

SOYBEANS
2013
PLANNING BUDGETS

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

December 2012

Foreword

This report is designed to provide necessary planning data to farmers, research and extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled "**Returns Above Specified Expenses.**" Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. "**Returns Above Direct Expenses**" should be used in making 2013 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses.**"

Acknowledgments

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

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

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

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

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Table of Contents

	Page
Foreword.....	i
Acknowledgments.....	i
2013 Budget Committees.....	ii
2013 Planning Budgets	1
Budgets for Agricultural Enterprises.....	1
Methods and Procedures	1
Production Practices	1
Machinery	1
Estimates of Direct Costs.....	2
Estimates of Fixed Costs.....	2
Estimates of Returns	3
Irrigation Costs	3
Net Returns	3
 Enterprise Budgets	
Table	
1 Soybeans, early-planted, RR, stale seedbed, 12R 30” Delta Area.....	6
2 Soybeans, early-planted, RR, stale seedbed, 12R 30” Furrow irrigated, 9 ac-in., Delta Area.....	12
3 Soybeans, May-planted, RR, 12R 30” Delta Area.....	18
4 Soybeans, May-planted, RR, 12R 30” Flood irrigated, 13.5 ac-in., Delta Area	24
5 Soybeans after wheat, RR, 12R 30” Pivot irrigated, 7.5 ac-in., Delta Area.....	30
6 Soybeans, early-planted, RR, reduced tillage, 12R 30” Non-Delta Area.....	36
7 Soybeans, May-planted, RR, convent. tillage, 12R 30” Non-Delta Area	42
8 Soybeans after wheat, RR, no-till, 12R 30” Non-Delta Area.....	48
 Appendix	
Table	
1 Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed costs per hour.....	56
2 Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed costs per acre	57
3 Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed costs per acre.....	58
4 Operating inputs: estimated prices.....	65

5	Estimated fuel prices and interest rates	69
6	Labor types, wage rates and unallocated labor multipliers for crop enterprises.....	69
7	Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets	70
8	Early soybeans irrigated with roll-out pipe 160-acre system, 9 ac-in., Delta Area	71
9	Irrigation with a contour flood system 80-acre system, 13.5 ac-in., Delta Area	72
10	Irrigation with a ½-mile center pivot system 530-acre system, 7.5 ac-in., Delta Area	73
	Literature Cited	75

2013 Planning Budgets

Budgets for Agricultural Enterprises

This publication provides economic and technical information in the form of enterprise budgets for a major crop produced by Mississippi farmers. A multidisciplinary approach involving researchers and extension personnel was used to determine production practices and input quantities, and to estimate costs and returns for each enterprise (14). The purpose of this section is to present the methods and procedures used to calculate costs and returns for each budget included in this publication.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the food and fiber industry. They are used:

- by farmers for planning,
- by extension personnel in providing educational programs to farmers,
- by lenders as a basis for credit,
- to provide basic data for research, and
- to inform non-farmers of the costs incurred by farmers in the production of food and fiber crops.

A budget should be prepared with a specific objective in mind. The budgets in this report were prepared to provide general information for several different uses. They provide information concerning general levels of costs and returns which will need to be adjusted for specific situations. Most users should think of these budgets as a first approximation and then make appropriate adjustments using the "Your Farm" column provided on each budget to add, delete, or change costs or incomes to reflect their specific situations.

Methods and Procedures

Production Practices

The production practices listed in each budget are the result of a combined effort by researchers and extension personnel to represent those practices that producers could use in a specific production system. Producers might use different practices in their own operations. If different types and quantities of operating inputs are to be used, then the budgeted expenses should be changed to more accurately reflect actual input usage. The Mississippi Agricultural Statistics Service conducts a survey of producers of major field crops in Mississippi. Data collected from producers are a part of the information used in selecting the practices included in each budget.

Committees made up of appropriate disciplines from the Mississippi Agricultural and Forestry Experiment Station, the Mississippi State University Extension Service, and the U.S. Department of Agriculture review and update the practices in the budgets every year. The updates are based on the collective judgment of the committee members. Quantities of materials and individual production practices budgeted are based on survey data from producers and/or generally accepted recommendations by committee members.

Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2012. (Appendix Tables 1, 2, and 3).

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

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

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

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

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

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

The labor wage rate per hour includes social security, accident and unemployment insurance, and some perquisites (11). Labor costs are estimated for four labor categories: operator labor, hand labor, irrigation labor, and unallocated labor. Operator labor and hand labor represent estimates of labor required to perform

the in-field tasks. Operator labor is that labor required to operate all power-driven equipment. Irrigation labor is used to perform tasks associated with an irrigation system. Unallocated labor is an estimate of labor that is not used directly in producing the enterprise. Its cost is estimated as a percentage of operator labor (11). The percentages used for the various crop enterprises are listed in Appendix Table 6.

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

Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2012 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

The futures price for an appropriate contract month is determined by averaging the closing prices for the month of October. The basis is determined by subtracting the average daily cash price for the month of October from the average daily closing price of the near contract month. These average futures prices and the basis adjustments are presented in Appendix Table 7.

A special table is presented to illustrate the effects of alternative levels of yields and prices on net returns. The budgeted yield and the budgeted price are used as base values (100 percent). Yields are then varied from 50 to 150 percent of the base yield while prices are varied from 75 to 125 percent of the base price. Net returns are computed for each combination of yield and price.

Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8, 9, and 10. A dryland crop budget may be converted to an irrigated crop budget by adding the appropriate direct and fixed costs to the costs of the dryland crop. Also, adjustments in crop yields and other costs may be required with the addition of supplemental irrigation.

Net Returns

Net returns are generally considered to be the amount left after subtracting all costs from all incomes for a particular enterprise. In these budgets, "RETURNS ABOVE DIRECT EXPENSES" and "RETURNS ABOVE TOTAL SPECIFIED EXPENSES" are used as a proxy for the economic concepts of net returns above variable costs and net returns above variable plus fixed costs, respectively. Some items are intentionally left out of these calculations, i.e., costs for land or land rent, taxes, insurance premiums, general farm overhead, and expected incomes from government payments or insurance payments. These costs and incomes vary widely among farms and farm situations so as to make routine calculation for representative situations impractical. These items should, however, be considered by each producer and factored into the final budget each producer develops for his own situation.

Enterprise Budgets

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	3.5000	21.00	_____
HARVEST AIDS					
Paraquat	oz	0.25	8.0000	2.00	_____
Sodium Chlorate 3L	gal	3.45	0.5000	1.73	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	29.30	0.2800	8.20	_____
Potash (60% K2O)	cwt	29.80	0.4000	11.92	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Headline EC	oz	2.81	3.0000	8.43	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.79	6.0000	10.74	_____
2,4-D Amine 4	pt	2.54	2.0000	5.08	_____
Valor SX	oz	5.55	2.0000	11.10	_____
Prefix	pt	6.84	2.0000	13.68	_____
INSECTICIDES					
Karate Z	oz	3.15	0.9600	3.02	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.1000	0.35	_____
HAULING					
Haul Soybeans/Field	bu	0.28	42.0000	11.76	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2000	9.00	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.3258	3.82	_____
Harvesters	hour	11.71	0.1021	1.20	_____
HAND LABOR					
Implements	hour	9.06	0.1127	1.02	_____
UNALLOCATED LABOR	hour	11.73	0.3852	4.52	_____
DIESEL FUEL					
Tractors	gal	3.50	3.1870	11.17	_____
Harvesters	gal	3.50	1.3935	4.88	_____
REPAIR & MAINTENANCE					
Implements	acre	4.10	1.0000	4.10	_____
Tractors	acre	1.58	1.0000	1.58	_____
Harvesters	acre	2.76	1.0000	2.76	_____
INTEREST ON OP. CAP.	acre	4.71	1.0000	4.71	_____
TOTAL DIRECT EXPENSES				222.45	_____
FIXED EXPENSES					
Implements	acre	8.57	1.0000	8.57	_____
Tractors	acre	10.04	1.0000	10.04	_____
Harvesters	acre	11.04	1.0000	11.04	_____
TOTAL FIXED EXPENSES				29.65	_____
TOTAL SPECIFIED EXPENSES				252.10	_____

Note: Cost of production estimates are based on 2012 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

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

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

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

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

Note: Cost of production estimates are based on 2012 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Subsoiler	3 shank	MFWD 190	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.20	Oct	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Oct		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.2800				
Potash (60% K2O)	cwt					0.4000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
2,4-D Amine 4	pt					2.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Nitrastick S	lbseed					50.0000				
Valor SX	oz					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Headline EC	oz					3.0000				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					0.9600				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			0.50	Aug	0.5000				
Paraquat	oz					8.0000				
Sodium Chlorate 3L	gal					0.5000				
Surfactant	pt					0.1000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					42.0000				
TOTALS							0.42	0.42	0.54	0.38

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

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

Note: Cost of production estimates are based on 2012 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	548.10
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	6.00	9.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.73	0.00
FERTILIZERS	20.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	0.00	8.43	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	8.66	0.00	11.10	20.84	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.02	4.92	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.76
CUSTOM LIME	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
LABOR	4.65	0.00	0.00	0.00	0.00	0.00	2.11	1.52	0.00	0.00	0.00	2.28
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	6.91	0.00	0.00	0.00	0.00	0.00	2.32	1.94	0.00	0.00	0.00	4.88
REPAIR & MAINTENANCE	2.29	0.00	0.00	0.00	0.00	0.00	2.05	0.58	0.00	0.00	0.00	3.52
INTEREST ON OP. CAP.	1.83	0.00	0.00	0.00	0.41	0.00	1.66	0.44	0.00	0.18	0.11	0.08
TOTAL DIRECT EXPENSES	44.80	0.00	0.00	0.00	15.07	0.00	79.00	25.32	0.00	17.63	18.11	22.52
NET INCOME	-44.80	0.00	0.00	0.00	-15.07	0.00	-79.00	-25.32	0.00	-17.63	-18.11	525.58
NET INCOME TO DATE	-44.80	-44.80	-44.80	-44.80	-59.87	-59.87	-138.87	-164.19	-164.19	-181.82	-199.93	325.65

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

Fertilization decisions should be based on soil tests. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

* Lease costs are based on hourly usage costs.

Table 1.F Estimated returns for various price/yield combinations, per acre
 Soybeans, early-planted, RR, stale seedbed, 12R 30"
 Delta Area, Mississippi, 2013

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

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2012 input prices.

Table 2.A Estimated costs per acre
 Soybeans, early-planted, RR, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2013

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	3.5000	21.00	_____
HARVEST AIDS					
Paraquat	oz	0.25	4.0000	1.00	_____
Sodium Chlorate 3L	gal	3.45	0.2500	0.86	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	29.30	0.4000	11.72	_____
Potash (60% K2O)	cwt	29.80	0.6000	17.88	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.47	3.0000	7.41	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.79	6.0000	10.74	_____
2,4-D Amine 4	pt	2.54	2.0000	5.08	_____
Valor SX	oz	5.55	2.0000	11.10	_____
Prefix	pt	6.84	2.0000	13.68	_____
INSECTICIDES					
Karate Z	oz	3.15	0.9600	3.02	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
Intrepid 2F	oz	1.81	1.0000	1.81	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.0750	0.26	_____
HAULING					
Haul Soybeans/Field	bu	0.28	65.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2000	9.00	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.4785	5.61	_____
Harvesters	hour	11.71	0.1021	1.20	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1127	1.02	_____
UNALLOCATED LABOR					
	hour	11.72	0.4519	5.30	_____
DIESEL FUEL					
Tractors	gal	3.50	4.5544	15.96	_____
Harvesters	gal	3.50	1.3935	4.88	_____
Roll-Out Pipe Irr.	gal	3.50	7.3316	25.65	_____
REPAIR & MAINTENANCE					
Implements	acre	4.73	1.0000	4.73	_____
Tractors	acre	2.22	1.0000	2.22	_____
Harvesters	acre	2.76	1.0000	2.76	_____
Roll-Out Pipe Irr.	acre	5.80	1.0000	5.80	_____
INTEREST ON OP. CAP.	acre	6.00	1.0000	6.00	_____
TOTAL DIRECT EXPENSES				289.80	_____
FIXED EXPENSES					
Implements	acre	10.72	1.0000	10.72	_____
Tractors	acre	14.14	1.0000	14.14	_____
Harvesters	acre	11.04	1.0000	11.04	_____
Roll-Out Pipe Irr.	acre	48.18	1.0000	48.18	_____
TOTAL FIXED EXPENSES				84.08	_____
TOTAL SPECIFIED EXPENSES				373.88	_____

Note: Cost of production estimates are based on 2012 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 2.B Summary of estimated costs and returns per acre
 Soybeans, early-planted, RR, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2013

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

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

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

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

Note: Cost of production estimates are based on 2012 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 2.C Estimated resource use for field operations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Subsoiler	3 shank	MFWD 190	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.20	Oct	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Oct		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.4000				
Potash (60% K2O)	cwt					0.6000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed-Roll-Fold.	8R-38	MFWD 190	0.074	1.00	Oct		0.07	0.07	0.07	0.06
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
2,4-D Amine 4	pt					2.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Nitrastick S	lbseed					50.0000				
Valor SX	oz					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Quadris	oz					3.0000				
App by Air (5 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					0.9600				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			0.25	Aug	0.2500				
Intrepid 2F	oz					1.0000				
Surfactant	pt					0.0250				
App by Air (5 gal)	appl			0.25	Aug	0.2500				
Paraquat	oz					4.0000				
Sodium Chlorate 3L	gal					0.2500				
Surfactant	pt					0.0500				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					65.0000				
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.58	0.58	1.05	0.45

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 2.D Estimated costs for field operations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2013

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

Note: Cost of production estimates are based on 2012 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 2.E Estimated monthly income and expense flows per acre
 Soybeans, early-planted, RR, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2013

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	848.25
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	6.00	9.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.86	0.00
FERTILIZERS	29.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	0.00	7.41	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	8.66	0.00	11.10	20.84	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.02	6.73	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.20
CUSTOM LIME	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
LABOR	6.74	0.00	0.00	0.00	0.00	0.00	2.11	1.75	2.76	0.23	0.00	2.84
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	10.75	0.00	0.00	0.00	0.00	0.00	2.32	1.94	17.61	8.55	0.00	5.32
REPAIR & MAINTENANCE	3.38	0.00	0.00	0.00	0.00	0.00	2.05	0.58	4.77	1.12	0.00	3.61
INTEREST ON OP. CAP.	2.53	0.00	0.00	0.00	0.41	0.00	1.66	0.44	0.47	0.27	0.12	0.10
TOTAL DIRECT EXPENSES	62.00	0.00	0.00	0.00	15.07	0.00	79.00	25.55	33.53	26.60	17.98	30.07
NET INCOME	-62.00	0.00	0.00	0.00	-15.07	0.00	-79.00	-25.55	-33.53	-26.60	-17.98	818.18
NET INCOME TO DATE	-62.00	-62.00	-62.00	-62.00	-77.07	-77.07	-156.07	-181.62	-215.15	-241.75	-259.73	558.45

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

* Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre
 Soybeans, early-planted, RR, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2013

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

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2012 input prices.

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

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

Note: Cost of production estimates are based on 2012 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

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

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

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

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

Note: Cost of production estimates are based on 2012 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.
Fertilization decisions should be based on soil tests. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Subsoiler	3 shank	MFWD 190	0.204	0.20	Nov		0.04	0.04	0.04	0.03
Disk Harrow	24'	MFWD 190	0.081	0.25	Nov		0.02	0.02	0.02	0.01
Lime (Spread)	ton			0.20	Nov	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Nov		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.2800				
Potash (60% K2O)	cwt					0.4000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May		0.06	0.06	0.06	0.05
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Nitrastick S	lbseed					50.0000				
Valor SX	oz					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
App by Air (5 gal)	appl			0.75	Jul	0.7500				
Quadris	oz					4.5000				
Karate Z	oz					1.4400				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			0.75	Aug	0.7500				
Intrepid 2F	oz					3.0000				
Surfactant	pt					0.0750				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					30.0000				
TOTALS							0.44	0.44	0.56	0.40

Note: Cost of production estimates are based on 2012 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

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

Note: Cost of production estimates are based on 2012 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	391.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.50	10.50	0.00	0.00
FERTILIZERS	20.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	11.12	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	28.36	3.58	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.54	10.35	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40
CUSTOM LIME	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
LABOR	1.90	0.00	0.00	0.00	0.00	1.82	4.26	0.76	0.00	0.00	0.00	2.28
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.68	0.00	0.00	0.00	0.00	2.80	5.42	0.97	0.00	0.00	0.00	4.88
REPAIR & MAINTENANCE	0.73	0.00	0.00	0.00	0.00	1.18	3.02	0.29	0.00	0.00	0.00	3.52
INTEREST ON OP. CAP.	1.46	0.00	0.00	0.00	0.00	0.14	2.16	0.10	0.28	0.22	0.00	0.07
TOTAL DIRECT EXPENSES	35.89	0.00	0.00	0.00	0.00	5.94	102.98	5.70	20.44	21.33	0.00	19.15
NET INCOME	-35.89	0.00	0.00	0.00	0.00	-5.94	-102.98	-5.70	-20.44	-21.33	0.00	372.35
NET INCOME TO DATE	-35.89	-35.89	-35.89	-35.89	-35.89	-41.83	-144.81	-150.51	-170.95	-192.28	-192.28	180.07

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

Fertilization decisions should be based on soil tests. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

* Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre
 Soybeans, May-planted, RR, 12R 30"
 Delta Area, Mississippi, 2013

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

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2012 input prices.

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	3.0000	18.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	29.30	0.4000	11.72	_____
Potash (60% K2O)	cwt	29.80	0.6000	17.88	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.47	6.0000	14.82	_____
HERBICIDES					
Valor SX	oz	5.55	2.0000	11.10	_____
Glyphosate 3lbs a.e	pt	1.79	4.0000	7.16	_____
Prefix	pt	6.84	2.0000	13.68	_____
INSECTICIDES					
Karate Z	oz	3.15	1.9200	6.05	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
Intrepid 2F	oz	1.81	4.0000	7.24	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.1000	0.35	_____
HAULING					
Haul Soybeans/Field	bu	0.28	53.0000	14.84	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2000	9.00	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.5697	6.68	_____
Harvesters	hour	11.71	0.1021	1.20	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1127	1.02	_____
UNALLOCATED LABOR	hour	11.72	0.4221	4.95	_____
DIESEL FUEL					
Tractors	gal	3.50	5.1749	18.14	_____
Harvesters	gal	3.50	1.3935	4.88	_____
Contour Flood Irr.	gal	3.50	10.9974	38.49	_____
REPAIR & MAINTENANCE					
Implements	acre	5.02	1.0000	5.02	_____
Tractors	acre	2.55	1.0000	2.55	_____
Harvesters	acre	2.76	1.0000	2.76	_____
Contour Flood Irr.	acre	11.57	1.0000	11.57	_____
INTEREST ON OP. CAP.	acre	5.99	1.0000	5.99	_____
TOTAL DIRECT EXPENSES				304.84	_____
FIXED EXPENSES					
Implements	acre	11.01	1.0000	11.01	_____
Tractors	acre	16.12	1.0000	16.12	_____
Harvesters	acre	11.04	1.0000	11.04	_____
Contour Flood Irr.	acre	36.52	1.0000	36.52	_____
TOTAL FIXED EXPENSES				74.69	_____
TOTAL SPECIFIED EXPENSES				379.53	_____

Note: Cost of production estimates are based on 2012 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 4.B Summary of estimated costs and returns per acre
Soybeans, May-planted, RR, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2013

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

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

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

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

Note: Cost of production estimates are based on 2012 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 4.C Estimated resource use for field operations, per acre
 Soybeans, May-planted, RR, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.20	Nov	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Nov		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.4000				
Potash (60% K2O)	cwt					0.6000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May		0.06	0.06	0.06	0.05
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Nitrastick S	lbseed					50.0000				
Valor SX	oz					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris	oz					6.0000				
Karate Z	oz					1.9200				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Intrepid 2F	oz					4.0000				
Surfactant	pt					0.1000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					53.0000				
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.67	0.67	1.09	0.42

Note: Cost of production estimates are based on 2012 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

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

Note: Cost of production estimates are based on 2012 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 4.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, RR, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2013

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	691.65
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	12.00	0.00	0.00
FERTILIZERS	29.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	14.82	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	28.36	3.58	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.05	12.16	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.84
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
LABOR	2.35	0.00	0.00	0.00	0.00	1.82	4.71	2.42	1.47	1.47	0.15	2.28
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.38	0.00	0.00	0.00	0.00	2.80	5.42	15.87	14.41	14.41	0.34	4.88
REPAIR & MAINTENANCE	1.36	0.00	0.00	0.00	0.00	1.18	3.02	7.76	2.50	2.50	0.06	3.52
INTEREST ON OP. CAP.	1.94	0.00	0.00	0.00	0.00	0.14	2.17	0.56	0.64	0.45	0.00	0.09
TOTAL DIRECT EXPENSES	47.63	0.00	0.00	0.00	0.00	5.94	103.44	32.44	45.89	43.34	0.55	25.61
NET INCOME	-47.63	0.00	0.00	0.00	0.00	-5.94	-103.44	-32.44	-45.89	-43.34	-0.55	666.04
NET INCOME TO DATE	-47.63	-47.63	-47.63	-47.63	-47.63	-53.57	-157.01	-189.45	-235.34	-278.68	-279.23	386.81

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

Fertilization decisions should be based on soil tests. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre
 Soybeans, May-planted, RR, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2013

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

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2012 input prices.

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	3.0000	18.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	29.30	0.4000	11.72	_____
Potash (60% K2O)	cwt	29.80	0.6000	17.88	_____
FUNGICIDES					
CruiserMaxx	oz	4.07	1.6000	6.51	_____
Quadris	oz	2.47	6.0000	14.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.79	5.0000	8.95	_____
Valor SX	oz	5.55	2.0000	11.10	_____
Prefix	pt	6.84	2.0000	13.68	_____
INSECTICIDES					
Karate Z	oz	3.15	1.7000	5.36	_____
Acephate 90SP	lb	6.56	0.7500	4.92	_____
Intrepid 2F	oz	1.81	4.0000	7.24	_____
Baythroid XL	oz	2.27	2.1300	4.84	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.04	50.0000	52.00	_____
ADJUVANTS					
Surfactant	pt	3.50	0.1000	0.35	_____
HAULING					
Haul Soybeans/Field	bu	0.28	45.0000	12.60	_____
CUSTOM LIME					
Lime (Spread)	ton	45.00	0.2000	9.00	_____
INOCULANT					
Nitrastick S	lbseed	0.02	50.0000	1.25	_____
OPERATOR LABOR					
Tractors	hour	11.71	0.1550	1.82	_____
Harvesters	hour	11.71	0.1021	1.20	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.1197	1.08	_____
UNALLOCATED LABOR	hour	11.66	0.2212	2.58	_____
DIESEL FUEL					
Tractors	gal	3.50	1.5163	5.32	_____
Harvesters	gal	3.50	1.3935	4.88	_____
1/2-mi Pivot Irr.	gal	3.50	16.4057	57.43	_____
REPAIR & MAINTENANCE					
Implements	acre	2.95	1.0000	2.95	_____
Tractors	acre	0.76	1.0000	0.76	_____
Harvesters	acre	2.76	1.0000	2.76	_____
1/2-mi Pivot Irr.	acre	9.90	1.0000	9.90	_____
INTEREST ON OP. CAP.	acre	5.13	1.0000	5.13	_____
TOTAL DIRECT EXPENSES				296.50	_____
FIXED EXPENSES					
Implements	acre	5.18	1.0000	5.18	_____
Tractors	acre	4.77	1.0000	4.77	_____
Harvesters	acre	11.04	1.0000	11.04	_____
1/2-mi Pivot Irr.	acre	35.62	1.0000	35.62	_____
TOTAL FIXED EXPENSES				56.61	_____
TOTAL SPECIFIED EXPENSES				353.11	_____

Note: Cost of production estimates are based on 2012 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.
Fertilization decisions should be based on soil tests. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 5.B Summary of estimated costs and returns per acre
 Soybeans after wheat, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2013

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

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

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

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

Note: Cost of production estimates are based on 2012 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.
Fertilization decisions should be based on soil tests. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 5.C Estimated resource use for field operations, per acre
Soybeans after wheat, RR, 12R 30"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Lime (Spread)	ton			0.20	Nov	0.2000				
Spin Spreader	5 ton	MFWD 190	0.042	0.40	Nov		0.01	0.01	0.03	0.01
Phosphorus(46% P2O5)	cwt					0.4000				
Potash (60% K2O)	cwt					0.6000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Nitrastick S	lbseed					50.0000				
Valor SX	oz					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Quadris	oz					6.0000				
Karate Z	oz					1.7000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Intrepid 2F	oz					4.0000				
Surfactant	pt					0.1000				
Baythroid XL	oz					2.1300				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans/Field	bu					45.0000				
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.25	0.25	0.42	0.22

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

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

Note: Cost of production estimates are based on 2012 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 5.E Estimated monthly income and expense flows per acre
 Soybeans after wheat, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2013

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	587.25
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.00	0.00	0.00
FERTILIZERS	29.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	14.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.68	19.05	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.36	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.60
CUSTOM LIME	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00
LABOR	0.52	0.00	0.00	0.00	0.00	0.00	0.34	2.86	1.16	0.04	0.00	2.23
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.58	0.00	0.00	0.00	0.00	0.00	0.00	20.52	24.42	17.23	0.00	4.88
REPAIR & MAINTENANCE	0.18	0.00	0.00	0.00	0.00	0.00	0.00	10.79	1.26	0.62	0.00	3.52
INTEREST ON OP. CAP.	1.69	0.00	0.00	0.00	0.00	0.00	0.01	1.93	0.65	0.77	0.00	0.08
TOTAL DIRECT EXPENSES	41.57	0.00	0.00	0.00	0.00	0.00	0.35	110.54	46.54	74.19	0.00	23.31
NET INCOME	-41.57	0.00	0.00	0.00	0.00	0.00	-0.35	-110.54	-46.54	-74.19	0.00	563.94
NET INCOME TO DATE	-41.57	-41.57	-41.57	-41.57	-41.57	-41.57	-41.92	-152.46	-199.00	-273.19	-273.19	290.75

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

Fertilization decisions should be based on soil tests. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

* Lease costs are based on hourly usage costs.

Table 5.F Estimated returns for various price/yield combinations, per acre
 Soybeans after wheat, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2013

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

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

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

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

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 6.B Summary of estimated costs and returns per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2013

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

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

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

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

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Lime (Spread)	ton			0.25	Oct	0.2500				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Glyphosate 3lbs a.e	pt					2.0000				
2,4-D Amine 4	pt					2.0000				
Valor SX	oz					2.0000				
Plant - Folding	12R-30	MFWD 190	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Dual Magnum	pt					1.0000				
Tricor DF	lb					0.3000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Headline EC	oz					3.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			0.50	Aug	0.5000				
Paraquat	oz					8.0000				
Surfactant	pt					0.1000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					43.0000				
TOTALS							0.44	0.44	0.60	0.40

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

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

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 6.E Estimated monthly income and expense flows per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2013

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	561.15
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	3.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
FERTILIZERS	49.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	0.00	8.43	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	19.76	0.00	25.04	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.92	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.04
CUSTOM LIME	11.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.52	0.00	0.00	0.00	0.00	0.00	1.97	1.52	0.00	0.38	0.76	2.28
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	6.37	0.00	0.00	0.00	0.00	0.00	2.15	1.94	0.00	0.48	0.97	4.88
REPAIR & MAINTENANCE	2.32	0.00	0.00	0.00	0.00	0.00	1.54	0.58	0.00	0.14	0.29	3.52
INTEREST ON OP. CAP.	3.14	0.00	0.00	0.00	0.00	0.65	1.37	0.52	0.00	0.10	0.07	0.08
TOTAL DIRECT EXPENSES	76.74	0.00	0.00	0.00	0.00	26.41	65.54	29.60	0.00	9.53	12.36	22.80
NET INCOME	-76.74	0.00	0.00	0.00	0.00	-26.41	-65.54	-29.60	0.00	-9.53	-12.36	538.35
NET INCOME TO DATE	-76.74	-76.74	-76.74	-76.74	-76.74	-103.15	-168.69	-198.29	-198.29	-207.82	-220.18	318.17

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
 Soybeans, early-planted, RR, reduced tillage, 12R 30"
 Non-Delta Area, Mississippi, 2013

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

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

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

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

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 7.B Summary of estimated costs and returns per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2013

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

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

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

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

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Lime (Spread)	ton			0.25	Nov	0.2500				
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Apr		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Apr		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	May		0.06	0.06	0.06	0.05
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Tricor DF	lb					0.3000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Dimilin 2L	oz					1.0000				
Quadris	oz					3.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Acephate 90SP	lb					0.7500				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Aug		0.01	0.01	0.02	0.01
Intrepid 2F	oz					2.0000				
Baythroid XL	oz					1.0650				
Surfactant	pt					0.0500				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans/Field	bu					30.0000				
TOTALS							0.46	0.46	0.63	0.42

Note: Cost of production estimates are based on 2012 input prices.
Fertilization decisions should be based on soil tests.
 The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

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

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 7.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2013

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	391.50
DIRECT EXPENSES												
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	49.14	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	7.41	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	21.46	3.58	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.84	10.96	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40
CUSTOM LIME	11.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	3.13	4.26	0.76	0.38	1.14	0.00	2.28
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	4.24	5.42	0.97	0.48	1.45	0.00	4.88
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	1.64	3.02	0.29	0.14	0.43	0.00	3.52
INTEREST ON OP. CAP.	0.48	0.00	0.00	0.00	0.00	1.44	1.98	0.10	0.14	0.15	0.00	0.07
TOTAL DIRECT EXPENSES	11.73	0.00	0.00	0.00	0.00	59.59	94.65	5.70	10.39	14.31	0.00	19.15
NET INCOME	-11.73	0.00	0.00	0.00	0.00	-59.59	-94.65	-5.70	-10.39	-14.31	0.00	372.35
NET INCOME TO DATE	-11.73	-11.73	-11.73	-11.73	-11.73	-71.32	-165.97	-171.67	-182.06	-196.37	-196.37	175.98

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
 Soybeans, May-planted, RR, convent. tillage, 12R 30"
 Non-Delta Area, Mississippi, 2013

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

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2012 input prices.

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

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

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

TOTAL FIXED EXPENSES				24.99	_____

TOTAL SPECIFIED EXPENSES				224.10	_____

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 8.B Summary of estimated costs and returns per acre
 Soybeans after wheat, RR, no-till, 12R 30"
 Non-Delta Area, Mississippi, 2013

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

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

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

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

Note: Cost of production estimates are based on 2012 input prices.
Fertilization decisions should be based on soil tests.
 The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Spin Spreader	5 ton	MFWD 190	0.042	1.00	Nov		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
NT Plant&Pre-Folding	12R-30	MFWD 190	0.070	1.00	Jun		0.07	0.07	0.14	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	pt					2.0000				
Tricor DF	lb					0.3000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Aug		0.01	0.01	0.02	0.01
Dimilin 2L	oz					1.0000				
Quadris	oz					3.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Acephate 90SP	lb					0.7500				
Spray (Broadcast)	60'	MFWD 190	0.028	0.75	Aug		0.02	0.02	0.03	0.01
Intrepid 2F	oz					3.0000				
Baythroid XL	oz					1.5975				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans/Field	bu					25.0000				
TOTALS							0.34	0.34	0.52	0.29

Note: Cost of production estimates are based on 2012 input prices.
Fertilization decisions should be based on soil tests.
 The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

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

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

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

Table 8.E Estimated monthly income and expense flows per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2013

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	326.25
DIRECT EXPENSES												
FERTILIZERS	49.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.51	0.00	7.41	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.58	23.25	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00
LABOR	1.29	0.00	0.00	0.00	0.00	0.00	0.00	2.92	1.11	1.67	0.00	2.23
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.44	0.00	0.00	0.00	0.00	0.00	0.00	3.38	1.45	2.17	0.00	4.88
REPAIR & MAINTENANCE	0.46	0.00	0.00	0.00	0.00	0.00	0.00	2.59	0.43	0.64	0.00	3.52
INTEREST ON OP. CAP.	2.23	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.37	0.30	0.00	0.06
TOTAL DIRECT EXPENSES	54.56	0.00	0.00	0.00	0.00	0.00	0.00	72.24	26.61	28.01	0.00	17.69
NET INCOME	-54.56	0.00	0.00	0.00	0.00	0.00	0.00	-72.24	-26.61	-28.01	0.00	308.56
NET INCOME TO DATE	-54.56	-54.56	-54.56	-54.56	-54.56	-54.56	-54.56	-126.80	-153.41	-181.42	-181.42	127.14

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

Fertilization decisions should be based on soil tests.

The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$7 to \$12 per acre.

* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
 Soybeans after wheat, RR, no-till, 12R 30"
 Non-Delta Area, Mississippi, 2013

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

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2012 input prices.

APPENDIX

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2013

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hour-----					
Combine (250-299 hp)	265 hp	259,000	300	8	13.64	11.60	47.74	26.97	86.31	108.04	194.36
Combine (300-349 hp)	325 hp	298,000	300	8	16.73	11.60	58.55	31.04	101.19	124.31	225.51
Combine (350-399 hp)	355 hp	316,000	300	8	18.27	11.60	63.94	32.91	108.46	131.82	240.28
Combine (400-449 hp)	425 hp	339,000	300	8	21.87	11.60	76.56	35.31	123.47	141.42	264.90
Combine (450-499hp)	475 hp	356,000	300	8	24.44	11.60	85.57	37.08	134.25	148.51	282.76
Cotton Stripper	173 hp	170,000	200	8	8.08	11.60	28.28	26.56	66.44	106.37	172.82
Tractor(20-39hp)CB	MFWD 30	28,100	600	8	1.54	11.60	5.40	0.87	17.88	5.37	23.25
Tractor(20-39hp)RB	MFWD 30	17,400	600	8	1.54	11.60	5.40	0.54	17.54	3.32	20.87
Tractor(40-59hp)CB	2WD 50	35,200	600	8	2.57	11.60	9.00	1.10	21.70	6.73	28.44
Tractor(40-59hp)CB	MFWD 50	36,700	600	8	2.57	11.60	9.00	1.14	21.75	7.02	28.77
Tractor(40-59hp)RB	2WD 50	20,500	600	8	2.57	11.60	9.00	0.64	21.24	3.92	25.16
Tractor(40-59hp)RB	MFWD 50	29,000	600	8	2.57	11.60	9.00	0.90	21.51	5.54	27.06
Tractor(60-89hp)CB	2WD 75	45,300	600	8	3.86	11.60	13.51	1.41	26.52	8.66	35.19
Tractor(60-89hp)CB	MFWD 75	49,400	600	8	3.86	11.60	13.51	1.54	26.65	9.44	36.10
Tractor(60-89hp)RB	2WD 75	33,600	600	8	3.86	11.60	13.51	1.05	26.16	6.42	32.58
Tractor(60-89hp)RB	MFWD 75	40,300	600	8	3.86	11.60	13.51	1.25	26.37	7.70	34.07
Tractor(90-119hp)CB	2WD 105	57,700	600	8	5.40	11.60	18.91	1.80	32.31	11.03	43.35
Tractor(90-119hp)CB	MFWD 105	74,700	600	8	5.40	11.60	18.91	2.33	32.85	14.28	47.13
Tractor(90-119hp)RB	2WD 105	45,800	600	8	5.40	11.60	18.91	1.43	31.94	8.76	40.70
Tractor(90-119hp)RB	MFWD 105	51,800	600	8	5.40	11.60	18.91	1.61	32.13	9.90	42.04
Tractor(120-139hp)CB	2WD 130	82,300	600	8	6.69	11.60	23.41	2.57	37.59	15.74	53.33
Tractor(120-139hp)CB	MFWD 130	101,000	600	8	6.69	11.60	23.41	3.15	38.17	19.32	57.49
Tractor(140-159hp)CB	2WD 150	131,000	600	8	7.72	11.60	27.02	4.09	42.71	25.05	67.77
Tractor(140-159hp)CB	MFWD 150	133,000	600	8	7.72	11.60	27.02	4.15	42.77	25.44	68.22
Tractor(160-179hp)CB	MFWD 170	144,000	600	8	8.75	11.60	30.62	4.50	46.72	28.79	75.51
Tractor(180-199hp)CB	MFWD 190	154,000	600	8	9.77	11.60	34.22	4.81	50.64	30.79	81.43
Tractor(200-249hp)CB	MFWD 225	208,000	600	8	11.58	11.60	40.53	6.50	58.63	41.58	100.22
Tractor(200-249hp)CB	Track 225	258,000	600	8	11.58	11.60	40.53	8.06	60.19	51.58	111.78
Tractor(250-349hp)CB	4WD 300	262,000	600	8	15.44	11.60	54.04	8.18	73.83	52.38	126.21
Tractor(250-349hp)CB	MFWD 300	247,000	600	8	15.44	11.60	54.04	7.71	73.36	49.38	122.74
Tractor(250-349hp)CB	Track 300	260,000	600	8	15.44	11.60	54.04	8.12	73.77	51.98	125.75
Tractor(350-449hp)CB	4WD 400	300,000	600	8	20.58	11.60	72.06	9.37	93.03	59.98	153.01
Tractor(350-449hp)CB	Track 400	345,000	600	8	20.58	11.60	72.06	10.78	94.44	68.97	163.42
Tractor(450-550hp)CB	4WD 500	343,000	600	8	25.73	11.60	90.07	10.71	112.39	68.57	180.97
Tractor(450-550hp)CB	Track 500	376,000	600	8	25.73	11.60	90.07	11.75	113.42	75.17	188.60
Utility Vehicle	800 CC	7,400	200	8	0.70	11.60	2.38	1.15	15.13	4.63	19.76
Utility Vehicle-mule	600 CC	7,100	200	8	0.50	11.60	1.70	1.10	14.40	4.44	18.85

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

CB = Cab, RB = Roll Bar

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 2013

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
Backhoe	2WD Cab	73,000	0	0	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Cotton Picker	4R-30(350)	350,000	200	8	18.01	0.327	6.76	20.64	17.90	45.30	71.70	117.01
Cotton Picker	4R-38(255)	267,000	200	8	13.12	0.257	5.32	11.84	10.75	27.92	43.06	70.99
Cotton Picker	4R-38(350)	382,000	200	8	18.01	0.257	5.32	16.25	15.38	36.96	61.62	98.58
Cotton Picker	4R2x1(350)	388,000	200	8	18.01	0.172	3.55	10.86	10.44	24.87	41.83	66.70
Cotton Picker	6R-30(355)	441,000	200	8	18.27	0.218	4.50	13.95	15.03	33.50	60.22	93.73
Cotton Picker	6R-38(355)	441,000	200	8	18.27	0.172	3.55	11.02	11.87	26.45	47.55	74.00
Cotton Picker/Module	4R-38(365)	515,000	200	8	18.78	0.257	5.32	16.95	20.74	43.01	83.07	126.09
Cotton Picker/Module	6R-30(365)	572,000	200	8	18.78	0.218	4.50	14.35	19.50	38.36	78.11	116.48
Cotton Picker/Module	6R-30(500)	609,000	200	8	25.73	0.218	4.50	19.65	20.76	44.93	83.17	128.10
Cotton Picker/Module	6R-38(365)	571,000	200	8	18.78	0.172	3.55	11.33	15.37	30.26	61.56	91.83
Cotton Picker/Module	6R-38(500)	610,000	200	8	25.73	0.172	3.55	15.52	16.42	35.50	65.77	101.27
Dry Applicator SP	70'300cuft	281,000	350	8	16.98	0.015	0.24	0.89	0.22	1.36	1.51	2.88
Sprayer 110Gal	30' 50hp	43,300	350	8	2.41	0.035	0.56	0.29	0.08	0.94	0.54	1.49
Sprayer 300-450gal	60' 125hp	103,000	350	8	5.66	0.017	0.28	0.34	0.09	0.73	0.64	1.38
Sprayer 300-450gal	80' 125hp	103,000	350	8	6.43	0.013	0.21	0.29	0.07	0.58	0.48	1.07
Sprayer 600-750gal	60' 175hp	161,000	350	8	9.00	0.017	0.28	0.55	0.15	0.99	1.01	2.00
Sprayer 600-825gal	80' 175hp	161,000	350	8	11.81	0.013	0.21	0.54	0.11	0.87	0.76	1.63
Sprayer 600-825gal	90' 250hp	237,000	350	8	12.73	0.011	0.18	0.52	0.14	0.86	0.99	1.85
Sprayer 800gal	100' 250hp	232,000	350	8	14.15	0.010	0.17	0.52	0.13	0.82	0.87	1.70
Sprayer 800gal	80' 250hp	233,000	350	8	12.86	0.013	0.21	0.59	0.16	0.97	1.10	2.07
Sprayer 1000-1400gal	90' 275hp	272,000	350	8	14.15	0.010	0.17	0.52	0.15	0.84	1.02	1.87
Sprayer 1000gal	100' 300hp	274,000	350	8	15.44	0.010	0.17	0.57	0.15	0.89	1.03	1.93
Sprayer 1200+gal	120' 300hp	286,000	350	8	15.44	0.008	0.14	0.47	0.13	0.75	0.90	1.65
Utility Vehicle	20'	7,400	200	8	0.70	0.052	0.85	0.12	0.06	1.03	0.24	1.28
Utility Vehicle	75"ropewic	7,100	200	8	0.50	0.170	2.75	0.29	0.18	3.23	0.75	3.98

Notes:

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

Direct: Does not include interest on operating capital.

BB = Boll Buggy, Tr = Trailer

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

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

Notes:

Labor: Includes labor from Power unit plus additional labor from the implement.

Total Direct: Does not include interest on operating capital.

HB = Hooded Boom, HD = Hooded Direct

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

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

(continued)

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

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

(continued)

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

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

(continued)

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

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

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

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

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

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	11.71
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE	UNALLOCATED LABOR MULTIPLIERS (%)	
Corn		90
Cotton		80
Grain Sorghum		90
Peanuts		80
Rice		90
Soybeans		90
Wheat		80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2013

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

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

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

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

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

^e Price used in the 2013 MAFES Planning Budgets.

^f Cottonseed price is the marketing year average price averaged over the years 2008-2012, Agricultural Prices Summary, USDA.

Appendix Table 8. Estimated costs for field operations, per acre
 Early soybeans irrigated with roll-out pipe
 160-acre system, 9 ac-in., Delta Area, Mississippi, 2013

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

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

Appendix Table 9. Estimated costs for field operations, per acre
 Irrigation with a contour flood system
 80-acre system, 13.5 ac-in., Delta Area, Mississippi, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.49	0.09	0.19			0.01	0.78	1.36
Survey & Mark Levees	acre	2.25						0.04	2.29	2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.66	0.13	0.25			0.02	1.06	1.84
Butt Levees										
Blade-Box	6'-7'		0.47	0.06	0.23			0.01	0.77	1.09
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Apply Water										
IRRIGATE LABOR	hour				0.11				0.11	0.11
Tear Down Levees										
Levee Splitter (1/80)	32"		0.45	0.08	0.20			0.01	0.74	1.22
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.66	0.13	0.25			0.01	1.05	1.83
Butt Levees										
Blade-Box	6'-7'		0.47	0.06	0.23			0.01	0.77	1.09
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Apply Water										
IRRIGATE LABOR	hour				0.11				0.11	0.11
Tear Down Levees										
Levee Splitter (1/80)	32"		0.45	0.08	0.20			0.01	0.74	1.22
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.66	0.13	0.25			0.01	1.05	1.83
Butt Levees										
Blade-Box	6'-7'		0.47	0.06	0.23			0.01	0.77	1.09
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Apply Water										
IRRIGATE LABOR	hour				0.11				0.11	0.11
Tear Down Levees										
Levee Splitter (1/80)	32"		0.45	0.08	0.20			0.01	0.74	1.22
Tear Down Levees										
Levee Splitter (1/80)	32"		0.34	0.06	0.15				0.55	0.90
Land Forming (\$75)	each								7.09	7.09
Well & Pump, Flood	each			4.88				0.09	4.97	14.78
Engine, CF, 75	each								14.65	14.65
June Irrigation	ac-in		12.83	2.23				0.27	15.33	15.33
July Irrigation	ac-in		12.83	2.23				0.21	15.27	15.27
August Irrigation	ac-in		12.83	2.23				0.16	15.22	15.22
TOTALS		2.25	44.06	12.53	5.20	0.00	0.92	64.96	42.19	107.15

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

Appendix Table 10. Estimated costs for field operations, per acre
 Irrigation with a 1/2-mile center pivot system
 530-acre system, 7.5 ac-in., Delta Area, Mississippi, 2013

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.07				0.07	0.07
Maintenance										
IRRIGATE LABOR	hour				0.27		0.01		0.28	0.28
Apply Water										
IRRIGATE LABOR	hour				0.04				0.04	0.04
Apply Water										
IRRIGATE LABOR	hour				0.05				0.05	0.05
Apply Water										
IRRIGATE LABOR	hour				0.04				0.04	0.04
Pivot, 1/2 CP	each			6.88			0.12	7.00	28.19	35.19
Well & Pump, 1/2 CP	each			0.95			0.02	0.97	2.88	3.85
Engine, 1/2 CP, 264	each								4.55	4.55
June Irr. 3app@.75"	ac-in		17.23	0.62			0.32	18.17		18.17
July Irr. 4app@.75"	ac-in		22.97	0.83			0.34	24.14		24.14
Aug Irr. 3app@.75"	ac-in		17.23	0.62			0.19	18.04		18.04
TOTALS		0.00	57.43	9.90	0.47	0.00	1.00	68.80	35.62	104.42

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

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