	pt	2.73					0.11	2.84		2.84
Valor SX	oz	8.62					0.34	8.96		8.96
Plant - Rigid	12R-20		2.27	1.80	2.73		0.20	7.00	5.56	12.56
Soybean Seed RR	lb	37.00					1.11	38.11		38.11
Apron Maxx RTA	oz	2.13					0.06	2.19		2.19
Nitragin S	oz	0.74					0.02	0.76		0.76
Gaucho 600	oz	6.25					0.19	6.44		6.44
Spray (Broadcast)	60'		0.68	0.20	0.71		0.04	1.63	0.87	2.50
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
Spray (Broadcast)	60'		0.68	0.20	0.71		0.04	1.63	0.87	2.50
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
App by Air (5 gal)	appl	4.50					0.07	4.57		4.57
Quadris	oz	9.72					0.15	9.87		9.87
Crop Oil Conc.(Pet.)	pt	1.58					0.02	1.60		1.60
Karate Z	oz	4.45					0.07	4.52		4.52
App by Air (5 gal)	appl	6.00					0.06	6.06		6.06
Acephate 90SP	lb	5.63					0.06	5.69		5.69
App by Air (5 gal)	appl	1.50					0.02	1.52		1.52
Intrepid 2F	oz	1.97					0.02	1.99		1.99
Surfactant	pt	0.04						0.04		0.04
App by Air (5 gal)	appl	1.50					0.02	1.52		1.52
Gramoxone Inteon	oz	0.92					0.01	0.93		0.93
Sodium Chlorate 3L	gal	0.76					0.01	0.77		0.77
Surfactant	pt	0.08						0.08		0.08
Header - Soybean	25' Flex		3.56	2.70	2.11		0.04	8.41	10.11	18.52
Haul Soybeans	bu	13.00					0.07	13.07		13.07
Roll-Out Pipe Irr.	acre	6.60	19.61	4.75	3.80		0.70	35.46	45.71	81.17
TOTALS		198.12	33.44	12.13	15.92	0.00	8.43	268.04	74.69	342.73

Note: Cost of production estimates are based on 2008 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, 2009

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	599.30
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	4.50	9.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68	0.00
FERTILIZERS	44.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.13	0.00	0.00	9.72	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	19.35	0.00	0.00	16.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.25	0.00	0.00	4.45	7.60	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	37.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.58	0.12	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	13.00
CUSTOM LIME	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00
LABOR	6.27	0.00	0.00	0.00	0.00	0.00	2.73	1.62	2.48	0.20	0.00	2.62
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	7.55	0.00	0.00	0.00	0.00	0.00	2.27	1.36	12.38	6.01	0.00	3.87
REPAIR & MAINTENANCE	2.68	0.00	0.00	0.00	0.00	0.00	1.80	0.40	3.69	0.78	0.00	2.78
INTEREST ON OP. CAP.	4.13	0.00	0.00	0.00	1.01	0.00	1.58	0.49	0.50	0.41	0.20	0.11
TOTAL DIRECT EXPENSES	73.03	0.00	0.00	0.00	26.36	0.00	54.50	19.87	25.65	27.65	18.60	22.38
NET INCOME	-73.03	0.00	0.00	0.00	-26.36	0.00	-54.50	-19.87	-25.65	-27.65	-18.60	576.92
NET INCOME TO DATE	-73.03	-73.03	-73.03	-73.03	-99.39	-99.39	-153.89	-173.76	-199.41	-227.06	-245.66	331.26

Note: Cost of production estimates are based on 2008 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, 2009

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			6.91	7.37	7.83	8.29	8.75	9.22	9.68	10.14	10.60	11.06	11.52
PERCENT	YIELD	UNIT	dollars										
50	32.50	bu	-36	-21	-6	8	23	38	53	68	83	98	113
			-111	-96	-81	-66	-51	-36	-21	-6	8	23	38
60	39.00	bu	6	24	42	60	78	96	114	132	150	168	186
			-67	-49	-31	-13	4	22	40	58	76	93	111
70	45.50	bu	50	71	92	113	134	155	176	197	218	239	260
			-24	-3	17	38	59	80	101	122	143	164	185
80	52.00	bu	94	118	142	166	190	214	237	261	285	309	333
			19	43	67	91	115	139	163	187	211	235	259
90	58.50	bu	137	164	191	218	245	272	299	326	353	380	407
			63	90	117	144	170	197	224	251	278	305	332
100	65.00	bu	181	211	241	271	301	331	361	391	421	451	481
			106	136	166	196	226	256	286	316	346	376	406
110	71.50	bu	225	258	290	323	356	389	422	455	488	521	554
			150	183	216	249	282	315	348	381	414	447	480
120	78.00	bu	268	304	340	376	412	448	484	520	556	592	628
			194	229	265	301	337	373	409	445	481	517	553
130	84.50	bu	312	351	390	429	468	507	546	585	623	662	701
			237	276	315	354	393	432	471	510	549	588	627
140	91.00	bu	355	397	439	481	523	565	607	649	691	733	775
			281	323	365	407	449	491	533	574	616	658	700
150	97.50	bu	399	444	489	534	579	624	669	714	759	804	849
			324	369	414	459	504	549	594	639	684	729	774

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 2008 input prices.

Table 3.A Estimated costs per acre
Soybeans, May-planted, RR, 12R 20"
Delta Area, Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	2.5000	15.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	46.00	0.2800	12.88	_____
Potash (60% K2O)	cwt	44.00	0.4000	17.60	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.85	2.5000	2.13	_____
Quadris	oz	2.16	3.0000	6.48	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	4.00	4.0000	16.00	_____
INSECTICIDES					
Gaucho 600	oz	6.25	1.0000	6.25	_____
Karate Z	oz	3.09	1.4400	4.45	_____
Acephate 90SP	lb	7.51	0.7500	5.63	_____
Intrepid 2F	oz	1.97	3.0000	5.91	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.74	50.0000	37.00	_____
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	1.05	1.5000	1.58	_____
Surfactant	pt	1.68	0.0750	0.13	_____
HAULING					
Haul Soybeans	bu	0.20	30.0000	6.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.2000	7.60	_____
INOCULANT					
Nitragin S	oz	0.27	2.7500	0.74	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.3729	4.07	_____
Harvesters	hour	10.91	0.1021	1.11	_____
HAND LABOR					
Implements	hour	8.19	0.1393	1.15	_____
UNALLOCATED LABOR	hour	10.92	0.4276	4.67	_____
DIESEL FUEL					
Tractors	gal	2.46	3.6473	8.98	_____
Harvesters	gal	2.46	1.4457	3.56	_____
REPAIR & MAINTENANCE					
Implements	acre	3.58	1.0000	3.58	_____
Tractors	acre	1.37	1.0000	1.37	_____
Harvesters	acre	2.07	1.0000	2.07	_____
INTEREST ON OP. CAP.	acre	5.65	1.0000	5.65	_____

TOTAL DIRECT EXPENSES				181.59	_____
FIXED EXPENSES					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	9.66	1.0000	9.66	_____
Harvesters	acre	9.04	1.0000	9.04	_____

TOTAL FIXED EXPENSES				26.98	_____

TOTAL SPECIFIED EXPENSES				208.57	_____

Note: Cost of production estimates are based on 2008 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, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.22	30.0000	276.60	
TOTAL INCOME				276.60	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.00	1.0000	15.00	
FERTILIZERS	acre	30.48	1.0000	30.48	
FUNGICIDES	acre	8.61	1.0000	8.61	
HERBICIDES	acre	16.00	1.0000	16.00	
INSECTICIDES	acre	22.24	1.0000	22.24	
SEED/PLANTS	acre	37.00	1.0000	37.00	
ADJUVANTS	acre	1.71	1.0000	1.71	
HAULING	acre	6.00	1.0000	6.00	
CUSTOM LIME	acre	7.60	1.0000	7.60	
INOCULANT	acre	0.74	1.0000	0.74	
HAND LABOR	hour	8.19	0.1393	1.15	
OPERATOR LABOR	hour	10.91	0.4751	5.18	
UNALLOCATED LABOR	hour	10.92	0.4276	4.67	
DIESEL FUEL	gal	2.46	5.0930	12.54	
REPAIR & MAINTENANCE	acre	7.02	1.0000	7.02	
INTEREST ON OP. CAP.	acre	5.65	1.0000	5.65	
TOTAL DIRECT EXPENSES				181.59	
RETURNS ABOVE DIRECT EXPENSES				95.01	
TOTAL FIXED EXPENSES				26.98	
TOTAL SPECIFIED EXPENSES				208.57	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				68.03	

Note: Cost of production estimates are based on 2008 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, 2009

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 - Rigid	12R-20	MFWD 190	0.094	1.00	May		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				
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					3.0000				
Crop Oil Conc.(Pet.)	pt					1.5000				
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	275 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					30.0000				
TOTALS							0.47	0.47	0.61	0.42

Note: Cost of production estimates are based on 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Subsoiler	3 shank		0.98	0.20	0.85		0.12	2.15	1.21	3.36
Disk Harrow	24'		0.49	0.25	0.42		0.07	1.23	0.93	2.16
Lime (Spread)	ton	7.60					0.46	8.06		8.06
Spin Spreader	5 ton		0.41	0.17	0.49		0.06	1.13	0.69	1.82
Phosphorus(46% P2O5)	cwt	12.88					0.77	13.65		13.65
Potash (60% K2O)	cwt	17.60					1.06	18.66		18.66
Disk Harrow	24'		1.97	0.97	1.69		0.16	4.79	3.71	8.50
Field Cultivate Fld	24'		1.50	0.53	1.29		0.10	3.42	3.03	6.45
Plant - Rigid	12R-20		2.27	1.80	2.73		0.20	7.00	5.56	12.56
Soybean Seed RR	lb	37.00					1.11	38.11		38.11
Apron Maxx RTA	oz	2.13					0.06	2.19		2.19
Nitragin S	oz	0.74					0.02	0.76		0.76
Gaucho 600	oz	6.25					0.19	6.44		6.44
Spray (Broadcast)	60'		0.68	0.20	0.71		0.05	1.64	0.87	2.51
Glyphosate 3lbs a.e	pt	8.00					0.24	8.24		8.24
Spray (Broadcast)	60'		0.68	0.20	0.71		0.04	1.63	0.87	2.50
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
App by Air (5 gal)	appl	4.50					0.09	4.59		4.59
Quadris	oz	6.48					0.13	6.61		6.61
Crop Oil Conc.(Pet.)	pt	1.58					0.03	1.61		1.61
Karate Z	oz	4.45					0.09	4.54		4.54
App by Air (5 gal)	appl	6.00					0.09	6.09		6.09
Acephate 90SP	lb	5.63					0.08	5.71		5.71
App by Air (5 gal)	appl	4.50					0.07	4.57		4.57
Intrepid 2F	oz	5.91					0.09	6.00		6.00
Surfactant	pt	0.13						0.13		0.13
Header - Soybean	25' Flex		3.56	2.70	2.11		0.04	8.41	10.11	18.52
Haul Soybeans	bu	6.00					0.03	6.03		6.03
TOTALS		145.38	12.54	7.02	11.00	0.00	5.65	181.59	26.98	208.57

Note: Cost of production estimates are based on 2008 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, 2009

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	276.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.50	10.50	0.00	0.00
FERTILIZERS	30.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.13	0.00	6.48	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.00	8.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.25	0.00	4.45	11.54	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.58	0.13	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
CUSTOM LIME	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00
LABOR	1.76	0.00	0.00	0.00	0.00	1.69	4.73	0.71	0.00	0.00	0.00	2.11
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	1.88	0.00	0.00	0.00	0.00	1.97	4.45	0.68	0.00	0.00	0.00	3.56
REPAIR & MAINTENANCE	0.62	0.00	0.00	0.00	0.00	0.97	2.53	0.20	0.00	0.00	0.00	2.70
INTEREST ON OP. CAP.	2.54	0.00	0.00	0.00	0.00	0.16	1.97	0.24	0.34	0.33	0.00	0.07
TOTAL DIRECT EXPENSES	44.88	0.00	0.00	0.00	0.00	4.79	67.80	9.83	17.35	22.50	0.00	14.44
NET INCOME	-44.88	0.00	0.00	0.00	0.00	-4.79	-67.80	-9.83	-17.35	-22.50	0.00	262.16
NET INCOME TO DATE	-44.88	-44.88	-44.88	-44.88	-44.88	-49.67	-117.47	-127.30	-144.65	-167.15	-167.15	95.01

Note: Cost of production estimates are based on 2008 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, 2009

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			6.91	7.37	7.83	8.29	8.75	9.22	9.68	10.14	10.60	11.06	11.52
PERCENT	YIELD	UNIT	dollars										
50	15.00	bu	-74	-67	-61	-54	-47	-40	-33	-26	-19	-12	-5
			-101	-94	-88	-81	-74	-67	-60	-53	-46	-39	-32
60	18.00	bu	-54	-46	-38	-29	-21	-13	-4	3	11	19	28
			-81	-73	-65	-56	-48	-40	-31	-23	-15	-7	1
70	21.00	bu	-34	-24	-15	-5	4	13	23	33	42	52	62
			-61	-51	-42	-32	-22	-13	-3	6	15	25	35
80	24.00	bu	-14	-3	7	18	29	40	51	63	74	85	96
			-41	-30	-19	-8	2	13	24	36	47	58	69
90	27.00	bu	5	18	30	43	55	67	80	92	105	117	130
			-21	-8	3	16	28	40	53	65	78	90	103
100	30.00	bu	25	39	53	67	81	95	108	122	136	150	164
			-1	12	26	40	54	68	81	95	109	123	137
110	33.00	bu	46	61	76	91	106	122	137	152	167	182	198
			19	34	49	64	79	95	110	125	140	155	171
120	36.00	bu	66	82	99	115	132	149	165	182	198	215	232
			39	55	72	88	105	122	138	155	171	188	205
130	39.00	bu	86	104	122	140	158	176	194	212	230	248	266
			59	77	95	113	131	149	167	185	203	221	239
140	42.00	bu	106	125	145	164	183	203	222	241	261	280	300
			79	98	118	137	156	176	195	214	234	253	273
150	45.00	bu	126	147	168	188	209	230	251	271	292	313	334
			99	120	141	161	182	203	224	244	265	286	307

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 2008 input prices.

Table 4.A Estimated costs per acre
Soybeans, May-planted, RR, 12R 20"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	3.0000	18.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	46.00	0.4000	18.40	_____
Potash (60% K2O)	cwt	44.00	0.6000	26.40	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.85	2.5000	2.13	_____
Quadris	oz	2.16	6.0000	12.96	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	4.00	4.0000	16.00	_____
INSECTICIDES					
Gaucho 600	oz	6.25	1.0000	6.25	_____
Karate Z	oz	3.09	1.9200	5.93	_____
Acephate 90SP	lb	7.51	0.7500	5.63	_____
Intrepid 2F	oz	1.97	4.0000	7.88	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.74	50.0000	37.00	_____
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	1.05	2.0000	2.10	_____
Surfactant	pt	1.68	0.1000	0.17	_____
HAULING					
Haul Soybeans	bu	0.20	53.0000	10.60	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.00	0.5000	2.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.2000	7.60	_____
INOCULANT					
Nitragin S	oz	0.27	2.7500	0.74	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.5963	6.50	_____
Harvesters	hour	10.91	0.1021	1.11	_____
IRRIGATE LABOR					
Special Labor	hour	8.19	0.3125	2.54	_____
HAND LABOR					
Implements	hour	8.19	0.1393	1.15	_____
UNALLOCATED LABOR	hour	10.91	0.4460	4.87	_____
DIESEL FUEL					
Tractors	gal	2.46	5.4352	13.40	_____
Harvesters	gal	2.46	1.4457	3.56	_____
Contour Flood Irr.	gal	2.46	10.9974	27.06	_____
REPAIR & MAINTENANCE					
Implements	acre	4.28	1.0000	4.28	_____
Tractors	acre	2.07	1.0000	2.07	_____
Harvesters	acre	2.07	1.0000	2.07	_____
Contour Flood Irr.	acre	8.73	1.0000	8.73	_____
INTEREST ON OP. CAP.	acre	7.83	1.0000	7.83	_____

TOTAL DIRECT EXPENSES				264.96	_____
FIXED EXPENSES					
Implements	acre	10.62	1.0000	10.62	_____
Tractors	acre	14.37	1.0000	14.37	_____
Harvesters	acre	9.04	1.0000	9.04	_____
Contour Flood Irr.	acre	32.02	1.0000	32.02	_____

TOTAL FIXED EXPENSES				66.05	_____

TOTAL SPECIFIED EXPENSES				331.01	_____

Note: Cost of production estimates are based on 2008 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, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.22	53.0000	488.66	_____
TOTAL INCOME				488.66	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	18.00	1.0000	18.00	_____
FERTILIZERS	acre	44.80	1.0000	44.80	_____
FUNGICIDES	acre	15.09	1.0000	15.09	_____
HERBICIDES	acre	16.00	1.0000	16.00	_____
INSECTICIDES	acre	25.69	1.0000	25.69	_____
SEED/PLANTS	acre	37.00	1.0000	37.00	_____
ADJUVANTS	acre	2.27	1.0000	2.27	_____
HAULING	acre	10.60	1.0000	10.60	_____
SURVEY & MARK LEVEES	acre	2.00	1.0000	2.00	_____
CUSTOM LIME	acre	7.60	1.0000	7.60	_____
INOCULANT	acre	0.74	1.0000	0.74	_____
HAND LABOR	hour	8.19	0.1393	1.15	_____
IRRIGATE LABOR	hour	8.19	0.3125	2.54	_____
OPERATOR LABOR	hour	10.91	0.6984	7.61	_____
UNALLOCATED LABOR	hour	10.91	0.4460	4.87	_____
DIESEL FUEL	gal	2.46	17.8783	44.02	_____
REPAIR & MAINTENANCE	acre	17.15	1.0000	17.15	_____
INTEREST ON OP. CAP.	acre	7.83	1.0000	7.83	_____
TOTAL DIRECT EXPENSES				264.96	_____
RETURNS ABOVE DIRECT EXPENSES				223.70	_____
TOTAL FIXED EXPENSES				66.05	_____
TOTAL SPECIFIED EXPENSES				331.01	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				157.65	_____

Note: Cost of production estimates are based on 2008 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, 2009

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 - Rigid	12R-20	MFWD 190	0.094	1.00	May		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				
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				
Crop Oil Conc.(Pet.)	pt					2.0000				
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	275 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					53.0000				
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.69	0.69	1.15	0.44

Note: Cost of production estimates are based on 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	DIRECT COST FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Disk Harrow	24'		1.97	0.97	1.69		0.28	4.91	3.71	8.62
Lime (Spread)	ton	7.60					0.46	8.06		8.06
Spin Spreader	5 ton		0.41	0.17	0.49		0.06	1.13	0.69	1.82
Phosphorus(46% P2O5)	cwt	18.40					1.10	19.50		19.50
Potash (60% K2O)	cwt	26.40					1.58	27.98		27.98
Disk Harrow	24'		1.97	0.97	1.69		0.16	4.79	3.71	8.50
Field Cultivate Fld	24'		1.50	0.53	1.29		0.10	3.42	3.03	6.45
Plant - Rigid	12R-20		2.27	1.80	2.73		0.20	7.00	5.56	12.56
Soybean Seed RR	lb	37.00					1.11	38.11		38.11
Apron Maxx RTA	oz	2.13					0.06	2.19		2.19
Nitragin S	oz	0.74					0.02	0.76		0.76
Gaucho 600	oz	6.25					0.19	6.44		6.44
Spray (Broadcast)	60'		0.68	0.20	0.71		0.05	1.64	0.87	2.51
Glyphosate 3lbs a.e	pt	8.00					0.24	8.24		8.24
Spray (Broadcast)	60'		0.68	0.20	0.71		0.04	1.63	0.87	2.50
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
App by Air (5 gal)	appl	6.00					0.12	6.12		6.12
Quadris	oz	12.96					0.26	13.22		13.22
Crop Oil Conc.(Pet.)	pt	2.10					0.04	2.14		2.14
Karate Z	oz	5.93					0.12	6.05		6.05
App by Air (5 gal)	appl	6.00					0.09	6.09		6.09
Acephate 90SP	lb	5.63					0.08	5.71		5.71
App by Air (5 gal)	appl	6.00					0.09	6.09		6.09
Intrepid 2F	oz	7.88					0.12	8.00		8.00
Surfactant	pt	0.17						0.17		0.17
Header - Soybean	25' Flex		3.56	2.70	2.11		0.04	8.41	10.11	18.52
Haul Soybeans	bu	10.60					0.05	10.65		10.65
Contour Flood Irr.	acre	2.00	30.98	9.61	4.75		0.97	48.31	37.50	85.81
TOTALS		179.79	44.02	17.15	16.17	0.00	7.83	264.96	66.05	331.01

Note: Cost of production estimates are based on 2008 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, 2009

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	488.66
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	12.00	0.00	0.00
FERTILIZERS	44.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.13	0.00	12.96	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.00	8.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.25	0.00	5.93	13.51	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.17	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.60
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
CUSTOM LIME	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00
LABOR	2.18	0.00	0.00	0.00	0.00	1.69	5.14	2.23	1.34	1.34	0.14	2.11
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	2.38	0.00	0.00	0.00	0.00	1.97	4.45	11.16	10.13	10.13	0.24	3.56
REPAIR & MAINTENANCE	1.14	0.00	0.00	0.00	0.00	0.97	2.53	6.14	1.81	1.81	0.05	2.70
INTEREST ON OP. CAP.	3.48	0.00	0.00	0.00	0.00	0.16	1.98	0.74	0.80	0.58	0.00	0.09
TOTAL DIRECT EXPENSES	61.58	0.00	0.00	0.00	0.00	4.79	68.22	30.27	41.07	39.54	0.43	19.06
NET INCOME	-61.58	0.00	0.00	0.00	0.00	-4.79	-68.22	-30.27	-41.07	-39.54	-0.43	469.60
NET INCOME TO DATE	-61.58	-61.58	-61.58	-61.58	-61.58	-66.37	-134.59	-164.86	-205.93	-245.47	-245.90	223.70

Note: Cost of production estimates are based on 2008 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, 2009

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			6.91	7.37	7.83	8.29	8.75	9.22	9.68	10.14	10.60	11.06	11.52
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-76	-64	-51	-39	-27	-15	-3	9	21	33	45
			-142	-130	-118	-105	-93	-81	-69	-56	-44	-32	-20
60	31.80	bu	-40	-26	-11	3	17	32	47	61	76	91	105
			-106	-92	-77	-62	-48	-33	-18	-4	10	25	39
70	37.10	bu	-5	11	28	46	63	80	97	114	131	148	165
			-71	-54	-37	-19	-2	14	31	48	65	82	99
80	42.40	bu	30	49	69	89	108	128	147	167	186	206	225
			-35	-16	3	22	42	62	81	101	120	140	159
90	47.70	bu	65	87	109	131	153	175	197	219	241	263	285
			-0	21	43	65	87	109	131	153	175	197	219
100	53.00	bu	101	125	150	174	199	223	248	272	296	321	345
			35	59	84	108	133	157	182	206	230	255	279
110	58.30	bu	137	163	190	217	244	271	298	325	352	379	405
			71	97	124	151	178	205	232	259	286	312	339
120	63.60	bu	172	202	231	260	289	319	348	377	407	436	465
			106	135	165	194	223	253	282	311	341	370	399
130	68.90	bu	208	240	271	303	335	367	398	430	462	494	525
			142	174	205	237	269	301	332	364	396	428	459
140	74.20	bu	243	278	312	346	380	414	449	483	517	551	585
			177	212	246	280	314	348	383	417	451	485	519
150	79.50	bu	279	316	352	389	426	462	499	536	572	609	645
			213	250	286	323	360	396	433	469	506	543	579

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 2008 input prices.

Table 5.A Estimated costs per acre
Soybeans after wheat, RR, 12R 20"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	3.0000	18.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	46.00	0.4000	18.40	_____
Potash (60% K2O)	cwt	44.00	0.6000	26.40	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.85	2.5000	2.13	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	4.00	5.0000	20.00	_____
INSECTICIDES					
Gaucho 600	oz	6.25	1.0000	6.25	_____
Karate Z	oz	3.09	1.7000	5.25	_____
Acephate 90SP	lb	7.51	0.7500	5.63	_____
Intrepid 2F	oz	1.97	4.0000	7.88	_____
Baythroid XL	oz	2.22	2.1300	4.73	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.74	50.0000	37.00	_____
ADJUVANTS					
Surfactant	pt	1.68	0.1000	0.17	_____
HAULING					
Haul Soybeans	bu	0.20	45.0000	9.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.2000	7.60	_____
INOCULANT					
Nitragin S	oz	0.27	2.7500	0.74	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.1816	1.98	_____
Harvesters	hour	10.91	0.1021	1.11	_____
IRRIGATE LABOR					
Special Labor	hour	8.19	0.0518	0.42	_____
HAND LABOR					
Implements	hour	8.19	0.1463	1.21	_____
UNALLOCATED LABOR	hour	10.85	0.2440	2.65	_____
DIESEL FUEL					
Tractors	gal	2.46	1.7765	4.38	_____
Harvesters	gal	2.46	1.4457	3.56	_____
1/2-mi Pivot Irr.	gal	2.46	14.0014	34.44	_____
REPAIR & MAINTENANCE					
Implements	acre	2.44	1.0000	2.44	_____
Tractors	acre	0.66	1.0000	0.66	_____
Harvesters	acre	2.07	1.0000	2.07	_____
1/2-mi Pivot Irr.	acre	7.07	1.0000	7.07	_____
INTEREST ON OP. CAP.	acre	6.64	1.0000	6.64	_____

TOTAL DIRECT EXPENSES				237.81	_____
FIXED EXPENSES					
Implements	acre	4.79	1.0000	4.79	_____
Tractors	acre	4.71	1.0000	4.71	_____
Harvesters	acre	9.04	1.0000	9.04	_____
1/2-mi Pivot Irr.	acre	28.91	1.0000	28.91	_____

TOTAL FIXED EXPENSES				47.45	_____

TOTAL SPECIFIED EXPENSES				285.26	_____

Note: Cost of production estimates are based on 2008 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, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.22	45.0000	414.90	_____
TOTAL INCOME				414.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	18.00	1.0000	18.00	_____
FERTILIZERS	acre	44.80	1.0000	44.80	_____
FUNGICIDES	acre	2.13	1.0000	2.13	_____
HERBICIDES	acre	20.00	1.0000	20.00	_____
INSECTICIDES	acre	29.74	1.0000	29.74	_____
SEED/PLANTS	acre	37.00	1.0000	37.00	_____
ADJUVANTS	acre	0.17	1.0000	0.17	_____
HAULING	acre	9.00	1.0000	9.00	_____
CUSTOM LIME	acre	7.60	1.0000	7.60	_____
INOCULANT	acre	0.74	1.0000	0.74	_____
HAND LABOR	hour	8.19	0.1463	1.21	_____
IRRIGATE LABOR	hour	8.19	0.0518	0.42	_____
OPERATOR LABOR	hour	10.91	0.2838	3.09	_____
UNALLOCATED LABOR	hour	10.85	0.2440	2.65	_____
DIESEL FUEL	gal	2.46	17.2236	42.38	_____
REPAIR & MAINTENANCE	acre	12.24	1.0000	12.24	_____
INTEREST ON OP. CAP.	acre	6.64	1.0000	6.64	_____
TOTAL DIRECT EXPENSES				237.81	_____
RETURNS ABOVE DIRECT EXPENSES				177.09	_____
TOTAL FIXED EXPENSES				47.45	_____
TOTAL SPECIFIED EXPENSES				285.26	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				129.64	_____

Note: Cost of production estimates are based on 2008 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, 2009

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 - Rigid	12R-20	MFWD 190	0.094	1.00	Jun		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	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				
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	275 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					45.0000				
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.28	0.28	0.48	0.24

Note: Cost of production estimates are based on 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	DIRECT COST FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	7.60					0.46	8.06		8.06
Spin Spreader	5 ton		0.41	0.17	0.48		0.06	1.12	0.69	1.81
Phosphorus(46% P2O5)	cwt	18.40					1.10	19.50		19.50
Potash (60% K2O)	cwt	26.40					1.58	27.98		27.98
Spray (Broadcast)	60'		0.68	0.20	0.69		0.04	1.61	0.87	2.48
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
Plant - Rigid	12R-20		2.27	1.80	2.68		0.17	6.92	5.56	12.48
Soybean Seed RR	lb	37.00					0.93	37.93		37.93
Apron Maxx RTA	oz	2.13					0.05	2.18		2.18
Nitragin S	oz	0.74					0.02	0.76		0.76
Gaucho 600	oz	6.25					0.16	6.41		6.41
Spray (Broadcast)	60'		0.68	0.20	0.69		0.03	1.60	0.87	2.47
Glyphosate 3lbs a.e	pt	8.00					0.16	8.16		8.16
Spray (Broadcast)	60'		0.34	0.10	0.34		0.02	0.80	0.44	1.24
Glyphosate 3lbs a.e	pt	4.00					0.08	4.08		4.08
App by Air (5 gal)	appl	6.00					0.09	6.09		6.09
Karate Z	oz	5.25					0.08	5.33		5.33
App by Air (5 gal)	appl	6.00					0.09	6.09		6.09
Acephate 90SP	lb	5.63					0.08	5.71		5.71
App by Air (5 gal)	appl	6.00					0.09	6.09		6.09
Intrepid 2F	oz	7.88					0.12	8.00		8.00
Surfactant	pt	0.17						0.17		0.17
Baythroid XL	oz	4.73					0.07	4.80		4.80
Header - Soybean	25' Flex		3.56	2.70	2.07		0.04	8.37	10.11	18.48
Haul Soybeans	bu	9.00					0.05	9.05		9.05
1/2-mi Pivot Irr.	acre		34.44	7.07	0.42		0.87	42.80	28.91	71.71
TOTALS		169.18	42.38	12.24	7.37	0.00	6.64	237.81	47.45	285.26

Note: Cost of production estimates are based on 2008 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, 2009

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	414.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.00	0.00	0.00
FERTILIZERS	44.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.13	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	12.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25	0.00	23.49	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.00	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	0.17	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	9.00
CUSTOM LIME	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00
LABOR	0.48	0.00	0.00	0.00	0.00	0.00	0.31	3.40	1.08	0.03	0.00	2.07
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	0.41	0.00	0.00	0.00	0.00	0.00	0.00	13.28	14.80	10.33	0.00	3.56
REPAIR & MAINTENANCE	0.17	0.00	0.00	0.00	0.00	0.00	0.00	8.13	0.84	0.40	0.00	2.70
INTEREST ON OP. CAP.	3.20	0.00	0.00	0.00	0.00	0.00	0.01	1.98	0.58	0.78	0.00	0.09
TOTAL DIRECT EXPENSES	56.66	0.00	0.00	0.00	0.00	0.00	0.32	80.91	29.30	53.20	0.00	17.42
NET INCOME	-56.66	0.00	0.00	0.00	0.00	0.00	-0.32	-80.91	-29.30	-53.20	0.00	397.48
NET INCOME TO DATE	-56.66	-56.66	-56.66	-56.66	-56.66	-56.66	-56.98	-137.89	-167.19	-220.39	-220.39	177.09

Note: Cost of production estimates are based on 2008 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, 2009

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			6.91	7.37	7.83	8.29	8.75	9.22	9.68	10.14	10.60	11.06	11.52
PERCENT	YIELD	UNIT	dollars										
50	22.50	bu	-77	-67	-56	-46	-36	-25	-15	-5	5	15	26
			-125	-114	-104	-94	-83	-73	-62	-52	-42	-31	-21
60	27.00	bu	-47	-35	-22	-10	2	14	27	39	52	64	76
			-94	-82	-70	-57	-45	-32	-20	-7	4	17	29
70	31.50	bu	-17	-2	11	26	40	55	69	84	98	113	127
			-64	-50	-35	-21	-6	7	22	36	51	65	80
80	36.00	bu	12	29	46	62	79	95	112	129	145	162	178
			-34	-17	-1	15	31	48	65	81	98	114	131
90	40.50	bu	43	61	80	99	117	136	155	173	192	211	229
			-4	14	33	51	70	89	107	126	145	163	182
100	45.00	bu	73	94	114	135	156	177	197	218	239	260	280
			25	46	67	88	108	129	150	171	191	212	233
110	49.50	bu	103	126	149	172	194	217	240	263	286	308	331
			56	78	101	124	147	170	193	215	238	261	284
120	54.00	bu	133	158	183	208	233	258	283	308	332	357	382
			86	111	136	161	185	210	235	260	285	310	335
130	58.50	bu	164	190	217	244	271	298	325	352	379	406	433
			116	143	170	197	224	251	278	305	332	359	386
140	63.00	bu	194	223	252	281	310	339	368	397	426	455	484
			146	175	204	233	262	291	321	350	379	408	437
150	67.50	bu	224	255	286	317	348	380	411	442	473	504	535
			176	208	239	270	301	332	363	394	425	457	488

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 2008 input prices.

Table 6.A Estimated costs per acre
Soybeans, early-planted, RR, reduced tillage, 12R 20"
Non-Delta Area, Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	1.0000	6.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	46.00	0.6600	30.36	_____
Potash (60% K2O)	cwt	44.00	1.0000	44.00	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.85	2.5000	2.13	_____
Headline	oz	2.08	3.0000	6.24	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	4.00	6.0000	24.00	_____
2,4-D Amine 4	pt	1.82	2.0000	3.64	_____
INSECTICIDES					
Gaucho 600	oz	6.25	1.0000	6.25	_____
Acephate 90SP	lb	7.51	0.7500	5.63	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.74	50.0000	37.00	_____
HAULING					
Haul Soybeans	bu	0.20	43.0000	8.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.2500	9.50	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.3791	4.14	_____
Harvesters	hour	10.91	0.1021	1.11	_____
HAND LABOR					
Implements	hour	8.19	0.1857	1.53	_____
UNALLOCATED LABOR	hour	10.91	0.4332	4.73	_____
DIESEL FUEL					
Tractors	gal	2.46	3.7083	9.13	_____
Harvesters	gal	2.46	1.4457	3.56	_____
REPAIR & MAINTENANCE					
Implements	acre	3.67	1.0000	3.67	_____
Tractors	acre	1.39	1.0000	1.39	_____
Harvesters	acre	2.07	1.0000	2.07	_____
INTEREST ON OP. CAP.	acre	8.59	1.0000	8.59	_____

TOTAL DIRECT EXPENSES				223.27	_____
FIXED EXPENSES					
Implements	acre	8.30	1.0000	8.30	_____
Tractors	acre	9.82	1.0000	9.82	_____
Harvesters	acre	9.04	1.0000	9.04	_____

TOTAL FIXED EXPENSES				27.16	_____

TOTAL SPECIFIED EXPENSES				250.43	_____

Note: Cost of production estimates are based on 2008 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, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.22	43.0000	396.46	_____
TOTAL INCOME				396.46	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.00	1.0000	6.00	_____
FERTILIZERS	acre	74.36	1.0000	74.36	_____
FUNGICIDES	acre	8.37	1.0000	8.37	_____
HERBICIDES	acre	27.64	1.0000	27.64	_____
INSECTICIDES	acre	11.88	1.0000	11.88	_____
SEED/PLANTS	acre	37.00	1.0000	37.00	_____
HAULING	acre	8.60	1.0000	8.60	_____
CUSTOM LIME	acre	9.50	1.0000	9.50	_____
HAND LABOR	hour	8.19	0.1857	1.53	_____
OPERATOR LABOR	hour	10.91	0.4813	5.25	_____
UNALLOCATED LABOR	hour	10.91	0.4332	4.73	_____
DIESEL FUEL	gal	2.46	5.1540	12.69	_____
REPAIR & MAINTENANCE	acre	7.13	1.0000	7.13	_____
INTEREST ON OP. CAP.	acre	8.59	1.0000	8.59	_____
TOTAL DIRECT EXPENSES				223.27	_____
RETURNS ABOVE DIRECT EXPENSES				173.19	_____
TOTAL FIXED EXPENSES				27.16	_____
TOTAL SPECIFIED EXPENSES				250.43	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				146.03	_____

Note: Cost of production estimates are based on 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Lime (Spread)	ton			0.25	Oct	0.2500				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
2,4-D Amine 4	pt					2.0000				
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				
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				
Header - Soybean	25' Flex	275hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					43.0000				
							-------	-------	-------	-------
TOTALS							0.48	0.48	0.66	0.43

Note: Cost of production estimates are based on 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	9.50					0.57	10.07		10.07
Spin Spreader	5 ton		1.01	0.43	1.21		0.16	2.81	1.70	4.51
Phosphorus(46% P2O5)	cwt	30.36					1.82	32.18		32.18
Potash (60% K2O)	cwt	44.00					2.64	46.64		46.64
Disk Harrow	24'		1.97	0.97	1.69		0.28	4.91	3.71	8.62
Field Cultivate Fld	24'		1.50	0.53	1.29		0.20	3.52	3.03	6.55
App by Air (5 gal)	appl	6.00					0.21	6.21		6.21
Glyphosate 3lbs a.e	pt	8.00					0.28	8.28		8.28
2,4-D Amine 4	pt	3.64					0.13	3.77		3.77
Plant - Rigid	12R-20		2.27	1.80	2.73		0.20	7.00	5.56	12.56
Soybean Seed RR	lb	37.00					1.11	38.11		38.11
Apron Maxx RTA	oz	2.13					0.06	2.19		2.19
Gaucho 600	oz	6.25					0.19	6.44		6.44
Spray (Broadcast)	60'		0.68	0.20	0.71		0.04	1.63	0.87	2.50
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
Spray (Broadcast)	60'		0.68	0.20	0.71		0.04	1.63	0.87	2.50
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
Spray (Broadcast)	60'		0.34	0.10	0.35		0.01	0.80	0.44	1.24
Headline	oz	6.24					0.09	6.33		6.33
Spray (Broadcast)	60'		0.68	0.20	0.71		0.02	1.61	0.87	2.48
Acephate 90SP	lb	5.63					0.06	5.69		5.69
Header - Soybean	25' Flex		3.56	2.70	2.11		0.04	8.41	10.11	18.52
Haul Soybeans	bu	8.60					0.04	8.64		8.64
TOTALS		183.35	12.69	7.13	11.51	0.00	8.59	223.27	27.16	250.43

Note: Cost of production estimates are based on 2008 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, 2009

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	396.46
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZERS	74.36	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	2.13	0.00	0.00	6.24	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	11.64	0.00	16.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.25	0.00	0.00	0.00	5.63	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.60
CUSTOM LIME	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.19	0.00	0.00	0.00	0.00	0.00	2.73	1.42	0.00	0.35	0.71	2.11
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	4.48	0.00	0.00	0.00	0.00	0.00	2.27	1.36	0.00	0.34	0.68	3.56
REPAIR & MAINTENANCE	1.93	0.00	0.00	0.00	0.00	0.00	1.80	0.40	0.00	0.10	0.20	2.70
INTEREST ON OP. CAP.	5.67	0.00	0.00	0.00	0.00	0.62	1.56	0.48	0.00	0.10	0.08	0.08
TOTAL DIRECT EXPENSES	100.13	0.00	0.00	0.00	0.00	18.26	53.74	19.66	0.00	7.13	7.30	17.05
NET INCOME	-100.13	0.00	0.00	0.00	0.00	-18.26	-53.74	-19.66	0.00	-7.13	-7.30	379.41
NET INCOME TO DATE	-100.13	-100.13	-100.13	-100.13	-100.13	-118.39	-172.13	-191.79	-191.79	-198.92	-206.22	173.19

Note: Cost of production estimates are based on 2008 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, 2009

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			6.91	7.37	7.83	8.29	8.75	9.22	9.68	10.14	10.60	11.06	11.52
PERCENT	YIELD	UNIT	dollars										
50	21.50	bu	-70	-60	-50	-40	-30	-20	-10	-0	9	18	28
			-97	-87	-77	-67	-57	-47	-37	-28	-18	-8	1
60	25.80	bu	-41	-29	-17	-5	6	18	29	41	53	65	77
			-68	-56	-44	-32	-20	-9	2	14	26	38	50
70	30.10	bu	-12	1	15	29	42	56	70	84	98	112	126
			-39	-25	-11	1	15	29	43	57	71	85	99
80	34.40	bu	16	32	48	63	79	95	111	127	143	159	174
			-10	5	20	36	52	68	84	100	116	131	147
90	38.70	bu	45	63	80	98	116	134	152	170	187	205	223
			18	35	53	71	89	107	125	142	160	178	196
100	43.00	bu	74	93	113	133	153	173	193	212	232	252	272
			46	66	86	106	126	146	165	185	205	225	245
110	47.30	bu	102	124	146	168	190	211	233	255	277	299	320
			75	97	119	141	163	184	206	228	250	272	293
120	51.60	bu	131	155	179	203	226	250	274	298	322	345	369
			104	128	152	176	199	223	247	271	294	318	342
130	55.90	bu	160	186	212	237	263	289	315	341	366	392	418
			133	159	185	210	236	262	288	313	339	365	391
140	60.20	bu	189	217	245	272	300	328	356	383	411	439	467
			162	190	217	245	273	301	328	356	384	412	439
150	64.50	bu	218	248	277	307	337	367	396	426	456	486	515
			191	221	250	280	310	339	369	399	429	458	488

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 2008 input prices.

Table 7.A Estimated costs per acre
Soybeans, May-planted, RR, convent. tillage, 12R 20"
Non-Delta Area, Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	46.00	0.6600	30.36	_____
Potash (60% K2O)	cwt	44.00	1.0000	44.00	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.85	2.5000	2.13	_____
Quadris	oz	2.16	3.0000	6.48	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	4.00	4.0000	16.00	_____
INSECTICIDES					
Gaucho 600	oz	6.25	1.0000	6.25	_____
Dimilin 2L	oz	1.63	1.0000	1.63	_____
Acephate 90SP	lb	7.51	0.7500	5.63	_____
Intrepid 2F	oz	1.97	2.0000	3.94	_____
Baythroid XL	oz	2.22	1.0650	2.36	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.74	50.0000	37.00	_____
ADJUVANTS					
Surfactant	pt	1.68	0.0500	0.08	_____
HAULING					
Haul Soybeans	bu	0.20	30.0000	6.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.2500	9.50	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.3932	4.29	_____
Harvesters	hour	10.91	0.1021	1.11	_____
HAND LABOR					
Implements	hour	8.19	0.1928	1.59	_____
UNALLOCATED LABOR	hour	10.92	0.4459	4.87	_____
DIESEL FUEL					
Tractors	gal	2.46	3.8462	9.47	_____
Harvesters	gal	2.46	1.4457	3.56	_____
REPAIR & MAINTENANCE					
Implements	acre	3.72	1.0000	3.72	_____
Tractors	acre	1.44	1.0000	1.44	_____
Harvesters	acre	2.07	1.0000	2.07	_____
INTEREST ON OP. CAP.	acre	6.07	1.0000	6.07	_____

TOTAL DIRECT EXPENSES				209.55	_____
FIXED EXPENSES					
Implements	acre	8.37	1.0000	8.37	_____
Tractors	acre	10.19	1.0000	10.19	_____
Harvesters	acre	9.04	1.0000	9.04	_____

TOTAL FIXED EXPENSES				27.60	_____

TOTAL SPECIFIED EXPENSES				237.15	_____

Note: Cost of production estimates are based on 2008 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, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.22	30.0000	276.60	_____
TOTAL INCOME				276.60	_____
DIRECT EXPENSES					
FERTILIZERS	acre	74.36	1.0000	74.36	_____
FUNGICIDES	acre	8.61	1.0000	8.61	_____
HERBICIDES	acre	16.00	1.0000	16.00	_____
INSECTICIDES	acre	19.81	1.0000	19.81	_____
SEED/PLANTS	acre	37.00	1.0000	37.00	_____
ADJUVANTS	acre	0.08	1.0000	0.08	_____
HAULING	acre	6.00	1.0000	6.00	_____
CUSTOM LIME	acre	9.50	1.0000	9.50	_____
HAND LABOR	hour	8.19	0.1928	1.59	_____
OPERATOR LABOR	hour	10.91	0.4954	5.40	_____
UNALLOCATED LABOR	hour	10.92	0.4459	4.87	_____
DIESEL FUEL	gal	2.46	5.2920	13.03	_____
REPAIR & MAINTENANCE	acre	7.23	1.0000	7.23	_____
INTEREST ON OP. CAP.	acre	6.07	1.0000	6.07	_____
TOTAL DIRECT EXPENSES				209.55	_____
RETURNS ABOVE DIRECT EXPENSES				67.05	_____
TOTAL FIXED EXPENSES				27.60	_____
TOTAL SPECIFIED EXPENSES				237.15	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				39.45	_____

Note: Cost of production estimates are based on 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Lime (Spread)	ton			0.25	Nov	0.2500				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Apr		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May		0.06	0.06	0.06	0.05
Plant - Rigid	12R-20	MFWD 190	0.094	1.00	May		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				
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	275hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					30.0000				
TOTALS							0.49	0.49	0.68	0.44

Note: Cost of production estimates are based on 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Lime (Spread)	ton	9.50					0.57	10.07		10.07
Spin Spreader	5 ton		1.01	0.43	1.21		0.09	2.74	1.70	4.44
Phosphorus(46% P2O5)	cwt	30.36					1.06	31.42		31.42
Potash (60% K2O)	cwt	44.00					1.54	45.54		45.54
Disk Harrow	24'		1.97	0.97	1.69		0.16	4.79	3.71	8.50
Field Cultivate Fld	24'		1.50	0.53	1.29		0.10	3.42	3.03	6.45
Plant - Rigid	12R-20		2.27	1.80	2.73		0.20	7.00	5.56	12.56
Soybean Seed RR	lb	37.00					1.11	38.11		38.11
Apron Maxx RTA	oz	2.13					0.06	2.19		2.19
Gaucho 600	oz	6.25					0.19	6.44		6.44
Spray (Broadcast)	60'		0.68	0.20	0.71		0.05	1.64	0.87	2.51
Glyphosate 3lbs a.e	pt	8.00					0.24	8.24		8.24
Spray (Broadcast)	60'		0.68	0.20	0.71		0.04	1.63	0.87	2.50
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
Spray (Broadcast)	60'		0.34	0.10	0.35		0.02	0.81	0.44	1.25
Dimilin 2L	oz	1.63					0.03	1.66		1.66
Quadris	oz	6.48					0.13	6.61		6.61
Spray (Broadcast)	60'		0.68	0.20	0.71		0.02	1.61	0.87	2.48
Acephate 90SP	lb	5.63					0.08	5.71		5.71
Spray (Broadcast)	60'		0.34	0.10	0.35		0.01	0.80	0.44	1.24
Intrepid 2F	oz	3.94					0.06	4.00		4.00
Baythroid XL	oz	2.36					0.04	2.40		2.40
Surfactant	pt	0.08						0.08		0.08
Header - Soybean	25' Flex		3.56	2.70	2.11		0.04	8.41	10.11	18.52
Haul Soybeans	bu	6.00					0.03	6.03		6.03
TOTALS		171.36	13.03	7.23	11.86	0.00	6.07	209.55	27.60	237.15

Note: Cost of production estimates are based on 2008 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, 2009

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	276.60
DIRECT EXPENSES												
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	74.36	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.13	0.00	6.48	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.00	8.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.25	0.00	1.63	11.93	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
CUSTOM LIME	9.50	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	2.90	4.73	0.71	0.35	1.06	0.00	2.11
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	2.98	4.45	0.68	0.34	1.02	0.00	3.56
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	1.40	2.53	0.20	0.10	0.30	0.00	2.70
INTEREST ON OP. CAP.	0.57	0.00	0.00	0.00	0.00	2.85	1.95	0.24	0.18	0.21	0.00	0.07
TOTAL DIRECT EXPENSES	10.07	0.00	0.00	0.00	0.00	84.49	67.04	9.83	9.08	14.60	0.00	14.44
NET INCOME	-10.07	0.00	0.00	0.00	0.00	-84.49	-67.04	-9.83	-9.08	-14.60	0.00	262.16
NET INCOME TO DATE	-10.07	-10.07	-10.07	-10.07	-10.07	-94.56	-161.60	-171.43	-180.51	-195.11	-195.11	67.05

Note: Cost of production estimates are based on 2008 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, 2009

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			6.91	7.37	7.83	8.29	8.75	9.22	9.68	10.14	10.60	11.06	11.52
PERCENT	YIELD	UNIT	dollars										
50	15.00	bu	-102	-95	-88	-82	-75	-68	-61	-54	-47	-40	-33
			-130	-123	-116	-109	-102	-95	-88	-82	-75	-68	-61
60	18.00	bu	-82	-74	-66	-57	-49	-41	-32	-24	-16	-7	0
			-110	-101	-93	-85	-77	-68	-60	-52	-43	-35	-27
70	21.00	bu	-62	-52	-43	-33	-23	-14	-4	5	14	24	34
			-90	-80	-70	-61	-51	-41	-32	-22	-12	-2	6
80	24.00	bu	-42	-31	-20	-9	1	12	24	35	46	57	68
			-69	-58	-47	-36	-25	-14	-3	7	18	29	40
90	27.00	bu	-22	-9	2	15	27	39	52	64	77	89	102
			-49	-37	-24	-12	-0	12	24	37	49	62	74
100	30.00	bu	-2	11	25	39	53	67	80	94	108	122	136
			-29	-15	-2	11	25	39	53	67	80	94	108
110	33.00	bu	18	33	48	63	78	94	109	124	139	154	170
			-9	5	20	36	51	66	81	96	112	127	142
120	36.00	bu	38	54	71	87	104	121	137	154	170	187	204
			10	27	43	60	76	93	110	126	143	159	176
130	39.00	bu	58	76	94	112	130	148	166	184	202	220	238
			30	48	66	84	102	120	138	156	174	192	210
140	42.00	bu	78	97	117	136	155	175	194	214	233	252	272
			50	70	89	108	128	147	167	186	205	225	244
150	45.00	bu	98	119	140	160	181	202	223	243	264	285	306
			71	91	112	133	153	174	195	216	236	257	278

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 2008 input prices.

Table 8.A Estimated costs per acre
Soybeans after wheat, RR, no-till, 12R 20"
Non-Delta Area, Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	46.00	0.6600	30.36	_____
Potash (60% K2O)	cwt	44.00	1.0000	44.00	_____
FUNGICIDES					
Apron Maxx RTA	oz	0.85	2.5000	2.13	_____
Quadris	oz	2.16	3.0000	6.48	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	4.00	5.0000	20.00	_____
INSECTICIDES					
Gaucho 600	oz	6.25	1.0000	6.25	_____
Dimilin 2L	oz	1.63	1.0000	1.63	_____
Acephate 90SP	lb	7.51	0.7500	5.63	_____
Intrepid 2F	oz	1.97	3.0000	5.91	_____
Baythroid XL	oz	2.22	1.5975	3.55	_____
SEED/PLANTS					
Soybean Seed RR	lb	0.74	50.0000	37.00	_____
HAULING					
Haul Soybeans	bu	0.20	25.0000	5.00	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.2742	2.99	_____
Harvesters	hour	10.91	0.1021	1.11	_____
HAND LABOR					
Implements	hour	8.19	0.2072	1.71	_____
UNALLOCATED LABOR	hour	10.84	0.3237	3.51	_____
DIESEL FUEL					
Tractors	gal	2.46	2.6825	6.60	_____
Harvesters	gal	2.46	1.4457	3.56	_____
REPAIR & MAINTENANCE					
Implements	acre	3.09	1.0000	3.09	_____
Tractors	acre	1.00	1.0000	1.00	_____
Harvesters	acre	2.07	1.0000	2.07	_____
INTEREST ON OP. CAP.	acre	6.93	1.0000	6.93	_____

TOTAL DIRECT EXPENSES				200.51	_____
FIXED EXPENSES					
Implements	acre	6.04	1.0000	6.04	_____
Tractors	acre	7.12	1.0000	7.12	_____
Harvesters	acre	9.04	1.0000	9.04	_____

TOTAL FIXED EXPENSES				22.20	_____

TOTAL SPECIFIED EXPENSES				222.71	_____

Note: Cost of production estimates are based on 2008 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, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.22	25.0000	230.50	_____
TOTAL INCOME				230.50	_____
DIRECT EXPENSES					
FERTILIZERS	acre	74.36	1.0000	74.36	_____
FUNGICIDES	acre	8.61	1.0000	8.61	_____
HERBICIDES	acre	20.00	1.0000	20.00	_____
INSECTICIDES	acre	22.97	1.0000	22.97	_____
SEED/PLANTS	acre	37.00	1.0000	37.00	_____
HAULING	acre	5.00	1.0000	5.00	_____
HAND LABOR	hour	8.19	0.2072	1.71	_____
OPERATOR LABOR	hour	10.91	0.3764	4.10	_____
UNALLOCATED LABOR	hour	10.84	0.3237	3.51	_____
DIESEL FUEL	gal	2.46	4.1282	10.16	_____
REPAIR & MAINTENANCE	acre	6.16	1.0000	6.16	_____
INTEREST ON OP. CAP.	acre	6.93	1.0000	6.93	_____
TOTAL DIRECT EXPENSES				200.51	_____
RETURNS ABOVE DIRECT EXPENSES				29.99	_____
TOTAL FIXED EXPENSES				22.20	_____
TOTAL SPECIFIED EXPENSES				222.71	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				7.79	_____

Note: Cost of production estimates are based on 2008 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, 2009

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-Rigid	12R-20	MFWD 190	0.098	1.00	Jun		0.09	0.09	0.19	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	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	275hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					25.0000				
TOTALS							0.37	0.37	0.58	0.32

Note: Cost of production estimates are based on 2008 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, 2009

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		1.01	0.43	1.19		0.16	2.79	1.70	4.49
Phosphorus(46% P2O5)	cwt	30.36					1.82	32.18		32.18
Potash (60% K2O)	cwt	44.00					2.64	46.64		46.64
Spray (Broadcast)	60'		0.68	0.20	0.69		0.04	1.61	0.87	2.48
Glyphosate 3lbs a.e	pt	8.00					0.20	8.20		8.20
NT Plant-Rigid	12R-20		2.36	2.07	2.79		0.18	7.40	6.25	13.65
Soybean Seed RR	lb	37.00					0.93	37.93		37.93
Apron Maxx RTA	oz	2.13					0.05	2.18		2.18
Gaucho 600	oz	6.25					0.16	6.41		6.41
Spray (Broadcast)	60'		0.68	0.20	0.69		0.03	1.60	0.87	2.47
Glyphosate 3lbs a.e	pt	8.00					0.16	8.16		8.16
Spray (Broadcast)	60'		0.34	0.10	0.34		0.02	0.80	0.44	1.24
Glyphosate 3lbs a.e	pt	4.00					0.08	4.08		4.08
Spray (Broadcast)	60'		0.34	0.10	0.34		0.01	0.79	0.44	1.23
Dimilin 2L	oz	1.63					0.02	1.65		1.65
Quadris	oz	6.48					0.10	6.58		6.58
Spray (Broadcast)	60'		0.68	0.20	0.69		0.02	1.59	0.87	2.46
Acephate 90SP	lb	5.63					0.08	5.71		5.71
Spray (Broadcast)	60'		0.51	0.16	0.52		0.02	1.21	0.65	1.86
Intrepid 2F	oz	5.91					0.09	6.00		6.00
Baythroid XL	oz	3.55					0.05	3.60		3.60
Header - Soybean	25' Flex		3.56	2.70	2.07		0.04	8.37	10.11	18.48
Haul Soybeans	bu	5.00					0.03	5.03		5.03
TOTALS		167.94	10.16	6.16	9.32	0.00	6.93	200.51	22.20	222.71

Note: Cost of production estimates are based on 2008 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, 2009

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	230.50
DIRECT EXPENSES												
FERTILIZERS	74.36	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	0.00	2.13	0.00	6.48	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	12.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25	0.00	16.72	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00
LABOR	1.19	0.00	0.00	0.00	0.00	0.00	0.00	3.48	1.03	1.55	0.00	2.07
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	1.01	0.00	0.00	0.00	0.00	0.00	0.00	3.04	1.02	1.53	0.00	3.56
REPAIR & MAINTENANCE	0.43	0.00	0.00	0.00	0.00	0.00	0.00	2.27	0.30	0.46	0.00	2.70
INTEREST ON OP. CAP.	4.62	0.00	0.00	0.00	0.00	0.00	0.00	1.56	0.29	0.39	0.00	0.07
TOTAL DIRECT EXPENSES	81.61	0.00	0.00	0.00	0.00	0.00	0.00	63.73	14.64	27.13	0.00	13.40
NET INCOME	-81.61	0.00	0.00	0.00	0.00	0.00	0.00	-63.73	-14.64	-27.13	0.00	217.10
NET INCOME TO DATE	-81.61	-81.61	-81.61	-81.61	-81.61	-81.61	-81.61	-145.34	-159.98	-187.11	-187.11	29.99

Note: Cost of production estimates are based on 2008 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, 2009

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			6.91	7.37	7.83	8.29	8.75	9.22	9.68	10.14	10.60	11.06	11.52
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-111	-105	-100	-94	-88	-82	-76	-71	-65	-59	-53
			-133	-127	-122	-116	-110	-104	-99	-93	-87	-81	-76
60	15.00	bu	-94	-87	-80	-74	-67	-60	-53	-46	-39	-32	-25
			-116	-110	-103	-96	-89	-82	-75	-68	-61	-54	-47
70	17.50	bu	-77	-69	-61	-53	-45	-37	-29	-21	-13	-5	2
			-100	-92	-84	-75	-67	-59	-51	-43	-35	-27	-19
80	20.00	bu	-61	-51	-42	-33	-24	-15	-5	3	12	21	30
			-83	-74	-64	-55	-46	-37	-28	-18	-9	-0	8
90	22.50	bu	-44	-34	-23	-13	-2	7	17	28	38	48	59
			-66	-56	-45	-35	-25	-14	-4	5	16	26	37
100	25.00	bu	-27	-16	-4	6	18	29	41	53	64	76	87
			-49	-38	-26	-15	-3	7	19	30	42	53	65
110	27.50	bu	-10	1	14	27	39	52	65	77	90	103	115
			-33	-20	-7	4	17	30	43	55	68	81	93
120	30.00	bu	5	19	33	47	61	75	88	102	116	130	144
			-16	-2	11	25	39	52	66	80	94	108	122
130	32.50	bu	22	37	52	67	82	97	112	127	142	157	172
			0	15	30	45	60	75	90	105	120	135	150
140	35.00	bu	39	55	71	87	104	120	136	152	168	184	200
			17	33	49	65	81	97	114	130	146	162	178
150	37.50	bu	56	73	90	108	125	142	160	177	194	211	229
			34	51	68	85	103	120	137	155	172	189	206

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 2008 input prices.

APPENDIX

Appenmdix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2009

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)	275 hp	194,693	300	8	14.15	10.91	34.80	20.28	65.99	88.48	154.48
Combine (300-349 hp)	325 hp	228,109	300	8	16.73	10.91	41.15	23.76	75.82	103.67	179.49
Combine (350-379 hp)	370 hp	240,137	300	8	19.04	10.91	46.83	25.01	82.76	109.13	191.90
Combine (395-420 hp)	400 hp	273,622	300	8	20.58	10.91	50.62	28.50	90.03	124.35	214.39
Cotton Stripper	173 hp	134,267	200	8	8.08	10.91	19.87	20.97	51.76	91.53	143.29
Tractor(40-59hp)CB	2WD 50	28,984	600	8	2.57	10.91	6.33	0.90	18.14	6.11	24.25
Tractor(40-59hp)CB	MFWD 50	31,863	600	8	2.57	10.91	6.33	0.99	18.23	6.71	24.95
Tractor(40-59hp)RB	2WD 50	18,617	600	8	2.57	10.91	6.33	0.58	17.82	3.92	21.74
Tractor(40-59hp)RB	MFWD 50	23,528	600	8	2.57	10.91	6.33	0.73	17.97	4.96	22.93
Tractor(60-89hp)CB	2WD 75	36,964	600	8	3.86	10.91	9.49	1.15	21.56	7.79	29.35
Tractor(60-89hp)CB	MFWD 75	41,620	600	8	3.86	10.91	9.49	1.30	21.70	8.77	30.48
Tractor(60-89hp)RB	2WD 75	27,169	600	8	3.86	10.91	9.49	0.84	21.25	5.72	26.98
Tractor(60-89hp)RB	MFWD 75	33,056	600	8	3.86	10.91	9.49	1.03	21.43	6.96	28.40
Tractor(90-119hp)CB	2WD 105	54,137	600	8	5.40	10.91	13.29	1.69	25.89	11.41	37.31
Tractor(90-119hp)CB	MFWD 105	64,936	600	8	5.40	10.91	13.29	2.02	26.23	13.69	39.92
Tractor(90-119hp)RB	2WD 105	37,544	600	8	5.40	10.91	13.29	1.17	25.37	7.91	33.29
Tractor(90-119hp)RB	MFWD 105	44,843	600	8	5.40	10.91	13.29	1.40	25.60	9.45	35.06
Tractor(120-139hp)CB	2WD 130	76,003	600	8	6.69	10.91	16.46	2.37	29.74	16.02	45.77
Tractor(120-139hp)CB	MFWD 130	88,605	600	8	6.69	10.91	16.46	2.76	30.13	18.68	48.82
Tractor(140-159hp)CB	2WD 150	88,335	600	8	7.72	10.91	18.99	2.76	32.66	18.62	51.28
Tractor(140-159hp)CB	MFWD 150	102,055	600	8	7.72	10.91	18.99	3.18	33.09	21.51	54.61
Tractor(160-179hp)CB	2WD 170	95,567	600	8	8.75	10.91	21.52	2.98	35.42	20.93	56.35
Tractor(160-179hp)CB	MFWD 170	116,823	600	8	8.75	10.91	21.52	3.65	36.08	25.58	61.67
Tractor(180-199hp)CB	2WD 190	109,958	600	8	9.77	10.91	24.05	3.43	38.40	24.08	62.49
Tractor(180-199hp)CB	MFWD 190	118,310	600	8	9.77	10.91	24.05	3.69	38.66	25.91	64.58
Tractor(200-249hp)CB	4WD 225	147,066	600	8	11.58	10.91	28.49	4.59	43.99	32.21	76.20
Tractor(200-249hp)CB	MFWD 225	146,615	600	8	11.58	10.91	28.49	4.58	43.98	32.11	76.09
Tractor(200-249hp)CB	Track 225	168,214	600	8	11.58	10.91	28.49	5.25	44.65	36.84	81.50
Tractor(250-349hp)CB	4WD 300	171,753	600	8	15.44	10.91	37.98	5.36	54.26	37.62	91.88
Tractor(250-349hp)CB	MFWD 300	175,962	600	8	15.44	10.91	37.98	5.49	54.39	38.54	92.93
Tractor(250-349hp)CB	Track 300	185,222	600	8	15.44	10.91	37.98	5.78	54.68	40.57	95.25
Tractor(350-449hp)CB	4WD 400	203,681	600	8	20.58	10.91	50.64	6.36	67.92	44.61	112.53
Tractor(350-449hp)CB	Track 400	245,097	600	8	20.58	10.91	50.64	7.65	69.21	53.68	122.90
Tractor(450-550hp)CB	Track 475	279,879	600	8	24.44	10.91	60.14	8.74	79.80	61.30	141.10
Tractor(450-550hp)CB	4WD 500	246,077	600	8	24.44	10.91	60.14	7.68	78.74	53.90	132.64

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, 2009

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					
ATV - 4 Wheeler	20' Rope W	8,679	100	8	0.50	0.052	0.79	0.06	0.14	1.00	0.60	1.60
Backhoe	2WD Cab	65,678	0	0	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Cotton Picker-1st-BB	4R-30(250)	256,715	200	8	12.86	0.327	6.25	10.36	13.13	29.74	57.29	87.04
Cotton Picker-1st-BB	4R-30(325)	307,909	200	8	16.72	0.327	6.25	13.47	15.75	35.47	68.71	104.19
Cotton Picker-1st-BB	4R-38(255)	259,280	200	8	13.12	0.257	4.92	8.32	10.44	23.69	45.56	69.25
Cotton Picker-1st-BB	4R-38(325)	320,624	200	8	16.72	0.257	4.92	10.60	12.91	28.44	56.34	84.79
Cotton Picker-1st-BB	4R2x1(350)	329,206	200	8	18.01	0.172	3.29	7.63	8.86	19.79	38.67	58.46
Cotton Picker-1st-BB	5R-30(255)	280,811	200	8	13.12	0.261	5.00	8.45	11.49	24.95	50.13	75.08
Cotton Picker-1st-BB	5R-38(250)	284,601	200	8	12.86	0.207	3.95	6.55	9.21	19.73	40.20	59.93
Cotton Picker-1st-BB	6R-30(325)	401,833	200	8	18.01	0.218	4.16	9.67	13.70	27.54	59.78	87.33
Cotton Picker-1st-BB	6R-38(330)	400,016	200	8	18.01	0.172	3.29	7.63	10.76	21.69	46.98	68.68
Cotton Picker-1st-Tr	4R-30(250)	256,715	200	8	12.86	0.327	6.25	10.36	13.13	29.74	57.29	87.04
Cotton Picker-1st-Tr	4R-30(325)	307,909	200	8	16.72	0.327	6.25	13.47	15.75	35.47	68.71	104.19
Cotton Picker-1st-Tr	4R-38(255)	259,280	200	8	13.12	0.257	4.92	8.32	10.44	23.68	45.56	69.25
Cotton Picker-1st-Tr	4R-38(325)	320,624	200	8	16.72	0.257	4.92	10.60	12.91	28.44	56.34	84.79
Cotton Picker-1st-Tr	4R2x1(350)	329,206	200	8	18.01	0.172	3.29	7.63	8.86	19.79	38.67	58.46
Cotton Picker-1st-Tr	5R-30(255)	280,811	200	8	13.12	0.261	5.00	8.45	11.49	24.94	50.13	75.08
Cotton Picker-1st-Tr	5R-38(250)	284,601	200	8	12.86	0.207	3.95	6.55	9.21	19.73	40.20	59.93
Cotton Picker-1st-Tr	6R-30(325)	401,833	200	8	18.01	0.218	4.16	9.67	13.70	27.54	59.78	87.33
Cotton Picker-1st-Tr	6R-38(330)	400,016	200	8	18.01	0.172	3.29	7.63	10.76	21.69	46.98	68.68
Cotton Picker-2nd-BB	4R-30(250)	256,715	200	8	12.86	0.277	5.29	8.77	11.12	25.19	48.53	73.72
Cotton Picker-2nd-BB	4R-30(325)	307,909	200	8	16.72	0.277	5.29	11.41	13.34	30.05	58.20	88.26
Cotton Picker-2nd-BB	4R-38(255)	259,280	200	8	13.12	0.218	4.17	7.04	8.84	20.06	38.59	58.66
Cotton Picker-2nd-BB	4R-38(325)	320,624	200	8	16.72	0.218	4.17	8.98	10.93	24.09	47.72	71.82
Cotton Picker-2nd-BB	4R2x1(350)	329,206	200	8	18.01	0.145	2.78	6.46	7.50	16.76	32.75	49.51
Cotton Picker-2nd-BB	5R-30(255)	280,811	200	8	13.12	0.221	4.23	7.16	9.73	21.13	42.46	63.60
Cotton Picker-2nd-BB	5R-38(250)	284,601	200	8	12.86	0.175	3.35	5.55	7.80	16.71	34.05	50.76
Cotton Picker-2nd-BB	6R-30(325)	401,833	200	8	18.01	0.184	3.53	8.19	11.60	23.33	50.64	73.97
Cotton Picker-2nd-BB	6R-38(330)	400,016	200	8	18.01	0.145	2.78	6.46	9.12	18.37	39.80	58.17
Cotton Picker-2nd-Tr	4R-30(250)	256,715	200	8	12.86	0.277	5.29	8.77	11.12	25.19	48.53	73.72
Cotton Picker-2nd-Tr	4R-30(325)	307,909	200	8	16.72	0.277	5.29	11.41	13.34	30.05	58.20	88.26
Cotton Picker-2nd-Tr	4R-38(255)	259,280	200	8	13.12	0.218	4.17	7.04	8.84	20.06	38.59	58.66
Cotton Picker-2nd-Tr	4R-38(325)	320,624	200	8	16.72	0.218	4.17	8.98	10.93	24.09	47.72	71.82
Cotton Picker-2nd-Tr	4R2x1(350)	329,206	200	8	18.01	0.145	2.78	6.46	7.50	16.76	32.75	49.51
Cotton Picker-2nd-Tr	5R-30(255)	280,811	200	8	13.12	0.221	4.23	7.16	9.73	21.13	42.46	63.60
Cotton Picker-2nd-Tr	5R-38(250)	284,601	200	8	12.86	0.175	3.35	5.55	7.80	16.71	34.05	50.76
Cotton Picker-2nd-Tr	6R-30(325)	401,833	200	8	18.01	0.184	3.53	8.19	11.60	23.33	50.64	73.97
Cotton Picker-2nd-Tr	6R-38(330)	400,016	200	8	18.01	0.145	2.78	6.46	9.12	18.37	39.80	58.17
Cotton Picker/Module	4R-38(365)	455,497	200	8	18.78	0.257	4.92	11.91	18.34	35.18	80.04	115.23
Cotton Picker/Module	6R-30(365)	506,901	200	8	18.78	0.218	4.16	10.08	17.28	31.54	75.41	106.96
Cotton Picker/Module	6R-38(365)	505,437	200	8	18.78	0.172	3.29	7.96	13.60	24.86	59.37	84.23
Dry Applicator SP	70'300cuft	247,266	350	8	15.44	0.015	0.22	0.57	0.20	1.00	1.45	2.45
Sprayer(110Gal)	30' 47 hp	36,568	350	8	2.57	0.035	0.52	0.22	0.06	0.82	0.50	1.32
Sprayer(300-450Gal)	60' 110 hp	85,701	350	8	5.66	0.017	0.26	0.24	0.08	0.59	0.58	1.17
Sprayer(300-450Gal)	80' 110 hp	88,123	350	8	5.66	0.013	0.19	0.18	0.06	0.44	0.45	0.89
Sprayer(600-750Gal)	60' 200 hp	129,370	350	8	10.29	0.017	0.26	0.44	0.12	0.83	0.88	1.72
Sprayer(600-825Gal)	80' 200 hp	141,780	350	8	10.29	0.013	0.19	0.33	0.10	0.63	0.73	1.36
Sprayer(600-825Gal)	90' 200 hp	187,300	350	8	10.29	0.011	0.17	0.29	0.11	0.59	0.85	1.44
Sprayer(1000-1400Gal	90' 275 hp	222,727	350	8	14.15	0.010	0.15	0.36	0.12	0.65	0.91	1.57
Sprayer(1200PlusGal)	120' 300 hp	259,282	350	8	15.44	0.008	0.13	0.33	0.12	0.58	0.88	1.47
Utility Vehicle	20'	12,413	200	8	0.70	0.052	0.79	0.08	0.10	0.98	0.44	1.43
Utility Vehicle	75" Rope W	10,771	200	8	0.50	0.167	2.51	0.20	0.28	3.00	1.23	4.23

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, 2009

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----------							
Bedder/Roller-Fold.	21'	MFWD 190	15,239	160	10	0.089	0.97	2.14	0.34	0.33	3.79	1.01	2.31	7.11
Bedder/Roller-Fold.	26'	MFWD 190	19,611	160	10	0.072	0.78	1.73	0.35	0.26	3.14	1.04	1.86	6.06
Bedder/Roller-Fold.	30'	MFWD 190	25,485	160	10	0.062	0.68	1.50	0.39	0.23	2.81	1.18	1.61	5.61
Bedder/Roller-Fold.	40'	MFWD 225	28,335	160	10	0.046	0.51	1.33	0.33	0.21	2.39	0.98	1.50	4.88
Bedder/Roller-Rigid	21'	MFWD 190	14,888	160	10	0.089	0.97	2.14	0.33	0.33	3.78	0.98	2.31	7.08
Bedder/Roller-Rigid	26'	MFWD 190	16,295	160	10	0.072	0.78	1.73	0.29	0.26	3.08	0.87	1.86	5.82
Bedder/Roller-Rigid	30'	MFWD 190	17,288	160	10	0.062	0.68	1.50	0.27	0.23	2.68	0.80	1.61	5.10
Bedder/Roller-Rigid	40'	MFWD 225	22,543	160	10	0.046	0.51	1.33	0.26	0.21	2.32	0.78	1.50	4.61
Blade-Box	6'-7'	2WD 130	1,313	200	20	0.020	0.21	0.32	0.01	0.04	0.60	0.01	0.32	0.93
Boll Buggy-1st pick	4R-30(250)	MFWD 190	26,045	200	10	0.327	3.57	7.87	2.13	1.21	14.78	4.90	8.48	28.18
Boll Buggy-1st pick	4R-30(325)	MFWD 190	26,045	200	10	0.327	3.57	7.87	2.13	1.21	14.78	4.90	8.48	28.18
Boll Buggy-1st pick	4R-38(255)	MFWD 190	26,045	200	10	0.257	2.81	6.20	1.67	0.95	11.64	3.86	6.68	22.19
Boll Buggy-1st pick	4R-38(325)	MFWD 190	26,045	200	10	0.257	2.81	6.20	1.67	0.95	11.64	3.86	6.68	22.19
Boll Buggy-1st pick	4R2x1(350)	MFWD 190	26,045	200	10	0.172	1.87	4.14	1.12	0.63	7.78	2.58	4.46	14.83
Boll Buggy-1st pick	5R-30(255)	MFWD 190	26,045	200	10	0.261	2.85	6.30	1.70	0.96	11.83	3.92	6.78	22.54
Boll Buggy-1st pick	5R-38(250)	MFWD 190	26,045	200	10	0.207	2.26	4.98	1.34	0.76	9.36	3.10	5.36	17.83
Boll Buggy-1st pick	6R-30(325)	MFWD 190	26,045	200	10	0.218	2.38	5.25	1.42	0.80	9.85	3.27	5.65	18.78
Boll Buggy-1st pick	6R-38(330)	MFWD 190	26,045	200	10	0.172	1.87	4.14	1.12	0.63	7.78	2.58	4.46	14.83
Boll Buggy-2nd pick	4R-30(250)	MFWD 190	26,045	200	10	0.277	3.02	6.67	1.80	1.02	12.52	4.15	7.18	23.87
Boll Buggy-2nd pick	4R-30(325)	MFWD 190	26,045	200	10	0.277	3.02	6.67	1.80	1.02	12.52	4.15	7.18	23.87
Boll Buggy-2nd pick	4R-38(255)	MFWD 190	26,045	200	10	0.218	2.38	5.25	1.42	0.80	9.86	3.27	5.65	18.79
Boll Buggy-2nd pick	4R-38(325)	MFWD 190	26,045	200	10	0.218	2.38	5.25	1.42	0.80	9.86	3.27	5.65	18.79
Boll Buggy-2nd pick	4R2x1(350)	MFWD 190	26,045	200	10	0.145	1.59	3.51	0.95	0.53	6.59	2.18	3.78	12.56
Boll Buggy-2nd pick	5R-30(255)	MFWD 190	26,045	200	10	0.221	2.42	5.33	1.44	0.82	10.02	3.32	5.74	19.09
Boll Buggy-2nd pick	5R-38(250)	MFWD 190	26,045	200	10	0.175	1.91	4.22	1.14	0.64	7.92	2.63	4.54	15.10
Boll Buggy-2nd pick	6R-30(325)	MFWD 190	26,045	200	10	0.184	2.01	4.44	1.20	0.68	8.35	2.77	4.79	15.91
Boll Buggy-2nd pick	6R-38(330)	MFWD 190	26,045	200	10	0.145	1.59	3.51	0.95	0.53	6.59	2.18	3.78	12.56
Boll Buggy-Stripper	13' Bcast	MFWD 150	26,045	200	10	0.251	2.74	4.78	1.63	0.80	9.97	3.77	5.41	19.16
Boll Buggy-Stripper	16' Bcast	MFWD 150	26,045	200	10	0.204	2.23	3.88	1.33	0.65	8.10	3.06	4.40	15.57
Boll Buggy-Stripper	19' Bcast	MFWD 150	26,045	200	10	0.172	1.87	3.27	1.12	0.54	6.82	2.58	3.70	13.11
Boll Buggy-Stripper	4R-30 2x1	MFWD 150	26,045	200	10	0.218	2.38	4.14	1.42	0.69	8.64	3.27	4.69	16.61
Boll Buggy-Stripper	4R-36	MFWD 150	26,045	200	10	0.272	2.97	5.18	1.77	0.87	10.80	4.08	5.87	20.76
Boll Buggy-Stripper	4R-38	MFWD 150	26,045	200	10	0.257	2.81	4.89	1.67	0.82	10.20	3.86	5.54	19.62
Boll Buggy-Stripper	4R-38 2x1	MFWD 150	26,045	200	10	0.172	1.87	3.27	1.12	0.54	6.82	2.58	3.70	13.11
Boll Buggy-Stripper	5R-30	MFWD 150	26,045	200	10	0.261	2.85	4.97	1.70	0.83	10.37	3.92	5.63	19.93
Boll Buggy-Stripper	5R-38	MFWD 150	26,045	200	10	0.207	2.26	3.93	1.34	0.66	8.20	3.10	4.45	15.77
Boll Buggy-Stripper	6R-30	MFWD 150	26,045	200	10	0.218	2.38	4.14	1.42	0.69	8.64	3.27	4.69	16.61
Boll Buggy-Stripper	6R-38	MFWD 150	26,045	200	10	0.172	1.87	3.27	1.12	0.54	6.82	2.58	3.70	13.11
Boll Buggy-Stripper	8R-30	MFWD 150	26,045	200	10	0.163	1.78	3.10	1.06	0.52	6.48	2.45	3.52	12.45
Boll Buggy-Stripper	8R-36/38	MFWD 150	26,045	200	10	0.129	1.41	2.45	0.84	0.41	5.12	1.93	2.78	9.84
Chisel Plow(Folding)	16'	2WD 130	12,422	150	12	0.115	1.26	1.90	0.51	0.27	3.95	1.02	1.85	6.83
Chisel Plow(Folding)	24'	MFWD 190	25,073	150	12	0.076	0.83	1.83	0.69	0.28	3.64	1.37	1.98	6.99
Chisel Plow(Folding)	32'	MFWD 225	30,224	150	12	0.057	0.63	1.64	0.63	0.26	3.17	1.24	1.85	6.27
Chisel Plow(Folding)	42'	MFWD 225	34,465	150	12	0.044	0.48	1.25	0.54	0.20	2.48	1.08	1.41	4.98
Chisel Plow(Folding)	50'	MFWD 225	53,437	150	10	0.036	0.40	1.05	0.85	0.16	2.48	1.56	1.18	5.23
Chisel Plow(Rigid)	15'	2WD 130	9,338	150	12	0.123	1.34	2.02	0.41	0.29	4.08	0.82	1.97	6.87
Chisel Plow(Rigid)	24'	MFWD 190	8,244	150	12	0.077	0.84	1.85	0.22	0.28	3.20	0.45	1.99	5.65
Chisel-Harrow	21 shank	2WD 190	8,951	150	12	0.088	0.96	2.11	0.28	0.30	3.66	0.56	2.12	6.34
Chisel-Harrow	27 shank	MFWD 225	11,186	150	12	0.068	0.74	1.95	0.27	0.31	3.28	0.54	2.19	6.03
Colter-Chisel-Harrow	21 shank	2WD 190	15,679	150	12	0.088	0.96	2.11	0.49	0.30	3.87	0.98	2.12	6.98
Colter-Chisel-Harrow	27 shank	MFWD 225	19,837	150	12	0.068	0.74	1.95	0.49	0.31	3.50	0.97	2.19	6.67
Corn Grain Cart 8R30	500 bu	MFWD 190	16,979	200	12	0.031	0.34	0.76	0.14	0.11	1.38	0.29	0.82	2.49
Corn Grain Cart 8R38	700 bu	MFWD 190	23,337	200	12	0.025	0.27	0.60	0.15	0.09	1.12	0.31	0.64	2.08
Cult & Post	4R-30	2WD 105	15,184	150	10	0.220	3.30	2.92	0.89	0.25	7.37	2.64	1.74	11.76
Cult & Post	4R-38	2WD 105	15,243	150	10	0.173	2.59	2.30	0.70	0.20	5.80	2.09	1.37	9.27
Cult & Post	6R-30	MFWD 150	19,672	150	10	0.146	2.20	2.78	0.76	0.46	6.22	2.28	3.15	11.66
Cult & Post	6R-38	MFWD 150	21,022	150	10	0.115	1.73	2.19	0.64	0.36	4.95	1.92	2.49	9.37
Cult & Post	8R-30	MFWD 190	22,731	150	10	0.110	1.65	2.64	0.66	0.40	5.37	1.97	2.85	10.20
Cult & Post	8R-38	MFWD 190	25,776	150	10	0.086	1.30	2.09	0.59	0.32	4.31	1.77	2.25	8.34
Cult & Post	8R-38 2x1	MFWD 190	36,848	150	10	0.057	0.86	1.39	0.56	0.21	3.04	1.68	1.50	6.23
Cult & Post	10R-30	MFWD 225	30,843	150	10	0.088	1.32	2.50	0.72	0.40	4.95	2.14	2.82	9.92
Cult & Post	12R-30	MFWD 225	38,690	150	10	0.073	1.10	2.08	0.75	0.33	4.28	2.24	2.35	8.88
Cult & Post	12R-38	MFWD 225	36,848	150	10	0.057	0.86	1.64	0.56	0.26	3.35	1.68	1.85	6.90
Cult & Post	16R-30	MFWD 225	45,579	150	10	0.055	0.82	1.56	0.66	0.25	3.31	1.98	1.76	7.06
Cultipacker	12'	2WD 130	4,640	300	12	0.124	1.35	2.04	0.13	0.29	3.83	0.21	1.99	6.04
Cultipacker	20'	MFWD 150	12,011	300	12	0.074	0.81	1.41	0.21	0.23	2.68	0.32	1.60	4.61
Cultivate	4R-30	2WD 105	9,689	150	10	0.206	2.25	2.74	0.53	0.34	5.87	1.58	2.35	9.81
Cultivate	4R-38	2WD 105	9,748	150	10	0.162	1.77	2.15	0.42	0.19	4.54	1.25	1.28	7.08
Cultivate	6R-30	MFWD 150	14,177	150	10	0.137	1.50	2.61	0.51	0.43	5.07	1.54	2.95	9.57
Cultivate	6R-38	MFWD 150	15,527	150	10	0.108	1.18	2.06	0.44	0.34	4.04	1.33	2.33	7.71
Cultivate	8R-30	MFWD 190	17,236	150	10	0.103	1.12	2.48	0.47	0.38	4.46	1.40	2.67	8.54
Cultivate	8R-38	MFWD 190	20,281	150	10	0.081	0.88	1.96	0.44	0.30	3.59	1.30	2.11	7.01

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2009 (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							
Cultivate	8R-38 2x1	MFWD 190	30,828	150	10	0.054	0.59	1.30	0.44	0.20	2.54	1.32	1.40	5.27
Cultivate	10R-30	MFWD 225	25,348	150	10	0.082	0.90	2.35	0.55	0.37	4.18	1.65	2.64	8.49
Cultivate	12R-30	MFWD 225	28,375	150	10	0.068	0.75	1.95	0.52	0.31	3.54	1.54	2.20	7.29
Cultivate	12R-38	MFWD 225	30,828	150	10	0.054	0.59	1.54	0.44	0.24	2.83	1.32	1.74	5.90
Cultivate	16R-30	MFWD 225	40,084	150	10	0.051	0.56	1.46	0.55	0.23	2.81	1.63	1.65	6.11
Disk & Incorporate	14'	2WD 130	22,039	200	10	0.149	2.24	2.46	0.98	0.35	6.05	1.95	2.39	10.41
Disk & Incorporate	24'	MFWD 190	34,957	200	10	0.087	1.30	2.10	0.91	0.32	4.64	1.81	2.26	8.72
Disk & Incorporate	28'	MFWD 225	38,796	200	10	0.074	1.12	2.13	0.87	0.34	4.46	1.72	2.40	8.59
Disk & Incorporate	32'	MFWD 225	43,916	200	10	0.065	0.98	1.86	0.86	0.30	4.01	1.70	2.10	7.82
Disk Bed (Hipper)	4R-38	MFWD 150	7,781	160	10	0.147	1.61	2.80	0.28	0.47	5.17	0.85	3.17	9.20
Disk Bed (Hipper)	6R-30	MFWD 170	12,271	160	10	0.125	1.36	2.69	0.38	0.45	4.89	1.13	3.19	9.23
Disk Bed (Hipper)	6R-38	MFWD 170	12,271	160	10	0.098	1.07	2.12	0.30	0.36	3.86	0.89	2.52	7.28
Disk Bed (Hipper)	8R-30	MFWD 190	13,070	160	10	0.093	1.02	2.25	0.30	0.34	3.93	0.90	2.42	7.27
Disk Bed (Hipper)	8R-38 2x1	MFWD 190	24,825	160	10	0.049	0.53	1.18	0.30	0.18	2.21	0.90	1.27	4.40
Disk Bed (Hipper)	10R-30	MFWD 225	17,142	160	10	0.075	0.81	2.13	0.32	0.34	3.62	0.95	2.40	6.98
Disk Bed (Hipper)	10R-38	MFWD 225	18,026	160	10	0.059	0.64	1.68	0.26	0.27	2.86	0.79	1.89	5.55
Disk Bed (Hipper)	12R-30	MFWD 225	19,414	160	10	0.062	0.68	1.78	0.30	0.28	3.05	0.90	2.00	5.96
Disk Bed (Hipper)	12R-38	MFWD 225	24,825	160	10	0.049	0.53	1.40	0.30	0.22	2.47	0.90	1.58	4.97
Disk Bed (Hipper)Fld	8R-38	MFWD 190	18,404	160	10	0.074	0.80	1.78	0.34	0.27	3.20	1.01	1.92	6.13
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	16,166	160	10	0.074	0.80	1.78	0.29	0.27	3.16	0.88	1.92	5.97
Disk Bed w/roller	8R-30	MFWD 190	15,186	160	10	0.093	1.02	2.25	0.35	0.34	3.98	1.05	2.42	7.46
Disk Bed w/roller	12R-30	MFWD 225	26,498	160	10	0.062	0.68	1.78	0.41	0.28	3.16	1.22	2.00	6.39
Disk Harrow	14'	2WD 130	16,544	180	10	0.140	1.53	2.30	0.64	0.33	4.81	1.53	2.24	8.59
Disk Harrow	24'	MFWD 190	29,462	180	10	0.081	0.89	1.96	0.66	0.30	3.83	1.59	2.12	7.54
Disk Harrow	28'	MFWD 225	33,301	180	10	0.070	0.76	1.99	0.64	0.32	3.73	1.54	2.25	7.52
Disk Harrow	32'	MFWD 225	38,421	180	10	0.061	0.66	1.74	0.65	0.28	3.35	1.55	1.97	6.88
Ditcher		2WD 130	4,717	200	10	0.020	0.21	0.32	0.03	0.04	0.63	0.05	0.32	1.00
Ditcher (1m/160a)		2WD 130	4,717	200	10	0.009	0.10	0.15	0.01	0.02	0.29	0.02	0.15	0.47
Fert Appl (Liquid)	4R-38	MFWD 150	12,995	150	8	0.154	2.32	2.93	1.33	0.49	7.09	1.69	3.32	12.11
Fert Appl (Liquid)	6R-30	MFWD 170	15,834	150	8	0.130	1.96	2.81	1.38	0.47	6.64	1.74	3.35	11.74
Fert Appl (Liquid)	6R-38	MFWD 170	12,360	150	8	0.103	1.55	2.22	0.85	0.37	5.00	1.07	2.64	8.72
Fert Appl (Liquid)	8R-30	MFWD 190	15,032	150	8	0.098	1.47	2.36	0.98	0.36	5.18	1.24	2.54	8.97
Fert Appl (Liquid)	8R-38	MFWD 190	14,694	150	8	0.077	1.16	1.86	0.76	0.28	4.08	0.96	2.01	7.05
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	17,350	150	8	0.051	0.77	1.24	0.59	0.19	2.80	0.75	1.33	4.90
Fert Appl (Liquid)	10R-30	MFWD 225	15,757	150	8	0.078	1.17	2.23	0.82	0.35	4.60	1.04	2.52	8.17
Fert Appl (Liquid)	10R-38	MFWD 225	17,187	150	8	0.061	0.92	1.76	0.70	0.28	3.68	0.89	1.98	6.57
Fert Appl (Liquid)	12R-30	MFWD 225	17,187	150	8	0.078	1.17	2.23	0.90	0.35	4.67	1.13	2.52	8.33
Fert Appl (Liquid)	12R-38	MFWD 225	17,350	150	8	0.051	0.77	1.47	0.59	0.23	3.08	0.75	1.66	5.49
Field Cult & Inc	42'	MFWD 225	43,618	100	10	0.037	0.56	1.07	0.41	0.17	2.22	1.95	1.21	5.39
Field Cult & Inc	50'	MFWD 225	52,836	100	10	0.031	0.47	0.90	0.41	0.14	1.94	1.99	1.01	4.95
Field Cult & Inc Fld	24'	MFWD 170	24,679	100	10	0.066	0.99	1.42	0.40	0.24	3.06	1.93	1.69	6.69
Field Cult & Inc Fld	32'	MFWD 190	33,211	100	10	0.049	0.74	1.19	0.41	0.18	2.53	1.95	1.28	5.77
Field Cult & Inc Rdg	12'	2WD 150	13,605	100	10	0.132	1.98	2.51	0.44	0.36	5.30	2.13	2.46	9.90
Field Cultivate	42'	MFWD 225	37,598	100	10	0.035	0.38	1.01	0.33	0.16	1.89	1.58	1.14	4.62
Field Cultivate	50'	MFWD 225	46,014	100	10	0.029	0.32	0.85	0.34	0.13	1.65	1.63	0.95	4.24
Field Cultivate Fld	24'	MFWD 170	19,184	100	10	0.062	0.67	1.33	0.29	0.22	2.54	1.41	1.59	5.55
Field Cultivate Fld	32'	MFWD 190	27,716	100	10	0.046	0.50	1.12	0.32	0.17	2.12	1.53	1.20	4.87
Field Cultivate Rdg	12'	2WD 150	8,110	100	10	0.124	1.35	2.36	0.25	0.34	4.31	1.19	2.31	7.83
Grain Drill	8'	2WD 130	19,229	150	8	0.235	4.50	3.87	1.69	0.55	10.64	3.67	3.77	18.09
Grain Drill	10'	2WD 130	21,337	150	8	0.188	3.60	3.10	1.50	0.44	8.66	3.26	3.02	14.94
Grain Drill	12'	2WD 130	16,364	150	8	0.157	3.00	2.58	0.96	0.37	6.92	2.08	2.51	11.52
Grain Drill	15'	MFWD 150	22,094	150	8	0.125	2.40	2.38	1.04	0.40	6.23	2.25	2.70	11.18
Grain Drill	15'11R/15"	MFWD 150	27,520	150	8	0.125	2.40	2.38	1.29	0.40	6.48	2.80	2.70	11.99
Grain Drill	20'	MFWD 170	31,813	150	8	0.094	1.80	2.02	1.12	0.34	5.29	2.43	2.41	10.14
Grain Drill	20'15R/15"	MFWD 170	32,226	150	8	0.094	1.80	2.02	1.13	0.34	5.31	2.46	2.41	10.19
Grain Drill	24'	MFWD 190	40,244	150	8	0.078	1.50	1.89	1.18	0.29	4.86	2.56	2.03	9.46
Grain Drill	25'15R/15"	MFWD 190	38,868	150	8	0.075	1.44	1.81	1.09	0.27	4.63	2.37	1.95	8.96
Grain Drill	30'	MFWD 225	45,658	150	8	0.062	1.20	1.79	1.07	0.28	4.35	2.32	2.01	8.70
Grain Drill	30'24R/15"	MFWD 225	51,181	150	8	0.062	1.20	1.79	1.20	0.28	4.48	2.60	2.01	9.11
Grain Drill	35'	MFWD 225	60,963	150	8	0.053	1.02	1.53	1.23	0.24	4.04	2.66	1.73	8.43
Grain Drill	40'	MFWD 225	82,954	150	8	0.047	0.90	1.34	1.46	0.21	3.92	3.16	1.51	8.60
Grain Drill & Pre	8'	2WD 130	24,723	150	8	0.253	4.84	4.17	2.35	0.60	11.98	5.08	4.06	21.13
Grain Drill & Pre	10'	2WD 130	26,831	150	8	0.203	3.87	3.34	2.04	0.48	9.74	4.41	3.25	17.41
Grain Drill & Pre	12'	2WD 130	21,859	150	8	0.169	3.23	2.78	1.38	0.40	7.80	2.99	2.71	13.51
Grain Drill & Pre	15'	MFWD 150	27,589	150	8	0.135	2.58	2.57	1.40	0.43	6.98	3.02	2.91	12.93
Grain Drill & Pre	15'11R/15"	MFWD 150	33,015	150	8	0.135	2.58	2.57	1.67	0.43	7.26	3.62	2.91	13.80
Grain Drill & Pre	20'	MFWD 170	37,308	150	8	0.101	1.93	2.18	1.42	0.37	5.91	3.07	2.59	11.58
Grain Drill & Pre	20'15R/15"	MFWD 170	37,721	150	8	0.101	1.93	2.18	1.43	0.37	5.93	3.10	2.59	11.63
Grain Drill & Pre	24'	MFWD 190	45,739	150	8	0.084	1.61	2.03	1.45	0.31	5.41	3.13	2.19	10.74
Grain Drill & Pre	25'15R/15"	MFWD 190	44,363	150	8	0.081	1.55	1.95	1.35	0.30	5.15	2.92	2.10	10.18
Grain Drill & Pre	30'	MFWD 225	51,153	150	8	0.067	1.29	1.92	1.29	0.31	4.82	2.80	2.17	9.81
Grain Drill & Pre	30'24R/15"	MFWD 225	56,429	150	8	0.067	1.29	1.92	1.43	0.31	4.96	3.09	2.17	10.23

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2009 (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							
Grain Drill & Pre	35'	MFWD 225	66,458	150	8	0.058	1.10	1.65	1.44	0.26	4.47	3.12	1.86	9.46
Grain Drill & Pre	40'	MFWD 225	88,450	150	8	0.050	0.96	1.44	1.68	0.23	4.33	3.64	1.63	9.60
Harrow Fld	40'	MFWD 190	10,620	200	10	0.038	0.42	0.93	0.14	0.14	1.64	0.24	1.00	2.89
Harrow Rdg	13'	2WD 130	3,690	200	10	0.119	1.30	1.96	0.15	0.28	3.70	0.26	1.91	5.88
Harrow Rdg	21'	2WD 150	4,590	200	10	0.073	0.80	1.40	0.11	0.20	2.53	0.20	1.37	4.11
Harrow Rdg	30'	MFWD 190	7,740	200	10	0.051	0.56	1.24	0.14	0.19	2.14	0.23	1.34	3.72
Header - Corn	4R-38	275hp	25,147	300	8	0.201	2.19	7.00	1.26	4.07	14.53	2.13	17.79	34.46
Header - Corn	6R30"	275hp	33,754	300	8	0.170	1.85	5.92	1.43	3.45	12.67	2.42	15.06	30.16
Header - Corn	6R38"	275hp	34,739	300	8	0.134	1.46	4.67	1.16	2.72	10.03	1.96	11.89	23.90
Header - Corn	8R-30	275hp	43,818	300	8	0.127	1.39	4.44	1.39	2.59	9.82	2.35	11.30	23.48
Header - Corn	8R-38	325hp	44,579	300	8	0.100	1.10	4.15	1.12	2.39	8.78	1.89	10.46	21.14
Header - Corn	12R-20	325hp	59,449	300	8	0.127	1.39	5.25	1.89	3.03	11.58	3.20	13.23	28.02
Header - Corn	12R-30	325hp	66,811	300	8	0.085	0.92	3.50	1.42	2.02	7.87	2.39	8.82	19.10
Header - Draper (CL)	25' Rigid	275hp	28,742	300	8	0.203	2.21	7.06	1.33	4.11	14.74	2.36	17.96	35.07
Header - Draper (CL)	30' Rigid	325hp	33,836	300	8	0.169	1.84	6.96	1.31	4.02	14.14	2.32	17.54	34.00
Header - Draper (CL)	36' Rigid	370hp	36,066	300	8	0.141	1.53	6.60	1.16	3.52	12.83	2.06	15.39	30.29
Header - Draper (SL)	25' Rigid	325hp	28,742	300	8	0.176	1.92	7.24	1.15	4.18	14.50	2.05	18.24	34.80
Header - Draper (SL)	30' Rigid	325hp	33,836	300	8	0.146	1.60	6.03	1.13	3.48	12.25	2.01	15.20	29.47
Header - Draper (SL)	36' Rigid	370hp	36,066	300	8	0.122	1.33	5.72	1.01	3.05	11.12	1.78	13.33	26.25
Header - Rice (CL)	22' Rigid	275hp	21,887	300	8	0.288	3.14	10.04	1.57	5.85	20.61	2.66	25.52	48.80
Header - Rice (CL)	25' Rigid	325hp	29,405	300	8	0.253	2.76	10.44	1.86	6.03	21.11	3.14	26.31	50.57
Header - Rice (CL)	30' Rigid	325hp	26,406	300	8	0.211	2.30	8.70	1.39	5.02	17.43	2.35	21.93	41.72
Header - Rice (SL)	22' Rigid	325hp	21,887	300	8	0.250	2.72	10.28	1.36	5.94	20.32	2.30	25.91	48.54
Header - Rice (SL)	25' Rigid	325hp	29,405	300	8	0.220	2.40	9.05	1.61	5.22	18.29	2.72	22.80	43.83
Header - Rice (SL)	30' Rigid	325hp	26,406	300	8	0.183	2.00	7.54	1.21	4.35	15.11	2.04	19.00	36.15
Header - Soybean	18' Flex	275hp	20,309	300	8	0.141	1.54	4.93	0.72	2.87	10.08	1.21	12.55	23.85
Header - Soybean	22' Flex	275hp	22,537	300	8	0.116	1.26	4.04	0.65	2.35	8.31	1.10	10.27	19.69
Header - Soybean	25' Flex	325hp	24,801	300	8	0.102	1.11	4.20	0.63	2.42	8.38	1.06	10.59	20.04
Header - Soybean	30' Flex	325hp	28,376	300	8	0.085	0.92	3.50	0.60	2.02	7.05	1.01	8.82	16.90
Header - Soybean	35' Flex	370hp	33,556	300	8	0.072	0.79	3.41	0.61	1.82	6.65	1.03	7.96	15.64
Header Wheat/Sorghum	18' Rigid	275hp	19,069	300	8	0.141	1.54	4.93	0.67	2.87	10.04	1.14	12.55	23.73
Header Wheat/Sorghum	22' Rigid	275hp	19,323	300	8	0.116	1.26	4.04	0.56	2.35	8.22	0.94	10.27	19.44
Header Wheat/Sorghum	25' Rigid	325hp	21,281	300	8	0.102	1.11	4.20	0.54	2.42	8.29	0.91	10.59	19.79
Header Wheat/Sorghum	30' Rigid	325hp	23,782	300	8	0.085	0.92	3.50	0.50	2.02	6.96	0.85	8.82	16.64
Header-Cotton Bcast	13'	173 hp	18,000	200	8	0.251	4.80	5.00	0.84	5.28	15.94	2.86	23.05	41.86
Header-Cotton-Bcast	16'	173 hp	21,060	200	8	0.204	3.90	4.06	0.80	4.29	13.07	2.72	18.72	34.52
Header-Cotton-Bcast	19'	173 hp	22,770	200	8	0.172	3.29	3.42	0.73	3.61	11.06	2.48	15.77	29.32
Header-Cotton-Brush	4R-30 2x1	173 hp	25,160	200	8	0.218	4.16	4.33	1.02	4.57	14.11	3.47	19.97	37.56
Header-Cotton-Brush	4R-36	173 hp	24,937	200	8	0.272	5.21	5.42	1.27	5.72	17.63	4.30	24.97	46.90
Header-Cotton-Brush	4R-38	173 hp	24,907	200	8	0.257	4.92	5.12	1.20	5.40	16.65	4.06	23.59	44.31
Header-Cotton-Brush	4R-38 2x1	173 hp	26,355	200	8	0.172	3.29	3.42	0.85	3.61	11.18	2.87	15.77	29.82
Header-Cotton-Brush	5R-30	173 hp	31,354	200	8	0.261	5.00	5.20	1.53	5.49	17.24	5.19	23.97	46.40
Header-Cotton-Brush	5R-38	173 hp	32,585	200	8	0.207	3.95	4.11	1.26	4.34	13.68	4.27	18.96	36.92
Header-Cotton-Brush	6R-30	173 hp	38,857	200	8	0.218	4.16	4.33	1.59	4.57	14.67	5.36	19.97	40.01
Header-Cotton-Brush	6R-38	173 hp	39,961	200	8	0.172	3.29	3.42	1.29	3.61	11.62	4.35	15.77	31.74
Header-Cotton-Brush	8R-30	173 hp	53,248	200	8	0.163	3.12	3.25	1.63	3.43	11.44	5.51	14.98	31.94
Header-Cotton-Brush	8R-36/38	173 hp	54,684	200	8	0.129	2.47	2.57	1.32	2.71	9.08	4.47	11.84	25.40
Heavy Disk	14'	MFWD 150	18,791	180	10	0.145	1.59	2.77	0.76	0.46	5.59	1.80	3.14	10.54
Heavy Disk	21'	MFWD 170	23,720	180	10	0.097	1.06	2.09	0.64	0.35	4.15	1.52	2.48	8.16
Heavy Disk	27'	MFWD 190	34,304	180	10	0.075	0.82	1.82	0.72	0.27	3.64	1.71	1.96	7.32
Land Plane	50'x16'	MFWD 190	7,466	200	10	0.151	1.65	3.64	0.22	0.56	6.09	0.67	3.93	10.69
Levee Pull (1m/80a)	8 blade	MFWD 170	7,508	100	10	0.003	0.03	0.07	0.00	0.01	0.13	0.03	0.09	0.25
Levee Splitter (1/80	8 blade	MFWD 150	7,508	100	10	0.004	0.04	0.07	0.00	0.01	0.14	0.03	0.08	0.27
Middle Buster	4R-38	MFWD 150	8,279	160	8	0.228	2.49	4.33	0.44	0.72	8.00	1.55	4.91	14.46
Middle Buster	6R-38	MFWD 150	10,503	160	8	0.120	1.31	2.28	0.29	0.38	4.27	1.03	2.58	7.89
Middle Buster	8R-30	MFWD 190	15,548	160	8	0.114	1.24	2.74	0.41	0.42	4.83	1.45	2.95	9.24
Middle Buster	8R-38	MFWD 190	14,075	160	8	0.090	0.98	2.17	0.29	0.33	3.78	1.04	2.33	7.17
Middle Buster	8R-38 2x1	MFWD 190	23,063	160	8	0.060	0.65	1.44	0.32	0.22	2.64	1.13	1.55	5.34
Middle Buster	10R-30	MFWD 225	17,561	160	8	0.091	0.99	2.60	0.37	0.41	4.39	1.31	2.93	8.64
Middle Buster	10R-38	MFWD 225	18,654	160	8	0.072	0.78	2.05	0.31	0.33	3.48	1.10	2.31	6.90
Middle Buster	12R-38	MFWD 225	23,063	160	8	0.060	0.65	1.71	0.32	0.27	2.96	1.13	1.93	6.03
Module Builder-1st	4R-30(250)	MFWD 190	35,588	200	10	0.327	6.25	7.87	2.91	1.21	18.25	6.70	8.48	33.44
Module Builder-1st	4R-30(325)	MFWD 190	35,588	200	10	0.327	6.25	7.87	2.91	1.21	18.25	6.70	8.48	33.44
Module Builder-1st	4R-38(255)	MFWD 190	35,588	200	10	0.257	4.92	6.20	2.29	0.95	14.37	5.27	6.68	26.33
Module Builder-1st	4R-38(325)	MFWD 190	35,588	200	10	0.257	4.92	6.20	2.29	0.95	14.37	5.27	6.68	26.33
Module Builder-1st	4R2x1(350)	MFWD 190	35,588	200	10	0.172	3.29	4.14	1.53	0.63	9.60	3.52	4.46	17.60
Module Builder-1st	5R-30(255)	MFWD 190	35,588	200	10	0.261	5.00	6.30	2.33	0.96	14.60	5.36	6.78	26.75
Module Builder-1st	5R-38(250)	MFWD 190	35,588	200	10	0.207	3.95	4.98	1.84	0.76	11.55	4.24	5.36	21.16
Module Builder-1st	6R-30(325)	MFWD 190	35,588	200	10	0.218	4.16	5.25	1.94	0.80	12.16	4.47	5.65	22.29
Module Builder-1st	6R-38(330)	MFWD 190	35,588	200	10	0.172	3.29	4.14	1.53	0.63	9.60	3.52	4.46	17.60
Module Builder-2nd	4R-30(250)	MFWD 190	35,588	200	10	0.277	5.29	6.67	2.46	1.02	15.46	5.67	7.18	28.32
Module Builder-2nd	4R-30(325)	MFWD 190	35,588	200	10	0.277	5.29	6.67	2.46	1.02	15.46	5.67	7.18	28.32

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2009 (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-2nd	4R-38(255)	MFWD 190	35,588	200	10	0.218	4.17	5.25	1.94	0.80	12.17	4.47	5.65	22.30
Module Builder-2nd	4R-38(325)	MFWD 190	35,588	200	10	0.218	4.17	5.25	1.94	0.80	12.17	4.47	5.65	22.30
Module Builder-2nd	4R2x1(350)	MFWD 190	35,588	200	10	0.145	2.78	3.51	1.29	0.53	8.13	2.98	3.78	14.90
Module Builder-2nd	5R-30(255)	MFWD 190	35,588	200	10	0.221	4.23	5.33	1.97	0.82	12.36	4.54	5.74	22.66
Module Builder-2nd	5R-38(250)	MFWD 190	35,588	200	10	0.175	3.35	4.22	1.56	0.64	9.78	3.59	4.54	17.92
Module Builder-2nd	6R-30(325)	MFWD 190	35,588	200	10	0.184	3.53	4.44	1.64	0.68	10.30	3.78	4.79	18.88
Module Builder-2nd	6R-38(330)	MFWD 190	35,588	200	10	0.145	2.78	3.51	1.29	0.53	8.13	2.98	3.78	14.90
Module Builder-Strip	13' Bcast	MFWD 150	35,588	200	10	0.251	4.80	4.78	2.24	0.80	12.63	5.15	5.41	23.21
Module Builder-Strip	16' Bcast	MFWD 150	35,588	200	10	0.204	3.90	3.88	1.82	0.65	10.26	4.19	4.40	18.86
Module Builder-Strip	19' Bcast	MFWD 150	35,588	200	10	0.172	3.29	3.27	1.53	0.54	8.64	3.52	3.70	15.88
Module Builder-Strip	4R-30 2x1	MFWD 150	35,588	200	10	0.218	4.16	4.14	1.94	0.69	10.95	4.47	4.69	20.11
Module Builder-Strip	4R-36	MFWD 150	35,588	200	10	0.272	5.21	5.18	2.42	0.87	13.69	5.58	5.87	25.14
Module Builder-Strip	4R-38	MFWD 150	35,588	200	10	0.257	4.92	4.89	2.29	0.82	12.93	5.27	5.54	23.76
Module Builder-Strip	4R-38 2x1	MFWD 150	35,588	200	10	0.172	3.29	3.27	1.53	0.54	8.64	3.52	3.70	15.88
Module Builder-Strip	5R-30	MFWD 150	35,588	200	10	0.261	5.00	4.97	2.33	0.83	13.14	5.36	5.63	24.14
Module Builder-Strip	5R-38	MFWD 150	35,588	200	10	0.207	3.95	3.93	1.84	0.66	10.39	4.24	4.45	19.09
Module Builder-Strip	6R-30	MFWD 150	35,588	200	10	0.218	4.16	4.14	1.94	0.69	10.95	4.47	4.69	20.11
Module Builder-Strip	6R-38	MFWD 190	35,588	200	10	0.172	3.29	4.14	1.53	0.63	9.60	3.52	4.46	17.60
Module Builder-Strip	8R-36/38	MFWD 190	35,588	200	10	0.129	2.47	3.11	1.15	0.47	7.21	2.65	3.35	13.21
NT Grain Drill	10'	2WD 130	25,016	150	8	0.235	4.50	3.87	2.21	0.55	11.15	4.77	3.77	19.71
NT Grain Drill	12'	2WD 130	29,184	150	8	0.163	3.12	2.69	1.79	0.38	8.00	3.87	2.62	14.49
NT Grain Drill	15'	MFWD 150	35,830	150	8	0.130	2.50	2.48	1.75	0.41	7.16	3.80	2.81	13.78
NT Grain Drill	20'	MFWD 170	47,785	150	8	0.098	1.87	2.11	1.75	0.35	6.10	3.80	2.51	12.42
NT Grain Drill	24'	MFWD 190	73,143	150	8	0.081	1.56	1.96	2.24	0.30	6.08	4.85	2.12	13.05
NT Grain Drill	30'	MFWD 225	72,485	150	8	0.065	1.25	1.86	1.77	0.30	5.19	3.84	2.10	11.14
NT Grain Drill & Pre	10'	2WD 130	30,511	150	8	0.211	4.04	3.48	2.42	0.50	10.44	5.23	3.38	19.06
NT Grain Drill & Pre	12'	2WD 130	34,679	150	8	0.176	3.36	2.90	2.29	0.41	8.97	4.95	2.82	16.76
NT Grain Drill & Pre	15'	MFWD 150	41,325	150	8	0.141	2.69	2.67	2.18	0.44	8.00	4.72	3.03	15.76
NT Grain Drill & Pre	20'	MFWD 170	53,280	150	8	0.105	2.02	2.27	2.11	0.38	6.79	4.56	2.70	14.07
NT Grain Drill & Pre	24'	MFWD 190	78,638	150	8	0.088	1.68	2.12	2.59	0.32	6.72	5.61	2.28	14.63
NT Grain Drill & Pre	30'	MFWD 225	77,980	150	8	0.070	1.34	2.00	2.06	0.32	5.74	4.45	2.26	12.46
NT Plant&Pre-Folding	8R-38	MFWD 170	46,723	150	8	0.083	1.59	1.79	1.46	0.30	5.16	3.16	2.13	10.47
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	61,533	150	8	0.055	1.06	1.19	1.28	0.20	3.74	2.77	1.42	7.95
NT Plant&Pre-Folding	10R-30	MFWD 190	57,555	150	8	0.084	1.61	2.03	1.82	0.31	5.79	3.94	2.19	11.93
NT Plant&Pre-Folding	10R-38	MFWD 190	52,893	150	8	0.066	1.27	1.60	1.32	0.24	4.45	2.86	1.72	9.04
NT Plant&Pre-Folding	12R-20	MFWD 190	57,452	150	8	0.105	2.02	2.54	2.27	0.39	7.23	4.92	2.74	14.90
NT Plant&Pre-Folding	12R-30	MFWD 190	61,566	150	8	0.070	1.34	1.69	1.62	0.26	4.93	3.51	1.82	10.27
NT Plant&Pre-Folding	12R-38	MFWD 190	61,553	150	8	0.055	1.06	1.33	1.28	0.20	3.89	2.77	1.44	8.11
NT Plant&Pre-Folding	16R-30	MFWD 190	86,279	150	8	0.052	1.01	1.27	1.71	0.19	4.18	3.69	1.37	9.25
NT Plant&Pre-Folding	23R-15	MFWD 190	99,841	150	8	0.073	1.40	1.76	2.75	0.27	6.19	5.94	1.90	14.03
NT Plant&Pre-Folding	24R-15	MFWD 225	101,826	150	8	0.070	1.34	2.00	2.69	0.32	6.37	5.82	2.26	14.45
NT Plant&Pre-Folding	24R-20	MFWD 190	112,054	150	8	0.052	1.01	1.27	2.22	0.19	4.69	4.80	1.37	10.87
NT Plant&Pre-Folding	24R-30	MFWD 190	140,423	150	8	0.035	0.67	0.84	1.85	0.13	3.50	4.01	0.91	8.43
NT Plant&Pre-Folding	31R-15	MFWD 225	126,689	150	8	0.054	1.04	1.55	2.59	0.25	5.44	5.61	1.75	12.81
NT Plant&Pre-Folding	32R-15	MFWD 225	128,605	150	8	0.052	1.01	1.50	2.55	0.24	5.30	5.51	1.69	12.52
NT Plant&Pre-Folding	32R-30	MFWD 225	209,979	150	8	0.026	0.50	0.75	2.08	0.12	3.46	4.50	0.84	8.81
NT Plant&Pre-Folding	36R-20	MFWD 225	139,367	150	8	0.035	0.67	1.00	1.84	0.16	3.68	3.98	1.13	8.79
NT Plant&Pre-Folding	36R-30	MFWD 225	215,244	150	8	0.023	0.44	0.66	1.89	0.10	3.12	4.10	0.75	7.97
NT Plant&Pre-Rigid	4R-30	2WD 130	23,638	150	8	0.211	4.04	3.48	1.87	0.50	9.90	4.05	3.38	17.34
NT Plant&Pre-Rigid	4R-38	2WD 130	23,687	150	8	0.166	3.18	2.74	1.47	0.39	7.79	3.19	2.66	13.66
NT Plant&Pre-Rigid	6R-30	MFWD 150	30,411	150	8	0.141	2.69	2.67	1.60	0.44	7.43	3.47	3.03	13.94
NT Plant&Pre-Rigid	6R-38	MFWD 150	30,249	150	8	0.111	2.12	2.11	1.26	0.35	5.85	2.73	2.39	10.98
NT Plant&Pre-Rigid	8R-30	MFWD 170	35,957	150	8	0.105	2.02	2.27	1.42	0.38	6.10	3.08	2.70	11.89
NT Plant&Pre-Rigid	8R-38	MFWD 170	32,670	150	8	0.083	1.59	1.79	1.02	0.30	4.72	2.21	2.13	9.08
NT Plant&Pre-Rigid	10R-30	MFWD 190	38,169	150	8	0.084	1.61	2.03	1.21	0.31	5.17	2.61	2.19	9.98
NT Plant&Pre-Rigid	11R-15	MFWD 170	41,286	150	8	0.143	2.74	3.09	2.22	0.52	8.59	4.81	3.68	17.09
NT Plant&Pre-Rigid	11R-20	MFWD 170	37,963	150	8	0.115	2.20	2.48	1.64	0.42	6.76	3.55	2.95	13.27
NT Plant&Pre-Rigid	12R-20	MFWD 190	51,926	150	8	0.105	2.02	2.54	2.05	0.39	7.01	4.45	2.74	14.20
NT Plant&Pre-Rigid	12R-30	MFWD 190	51,065	150	8	0.070	1.34	1.69	1.35	0.26	4.65	2.91	1.82	9.39
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	47,400	150	8	0.097	1.86	2.77	1.73	0.44	6.81	3.74	3.13	13.69
NT Plant&Pre-Rigid	13R-36/40	MFWD 225	42,223	150	8	0.051	0.98	1.46	0.81	0.23	3.50	1.76	1.65	6.93
NT Plant&Pre-Rigid	15R-15	MFWD 190	52,240	150	8	0.113	2.16	2.72	2.21	0.41	7.51	4.79	2.93	15.23
NT Plant&Pre-Rigid	15R-20	MFWD 190	52,096	150	8	0.084	1.61	2.03	1.65	0.31	5.61	3.57	2.19	11.38
NT Plant&Pre-Rigid	16R-30	MFWD 225	91,735	150	8	0.052	1.01	1.50	1.81	0.24	4.57	3.93	1.69	10.20
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	97,347	150	8	0.055	1.06	1.58	2.03	0.25	4.93	4.39	1.78	11.11
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	75,173	150	8	0.083	1.59	2.38	2.35	0.38	6.71	5.09	2.68	14.49
NT Plant-Folding	8R-38	MFWD 170	41,228	150	8	0.077	1.48	1.67	1.20	0.28	4.63	2.59	1.98	9.21
NT Plant-Folding	8R-38 2x1	MFWD 170	55,533	150	8	0.051	0.98	1.11	1.07	0.18	3.36	2.32	1.32	7.01
NT Plant-Folding	10R-30	MFWD 190	52,061	150	8	0.078	1.50	1.89	1.53	0.29	5.21	3.31	2.03	10.56
NT Plant-Folding	10R-38	MFWD 190	47,646	150	8	0.061	1.18	1.49	1.10	0.22	4.01	2.39	1.60	8.00
NT Plant-Folding	12R-20	MFWD 190	51,957	150	8	0.098	1.87	2.36	1.91	0.36	6.51	4.13	2.54	13.19
NT Plant-Folding	12R-30	MFWD 190	56,071	150	8	0.065	1.25	1.57	1.37	0.24	4.44	2.97	1.69	9.11

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2009 (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----------							
NT Plant-Folding	12R-38	MFWD 190	55,533	150	8	0.051	0.98	1.24	1.07	0.19	3.49	2.32	1.33	7.16
NT Plant-Folding	16R-30	MFWD 190	80,260	150	8	0.049	0.93	1.18	1.47	0.18	3.77	3.19	1.27	8.24
NT Plant-Folding	23R-15	MFWD 190	94,346	150	8	0.068	1.30	1.64	2.41	0.25	5.60	5.21	1.76	12.59
NT Plant-Folding	24R-15	MFWD 225	96,331	150	8	0.065	1.25	1.86	2.36	0.30	5.78	5.11	2.10	12.99
NT Plant-Folding	24R-20	MFWD 190	106,034	150	8	0.049	0.93	1.18	1.95	0.18	4.25	4.22	1.27	9.74
NT Plant-Folding	24R-30	MFWD 190	132,842	150	8	0.032	0.62	0.78	1.63	0.12	3.16	3.52	0.84	7.53
NT Plant-Folding	31R-15	MFWD 225	119,109	150	8	0.050	0.96	1.44	2.26	0.23	4.91	4.90	1.63	11.44
NT Plant-Folding	32R-15	MFWD 225	121,025	150	8	0.049	0.93	1.39	2.22	0.22	4.79	4.81	1.57	11.18
NT Plant-Folding	32R-30	MFWD 225	202,399	150	8	0.024	0.46	0.69	1.86	0.11	3.14	4.02	0.78	7.96
NT Plant-Folding	36R-20	MFWD 225	131,787	150	8	0.032	0.62	0.93	1.61	0.15	3.32	3.49	1.05	7.87
NT Plant-Folding	36R-30	MFWD 225	207,664	150	8	0.021	0.41	0.62	1.69	0.10	2.83	3.67	0.70	7.21
NT Plant-Rigid	4R-30	2WD 130	18,143	150	8	0.196	3.75	3.23	1.33	0.46	8.78	2.88	3.14	14.82
NT Plant-Rigid	4R-38	2WD 130	18,192	150	8	0.154	2.95	2.54	1.05	0.36	6.92	2.28	2.47	11.68
NT Plant-Rigid	6R-30	MFWD 150	24,916	150	8	0.130	2.50	2.48	1.22	0.41	6.62	2.64	2.81	12.09
NT Plant-Rigid	6R-38	MFWD 150	24,754	150	8	0.103	1.97	1.96	0.95	0.32	5.22	2.07	2.22	9.52
NT Plant-Rigid	8R-30	MFWD 170	30,462	150	8	0.098	1.87	2.11	1.12	0.35	5.47	2.42	2.51	10.40
NT Plant-Rigid	8R-38	MFWD 170	27,175	150	8	0.077	1.48	1.67	0.79	0.28	4.22	1.71	1.98	7.92
NT Plant-Rigid	10R-30	MFWD 190	32,675	150	8	0.078	1.50	1.89	0.96	0.29	4.64	2.08	2.03	8.76
NT Plant-Rigid	11R-15	MFWD 170	35,791	150	8	0.133	2.55	2.87	1.79	0.48	7.70	3.87	3.41	15.00
NT Plant-Rigid	11R-20	MFWD 170	32,468	150	8	0.107	2.05	2.31	1.30	0.39	6.05	2.82	2.74	11.63
NT Plant-Rigid	12R-20	MFWD 190	46,431	150	8	0.098	1.87	2.36	1.71	0.36	6.31	3.69	2.54	12.55
NT Plant-Rigid	12R-30	MFWD 190	45,570	150	8	0.065	1.25	1.57	1.11	0.24	4.18	2.41	1.69	8.30
NT Plant-Rigid	13R-18/20	MFWD 225	41,380	150	8	0.090	1.73	2.59	1.41	0.41	6.15	3.05	2.92	12.12
NT Plant-Rigid	13R-36/40	MFWD 225	36,500	150	8	0.047	0.91	1.36	0.65	0.21	3.15	1.41	1.53	6.11
NT Plant-Rigid	15R-15	MFWD 190	46,220	150	8	0.105	2.00	2.52	1.82	0.38	6.74	3.93	2.72	13.39
NT Plant-Rigid	15R-20	MFWD 190	46,076	150	8	0.078	1.50	1.89	1.35	0.29	5.03	2.93	2.03	10.00
NT Plant-Rigid	16R-30	MFWD 225	85,715	150	8	0.049	0.93	1.39	1.57	0.22	4.14	3.41	1.57	9.13
NT Plant-TwinRow	12R-30/40	MFWD 225	91,328	150	8	0.051	0.98	1.47	1.77	0.23	4.46	3.82	1.66	9.95
NT Plant-TwinRow	8R-30/40	MFWD 225	69,678	150	8	0.077	1.48	2.21	2.02	0.35	6.07	4.38	2.49	12.95
Paratill & Bed Fold.	8R-38	MFWD 225	35,136	150	12	0.080	0.88	2.30	1.02	0.37	4.57	2.02	2.59	9.19
Paratill & Bed Fold.	8R-38 2x1	MFWD 225	48,077	150	12	0.053	0.58	1.53	0.93	0.24	3.29	1.84	1.72	6.87
Paratill & Bed Fold.	10R-30	MFWD 225	27,933	150	12	0.081	0.89	2.32	0.82	0.37	4.41	1.63	2.62	8.67
Paratill & Bed Fold.	12R-38	MFWD 225	48,077	150	12	0.053	0.58	1.53	0.93	0.24	3.29	1.84	1.72	6.87
Paratill & Bed Rigid	4R-30	MFWD 225	10,389	150	12	0.204	2.22	5.82	0.76	0.93	9.75	1.51	6.56	17.83
Paratill & Bed Rigid	4R-38	MFWD 225	11,137	150	12	0.160	1.75	4.58	0.64	0.73	7.72	1.28	5.16	14.17
Paratill & Bed Rigid	6R-30	MFWD 225	14,468	150	12	0.136	1.48	3.88	0.71	0.62	6.70	1.40	4.37	12.48
Paratill & Bed Rigid	6R-38	MFWD 225	17,739	150	12	0.107	1.17	3.06	0.68	0.49	5.41	1.36	3.45	10.23
Paratill & Bed Rigid	8R-30	MFWD 225	19,561	150	12	0.102	1.11	2.91	0.72	0.46	5.21	1.42	3.28	9.92
Paratill & Bed Rigid	8R-38	MFWD 225	22,598	150	12	0.080	0.88	2.30	0.65	0.37	4.21	1.30	2.59	8.10
Paratill & Bed Rigid	10R-30	MFWD 225	21,664	150	12	0.081	0.89	2.32	0.63	0.37	4.23	1.26	2.62	8.12
Peanut Cond.& Lifter	6-Row	MFWD 190	11,455	300	20	0.100	1.09	2.40	0.19	0.36	4.05	0.33	2.59	6.98
Peanut Conditioner	4-Row	MFWD 190	6,035	300	20	0.142	1.55	3.43	0.24	0.52	5.76	0.23	3.70	9.70
Peanut Conditioner	6-Row	MFWD 190	10,407	300	20	0.100	1.09	2.40	0.20	0.36	4.07	0.27	2.59	6.94
Peanut Dig/Invertor	4R-30	MFWD 190	20,563	300	15	0.235	2.57	5.67	1.20	0.87	10.32	1.64	6.11	18.08
Peanut Dig/Invertor	4R-38	MFWD 190	20,563	300	15	0.186	2.03	4.48	0.95	0.68	8.15	1.30	4.82	14.28
Peanut Dig/Invertor	6R-38	MFWD 190	29,188	300	15	0.124	1.35	2.98	0.63	0.45	5.43	1.23	3.21	9.87
Peanut Dump Cart	6-Row	MFWD 190	29,580	300	20	0.310	3.38	7.45	0.53	1.14	12.52	2.59	8.03	23.15
Peanut Harvester	4R-30	MFWD 225	101,125	300	20	1.176	12.83	33.51	6.74	5.39	58.48	31.73	37.78	128.00
Peanut Harvester	4R-38	MFWD 225	101,125	300	20	0.934	10.19	26.62	5.35	4.28	46.45	26.00	30.01	102.47
Peanut Harvester	6R-38	MFWD 225	118,913	300	20	0.625	6.81	17.80	3.59	2.86	31.08	20.44	20.07	71.60
Peanut Lifter	6-Row	MFWD 225	4,569	300	20	0.100	1.09	2.84	0.09	0.45	4.49	0.12	3.21	7.82
Peanut Plt&Pre Fold	12R-38	MFWD 190	55,991	150	8	0.080	1.53	1.93	1.68	0.29	5.45	3.64	2.08	11.18
Peanut Plt&Pre Rigid	8R-30	MFWD 190	32,249	150	8	0.152	2.91	3.67	1.84	0.56	9.00	3.99	3.95	16.95
Peanut Plt&Pre Rigid	8R-38	MFWD 190	27,175	150	8	0.120	2.30	2.90	1.23	0.44	6.88	2.66	3.12	12.67
Pipe Spool 160ac	1/4m roll	2WD 130	3,850	15	12	0.003	0.08	0.05	0.00	0.00	0.15	0.08	0.05	0.28
Pipe Trailer 1m/160a	30'	2WD 130	1,122	100	15	0.003	0.16	0.06	0.00	0.00	0.23	0.00	0.06	0.29
Plant & Pre-Folding	8R-38	MFWD 170	43,015	150	8	0.080	1.53	1.72	1.29	0.29	4.84	2.79	2.05	9.70
Plant & Pre-Folding	8R-38 2x1	MFWD 170	55,991	150	8	0.053	1.02	1.15	1.12	0.19	3.48	2.42	1.36	7.28
Plant & Pre-Folding	10R-30	MFWD 190	52,920	150	8	0.081	1.55	1.95	1.61	0.30	5.41	3.48	2.10	11.00
Plant & Pre-Folding	10R-38	MFWD 190	48,258	150	8	0.064	1.22	1.54	1.15	0.23	4.16	2.50	1.66	8.32
Plant & Pre-Folding	12R-20	MFWD 190	51,890	150	8	0.101	1.93	2.44	1.97	0.37	6.73	4.27	2.63	13.63
Plant & Pre-Folding	12R-30	MFWD 190	56,004	150	8	0.067	1.29	1.62	1.42	0.25	4.59	3.07	1.75	9.42
Plant & Pre-Folding	12R-38	MFWD 190	55,991	150	8	0.053	1.02	1.28	1.12	0.19	3.62	2.42	1.38	7.43
Plant & Pre-Folding	16R-30	MFWD 190	78,863	150	8	0.050	0.96	1.22	1.50	0.18	3.88	3.24	1.31	8.44
Plant & Pre-Folding	23R-15	MFWD 190	89,181	150	8	0.070	1.34	1.69	2.35	0.26	5.66	5.09	1.82	12.58
Plant & Pre-Folding	24R-15	MFWD 225	90,702	150	8	0.067	1.29	1.92	2.30	0.31	5.83	4.97	2.17	12.98
Plant & Pre-Folding	24R-20	MFWD 190	100,930	150	8	0.050	0.96	1.22	1.92	0.18	4.30	4.15	1.31	9.76
Plant & Pre-Folding	24R-30	MFWD 190	129,299	150	8	0.033	0.64	0.81	1.64	0.12	3.22	3.54	0.87	7.65
Plant & Pre-Folding	31R-15	MFWD 225	112,320	150	8	0.052	1.00	1.49	2.21	0.24	4.94	4.77	1.68	11.40
Plant & Pre-Folding	32R-15	MFWD 225	113,773	150	8	0.050	0.96	1.44	2.16	0.23	4.81	4.68	1.63	11.12
Plant & Pre-Folding	32R-30	MFWD 225	195,147	150	8	0.025	0.48	0.72	1.85	0.11	3.18	4.01	0.81	8.01
Plant & Pre-Folding	36R-20	MFWD 225	133,805	150	8	0.033	0.64	0.96	1.69	0.15	3.46	3.67	1.08	8.22

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2009 (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							
Plant & Pre-Folding	36R-30	MFWD 225	209,682	150	8	0.022	0.43	0.64	1.77	0.10	2.95	3.83	0.72	7.50
Plant & Pre-Rigid	4R-30	2WD 130	21,784	150	8	0.203	3.87	3.34	1.65	0.48	9.36	3.58	3.25	16.20
Plant & Pre-Rigid	4R-38	2WD 130	21,833	150	8	0.159	3.05	2.63	1.30	0.37	7.37	2.82	2.56	12.76
Plant & Pre-Rigid	6R-30	MFWD 150	28,557	150	8	0.135	2.58	2.57	1.44	0.43	7.03	3.13	2.91	13.08
Plant & Pre-Rigid	6R-38	MFWD 150	27,468	150	8	0.106	2.04	2.03	1.10	0.34	5.51	2.37	2.29	10.19
Plant & Pre-Rigid	8R-30	MFWD 170	32,249	150	8	0.101	1.93	2.18	1.22	0.37	5.72	2.65	2.59	10.97
Plant & Pre-Rigid	8R-38	MFWD 170	28,962	150	8	0.080	1.53	1.72	0.87	0.29	4.42	1.88	2.05	8.36
Plant & Pre-Rigid	10R-30	MFWD 190	33,534	150	8	0.081	1.55	1.95	1.02	0.30	4.82	2.20	2.10	9.14
Plant & Pre-Rigid	11R-15	MFWD 170	36,188	150	8	0.148	2.83	3.19	2.01	0.54	8.57	4.34	3.79	16.71
Plant & Pre-Rigid	11R-20	MFWD 170	32,865	150	8	0.110	2.11	2.38	1.36	0.40	6.28	2.95	2.83	12.07
Plant & Pre-Rigid	12R-20	MFWD 190	46,364	150	8	0.101	1.93	2.44	1.76	0.37	6.52	3.81	2.63	12.97
Plant & Pre-Rigid	12R-30	MFWD 190	45,503	150	8	0.067	1.29	1.62	1.15	0.25	4.32	2.49	1.75	8.57
Plant & Pre-Rigid	13R-18/20	MFWD 225	41,375	150	8	0.093	1.78	2.66	1.45	0.42	6.33	3.13	3.00	12.47
Plant & Pre-Rigid	13R-36/40	MFWD 225	36,197	150	8	0.049	0.94	1.41	0.67	0.22	3.25	1.45	1.59	6.30
Plant & Pre-Rigid	15R-15	MFWD 190	45,288	150	8	0.108	2.07	2.61	1.84	0.40	6.93	3.98	2.81	13.73
Plant & Pre-Rigid	15R-20	MFWD 190	45,144	150	8	0.081	1.55	1.95	1.37	0.30	5.18	2.97	2.10	10.25
Plant & Pre-Rigid	16R30	MFWD 225	84,319	150	8	0.050	0.96	1.44	1.60	0.23	4.25	3.47	1.63	9.35
Plant & Pre-TwinRow	12R-30/40	MFWD 225	91,785	150	8	0.053	1.02	1.52	1.83	0.24	4.62	3.97	1.71	10.31
Plant & Pre-TwinRow	8R-30/40	MFWD 225	71,465	150	8	0.080	1.53	2.28	2.15	0.36	6.33	4.65	2.57	13.56
Plant - Folding	8R-38	MFWD 170	37,520	150	8	0.074	1.42	1.60	1.04	0.27	4.34	2.26	1.90	8.52
Plant - Folding	8R-38 2x1	MFWD 170	49,971	150	8	0.049	0.94	1.06	0.92	0.18	3.12	2.00	1.26	6.40
Plant - Folding	10R-30	MFWD 190	47,426	150	8	0.075	1.44	1.81	1.34	0.27	4.87	2.89	1.95	9.73
Plant - Folding	10R-38	MFWD 190	43,011	150	8	0.059	1.13	1.43	0.95	0.21	3.74	2.07	1.54	7.36
Plant - Folding	12R-20	MFWD 190	46,395	150	8	0.094	1.80	2.26	1.64	0.34	6.05	3.54	2.44	12.04
Plant - Folding	12R-30	MFWD 190	50,509	150	8	0.062	1.20	1.51	1.19	0.23	4.13	2.57	1.62	8.33
Plant - Folding	12R-38	MFWD 190	49,971	150	8	0.049	0.94	1.19	0.92	0.18	3.25	2.00	1.28	6.55
Plant - Folding	16R-30	MFWD 190	72,844	150	8	0.047	0.90	1.13	1.28	0.17	3.49	2.78	1.22	7.50
Plant - Folding	23R-15	MFWD 190	83,686	150	8	0.065	1.25	1.57	2.05	0.24	5.12	4.44	1.69	11.26
Plant - Folding	24R-15	MFWD 225	85,207	150	8	0.062	1.20	1.79	2.00	0.28	5.28	4.34	2.01	11.64
Plant - Folding	24R-20	MFWD 190	94,910	150	8	0.047	0.90	1.13	1.67	0.17	3.88	3.62	1.22	8.73
Plant - Folding	24R-30	MFWD 190	121,718	150	8	0.031	0.60	0.75	1.43	0.11	2.90	3.10	0.81	6.82
Plant - Folding	31R-15	MFWD 225	104,740	150	8	0.048	0.93	1.38	1.91	0.22	4.45	4.13	1.56	10.15
Plant - Folding	32R-15	MFWD 225	106,193	150	8	0.047	0.90	1.34	1.87	0.21	4.33	4.05	1.51	9.90
Plant - Folding	32R-30	MFWD 225	187,567	150	8	0.023	0.45	0.67	1.65	0.10	2.88	3.58	0.75	7.22
Plant - Folding	36R-20	MFWD 225	126,225	150	8	0.031	0.60	0.89	1.48	0.14	3.12	3.21	1.00	7.35
Plant - Folding	36R-30	MFWD 225	202,102	150	8	0.020	0.40	0.59	1.58	0.09	2.68	3.43	0.67	6.78
Plant - Rigid	4R-30	2WD 130	16,289	150	8	0.188	3.60	3.10	1.15	0.44	8.30	2.48	3.02	13.81
Plant - Rigid	4R-38	2WD 130	16,338	150	8	0.148	2.83	2.44	0.90	0.35	6.54	1.96	2.37	10.88
Plant - Rigid	6R-30	MFWD 150	23,062	150	8	0.125	2.40	2.38	1.08	0.40	6.27	2.35	2.70	11.33
Plant - Rigid	6R-38	MFWD 150	21,973	150	8	0.099	1.89	1.88	0.81	0.31	4.91	1.76	2.13	8.81
Plant - Rigid	8R-30	MFWD 170	26,754	150	8	0.094	1.80	2.02	0.94	0.34	5.12	2.04	2.41	9.57
Plant - Rigid	8R-38	MFWD 170	23,467	150	8	0.074	1.42	1.60	0.65	0.27	3.95	1.41	1.90	7.28
Plant - Rigid	10R-30	MFWD 190	28,040	150	8	0.075	1.44	1.81	0.79	0.27	4.32	1.71	1.95	7.99
Plant - Rigid	11R-15	MFWD 170	30,693	150	8	0.137	2.62	2.96	1.58	0.50	7.67	3.42	3.52	14.62
Plant - Rigid	11R-20	MFWD 170	27,370	150	8	0.103	1.96	2.21	1.05	0.37	5.61	2.28	2.63	10.54
Plant - Rigid	12R-20	MFWD 190	40,869	150	8	0.094	1.80	2.26	1.44	0.34	5.86	3.12	2.44	11.43
Plant - Rigid	12R-30	MFWD 190	40,008	150	8	0.062	1.20	1.51	0.94	0.23	3.88	2.03	1.62	7.55
Plant - Rigid	13R-18/20	MFWD 225	35,355	150	8	0.086	1.65	2.47	1.15	0.39	5.68	2.49	2.79	10.96
Plant - Rigid	13R-36/40	MFWD 225	30,475	150	8	0.045	0.87	1.31	0.52	0.21	2.92	1.13	1.47	5.53
Plant - Rigid	15R-15	2WD 150	39,268	150	8	0.094	1.80	1.79	1.38	0.26	5.24	3.00	1.75	9.99
Plant - Rigid	15R-20	MFWD 190	39,124	150	8	0.075	1.44	1.81	1.10	0.27	4.64	2.39	1.95	8.98
Plant - Rigid	16R-30	MFWD 225	78,299	150	8	0.047	0.90	1.34	1.38	0.21	3.84	2.99	1.51	8.34
Plant - TwinRow	12R-30/40	MFWD 225	85,766	150	8	0.049	0.94	1.41	1.59	0.22	4.18	3.44	1.59	9.22
Plant - TwinRow	8R-30/40	MFWD 225	65,970	150	8	0.074	1.42	2.12	1.84	0.34	5.73	3.98	2.39	12.11
Rice Grain Cart	500 Bu	MFWD 190	16,979	200	12	0.062	0.68	1.50	0.28	0.23	2.70	0.56	1.61	4.89
Rice Grain Cart	700 Bu	MFWD 190	23,337	200	12	0.055	0.60	1.32	0.34	0.20	2.47	0.68	1.42	4.58
Rip/Bed/Till Fold	8R-38	MFWD 190	28,400	300	20	0.073	0.79	1.75	0.10	0.27	2.92	0.58	1.89	5.41
Rip/Bed/Till Fold	12R-30	MFWD 225	39,652	300	20	0.061	0.67	1.75	0.12	0.28	2.83	0.69	1.97	5.50
Rip/Bed/Till Fold	12R-38	MFWD 225	39,652	300	20	0.046	0.50	1.31	0.09	0.21	2.12	0.51	1.48	4.12
Rip/Bed/Till Rigid	4R-30	MFWD 190	12,552	300	20	0.184	2.01	4.44	0.11	0.68	7.26	0.65	4.79	12.71
Rip/Bed/Till Rigid	4R-38	MFWD 190	12,552	300	20	0.146	1.60	3.53	0.09	0.54	5.76	0.52	3.80	10.09
Rip/Bed/Till Rigid	6R-38	MFWD 190	18,341	300	20	0.097	1.06	2.34	0.08	0.35	3.85	0.50	2.52	6.87
Rip/Bed/Till Rigid	8R-30	MFWD 190	23,276	300	20	0.139	1.51	3.34	0.16	0.51	5.53	0.91	3.60	10.05
Rip/Bed/Till Rigid	8R-38	MFWD 190	23,276	300	20	0.073	0.79	1.75	0.08	0.27	2.91	0.48	1.89	5.28
Rip/Bed/Till Rigid	6R-30	MFWD 190	18,341	300	20	0.123	1.34	2.96	0.11	0.45	4.87	0.64	3.19	8.71
Ripper Conditioner	4-Row	MFWD 225	11,470	150	12	0.160	1.75	4.58	0.66	0.73	7.74	1.31	5.16	14.22
Ripper Conditioner	8-Row	MFWD 225	17,610	150	12	0.080	0.88	2.30	0.51	0.37	4.06	1.01	2.59	7.67
Roller	32'-12R30	MFWD 170	12,595	100	12	0.046	0.50	1.00	0.09	0.17	1.78	0.63	1.19	3.60
Ripper Conditioner	6-Row	MFWD 225	15,305	150	12	0.107	1.17	3.06	0.59	0.49	5.32	1.17	3.45	9.95
Roller/Bed Shaper Fl	8R-38	MFWD 190	18,395	160	10	0.074	0.80	1.78	0.34	0.27	3.20	1.01	1.92	6.13
Roller/Bed Shaper Fl	12R-30	MFWD 225	19,995	160	10	0.062	0.68	1.78	0.31	0.28	3.06	0.92	2.00	5.99
Roller/Bed Shaper Fl	12R-38	MFWD 225	22,595	160	10	0.049	0.53	1.40	0.27	0.22	2.44	0.82	1.58	4.86
Roller/Bed Shaper Fl	16R-30	MFWD 225	21,655	160	10	0.046	0.51	1.33	0.25	0.21	2.31	0.75	1.50	4.57
Roller/Bed Shaper Rd	8R-38	MFWD 190	13,695	160	10	0.074	0.80	1.78	0.25	0.27	3.11	0.75	1.92	5.79

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2009 (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----------							
Rotary Cutter	7'	MFWD 130	3,712	185	10	0.168	1.83	2.77	0.50	0.46	5.58	0.40	3.14	9.12
Rotary Cutter	12'	2WD 150	8,455	185	10	0.098	1.07	1.86	0.67	0.27	3.88	0.53	1.82	6.24
Rotary Cutter-Flex	15'	MFWD 150	14,627	185	10	0.078	0.85	1.49	0.93	0.25	3.53	0.73	1.69	5.96
Rotary Cutter-Flex	20'	MFWD 150	21,890	185	10	0.058	0.64	1.11	1.04	0.18	2.99	0.82	1.26	5.09
Row Cond & Inc Fold.	26'	MFWD 190	20,486	100	10	0.063	0.95	1.52	0.32	0.23	3.03	1.54	1.64	6.22
Row Cond & Inc Fold.	38'	MFWD 225	23,500	100	10	0.043	0.65	1.23	0.25	0.19	2.34	1.21	1.39	4.94
Row Cond & Inc Rigid	13'	2WD 130	10,935	100	10	0.126	1.90	2.08	0.34	0.30	4.64	1.64	2.03	8.32
Row Cond & Inc Rigid	21'	2WD 170	13,993	100	10	0.078	1.17	1.69	0.27	0.23	3.37	1.30	1.64	6.33
Row Cond & Inc Rigid	26'	MFWD 190	15,722	100	10	0.026	0.39	0.64	0.10	0.09	1.24	0.49	0.68	2.42
Row Cond Fld	26'	MFWD 225	14,991	100	10	0.059	0.65	1.70	0.22	0.27	2.85	1.06	1.91	5.83
Row Cond Fld	38'	MFWD 225	17,480	100	10	0.040	0.44	1.16	0.17	0.18	1.97	0.84	1.31	4.13
Row Cond Rdg	13'	2WD 130	5,440	100	10	0.119	1.30	1.96	0.16	0.28	3.71	0.77	1.91	6.40
Row Cond Rdg	21'	2WD 170	8,498	100	10	0.073	0.80	1.59	0.15	0.22	2.77	0.74	1.54	5.07
Row Cond Rdg	26'	MFWD 190	10,227	100	10	0.059	0.65	1.43	0.15	0.22	2.46	0.72	1.54	4.73
RT Cult	8R-30	2WD 170	20,774	200	12	0.103	1.12	2.21	1.02	0.30	4.67	1.17	2.15	8.01
RT Cult	12R-30	2WD 190	29,998	200	12	0.068	0.75	1.65	0.98	0.23	3.62	1.13	1.65	6.41
RT Cult + PD	8R-30	2WD 150	26,269	200	12	0.110	1.65	2.08	1.38	0.30	5.42	1.58	2.04	9.06
RT Cult + PD	12R-30	2WD 190	35,493	200	12	0.073	1.10	1.76	1.24	0.25	4.36	1.43	1.76	7.56
Soybean Grain Cart	500 bu	MFWD 190	16,979	200	12	0.025	0.27	0.61	0.11	0.09	1.10	0.23	0.66	1.99
Soybean Grain Cart	700 bu	MFWD 190	23,337	200	12	0.021	0.23	0.51	0.13	0.07	0.95	0.26	0.55	1.77
Spin Spreader	5 ton	MFWD 190	11,529	100	8	0.042	0.80	1.01	0.27	0.15	2.24	0.61	1.09	3.94
Spray (Band)	27' Fold	MFWD 170	5,459	200	8	0.062	0.94	1.34	0.16	0.22	2.67	0.21	1.60	4.49
Spray (Band)	40' Fold	MFWD 170	6,020	200	8	0.042	0.63	0.91	0.11	0.15	1.81	0.16	1.08	3.06
Spray (Band)	50' Fold	MFWD 170	5,957	200	8	0.033	0.50	0.72	0.09	0.12	1.45	0.12	0.86	2.44
Spray (Band)	53' Fold	MFWD 170	6,823	200	8	0.031	0.47	0.68	0.10	0.11	1.38	0.13	0.81	2.33
Spray (Band)	60' Fold	MFWD 170	7,580	200	8	0.028	0.42	0.60	0.10	0.10	1.23	0.13	0.72	2.09
Spray (Bcast/HB)	13' Rigid	MFWD 150	4,873	200	8	0.130	1.95	2.47	0.29	0.41	5.13	0.40	2.80	8.34
Spray (Bcast/HB)	20' Rigid	MFWD 150	5,734	200	8	0.084	1.26	1.60	0.22	0.26	3.37	0.30	1.82	5.50
Spray (Bcast/HB)	27' Fold	MFWD 170	9,742	200	8	0.062	0.94	1.34	0.28	0.22	2.80	0.38	1.60	4.79
Spray (Bcast/HB)	27' Rigid	MFWD 170	6,657	200	8	0.062	0.94	1.34	0.19	0.22	2.71	0.26	1.60	4.58
Spray (Bcast/HB)	30' Fold	MFWD 170	13,025	200	8	0.056	0.84	1.21	0.34	0.20	2.61	0.46	1.44	4.51
Spray (Bcast/HB)	40' Fold	MFWD 170	13,627	200	8	0.042	0.63	0.91	0.27	0.15	1.97	0.36	1.08	3.41
Spray (Bcast/HB/HD)	27'	MFWD 170	20,451	200	8	0.062	0.94	1.34	0.60	0.22	3.11	0.81	1.60	5.53
Spray (Bcast/HB/HD)	40'	MFWD 170	24,379	200	8	0.042	0.63	0.91	0.48	0.15	2.18	0.65	1.08	3.91
Spray (Broadcast)	27'	MFWD 170	5,495	200	8	0.062	0.94	1.34	0.16	0.22	2.68	0.21	1.60	4.50
Spray (Broadcast)	40'	MFWD 170	6,020	200	8	0.042	0.63	0.91	0.11	0.15	1.81	0.16	1.08	3.06
Spray (Broadcast)	50'	MFWD 170	5,957	200	8	0.033	0.50	0.72	0.09	0.12	1.45	0.12	0.86	2.44
Spray (Broadcast)	53'	MFWD 170	6,823	200	8	0.031	0.47	0.68	0.10	0.11	1.38	0.13	0.81	2.33
Spray (Broadcast)	60'	MFWD 170	7,580	200	8	0.028	0.42	0.60	0.10	0.10	1.23	0.13	0.72	2.09
Spray (Direct/Hood)	8R-30	MFWD 170	14,472	200	8	0.084	1.26	1.82	0.57	0.30	3.97	0.77	2.16	6.91
Spray (Direct/Hood)	8R-38	MFWD 170	15,668	200	8	0.066	1.00	1.43	0.49	0.24	3.17	0.66	1.71	5.55
Spray (Direct/Hood)	12R-30	MFWD 170	18,370	200	8	0.056	0.84	1.21	0.48	0.20	2.75	0.65	1.44	4.85
Spray (Direct/Hood)	12R-38	MFWD 170	18,837	200	8	0.044	0.66	0.95	0.39	0.16	2.18	0.53	1.13	3.85
Spray (Direct/Layby)	8R-30	MFWD 170	9,112	200	8	0.084	1.26	1.82	0.36	0.30	3.76	0.48	2.16	6.41
Spray (Direct/Layby)	8R-38	MFWD 170	10,176	200	8	0.066	1.00	1.43	0.31	0.24	3.00	0.43	1.71	5.14
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	17,524	200	8	0.044	0.66	0.95	0.36	0.16	2.15	0.49	1.13	3.78
Spray (Direct/Layby)	10R-30	MFWD 170	10,489	200	8	0.067	1.01	1.45	0.33	0.24	3.05	0.44	1.73	5.23
Spray (Direct/Layby)	12R-30	MFWD 170	11,817	200	8	0.056	0.84	1.21	0.31	0.20	2.57	0.42	1.44	4.44
Spray (Direct/Layby)	12R-38	MFWD 170	17,524	200	8	0.044	0.66	0.95	0.36	0.16	2.15	0.49	1.13	3.78
Spray (Direct/Layby)	16R-20	MFWD 170	9,843	200	8	0.063	0.95	1.36	0.29	0.23	2.83	0.39	1.62	4.85
Spray (Spot)	27'	MFWD 170	5,495	200	8	0.062	0.94	1.34	0.16	0.22	2.68	0.21	1.60	4.50
Spray (Spot)	40'	MFWD 170	6,020	200	8	0.042	0.63	0.91	0.11	0.15	1.81	0.16	1.08	3.06
Spray (Spot)	50'	MFWD 170	5,957	200	8	0.033	0.50	0.72	0.09	0.12	1.45	0.12	0.86	2.44
Spray (Spot)	53'	MFWD 170	6,823	200	8	0.031	0.47	0.68	0.10	0.11	1.38	0.13	0.81	2.33
Spray (Spot)	60'	MFWD 170	7,580	200	8	0.028	0.42	0.60	0.10	0.10	1.23	0.13	0.72	2.09
Stalk Shredder	14'	MFWD 150	10,850	200	10	0.117	1.28	2.23	1.11	0.37	5.01	0.75	2.53	8.31
Stalk Shredder	20'	MFWD 150	25,301	200	10	0.082	0.90	1.56	1.82	0.26	4.55	1.23	1.77	7.57
Stalk Shredder-Flail	12'	MFWD 150	13,201	200	10	0.137	1.50	2.61	1.58	0.43	6.13	1.07	2.95	10.17
Stalk Shredder-Flail	15'	MFWD 150	15,022	200	10	0.110	1.20	2.08	1.44	0.35	5.08	0.98	2.36	8.43
Stalk Shredder-Flail	18'	MFWD 150	21,133	200	10	0.091	1.00	1.74	1.69	0.29	4.72	1.15	1.97	7.85
Stalk Shredder-Flail	20'	MFWD 150	19,813	200	10	0.082	0.90	1.56	1.43	0.26	4.16	0.97	1.77	6.90
Stalk Shredder-Flail	25'	MFWD 150	24,347	200	10	0.066	0.72	1.25	1.40	0.21	3.59	0.95	1.42	5.96
Subsoiler	3 shank	MFWD 190	3,773	100	15	0.204	2.22	4.91	0.25	0.75	8.15	0.73	5.29	14.19
Subsoiler	4 shank	MFWD 225	5,769	100	15	0.153	1.67	4.37	0.29	0.70	7.05	0.84	4.93	12.83
Subsoiler	5 shank	MFWD 225	6,450	100	15	0.122	1.33	3.48	0.26	0.56	5.64	0.75	3.92	10.33
Subsoiler low-till	4 shank	MFWD 225	1,058	100	15	0.153	1.67	4.37	0.05	0.70	6.81	0.15	4.93	11.90
Subsoiler low-till	6 shank	MFWD 225	13,153	100	15	0.102	1.11	2.91	0.44	0.46	4.94	1.28	3.28	9.51
Wht/Sor Grain Cart	500 bu	MFWD 190	16,979	200	12	0.025	0.27	0.61	0.11	0.09	1.10	0.23	0.66	1.99
Wht/Sor Grain Cart	700 bu	MFWD 190	23,337	200	12	0.021	0.23	0.51	0.13	0.07	0.95	0.26	0.55	1.77

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, 2009

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Captan 50 WP	lb	3.61
Crop Oil Conc.(Pet.)	pt	1.05	Convoy	oz	0.31
Crop Oil Conc.(Veg.)	pt	2.51	Cotton Seed Trt.	acre	20.00
Drift/Defoamer	pt	5.86	Dithane F-45	qt	3.63
Spreader Sticker	pt	2.80	Dithane Rainshield	lb	2.28
Surfactant	pt	1.68	Folicur 3.6	oz	2.33
CLEANING			Fungicide	lb	2.67
Cleaning Peanuts	ton	18.00	Gem 25 WG	oz	3.52
CROP CONSULTANT			Headline	oz	2.08
Rice Consultant	acre	7.00	Headline SBR Copak	oz	1.78
CROP INSURANCE			Manzate 75 DF	lb	2.65
Insurance - Peanuts	acre	13.00	Manzate Flowable	pt	1.90
CUSTOM FERTILIZE			Moncut 70 DF	lb	24.85
App Fert by Air	cwt	7.00	Prevail	lb	28.06
App Fert by Air(Min)	appl	7.00	Provost	oz	2.00
Custom Apply Fert	acre	7.00	Quadris	oz	2.16
CUSTOM LIME			Quadris Ridomil Gold	oz	8.92
Lime (Spread)	ton	38.00	Quilt	pt	16.86
CUSTOM PLANT			Ridomil Gold PC GR	lb	2.05
Custom Plant	acre	8.00	Rovral 4F	pt	17.06
Custom Plant Air	cwt	7.00	Stiletto	oz	0.57
CUSTOM SPRAY			Stratego	pt	19.49
App by Air (2 gal)	appl	4.00	Terrachlor 2EC	pt	2.02
App by Air (3 gal)	appl	5.00	Terrachlor Flowable	pt	4.74
App by Air (5 gal)	appl	6.00	Terraclor Super X EC	pt	3.95
App by Air (10 gal)	appl	8.00	Terraclor Super X G	lb	2.67
Custom Spray	acre	7.00	Tilt 3.6 EC	oz	2.33
DRYING			Tilt/Bravo SE	oz	0.38
Dry Corn	bu	0.19	Uniform	oz	2.99
Dry Grain Sorghum	cwt	0.25	Vitavax 200	oz	0.49
Dry Peanuts	ton	24.00	Vitavax RTU-Thiram	oz	0.33
Dry Rice	bu	0.40	Vitavax T-L	oz	0.29
ERADICATION FEE			GINNING		
Eradication Delta	acre	4.00	Gin & Haul	lb	0.09
Eradication NonDelta	acre	6.25	GROWTH REGULATORS		
Eradication Zone 1	acre	4.00	Early Harvest PGR	oz	1.46
Eradication Zone 1A	acre	4.00	Mepex	oz	0.19
Eradication Zone 1B	acre	4.00	Mepex Gin Out	oz	0.29
Eradication Zone 2	acre	4.00	Mepichlor 4.2% Liq	oz	0.19
Eradication Zone 3	acre	6.50	Mepiquat Chloride	oz	0.16
Eradication Zone 4	acre	6.00	Mepiquat Extra	oz	0.16
FERTILIZERS			Pentia	pt	6.93
Amm Nitrate (34% N)	cwt	28.00	PGR IV	oz	1.56
Amm Sulfate (21% N)	cwt	22.00	PGR Plus	oz	5.48
Anhy Ammonia (82%	cwt	42.00	Pix Plus	oz	0.28
Boron 15%	lb	0.40	Pix Ultra	oz	0.39
Boron Plus	pt	3.87	Stance	pt	16.64
DAP	cwt	48.00	SuperBoll	pt	3.54
Fert 10-34-0	cwt	52.00	HARVEST AIDS		
Fert 11-37-0	cwt	56.00	Accelerate	pt	2.59
Fert 41-0-0-4	cwt	20.00	Aim 2EC	oz	5.82
Phosphorus(46% P2O5)	cwt	46.00	Ammonium Sulfate	lb	0.20
Potash (60% K2O)	cwt	44.00	Boll Buster	pt	2.68
Sulfur 90%	lb	0.20	CottonQuik	pt	3.12
Sulfur Plus	pt	1.24	Def 6	pt	6.75
UAN (32% N)	cwt	24.00	Def/Folex	pt	6.91
Urea, Solid (46% N)	cwt	27.00	Defol 3	gal	3.04
Zinc Sulfate 31%	lb	0.60	Defol 5	gal	4.24
FUNGICIDES			Defol 6	gal	5.20
Abound	pt	35.63	Defol 750	pt	0.94
Absolute 500SC	PT	31.91	Dropp 50 WP	lb	45.45
Allegiance Flowable	pt	50.42	Dropp SC	oz	2.37
Apron Maxx RTA	oz	0.85	ET	pt	43.31
Apron Maxx RTA+Moly	pt	13.24	Ethephon 6E	pt	4.35
Apron XL	oz	8.13	Finish 6	pt	7.61
Apron XL LS	oz	6.37	First Pick	pt	3.07
Artisan	oz	0.76	Folex 6EC	pt	7.06
Bravo Ultrex	lb	6.34	Freefall SC	oz	33.78
Bravo Weather Stick	pt	6.25			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2009 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Ginstar EC	pt	26.29	Classic	oz	14.07
Gramoxone Inteon	oz	0.23	Clearpath	lb	55.03
Gramoxone Max	pt	4.97	Clincher SF	oz	1.74
Harvade 5F	oz	0.60	Cobra 2EC	oz	1.33
Leafless	pt	18.56	Command 3ME	pt	12.93
MFX Cotton Har. Aid	pt	3.64	Conclude XACT	pt	11.32
Prep	pt	4.41	Cornerstone	pt	3.63
Shed-a-leaf	gal	3.00	Cornerstone Plus	pt	3.69
Sodium Chlorate 3L	gal	3.04	Cotoran 4L	pt	5.03
Sodium Chlorate 5L	gal	4.24	Cotoran DF	lb	9.00
Solium Chlorate 6L	gal	5.20	Cotton Pro	pt	3.36
TDZ SC	oz	2.94	Credit Extra	pt	3.91
Thidazuron 50 WSB	oz	2.08	Direx 4L	pt	2.73
Thidiazuron 4lb	oz	2.37	Direx 80 DF	lb	7.37
Thidiazuron 4SC	oz	2.79	Diuron 4L	pt	2.36
Tribufos 6lb	pt	7.15	Diuron 80 DF	lb	4.64
HAULING			Diuron 80%	lb	4.64
Haul Corn	bu	0.20	Domain	lb	12.75
Haul Cotton	lb	0.02	DSMA 4	pt	0.90
Haul Peanuts	ton	14.50	Dual II Magnum	pt	13.47
Haul Rice	bu	0.22	Dual Magnum	pt	12.74
Haul Sorghum	bu	0.20	Duet	pt	3.61
Haul Soybeans	bu	0.20	Envoke	oz	78.53
Haul Wheat	bu	0.20	Equip	oz	10.65
HERBICIDES			Evik DF 80W	lb	6.99
2,4-D Amine 4	pt	1.82	Exceed	oz	10.71
2,4-D LV 4Ester	pt	1.87	Expert	pt	4.06
2,4-D Weedar 64	pt	2.04	Facet 75DF	lb	52.09
AAtrex 4L	pt	1.94	Finesse	oz	16.17
AAtrex NINE-O	lb	3.42	First Rate	oz	27.86
Accent Gold	oz	6.30	Flexstar HL	pt	13.63
Accent SP	oz	31.94	FloMet 4L	pt	5.05
Acramite-4SC	oz	1.37	Flomet DF	lb	6.65
Aim 2EC	oz	6.06	Fluometuron 4lb	pt	5.04
Aim DF	oz	9.65	Frontier 6.0	oz	0.63
Arrosolo	qt	7.88	Fultime	pt	3.91
Arrow 2EC	pt	15.06	Fusilade DX	oz	1.34
Assure II	oz	1.12	Fusion	pt	20.12
Atrazine 4L	pt	1.69	Glyfos	pt	3.77
Atrazine 90DF	lb	3.11	Glyfos Xtra	pt	3.91
Axiom 68DF	lb	22.86	Glyphosate 3lbs a.e	pt	4.00
Backdraft SL	pt	2.40	Glyphosate 3lbs a.e.	oz	0.25
Banvel	pt	8.85	Glystar Plus	pt	3.91
Basagran	pt	10.75	Goal 2XL	pt	10.31
Basis Gold	lb	18.87	Gramoxone Inteon	oz	0.23
Beacon 75% WSP	oz	27.74	Gramoxone Max	pt	4.97
Beyond	oz	4.25	Grandstand R	qt	22.59
Bicep II Magnum	qt	9.46	Guardsman Max	pt	5.74
Blazer Ultra	pt	7.81	Harmony Extra XP	oz	14.65
Bolero 8EC	pt	4.83	Harmony GT	oz	19.98
Boundary 7.5	pt	8.69	Harness	pt	11.84
Buccaneer Plus	pt	4.09	Harness XTRA	pt	6.99
Buctril 2EC	pt	8.63	Hoelon 3EC	pt	10.42
Buctril 4EC	pt	15.37	Honcho	pt	2.78
Butoxone 175(2,4-DB)	pt	2.70	Honcho Plus	pt	3.82
Butoxone 200(2,4-DB)	pt	3.89	Hornet WDG	lb	55.02
Butyrac 175 (2,4-DB)	pt	2.71	Ignite 280	pt	6.57
Butyrac 200 (2,4-DB)	pt	4.24	Karmex DF	lb	4.20
Cadre	oz	5.16	Lariat	qt	5.67
Callisto 4SC	oz	4.61	Lasso 4EC	qt	6.60
Canopy 75%	oz	2.89	Layby Pro	qt	9.16
Canopy EX	oz	6.00	Lexar	pt	5.17
Canopy XL	oz	2.23	Liberty	pt	8.89
Caparol 4L	pt	4.04	Lightning	oz	12.69
Carbaryl 4L	pt	3.58	Linex 4L	pt	7.53
Celebrity Plus	lb	87.24	Londax 60DF	oz	12.70
Clarity	pt	10.87			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2009 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Lorox 50DF	lb	16.56	Ultra Blazer	pt	8.46
Me-Too-Lachlor	pt	6.74	Valor SX	oz	4.31
MSMA 6.6	pt	2.18	Valor XLT	oz	3.13
MSMA6 Plus	pt	1.99	Weedar 64	pt	1.86
Newpath 2SL	oz	3.72	Weedone 638	pt	3.22
Option	oz	9.68	Weedone LV4	pt	2.15
Ordram 15-GM	lb	1.44	Weedone LV6	pt	3.00
Ordram 8-E	pt	7.75	Whip 360	pt	24.12
Osprey	oz	3.42	Zorial Rapid 80DF	lb	15.06
Outlook	pt	18.27	INOCULANT		
Parrlay	pt	8.70	Innoculant (Liquid)	pt	10.34
Peak Accu Pak	oz	12.54	Nitragin S	oz	0.27
Pendimax 3.3	pt	3.08	Optimizer LIFT	oz	0.56
Permit 75 DF	oz	18.07	Vault	oz	1.42
Poast 1.53	pt	8.90	INSECT SCOUTING		
Poast Plus	pt	6.63	Insect Scouting	acre	7.00
Prefix	pt	5.56	INSECTICIDES		
Prometryne	pt	3.76	Acephate 90%	lb	7.97
Propimax EC	pt	33.97	Acephate 90SP	lb	7.51
Prowl 3.3 EC	pt	3.31	Aeris	oz	6.64
Prowl H20	pt	3.82	Ambush 2E	oz	13.13
Pursuit 2S	oz	4.08	Ammo 2.5 EC	oz	0.72
Pursuit DG	oz	11.59	Asana .66 XL	oz	0.72
Pursuit Plus EC	pt	6.31	Baythroid 2	oz	2.36
Python WDG	oz	10.24	Baythroid XL	oz	2.22
Raptor	oz	4.23	Bidrin 8WM	oz	0.86
Reflex 2LC	pt	13.34	Bidrin XL	oz	1.91
Regiment 80WP	oz	32.49	Bifenture 2EC	pt	20.63
Remedy	pt	12.56	Brigade EC	pt	19.04
Resource .86EC	pt	22.60	Brigade WSB	lb	20.32
Riceshot	pt	2.81	Capture 2EC	oz	1.45
Ricestar	pt	18.13	Carbine	oz	4.11
Ricestar HT	pt	18.62	Carbine 50WG	oz	4.11
Rifel	pt	7.35	Centric 40WG	oz	4.45
Roundup Original Max	oz	0.41	Comite ll	pt	7.88
Roundup Original Max	pt	6.56	Confirm 2F	oz	1.49
Roundup Power Max	oz	0.43	Counter 15G	lb	2.51
Roundup PowerMax	pt	6.88	Counter CR	lb	2.65
Roundup WeatherMax	oz	0.50	Couraze 1.6F	pt	26.39
Roundup WeatherMax	pt	8.00	Couraze 2F	pt	33.33
Scepter 70 DG	oz	3.18	Curacron 8E	pt	9.62
Select 2EC	oz	1.34	Decis 1.5EC	oz	2.84
Select Max	pt	15.00	Declare	pt	4.21
Sencor 4F	pt	10.30	Delta Gold	pt	34.38
Sencor DF	lb	16.01	Denim 0.16 EC	pt	26.51
Sequence	pt	5.91	Di-Syston 15G	lb	2.81
Simazine 4L	pt	2.39	Di-Syston 8	pt	13.89
Stalwart	pt	6.54	Diamond .83EC	pt	16.34
Stam 80 EDF	lb	5.32	Dimethoate 4E	pt	4.73
Stam M4	qt	5.90	Dimilin 2L	oz	1.63
Staple	oz	16.01	Dipel DF	lb	10.40
Staple LX	oz	6.93	Dipel ES	pt	4.26
Steadfast	oz	24.13	Discipline 2 EC	oz	1.90
Storm	pt	10.00	Endigo ZC	pt	30.11
Strada WG	oz	5.32	Fanfare 2EC	oz	1.57
Strongarm	oz	41.55	Force 3G	lb	4.67
Superwham	qt	6.68	Furadan 4F	pt	9.52
Suprend	lb	10.48	Gaucho 480	oz	8.56
Surpass EC	qt	19.27	Gaucho 600	oz	6.25
Synchrony XP	oz	6.86	Hero	pt	22.97
Touchdown HiTech	qt	12.36	Incidental Pest Trt	acre	12.00
Touchdown Total	qt	13.44	Intrepid 2F	oz	1.97
Treflan HFP	pt	3.33	Intruder 70WSP	oz	8.38
Treflan TR-10	lb	0.77	Karate Z	oz	3.09
Trifluralin 4EC	pt	2.28	Kelthane MF 4EC	pt	5.25

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2009 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Knack	pt	86.07	IRRIGATION SUPPLIES		
Lannate LV	pt	7.67	Roll-Out Pipe	ft	0.20
Lannate SP	oz	24.27	SEED/PLANTS		
Larvin 3.2	oz	0.51	Corn Seed BtRR	thous	2.42
Leverage 2.7	oz	2.69	Corn Seed RR	thous	2.25
Lorsban 15G	lb	1.58	Cotton Seed BGllRRF	thous	0.52
Lorsban 4E	pt	4.45	Cotton Seed BGRR	thous	0.48
Malathion 5E	pt	3.24	Cotton Seed BGRRF	thous	0.51
Malathion 8E	pt	4.25	Cotton Seed Liberty	thous	0.62
Malathion ULV	pt	4.93	Cotton Seed RR	thous	0.48
Methyl Parathion	pt	4.23	Cotton Seed RRF	thous	0.50
Monitor 4	pt	14.97	Peanut Seed	lb	0.86
Mustang Max	oz	1.61	Rice Clearfield 161	lb	0.63
Oberon 4 SC	pt	70.71	Rice Clearfield Hyb	lb	3.10
Orthene 90S	lb	8.42	Rice Seed (Levees)	lb	0.32
Penncap-M	pt	3.55	Rice Seed CF(Levees)	lb	0.63
Phorate	lb	2.83	Rice Seed CFH(Levee)	lb	3.10
Pounce 25WP	lb	10.94	Rice Seed Conv.	lb	0.32
Prolex	oz	2.94	Sorghum Concept	lb	1.59
Provado 1.6F	oz	2.65	Sorghum Hybrid Sudax	lb	0.60
Sevin 4F	pt	3.88	Soybean Seed RR	lb	0.74
Sevin 80S	lb	6.13	Soybean Seed Stack	lb	0.72
Sevin XLR Plus	qt	9.44	Wheat Seed Private	lb	0.29
Steward	pt	25.11	SURVEY & MARK LEVEES		
Temik 15G Grit	lb	3.49	Survey & Mark Levees	acre	4.00
Temik 15G Gypsum	lb	3.60	Survey & Mark Levees	acre	3.50
Thimet 20-G Lock N L	lb	2.75	TECHNOLOGY FEE		
Thionex 3 EC	pt	3.60	BG Cot Tech Fee	cap/ac	19.50
Thionex 50W	lb	8.35	BG II/RR Tech Fee	cap/ac	56.00
Tombstone 2E	pt	40.04	BG ll/RRF Tech Fee	thous	1.38
Tracer 4SC	oz	6.58	BG ll/RRF Tech Fee	cap/ac	64.00
Trimax	oz	4.13	BG/RR Cot Tech Fee	thous	1.05
Trimax Pro	oz	4.08	BG/RR Cot Tech Fee	cap/ac	49.00
Vydate C-LV	oz	0.60	RR Cotton Tech Fee	thous	0.62
Warrior Z	oz	1.88	RR Cotton Tech Fee	cap/ac	29.00
Zeal	oz	19.29	RRF Cotton Tech Fee	thous	0.86
Zephyr	oz	4.37	RRF Cotton Tech Fee	cap/ac	40.00

Appendix Table 5. Estimated fuel prices and interest rates, Mississippi, 2009

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	2.46
Gasoline	gal	2.40
LP Gas	gal	2.64
INTEREST RATES		
Short-term	%	6.00
Intermediate-term	%	6.75

Appendix Table 6. Labor types, wage rates and unallocated labor multipliers for crop enterprises, Mississippi, 2009

Item name	
LABOR TYPES	WAGE RATE ($/HR)
OPERATOR LABOR	10.91
IRRIGATE LABOR	8.19
HAND LABOR	8.19
HAND. & STOR. LABOR	8.19
RICE MGT. LABOR	8.19
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, 2009

	Unit	Futures Contract Month	Futures Contract Price[a]	Basis[b]	Forward Contract Price[c]	Loan Rate[d]	Budget Price[e]
Corn	bu	Dec '09	4.68	-0.3033	4.38	2.10	4.38
Cotton Lint	lb	Dec '09	0.622	-0.0255	0.622	0.524	0.622
Cotton Seed	lb						0.051[f]
Grain Sorghum	bu				4.25	2.01	4.25
Peanuts	ton				500.00	355.00	500.00
Rice	bu	Sep '09	7.23	-0.5970	6.63	2.96	6.63
Soybeans	bu	Nov '09	9.60	-0.3720	9.22	5.15	9.22
Wheat	bu	Jul '09	6.17	-0.6063	5.57	2.41	5.57

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

[b] The basis is computed by subtracting the 2001-2008 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 contractprice plus the basis. The forward contract price for grain sorghum is 97% 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 2008 crop year for soybeans, corn, grain sorghum, and wheat. 2008 Mississippi base loan rate for the Delta area for cotton. 2008 Mississippi loan rate for long grain rice. 2008 national average loan rate for peanuts.

[e] Price used in the 2009 MAFES Planning Budgets.

[f] Cottonseed price is the marketing year average price averaged over the years 2003-2007, 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, 2009

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'		0.91	0.20	0.41		0.09	1.61	1.15	2.76
Set Up Engine										
IRRIGATE LABOR	hour				0.20		0.01	0.21		0.21
Ditcher (1m/160a)			0.15	0.04	0.10		0.01	0.30	0.18	0.48
Roll-Out Pipe	ft	6.60					0.13	6.73		6.73
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.21	0.06	0.34		0.01	0.62	0.54	1.16
IRRIGATE LABOR	hour				1.64		0.03	1.67		1.67
Apply Water										
IRRIGATE LABOR	hour				0.20			0.20		0.20
Apply Water										
IRRIGATE LABOR	hour				0.20			0.20		0.20
Apply Water										
IRRIGATE LABOR	hour				0.20			0.20		0.20
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.31	0.08	0.51			0.90	0.82	1.72
Land Forming ($300)	each								25.17	25.17
Well & Pump, Furrow	each			2.03			0.04	2.07	7.08	9.15
Main Line Pipe	each								4.98	4.98
Engine, RPF, ESB	each								5.79	5.79
1st June Irrigation	ac-in		6.01	0.78			0.14	6.93		6.93
2nd June Irrigation	ac-in		6.01	0.78			0.14	6.93		6.93
July Irrigation	ac-in		6.01	0.78			0.10	6.89		6.89
TOTALS		6.60	19.61	4.75	3.80	0.00	0.70	35.46	45.71	81.17

Note: Cost of production estimates are based on 2008 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, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	DIRECT COST FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.41		0.01	0.42		0.42
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.35	0.08	0.18		0.02	0.63	0.55	1.18
Survey & Mark Levees	acre	2.00					0.05	2.05		2.05
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.46	0.11	0.23		0.02	0.82	0.74	1.56
Butt Levees										
Blade-Box	6'-7'		0.33	0.06	0.22		0.02	0.63	0.33	0.96
IRRIGATE LABOR	hour				0.61		0.02	0.63		0.63
Apply Water										
IRRIGATE LABOR	hour				0.10			0.10		0.10
Tear Down Levees										
Levee Splitter (1/80	8 blade		0.32	0.08	0.18		0.01	0.59	0.46	1.05
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.46	0.11	0.23		0.02	0.82	0.74	1.56
Butt Levees										
Blade-Box	6'-7'		0.33	0.06	0.22		0.01	0.62	0.33	0.95
IRRIGATE LABOR	hour				0.61		0.01	0.62		0.62
Apply Water										
IRRIGATE LABOR	hour				0.10			0.10		0.10
Tear Down Levees										
Levee Splitter (1/80	8 blade		0.32	0.08	0.18		0.01	0.59	0.46	1.05
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.46	0.11	0.23		0.01	0.81	0.74	1.55
Butt Levees										
Blade-Box	6'-7'		0.33	0.06	0.22		0.01	0.62	0.33	0.95
IRRIGATE LABOR	hour				0.61		0.01	0.62		0.62
Apply Water										
IRRIGATE LABOR	hour				0.10			0.10		0.10
Tear Down Levees										
Levee Splitter (1/80	8 blade		0.32	0.08	0.18		0.01	0.59	0.46	1.05
Tear Down Levees										
Levee Splitter (1/80	8 blade		0.24	0.05	0.14			0.43	0.34	0.77
Land Forming ($75)	each								6.29	6.29
Well & Pump, Flood	each			4.05			0.10	4.15	14.16	18.31
Engine, CF, 75	each								11.57	11.57
June Irrigation	ac-in		9.02	1.56			0.26	10.84		10.84
July Irrigation	ac-in		9.02	1.56			0.21	10.79		10.79
August Irrigation	ac-in		9.02	1.56			0.16	10.74		10.74
TOTALS		2.00	30.98	9.61	4.75	0.00	0.97	48.31	37.50	85.81

Note: Cost of production estimates are based on 2008 input prices.

Appendix Table 10. Estimated costs for field operations, per acre
Irrigation with a 1/2-mile center pivot system
530-acre system, 7.5 ac-in., Delta Area, Mississippi, 2009

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				0.06			0.06		0.06
Maintenance										
IRRIGATE LABOR	hour				0.25		0.01	0.26		0.26
Apply Water										
IRRIGATE LABOR	hour				0.03			0.03		0.03
Apply Water										
IRRIGATE LABOR	hour				0.05			0.05		0.05
Apply Water										
IRRIGATE LABOR	hour				0.03			0.03		0.03
Pivot, 1/2 CP	each			4.91			0.12	5.03	22.74	27.77
Well & Pump, 1/2 CP	each			0.82			0.02	0.84	2.85	3.69
Engine, 1/2 CP, 225	each								3.32	3.32
June Irr. 3app@.75"	ac-in		10.33	0.40			0.27	11.00		11.00
July Irr. 4app@.75"	ac-in		13.78	0.54			0.29	14.61		14.61
Aug Irr. 3app@.75"	ac-in		10.33	0.40			0.16	10.89		10.89
TOTALS		0.00	34.44	7.07	0.42	0.00	0.87	42.80	28.91	71.71

Note: Cost of production estimates are based on 2008 input prices.

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