

SOYBEANS
2017
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2016-02

October 2016

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 2017 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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2017 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 2016. (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 2016 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 first five trading days in 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 specified harvest month futures contract. 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, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Select Max	pt	14.99	1.0000	14.99	_____
Valor SX	oz	6.60	2.0000	13.20	_____
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.0000	3.69	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3302	4.35	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	13.12	0.3892	5.11	_____
DIESEL FUEL					
Tractors	gal	1.70	3.8252	6.51	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.80	1.0000	4.80	_____
Tractors	acre	2.24	1.0000	2.24	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	8.84	1.0000	8.84	_____
TOTAL DIRECT EXPENSES				329.51	_____
FIXED EXPENSES					
Implements	acre	9.56	1.0000	9.56	_____
Tractors	acre	14.16	1.0000	14.16	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				37.28	_____
TOTAL SPECIFIED EXPENSES				366.79	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 1.B Summary of estimated costs and returns per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	42.0000	409.08	_____

TOTAL INCOME				409.08	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	93.21	1.0000	93.21	_____
INSECTICIDES	acre	6.52	1.0000	6.52	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	3.70	1.0000	3.70	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	13.14	0.4324	5.69	_____
UNALLOCATED LABOR	hour	13.12	0.3892	5.11	_____
DIESEL FUEL	gal	1.70	5.2188	8.88	_____
REPAIR & MAINTENANCE	acre	10.48	1.0000	10.48	_____
INTEREST ON OP. CAP.	acre	8.84	1.0000	8.84	_____

TOTAL DIRECT EXPENSES				329.51	_____
RETURNS ABOVE DIRECT EXPENSES				79.57	_____
TOTAL FIXED EXPENSES				37.28	_____

TOTAL SPECIFIED EXPENSES				366.79	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				42.29	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 1.C Estimated resource use for field operations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3300				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	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	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
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				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.43	0.43	0.52	0.38

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 1.D Estimated costs for field operations, per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Disk Harrow	24'		1.61	1.53	2.05			0.25	5.44	5.55	10.99
Field Cultivate Fld	24'		1.23	0.81	1.56			0.17	3.77	4.33	8.10
App by Air (5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Select Max	pt	14.99						0.47	15.46		15.46
Valor SX	oz	13.20						0.42	13.62		13.62
Surfactant	pt	1.48						0.05	1.53		1.53
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed RR2	lb	63.00						1.50	64.50		64.50
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
Prefix	pt	12.68						0.25	12.93		12.93
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Acephate 90SP	lb	6.52						0.05	6.57		6.57
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	11.34						0.04	11.38		11.38
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
TOTALS		289.64	8.88	10.48	11.67	0.00	8.84	329.51	37.28	366.79	

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 1.E Estimated monthly income and expense flows per acre
Soybeans, early-planted, RR, stale seedbed, 12R 30"
Delta Area, Mississippi, 2017

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	409.08
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	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	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	38.25	0.00	33.32	21.64	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	6.52	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.48	0.00	1.48	0.00	0.00	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.63	0.00	0.00	0.00	0.00	0.00	2.30	1.66	0.00	0.00	0.00	3.08
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	3.64	0.00	0.00	0.00	0.00	0.00	1.33	1.12	0.00	0.00	0.00	2.79
REPAIR & MAINTENANCE	2.67	0.00	0.00	0.00	0.00	0.00	2.26	0.88	0.00	0.00	0.00	4.67
INTEREST ON OP. CAP.	3.70	0.00	0.00	0.00	1.47	0.00	2.71	0.64	0.00	0.00	0.23	0.09
TOTAL DIRECT EXPENSES	81.73	0.00	0.00	0.00	47.70	0.00	116.76	32.44	0.00	0.00	28.91	21.97
NET INCOME	-81.73	0.00	0.00	0.00	-47.70	0.00	-116.76	-32.44	0.00	0.00	-28.91	387.11
NET INCOME TO DATE	-81.73	-81.73	-81.73	-81.73	-129.43	-129.43	-246.19	-278.63	-278.63	-278.63	-307.54	79.57

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
-----PRODUCT PRICE-----													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	-----dollars-----										
50	21.00	bu	-170	-160	-149	-139	-129	-119	-109	-98	-88	-78	-68
			-207	-197	-187	-177	-166	-156	-146	-136	-125	-115	-105
60	25.20	bu	-140	-128	-116	-104	-91	-79	-67	-54	-42	-30	-18
			-178	-165	-153	-141	-129	-116	-104	-92	-79	-67	-55
70	29.40	bu	-111	-97	-82	-68	-54	-39	-25	-11	3	17	31
			-148	-134	-119	-105	-91	-77	-62	-48	-34	-19	-5
80	33.60	bu	-81	-65	-49	-32	-16	0	16	32	49	65	81
			-119	-102	-86	-69	-53	-37	-20	-4	11	28	44
90	37.80	bu	-52	-33	-15	2	21	39	58	76	95	113	131
			-89	-71	-52	-34	-15	2	20	39	57	76	94
100	42.00	bu	-22	-2	18	38	59	79	100	120	140	161	181
			-59	-39	-19	1	21	42	62	83	103	124	144
110	46.20	bu	6	29	51	74	96	119	141	164	186	209	231
			-30	-7	14	37	59	82	104	127	149	172	194
120	50.40	bu	36	60	85	110	134	159	183	208	232	257	281
			-0	23	48	72	97	121	146	170	195	220	244
130	54.60	bu	65	92	119	145	172	198	225	252	278	305	331
			28	55	81	108	135	161	188	214	241	267	294
140	58.80	bu	95	124	152	181	210	238	267	295	324	353	381
			58	86	115	144	172	201	230	258	287	315	344
150	63.00	bu	125	155	186	217	247	278	309	339	370	401	431
			87	118	149	179	210	241	271	302	333	363	394

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 2016 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, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Select Max	pt	14.99	1.0000	14.99	_____
Valor SX	oz	6.60	2.0000	13.20	_____
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.1000	4.06	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4713	6.20	_____
Harvesters	hour	13.14	0.1021	1.34	_____
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	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	13.13	0.4454	5.85	_____
DIESEL FUEL					
Tractors	gal	1.70	5.2753	8.98	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Roll-Out Pipe Irr.	gal	1.70	7.3316	12.45	_____
REPAIR & MAINTENANCE					
Implements	acre	5.46	1.0000	5.46	_____
Tractors	acre	3.11	1.0000	3.11	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Roll-Out Pipe Irr.	acre	6.34	1.0000	6.34	_____
INTEREST ON OP. CAP.	acre	9.88	1.0000	9.88	_____
TOTAL DIRECT EXPENSES				399.29	_____
FIXED EXPENSES					
Implements	acre	11.79	1.0000	11.79	_____
Tractors	acre	19.59	1.0000	19.59	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
TOTAL FIXED EXPENSES				96.47	_____
TOTAL SPECIFIED EXPENSES				495.76	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	60.0000	584.40	_____

TOTAL INCOME				584.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	93.21	1.0000	93.21	_____
INSECTICIDES	acre	6.52	1.0000	6.52	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	4.07	1.0000	4.07	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	13.14	0.5735	7.54	_____
UNALLOCATED LABOR	hour	13.13	0.4454	5.85	_____
DIESEL FUEL	gal	1.70	14.0006	23.80	_____
REPAIR & MAINTENANCE	acre	18.35	1.0000	18.35	_____
INTEREST ON OP. CAP.	acre	9.88	1.0000	9.88	_____

TOTAL DIRECT EXPENSES				399.29	_____
RETURNS ABOVE DIRECT EXPENSES				185.11	_____
TOTAL FIXED EXPENSES				96.47	_____

TOTAL SPECIFIED EXPENSES				495.76	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				88.64	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3300				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fold	12R-30	MFWD 225	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	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
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				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.57	0.57	1.03	0.44

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Disk Harrow	24'		1.61	1.53	2.05			0.25	5.44	5.55	10.99
Field Cultivate Fld	24'		1.23	0.81	1.56			0.17	3.77	4.33	8.10
Bed/Lister-Roll-Fold	12R-30		1.23	0.89	1.56			0.17	3.85	3.89	7.74
App by Air (5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Select Max	pt	14.99						0.47	15.46		15.46
Valor SX	oz	13.20						0.42	13.62		13.62
Surfactant	pt	1.48						0.05	1.53		1.53
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed RR2	lb	63.00						1.50	64.50		64.50
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
Prefix	pt	12.68						0.25	12.93		12.93
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Quadris Top	oz	20.08						0.24	20.32		20.32
Surfactant	pt	0.37							0.37		0.37
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Acephate 90SP	lb	6.52						0.05	6.57		6.57
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	16.20						0.06	16.26		16.26
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
Roll-Out Pipe Irr.	acre	8.25	13.69	6.98	4.33			0.53	33.78	55.30	89.08
TOTALS		329.70	23.80	18.35	17.56	0.00	9.88	399.29	96.47	495.76	

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

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	584.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	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	7.36	0.00	0.00	20.08	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	38.25	0.00	33.32	21.64	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	6.52	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.48	0.00	1.48	0.00	0.00	0.37	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	6.69	0.00	0.00	0.00	0.00	0.00	2.30	1.89	2.78	0.23	0.00	3.67
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	5.50	0.00	0.00	0.00	0.00	0.00	1.33	1.12	8.63	4.15	0.00	3.07
REPAIR & MAINTENANCE	3.89	0.00	0.00	0.00	0.00	0.00	2.26	0.88	5.21	1.30	0.00	4.81
INTEREST ON OP. CAP.	3.94	0.00	0.00	0.00	1.47	0.00	2.71	0.64	0.40	0.38	0.23	0.11
TOTAL DIRECT EXPENSES	87.11	0.00	0.00	0.00	47.70	0.00	116.76	32.67	25.27	33.01	28.91	27.86
NET INCOME	-87.11	0.00	0.00	0.00	-47.70	0.00	-116.76	-32.67	-25.27	-33.01	-28.91	556.54
NET INCOME TO DATE	-87.11	-87.11	-87.11	-87.11	-134.81	-134.81	-251.57	-284.24	-309.51	-342.52	-371.43	185.11

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-172	-157	-142	-128	-113	-98	-84	-69	-55	-40	-25
			-268	-253	-239	-224	-210	-195	-180	-166	-151	-136	-122
60	36.00	bu	-129	-112	-94	-77	-59	-42	-24	-7	10	27	45
			-226	-208	-191	-173	-156	-138	-121	-103	-86	-68	-50
70	42.00	bu	-87	-67	-46	-26	-5	14	35	55	76	96	116
			-184	-163	-143	-122	-102	-81	-61	-40	-20	0	20
80	48.00	bu	-45	-22	1	24	48	71	94	118	141	164	188
			-141	-118	-95	-71	-48	-24	-1	21	45	68	91
90	54.00	bu	-3	23	49	75	101	128	154	180	207	233	259
			-99	-73	-47	-20	5	31	58	84	110	137	163
100	60.00	bu	39	68	97	126	155	185	214	243	272	301	331
			-57	-28	0	30	59	88	117	147	176	205	234
110	66.00	bu	81	113	145	177	209	241	274	306	338	370	402
			-15	16	49	81	113	145	177	209	241	274	306
120	72.00	bu	123	158	193	228	263	298	333	368	403	438	474
			26	62	97	132	167	202	237	272	307	342	377
130	78.00	bu	165	203	241	279	317	355	393	431	469	507	545
			69	107	145	183	221	259	297	335	373	411	449
140	84.00	bu	207	248	289	330	371	412	453	494	535	575	616
			111	152	193	234	274	315	356	397	438	479	520
150	90.00	bu	250	293	337	381	425	469	513	556	600	644	688
			153	197	241	285	328	372	416	460	504	548	591

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 2016 input prices.

Table 3.A Estimated costs per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.7500	24.38	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	10.5000	13.76	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.4000	5.17	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	40.0000	10.80	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.2631	3.46	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR	hour	13.07	0.3287	4.30	_____
DIESEL FUEL					
Tractors	gal	1.70	3.0471	5.19	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.18	1.0000	4.18	_____
Tractors	acre	1.78	1.0000	1.78	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	9.43	1.0000	9.43	_____
TOTAL DIRECT EXPENSES				372.45	_____
FIXED EXPENSES					
Implements	acre	6.97	1.0000	6.97	_____
Tractors	acre	11.28	1.0000	11.28	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				31.81	_____
TOTAL SPECIFIED EXPENSES				404.26	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 3.B Summary of estimated costs and returns per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	40.0000	389.60	_____

TOTAL INCOME				389.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	24.38	1.0000	24.38	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	111.82	1.0000	111.82	_____
INSECTICIDES	acre	28.28	1.0000	28.28	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	5.18	1.0000	5.18	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
OPERATOR LABOR	hour	13.14	0.3652	4.80	_____
UNALLOCATED LABOR	hour	13.07	0.3287	4.30	_____
DIESEL FUEL	gal	1.70	4.4407	7.56	_____
REPAIR & MAINTENANCE	acre	9.40	1.0000	9.40	_____
INTEREST ON OP. CAP.	acre	9.43	1.0000	9.43	_____

TOTAL DIRECT EXPENSES				372.45	_____
RETURNS ABOVE DIRECT EXPENSES				17.15	_____
TOTAL FIXED EXPENSES				31.81	_____

TOTAL SPECIFIED EXPENSES				404.26	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-14.66	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 3.C Estimated resource use for field operations, per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Nov		0.04	0.04	0.04	0.03
Disk Harrow	24'	MFWD 225	0.081	0.25	Nov		0.02	0.02	0.02	0.01
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
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				
Prevathon	oz					10.5000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					40.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.36	0.36	0.48	0.32

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 3.D Estimated costs for field operations, per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Disk Harrow	24'		0.40	0.38	0.51			0.06	1.35	1.39	2.74
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus(46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51	3.41
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64		4.64
Select Max	pt	14.99						0.53	15.52		15.52
Surfactant	pt	1.48						0.05	1.53		1.53
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51	3.39
Fierce	oz	24.43						0.68	25.11		25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32		13.32
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.15	6.65		6.65
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed RR2	lb	63.00						1.50	64.50		64.50
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Prefix	pt	12.68						0.30	12.98		12.98
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Acephate 90SP	lb	6.52						0.08	6.60		6.60
App by Air (5 gal)	appl	4.88						0.06	4.94		4.94
Prevathon	oz	13.76						0.16	13.92		13.92
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Incidental Pest Trt	acre	8.00						0.06	8.06		8.06
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	10.80						0.04	10.84		10.84
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
TOTALS		335.83	7.56	9.40	10.23	0.00		9.43	372.45	31.81	404.26

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 3.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, RR, 12R 30"
Delta Area, Mississippi, 2017

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	389.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.38	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	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	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	50.48	4.48	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	20.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.00	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.53	0.00	0.00	0.83	0.00	0.83	3.13	0.83	0.00	0.00	0.00	3.08
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	1.20	0.00	0.00	0.56	0.00	0.56	1.89	0.56	0.00	0.00	0.00	2.79
REPAIR & MAINTENANCE	0.71	0.00	0.00	0.44	0.00	0.44	2.70	0.44	0.00	0.00	0.00	4.67
INTEREST ON OP. CAP.	3.34	0.00	0.00	0.81	0.00	1.13	3.31	0.13	0.00	0.38	0.24	0.09
TOTAL DIRECT EXPENSES	73.87	0.00	0.00	23.59	0.00	41.83	142.85	6.44	0.00	32.04	30.40	21.43
NET INCOME	-73.87	0.00	0.00	-23.59	0.00	-41.83	-142.85	-6.44	0.00	-32.04	-30.40	368.17
NET INCOME TO DATE	-73.87	-73.87	-73.87	-97.46	-97.46	-139.29	-282.14	-288.58	-288.58	-320.62	-351.02	17.15

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-220 -252	-211 -243	-201 -233	-191 -223	-181 -213	-172 -204	-162 -194	-152 -184	-143 -174	-133 -165	-123 -155
60	24.00	bu	-192 -224	-181 -212	-169 -201	-157 -189	-146 -177	-134 -166	-122 -154	-110 -142	-99 -131	-87 -119	-75 -107
70	28.00	bu	-164 -196	-151 -182	-137 -169	-123 -155	-110 -141	-96 -128	-82 -114	-69 -101	-55 -87	-41 -73	-28 -60
80	32.00	bu	-136 -168	-120 -152	-105 -137	-89 -121	-74 -105	-58 -90	-43 -74	-27 -59	-11 -43	3 -28	19 -12
90	36.00	bu	-108 -140	-90 -122	-73 -105	-55 -87	-38 -70	-20 -52	-3 -35	14 -17	31 0	49 17	66 35
100	40.00	bu	-80 -112	-60 -92	-41 -73	-21 -53	-2 -34	17 -14	36 4	56 24	75 43	95 63	114 82
110	44.00	bu	-52 -83	-30 -62	-9 -41	12 -19	33 1	55 23	76 44	97 66	119 87	140 108	162 130
120	48.00	bu	-23 -55	-0 -32	22 -9	46 14	69 37	92 61	116 84	139 107	163 131	186 154	209 177
130	52.00	bu	4 -27	29 -2	54 22	80 48	105 73	130 98	156 124	181 149	206 174	232 200	257 225
140	56.00	bu	32 0	59 27	86 55	114 82	141 109	168 136	195 164	223 191	250 218	277 245	305 273
150	60.00	bu	60 28	89 57	118 87	148 116	177 145	206 174	235 203	264 233	294 262	323 291	352 320

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 2016 input prices.

Table 4.A Estimated costs per acre
Soybeans, May-planted, RR, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.5000	5.54	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4864	6.38	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR	hour	13.10	0.3472	4.55	_____
DIESEL FUEL					
Tractors	gal	1.70	4.6503	7.94	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Contour Flood Irr.	gal	1.70	10.9974	18.69	_____
REPAIR & MAINTENANCE					
Implements	acre	5.08	1.0000	5.08	_____
Tractors	acre	2.78	1.0000	2.78	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Contour Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	10.69	1.0000	10.69	_____
TOTAL DIRECT EXPENSES				454.66	_____
FIXED EXPENSES					
Implements	acre	9.49	1.0000	9.49	_____
Tractors	acre	17.55	1.0000	17.55	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Contour Flood Irr.	acre	39.18	1.0000	39.18	_____
TOTAL FIXED EXPENSES				79.78	_____
TOTAL SPECIFIED EXPENSES				534.44	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	53.0000	516.22	_____

TOTAL INCOME				516.22	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	111.82	1.0000	111.82	_____
INSECTICIDES	acre	32.86	1.0000	32.86	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	5.55	1.0000	5.55	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	13.14	0.5886	7.72	_____
UNALLOCATED LABOR	hour	13.10	0.3472	4.55	_____
DIESEL FUEL	gal	1.70	17.0414	29.00	_____
REPAIR & MAINTENANCE	acre	24.01	1.0000	24.01	_____
INTEREST ON OP. CAP.	acre	10.69	1.0000	10.69	_____

TOTAL DIRECT EXPENSES				454.66	_____
RETURNS ABOVE DIRECT EXPENSES				61.56	_____
TOTAL FIXED EXPENSES				79.78	_____

TOTAL SPECIFIED EXPENSES				534.44	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-18.22	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3300				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
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				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
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	oz					32.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
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				
Prevathon	oz					14.0000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.58	0.58	1.02	0.34

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	
Disk Harrow	24'		1.36	1.45	2.05			0.23	5.09	5.04
Lime (Spread)	ton	15.18						0.72	15.90	
Custom Apply Fert	acre	7.00						0.33	7.33	
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94	
Potash (60% K2O)	cwt	22.57						1.07	23.64	
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64	
Select Max	pt	14.99						0.53	15.52	
Surfactant	pt	1.48						0.05	1.53	
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51
Fierce	oz	24.43						0.68	25.11	
Gramoxone SL 2.0	oz	12.96						0.36	13.32	
Surfactant	pt	1.48						0.04	1.52	
Soybeans Consultant	acre	6.50						0.15	6.65	
Plant & Pre-Folding	12R-30		1.13	2.19	2.30			0.13	5.75	5.93
Soybean Seed RR2	lb	63.00						1.50	64.50	
CruiserMaxx	oz	7.36						0.17	7.53	
Optimize	oz	3.00						0.07	3.07	
Boundary	pt	20.36						0.48	20.84	
Gramoxone SL 2.0	oz	12.96						0.31	13.27	
Surfactant	pt	1.48						0.04	1.52	
Spray (Broadcast)	60'		0.47	0.41	0.83			0.04	1.75	1.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	
Prefix	pt	12.68						0.30	12.98	
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	1.33
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	
App by Air (5 gal)	appl	6.50						0.10	6.60	
Quadris Top	oz	20.08						0.32	20.40	
Surfactant	pt	0.37						0.01	0.38	
App by Air (5 gal)	appl	6.50						0.08	6.58	
Acephate 90SP	lb	6.52						0.08	6.60	
App by Air (5 gal)	appl	6.50						0.08	6.58	
Prevathon	oz	18.34						0.22	18.56	
Incidental Pest										
App by Air (5 gal)	appl	6.50						0.05	6.55	
Incidental Pest Trt	acre	8.00						0.06	8.06	
App by Air (5 gal)	appl	6.50						0.05	6.55	
Paraquat	oz	5.12						0.04	5.16	
Sodium Chlorate 5L	gal	3.30						0.03	3.33	
Surfactant	pt	0.74						0.01	0.75	
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88
Haul Soybeans	bu	14.31						0.06	14.37	
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	1.15
Contour Flood Irr.	acre	2.25	21.73	14.02	5.47			0.69	44.16	47.10
TOTALS		374.74	29.00	24.01	16.22	0.00	10.69	454.66	79.78	534.44

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

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	516.22
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	13.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	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	7.36	0.00	20.08	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	50.48	4.48	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	24.86	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.37	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
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	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.05	0.00	0.00	0.83	0.00	0.83	3.58	2.59	1.55	1.55	0.16	3.08
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	1.36	0.00	0.00	0.56	0.00	0.56	1.60	7.81	7.10	7.10	0.19	2.72
REPAIR & MAINTENANCE	1.45	0.00	0.00	0.44	0.00	0.44	2.60	8.38	2.98	2.98	0.09	4.65
INTEREST ON OP. CAP.	3.41	0.00	0.00	0.81	0.00	1.13	3.31	0.48	0.61	0.60	0.24	0.10
TOTAL DIRECT EXPENSES	75.36	0.00	0.00	23.59	0.00	41.83	142.91	25.99	39.19	50.09	30.84	24.86
NET INCOME	-75.36	0.00	0.00	-23.59	0.00	-41.83	-142.91	-25.99	-39.19	-50.09	-30.84	491.36
NET INCOME TO DATE	-75.36	-75.36	-75.36	-98.95	-98.95	-140.78	-283.69	-309.68	-348.87	-398.96	-429.80	61.56

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost 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, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-253 -333	-240 -320	-228 -307	-215 -294	-202 -282	-189 -269	-176 -256	-163 -243	-150 -230	-137 -217	-124 -204
60	31.80	bu	-216 -296	-201 -280	-185 -265	-170 -249	-154 -234	-139 -218	-123 -203	-108 -187	-92 -172	-77 -157	-61 -141
70	37.10	bu	-179 -259	-161 -241	-143 -222	-125 -204	-107 -186	-88 -168	-70 -150	-52 -132	-34 -114	-16 -96	1 -78
80	42.40	bu	-142 -221	-121 -201	-100 -180	-80 -159	-59 -139	-38 -118	-18 -97	2 -77	23 -56	43 -35	64 -15
90	47.70	bu	-104 -184	-81 -161	-58 -138	-35 -114	-11 -91	11 -68	34 -45	57 -21	81 1	104 24	127 47
100	53.00	bu	-67 -147	-41 -121	-15 -95	9 -69	35 -44	61 -18	87 7	113 33	138 59	164 85	190 110
110	58.30	bu	-30 -109	-1 -81	26 -53	54 -24	83 3	111 31	140 60	168 88	196 117	225 145	253 173
120	63.60	bu	7 -72	38 -41	69 -10	99 20	130 51	161 82	192 113	223 144	254 175	285 206	316 237
130	68.90	bu	44 -35	77 -1	111 31	145 65	178 98	212 132	245 165	279 199	312 232	346 266	379 300
140	74.20	bu	81 1	117 37	153 74	190 110	226 146	262 182	298 218	334 254	370 290	406 327	442 363
150	79.50	bu	118 39	157 77	196 116	235 155	273 193	312 232	351 271	389 310	428 348	467 387	506 426

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 2016 input prices.

Table 5.A Estimated costs per acre
Soybeans, May-planted, RR, 12R 30"
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.5000	5.54	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3621	4.76	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR					
	hour	13.10	0.3472	4.55	_____
DIESEL FUEL					
Tractors	gal	1.70	3.6017	6.14	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Roll-Out Pipe Irr.	gal	1.70	9.7755	16.60	_____
REPAIR & MAINTENANCE					
Implements	acre	5.06	1.0000	5.06	_____
Tractors	acre	2.13	1.0000	2.13	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Roll-Out Pipe Irr.	acre	6.36	1.0000	6.36	_____
INTEREST ON OP. CAP.	acre	10.64	1.0000	10.64	_____
TOTAL DIRECT EXPENSES				448.79	_____
FIXED EXPENSES					
Implements	acre	9.40	1.0000	9.40	_____
Tractors	acre	13.49	1.0000	13.49	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
TOTAL FIXED EXPENSES				87.98	_____
TOTAL SPECIFIED EXPENSES				536.77	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 5.B Summary of estimated costs and returns per acre
 Soybeans, May-planted, RR, 12R 30"
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	53.0000	516.22	_____

TOTAL INCOME				516.22	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	111.82	1.0000	111.82	_____
INSECTICIDES	acre	32.86	1.0000	32.86	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	5.55	1.0000	5.55	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	14.31	1.0000	14.31	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	13.14	0.4643	6.10	_____
UNALLOCATED LABOR	hour	13.10	0.3472	4.55	_____
DIESEL FUEL	gal	1.70	14.7708	25.11	_____
REPAIR & MAINTENANCE	acre	16.99	1.0000	16.99	_____
INTEREST ON OP. CAP.	acre	10.64	1.0000	10.64	_____

TOTAL DIRECT EXPENSES				448.79	_____
RETURNS ABOVE DIRECT EXPENSES				67.43	_____
TOTAL FIXED EXPENSES				87.98	_____

TOTAL SPECIFIED EXPENSES				536.77	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-20.55	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 5.C Estimated resource use for field operations, per acre
Soybeans, May-planted, RR, 12R 30"
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
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				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
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	oz					32.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
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				
Prevathon	oz					14.0000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.46	0.46	0.97	0.34

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 5.D Estimated costs for field operations, per acre
Soybeans, May-planted, RR, 12R 30"
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Disk Harrow	24'		1.36	1.45	2.05			0.23	5.09	5.04	10.13
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51	3.41
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64		4.64
Select Max	pt	14.99						0.53	15.52		15.52
Surfactant	pt	1.48						0.05	1.53		1.53
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51	3.39
Fierce	oz	24.43						0.68	25.11		25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32		13.32
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.15	6.65		6.65
Plant & Pre-Folding	12R-30		1.13	2.19	2.30			0.13	5.75	5.93	11.68
Soybean Seed RR2	lb	63.00						1.50	64.50		64.50
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Spray (Broadcast)	60'		0.47	0.41	0.83			0.04	1.75	1.33	3.08
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Prefix	pt	12.68						0.30	12.98		12.98
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	1.33	3.07
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Quadris Top	oz	20.08						0.32	20.40		20.40
Surfactant	pt	0.37						0.01	0.38		0.38
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Acephate 90SP	lb	6.52						0.08	6.60		6.60
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Prevathon	oz	18.34						0.22	18.56		18.56
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Incidental Pest Trt	acre	8.00						0.06	8.06		8.06
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	14.31						0.06	14.37		14.37
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	1.15	2.36
Roll-Out Pipe Irr.	acre	8.25	17.84	7.00	4.56			0.64	38.29	55.30	93.59
TOTALS		380.74	25.11	16.99	15.31	0.00	10.64	448.79	87.98	536.77	

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 5.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, RR, 12R 30"
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

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	516.22
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	13.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	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	7.36	0.00	20.08	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	50.48	4.48	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	24.86	8.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.37	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.55	0.00	0.00	0.83	0.00	0.83	3.36	3.15	0.46	0.46	0.59	3.08
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	1.99	0.00	0.00	0.56	0.00	0.56	1.60	0.80	8.30	8.30	0.28	2.72
REPAIR & MAINTENANCE	1.78	0.00	0.00	0.44	0.00	0.44	2.60	3.02	1.96	1.96	0.14	4.65
INTEREST ON OP. CAP.	3.48	0.00	0.00	0.81	0.00	1.13	3.31	0.39	0.59	0.58	0.25	0.10
TOTAL DIRECT EXPENSES	76.89	0.00	0.00	23.59	0.00	41.83	142.69	20.09	38.26	49.16	31.42	24.86
NET INCOME	-76.89	0.00	0.00	-23.59	0.00	-41.83	-142.69	-20.09	-38.26	-49.16	-31.42	491.36
NET INCOME TO DATE	-76.89	-76.89	-76.89	-100.48	-100.48	-142.31	-285.00	-305.09	-343.35	-392.51	-423.93	67.43

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 5.F Estimated returns for various price/yield combinations, per acre
 Soybeans, May-planted, RR, 12R 30"
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-248 -336	-235 -323	-222 -310	-209 -297	-196 -284	-183 -271	-170 -258	-157 -245	-144 -232	-131 -219	-118 -206
60	31.80	bu	-210 -298	-195 -283	-179 -267	-164 -252	-148 -236	-133 -221	-117 -205	-102 -190	-86 -174	-71 -159	-55 -143
70	37.10	bu	-173 -261	-155 -243	-137 -225	-119 -207	-101 -189	-83 -171	-65 -153	-46 -134	-28 -116	-10 -98	7 -80
80	42.40	bu	-136 -224	-115 -203	-94 -182	-74 -162	-53 -141	-32 -120	-12 -100	8 -79	29 -58	49 -38	70 -17
90	47.70	bu	-98 -186	-75 -163	-52 -140	-29 -117	-5 -93	17 -70	40 -47	63 -24	86 -1	110 22	133 45
100	53.00	bu	-61 -149	-35 -123	-10 -97	15 -72	41 -46	67 -20	93 5	119 31	144 56	170 82	196 108
110	58.30	bu	-24 -112	4 -83	32 -55	60 -27	89 1	117 29	146 58	174 86	202 114	231 143	259 171
120	63.60	bu	12 -75	43 -44	74 -13	105 17	136 48	167 79	198 110	229 141	260 172	291 203	322 234
130	68.90	bu	50 -37	83 -4	117 29	150 62	184 96	217 130	251 163	285 197	318 230	352 264	385 297
140	74.20	bu	87 -0	123 35	159 71	195 107	232 144	268 180	304 216	340 252	376 288	412 324	448 360
150	79.50	bu	124 36	163 75	202 114	240 152	279 191	318 230	357 269	395 307	434 346	473 385	511 423

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 2016 input prices.

Table 6.A Estimated costs per acre
Soybeans, June-planted, after wheat, RR, 12R 30"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Baythroid XL	oz	2.48	2.1300	5.28	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	0.6000	2.21	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.1453	1.91	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	13.10	0.2128	2.79	_____
DIESEL FUEL					
Tractors	gal	1.70	1.6834	2.87	_____
Harvesters	gal	1.70	1.3935	2.37	_____
1/2-mi Pivot Irr.	gal	1.70	16.4057	27.90	_____
REPAIR & MAINTENANCE					
Implements	acre	3.39	1.0000	3.39	_____
Tractors	acre	0.98	1.0000	0.98	_____
Harvesters	acre	3.44	1.0000	3.44	_____
1/2-mi Pivot Irr.	acre	9.62	1.0000	9.62	_____
INTEREST ON OP. CAP.	acre	8.07	1.0000	8.07	_____
TOTAL DIRECT EXPENSES				385.13	_____
FIXED EXPENSES					
Implements	acre	5.74	1.0000	5.74	_____
Tractors	acre	6.23	1.0000	6.23	_____
Harvesters	acre	13.56	1.0000	13.56	_____
1/2-mi Pivot Irr.	acre	34.22	1.0000	34.22	_____
TOTAL FIXED EXPENSES				59.75	_____
TOTAL SPECIFIED EXPENSES				444.88	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 6.B Summary of estimated costs and returns per acre
 Soybeans, June-planted, after wheat, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	50.0000	487.00	_____

TOTAL INCOME				487.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	72.22	1.0000	72.22	_____
INSECTICIDES	acre	38.14	1.0000	38.14	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	2.22	1.0000	2.22	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	13.14	0.2475	3.25	_____
UNALLOCATED LABOR	hour	13.10	0.2128	2.79	_____
DIESEL FUEL	gal	1.70	19.4827	33.14	_____
REPAIR & MAINTENANCE	acre	17.43	1.0000	17.43	_____
INTEREST ON OP. CAP.	acre	8.07	1.0000	8.07	_____

TOTAL DIRECT EXPENSES				385.13	_____
RETURNS ABOVE DIRECT EXPENSES				101.87	_____
TOTAL FIXED EXPENSES				59.75	_____

TOTAL SPECIFIED EXPENSES				444.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				42.12	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 6.C Estimated resource use for field operations, per acre
 Soybeans, June-planted, after wheat, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
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				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Baythroid XL	oz					2.1300				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					50.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.24	0.24	0.39	0.21

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 6.D Estimated costs for field operations, per acre
 Soybeans, June-planted, after wheat, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	15.18						0.72	15.90	15.90
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Phosphorus(46% P2O5)	cwt	19.04						0.90	19.94	19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64	23.64
Soybeans Consultant	acre	6.50						0.15	6.65	6.65
Plant & Pre-Folding	12R-30		1.33	2.26	2.26			0.12	5.97	6.35
Soybean Seed RR2	lb	63.00						1.25	64.25	64.25
CruiserMaxx	oz	7.36						0.15	7.51	7.51
Optimize	oz	3.00						0.06	3.06	3.06
Boundary	pt	20.36						0.40	20.76	20.76
Gramoxone SL 2.0	oz	12.96						0.26	13.22	13.22
Surfactant	pt	1.48						0.03	1.51	1.51
Spray (Broadcast)	60'		0.56	0.44	0.82			0.04	1.86	1.51
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
Dual Magnum	pt	14.97						0.30	15.27	15.27
Spray (Broadcast)	60'		0.56	0.44	0.82			0.03	1.85	1.51
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55	4.55
Dual Magnum	pt	14.97						0.24	15.21	15.21
App by Air (5 gal)	appl	6.50						0.08	6.58	6.58
Quadris Top	oz	20.08						0.24	20.32	20.32
Surfactant	pt	0.37							0.37	0.37
App by Air (5 gal)	appl	6.50						0.08	6.58	6.58
Acephate 90SP	lb	6.52						0.08	6.60	6.60
App by Air (5 gal)	appl	6.50						0.08	6.58	6.58
Prevathon	oz	18.34						0.22	18.56	18.56
Surfactant	pt	0.37							0.37	0.37
Baythroid XL	oz	5.28						0.06	5.34	5.34
Incidental Pest										
App by Air (5 gal)	appl	6.50						0.05	6.55	6.55
Incidental Pest Trt	acre	8.00						0.06	8.06	8.06
Header -Soybean	25' Flex		2.37	4.32	2.49			0.04	9.22	14.88
Haul Soybeans	bu	13.50						0.05	13.55	13.55
Grain Cart Soybean	700 bu		0.42	0.35	0.52			0.01	1.30	1.28
1/2-mi Pivot Irr.	acre		27.90	9.62	0.47			0.65	38.64	34.22
TOTALS		319.11	33.14	17.43	7.38	0.00	8.07	385.13	59.75	444.88

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 6.E Estimated monthly income and expense flows per acre
Soybeans, June-planted, after wheat, RR, 12R 30"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

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	487.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	6.50	0.00
FERTILIZERS	41.61	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	7.36	0.00	20.08	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.77	19.45	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	30.14	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.74	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	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	3.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	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	0.00	0.34	3.12	0.87	0.04	0.00	3.01
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	0.00	0.00	10.26	11.72	8.37	0.00	2.79
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.06	1.16	0.54	0.00	4.67
INTEREST ON OP. CAP.	3.18	0.00	0.00	0.00	0.00	0.00	0.16	3.04	0.53	0.95	0.11	0.10
TOTAL DIRECT EXPENSES	70.27	0.00	0.00	0.00	0.00	0.00	7.00	155.09	33.73	80.36	14.61	24.07
NET INCOME	-70.27	0.00	0.00	0.00	0.00	0.00	-7.00	-155.09	-33.73	-80.36	-14.61	462.93
NET INCOME TO DATE	-70.27	-70.27	-70.27	-70.27	-70.27	-70.27	-77.27	-232.36	-266.09	-346.45	-361.06	101.87

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
 Soybeans, June-planted, after wheat, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
-----PRODUCT PRICE-----													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	-----dollars-----										
50	25.00	bu	-195	-183	-171	-159	-147	-134	-122	-110	-98	-86	-73
			-255	-243	-231	-218	-206	-194	-182	-170	-158	-145	-133
60	30.00	bu	-160	-145	-131	-116	-102	-87	-72	-58	-43	-29	-14
			-220	-205	-191	-176	-161	-147	-132	-118	-103	-88	-74
70	35.00	bu	-125	-108	-91	-74	-57	-40	-23	-6	10	28	45
			-185	-168	-151	-134	-116	-99	-82	-65	-48	-31	-14
80	40.00	bu	-90	-70	-51	-31	-12	7	26	46	65	85	104
			-149	-130	-111	-91	-72	-52	-33	-13	5	25	44
90	45.00	bu	-55	-33	-11	10	32	54	76	98	120	142	164
			-114	-92	-70	-49	-27	-5	16	38	60	82	104
100	50.00	bu	-19	4	28	53	77	101	126	150	174	199	223
			-79	-55	-30	-6	17	42	66	90	115	139	163
110	55.00	bu	15	42	68	95	122	149	176	202	229	256	283
			-44	-17	9	35	62	89	116	143	169	196	223
120	60.00	bu	50	79	108	138	167	196	225	255	284	313	342
			-9	19	49	78	107	136	166	195	224	253	282
130	65.00	bu	85	117	148	180	212	243	275	307	338	370	402
			25	57	89	120	152	184	215	247	279	310	342
140	70.00	bu	120	154	188	223	257	291	325	359	393	427	461
			61	95	129	163	197	231	265	299	333	367	401
150	75.00	bu	155	192	229	265	302	338	375	411	448	484	521
			96	132	169	205	242	278	315	351	388	424	461

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 2016 input prices.

Table 7.A Estimated costs per acre
Soybeans, early-planted, LL, stale seedbed, 12R 30"
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Select Max	pt	14.99	1.0000	14.99	_____
Valor SX	oz	6.60	2.0000	13.20	_____
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.0000	3.69	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3302	4.35	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	13.12	0.3892	5.11	_____
DIESEL FUEL					
Tractors	gal	1.70	3.8252	6.51	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.80	1.0000	4.80	_____
Tractors	acre	2.24	1.0000	2.24	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	9.25	1.0000	9.25	_____
TOTAL DIRECT EXPENSES				351.31	_____
FIXED EXPENSES					
Implements	acre	9.56	1.0000	9.56	_____
Tractors	acre	14.16	1.0000	14.16	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				37.28	_____
TOTAL SPECIFIED EXPENSES				388.59	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 7.B Summary of estimated costs and returns per acre
Soybeans, early-planted, LL, stale seedbed, 12R 30"
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	42.0000	409.08	_____

TOTAL INCOME				409.08	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	119.60	1.0000	119.60	_____
INSECTICIDES	acre	6.52	1.0000	6.52	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	3.70	1.0000	3.70	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	13.14	0.4324	5.69	_____
UNALLOCATED LABOR	hour	13.12	0.3892	5.11	_____
DIESEL FUEL	gal	1.70	5.2188	8.88	_____
REPAIR & MAINTENANCE	acre	10.48	1.0000	10.48	_____
INTEREST ON OP. CAP.	acre	9.25	1.0000	9.25	_____

TOTAL DIRECT EXPENSES				351.31	_____
RETURNS ABOVE DIRECT EXPENSES				57.77	_____
TOTAL FIXED EXPENSES				37.28	_____

TOTAL SPECIFIED EXPENSES				388.59	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				20.49	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 7.C Estimated resource use for field operations, per acre
Soybeans, early-planted, LL, stale seedbed, 12R 30"
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3300				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	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	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
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				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.43	0.43	0.52	0.38

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 7.D Estimated costs for field operations, per acre
Soybeans, early-planted, LL, stale seedbed, 12R 30"
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Disk Harrow	24'		1.61	1.53	2.05			0.25	5.44	5.55	10.99
Field Cultivate Fld	24'		1.23	0.81	1.56			0.17	3.77	4.33	8.10
App by Air (5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Select Max	pt	14.99						0.47	15.46		15.46
Valor SX	oz	13.20						0.42	13.62		13.62
Surfactant	pt	1.48						0.05	1.53		1.53
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed LL	lb	58.00						1.38	59.38		59.38
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Liberty 280	oz	16.53						0.33	16.86		16.86
Dual Magnum	pt	14.97						0.30	15.27		15.27
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Liberty 280	oz	16.53						0.33	16.86		16.86
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Acephate 90SP	lb	6.52						0.05	6.57		6.57
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	11.34						0.04	11.38		11.38
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
TOTALS		311.03	8.88	10.48	11.67	0.00	9.25	351.31	37.28	388.59	

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 7.E Estimated monthly income and expense flows per acre
Soybeans, early-planted, LL, stale seedbed, 12R 30"
Delta Area, Mississippi, 2017

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	409.08
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	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	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	38.25	0.00	33.32	48.03	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	6.52	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.48	0.00	1.48	0.00	0.00	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.63	0.00	0.00	0.00	0.00	0.00	2.30	1.66	0.00	0.00	0.00	3.08
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	3.64	0.00	0.00	0.00	0.00	0.00	1.33	1.12	0.00	0.00	0.00	2.79
REPAIR & MAINTENANCE	2.67	0.00	0.00	0.00	0.00	0.00	2.26	0.88	0.00	0.00	0.00	4.67
INTEREST ON OP. CAP.	3.70	0.00	0.00	0.00	1.47	0.00	2.59	1.17	0.00	0.00	0.23	0.09
TOTAL DIRECT EXPENSES	81.73	0.00	0.00	0.00	47.70	0.00	111.64	59.36	0.00	0.00	28.91	21.97
NET INCOME	-81.73	0.00	0.00	0.00	-47.70	0.00	-111.64	-59.36	0.00	0.00	-28.91	387.11
NET INCOME TO DATE	-81.73	-81.73	-81.73	-81.73	-129.43	-129.43	-241.07	-300.43	-300.43	-300.43	-329.34	57.77

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
 Soybeans, early-planted, LL, stale seedbed, 12R 30"
 Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-192	-181	-171	-161	-151	-141	-130	-120	-110	-100	-89
			-229	-219	-209	-198	-188	-178	-168	-157	-147	-137	-127
60	25.20	bu	-162	-150	-138	-125	-113	-101	-89	-76	-64	-52	-39
			-199	-187	-175	-163	-150	-138	-126	-114	-101	-89	-77
70	29.40	bu	-133	-118	-104	-90	-75	-61	-47	-32	-18	-4	10
			-170	-156	-141	-127	-113	-98	-84	-70	-55	-41	-27
80	33.60	bu	-103	-87	-70	-54	-38	-21	-5	10	27	43	60
			-140	-124	-108	-91	-75	-59	-42	-26	-9	6	22
90	37.80	bu	-74	-55	-37	-18	-0	18	36	54	73	91	110
			-111	-92	-74	-56	-37	-19	-0	17	35	54	72
100	42.00	bu	-44	-24	-3	16	37	57	78	98	119	139	160
			-81	-61	-40	-20	0	20	40	61	81	102	122
110	46.20	bu	-14	7	30	52	75	97	120	142	165	187	210
			-52	-29	-7	15	37	60	82	105	127	150	172
120	50.40	bu	14	39	63	88	112	137	161	186	210	235	260
			-22	1	26	50	75	100	124	149	173	198	222
130	54.60	bu	44	70	97	123	150	177	203	230	256	283	310
			6	33	60	86	113	139	166	192	219	246	272
140	58.80	bu	73	102	130	159	188	216	245	274	302	331	360
			36	65	93	122	150	179	208	236	265	294	322
150	63.00	bu	103	133	164	195	225	256	287	317	348	379	410
			65	96	127	157	188	219	250	280	311	342	372

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 2016 input prices.

Table 8.A Estimated costs per acre
Soybeans, early-planted, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Select Max	pt	14.99	1.0000	14.99	_____
Valor SX	oz	6.60	2.0000	13.20	_____
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.1000	4.06	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4713	6.20	_____
Harvesters	hour	13.14	0.1021	1.34	_____
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	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	13.13	0.4454	5.85	_____
DIESEL FUEL					
Tractors	gal	1.70	5.2753	8.98	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Roll-Out Pipe Irr.	gal	1.70	7.3316	12.45	_____
REPAIR & MAINTENANCE					
Implements	acre	5.46	1.0000	5.46	_____
Tractors	acre	3.11	1.0000	3.11	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Roll-Out Pipe Irr.	acre	6.34	1.0000	6.34	_____
INTEREST ON OP. CAP.	acre	10.29	1.0000	10.29	_____
TOTAL DIRECT EXPENSES				421.09	_____
FIXED EXPENSES					
Implements	acre	11.79	1.0000	11.79	_____
Tractors	acre	19.59	1.0000	19.59	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
TOTAL FIXED EXPENSES				96.47	_____
TOTAL SPECIFIED EXPENSES				517.56	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 8.B Summary of estimated costs and returns per acre
 Soybeans, early-planted, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	60.0000	584.40	_____

TOTAL INCOME				584.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	119.60	1.0000	119.60	_____
INSECTICIDES	acre	6.52	1.0000	6.52	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	4.07	1.0000	4.07	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	13.14	0.5735	7.54	_____
UNALLOCATED LABOR	hour	13.13	0.4454	5.85	_____
DIESEL FUEL	gal	1.70	14.0006	23.80	_____
REPAIR & MAINTENANCE	acre	18.35	1.0000	18.35	_____
INTEREST ON OP. CAP.	acre	10.29	1.0000	10.29	_____

TOTAL DIRECT EXPENSES				421.09	_____
RETURNS ABOVE DIRECT EXPENSES				163.31	_____
TOTAL FIXED EXPENSES				96.47	_____

TOTAL SPECIFIED EXPENSES				517.56	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				66.84	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 8.C Estimated resource use for field operations, per acre
 Soybeans, early-planted, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3300				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fold	12R-30	MFWD 225	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	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
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				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.57	0.57	1.03	0.44

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 8.D Estimated costs for field operations, per acre
 Soybeans, early-planted, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Disk Harrow	24'		1.61	1.53	2.05			0.25	5.44	5.55	10.99
Field Cultivate Fld	24'		1.23	0.81	1.56			0.17	3.77	4.33	8.10
Bed/Lister-Roll-Fold	12R-30		1.23	0.89	1.56			0.17	3.85	3.89	7.74
App by Air (5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Select Max	pt	14.99						0.47	15.46		15.46
Valor SX	oz	13.20						0.42	13.62		13.62
Surfactant	pt	1.48						0.05	1.53		1.53
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed LL	lb	58.00						1.38	59.38		59.38
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Liberty 280	oz	16.53						0.33	16.86		16.86
Dual Magnum	pt	14.97						0.30	15.27		15.27
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Liberty 280	oz	16.53						0.33	16.86		16.86
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Quadris Top	oz	20.08						0.24	20.32		20.32
Surfactant	pt	0.37							0.37		0.37
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Acephate 90SP	lb	6.52						0.05	6.57		6.57
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	16.20						0.06	16.26		16.26
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
Roll-Out Pipe Irr.	acre	8.25	13.69	6.98	4.33			0.53	33.78	55.30	89.08
TOTALS		351.09	23.80	18.35	17.56	0.00	10.29	421.09	96.47	517.56	

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 8.E Estimated monthly income and expense flows per acre
Soybeans, early-planted, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

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	584.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	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	7.36	0.00	0.00	20.08	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	38.25	0.00	33.32	48.03	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	6.52	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.48	0.00	1.48	0.00	0.00	0.37	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	6.69	0.00	0.00	0.00	0.00	0.00	2.30	1.89	2.78	0.23	0.00	3.67
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	5.50	0.00	0.00	0.00	0.00	0.00	1.33	1.12	8.63	4.15	0.00	3.07
REPAIR & MAINTENANCE	3.89	0.00	0.00	0.00	0.00	0.00	2.26	0.88	5.21	1.30	0.00	4.81
INTEREST ON OP. CAP.	3.94	0.00	0.00	0.00	1.47	0.00	2.59	1.17	0.40	0.38	0.23	0.11
TOTAL DIRECT EXPENSES	87.11	0.00	0.00	0.00	47.70	0.00	111.64	59.59	25.27	33.01	28.91	27.86
NET INCOME	-87.11	0.00	0.00	0.00	-47.70	0.00	-111.64	-59.59	-25.27	-33.01	-28.91	556.54
NET INCOME TO DATE	-87.11	-87.11	-87.11	-87.11	-134.81	-134.81	-246.45	-306.04	-331.31	-364.32	-393.23	163.31

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
 Soybeans, early-planted, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-193 -290	-179 -275	-164 -261	-149 -246	-135 -231	-120 -217	-106 -202	-91 -188	-76 -173	-62 -158	-47 -144
60	36.00	bu	-151 -248	-134 -230	-116 -213	-99 -195	-81 -177	-63 -160	-46 -142	-28 -125	-11 -107	6 -90	23 -72
70	42.00	bu	-109 -205	-88 -185	-68 -164	-48 -144	-27 -124	-7 -103	13 -83	33 -62	54 -42	74 -21	95 -1
80	48.00	bu	-67 -163	-43 -140	-20 -116	2 -93	26 -70	49 -46	73 -23	96 -0	119 23	143 46	166 70
90	54.00	bu	-24 -121	1 -95	27 -68	53 -42	80 -16	106 10	132 36	159 62	185 88	211 115	237 141
100	60.00	bu	17 -79	46 -50	75 -20	104 8	134 37	163 66	192 96	221 125	250 154	280 183	309 212
110	66.00	bu	59 -37	91 -4	123 27	155 59	187 91	220 123	252 155	284 187	316 220	348 252	380 284
120	72.00	bu	101 5	136 40	171 75	206 110	241 145	276 180	312 215	347 250	382 285	417 320	452 355
130	78.00	bu	143 47	181 85	219 123	257 161	295 199	333 237	371 275	409 313	447 351	485 389	523 427
140	84.00	bu	186 89	226 130	267 171	308 212	349 253	390 294	431 335	472 375	513 416	554 457	595 498
150	90.00	bu	228 131	272 175	315 219	359 263	403 307	447 350	491 394	535 438	578 482	622 526	666 570

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 2016 input prices.

Table 9.A Estimated costs per acre
Soybeans, May-planted, LL, 12R 30"
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.7500	24.38	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	10.5000	13.76	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.4000	5.17	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	40.0000	10.80	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.2631	3.46	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR	hour	13.07	0.3287	4.30	_____
DIESEL FUEL					
Tractors	gal	1.70	3.0471	5.19	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.18	1.0000	4.18	_____
Tractors	acre	1.78	1.0000	1.78	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	9.89	1.0000	9.89	_____
TOTAL DIRECT EXPENSES				394.30	_____
FIXED EXPENSES					
Implements	acre	6.97	1.0000	6.97	_____
Tractors	acre	11.28	1.0000	11.28	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				31.81	_____
TOTAL SPECIFIED EXPENSES				426.11	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.B Summary of estimated costs and returns per acre
Soybeans, May-planted, LL, 12R 30"
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	40.0000	389.60	_____

TOTAL INCOME				389.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	24.38	1.0000	24.38	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	138.21	1.0000	138.21	_____
INSECTICIDES	acre	28.28	1.0000	28.28	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	5.18	1.0000	5.18	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
OPERATOR LABOR	hour	13.14	0.3652	4.80	_____
UNALLOCATED LABOR	hour	13.07	0.3287	4.30	_____
DIESEL FUEL	gal	1.70	4.4407	7.56	_____
REPAIR & MAINTENANCE	acre	9.40	1.0000	9.40	_____
INTEREST ON OP. CAP.	acre	9.89	1.0000	9.89	_____

TOTAL DIRECT EXPENSES				394.30	_____
RETURNS ABOVE DIRECT EXPENSES				-4.70	_____
TOTAL FIXED EXPENSES				31.81	_____

TOTAL SPECIFIED EXPENSES				426.11	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-36.51	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.C Estimated resource use for field operations, per acre
Soybeans, May-planted, LL, 12R 30"
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Nov		0.04	0.04	0.04	0.03
Disk Harrow	24'	MFWD 225	0.081	0.25	Nov		0.02	0.02	0.02	0.01
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
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				
Prevathon	oz					10.5000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					40.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.36	0.36	0.48	0.32

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.D Estimated costs for field operations, per acre
Soybeans, May-planted, LL, 12R 30"
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Disk Harrow	24'		0.40	0.38	0.51			0.06	1.35	1.39	2.74
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus(46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51	3.41
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64		4.64
Select Max	pt	14.99						0.53	15.52		15.52
Surfactant	pt	1.48						0.05	1.53		1.53
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51	3.39
Fierce	oz	24.43						0.68	25.11		25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32		13.32
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.15	6.65		6.65
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed LL	lb	58.00						1.38	59.38		59.38
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Liberty 280	oz	16.53						0.39	16.92		16.92
Dual Magnum	pt	14.97						0.36	15.33		15.33
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Liberty 280	oz	16.53						0.33	16.86		16.86
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Acephate 90SP	lb	6.52						0.08	6.60		6.60
App by Air (5 gal)	appl	4.88						0.06	4.94		4.94
Prevathon	oz	13.76						0.16	13.92		13.92
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Incidental Pest Trt	acre	8.00						0.06	8.06		8.06
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	10.80						0.04	10.84		10.84
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
TOTALS		357.22	7.56	9.40	10.23	0.00	9.89	394.30	31.81	426.11	

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, LL, 12R 30"
Delta Area, Mississippi, 2017

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	389.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.38	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	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	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	64.82	16.53	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	20.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.00	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.53	0.00	0.00	0.83	0.00	0.83	3.13	0.83	0.00	0.00	0.00	3.08
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	1.20	0.00	0.00	0.56	0.00	0.56	1.89	0.56	0.00	0.00	0.00	2.79
REPAIR & MAINTENANCE	0.71	0.00	0.00	0.44	0.00	0.44	2.70	0.44	0.00	0.00	0.00	4.67
INTEREST ON OP. CAP.	3.34	0.00	0.00	0.81	0.00	1.13	3.53	0.37	0.00	0.38	0.24	0.09
TOTAL DIRECT EXPENSES	73.87	0.00	0.00	23.59	0.00	41.83	152.41	18.73	0.00	32.04	30.40	21.43
NET INCOME	-73.87	0.00	0.00	-23.59	0.00	-41.83	-152.41	-18.73	0.00	-32.04	-30.40	368.17
NET INCOME TO DATE	-73.87	-73.87	-73.87	-97.46	-97.46	-139.29	-291.70	-310.43	-310.43	-342.47	-372.87	-4.70

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre
 Soybeans, May-planted, LL, 12R 30"
 Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-242 -274	-233 -264	-223 -255	-213 -245	-203 -235	-194 -225	-184 -216	-174 -206	-164 -196	-155 -186	-145 -177
60	24.00	bu	-214 -246	-202 -234	-191 -223	-179 -211	-167 -199	-156 -188	-144 -176	-132 -164	-121 -152	-109 -141	-97 -129
70	28.00	bu	-186 -218	-172 -204	-159 -191	-145 -177	-131 -163	-118 -150	-104 -136	-91 -122	-77 -109	-63 -95	-50 -81
80	32.00	bu	-158 -190	-142 -174	-127 -159	-111 -143	-96 -127	-80 -112	-64 -96	-49 -81	-33 -65	-18 -49	-2 -34
90	36.00	bu	-130 -162	-112 -144	-95 -126	-77 -109	-60 -91	-42 -74	-25 -56	-7 -39	10 -21	27 -4	45 13
100	40.00	bu	-102 -133	-82 -114	-63 -94	-43 -75	-24 -55	-4 -36	14 -17	34 2	53 21	73 41	92 60
110	44.00	bu	-73 -105	-52 -84	-31 -62	-9 -41	11 -20	33 1	54 22	76 44	97 65	118 87	140 108
120	48.00	bu	-45 -77	-22 -54	0 -30	24 -7	47 15	71 39	94 62	117 85	141 109	164 132	187 156
130	52.00	bu	-17 -49	7 -24	32 1	58 26	83 51	108 77	134 102	159 127	184 153	210 178	235 203
140	56.00	bu	10 -21	37 5	64 33	92 60	119 87	146 114	174 142	201 169	228 196	255 224	283 251
150	60.00	bu	38 6	67 35	97 65	126 94	155 123	184 152	213 182	243 211	272 240	301 269	330 298

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 2016 input prices.

Table 10.A Estimated costs per acre
Soybeans, May-planted, LL, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.5000	5.54	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4864	6.38	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR					
	hour	13.10	0.3472	4.55	_____
DIESEL FUEL					
Tractors	gal	1.70	4.6503	7.94	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Contour Flood Irr.	gal	1.70	10.9974	18.69	_____
REPAIR & MAINTENANCE					
Implements	acre	5.08	1.0000	5.08	_____
Tractors	acre	2.78	1.0000	2.78	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Contour Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	11.15	1.0000	11.15	_____
TOTAL DIRECT EXPENSES				476.51	_____
FIXED EXPENSES					
Implements	acre	9.49	1.0000	9.49	_____
Tractors	acre	17.55	1.0000	17.55	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Contour Flood Irr.	acre	39.18	1.0000	39.18	_____
TOTAL FIXED EXPENSES				79.78	_____
TOTAL SPECIFIED EXPENSES				556.29	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 10.B Summary of estimated costs and returns per acre
 Soybeans, May-planted, LL, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	53.0000	516.22	_____

TOTAL INCOME				516.22	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	138.21	1.0000	138.21	_____
INSECTICIDES	acre	32.86	1.0000	32.86	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	5.55	1.0000	5.55	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	13.14	0.5886	7.72	_____
UNALLOCATED LABOR	hour	13.10	0.3472	4.55	_____
DIESEL FUEL	gal	1.70	17.0414	29.00	_____
REPAIR & MAINTENANCE	acre	24.01	1.0000	24.01	_____
INTEREST ON OP. CAP.	acre	11.15	1.0000	11.15	_____

TOTAL DIRECT EXPENSES				476.51	_____
RETURNS ABOVE DIRECT EXPENSES				39.71	_____
TOTAL FIXED EXPENSES				79.78	_____

TOTAL SPECIFIED EXPENSES				556.29	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-40.07	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre..

Table 10.C Estimated resource use for field operations, per acre
Soybeans, May-planted, LL, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
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				
Prevathon	oz					14.0000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.58	0.58	1.02	0.34

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 10.D Estimated costs for field operations, per acre
Soybeans, May-planted, LL, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Disk Harrow	24'		1.36	1.45	2.05			0.23	5.09	5.04	10.13
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51	3.41
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64		4.64
Select Max	pt	14.99						0.53	15.52		15.52
Surfactant	pt	1.48						0.05	1.53		1.53
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51	3.39
Fierce	oz	24.43						0.68	25.11		25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32		13.32
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.15	6.65		6.65
Plant & Pre-Folding	12R-30		1.13	2.19	2.30			0.13	5.75	5.93	11.68
Soybean Seed LL	lb	58.00						1.38	59.38		59.38
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Spray (Broadcast)	60'		0.47	0.41	0.83			0.04	1.75	1.33	3.08
Liberty 280	oz	16.53						0.39	16.92		16.92
Dual Magnum	pt	14.97						0.36	15.33		15.33
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	1.33	3.07
Liberty 280	oz	16.53						0.33	16.86		16.86
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Quadris Top	oz	20.08						0.32	20.40		20.40
Surfactant	pt	0.37						0.01	0.38		0.38
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Acephate 90SP	lb	6.52						0.08	6.60		6.60
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Prevathon	oz	18.34						0.22	18.56		18.56
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Incidental Pest Trt	acre	8.00						0.06	8.06		8.06
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	14.31						0.06	14.37		14.37
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	1.15	2.36
Contour Flood Irr.	acre	2.25	21.73	14.02	5.47			0.69	44.16	47.10	91.26
TOTALS		396.13	29.00	24.01	16.22	0.00	11.15	476.51	79.78	556.29	

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second Fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 10.E Estimated monthly income and expense flows per acre
 Soybeans, May-planted, LL, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

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	516.22
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	13.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	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	7.36	0.00	20.08	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	64.82	16.53	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	24.86	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.37	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
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	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.05	0.00	0.00	0.83	0.00	0.83	3.58	2.59	1.55	1.55	0.16	3.08
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	1.36	0.00	0.00	0.56	0.00	0.56	1.60	7.81	7.10	7.10	0.19	2.72
REPAIR & MAINTENANCE	1.45	0.00	0.00	0.44	0.00	0.44	2.60	8.38	2.98	2.98	0.09	4.65
INTEREST ON OP. CAP.	3.41	0.00	0.00	0.81	0.00	1.13	3.53	0.72	0.61	0.60	0.24	0.10
TOTAL DIRECT EXPENSES	75.36	0.00	0.00	23.59	0.00	41.83	152.47	38.28	39.19	50.09	30.84	24.86
NET INCOME	-75.36	0.00	0.00	-23.59	0.00	-41.83	-152.47	-38.28	-39.19	-50.09	-30.84	491.36
NET INCOME TO DATE	-75.36	-75.36	-75.36	-98.95	-98.95	-140.78	-293.25	-331.53	-370.72	-420.81	-451.65	39.71

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

* Lease costs are based on hourly usage costs.

Table 10.F Estimated returns for various price/yield combinations, per acre
 Soybeans, May-planted, LL, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
			dollars										
PERCENT	YIELD	UNIT											
50	26.50	bu	-275 -355	-262 -342	-249 -329	-237 -316	-224 -303	-211 -290	-198 -278	-185 -265	-172 -252	-159 -239	-146 -226
60	31.80	bu	-238 -318	-222 -302	-207 -287	-192 -271	-176 -256	-161 -240	-145 -225	-130 -209	-114 -194	-99 -178	-83 -163
70	37.10	bu	-201 -280	-183 -262	-165 -244	-146 -226	-128 -208	-110 -190	-92 -172	-74 -154	-56 -136	-38 -118	-20 -100
80	42.40	bu	-163 -243	-143 -223	-122 -202	-101 -181	-81 -161	-60 -140	-40 -119	-19 -99	1 -78	21 -57	42 -37
90	47.70	bu	-126 -206	-103 -183	-80 -159	-56 -136	-33 -113	-10 -90	12 -67	35 -43	59 -20	82 2	105 25
100	53.00	bu	-89 -169	-63 -143	-37 -117	-11 -91	13 -65	39 -40	65 -14	91 11	117 37	142 63	168 88
110	58.30	bu	-52 -131	-23 -103	4 -75	33 -46	61 -18	89 10	118 38	146 66	175 95	203 123	231 152
120	63.60	bu	-14 -94	16 -63	47 -32	78 -1	109 29	140 60	171 91	202 122	233 153	263 184	294 215
130	68.90	bu	22 -57	56 -23	89 9	123 43	156 76	190 110	223 144	257 177	290 211	324 244	358 278
140	74.20	bu	59 -20	95 16	132 52	168 88	204 124	240 160	276 196	312 232	348 269	384 305	421 341
150	79.50	bu	97 17	135 55	174 94	213 133	251 172	290 210	329 249	368 288	406 327	445 365	484 404

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 2016 input prices.

Table 11.A Estimated costs per acre
Soybeans, LL, 12R 30"
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 201

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.5000	5.54	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3621	4.76	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR					
	hour	13.10	0.3472	4.55	_____
DIESEL FUEL					
Tractors	gal	1.70	3.6017	6.14	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Roll-Out Pipe Irr.	gal	1.70	9.7755	16.60	_____
REPAIR & MAINTENANCE					
Implements	acre	5.06	1.0000	5.06	_____
Tractors	acre	2.13	1.0000	2.13	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Roll-Out Pipe Irr.	acre	6.36	1.0000	6.36	_____
INTEREST ON OP. CAP.	acre	11.10	1.0000	11.10	_____
TOTAL DIRECT EXPENSES				470.64	_____
FIXED EXPENSES					
Implements	acre	9.40	1.0000	9.40	_____
Tractors	acre	13.49	1.0000	13.49	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
TOTAL FIXED EXPENSES				87.98	_____
TOTAL SPECIFIED EXPENSES				558.62	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.B Summary of estimated costs and returns per acre
 Soybeans, May-planted, LL, 12R 30"
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 201

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	53.0000	516.22	_____

TOTAL INCOME				516.22	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	138.21	1.0000	138.21	_____
INSECTICIDES	acre	32.86	1.0000	32.86	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	5.55	1.0000	5.55	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	14.31	1.0000	14.31	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	13.14	0.4643	6.10	_____
UNALLOCATED LABOR	hour	13.10	0.3472	4.55	_____
DIESEL FUEL	gal	1.70	14.7708	25.11	_____
REPAIR & MAINTENANCE	acre	16.99	1.0000	16.99	_____
INTEREST ON OP. CAP.	acre	11.10	1.0000	11.10	_____

TOTAL DIRECT EXPENSES				470.64	_____
RETURNS ABOVE DIRECT EXPENSES				45.58	_____
TOTAL FIXED EXPENSES				87.98	_____

TOTAL SPECIFIED EXPENSES				558.62	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-42.40	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.C Estimated resource use for field operations, per acre
Soybeans, May-planted, LL, 12R 30"
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
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				
Prevathon	oz					14.0000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.46	0.46	0.97	0.34

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.D Estimated costs for field operations, per acre
Soybeans, May-planted, LL, 12R 30"
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Disk Harrow	24'		1.36	1.45	2.05			0.23	5.09	5.04	10.13
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51	3.41
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64		4.64
Select Max	pt	14.99						0.53	15.52		15.52
Surfactant	pt	1.48						0.05	1.53		1.53
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51	3.39
Fierce	oz	24.43						0.68	25.11		25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32		13.32
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.15	6.65		6.65
Plant & Pre-Folding	12R-30		1.13	2.19	2.30			0.13	5.75	5.93	11.68
Soybean Seed LL	lb	58.00						1.38	59.38		59.38
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Spray (Broadcast)	60'		0.47	0.41	0.83			0.04	1.75	1.33	3.08
Liberty 280	oz	16.53						0.39	16.92		16.92
Dual Magnum	pt	14.97						0.36	15.33		15.33
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	1.33	3.07
Liberty 280	oz	16.53						0.33	16.86		16.86
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Quadris Top	oz	20.08						0.32	20.40		20.40
Surfactant	pt	0.37						0.01	0.38		0.38
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Acephate 90SP	lb	6.52						0.08	6.60		6.60
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Prevathon	oz	18.34						0.22	18.56		18.56
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Incidental Pest Trt	acre	8.00						0.06	8.06		8.06
App by Air (5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	14.31						0.06	14.37		14.37
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	1.15	2.36
Roll-Out Pipe Irr.	acre	8.25	17.84	7.00	4.56			0.64	38.29	55.30	93.59
TOTALS		402.13	25.11	16.99	15.31	0.00	11.10	470.64	87.98	558.62	

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, LL, 12R 30"
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

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	516.22
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	13.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	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	7.36	0.00	20.08	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	64.82	16.53	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	24.86	8.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.37	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.55	0.00	0.00	0.83	0.00	0.83	3.36	3.15	0.46	0.46	0.59	3.08
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	1.99	0.00	0.00	0.56	0.00	0.56	1.60	0.80	8.30	8.30	0.28	2.72
REPAIR & MAINTENANCE	1.78	0.00	0.00	0.44	0.00	0.44	2.60	3.02	1.96	1.96	0.14	4.65
INTEREST ON OP. CAP.	3.48	0.00	0.00	0.81	0.00	1.13	3.53	0.63	0.59	0.58	0.25	0.10
TOTAL DIRECT EXPENSES	76.89	0.00	0.00	23.59	0.00	41.83	152.25	32.38	38.26	49.16	31.42	24.86
NET INCOME	-76.89	0.00	0.00	-23.59	0.00	-41.83	-152.25	-32.38	-38.26	-49.16	-31.42	491.36
NET INCOME TO DATE	-76.89	-76.89	-76.89	-100.48	-100.48	-142.31	-294.56	-326.94	-365.20	-414.36	-445.78	45.58

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

* Lease costs are based on hourly usage costs.

Table 11.F Estimated returns for various price/yield combinations, per acre
 Soybeans, May-planted, LL, 12R 30"
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-269 -357	-256 -344	-244 -332	-231 -319	-218 -306	-205 -293	-192 -280	-179 -267	-166 -254	-153 -241	-140 -228
60	31.80	bu	-232 -320	-217 -305	-201 -289	-186 -274	-170 -258	-155 -243	-139 -227	-124 -212	-108 -196	-93 -181	-77 -165
70	37.10	bu	-195 -283	-177 -265	-159 -247	-141 -229	-123 -211	-104 -192	-86 -174	-68 -156	-50 -138	-32 -120	-14 -102
80	42.40	bu	-158 -246	-137 -225	-116 -204	-96 -184	-75 -163	-54 -142	-34 -122	-13 -101	7 -80	27 -60	48 -39
90	47.70	bu	-120 -208	-97 -185	-74 -162	-51 -139	-27 -115	-4 -92	18 -69	41 -46	65 -22	88 0	111 23
100	53.00	bu	-83 -171	-57 -145	-31 -119	-6 -94	19 -68	45 -42	71 -16	97 9	123 35	148 60	174 86
110	58.30	bu	-46 -134	-17 -105	10 -77	38 -48	67 -20	95 7	124 36	152 64	180 92	209 121	237 149
120	63.60	bu	-8 -96	22 -65	53 -34	84 -3	114 26	145 57	176 88	207 119	238 150	269 181	300 212
130	68.90	bu	28 -59	61 -26	95 7	129 41	162 74	196 108	229 141	263 175	296 208	330 242	363 275
140	74.20	bu	65 -22	101 13	137 49	174 86	210 122	246 158	282 194	318 230	354 266	390 302	426 339
150	79.50	bu	102 14	141 53	180 92	219 131	257 169	296 208	335 247	373 285	412 324	451 363	490 402

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 2016 input prices.

Table 12.A Estimated costs per acre
Soybeans, June-planted, after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Baythroid XL	oz	2.48	2.1300	5.28	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	0.6000	2.21	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.1453	1.91	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	13.10	0.2128	2.79	_____
DIESEL FUEL					
Tractors	gal	1.70	1.6834	2.87	_____
Harvesters	gal	1.70	1.3935	2.37	_____
1/2-mi Pivot Irr.	gal	1.70	16.4057	27.90	_____
REPAIR & MAINTENANCE					
Implements	acre	3.39	1.0000	3.39	_____
Tractors	acre	0.98	1.0000	0.98	_____
Harvesters	acre	3.44	1.0000	3.44	_____
1/2-mi Pivot Irr.	acre	9.62	1.0000	9.62	_____
INTEREST ON OP. CAP.	acre	8.40	1.0000	8.40	_____
TOTAL DIRECT EXPENSES				404.56	_____
FIXED EXPENSES					
Implements	acre	5.74	1.0000	5.74	_____
Tractors	acre	6.23	1.0000	6.23	_____
Harvesters	acre	13.56	1.0000	13.56	_____
1/2-mi Pivot Irr.	acre	34.22	1.0000	34.22	_____
TOTAL FIXED EXPENSES				59.75	_____
TOTAL SPECIFIED EXPENSES				464.31	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.B Summary of estimated costs and returns per acre
 Soybeans, June-planted, after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	50.0000	487.00	_____

TOTAL INCOME				487.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	96.32	1.0000	96.32	_____
INSECTICIDES	acre	38.14	1.0000	38.14	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	2.22	1.0000	2.22	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	13.14	0.2475	3.25	_____
UNALLOCATED LABOR	hour	13.10	0.2128	2.79	_____
DIESEL FUEL	gal	1.70	19.4827	33.14	_____
REPAIR & MAINTENANCE	acre	17.43	1.0000	17.43	_____
INTEREST ON OP. CAP.	acre	8.40	1.0000	8.40	_____

TOTAL DIRECT EXPENSES				404.56	_____
RETURNS ABOVE DIRECT EXPENSES				82.44	_____
TOTAL FIXED EXPENSES				59.75	_____

TOTAL SPECIFIED EXPENSES				464.31	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				22.69	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.C Estimated resource use for field operations, per acre
Soybeans, June-planted, after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
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				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Baythroid XL	oz					2.1300				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					50.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.24	0.24	0.39	0.21

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.D Estimated costs for field operations, per acre
Soybeans, June-planted, after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	15.18						0.72	15.90	15.90
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Phosphorus(46% P2O5)	cwt	19.04						0.90	19.94	19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64	23.64
Soybeans Consultant	acre	6.50						0.15	6.65	6.65
Plant & Pre-Folding	12R-30		1.33	2.26	2.26			0.12	5.97	6.35
Soybean Seed LL	lb	58.00						1.15	59.15	59.15
CruiserMaxx	oz	7.36						0.15	7.51	7.51
Optimize	oz	3.00						0.06	3.06	3.06
Boundary	pt	20.36						0.40	20.76	20.76
Gramoxone SL 2.0	oz	12.96						0.26	13.22	13.22
Surfactant	pt	1.48						0.03	1.51	1.51
Spray (Broadcast)	60'		0.56	0.44	0.82			0.04	1.86	1.51
Liberty 280	oz	16.53						0.33	16.86	16.86
Dual Magnum	pt	14.97						0.30	15.27	15.27
Spray (Broadcast)	60'		0.56	0.44	0.82			0.03	1.85	1.51
Liberty 280	oz	16.53						0.26	16.79	16.79
Dual Magnum	pt	14.97						0.24	15.21	15.21
App by Air (5 gal)	appl	6.50						0.08	6.58	6.58
Quadris Top	oz	20.08						0.24	20.32	20.32
Surfactant	pt	0.37							0.37	0.37
App by Air (5 gal)	appl	6.50						0.08	6.58	6.58
Acephate 90SP	lb	6.52						0.08	6.60	6.60
App by Air (5 gal)	appl	6.50						0.08	6.58	6.58
Prevathon	oz	18.34						0.22	18.56	18.56
Surfactant	pt	0.37							0.37	0.37
Baythroid XL	oz	5.28						0.06	5.34	5.34
Incidental Pest										
App by Air (5 gal)	appl	6.50						0.05	6.55	6.55
Incidental Pest Trt	acre	8.00						0.06	8.06	8.06
Header -Soybean	25' Flex		2.37	4.32	2.49			0.04	9.22	14.88
Haul Soybeans	bu	13.50						0.05	13.55	13.55
Grain Cart Soybean	700 bu		0.42	0.35	0.52			0.01	1.30	1.28
1/2-mi Pivot Irr.	acre		27.90	9.62	0.47			0.65	38.64	34.22
TOTALS		338.21	33.14	17.43	7.38	0.00	8.40	404.56	59.75	464.31

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.E Estimated monthly income and expense flows per acre
 Soybeans, June-planted, after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

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	487.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	6.50	0.00
FERTILIZERS	41.61	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	7.36	0.00	20.08	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.82	31.50	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	30.14	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.74	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	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	3.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	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	0.00	0.34	3.12	0.87	0.04	0.00	3.01
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	0.00	0.00	10.26	11.72	8.37	0.00	2.79
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.06	1.16	0.54	0.00	4.67
INTEREST ON OP. CAP.	3.18	0.00	0.00	0.00	0.00	0.00	0.16	3.18	0.72	0.95	0.11	0.10
TOTAL DIRECT EXPENSES	70.27	0.00	0.00	0.00	0.00	0.00	7.00	162.28	45.97	80.36	14.61	24.07
NET INCOME	-70.27	0.00	0.00	0.00	0.00	0.00	-7.00	-162.28	-45.97	-80.36	-14.61	462.93
NET INCOME TO DATE	-70.27	-70.27	-70.27	-70.27	-70.27	-70.27	-77.27	-239.55	-285.52	-365.88	-380.49	82.44

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre* Lease costs are based on hourly usage costs.

Table 12.F Estimated returns for various price/yield combinations, per acre
 Soybeans, June-planted, after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	25.00	bu	-215 -274	-202 -262	-190 -250	-178 -238	-166 -226	-154 -214	-142 -201	-129 -189	-117 -177	-105 -165	-93 -153
60	30.00	bu	-179 -239	-165 -225	-150 -210	-136 -195	-121 -181	-106 -166	-92 -152	-77 -137	-63 -122	-48 -108	-33 -93
70	35.00	bu	-144 -204	-127 -187	-110 -170	-93 -153	-76 -136	-59 -119	-42 -102	-25 -85	-8 -68	8 -51	25 -34
80	40.00	bu	-109 -169	-90 -149	-70 -130	-51 -110	-31 -91	-12 -72	7 -52	26 -33	46 -13	65 5	85 25
90	45.00	bu	-74 -134	-52 -112	-30 -90	-8 -68	13 -46	35 -24	57 -2	78 19	100 41	122 63	144 84
100	50.00	bu	-39 -99	-14 -74	9 -50	33 -26	58 -1	82 22	106 47	131 71	155 95	179 120	204 144
110	55.00	bu	-4 -63	22 -37	49 -10	76 16	103 43	129 70	156 96	183 123	210 150	236 177	263 203
120	60.00	bu	31 -28	60 0	89 29	118 58	147 88	177 117	206 146	235 175	264 205	294 234	323 263
130	65.00	bu	66 6	97 38	129 69	161 101	192 133	224 164	256 196	287 228	319 259	351 291	382 323
140	70.00	bu	101 41	135 75	169 109	203 143	237 177	271 212	305 246	340 280	374 314	408 348	442 382
150	75.00	bu	136 76	173 113	209 149	246 186	282 222	319 259	355 295	392 332	428 368	465 405	501 442

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 2016 input prices.

Table 13.A Estimated costs per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	2.0000	13.00	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.6600	14.44	_____
Potash (60% K2O)	cwt	16.97	1.0000	16.97	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	0.6000	2.21	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	43.0000	11.61	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3128	4.12	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	_____
UNALLOCATED LABOR					
	hour	13.11	0.3734	4.90	_____
DIESEL FUEL					
Tractors	gal	1.70	3.0592	5.20	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.69	1.0000	4.69	_____
Tractors	acre	1.81	1.0000	1.81	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	7.04	1.0000	7.04	_____
TOTAL DIRECT EXPENSES				273.11	_____
FIXED EXPENSES					
Implements	acre	9.14	1.0000	9.14	_____
Tractors	acre	11.45	1.0000	11.45	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				34.15	_____
TOTAL SPECIFIED EXPENSES				307.26	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.B Summary of estimated costs and returns per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	43.0000	418.82	_____

TOTAL INCOME				418.82	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.00	1.0000	13.00	_____
HARVEST AIDS	acre	5.12	1.0000	5.12	_____
FERTILIZERS	acre	31.41	1.0000	31.41	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	65.02	1.0000	65.02	_____
INSECTICIDES	acre	6.52	1.0000	6.52	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	2.22	1.0000	2.22	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1051	0.96	_____
OPERATOR LABOR	hour	13.14	0.4149	5.46	_____
UNALLOCATED LABOR	hour	13.11	0.3734	4.90	_____
DIESEL FUEL	gal	1.70	4.4528	7.57	_____
REPAIR & MAINTENANCE	acre	9.94	1.0000	9.94	_____
INTEREST ON OP. CAP.	acre	7.04	1.0000	7.04	_____

TOTAL DIRECT EXPENSES				273.11	_____
RETURNS ABOVE DIRECT EXPENSES				145.71	_____
TOTAL FIXED EXPENSES				34.15	_____

TOTAL SPECIFIED EXPENSES				307.26	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				111.56	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.C Estimated resource use for field operations, per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER UNIT	ALLOC LABOR	UNALL LABOR	
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Lime (Spread)	ton			0.33	Oct	0.3300				
Custom Apply Fert	acre			1.00	Oct	1.0000				
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	0.07	
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.05	
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Plant - Folding	12R-30	MFWD 190	0.062	1.00	Apr		0.06	0.06	0.05	
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.02	
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.02	
Glyphosate 3lbs a.e	oz					32.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.02	
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Paraquat	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.09	
Haul Soybeans	bu					43.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Sep		0.02	0.02	0.01	
TOTALS							0.41	0.41	0.52	0.37

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.D Estimated costs for field operations, per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	15.18						0.72	15.90	15.90
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Phosphorus(46% P2O5)	cwt	14.44						0.69	15.13	15.13
Potash (60% K2O)	cwt	16.97						0.81	17.78	17.78
Disk Harrow	24'		1.36	1.45	2.05			0.23	5.09	10.13
Field Cultivate Fld	24'		1.03	0.75	1.56			0.16	3.50	7.44
App by Air (5 gal)	appl	6.50						0.18	6.68	6.68
Glyphosate 3lbs a.e	oz	4.48						0.12	4.60	4.60
2,4-D Amine 4	pt	5.58						0.15	5.73	5.73
Plant - Folding	12R-30		1.05	1.86	2.14			0.12	5.17	10.32
Soybean Seed RR2	lb	63.00						1.50	64.50	64.50
CruiserMaxx	oz	7.36						0.17	7.53	7.53
Boundary	pt	20.36						0.48	20.84	20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Surfactant	pt	1.48						0.04	1.52	1.52
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	3.07
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
Prefix	pt	12.68						0.25	12.93	12.93
Soybeans Consultant	acre	6.50						0.13	6.63	6.63
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	3.07
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
Spray (Broadcast)	60'		0.47	0.41	0.83			0.01	1.72	3.05
Acephate 90SP	lb	6.52						0.05	6.57	6.57
App by Air (5 gal)	appl	6.50						0.05	6.55	6.55
Paraquat	oz	5.12						0.04	5.16	5.16
Surfactant	pt	0.74						0.01	0.75	0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	24.16
Haul Soybeans	bu	11.61						0.05	11.66	11.66
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	2.36
TOTALS		237.24	7.57	9.94	11.32	0.00	7.04	273.11	34.15	307.26

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.E Estimated monthly income and expense flows per acre
Soybeans, early-planted, RR, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

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	418.82
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.12	0.00
FERTILIZERS	31.41	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	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	10.06	33.32	21.64	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	6.52	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.61
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.61	0.00	0.00	0.00	0.00	0.00	2.14	1.66	0.00	0.00	0.83	3.08
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	2.39	0.00	0.00	0.00	0.00	0.00	1.05	0.94	0.00	0.00	0.47	2.72
REPAIR & MAINTENANCE	2.20	0.00	0.00	0.00	0.00	0.00	1.86	0.82	0.00	0.00	0.41	4.65
INTEREST ON OP. CAP.	3.10	0.00	0.00	0.00	0.00	0.45	2.62	0.62	0.00	0.00	0.16	0.09
TOTAL DIRECT EXPENSES	68.19	0.00	0.00	0.00	0.00	17.01	112.83	32.18	0.00	0.00	20.75	22.15
NET INCOME	-68.19	0.00	0.00	0.00	0.00	-17.01	-112.83	-32.18	0.00	0.00	-20.75	396.67
NET INCOME TO DATE	-68.19	-68.19	-68.19	-68.19	-68.19	-85.20	-198.03	-230.21	-230.21	-230.21	-250.96	145.71

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 13.F Estimated returns for various price/yield combinations, per acre
 Soybeans, early-planted, RR, reduced tillage, 12R 30"
 Non-Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	21.50	bu	-110 -144	-99 -133	-89 -123	-78 -112	-68 -102	-57 -92	-47 -81	-36 -71	-26 -60	-15 -50	-5 -39
60	25.80	bu	-79 -114	-67 -101	-54 -88	-42 -76	-29 -63	-17 -51	-4 -38	7 -26	20 -13	33 -1	45 11
70	30.10	bu	-49 -83	-35 -69	-20 -54	-5 -39	8 -25	23 -10	38 4	52 18	67 33	82 48	96 62
80	34.40	bu	-19 -53	-2 -36	14 -20	30 -3	47 13	64 30	81 46	97 63	114 80	131 97	148 113
90	38.70	bu	10 -23	29 -4	48 14	67 33	86 51	104 70	123 89	142 108	161 127	180 146	199 165
100	43.00	bu	41 6	61 27	82 48	103 69	124 90	145 111	166 132	187 153	208 174	229 195	250 216
110	47.30	bu	71 37	94 60	117 83	140 106	163 129	186 152	209 175	232 198	255 221	278 244	301 267
120	51.60	bu	101 67	126 92	151 117	176 142	202 167	227 192	252 218	277 243	302 268	327 293	352 318
130	55.90	bu	131 97	158 124	186 152	213 179	240 206	267 233	295 260	322 288	349 315	376 342	403 369
140	60.20	bu	161 127	191 157	220 186	249 215	279 245	308 274	337 303	367 333	396 362	425 391	455 421
150	64.50	bu	192 158	223 189	255 220	286 252	317 283	349 315	380 346	412 377	443 409	474 440	506 472

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 2016 input prices.

Table 14.A Estimated costs per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.6600	14.44	_____
Potash (60% K2O)	cwt	16.97	1.0000	16.97	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Dimilin 2L	oz	2.12	1.0000	2.12	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Baythroid XL	oz	2.48	1.0650	2.64	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.4500	5.35	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	40.0000	10.80	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.2582	3.40	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1523	1.38	_____
UNALLOCATED LABOR					
	hour	13.10	0.3243	4.25	_____
DIESEL FUEL					
Tractors	gal	1.70	2.5251	4.29	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.38	1.0000	4.38	_____
Tractors	acre	1.47	1.0000	1.47	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	7.72	1.0000	7.72	_____
TOTAL DIRECT EXPENSES				330.49	_____
FIXED EXPENSES					
Implements	acre	6.94	1.0000	6.94	_____
Tractors	acre	9.45	1.0000	9.45	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				29.95	_____
TOTAL SPECIFIED EXPENSES				360.44	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.B Summary of estimated costs and returns per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	40.0000	389.60	_____

TOTAL INCOME				389.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
HARVEST AIDS	acre	5.12	1.0000	5.12	_____
FERTILIZERS	acre	31.41	1.0000	31.41	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	111.82	1.0000	111.82	_____
INSECTICIDES	acre	23.10	1.0000	23.10	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	5.36	1.0000	5.36	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1523	1.38	_____
OPERATOR LABOR	hour	13.14	0.3603	4.74	_____
UNALLOCATED LABOR	hour	13.10	0.3243	4.25	_____
DIESEL FUEL	gal	1.70	3.9187	6.66	_____
REPAIR & MAINTENANCE	acre	9.29	1.0000	9.29	_____
INTEREST ON OP. CAP.	acre	7.72	1.0000	7.72	_____

TOTAL DIRECT EXPENSES				330.49	_____
RETURNS ABOVE DIRECT EXPENSES				59.11	_____
TOTAL FIXED EXPENSES				29.95	_____

TOTAL SPECIFIED EXPENSES				360.44	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				29.16	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.C Estimated resource use for field operations, per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.3300				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
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				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
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	oz					32.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Dimilin 2L	oz					1.0000				
Surfactant	pt					0.0500				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Prevathon	oz					14.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Aug		0.01	0.01	0.02	0.01
Baythroid XL	oz					1.0650				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					40.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.36	0.36	0.51	0.32

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.D Estimated costs for field operations, per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	15.18						0.72	15.90	15.90
Spray (Broadcast)	60'		0.47	0.41	0.83			0.06	1.77	1.33 3.10
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64	4.64
Select Max	pt	14.99						0.53	15.52	15.52
Surfactant	pt	1.48						0.05	1.53	1.53
Custom Apply Fert	acre	7.00						0.19	7.19	7.19
Phosphorus(46% P2O5)	cwt	14.44						0.40	14.84	14.84
Potash (60% K2O)	cwt	16.97						0.47	17.44	17.44
Spray (Broadcast)	60'		0.47	0.41	0.83			0.05	1.76	1.33 3.09
Fierce	oz	24.43						0.68	25.11	25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32	13.32
Surfactant	pt	1.48						0.04	1.52	1.52
Soybeans Consultant	acre	6.50						0.15	6.65	6.65
Plant & Pre-Folding	12R-30		1.13	2.19	2.30			0.13	5.75	5.93 11.68
Soybean Seed RR2	lb	63.00						1.50	64.50	64.50
CruiserMaxx	oz	7.36						0.17	7.53	7.53
Boundary	pt	20.36						0.48	20.84	20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Surfactant	pt	1.48						0.04	1.52	1.52
Spray (Broadcast)	60'		0.47	0.41	0.83			0.04	1.75	1.33 3.08
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Prefix	pt	12.68						0.30	12.98	12.98
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	1.33 3.07
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
Spray (Broadcast)	60'		0.23	0.20	0.42			0.01	0.86	0.67 1.53
Dimilin 2L	oz	2.12						0.03	2.15	2.15
Surfactant	pt	0.18							0.18	0.18
Spray (Broadcast)	60'		0.47	0.41	0.83			0.02	1.73	1.33 3.06
Prevathon	oz	18.34						0.22	18.56	18.56
Spray (Broadcast)	60'		0.23	0.20	0.42			0.01	0.86	0.67 1.53
Baythroid XL	oz	2.64						0.03	2.67	2.67
App by Air (5 gal)	appl	6.50						0.05	6.55	6.55
Paraquat	oz	5.12						0.04	5.16	5.16
Surfactant	pt	0.74						0.01	0.75	0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88 24.16
Haul Soybeans	bu	10.80						0.04	10.84	10.84
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	1.15 2.36
TOTALS		296.45	6.66	9.29	10.37	0.00	7.72	330.49	29.95	360.44

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, RR, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

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	389.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.12	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	31.41	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	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	50.48	4.48	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	2.12	20.98	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.18	0.00	0.74	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	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	0.83	0.00	0.83	3.13	0.83	0.42	1.25	0.00	3.08
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	0.47	0.00	0.47	1.60	0.47	0.23	0.70	0.00	2.72
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.41	0.00	0.41	2.60	0.41	0.20	0.61	0.00	4.65
INTEREST ON OP. CAP.	0.88	0.00	0.00	0.80	0.00	2.19	3.23	0.12	0.04	0.28	0.10	0.08
TOTAL DIRECT EXPENSES	19.36	0.00	0.00	23.46	0.00	81.18	139.38	6.31	3.19	23.82	12.46	21.33
NET INCOME	-19.36	0.00	0.00	-23.46	0.00	-81.18	-139.38	-6.31	-3.19	-23.82	-12.46	368.27
NET INCOME TO DATE	-19.36	-19.36	-19.36	-42.82	-42.82	-124.00	-263.38	-269.69	-272.88	-296.70	-309.16	59.11

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 14.F Estimated returns for various price/yield combinations, per acre
 Soybeans, May-planted, RR, convent. tillage, 12R 30"
 Non-Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
-----PRODUCT PRICE-----													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	-----dollars-----										
50	20.00	bu	-178	-169	-159	-149	-140	-130	-120	-110	-101	-91	-81
			-208	-199	-189	-179	-169	-160	-150	-140	-131	-121	-111
60	24.00	bu	-150	-139	-127	-115	-104	-92	-80	-69	-57	-45	-33
			-180	-169	-157	-145	-134	-122	-110	-98	-87	-75	-63
70	28.00	bu	-122	-109	-95	-81	-68	-54	-40	-27	-13	0	13
			-152	-139	-125	-111	-98	-84	-70	-57	-43	-29	-16
80	32.00	bu	-94	-78	-63	-47	-32	-16	-1	14	30	45	61
			-124	-108	-93	-77	-62	-46	-31	-15	0	15	31
90	36.00	bu	-66	-48	-31	-13	3	21	38	56	73	91	108
			-96	-78	-61	-43	-26	-8	8	26	43	61	78
100	40.00	bu	-38	-18	0	20	39	59	78	98	117	137	156
			-68	-48	-29	-9	9	29	48	68	87	107	126
110	44.00	bu	-10	11	32	54	75	96	118	139	161	182	204
			-40	-18	2	24	45	67	88	109	131	152	174
120	48.00	bu	17	41	64	88	111	134	158	181	204	228	251
			-11	11	34	58	81	104	128	151	175	198	221
130	52.00	bu	46	71	96	122	147	172	198	223	248	274	299
			16	41	66	92	117	142	168	193	218	244	269
140	56.00	bu	74	101	128	156	183	210	237	265	292	319	346
			44	71	98	126	153	180	207	235	262	289	317
150	60.00	bu	102	131	160	190	219	248	277	306	336	365	394
			72	101	130	160	189	218	247	276	306	335	364

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 2016 input prices.

Table 15.A Estimated costs per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.6600	14.44	_____
Potash (60% K2O)	cwt	16.97	1.0000	16.97	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
INSECTICIDES					
Dimilin 2L	oz	2.12	1.0000	2.12	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Baythroid XL	oz	2.48	1.5975	3.96	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	0.4500	1.66	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.2116	2.79	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1304	1.19	_____
UNALLOCATED LABOR	hour	13.15	0.2698	3.55	_____
DIESEL FUEL					
Tractors	gal	1.70	2.0699	3.51	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.21	1.0000	4.21	_____
Tractors	acre	1.21	1.0000	1.21	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	5.32	1.0000	5.32	_____
TOTAL DIRECT EXPENSES				249.25	_____
FIXED EXPENSES					
Implements	acre	6.91	1.0000	6.91	_____
Tractors	acre	7.74	1.0000	7.74	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				28.21	_____
TOTAL SPECIFIED EXPENSES				277.46	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.B Summary of estimated costs and returns per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	25.0000	243.50	_____

TOTAL INCOME				243.50	_____
DIRECT EXPENSES					
FERTILIZERS	acre	31.41	1.0000	31.41	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	72.22	1.0000	72.22	_____
INSECTICIDES	acre	24.42	1.0000	24.42	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	1.66	1.0000	1.66	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	6.75	1.0000	6.75	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
HAND LABOR	hour	9.06	0.1304	1.19	_____
OPERATOR LABOR	hour	13.14	0.3138	4.13	_____
UNALLOCATED LABOR	hour	13.15	0.2698	3.55	_____
DIESEL FUEL	gal	1.70	3.4635	5.88	_____
REPAIR & MAINTENANCE	acre	8.86	1.0000	8.86	_____
INTEREST ON OP. CAP.	acre	5.32	1.0000	5.32	_____

TOTAL DIRECT EXPENSES				249.25	_____
RETURNS ABOVE DIRECT EXPENSES				-5.75	_____
TOTAL FIXED EXPENSES				28.21	_____

TOTAL SPECIFIED EXPENSES				277.46	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-33.96	_____

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.C Estimated resource use for field operations, per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
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				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Soybeans Consultant	acre			1.00	Jul	1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	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				
Surfactant	pt					0.0500				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Prevathon	oz					14.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.75	Aug		0.02	0.02	0.03	0.01
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	bu					25.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.31	0.31	0.44	0.26

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.D Estimated costs for field operations, per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	14.44						0.69	15.13		15.13
Potash (60% K2O)	cwt	16.97						0.81	17.78		17.78
NT Plant&Pre-Folding	12R-30		1.17	2.48	2.37			0.12	6.14	6.53	12.67
Soybean Seed RR2	lb	63.00						1.25	64.25		64.25
CruiserMaxx	oz	7.36						0.15	7.51		7.51
Boundary	pt	20.36						0.40	20.76		20.76
Gramoxone SL 2.0	oz	12.96						0.26	13.22		13.22
Surfactant	pt	1.48						0.03	1.51		1.51
Spray (Broadcast)	60'		0.47	0.41	0.82			0.03	1.73	1.33	3.06
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
Dual Magnum	pt	14.97						0.30	15.27		15.27
Soybeans Consultant	acre	6.50						0.10	6.60		6.60
Spray (Broadcast)	60'		0.47	0.41	0.82			0.03	1.73	1.33	3.06
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55		4.55
Dual Magnum	pt	14.97						0.24	15.21		15.21
Spray (Broadcast)	60'		0.23	0.20	0.41			0.01	0.85	0.67	1.52
Dimilin 2L	oz	2.12						0.03	2.15		2.15
Surfactant	pt	0.18							0.18		0.18
Spray (Broadcast)	60'		0.47	0.41	0.82			0.02	1.72	1.33	3.05
Prevathon	oz	18.34						0.22	18.56		18.56
Spray (Broadcast)	60'		0.35	0.30	0.62			0.02	1.29	0.99	2.28
Baythroid XL	oz	3.96						0.05	4.01		4.01
Header -Soybean	25' Flex		2.37	4.32	2.49			0.04	9.22	14.88	24.10
Haul Soybeans	bu	6.75						0.03	6.78		6.78
Grain Cart Soybean	700 bu		0.35	0.33	0.52				1.20	1.15	2.35
TOTALS		220.32	5.88	8.86	8.87	0.00	5.32	249.25	28.21	277.46	

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.E Estimated monthly income and expense flows per acre
Soybeans after wheat, RR, no-till, 12R 30"
Non-Delta Area, Mississippi, 2017

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	243.50
DIRECT EXPENSES												
FERTILIZERS	31.41	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	7.36	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.77	19.45	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	24.42	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.18	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.19	0.82	1.85	0.00	3.01
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	0.00	0.00	1.64	0.47	1.05	0.00	2.72
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.89	0.41	0.91	0.00	4.65
INTEREST ON OP. CAP.	1.83	0.00	0.00	0.00	0.00	0.00	0.00	2.63	0.44	0.35	0.00	0.07
TOTAL DIRECT EXPENSES	40.24	0.00	0.00	0.00	0.00	0.00	0.00	134.96	28.09	28.76	0.00	17.20
NET INCOME	-40.24	0.00	0.00	0.00	0.00	0.00	0.00	-134.96	-28.09	-28.76	0.00	226.30
NET INCOME TO DATE	-40.24	-40.24	-40.24	-40.24	-40.24	-40.24	-40.24	-175.20	-203.29	-232.05	-232.05	-5.75

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre
 Soybeans after wheat, RR, no-till, 12R 30"
 Non-Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-154	-148	-142	-136	-130	-124	-118	-111	-105	-99	-93
			-182	-176	-170	-164	-158	-152	-146	-140	-134	-127	-121
60	15.00	bu	-136	-129	-122	-115	-107	-100	-93	-85	-78	-71	-63
			-165	-157	-150	-143	-135	-128	-121	-114	-106	-99	-92
70	17.50	bu	-119	-110	-102	-93	-85	-76	-68	-59	-51	-42	-34
			-147	-139	-130	-122	-113	-104	-96	-87	-79	-70	-62
80	20.00	bu	-101	-92	-82	-72	-62	-53	-43	-33	-23	-14	-4
			-130	-120	-110	-100	-91	-81	-71	-61	-52	-42	-32
90	22.50	bu	-84	-73	-62	-51	-40	-29	-18	-7	3	14	25
			-112	-101	-90	-79	-68	-57	-46	-35	-24	-13	-2
100	25.00	bu	-66	-54	-42	-30	-17	-5	6	18	30	42	55
			-94	-82	-70	-58	-46	-33	-21	-9	2	14	26
110	27.50	bu	-49	-35	-22	-8	4	17	31	44	58	71	84
			-77	-63	-50	-37	-23	-10	3	16	29	43	56
120	30.00	bu	-31	-16	-2	12	26	41	56	70	85	100	114
			-59	-45	-30	-15	-1	13	27	42	57	71	86
130	32.50	bu	-13	1	17	33	49	65	81	96	112	128	144
			-42	-26	-10	5	21	37	52	68	84	100	116
140	35.00	bu	3	20	37	54	71	88	105	123	140	157	174
			-24	-7	9	26	43	60	77	94	111	128	145
150	37.50	bu	21	39	57	76	94	112	130	149	167	185	203
			-6	11	29	47	66	84	102	120	139	157	175

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 2016 input prices.

Table 16.A Estimated costs per acre
Soybeans, early-planted, LL, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	2.0000	13.00	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.6600	14.44	_____
Potash (60% K2O)	cwt	16.97	1.0000	16.97	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	0.6000	2.21	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	43.0000	11.61	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3128	4.12	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	_____
UNALLOCATED LABOR	hour	13.11	0.3734	4.90	_____
DIESEL FUEL					
Tractors	gal	1.70	3.0592	5.20	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.69	1.0000	4.69	_____
Tractors	acre	1.81	1.0000	1.81	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	7.45	1.0000	7.45	_____
TOTAL DIRECT EXPENSES				294.91	_____
FIXED EXPENSES					
Implements	acre	9.14	1.0000	9.14	_____
Tractors	acre	11.45	1.0000	11.45	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				34.15	_____
TOTAL SPECIFIED EXPENSES				329.06	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.B Summary of estimated costs and returns per acre
Soybeans, early-planted, LL, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	43.0000	418.82	_____

TOTAL INCOME				418.82	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.00	1.0000	13.00	_____
HARVEST AIDS	acre	5.12	1.0000	5.12	_____
FERTILIZERS	acre	31.41	1.0000	31.41	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	91.41	1.0000	91.41	_____
INSECTICIDES	acre	6.52	1.0000	6.52	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	2.22	1.0000	2.22	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1051	0.96	_____
OPERATOR LABOR	hour	13.14	0.4149	5.46	_____
UNALLOCATED LABOR	hour	13.11	0.3734	4.90	_____
DIESEL FUEL	gal	1.70	4.4528	7.57	_____
REPAIR & MAINTENANCE	acre	9.94	1.0000	9.94	_____
INTEREST ON OP. CAP.	acre	7.45	1.0000	7.45	_____

TOTAL DIRECT EXPENSES				294.91	_____
RETURNS ABOVE DIRECT EXPENSES				123.91	_____
TOTAL FIXED EXPENSES				34.15	_____

TOTAL SPECIFIED EXPENSES				329.06	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				89.76	_____

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.C Estimated resource use for field operations, per acre
Soybeans, early-planted, LL, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Lime (Spread)	ton			0.33	Oct	0.3300				
Custom Apply Fert	acre			1.00	Oct	1.0000				
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	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Plant - Folding	12R-30	MFWD 190	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
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			1.00	Aug	1.0000				
Paraquat	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					43.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.41	0.41	0.52	0.37

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.D Estimated costs for field operations, per acre
Soybeans, early-planted, LL, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	15.18						0.72	15.90	15.90
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Phosphorus (46% P2O5)	cwt	14.44						0.69	15.13	15.13
Potash (60% K2O)	cwt	16.97						0.81	17.78	17.78
Disk Harrow	24'		1.36	1.45	2.05			0.23	5.09	10.13
Field Cultivate Fld	24'		1.03	0.75	1.56			0.16	3.50	7.44
App by Air (5 gal)	appl	6.50						0.18	6.68	6.68
Glyphosate 3lbs a.e	oz	4.48						0.12	4.60	4.60
2,4-D Amine 4	pt	5.58						0.15	5.73	5.73
Plant - Folding	12R-30		1.05	1.86	2.14			0.12	5.17	10.32
Soybean Seed LL	lb	58.00						1.38	59.38	59.38
CruiserMaxx	oz	7.36						0.17	7.53	7.53
Boundary	pt	20.36						0.48	20.84	20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Surfactant	pt	1.48						0.04	1.52	1.52
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	3.07
Liberty 280	oz	16.53						0.33	16.86	16.86
Dual Magnum	pt	14.97						0.30	15.27	15.27
Soybeans Consultant	acre	6.50						0.13	6.63	6.63
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	3.07
Liberty 280	oz	16.53						0.33	16.86	16.86
Spray (Broadcast)	60'		0.47	0.41	0.83			0.01	1.72	3.05
Acephate 90SP	lb	6.52						0.05	6.57	6.57
App by Air (5 gal)	appl	6.50						0.05	6.55	6.55
Paraquat	oz	5.12						0.04	5.16	5.16
Surfactant	pt	0.74						0.01	0.75	0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	24.16
Haul Soybeans	bu	11.61						0.05	11.66	11.66
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	2.36
TOTALS		258.63	7.57	9.94	11.32	0.00	7.45	294.91	34.15	329.06

Note: Cost of production estimates are based on 2016 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. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.E Estimated monthly income and expense flows per acre
Soybeans, early-planted, LL, reduced tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

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	418.82
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.12	0.00
FERTILIZERS	31.41	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	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	10.06	33.32	48.03	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	6.52	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.61
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.61	0.00	0.00	0.00	0.00	0.00	2.14	1.66	0.00	0.00	0.83	3.08
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	2.39	0.00	0.00	0.00	0.00	0.00	1.05	0.94	0.00	0.00	0.47	2.72
REPAIR & MAINTENANCE	2.20	0.00	0.00	0.00	0.00	0.00	1.86	0.82	0.00	0.00	0.41	4.65
INTEREST ON OP. CAP.	3.10	0.00	0.00	0.00	0.00	0.45	2.50	1.15	0.00	0.00	0.16	0.09
TOTAL DIRECT EXPENSES	68.19	0.00	0.00	0.00	0.00	17.01	107.71	59.10	0.00	0.00	20.75	22.15
NET INCOME	-68.19	0.00	0.00	0.00	0.00	-17.01	-107.71	-59.10	0.00	0.00	-20.75	396.67
NET INCOME TO DATE	-68.19	-68.19	-68.19	-68.19	-68.19	-85.20	-192.91	-252.01	-252.01	-252.01	-272.76	123.91

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

* Lease costs are based on hourly usage costs.

Table 16.F Estimated returns for various price/yield combinations, per acre
 Soybeans, early-planted, LL, reduced tillage, 12R 30"
 Non-Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
			PRODUCT PRICE										
PERCENT	YIELD	UNIT	dollars										
50	21.50	bu	-132	-121	-111	-100	-90	-79	-69	-58	-48	-37	-27
			-166	-155	-145	-134	-124	-113	-103	-92	-82	-71	-61
60	25.80	bu	-101	-89	-76	-64	-51	-38	-26	-13	-1	11	23
			-135	-123	-110	-98	-85	-73	-60	-47	-35	-22	-10
70	30.10	bu	-71	-56	-42	-27	-12	1	16	31	45	60	75
			-105	-91	-76	-61	-47	-32	-17	-3	11	26	40
80	34.40	bu	-41	-24	-7	8	25	42	59	75	92	109	126
			-75	-58	-41	-25	-8	8	25	41	58	75	92
90	38.70	bu	-11	7	26	45	64	83	102	120	139	158	177
			-45	-26	-7	11	30	49	67	86	105	124	143
100	43.00	bu	19	40	61	82	102	123	144	165	186	207	228
			-14	5	26	47	68	89	110	131	152	173	194
110	47.30	bu	49	72	95	118	141	164	187	210	233	256	279
			15	38	61	84	107	130	153	176	199	222	245
120	51.60	bu	79	104	129	155	180	205	230	255	280	305	330
			45	70	95	120	146	171	196	221	246	271	296
130	55.90	bu	109	137	164	191	218	246	273	300	327	354	382
			75	103	130	157	184	211	239	266	293	320	348
140	60.20	bu	140	169	198	228	257	286	316	345	374	404	433
			106	135	164	193	223	252	281	311	340	369	399
150	64.50	bu	170	201	233	264	296	327	358	390	421	453	484
			136	167	199	230	261	293	324	356	387	418	450

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 2016 input prices.

Table 17.A Estimated costs per acre
Soybeans, May-planted, LL, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.6600	14.44	_____
Potash (60% K2O)	cwt	16.97	1.0000	16.97	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Dimilin 2L	oz	2.12	1.0000	2.12	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Baythroid XL	oz	2.48	1.0650	2.64	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.4500	5.35	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	40.0000	10.80	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.2582	3.40	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1523	1.38	_____
UNALLOCATED LABOR					
	hour	13.10	0.3243	4.25	_____
DIESEL FUEL					
Tractors	gal	1.70	2.5251	4.29	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.38	1.0000	4.38	_____
Tractors	acre	1.47	1.0000	1.47	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	8.18	1.0000	8.18	_____
TOTAL DIRECT EXPENSES				352.34	_____
FIXED EXPENSES					
Implements	acre	6.94	1.0000	6.94	_____
Tractors	acre	9.45	1.0000	9.45	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				29.95	_____
TOTAL SPECIFIED EXPENSES				382.29	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.B Summary of estimated costs and returns per acre
Soybeans, May-planted, LL, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	40.0000	389.60	_____

TOTAL INCOME				389.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
HARVEST AIDS	acre	5.12	1.0000	5.12	_____
FERTILIZERS	acre	31.41	1.0000	31.41	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	138.21	1.0000	138.21	_____
INSECTICIDES	acre	23.10	1.0000	23.10	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	5.36	1.0000	5.36	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1523	1.38	_____
OPERATOR LABOR	hour	13.14	0.3603	4.74	_____
UNALLOCATED LABOR	hour	13.10	0.3243	4.25	_____
DIESEL FUEL	gal	1.70	3.9187	6.66	_____
REPAIR & MAINTENANCE	acre	9.29	1.0000	9.29	_____
INTEREST ON OP. CAP.	acre	8.18	1.0000	8.18	_____

TOTAL DIRECT EXPENSES				352.34	_____
RETURNS ABOVE DIRECT EXPENSES				37.26	_____
TOTAL FIXED EXPENSES				29.95	_____

TOTAL SPECIFIED EXPENSES				382.29	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				7.31	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.C Estimated resource use for field operations, per acre
Soybeans, May-planted, LL, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.3300				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Dimilin 2L	oz					1.0000				
Surfactant	pt					0.0500				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Prevathon	oz					14.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Aug		0.01	0.01	0.02	0.01
Baythroid XL	oz					1.0650				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					40.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.36	0.36	0.51	0.32

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.D Estimated costs for field operations, per acre
Soybeans, May-planted, LL, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	15.18						0.72	15.90	15.90
Spray (Broadcast)	60'		0.47	0.41	0.83			0.06	1.77	1.33 3.10
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64	4.64
Select Max	pt	14.99						0.53	15.52	15.52
Surfactant	pt	1.48						0.05	1.53	1.53
Custom Apply Fert	acre	7.00						0.19	7.19	7.19
Phosphorus(46% P2O5)	cwt	14.44						0.40	14.84	14.84
Potash (60% K2O)	cwt	16.97						0.47	17.44	17.44
Spray (Broadcast)	60'		0.47	0.41	0.83			0.05	1.76	1.33 3.09
Fierce	oz	24.43						0.68	25.11	25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32	13.32
Surfactant	pt	1.48						0.04	1.52	1.52
Soybeans Consultant	acre	6.50						0.15	6.65	6.65
Plant & Pre-Folding	12R-30		1.13	2.19	2.30			0.13	5.75	5.93 11.68
Soybean Seed LL	lb	58.00						1.38	59.38	59.38
CruiserMaxx	oz	7.36						0.17	7.53	7.53
Boundary	pt	20.36						0.48	20.84	20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Surfactant	pt	1.48						0.04	1.52	1.52
Spray (Broadcast)	60'		0.47	0.41	0.83			0.04	1.75	1.33 3.08
Liberty 280	oz	16.53						0.39	16.92	16.92
Dual Magnum	pt	14.97						0.36	15.33	15.33
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	1.33 3.07
Liberty 280	oz	16.53						0.33	16.86	16.86
Spray (Broadcast)	60'		0.23	0.20	0.42			0.01	0.86	0.67 1.53
Dimilin 2L	oz	2.12						0.03	2.15	2.15
Surfactant	pt	0.18							0.18	0.18
Spray (Broadcast)	60'		0.47	0.41	0.83			0.02	1.73	1.33 3.06
Prevathon	oz	18.34						0.22	18.56	18.56
Spray (Broadcast)	60'		0.23	0.20	0.42			0.01	0.86	0.67 1.53
Baythroid XL	oz	2.64						0.03	2.67	2.67
App by Air (5 gal)	appl	6.50						0.05	6.55	6.55
Paraquat	oz	5.12						0.04	5.16	5.16
Surfactant	pt	0.74						0.01	0.75	0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88 24.16
Haul Soybeans	bu	10.80						0.04	10.84	10.84
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	1.15 2.36
TOTALS		317.84	6.66	9.29	10.37	0.00	8.18	352.34	29.95	382.29

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.E Estimated monthly income and expense flows per acre
Soybeans, May-planted, LL, convent. tillage, 12R 30"
Non-Delta Area, Mississippi, 2017

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	389.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.12	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	31.41	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	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	64.82	16.53	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	2.12	20.98	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.18	0.00	0.74	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	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	0.83	0.00	0.83	3.13	0.83	0.42	1.25	0.00	3.08
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	0.47	0.00	0.47	1.60	0.47	0.23	0.70	0.00	2.72
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.41	0.00	0.41	2.60	0.41	0.20	0.61	0.00	4.65
INTEREST ON OP. CAP.	0.88	0.00	0.00	0.80	0.00	2.19	3.45	0.36	0.04	0.28	0.10	0.08
TOTAL DIRECT EXPENSES	19.36	0.00	0.00	23.46	0.00	81.18	148.94	18.60	3.19	23.82	12.46	21.33
NET INCOME	-19.36	0.00	0.00	-23.46	0.00	-81.18	-148.94	-18.60	-3.19	-23.82	-12.46	368.27
NET INCOME TO DATE	-19.36	-19.36	-19.36	-42.82	-42.82	-124.00	-272.94	-291.54	-294.73	-318.55	-331.01	37.26

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

* Lease costs are based on hourly usage costs.

Table 17.F Estimated returns for various price/yield combinations, per acre
 Soybeans, May-planted, LL, convent. tillage, 12R 30"
 Non-Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-200 -230	-191 -221	-181 -211	-171 -201	-161 -191	-152 -182	-142 -172	-132 -162	-122 -152	-113 -143	-103 -133
60	24.00	bu	-172 -202	-160 -190	-149 -179	-137 -167	-125 -155	-114 -144	-102 -132	-90 -120	-79 -109	-67 -97	-55 -85
70	28.00	bu	-144 -174	-130 -160	-117 -147	-103 -133	-90 -119	-76 -106	-62 -92	-49 -79	-35 -65	-21 -51	-8 -38
80	32.00	bu	-116 -146	-100 -130	-85 -115	-69 -99	-54 -84	-38 -68	-22 -52	-7 -37	8 -21	23 -6	39 9
90	36.00	bu	-88 -118	-70 -100	-53 -83	-35 -65	-18 -48	-0 -30	16 -13	34 4	51 22	69 39	87 57
100	40.00	bu	-60 -90	-40 -70	-21 -51	-1 -31	17 -12	37 7	56 26	76 46	95 65	115 85	134 104
110	44.00	bu	-32 -61	-10 -40	10 -19	32 2	53 23	75 45	96 66	117 88	139 109	160 130	182 152
120	48.00	bu	-3 -33	19 -10	42 12	66 36	89 59	113 83	136 106	159 129	183 153	206 176	229 199
130	52.00	bu	24 -5	49 19	74 44	100 70	125 95	150 120	176 146	201 171	226 196	252 222	277 247
140	56.00	bu	52 22	79 49	106 76	134 104	161 131	188 158	216 186	243 213	270 240	297 267	325 295
150	60.00	bu	80 50	109 79	138 109	168 138	197 167	226 196	255 225	285 255	314 284	343 313	372 342

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 2016 input prices.

Table 18.A Estimated costs per acre
Soybeans after wheat, LL, no-till, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.6600	14.44	_____
Potash (60% K2O)	cwt	16.97	1.0000	16.97	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
INSECTICIDES					
Dimilin 2L	oz	2.12	1.0000	2.12	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Baythroid XL	oz	2.48	1.5975	3.96	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	0.4500	1.66	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.2116	2.79	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1304	1.19	_____
UNALLOCATED LABOR					
	hour	13.15	0.2698	3.55	_____
DIESEL FUEL					
Tractors	gal	1.70	2.0699	3.51	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.21	1.0000	4.21	_____
Tractors	acre	1.21	1.0000	1.21	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	5.65	1.0000	5.65	_____
TOTAL DIRECT EXPENSES				268.68	_____
FIXED EXPENSES					
Implements	acre	6.91	1.0000	6.91	_____
Tractors	acre	7.74	1.0000	7.74	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				28.21	_____
TOTAL SPECIFIED EXPENSES				296.89	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.B Summary of estimated costs and returns per acre
Soybeans after wheat, LL, no-till, 12R 30"
Non-Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	25.0000	243.50	_____

TOTAL INCOME				243.50	_____
DIRECT EXPENSES					
FERTILIZERS	acre	31.41	1.0000	31.41	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	96.32	1.0000	96.32	_____
INSECTICIDES	acre	24.42	1.0000	24.42	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	1.66	1.0000	1.66	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	6.75	1.0000	6.75	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
HAND LABOR	hour	9.06	0.1304	1.19	_____
OPERATOR LABOR	hour	13.14	0.3138	4.13	_____
UNALLOCATED LABOR	hour	13.15	0.2698	3.55	_____
DIESEL FUEL	gal	1.70	3.4635	5.88	_____
REPAIR & MAINTENANCE	acre	8.86	1.0000	8.86	_____
INTEREST ON OP. CAP.	acre	5.65	1.0000	5.65	_____

TOTAL DIRECT EXPENSES				268.68	_____
RETURNS ABOVE DIRECT EXPENSES				-25.18	_____
TOTAL FIXED EXPENSES				28.21	_____

TOTAL SPECIFIED EXPENSES				296.89	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-53.39	_____

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre..

Table 18.C Estimated resource use for field operations, per acre
 Soybeans after wheat, LL, no-till, 12R 30"
 Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
NT Plant&Pre-Folding	12R-30	MFWD 190	0.070	1.00	Jun		0.07	0.07	0.14	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Soybeans Consultant	acre			1.00	Jul	1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	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				
Surfactant	pt					0.0500				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Prevathon	oz					14.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.75	Aug		0.02	0.02	0.03	0.01
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	bu					25.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.31	0.31	0.44	0.26

Note: Cost of production estimates are based on 2016 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.D Estimated costs for field operations, per acre
Soybeans after wheat, LL, no-till, 12R 30"
Non-Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	14.44						0.69	15.13		15.13
Potash (60% K2O)	cwt	16.97						0.81	17.78		17.78
NT Plant&Pre-Folding	12R-30		1.17	2.48	2.37			0.12	6.14	6.53	12.67
Soybean Seed LL	lb	58.00						1.15	59.15		59.15
CruiserMaxx	oz	7.36						0.15	7.51		7.51
Boundary	pt	20.36						0.40	20.76		20.76
Gramoxone SL 2.0	oz	12.96						0.26	13.22		13.22
Surfactant	pt	1.48						0.03	1.51		1.51
Spray (Broadcast)	60'		0.47	0.41	0.82			0.03	1.73	1.33	3.06
Liberty 280	oz	16.53						0.33	16.86		16.86
Dual Magnum	pt	14.97						0.30	15.27		15.27
Soybeans Consultant	acre	6.50						0.10	6.60		6.60
Spray (Broadcast)	60'		0.47	0.41	0.82			0.03	1.73	1.33	3.06
Liberty 280	oz	16.53						0.26	16.79		16.79
Dual Magnum	pt	14.97						0.24	15.21		15.21
Spray (Broadcast)	60'		0.23	0.20	0.41			0.01	0.85	0.67	1.52
Dimilin 2L	oz	2.12						0.03	2.15		2.15
Surfactant	pt	0.18							0.18		0.18
Spray (Broadcast)	60'		0.47	0.41	0.82			0.02	1.72	1.33	3.05
Prevathon	oz	18.34						0.22	18.56		18.56
Spray (Broadcast)	60'		0.35	0.30	0.62			0.02	1.29	0.99	2.28
Baythroid XL	oz	3.96						0.05	4.01		4.01
Header -Soybean	25' Flex		2.37	4.32	2.49			0.04	9.22	14.88	24.10
Haul Soybeans	bu	6.75						0.03	6.78		6.78
Grain Cart Soybean	700 bu		0.35	0.33	0.52				1.20	1.15	2.35
TOTALS		239.42	5.88	8.86	8.87	0.00	5.65	268.68	28.21	296.89	

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second Fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.E Estimated monthly income and expense flows per acre
Soybeans after wheat, LL, no-till, 12R 30"
Non-Delta Area, Mississippi, 2017

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	243.50
DIRECT EXPENSES												
FERTILIZERS	31.41	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	7.36	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.82	31.50	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	24.42	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.18	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.19	0.82	1.85	0.00	3.01
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	0.00	0.00	1.64	0.47	1.05	0.00	2.72
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.89	0.41	0.91	0.00	4.65
INTEREST ON OP. CAP.	1.83	0.00	0.00	0.00	0.00	0.00	0.00	2.77	0.63	0.35	0.00	0.07
TOTAL DIRECT EXPENSES	40.24	0.00	0.00	0.00	0.00	0.00	0.00	142.15	40.33	28.76	0.00	17.20
NET INCOME	-40.24	0.00	0.00	0.00	0.00	0.00	0.00	-142.15	-40.33	-28.76	0.00	226.30
NET INCOME TO DATE	-40.24	-40.24	-40.24	-40.24	-40.24	-40.24	-40.24	-182.39	-222.72	-251.48	-251.48	-25.18

Note: Cost of production estimates are based on 2016 input prices.

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

* Lease costs are based on hourly usage costs.

Table 18.F Estimated returns for various price/yield combinations, per acre
 Soybeans after wheat, LL, no-till, 12R 30"
 Non-Delta Area, Mississippi, 2017

PRODUCT	PERCENT													
	75	80	85	90	95	100	105	110	115	120	125			
PRODUCT PRICE	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17			
PERCENT	YIELD	UNIT	dollars											
50	12.50	bu	-173	-167	-161	-155	-149	-143	-137	-131	-125	-119	-113	
			-202	-196	-190	-183	-177	-171	-165	-159	-153	-147	-141	
60	15.00	bu	-156	-149	-141	-134	-127	-119	-112	-105	-97	-90	-83	
			-184	-177	-169	-162	-155	-148	-140	-133	-126	-118	-111	
70	17.50	bu	-138	-130	-121	-113	-104	-96	-87	-79	-70	-62	-53	
			-167	-158	-149	-141	-132	-124	-115	-107	-98	-90	-81	
80	20.00	bu	-121	-111	-101	-92	-82	-72	-62	-53	-43	-33	-23	
			-149	-139	-129	-120	-110	-100	-90	-81	-71	-61	-52	
90	22.50	bu	-103	-92	-81	-70	-59	-48	-37	-26	-15	-5	5	
			-131	-120	-109	-98	-88	-77	-66	-55	-44	-33	-22	
100	25.00	bu	-86	-73	-61	-49	-37	-25	-13	-0	11	23	35	
			-114	-102	-89	-77	-65	-53	-41	-29	-16	-4	7	
110	27.50	bu	-68	-55	-41	-28	-14	-1	11	25	38	52	65	
			-96	-83	-69	-56	-43	-29	-16	-2	10	23	37	
120	30.00	bu	-50	-36	-21	-7	7	22	36	51	65	80	95	
			-79	-64	-49	-35	-20	-6	8	23	37	52	67	
130	32.50	bu	-33	-17	-1	14	30	45	61	77	93	109	124	
			-61	-45	-29	-14	1	17	33	49	65	80	96	
140	35.00	bu	-15	1	18	35	52	69	86	103	120	137	154	
			-43	-26	-9	7	24	41	58	75	92	109	126	
150	37.50	bu	1	20	38	56	74	93	111	129	147	166	184	
			-26	-8	10	28	46	64	83	101	119	138	156	

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 2016 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, 2017

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	323,000	300	8	13.64	13.14	23.18	33.64	69.97	132.75	202.73
Combine (300-349 hp)	325 hp	336,000	300	8	16.73	13.14	28.44	35.00	76.58	138.10	214.68
Combine (350-399 hp)	355 hp	340,000	300	8	18.27	13.14	31.05	35.41	79.61	139.74	219.36
Combine (400-449 hp)	425 hp	409,000	300	8	21.87	13.14	37.18	42.60	92.93	168.10	261.03
Combine (450-499hp)	475 hp	423,000	300	8	24.44	13.14	41.56	44.06	98.76	173.86	272.62
Tractor (20-39hp)CB	MFWD 30	28,500	600	8	1.54	13.14	2.62	0.89	16.65	5.35	22.01
Tractor (20-39hp)RB	MFWD 30	21,300	600	8	1.54	13.14	2.62	0.66	16.43	4.00	20.43
Tractor (40-59hp)CB	2WD 50	32,200	600	8	2.57	13.14	4.37	1.00	18.52	6.05	24.57
Tractor (40-59hp)CB	MFWD 50	39,100	600	8	2.57	13.14	4.37	1.22	18.73	7.35	26.08
Tractor (40-59hp)RB	2WD 50	20,900	600	8	2.57	13.14	4.37	0.65	18.16	3.93	22.09
Tractor (40-59hp)RB	MFWD 50	24,300	600	8	2.57	13.14	4.37	0.75	18.27	4.56	22.84
Tractor (60-89hp)CB	2WD 75	48,300	600	8	3.86	13.14	6.56	1.50	21.21	9.08	30.29
Tractor (60-89hp)CB	MFWD 75	54,100	600	8	3.86	13.14	6.56	1.69	21.39	10.17	31.56
Tractor (60-89hp)RB	2WD 75	34,400	600	8	3.86	13.14	6.56	1.07	20.77	6.46	27.24
Tractor (60-89hp)RB	MFWD 75	35,800	600	8	3.86	13.14	6.56	1.11	20.82	6.73	27.55
Tractor (90-119hp)CB	2WD 105	65,300	600	8	5.40	13.14	9.18	2.04	24.36	12.28	36.64
Tractor (90-119hp)CB	MFWD 105	77,400	600	8	5.40	13.14	9.18	2.41	24.74	14.55	39.30
Tractor (90-119hp)RB	2WD 105	57,600	600	8	5.40	13.14	9.18	1.80	24.12	10.83	34.95
Tractor (90-119hp)RB	MFWD 105	62,100	600	8	5.40	13.14	9.18	1.94	24.26	11.67	35.94
Tractor(120-139hp)CB	2WD 130	177,000	600	8	6.69	13.14	11.37	5.53	30.04	33.28	63.33
Tractor(120-139hp)CB	MFWD 130	123,000	600	8	6.69	13.14	11.37	3.84	28.35	23.13	51.48
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	13.14	13.12	4.46	30.73	26.89	57.62
Tractor(160-179hp)CB	MFWD 170	170,000	600	8	8.75	13.14	14.87	5.31	33.32	33.45	66.78
Tractor(180-199hp)CB	MFWD 190	186,000	600	8	9.77	13.14	16.62	5.81	35.57	36.60	72.17
Tractor(200-249hp)CB	MFWD 225	218,000	600	8	11.58	13.14	19.68	6.81	39.64	42.89	82.53
Tractor(250-349hp)CB	4WD 300	281,000	600	8	15.44	13.14	26.25	8.78	48.17	55.29	103.46
Tractor(250-349hp)CB	MFWD 300	297,000	600	8	15.44	13.14	26.25	9.28	48.67	58.44	107.11
Tractor(250-349hp)CB	Track 300	292,000	600	8	15.44	13.14	26.25	9.12	48.51	57.46	105.97
Tractor(350-449hp)	Track 400	351,000	600	8	20.58	13.14	35.00	10.96	59.11	69.07	128.18
Tractor(350-449hp)CB	4WD 400	325,000	600	8	20.58	13.14	35.00	10.15	58.29	63.95	122.25
Tractor(450-550hp)CB	4WD 500	359,000	600	8	25.73	13.14	43.75	11.21	68.10	70.64	138.75
Tractor(450-550hp)CB	Track 500	400,000	600	8	25.73	13.14	43.75	12.50	69.39	78.71	148.10
Utility Vehicle	800 CC	9,700	200	8	0.70	13.14	1.33	1.51	15.98	5.98	21.96
Utility Vehicle	900 CC	12,200	200	8	1.00	13.14	1.90	1.90	16.94	7.52	24.46
Utility Vehicle-mule	600 CC	6,500	200	8	0.50	13.14	0.95	1.01	15.10	4.00	19.11

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, 2017

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-----					
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	5.72	5.63	10.79	22.15	42.59	64.74
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	5.72	7.89	14.13	27.75	55.78	83.53
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	3.82	5.27	9.61	18.71	37.92	56.63
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	4.84	6.77	15.85	27.48	62.56	90.05
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	3.82	5.35	12.51	21.69	49.39	71.09
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	5.72	9.02	21.58	36.33	85.18	121.51
Cotton Picker/Modu	6R-30 (500)	744,000	200	8	25.73	0.218	4.84	9.54	25.37	39.76	100.11	139.87
Cotton Picker/Modu	6R-38 (365)	536,000	200	8	20.58	0.172	3.82	6.03	14.43	24.28	56.94	81.22
Cotton Picker/Module	6R-38 (500)	745,000	200	8	25.73	0.172	3.82	7.53	20.05	31.42	79.14	110.56
Dry Applicator SP	70'300cuft	312,000	350	8	16.98	0.015	0.26	0.43	0.25	0.95	1.66	2.61
Sprayer 600-750gal	60' 175hp	193,000	350	8	9.00	0.017	0.31	0.26	0.18	0.76	1.19	1.96
Sprayer 600-825gal	80' 175hp	202,000	350	8	11.81	0.013	0.23	0.26	0.14	0.64	0.94	1.58
Sprayer 600-825gal	90' 250hp	273,000	350	8	12.73	0.011	0.20	0.25	0.17	0.63	1.13	1.76
Sprayer 800gal	100' 250hp	261,000	350	8	14.15	0.010	0.18	0.25	0.14	0.58	0.97	1.56
Sprayer 800gal	80' 250hp	250,000	350	8	12.86	0.013	0.23	0.28	0.17	0.69	1.16	1.86
Sprayer 1000-1400gal	90' 275hp	294,000	350	8	14.15	0.010	0.18	0.25	0.16	0.60	1.09	1.70
Sprayer 1000gal	100' 300hp	308,000	350	8	15.44	0.010	0.18	0.27	0.17	0.63	1.14	1.78
Sprayer 1200+gal	120' 300hp	343,000	350	8	15.44	0.008	0.15	0.23	0.16	0.54	1.06	1.61

Notes:

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

Direct: Does not include interest on operating capital.

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost	
									Imp.	P.U.		Imp.	P.U.		
			dollars	hours	years	hr/ac	-----\$/acre-----								
Bed-Paratill	Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.06	1.59	1.58	0.55	4.78	2.75	3.46	11.00
Bed-Paratill	Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.70	1.05	1.34	0.36	3.47	2.32	2.30	8.10
Bed-Paratill	Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.70	1.05	1.34	0.36	3.47	2.32	2.30	8.10
Bed-Paratill	Rigid	4R-30	MFWD 225	13,500	150	12	0.204	2.68	4.02	0.99	1.39	9.09	1.72	8.76	19.58
Bed-Paratill	Rigid	4R-38	MFWD 225	13,500	150	12	0.160	2.11	3.16	0.78	1.09	7.16	1.36	6.90	15.42
Bed-Paratill	Rigid	6R-30	MFWD 225	19,900	150	12	0.136	1.78	2.68	0.97	0.92	6.37	1.69	5.84	13.92
Bed-Paratill	Rigid	6R-38	MFWD 225	18,800	150	12	0.107	1.41	2.11	0.73	0.73	4.99	1.26	4.61	10.87
Bed-Paratill	Rigid	8R-30	MFWD 225	25,000	150	12	0.102	1.34	2.01	0.92	0.69	4.97	1.60	4.38	10.95
Bed-Paratill	Rigid	8R-38	MFWD 225	25,000	150	12	0.080	1.06	1.59	0.72	0.55	3.93	1.26	3.46	8.65
Bed-Paratill	w/rol	4R-30	MFWD 225	17,900	150	12	0.204	2.68	4.02	1.32	1.39	9.42	2.29	8.76	20.47
Bed-Paratill	w/rol	4R-38	MFWD 225	17,900	150	12	0.160	2.11	3.16	1.03	1.09	7.41	1.80	6.90	16.12
Bed-Paratill	w/rol	6R-38	MFWD 225	25,200	150	12	0.107	1.41	2.11	0.97	0.73	5.24	1.69	4.61	11.55
Bed-Rip/Disk	Fold.	8R-38	MFWD 190	36,900	300	20	0.073	0.96	1.21	0.13	0.42	2.73	0.63	2.67	6.04
Bed-Rip/Disk	Fold.	12R-30	MFWD 225	54,400	300	20	0.061	0.80	1.21	0.16	0.41	2.61	0.79	2.64	6.04
Bed-Rip/Disk	Fold.	12R-38	MFWD 225	54,400	300	20	0.046	0.60	0.90	0.12	0.31	1.95	0.59	1.98	4.53
Bed-Rip/Disk	Rigid	4R-30	MFWD 190	17,300	300	20	0.184	2.42	3.07	0.15	1.07	6.73	0.75	6.76	14.26
Bed-Rip/Disk	Rigid	4R-38	MFWD 190	17,300	300	20	0.146	1.92	2.43	0.12	0.85	5.34	0.60	5.37	11.32
Bed-Rip/Disk	Rigid	6R-38	MFWD 190	23,900	300	20	0.097	1.27	1.61	0.11	0.56	3.57	0.55	3.56	7.69
Bed-Rip/Disk	Rigid	8R-30	MFWD 190	31,300	300	20	0.139	1.82	2.31	0.21	0.80	5.16	1.03	5.08	11.28
Bed-Rip/Disk	Rigid	8R-38	MFWD 190	31,300	300	20	0.073	0.96	1.21	0.11	0.42	2.71	0.54	2.67	5.93
Bed-Rip/Disk	Rigid	6R-30	MFWD 190	23,900	300	20	0.123	1.61	2.04	0.14	0.71	4.53	0.69	4.51	9.74
Bed-Rip/Disk/Cond.		6-Row	MFWD 225	24,600	150	12	0.107	1.41	2.11	0.95	0.73	5.21	1.65	4.61	11.48
Bed-Rip/Disk/Cond.		8-Row	MFWD 225	32,700	150	12	0.080	1.06	1.59	0.95	0.55	4.15	1.65	3.46	9.27
Bed/Disk	(Hipper)	4R-38	MFWD 150	8,800	160	10	0.147	1.93	1.93	0.32	0.65	4.86	0.85	3.97	9.69
Bed/Disk	(Hipper)	6R-30	MFWD 170	15,100	160	10	0.125	1.64	1.85	0.47	0.66	4.63	1.24	4.18	10.06
Bed/Disk	(Hipper)	6R-38	MFWD 170	15,100	160	10	0.098	1.29	1.46	0.37	0.52	3.66	0.98	3.30	7.94
Bed/Disk	(Hipper)	8R-30	MFWD 190	17,400	160	10	0.093	1.23	1.55	0.40	0.54	3.74	1.07	3.43	8.25
Bed/Disk	(Hipper)	8R-38 2x1	MFWD 190	33,600	160	10	0.049	0.64	0.82	0.41	0.28	2.16	1.09	1.80	5.07
Bed/Disk	(Hipper)	12R-30	MFWD 225	30,700	160	10	0.062	0.82	1.23	0.47	0.42	2.95	1.26	2.68	6.90
Bed/Disk	(Hipper)	12R-38	MFWD 225	33,600	160	10	0.049	0.64	0.97	0.41	0.33	2.37	1.09	2.11	5.58
Bed/Disk	(Hipper)	16R40	MFWD 300	47,000	160	10	0.035	0.46	0.92	0.41	0.32	2.13	1.09	2.06	5.30
Bed/Disk	(Hipper)Fl	8R-38	MFWD 190	20,200	160	10	0.074	0.97	1.23	0.37	0.43	3.01	0.98	2.71	6.71
Bed/Disk	(Hipper)Rd	8R-38	MFWD 190	14,600	160	10	0.074	0.97	1.23	0.27	0.43	2.90	0.71	2.71	6.33
Bed/Disk	w/roller	8R-30/40	MFWD 190	27,800	160	10	0.093	1.23	1.55	0.65	0.54	3.98	1.72	3.43	9.13
Bed/Disk	w/roller	12R-30/40	MFWD 225	44,400	160	10	0.062	0.82	1.23	0.69	0.42	3.17	1.83	2.68	7.68
Bed/Disk	w/roller	8R-38	MFWD 190	27,400	160	10	0.074	0.97	1.23	0.50	0.43	3.14	1.34	2.71	7.19
Bed/Lister		4R-38	MFWD 150	18,200	160	8	0.228	3.00	2.99	0.97	1.02	7.99	3.06	6.14	17.20
Bed/Lister		6R-38	MFWD 150	18,900	160	8	0.120	1.57	1.57	0.53	0.53	4.22	1.67	3.23	9.13
Bed/Lister		8R-30	MFWD 190	20,500	160	8	0.114	1.50	1.89	0.54	0.66	4.61	1.72	4.17	10.51
Bed/Lister		8R-38	MFWD 190	23,500	160	8	0.090	1.18	1.50	0.49	0.52	3.70	1.56	3.30	8.57
Bed/Lister		8R-38 2x1	MFWD 190	46,200	160	8	0.060	0.78	0.99	0.65	0.34	2.78	2.04	2.19	7.03
Bed/Lister		12R-38	MFWD 225	46,200	160	8	0.060	0.78	1.18	0.65	0.40	3.03	2.04	2.57	7.66
Bed/Lister		16R-30	MFWD 225	59,400	160	8	0.035	0.46	0.69	0.48	0.23	1.88	1.53	1.50	4.92
Bed/Lister		16R40	MFWD 300	82,400	160	8	0.043	0.56	1.13	0.83	0.39	2.92	2.62	2.51	8.06
Bed/Lister-Roll-Fold		8R-38	MFWD 190	24,400	160	10	0.074	0.97	1.23	0.45	0.43	3.08	1.19	2.71	6.99
Bed/Lister-Roll-Fold		12R-30	MFWD 225	29,200	160	10	0.062	0.82	1.23	0.45	0.42	2.93	1.20	2.68	6.82
Bed/Lister-Roll-Fold		12R-38	MFWD 225	33,400	160	10	0.049	0.64	0.97	0.41	0.33	2.36	1.08	2.11	5.57
Bed/Lister-Roll-Fold		16R-30	MFWD 225	34,800	160	10	0.046	0.61	0.92	0.40	0.31	2.26	1.07	2.01	5.35
Bed/Lister-Roll-Rig.		8R-38	MFWD 190	21,300	160	10	0.074	0.97	1.23	0.39	0.43	3.03	1.04	2.71	6.78
Blade-Box		6'-7'	MFWD 105	1,150	200	20	0.020	0.26	0.18	0.01	0.03	0.49	0.00	0.23	0.73
Blade-Box		8'-10'	MFWD 105	3,010	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box		12'-16'	MFWD 105	6,270	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper		6'-7'	MFWD 105	1,100	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper		8'-10'	MFWD 105	3,390	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper		12'-16'	MFWD 105	6,860	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy		4R-38(250)	MFWD 190	30,500	200	10	0.257	3.38	4.28	1.96	1.49	11.13	3.99	9.43	24.56
Boll Buggy		4R-38(350)	MFWD 190	30,500	200	10	0.257	3.38	4.28	1.96	1.49	11.13	3.99	9.43	24.56
Boll Buggy		4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.26	2.86	1.31	1.00	7.44	2.67	6.30	16.42
Boll Buggy		6R-30(355)	MFWD 190	30,500	200	10	0.218	2.86	3.62	1.66	1.26	9.42	3.38	7.98	20.80
Boll Buggy		6R-38(355)	MFWD 190	30,500	200	10	0.172	2.26	2.86	1.31	1.00	7.44	2.67	6.30	16.42
Chisel Plow-Folding		24'	MFWD 190	38,000	150	12	0.076	1.00	1.27	1.04	0.44	3.76	1.82	2.79	8.38
Chisel Plow-Folding		32'	MFWD 225	49,900	150	12	0.057	0.75	1.13	1.04	0.39	3.33	1.80	2.47	7.61
Chisel Plow-Folding		42'	MFWD 225	60,600	150	12	0.044	0.57	0.86	0.96	0.29	2.70	1.67	1.88	6.26
Chisel Plow-Folding		50'	MFWD 225	79,400	150	10	0.036	0.48	0.72	1.27	0.25	2.73	2.06	1.58	6.39
Chisel Plow-Folding		61'	MFWD 225	88,400	150	12	0.030	0.39	0.59	0.96	0.20	2.16	1.67	1.30	5.14
Chisel Plow-Rigid		10'	MFWD 170	6,300	150	12	0.184	2.42	2.75	0.42	0.98	6.58	0.72	6.18	13.49
Chisel Plow-Rigid		15'	2WD 130	11,400	150	12	0.123	1.61	1.40	0.50	0.68	4.21	0.88	4.10	9.19
Chisel Plow-Rigid		20'	MFWD 225	11,300	150	12	0.102	1.34	2.02	0.41	0.69	4.49	0.72	4.40	9.62
Chisel Plow-Rigid		24'	MFWD 190	12,100	150	12	0.077	1.01	1.28	0.33	0.44	3.07	0.58	2.81	6.48
Cultivate		4R-30	2WD 105	11,900	150	10	0.206	2.71	1.89	0.65	0.42	5.68	1.72	2.53	9.94
Cultivate		4R-38	2WD 105	12,000	150	10	0.162	2.13	1.49	0.51	0.29	4.43	1.37	1.75	7.56
Cultivate		6R-30	MFWD 150	16,200	150	10	0.137	1.80	1.80	0.59	0.61	4.81	1.56	3.69	10.08
Cultivate		6R-38	MFWD 150	17,100	150	10	0.108	1.42	1.42	0.49	0.48	3.83	1.30	2.91	8.05
Cultivate		8R-30	MFWD 190	20,500	150	10	0.103	1.35	1.71	0.56	0.59	4.23	1.48	3.77	9.49
Cultivate		8R-38	MFWD 190	21,300	150	10	0.073	0.96	1.22	0.41	0.42	3.03	1.10	2.69	6.84
Cultivate		8R-38 2x1	MFWD 190	30,400	150	10	0.054	0.71	0.90	0.44	0.31	2.37	1.16	1.98	5.52
Cultivate		12R-30	MFWD 225	35,500	150	10	0.068	0.90	1.35	0.65	0.46	3.37	1.71	2.94	8.04
Cultivate		12R-38	MFWD 225	37,000	150	10	0.054	0.71	1.06	0.53	0.36	2.68	1.41	2.32	6.43

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (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-----							
Cultivate	16R-30	MFWD 225	47,300	150	10	0.051	0.67	1.01	0.65	0.35	2.69	1.71	2.21	6.62
Cultivate & Post	4R-30	2WD 105	17,300	150	10	0.220	3.88	2.02	1.01	0.39	7.31	2.68	2.38	12.38
Cultivate & Post	4R-38	2WD 105	17,400	150	10	0.173	3.06	1.59	0.80	0.31	5.76	2.12	1.87	9.76
Cultivate & Post	6R-30	MFWD 150	21,600	150	10	0.146	2.59	1.92	0.84	0.65	6.01	2.23	3.94	12.19
Cultivate & Post	6R-38	MFWD 150	22,500	150	10	0.115	2.04	1.51	0.69	0.51	4.77	1.83	3.11	9.72
Cultivate & Post	8R-30	MFWD 190	25,900	150	10	0.110	1.94	1.82	0.75	0.63	5.17	2.00	4.02	11.20
Cultivate & Post	8R-38	MFWD 190	26,700	150	10	0.086	1.53	1.44	0.61	0.50	4.10	1.63	3.18	8.92
Cultivate & Post	8R-38 2x1	MFWD 190	38,300	150	10	0.057	1.02	0.96	0.59	0.33	2.91	1.56	2.11	6.59
Cultivate & Post	10R-30	MFWD 225	31,700	150	10	0.088	1.55	1.73	0.74	0.59	4.63	1.96	3.77	10.37
Cultivate & Post	12R-30	MFWD 225	41,000	150	10	0.073	1.29	1.44	0.80	0.49	4.04	2.11	3.14	9.30
Cultivate & Post	12R-38	MFWD 225	44,800	150	10	0.057	1.02	1.13	0.69	0.39	3.24	1.82	2.48	7.55
Cultivate & Post	16R-30	MFWD 225	55,100	150	10	0.055	0.97	1.08	0.80	0.37	3.23	2.13	2.35	7.73
Disk & Incorporate	14'	2WD 130	29,800	200	10	0.149	2.64	1.70	1.33	0.82	6.51	2.35	4.98	13.85
Disk & Incorporate	20'	MFWD 190	46,000	180	10	0.092	1.21	1.53	1.41	0.53	4.70	2.49	3.38	10.58
Disk & Incorporate	24'	MFWD 190	47,900	200	10	0.087	1.54	1.45	1.25	0.50	4.75	2.20	3.19	10.16
Disk & Incorporate	28'	MFWD 225	55,900	200	10	0.074	1.32	1.47	1.25	0.50	4.56	2.20	3.21	9.98
Disk & Incorporate	32'	MFWD 225	59,300	200	10	0.065	1.15	1.28	1.16	0.44	4.05	2.05	2.80	8.91
Disk Harrow	14'	2WD 130	24,400	180	10	0.140	1.84	1.59	0.95	0.77	5.16	2.00	4.67	11.84
Disk Harrow	20'	MFWD 190	40,600	180	10	0.098	1.29	1.63	1.10	0.57	4.60	2.34	3.59	10.53
Disk Harrow	24'	MFWD 190	42,500	180	10	0.081	1.07	1.36	0.96	0.47	3.87	2.04	2.99	8.91
Disk Harrow	28'	MFWD 225	50,400	180	10	0.070	0.92	1.38	0.98	0.47	3.76	2.07	3.00	8.84
Disk Harrow	32'	MFWD 225	53,900	180	10	0.061	0.80	1.20	0.91	0.41	3.35	1.94	2.63	7.92
Disk Harrow	42'	MFWD 225	94,400	180	10	0.046	0.61	0.92	1.22	0.31	3.08	2.59	2.00	7.67
Disk Harrow 40-100hp	14'	2WD 75	14,700	180	10	0.140	1.84	0.92	0.57	0.15	3.48	1.21	0.90	5.60
Disk Heavy	14'	MFWD 150	24,400	180	10	0.145	1.91	1.91	0.98	0.65	5.47	2.09	3.92	11.49
Disk Heavy	20'	MFWD 170	40,600	180	10	0.097	1.27	1.44	1.09	0.51	4.34	2.31	3.25	9.91
Disk Heavy	28'	MFWD 190	50,400	180	10	0.075	0.99	1.25	1.05	0.43	3.75	2.23	2.77	8.76
Disk Ripper	15'	MFWD 225	41,500	180	10	0.136	1.78	2.68	1.57	0.92	6.97	3.31	5.84	16.13
Ditcher		2WD 130	5,750	200	10	0.020	0.26	0.22	0.04	0.11	0.64	0.06	0.66	1.37
Ditcher (1m/160a)		2WD 130	5,750	200	10	0.009	0.12	0.10	0.02	0.05	0.30	0.02	0.31	0.64
Fert Appl (Liquid)	4R-38	MFWD 150	14,700	150	8	0.154	2.73	2.03	1.51	0.69	6.97	1.71	4.15	12.83
Fert Appl (Liquid)	6R-30	MFWD 170	13,700	150	8	0.130	2.31	1.94	1.19	0.69	6.15	1.34	4.38	11.88
Fert Appl (Liquid)	6R-38	MFWD 170	11,600	150	8	0.103	1.82	1.53	0.79	0.54	4.71	0.90	3.45	9.07
Fert Appl (Liquid)	8R-30	MFWD 190	14,500	150	8	0.098	1.73	1.63	0.94	0.57	4.88	1.07	3.59	9.55
Fert Appl (Liquid)	8R-38	MFWD 190	16,600	150	8	0.077	1.37	1.29	0.85	0.45	3.97	0.96	2.84	7.78
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	17,700	150	8	0.051	0.91	0.85	0.60	0.30	2.68	0.68	1.89	5.26
Fert Appl (Liquid)	12R-30	MFWD 225	19,000	150	8	0.078	1.38	1.54	0.99	0.53	4.46	1.12	3.37	8.95
Fert Appl (Liquid)	12R-38	MFWD 225	17,700	150	8	0.051	0.91	1.01	0.60	0.35	2.89	0.68	2.21	5.79
Field Cult & Inc	42'	MFWD 225	64,700	100	10	0.037	0.66	0.74	0.61	0.25	2.27	2.58	1.62	6.48
Field Cult & Inc	50'	MFWD 225	74,900	100	10	0.031	0.56	0.62	0.59	0.21	1.99	2.51	1.36	5.86
Field Cult & Inc Fld	24'	MFWD 170	38,000	100	10	0.066	1.16	0.98	0.62	0.35	3.13	2.65	2.21	7.99
Field Cult & Inc Fld	32'	MFWD 190	45,000	100	10	0.049	0.87	0.82	0.55	0.28	2.54	2.35	1.81	6.71
Field Cult & Inc Rdg	12'	2WD 150	18,000	100	10	0.132	2.33	1.73	0.59	0.44	5.11	2.51	2.68	10.31
Field Cultivate Fld	24'	MFWD 170	25,300	100	10	0.062	0.81	0.92	0.39	0.33	2.46	1.66	2.08	6.21
Field Cultivate Fld	32'	MFWD 190	39,600	100	10	0.046	0.61	0.77	0.46	0.27	2.12	1.95	1.70	5.78
Field Cultivate Fld	42'	MFWD 225	56,900	100	10	0.035	0.46	0.69	0.50	0.24	1.91	2.13	1.52	5.57
Field Cultivate Fld	50'	MFWD 225	65,300	100	10	0.029	0.39	0.58	0.48	0.20	1.67	2.06	1.28	5.01
Field Cultivate Rdg	12'	2WD 150	12,600	100	10	0.124	1.63	1.63	0.39	0.41	4.08	1.65	2.52	8.26
Grain Cart Corn	500 bu	MFWD 190	23,900	200	12	0.025	0.33	0.42	0.16	0.14	1.06	0.28	0.92	2.27
Grain Cart Corn	700 bu	MFWD 190	36,800	200	12	0.025	0.33	0.42	0.25	0.14	1.15	0.43	0.92	2.51
Grain Cart Corn	1000 bu	MFWD 225	48,700	200	12	0.025	0.33	0.49	0.33	0.17	1.33	0.57	1.08	3.00
Grain Cart Rice	500 bu	MFWD 190	23,900	200	12	0.062	0.82	1.03	0.40	0.36	2.62	0.70	2.28	5.61
Grain Cart Rice	700 bu	MFWD 190	36,800	200	12	0.055	0.72	0.91	0.54	0.31	2.50	0.95	2.01	5.46
Grain Cart Rice	1000 bu	MFWD 190	48,700	200	12	0.045	0.60	0.76	0.60	0.26	2.23	1.04	1.67	4.96
Grain Cart Soybean	500 bu	MFWD 190	23,900	200	12	0.025	0.33	0.42	0.16	0.14	1.07	0.28	0.93	2.29
Grain Cart Soybean	700 bu	MFWD 190	36,800	200	12	0.021	0.27	0.35	0.21	0.12	0.96	0.36	0.77	2.11
Grain Cart Soybean	1000 bu	MFWD 190	48,700	200	12	0.021	0.27	0.35	0.28	0.12	1.03	0.48	0.77	2.30
Grain Cart Wht/Sor	500 bu	MFWD 190	23,900	200	12	0.025	0.33	0.42	0.16	0.14	1.07	0.28	0.93	2.29
Grain Cart Wht/Sor	700 bu	MFWD 190	36,800	200	12	0.021	0.27	0.35	0.21	0.12	0.96	0.36	0.77	2.11
Grain Cart Wht/Sor	1000 bu	MFWD 190	48,700	200	12	0.021	0.27	0.35	0.28	0.12	1.03	0.48	0.77	2.30
Grain Drill	10'	2WD 130	26,800	150	8	0.188	4.18	2.14	1.89	1.04	9.26	3.62	6.27	19.17
Grain Drill	12'	2WD 130	24,100	150	8	0.157	3.48	1.78	1.42	0.86	7.56	2.71	5.23	15.51
Grain Drill	15'	MFWD 150	32,700	150	8	0.125	2.79	1.65	1.54	0.56	6.54	2.94	3.38	12.87
Grain Drill	20'	MFWD 170	38,800	150	8	0.094	2.09	1.40	1.37	0.50	5.36	2.62	3.15	11.14
Grain Drill	24'	MFWD 190	58,600	150	8	0.078	1.74	1.30	1.72	0.45	5.23	3.30	2.87	11.41
Grain Drill	30'	MFWD 225	65,300	150	8	0.062	1.39	1.23	1.53	0.42	4.60	2.94	2.69	10.24
Grain Drill	35'	MFWD 225	93,600	150	8	0.053	1.19	1.06	1.89	0.36	4.51	3.61	2.31	10.44
Grain Drill & Pre	10'	2WD 130	32,200	150	8	0.203	4.50	2.31	2.45	1.12	10.39	4.69	6.75	21.84
Grain Drill & Pre	12'	2WD 130	29,600	150	8	0.169	3.75	1.92	1.87	0.93	8.49	3.59	5.63	17.72
Grain Drill & Pre	15'	MFWD 150	38,100	150	8	0.135	3.00	1.77	1.93	0.60	7.32	3.69	3.64	14.66
Grain Drill & Pre	20'	MFWD 170	44,300	150	8	0.101	2.25	1.51	1.68	0.53	5.99	3.22	3.39	12.61
Grain Drill & Pre	24'	MFWD 190	64,000	150	8	0.084	1.87	1.40	2.03	0.49	5.80	3.88	3.09	12.79
Grain Drill & Pre	30'	MFWD 225	70,700	150	8	0.067	1.50	1.33	1.79	0.46	5.09	3.43	2.90	11.42
Grain Drill & Pre	35'	MFWD 225	99,100	150	8	0.058	1.28	1.14	2.15	0.39	4.98	4.12	2.48	11.59
Grain Drill & Pre T	8R-38	MFWD 225	50,500	150	8	0.062	1.39	1.23	1.19	0.42	4.25	2.27	2.69	9.22
Harrow - Rigid	21'	2WD 150	6,750	200	10	0.073	0.97	0.97	0.17	0.24	2.36	0.26	1.50	4.13
Harrow - Folding	24'	MFWD 190	12,700	200	10	0.064	0.85	1.07	0.28	0.37	2.58	0.43	2.36	5.39
Harrow - Folding	30'	MFWD 190	15,200	200	10	0.051	0.68	0.86	0.27	0.30	2.11	0.41	1.89	4.42
Harrow - Folding	40'	MFWD 190	17,400	200	10	0.038	0.51	0.64	0.23	0.22	1.61	0.35	1.42	3.39
Harrow - Folding	48'	MFWD 225	22,700	200	10	0.032	0.42	0.63	0.25	0.22	1.53	0.38	1.38	3.31

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (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-----							
Harrow - Rigid	13'	2WD 130	4,950	200	10	0.119	1.56	1.35	0.20	0.66	3.79	0.31	3.97	8.08
Header - Corn	6R-30	265 hp	46,500	300	8	0.170	2.23	3.94	1.97	5.72	13.89	2.97	22.60	39.47
Header - Corn	6R-38	265 hp	46,700	300	8	0.134	1.76	3.11	1.56	4.52	10.97	2.36	17.84	31.18
Header - Corn	8R-30	265 hp	58,600	300	8	0.127	1.67	2.96	1.87	4.29	10.80	2.81	16.95	30.57
Header - Corn	8R-38	325 hp	59,600	300	8	0.100	1.32	2.87	1.50	3.53	9.23	2.26	13.94	25.44
Header - Corn	12R-20	325 hp	77,400	300	8	0.127	1.67	3.63	2.47	4.46	12.25	3.71	17.63	33.60
Header - Corn	12R-30	325 hp	91,600	300	8	0.085	1.11	2.42	1.94	2.97	8.46	2.93	11.75	23.16
Header - Draper (CL)	25' Rigid	265 hp	58,200	300	8	0.203	2.66	4.70	2.70	6.83	16.91	4.23	26.96	48.11
Header - Draper (CL)	30' Rigid	325 hp	67,200	300	8	0.169	2.22	4.81	2.60	5.92	15.56	4.07	23.37	43.01
Header - Draper (CL)	36' Rigid	355 hp	71,300	300	8	0.141	1.85	4.38	2.30	4.99	13.53	3.60	19.70	36.84
Header - Draper (SL)	25' Rigid	325 hp	58,200	300	8	0.176	2.31	5.00	2.34	6.16	15.82	3.67	24.30	43.80
Header - Draper (SL)	30' Rigid	325 hp	67,200	300	8	0.146	1.92	4.17	2.25	5.13	13.49	3.53	20.25	37.28
Header - Draper (SL)	36' Rigid	355 hp	71,300	300	8	0.122	1.60	3.79	1.99	4.32	11.72	3.12	17.07	31.93
Header - Rice (CL)	25' Rigid	325 hp	64,400	300	8	0.253	3.33	7.21	4.08	8.88	23.52	6.14	35.05	64.73
Header - Rice (CL)	30' Rigid	325 hp	74,100	300	8	0.211	2.77	6.01	3.91	7.40	20.11	5.89	29.21	55.22
Header - Rice (SL)	25' Rigid	325 hp	64,400	300	8	0.220	2.89	6.25	3.54	7.70	20.38	5.32	30.38	56.10
Header - Rice (SL)	30' Rigid	325 hp	74,100	300	8	0.183	2.40	5.21	3.39	6.41	17.43	5.10	25.31	47.86
Header -RiceStrp(CL)	20'	265 hp	48,600	300	8	0.253	3.33	5.88	3.08	8.54	20.84	4.64	33.70	59.18
Header -RiceStrp(CL)	24'	325 hp	53,300	300	8	0.211	2.77	6.01	2.81	7.40	19.01	4.24	29.21	52.47
Header -RiceStrp(CL)	32'	325 hp	58,700	300	8	0.158	2.08	4.51	2.32	5.55	14.47	3.50	21.90	39.89
Header -RiceStrp(SL)	20'	265 hp	48,600	300	8	0.220	2.89	5.10	2.67	7.40	18.06	4.02	29.20	51.29
Header -RiceStrp(SL)	24'	325 hp	53,300	300	8	0.183	2.40	5.21	2.44	6.41	16.48	3.67	25.31	45.47
Header -RiceStrp(SL)	32'	325 hp	58,700	300	8	0.137	1.80	3.91	2.01	4.81	12.54	3.03	18.98	34.57
Header -Soybean	22' Flex	265 hp	31,800	300	8	0.116	1.52	2.69	0.92	3.90	9.04	1.38	15.41	25.84
Header -Soybean	25' Flex	325 hp	34,300	300	8	0.102	1.34	2.90	0.87	3.57	8.70	1.31	14.10	24.12
Header -Soybean	30' Flex	325 hp	39,600	300	8	0.085	1.11	2.42	0.84	2.97	7.36	1.26	11.75	20.38
Header -Soybean	35' Flex	355 hp	45,700	300	8	0.072	0.95	2.26	0.83	2.58	6.64	1.25	10.19	18.09
Header Wheat/Sorghum	22' Rigid	265 hp	19,600	300	8	0.116	1.52	2.69	0.56	3.90	8.69	0.85	15.41	24.96
Header Wheat/Sorghum	25' Rigid	325 hp	24,300	300	8	0.102	1.34	2.90	0.62	3.57	8.44	0.93	14.10	23.48
Header Wheat/Sorghum	30' Rigid	325 hp	28,300	300	8	0.085	1.11	2.42	0.60	2.97	7.12	0.90	11.75	19.78
Land Plane	50'x16'	MFWD 190	14,300	200	10	0.151	1.99	2.52	0.43	0.88	5.82	1.14	5.55	12.52
Levee Pull & Seed	8 Blade	MFWD 170	10,400	100	10	0.003	0.04	0.05	0.00	0.01	0.12	0.03	0.11	0.28
Levee Pull (1m/80a)	8 blade	MFWD 170	7,180	100	10	0.003	0.04	0.05	0.00	0.01	0.12	0.02	0.11	0.27
Levee Splitter (1/80	32"	MFWD 150	7,180	100	10	0.004	0.05	0.05	0.00	0.01	0.13	0.03	0.11	0.27
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	5.72	4.28	2.23	1.49	13.74	4.54	9.43	27.72
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	5.72	4.28	2.23	1.49	13.74	4.54	9.43	27.72
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	3.82	2.86	1.49	1.00	9.18	3.03	6.30	18.53
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	4.84	3.62	1.89	1.26	11.63	3.85	7.98	23.47
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	3.82	2.86	1.49	1.00	9.18	3.03	6.30	18.53
NT Grain Drill	10'	2WD 130	34,500	150	8	0.235	5.23	2.68	3.04	1.30	12.26	5.83	7.84	25.94
NT Grain Drill	12'	2WD 130	41,800	150	8	0.163	3.63	1.86	2.56	0.90	8.96	4.90	5.44	19.32
NT Grain Drill	15'	MFWD 150	49,700	150	8	0.130	2.90	1.71	2.44	0.58	7.65	4.66	3.52	15.84
NT Grain Drill	20'	MFWD 170	65,600	150	8	0.098	2.18	1.46	2.41	0.52	6.57	4.62	3.28	14.48
NT Grain Drill	24'	MFWD 190	82,400	150	8	0.081	1.81	1.36	2.52	0.47	6.18	4.83	2.99	14.01
NT Grain Drill	30'	MFWD 225	94,200	150	8	0.065	1.45	1.28	2.31	0.44	5.50	4.42	2.80	12.73
NT Grain Drill & Pre	10'	2WD 130	39,900	150	8	0.211	4.69	2.40	3.16	1.17	11.43	6.05	7.04	24.53
NT Grain Drill & Pre	12'	2WD 130	47,200	150	8	0.176	3.91	2.00	3.12	0.97	10.01	5.96	5.86	21.84
NT Grain Drill & Pre	15'	MFWD 150	55,100	150	8	0.141	3.13	1.85	2.91	0.63	8.52	5.57	3.79	17.89
NT Grain Drill & Pre	20'	MFWD 170	71,000	150	8	0.105	2.34	1.57	2.81	0.56	7.29	5.38	3.53	16.22
NT Grain Drill & Pre	24'	MFWD 190	87,800	150	8	0.088	1.95	1.46	2.90	0.51	6.83	5.55	3.22	15.61
NT Grain Drill & Pre	30'	MFWD 225	99,600	150	8	0.070	1.56	1.38	2.63	0.48	6.06	5.03	3.02	14.12
NT Plant&Pre-Folding	8R-38	MFWD 170	54,300	150	8	0.083	1.85	1.24	1.70	0.44	5.24	3.25	2.79	11.30
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	86,900	150	8	0.055	1.23	0.82	1.81	0.29	4.17	3.47	1.86	9.50
NT Plant&Pre-Folding	12R-20	MFWD 190	71,600	150	8	0.105	2.34	1.75	2.83	0.61	7.56	5.43	3.87	16.86
NT Plant&Pre-Folding	12R-30	MFWD 190	78,100	150	8	0.070	1.56	1.17	2.06	0.40	5.21	3.95	2.58	11.74
NT Plant&Pre-Folding	12R-38	MFWD 190	86,900	150	8	0.055	1.23	0.92	1.81	0.32	4.29	3.47	2.03	9.80
NT Plant&Pre-Folding	16R-30	MFWD 190	109,000	150	8	0.052	1.17	0.87	2.16	0.30	4.52	4.13	1.93	10.59
NT Plant&Pre-Folding	23R-15	MFWD 190	141,000	150	8	0.073	1.63	1.22	3.88	0.42	7.16	7.42	2.68	17.27
NT Plant&Pre-Folding	24R-15	MFWD 225	148,000	150	8	0.070	1.56	1.38	3.91	0.48	7.34	7.48	3.02	17.85
NT Plant&Pre-Folding	24R-20	MFWD 190	163,000	150	8	0.052	1.17	0.87	3.23	0.30	5.59	6.18	1.93	13.71
NT Plant&Pre-Folding	24R-30	MFWD 190	199,000	150	8	0.035	0.78	0.58	2.63	0.20	4.20	5.03	1.29	10.52
NT Plant&Pre-Folding	31R-15	MFWD 225	173,000	150	8	0.054	1.21	1.07	3.54	0.37	6.20	6.78	2.34	15.33
NT Plant&Pre-Folding	32R-15	MFWD 225	192,000	150	8	0.052	1.17	1.04	3.80	0.36	6.38	7.28	2.26	15.93
NT Plant&Pre-Rigid	4R-30	2WD 130	28,200	150	8	0.211	4.69	2.40	2.23	1.17	10.50	4.27	7.04	21.83
NT Plant&Pre-Rigid	4R-38	2WD 130	30,500	150	8	0.166	3.69	1.89	1.90	0.92	8.41	3.64	5.54	17.60
NT Plant&Pre-Rigid	6R-30	MFWD 150	39,600	150	8	0.141	3.13	1.85	2.09	0.63	7.70	4.00	3.79	15.50
NT Plant&Pre-Rigid	6R-38	MFWD 150	35,400	150	8	0.111	2.47	1.46	1.47	0.49	5.90	2.82	2.99	11.73
NT Plant&Pre-Rigid	8R-30	MFWD 170	45,600	150	8	0.105	2.34	1.57	1.80	0.56	6.29	3.45	3.53	13.29
NT Plant&Pre-Rigid	8R-38	MFWD 170	42,900	150	8	0.083	1.85	1.24	1.34	0.44	4.88	2.57	2.79	10.25
NT Plant&Pre-Rigid	10R-30	MFWD 190	47,400	150	8	0.084	1.87	1.40	1.50	0.49	5.28	2.87	3.09	11.25
NT Plant&Pre-Rigid	11R-15	MFWD 170	55,200	150	8	0.143	3.19	2.14	2.97	0.76	9.07	5.69	4.81	19.59
NT Plant&Pre-Rigid	11R-20	MFWD 170	50,700	150	8	0.115	2.56	1.71	2.19	0.61	7.09	4.20	3.86	15.16
NT Plant&Pre-Rigid	12R-20	MFWD 190	57,100	150	8	0.105	2.34	1.75	2.26	0.61	6.98	4.33	3.87	15.18
NT Plant&Pre-Rigid	12R-30	MFWD 190	72,000	150	8	0.070	1.56	1.17	1.90	0.40	5.05	3.64	2.58	11.27
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	6,210	150	8	0.097	2.16	1.91	0.22	0.66	4.97	0.43	4.18	9.59
NT Plant&Pre-Rigid	15R-15	MFWD 190	71,000	150	8	0.113	2.51	1.88	3.01	0.65	8.06	5.76	4.14	17.96
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	159,000	150	8	0.055	1.23	1.09	3.31	0.37	6.03	6.34	2.38	14.76
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	129,000	150	8	0.083	1.85	1.64	4.04	0.56	8.11	7.73	3.58	19.43
NT Plant-Folding	8R-38	MFWD 170	48,000	150	8	0.077	1.72	1.15	1.39	0.41	4.68	2.67	2.59	9.95

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
NT Plant-Folding	8R-38 2x1	MFWD 170	79,100	150	8	0.051	1.14	0.76	1.53	0.27	3.72	2.93	1.72	8.38
NT Plant-Folding	12R-20	MFWD 190	66,100	150	8	0.098	2.18	1.63	2.43	0.57	6.81	4.65	3.59	15.06
NT Plant-Folding	12R-30	MFWD 190	70,300	150	8	0.065	1.45	1.08	1.72	0.38	4.64	3.30	2.39	10.34
NT Plant-Folding	12R-38	MFWD 190	79,100	150	8	0.051	1.14	0.85	1.53	0.30	3.84	2.93	1.89	8.66
NT Plant-Folding	16R-30	MFWD 190	101,000	150	8	0.049	1.09	0.81	1.86	0.28	4.05	3.55	1.79	9.40
NT Plant-Folding	23R-15	MFWD 190	133,000	150	8	0.068	1.51	1.13	3.40	0.39	6.44	6.50	2.49	15.44
NT Plant-Folding	24R-15	MFWD 225	140,000	150	8	0.065	1.45	1.28	3.43	0.44	6.62	6.57	2.80	16.01
NT Plant-Folding	24R-20	MFWD 190	156,000	150	8	0.049	1.09	0.81	2.87	0.28	5.06	5.49	1.79	12.35
NT Plant-Folding	24R-30	MFWD 190	180,000	150	8	0.032	0.72	0.54	2.20	0.19	3.67	4.22	1.19	9.09
NT Plant-Folding	31R-15	MFWD 225	154,000	150	8	0.050	1.12	0.99	2.93	0.34	5.40	5.60	2.17	13.18
NT Plant-Folding	32R-15	MFWD 225	173,000	150	8	0.049	1.09	0.96	3.18	0.33	5.57	6.09	2.10	13.77
NT Plant-Rigid	4R-30	2WD 130	22,700	150	8	0.196	4.36	2.23	1.67	1.08	9.35	3.19	6.53	19.09
NT Plant-Rigid	4R-38	2WD 130	25,100	150	8	0.154	3.43	1.75	1.45	0.85	7.50	2.78	5.14	15.43
NT Plant-Rigid	6R-30	MFWD 150	34,100	150	8	0.130	2.90	1.71	1.67	0.58	6.88	3.20	3.52	13.61
NT Plant-Rigid	6R-38	MFWD 150	29,900	150	8	0.103	2.29	1.35	1.15	0.46	5.27	2.21	2.78	10.27
NT Plant-Rigid	8R-30	MFWD 170	40,200	150	8	0.098	2.18	1.46	1.48	0.52	5.64	2.83	3.28	11.76
NT Plant-Rigid	8R-38	MFWD 170	37,500	150	8	0.077	1.72	1.15	1.09	0.41	4.38	2.08	2.59	9.06
NT Plant-Rigid	10R-30	MFWD 190	41,900	150	8	0.078	1.74	1.30	1.23	0.45	4.74	2.36	2.87	9.97
NT Plant-Rigid	11R-15	MFWD 170	49,800	150	8	0.133	2.96	1.98	2.49	0.70	8.15	4.77	4.46	17.40
NT Plant-Rigid	11R-20	MFWD 170	45,300	150	8	0.107	2.38	1.59	1.82	0.57	6.37	3.48	3.59	13.45
NT Plant-Rigid	12R-20	MFWD 190	51,700	150	8	0.098	2.18	1.63	1.90	0.57	6.28	3.64	3.59	13.52
NT Plant-Rigid	12R-30	MFWD 190	56,200	150	8	0.065	1.45	1.08	1.37	0.38	4.30	2.63	2.39	9.33
NT Plant-Rigid	13R-18/20	MFWD 225	56,600	150	8	0.090	2.01	1.79	1.93	0.61	6.35	3.69	3.90	13.95
NT Plant-Rigid	15R-15	MFWD 190	63,200	150	8	0.105	2.33	1.74	2.48	0.61	7.17	4.76	3.84	15.78
NT Plant-TwinRow	12R-30/40	MFWD 225	140,000	150	8	0.051	1.14	1.01	2.71	0.35	5.23	5.19	2.21	12.63
NT Plant-TwinRow	8R-30/40	MFWD 225	123,000	150	8	0.077	1.72	1.52	3.58	0.52	7.36	6.85	3.33	17.54
Peanut Cond. & Lifter	6-Row	MFWD 190	12,900	300	20	0.100	1.31	1.66	0.21	0.58	3.77	0.31	3.66	7.75
Peanut Conditioner	6-Row	MFWD 190	14,900	300	20	0.100	1.31	1.66	0.29	0.58	3.85	0.32	3.66	7.83
Peanut Dig/Invertor	4R-30	MFWD 190	29,000	300	15	0.235	3.09	3.92	1.70	1.37	10.09	2.03	8.63	20.76
Peanut Dig/Invertor	4R-38	MFWD 190	29,000	300	15	0.186	2.44	3.09	1.34	1.08	7.96	1.60	6.81	16.39
Peanut Dig/Invertor	6R-38	MFWD 190	42,100	300	15	0.124	1.63	2.06	0.91	0.72	5.33	1.55	4.54	11.42
Peanut Dump Cart	6-Row	MFWD 190	47,500	300	20	0.310	4.07	5.15	0.85	1.80	11.88	3.49	11.34	26.72
Peanut Harvester	4R-30	MFWD 225	133,000	300	20	0.849	11.16	16.73	6.40	5.79	40.10	24.53	36.46	101.10
Peanut Harvester	4R-38	MFWD 225	133,000	300	20	0.934	12.28	18.40	7.04	6.36	44.09	28.23	40.09	112.41
Peanut Harvester	6R-38	MFWD 225	147,000	300	20	0.625	8.21	12.30	4.44	4.25	29.21	20.86	26.81	76.89
Peanut Lifter	6-Row	MFWD 225	6,300	300	20	0.100	1.31	1.96	0.13	0.68	4.09	0.13	4.28	8.52
Peanut Plt&Pre Fold.	12R-38	MFWD 190	79,800	150	8	0.080	1.78	1.33	2.40	0.46	5.99	4.60	2.94	13.54
Peanut Plt&Pre Rigid	8R-30	MFWD 190	41,000	150	8	0.152	3.39	2.54	2.34	0.88	9.16	4.49	5.59	19.25
Peanut Plt&Pre Rigid	8R-38	MFWD 190	38,200	150	8	0.120	2.68	2.00	1.73	0.70	7.12	3.30	4.42	14.85
Pipe Spool 160ac	1/4m roll	2WD 130	3,600	15	12	0.003	0.09	0.03	0.00	0.01	0.15	0.07	0.10	0.33
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.18	0.04	0.00	0.02	0.24	0.00	0.12	0.37
Plant & Pre-Folding	8R-38	MFWD 170	48,700	150	8	0.080	1.78	1.19	1.46	0.42	4.86	2.80	2.68	10.35
Plant & Pre-Folding	8R-38 2x1	MFWD 170	79,800	150	8	0.053	1.18	0.79	1.59	0.28	3.86	3.05	1.78	8.71
Plant & Pre-Folding	12R-20	MFWD 190	64,600	150	8	0.101	2.25	1.68	2.45	0.59	6.99	4.70	3.71	15.41
Plant & Pre-Folding	12R-30	MFWD 190	71,100	150	8	0.067	1.50	1.12	1.80	0.39	4.82	3.45	2.47	10.75
Plant & Pre-Folding	12R-38	MFWD 190	79,800	150	8	0.053	1.18	0.88	1.59	0.31	3.98	3.05	1.95	8.99
Plant & Pre-Folding	16R-30	MFWD 190	99,600	150	8	0.050	1.12	0.84	1.89	0.29	4.16	3.62	1.85	9.64
Plant & Pre-Folding	23R-15	MFWD 190	127,000	150	8	0.070	1.56	1.17	3.35	0.40	6.50	6.42	2.58	15.50
Plant & Pre-Folding	24R-15	MFWD 225	134,000	150	8	0.067	1.50	1.33	3.40	0.46	6.69	6.50	2.90	16.10
Plant & Pre-Folding	24R-20	MFWD 190	149,000	150	8	0.050	1.12	0.84	2.83	0.29	5.10	5.42	1.85	12.38
Plant & Pre-Folding	24R-30	MFWD 190	185,000	150	8	0.033	0.75	0.56	2.34	0.19	3.85	4.49	1.23	9.59
Plant & Pre-Folding	31R-15	MFWD 225	155,000	150	8	0.052	1.16	1.03	3.04	0.35	5.60	5.83	2.25	13.68
Plant & Pre-Folding	32R-15	MFWD 225	173,000	150	8	0.050	1.12	0.99	3.29	0.34	5.76	6.30	2.17	14.24
Plant & Pre-Rigid	4R-30	2WD 130	25,800	150	8	0.203	4.50	2.31	1.96	1.12	9.90	3.75	6.75	20.42
Plant & Pre-Rigid	4R-38	2WD 130	28,200	150	8	0.159	3.54	1.81	1.69	0.88	7.94	3.23	5.32	16.50
Plant & Pre-Rigid	6R-30	MFWD 150	36,000	150	8	0.135	3.00	1.77	1.82	0.60	7.21	3.49	3.64	14.35
Plant & Pre-Rigid	6R-38	MFWD 150	31,900	150	8	0.106	2.37	1.40	1.27	0.47	5.53	2.44	2.87	10.85
Plant & Pre-Rigid	8R-30	MFWD 170	41,000	150	8	0.101	2.25	1.51	1.56	0.53	5.86	2.98	3.39	12.24
Plant & Pre-Rigid	8R-38	MFWD 170	38,200	150	8	0.080	1.78	1.19	1.14	0.42	4.55	2.19	2.68	9.43
Plant & Pre-Rigid	10R-30	MFWD 190	41,500	150	8	0.081	1.80	1.35	1.26	0.47	4.89	2.41	2.97	10.28
Plant & Pre-Rigid	11R-15	MFWD 170	48,800	150	8	0.148	3.29	2.20	2.71	0.78	8.99	5.18	4.95	19.14
Plant & Pre-Rigid	11R-20	MFWD 170	44,300	150	8	0.110	2.46	1.65	1.84	0.58	6.54	3.52	3.71	13.78
Plant & Pre-Rigid	12R-20	MFWD 190	50,100	150	8	0.101	2.25	1.68	1.90	0.59	6.44	3.64	3.71	13.80
Plant & Pre-Rigid	12R-30	MFWD 190	65,000	150	8	0.067	1.50	1.12	1.64	0.39	4.67	3.15	2.47	10.30
Plant & Pre-Rigid	13R-18/20	MFWD 225	54,500	150	8	0.093	2.07	1.84	1.91	0.63	6.46	3.65	4.01	14.14
Plant & Pre-Rigid	15R-15	MFWD 190	62,200	150	8	0.108	2.41	1.80	2.53	0.63	7.38	4.84	3.97	16.20
Plant & Pre-TwinRow	12R-30/40	MFWD 225	145,000	150	8	0.053	1.18	1.05	2.90	0.36	5.50	5.55	2.29	13.35
Plant & Pre-TwinRow	8R-30/40	MFWD 225	119,000	150	8	0.080	1.78	1.58	3.58	0.54	7.49	6.85	3.44	17.78
Plant - Folding	8R-38	MFWD 170	43,300	150	8	0.074	1.65	1.10	1.21	0.39	4.36	2.31	2.49	9.17
Plant - Folding	8R-38 2x1	MFWD 170	72,000	150	8	0.049	1.10	0.73	1.33	0.26	3.44	2.56	1.65	7.66
Plant - Folding	12R-20	MFWD 190	59,100	150	8	0.094	2.09	1.56	2.08	0.54	6.29	3.99	3.45	13.74
Plant - Folding	12R-30	MFWD 190	63,300	150	8	0.062	1.39	1.04	1.49	0.36	4.29	2.85	2.30	9.45
Plant - Folding	12R-38	MFWD 190	72,000	150	8	0.049	1.10	0.82	1.33	0.28	3.55	2.56	1.81	7.93
Plant - Folding	16R-30	MFWD 190	91,800	150	8	0.047	1.04	0.78	1.62	0.27	3.72	3.10	1.72	8.55
Plant - Folding	23R-15	MFWD 190	119,000	150	8	0.065	1.45	1.08	2.92	0.38	5.84	5.58	2.39	13.83
Plant - Folding	24R-15	MFWD 225	126,000	150	8	0.062	1.39	1.23	2.97	0.42	6.03	5.68	2.69	14.40
Plant - Folding	24R-20	MFWD 190	142,000	150	8	0.047	1.04	0.78	2.51	0.27	4.61	4.80	1.72	11.14
Plant - Folding	24R-30	MFWD 190	166,000	150	8	0.031	0.69	0.52	1.95	0.18	3.35	3.74	1.15	8.25

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (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/acre	-----\$/acre-----							
Plant - Folding	31R-15	MFWD 225	136,000	150	8	0.048	1.08	0.95	2.48	0.33	4.85	4.75	2.09	11.70
Plant - Folding	32R-15	MFWD 225	155,000	150	8	0.047	1.04	0.92	2.74	0.32	5.03	5.24	2.02	12.29
Plant - Rigid	4R-30	2WD 130	20,400	150	8	0.188	4.18	2.14	1.44	1.04	8.81	2.75	6.27	17.85
Plant - Rigid	4R-38	2WD 130	22,700	150	8	0.148	3.29	1.68	1.26	0.82	7.07	2.41	4.94	14.43
Plant - Rigid	6R-30	MFWD 150	30,600	150	8	0.125	2.79	1.65	1.44	0.56	6.44	2.75	3.38	12.58
Plant - Rigid	6R-38	MFWD 150	26,400	150	8	0.099	2.20	1.30	0.98	0.44	4.93	1.87	2.66	9.48
Plant - Rigid	8R-30	MFWD 170	35,500	150	8	0.094	2.09	1.40	1.25	0.50	5.25	2.40	3.15	10.80
Plant - Rigid	8R-38	MFWD 170	32,800	150	8	0.074	1.65	1.10	0.91	0.39	4.07	1.75	2.49	8.32
Plant - Rigid	10R-30	MFWD 190	36,100	150	8	0.075	1.67	1.25	1.02	0.43	4.38	1.95	2.76	9.10
Plant - Rigid	11R-15	MFWD 170	43,400	150	8	0.137	3.05	2.04	2.24	0.73	8.07	4.28	4.60	16.96
Plant - Rigid	11R-20	MFWD 170	38,900	150	8	0.103	2.28	1.53	1.50	0.54	5.87	2.87	3.44	12.19
Plant - Rigid	12R-20	MFWD 190	44,600	150	8	0.094	2.09	1.56	1.57	0.54	5.78	3.01	3.45	12.25
Plant - Rigid	12R-30	MFWD 190	57,200	150	8	0.062	1.39	1.04	1.34	0.36	4.15	2.57	2.30	9.03
Plant - Rigid	13R-18/20	MFWD 225	49,000	150	8	0.086	1.92	1.71	1.59	0.59	5.82	3.05	3.72	12.61
Plant - Rigid	15R-15	2WD 150	54,400	150	8	0.094	2.09	1.23	1.92	0.31	5.57	3.67	1.91	11.16
Plant - TwinRow	12R-30/40	MFWD 225	126,000	150	8	0.049	1.10	0.97	2.34	0.33	4.76	4.48	2.12	11.37
Plant - TwinRow	8R-30/40	MFWD 225	114,000	150	8	0.074	1.65	1.46	3.18	0.50	6.81	6.09	3.19	16.10
Roller/Cultipacker	12'	2WD 130	6,520	300	12	0.124	1.63	1.41	0.19	0.68	3.93	0.26	4.14	8.33
Roller/Cultipacker	20'	MFWD 150	17,000	300	12	0.074	0.98	0.97	0.29	0.33	2.59	0.41	2.00	5.01
Roller/Cultipacker	30'	MFWD 170	18,700	300	12	0.049	0.65	0.74	0.21	0.26	1.87	0.30	1.66	3.84
Roller/Cultipacker	38'	MFWD 225	20,600	300	12	0.039	0.51	0.77	0.19	0.26	1.74	0.26	1.68	3.69
Roller/Stubble	20'	2WD 50	13,500	300	12	0.074	0.98	0.32	0.23	0.04	1.59	0.32	0.29	2.21
Roller/Stubble	32'	MFWD 225	22,800	300	12	0.046	0.61	0.91	0.25	0.31	2.10	0.34	2.00	4.44
Rotary Cutter	7'	MFWD 130	4,690	185	10	0.168	2.21	1.91	0.64	0.64	5.41	0.45	3.89	9.76
Rotary Cutter	12'	2WD 150	16,000	185	10	0.098	1.29	1.28	1.27	0.33	4.18	0.89	1.99	7.07
Rotary Cutter-Flex	15'	MFWD 150	19,400	185	10	0.078	1.03	1.03	1.23	0.35	3.65	0.87	2.11	6.63
Rotary Cutter-Flex	20'	MFWD 150	28,100	185	10	0.058	0.77	0.77	1.34	0.26	3.15	0.94	1.58	5.68
Row Cond & Inc-Fold.	26'	MFWD 190	24,700	100	10	0.063	1.12	1.05	0.39	0.36	2.93	1.65	2.32	6.91
Row Cond & Inc-Fold.	38'	MFWD 225	32,400	100	10	0.043	0.76	0.85	0.35	0.29	2.26	1.48	1.86	5.61
Row Cond & Inc-Rigid	13'	2WD 130	13,300	100	10	0.126	2.24	1.44	0.42	0.70	4.81	1.78	4.22	10.81
Row Cond & Inc-Rigid	21'	2WD 170	16,700	100	10	0.078	1.38	1.16	0.32	0.29	3.17	1.38	1.83	6.40
Row Cond & Inc-Rigid	26'	MFWD 190	19,600	100	10	0.026	0.47	0.44	0.13	0.15	1.19	0.55	0.97	2.72
Row Cond Folding	26'	MFWD 225	19,300	100	10	0.059	0.78	1.17	0.28	0.40	2.65	1.21	2.56	6.43
Row Cond Folding	38'	MFWD 225	24,600	100	10	0.040	0.53	0.80	0.25	0.27	1.87	1.06	1.75	4.68
Row Cond Rigid	13'	2WD 130	7,840	100	10	0.119	1.56	1.35	0.23	0.66	3.82	0.98	3.97	8.78
Row Cond Rigid	21'	2WD 170	11,200	100	10	0.073	0.97	1.10	0.20	0.27	2.55	0.87	1.73	5.16
Row Cond Rigid	26'	MFWD 190	14,200	100	10	0.059	0.78	0.99	0.21	0.34	2.33	0.89	2.18	5.41
Row Cond./Roll-Fold.	26'	MFWD 190	22,200	160	10	0.072	0.94	1.19	0.40	0.41	2.96	1.05	2.63	6.66
Row Cond./Roll-Fold.	30'	MFWD 190	35,600	160	10	0.062	0.82	1.03	0.55	0.36	2.77	1.46	2.28	6.53
Row Cond./Roll-Fold.	40'	MFWD 225	34,300	160	10	0.046	0.61	0.92	0.40	0.31	2.26	1.06	2.01	5.33
Row Cond./Roll-Rigid	21'	MFWD 190	23,000	160	10	0.089	1.17	1.48	0.51	0.51	3.69	1.35	3.26	8.31
Row Cond./Roll-Rigid	26'	MFWD 190	25,800	160	10	0.072	0.94	1.19	0.46	0.41	3.03	1.22	2.63	6.89
Spin Spreader	5 ton	MFWD 190	11,800	100	8	0.042	0.93	0.69	0.27	0.24	2.15	0.56	1.54	4.25
Spray (ATV Ropewick)	75"	800 CC	660	200	8	0.260	4.60	0.34	0.08	0.39	5.42	0.09	1.55	7.07
Spray (ATV)	12'/17'	800 CC	2,280	200	8	0.112	1.99	0.15	0.12	0.17	2.43	0.14	0.67	3.25
Spray (ATV)	20'	800 CC	1,950	200	8	0.084	1.49	0.11	0.07	0.12	1.81	0.09	0.50	2.41
Spray (Band)	27' Fold	MFWD 170	5,440	200	8	0.062	1.10	0.93	0.15	0.33	2.53	0.19	2.09	4.82
Spray (Band)	40' Fold	MFWD 170	7,810	200	8	0.042	0.74	0.62	0.15	0.22	1.75	0.18	1.41	3.35
Spray (Band)	50' Fold	MFWD 170	6,940	200	8	0.033	0.59	0.50	0.11	0.17	1.39	0.13	1.13	2.65
Spray (Band)	53' Fold	MFWD 170	9,620	200	8	0.031	0.56	0.47	0.14	0.16	1.35	0.17	1.06	2.59
Spray (Band)	60' Fold	MFWD 170	18,600	200	8	0.028	0.49	0.41	0.24	0.14	1.31	0.29	0.94	2.55
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,480	200	8	0.130	2.30	1.70	0.33	0.58	4.92	0.40	3.50	8.82
Spray (Bcast/HB)	20' Rigid	MFWD 150	6,450	200	8	0.084	1.49	1.11	0.25	0.37	3.23	0.30	2.27	5.82
Spray (Bcast/HB)	27' Fold	MFWD 170	10,700	200	8	0.062	1.10	0.93	0.31	0.33	2.68	0.37	2.09	5.16
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,830	200	8	0.062	1.10	0.93	0.23	0.33	2.60	0.27	2.09	4.97
Spray (Bcast/HB)	30' Fold	MFWD 170	16,500	200	8	0.056	0.99	0.83	0.43	0.29	2.57	0.52	1.88	4.98
Spray (Bcast/HB)	40' Fold	MFWD 170	16,100	200	8	0.042	0.74	0.62	0.31	0.22	1.92	0.38	1.41	3.72
Spray (Broadcast)	27'	MFWD 170	5,440	200	8	0.062	1.10	0.93	0.15	0.33	2.53	0.19	2.09	4.82
Spray (Broadcast)	40'	MFWD 170	7,810	200	8	0.042	0.74	0.62	0.15	0.22	1.75	0.18	1.41	3.35
Spray (Broadcast)	50'	MFWD 170	6,940	200	8	0.033	0.59	0.50	0.11	0.17	1.39	0.13	1.13	2.65
Spray (Broadcast)	53'	MFWD 170	9,620	200	8	0.031	0.56	0.47	0.14	0.16	1.35	0.17	1.06	2.59
Spray (Broadcast)	60'	MFWD 170	18,600	200	8	0.028	0.49	0.41	0.24	0.14	1.31	0.29	0.94	2.55
Spray (Direct/Hood)	8R-30	MFWD 170	15,600	200	8	0.084	1.49	1.25	0.61	0.44	3.82	0.74	2.83	7.39
Spray (Direct/Hood)	8R-38	MFWD 170	16,600	200	8	0.066	1.18	0.99	0.52	0.35	3.05	0.62	2.23	5.91
Spray (Direct/Hood)	12R-30	MFWD 170	22,200	200	8	0.056	0.99	0.83	0.58	0.29	2.72	0.70	1.88	5.31
Spray (Direct/Hood)	12R-38	MFWD 170	22,500	200	8	0.044	0.78	0.66	0.46	0.23	2.15	0.56	1.48	4.21
Spray (Direct/Layby)	8R-30	MFWD 170	12,700	200	8	0.084	1.49	1.25	0.50	0.44	3.70	0.60	2.83	7.14
Spray (Direct/Layby)	8R-38	MFWD 170	12,700	200	8	0.066	1.18	0.99	0.39	0.35	2.93	0.47	2.23	5.64
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	17,300	200	8	0.044	0.78	0.66	0.36	0.23	2.04	0.43	1.48	3.97
Spray (Direct/Layby)	12R-30	MFWD 170	17,400	200	8	0.056	0.99	0.83	0.46	0.29	2.59	0.55	1.88	5.03
Spray (Direct/Layby)	12R-38	MFWD 170	17,300	200	8	0.044	0.78	0.66	0.36	0.23	2.04	0.43	1.48	3.97
Spray (Direct/Layby)	16R-20	2WD 50	10,000	200	8	0.062	1.10	0.27	0.29	0.04	1.71	0.35	0.24	2.31
Spray (Levee Leaper)	50'	MFWD 225	12,900	200	8	0.033	0.59	0.66	0.20	0.23	1.69	0.24	1.45	3.39
Spray (Pull Type)	60'	MFWD 225	36,400	200	8	0.028	0.49	0.55	0.48	0.19	1.72	0.57	1.21	3.51
Spray (Pull Type)	80'	MFWD 225	50,300	200	8	0.021	0.37	0.41	0.49	0.14	1.43	0.60	0.90	2.94
Spray (Pull Type)	90'	2WD 50	51,000	200	8	0.018	0.33	0.08	0.44	0.01	0.87	0.54	0.07	1.49
Spray (Pull Type)	120'	MFWD 225	76,600	200	8	0.014	0.24	0.27	0.50	0.09	1.12	0.60	0.60	2.34
Spray (Ropewick)	20'	MFWD 190	3,440	200	8	0.084	1.49	1.40	0.13	0.49	3.53	0.16	3.09	6.79
Spray (Spot)	27'	MFWD 170	5,440	200	8	0.062	1.10	0.93	0.15	0.33	2.53	0.19	2.09	4.82

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (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-----							
Spray (Spot)	40'	MFWD 170	7,810	200	8	0.042	0.74	0.62	0.15	0.22	1.75	0.18	1.41	3.35
Spray (Spot)	50'	MFWD 170	6,940	200	8	0.033	0.59	0.50	0.11	0.17	1.39	0.13	1.13	2.65
Spray (Spot)	53'	MFWD 170	9,620	200	8	0.031	0.56	0.47	0.14	0.16	1.35	0.17	1.06	2.59
Spray (Spot)	60'	MFWD 225	18,600	200	8	0.028	0.49	0.55	0.24	0.19	1.49	0.29	1.21	2.99
Stalk Shredder	14'	MFWD 150	12,800	200	10	0.117	1.54	1.54	1.32	0.52	4.94	0.79	3.16	8.90
Stalk Shredder Flex	20'	MFWD 150	29,800	200	10	0.082	1.08	1.08	2.15	0.36	4.68	1.29	2.21	8.20
Stalk Shredder-Flail	12'	MFWD 150	15,500	200	10	0.137	1.80	1.80	1.86	0.61	6.09	1.12	3.69	10.91
Stalk Shredder-Flail	15'	MFWD 150	19,800	200	10	0.110	1.44	1.44	1.90	0.49	5.28	1.15	2.95	9.39
Stalk Shredder-Flail	18'	MFWD 150	26,900	200	10	0.091	1.20	1.20	2.15	0.40	4.97	1.30	2.46	8.74
Stalk Shredder-Flail	20'	MFWD 150	27,000	200	10	0.082	1.08	1.08	1.94	0.36	4.48	1.17	2.21	7.87
Stalk Shredder-Flail	25'	MFWD 150	39,600	200	10	0.066	0.86	0.86	2.28	0.29	4.31	1.38	1.77	7.47
Strip Till	8R-38	MFWD 225	38,100	150	10	0.061	0.80	1.21	1.01	0.41	3.46	1.65	2.64	7.75
Strip Till	12R-30	MFWD 225	61,100	150	10	0.061	0.80	1.21	1.63	0.41	4.07	2.65	2.64	9.36
Strip Till	12R-40	MFWD 225	58,500	150	10	0.046	0.60	0.90	1.17	0.31	3.00	1.90	1.98	6.89
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.68	3.39	0.24	1.18	7.51	0.59	7.47	15.58
Subsoiler	4 shank	MFWD 225	9,340	100	15	0.153	2.01	3.02	0.47	1.04	6.56	1.18	6.59	14.34
Subsoiler	5 shank	MFWD 225	10,800	100	15	0.122	1.60	2.40	0.44	0.83	5.29	1.08	5.24	11.62
Subsoiler low-till	4 shank	MFWD 225	10,800	100	15	0.153	2.01	3.02	0.55	1.04	6.64	1.36	6.59	14.60
Subsoiler low-till	6 shank	MFWD 225	16,600	100	15	0.102	1.34	2.01	0.56	0.69	4.61	1.39	4.38	10.39
Subsoiler low-till	8 shank	MFWD 225	20,600	100	15	0.076	1.00	1.50	0.52	0.52	3.55	1.29	3.28	8.14

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, 2017

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Apron Maxx RTA	oz	0.93
Activator 90	pt	3.75	Apron Maxx RTA+Moly	pt	17.16
Agri-Dex	pt	2.25	Apron XL LS	oz	5.27
Crop Oil Conc. (Pet.)	pt	2.47	Artisan	oz	1.13
Crop Oil Conc. (Veg.)	pt	3.75	Bravo Ultrex	lb	9.00
Dyne-A-Pak	pt	4.63	Bravo Weather Stick	pt	6.62
Herbimax	pt	1.88	Captan 50 WP	lb	5.41
Induce	pt	3.63	Cotton Seed Trt.	acre	20.00
MSO	pt	3.75	CruiserMaxx	oz	4.60
Penetrator Plus	pt	3.50	Dithane F-45	qt	9.08
Prime Oil	pt	2.25	Dithane Rainshield	pt	4.15
SuperMax AMS	pt	2.67	Enable 2F	oz	2.17
Surfactant	pt	3.69	Headline EC	oz	2.86
CLEANING			Headline SC	oz	3.76
Cleaning Peanuts	ton	18.00	Manzate 75 DF	lb	5.54
CROP CONSULTANT			Moncut 70 DF	lb	38.35
Corn Consultant	acre	6.00	Propimax EC	pt	13.03
Cotton Consultant	acre	8.00	Prosaro	oz	2.70
Peanut Consultant	acre	9.25	Provost	oz	2.73
Rice Consultant	acre	8.00	Quadris	oz	2.08
Sorghum Consultant	acre	6.00	Quadris Top	oz	2.51
Soybeans Consultant	acre	6.50	Quilt	pt	18.82
Wheat Consultant	acre	5.50	Quilt XCEL	pt	23.07
CUSTOM FERTILIZE			Ridomil Gold	oz	7.23
App Fert by Air	cwt	7.00	Ridomil Gold PC GR	lb	5.96
App Fert by Air (Mi)	appl	7.00	Rovral 4F	pt	16.97
Custom Apply Fert	acre	7.00	Stratego	pt	22.58
CUSTOM LIME			Stratego YLD	oz	3.20
Lime (Spread)	ton	46.00	Tilt 3.6 EC	oz	0.85
CUSTOM PLANT			Tilt/ Bravo SE	oz	0.45
Custom Plant	acre	13.00	Uniform	oz	5.21
Custom Plant Air	cwt	7.00	GINNING		
CUSTOM SPRAY			Gin & Haul	lb	0.11
App by Air (3 gal)	appl	5.00	GROWTH REGULATORS		
App by Air (5 gal)	appl	6.50	Mepex	oz	0.13
App by Air (10 gal)	appl	8.50	Mepex Gin Out	oz	0.19
Custom Spray Ground	acre	7.50	Mepichlor 4.2%	oz	0.13
Custom Spray Self Pr	acre	6.25	Mepiquat	oz	0.13
Custom Spray Tractor	acre	7.75	Mepiquat Extra	oz	0.60
DRYING			Pentia	pt	7.21
Dry Corn	bu	0.19	Pix Plus	oz	0.40
Dry Grain Sorghum	cwt	0.25	Stance	oz	1.38
Dry Peanuts	ton	24.00	HARVEST AIDS		
Dry Rice	bu	0.40	Adios	oz	1.50
ERADICATION FEE			Aim 2EC	oz	5.60
Eradication	acre	1.00	CottonQuik	pt	6.06
FERTILIZERS			Def 6	pt	6.88
Agrotain Plus	lb	4.56	Def/Folex	pt	8.10
Agrotain Ultra	pt	10.23	Defol 5	gal	5.50
Amm Sulfate (21% N)	cwt	17.23	Ethephon 6E	pt	3.38
Boron Plus	pt	4.24	Finish 6	pt	10.25
DAP	cwt	24.82	First Pick	pt	3.72
Fert 10-34-0	cwt	28.58	Folex 6EC	pt	9.32
Fert 10-34-0	gal	3.33	Freefall SC	oz	1.69
Fert 11-37-0	cwt	32.70	Ginstar EC	pt	30.23
Fert 33-0-0-12S	cwt	17.50	Gramoxone SL	oz	0.27
Fert 41-0-0-4	cwt	16.85	Sharpen	oz	6.25
Lime	ton	36.00	Sodium Chlorate 5L	gal	5.50
NBPT	pt	10.23	SuperBoll	oz	0.25
Phosphorus (46% P2O5)	cwt	21.88	TDZ SC	oz	1.19
Potash (60% K2O)	cwt	16.97	Thidiazuron 4lb	oz	1.44
Sulfur Plus	pt	2.62	Tribufos 6lb	pt	9.32
UAN (32% N)	cwt	14.31	HAULING		
UAN (32%)	gal	1.58	Haul Corn	bu	0.23
UAN + Sulfur (28%)	cwt	14.48	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	gal	1.61	Haul Rice	bu	0.35
Urea, Solid (46% N)	cwt	16.78	Haul Sorghum	bu	0.25
Zinc Plus	pt	2.99	Haul Soybeans	bu	0.27
FUNGICIDES			Haul Wheat	bu	0.26
Aframe	oz	1.13	HERBICIDES		
Alfa Guard	lb	1.56	2,4-D Amine 4	pt	2.79
Allegiance Flowable	pt	51.61	AAtrex 4L	pt	2.58

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2017(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
AAtrex NINE-0	lb	4.52	Newpath 2SL	oz	3.63
Accent Q	oz	24.75	Osprey	oz	3.74
Aim 2EC	oz	5.60	Outlook	pt	19.31
Assure II	oz	0.84	Paraquat	oz	0.32
Atrazine 4L	pt	1.95	Parazone 3SL	oz	0.32
Axial XL	oz	1.16	Peak Accu Pak	oz	18.18
Axiom 68DF	oz	2.13	Permit 75 DF	oz	20.59
Banvel	pt	15.02	Poast 1.53	pt	13.41
Basagran	pt	15.81	Poast Plus	pt	9.69
Beyond	oz	4.97	PowerFlex HL	lb	122.38
Bicep II Magnum	qt	11.69	Prefix	pt	6.34
Bicep Lite Magnum	pt	8.13	Prowl 3.3 EC	pt	6.86
Bolero 8EC	pt	7.65	Pursuit 2S	oz	3.97
Boundary 6.5 EC	pt	10.18	Python WDG	oz	15.58
Butyrac 175 (2,4-D)	pt	3.55	Quinstar	lb	56.17
Butyrac 200 (2,4-DB)	pt	4.77	Raptor	oz	4.96
Cadre	oz	4.21	RealmQ	oz	5.21
Callisto 4SC	oz	6.84	RebelEx	oz	2.36
Canopy 75%	oz	3.08	Reflex 2LC	pt	6.56
Canopy EX	oz	9.05	Regiment 80WP	oz	44.39
Caparol 4L	pt	4.44	Remedy Ultra	pt	10.76
Capreno	oz	6.97	Resolve SG	oz	8.26
Clarity	pt	11.18	Ricebeaux	pt	4.48
Classic	oz	16.95	Riceshot	pt	4.78
Clearpath	lb	59.53	Ricestar HT	pt	24.54
Clincher SF	oz	2.38	Roundup Power Max	oz	0.21
Cobra 2EC	oz	1.95	Roundup PowerMax	pt	3.28
Command 3ME	pt	19.34	Roundup WeatherMax	oz	0.27
Corvus	oz	6.72	Roundup WeatherMax	pt	4.29
Cotoran 4L	pt	6.31	Scepter 70 DG	oz	5.06
Cotton Pro	pt	3.98	Select Max	pt	14.99
Credit Extra	pt	2.50	Sequence	pt	5.42
Direx 4L	pt	3.29	Sharpen	oz	5.35
Diuron 4L	pt	3.36	Simazine 4L	pt	2.89
Diuron 80 DF	lb	5.81	Stalwart	pt	5.11
Diuron 80%	lb	6.20	Stam 80 EDF	lb	10.85
Dual II Magnum	pt	15.51	Stam M4	qt	8.10
Dual Magnum	pt	14.97	Staple LX	oz	8.46
Duet	pt	4.75	Steadfast	oz	12.40
Envoke	oz	103.36	Storm	pt	12.75
Expert	pt	4.95	Strada WG	oz	7.33
Facet L	pt	14.84	Strongarm	oz	62.62
Fierce	oz	6.98	Superwham	qt	9.78
Finesse	oz	15.88	Surpass EC	qt	29.04
First Rate	oz	41.21	Synchrony XP	oz	14.31
Flexstar	pt	8.81	Touchdown Total	qt	8.38
Fultime	pt	6.29	Treflan 4EC	pt	4.01
Fusilade DX	oz	1.13	Tricor DF	lb	17.81
Fusion	pt	29.86	Trifluralin 4EC	pt	4.01
Glyphosate 3lbs a.e	pt	2.29	Ultra Blazer	pt	11.65
Glyphosate 3lbs a.e	oz	0.14	Valor SX	oz	6.60
Glystar Plus	pt	2.64	Valor XLT	oz	5.77
Goal 2XL	pt	10.80	Verdict	oz	1.77
Gramoxone SL 2.0	oz	0.27	INOCULANT		
Grandstand R	qt	17.15	Optimize	oz	2.14
Grasp Xtra			Optimize LIFT	oz	0.59
Halex GT	pt	7.60	Vault	oz	1.73
Halomax	oz	21.07	INSECTICIDES		
Harmony Extra SG TS	oz	14.02	Abamectin .15EC	oz	1.08
Harness XTRA	pt	9.45	Acephate 90%	lb	9.80
Impact	oz	23.68	Acephate 90SP	lb	8.69
Layby Pro	qt	14.04	Acramite-4SC	oz	1.99
Leadoff	oz	6.04	Admire Pro	oz	1.72
Lexar	pt	7.90	Asana .66 XL	oz	0.67
Liberty 280	oz	0.57	Aztec 2.1% G	lb	3.88
Linex 4L	pt	11.23	Baythroid XL	oz	2.48
Londax 60DF	oz	20.27	Belt	oz	8.77
Lorox 50DF	lb	26.36	Bidrin 8WM	oz	1.12
Metribuzin 75	lb	14.41	Bifenthrin	oz	1.03
MSMA 6.6	pt	3.66	Bifenture 2EC	pt	20.48
MSMA6 Plus	pt	3.63			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2017 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Brigade EC	pt	19.36	Steward	pt	39.51
Brigade WSB	lb	26.04	Transform WG	oz	7.90
Capture LFR	oz	2.97	Zeal Miticid I	oz	21.74
Carbaryl 4L	pt	6.32	IRRIGATION SUPPLIES		
Carbine 50WG	oz	6.66	Roll-Out Pipe	ft	0.25
Centric 40WG	oz	5.21	SEED/PLANTS		
Comite 1l	pt	9.46	Corn Seed BtRR	thous	3.89
Confirm 2F	oz	2.27	Corn Seed RR2	thous	3.17
Diamond .83EC	pt	21.84	Cotton Seed B2XF	thous	0.89
Diamond .83EC	oz	1.37	Cotton Seed GLB2	thous	2.81
Dimethoate 4E	pt	5.88	Cotton Seed LLB2	thous	1.43
Dimilin 2L	oz	2.12	Cotton Seed W3RF	thous	1.05
Dipel DF	lb	14.47	Cotton Seed WRF	thous	0.79
Dipel ES	pt	5.50	Cruiser Maxx Rice	lbseed	0.23
Endigo ZC	pt	31.11	Peanut Seed	lb	0.78
Force 3G	lb	7.41	Rice Clearfield	lb	1.05
Gaucho 600	oz	2.48	Rice Clrflld Hyb Trt	lb	5.30
Hero	pt	29.57	Rice Conv Hyb Trt	lb	5.57
Imidan 70 WSB	oz	0.70	Rice Seed CF(Levees)	lb	1.05
Incidental Pest Trt	acre	12.00	Rice Seed CFH(Levee)	lb	1.77
Incidental Pest Trt	acre	8.00	Rice Seed Conv.	lb	0.38
Intrepid 2F	oz	2.05	Rice Seed Cv(Levees)	lb	0.38
Intruder 70WSP	oz	10.99	Rice Seed CvH(Levee)	lb	1.65
Karate Z	oz	2.58	Sorghum Concept	lb	2.55
Lambda	oz	101.00	Sorghum Concept+ Po	lb	3.39
Lannate LV	pt	12.23	Soybean Seed LL	lb	1.16
Lannate SP	oz	2.42	Soybean Seed RR2	lb	1.26
Leverage 2.7	oz	1.95	Wheat Seed Private	lb	0.25
Lorsban 15G	lb	2.40	SOIL TEST		
Lorsban 4E	pt	6.66	Soil Test	acre	10.00
Macho	oz	0.71	SURVEY & MARK LEVEES		
Malathion 5E	pt	4.40	Survey & Mark Levees	acre	4.50
Malathion 8E	pt	9.30	TECHNOLOGY FEE		
Mustang Max	oz	1.44	B2 Cot Tech Fee	thous	0.76
Nuprid 4F	oz	1.20	B2 Cot Tech Fee	cap/ac	31.91
Oberon 4 SC	pt	59.84	B2XF Cot Tech Fee	thous	1.49
Orthene 97S	lb	10.90	B2XF Cot Tech Fee	cap/ac	62.69
Pounce 25WP	lb	16.80	LLB2 Cot Tech Fee	thous	0.76
Prevathon	oz	1.31	RF Cot Tech Fee	thous	1.04
Radiant	oz	6.61	RF Cot Tech Fee	cap/ac	43.66
Sevin 4F	pt	7.02	WRF Cot Tech Fee	thous	1.45
Sevin XLR Plus	qt	15.07	W3RF Cot Tech Fee	thous	1.45
Sivanto	oz	2.53			

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2017

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	1.70
Gasoline	gal	1.90
LP Gas	gal	1.50
INTEREST RATES		
Short-term	%	4.75
Intermediate-term	%	5.00

Appendix Table 6. Labor types, wage rates and unallocated labor
multipliers for crop enterprises, Mississippi, 2017

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	13.14
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, 2017

Crop	unit	Futures Contract Month	Futures Contract Price ^a	Basis	Forward Contract Price ^c	Loan	Budget Price ^e
Corn	bu	Dec '17	3.83	-0.21	3.62	2.10	3.62
Cotton Lint	lb	Dec '17	0.6899	-	0.6695	0.4946	0.67
Cottonseed	lb						0.099 ^f
Grain	bu				3.44	2.02	3.44
Peanuts	ton				400.00	355.00	400.00
Soybeans	bu	Nov '17	9.65	+0.09	9.74	5.19	9.74
Rice	bu	Nov '17	4.95	-0.58	4.37	2.97	4.37
Wheat	bu	Jul '17	4.43	-0.19	4.24	2.58	4.24

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2016 for the stated contract months.

^b Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 2016 for corn, soybeans and wheat at Greenville, MS. Rice basis is a weekly average price for river point delivery. June harvest delivery for wheat. September harvest delivery for corn, rice and soybeans. October harvest delivery for cotton.

^c The forward contract price for corn, cotton, rice, soybeans and wheat 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 an estimate from a poll of Extension Peanut Marketing Specialists.

^d Average Mississippi County CCC Loan Rate for 2016 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2016 Farm-stored Loan Rate for long grain rough rice. National 2017 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.

^e Price used in MSU Extension Service Planning Budgets.

^f Cottonseed price is the average marketing year price over the years 2006-2015.

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, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Land Plane	50'x16'		0.63	0.33	0.50			0.07	1.53	1.68	3.21
Set Up Engine											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Ditcher (1m/160a)			0.14	0.07	0.12			0.01	0.34	0.34	0.68
Roll-Out Pipe	ft	8.25						0.13	8.38		8.38
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.19	0.10	0.39			0.01	0.69	0.70	1.39
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		0.28	0.14	0.59				1.01	1.05	2.06
Land Forming (\$450)	each									31.93	31.93
Well & Pump, Furrow	each			2.44				0.04	2.48	7.21	9.69
Main Line Pipe	each									4.01	4.01
Engine, RPF, ESB	each									8.38	8.38
1st June Irrigation	ac-in		4.15	1.30				0.09	5.54		5.54
2nd June Irrigation	ac-in		4.15	1.30				0.09	5.54		5.54
July Irrigation	ac-in		4.15	1.30				0.06	5.51		5.51
TOTALS		8.25	13.69	6.98	4.33	0.00	0.53		33.78	55.30	89.08

Note: Cost of production estimates are based on 2016 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, 2017

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		0.24	0.11	0.21			0.01	0.57	1.23
Survey & Mark Levees	acre	2.25						0.04	2.29	2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.32	0.14	0.28			0.01	0.75	1.63
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.01	0.69	1.37
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"		0.25	0.11	0.22			0.01	0.59	1.28
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.32	0.14	0.28			0.01	0.75	1.63
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.01	0.69	1.37
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"		0.25	0.11	0.22			0.01	0.59	1.28
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.32	0.14	0.28			0.01	0.75	1.63
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.01	0.69	1.37
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"		0.25	0.11	0.22			0.01	0.59	1.28
Tear Down Levees										
Levee Splitter (1/80)	32"		0.19	0.09	0.16				0.44	0.95
Land Forming (\$113)	each								8.02	8.02
Well & Pump, Flood	each			4.88				0.10	4.98	19.39
Engine, CF, 75	each								16.75	16.75
June Irrigation	ac-in		6.23	2.61				0.17	9.01	9.01
July Irrigation	ac-in		6.23	2.61				0.14	8.98	8.98
August Irrigation	ac-in		6.23	2.61				0.10	8.94	8.94
TOTALS		2.25	21.73	14.02	5.47	0.00	0.69	44.16	47.10	91.26

Note: Cost of production estimates are based on 2016 input prices.

Appendix Table 10. Estimated costs for field operations, per acre
 Late soybeans irrigated with roll-out pipe
 160-acre system, 12 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Land Plane	50'x16'		0.63	0.33	0.50			0.07	1.53	1.68	3.21
Set Up Engine											
IRRIGATE LABOR	hour				0.23			0.01	0.24		0.24
Ditcher (1m/160a)			0.14	0.07	0.12			0.01	0.34	0.34	0.68
Roll-Out Pipe	ft	8.25						0.16	8.41		8.41
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.19	0.10	0.39			0.01	0.69	0.70	1.39
IRRIGATE LABOR	hour				1.81			0.04	1.85		1.85
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
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Pick Up Pipe											
Pipe Spool 160ac	1/4m roll		0.28	0.14	0.59			0.01	1.02	1.05	2.07
Land Forming (\$450)	each									31.93	31.93
Well & Pump, Furrow	each			2.44				0.05	2.49	7.21	9.70
Main Line Pipe	each									4.01	4.01
Engine, RPF, LSB	each									8.38	8.38
1st July Irrigation	ac-in		4.15	0.98				0.08	5.21		5.21
2nd July Irrigation	ac-in		4.15	0.98				0.08	5.21		5.21
1st Aug Irrigation	ac-in		4.15	0.98				0.06	5.19		5.19
2nd Aug Irrigation	ac-in		4.15	0.98				0.06	5.19		5.19
TOTALS		8.25	17.84	7.00	4.56	0.00		0.64	38.29	55.30	93.59

Note: Cost of production estimates are based on 2016 input prices

Appendix Table 11. 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, 2017

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			6.87			0.14	7.01	27.56	34.57
Well & Pump, 1/2 CP	each			0.95			0.02	0.97	2.81	3.78
Engine, 1/2 CP, 164	each								3.85	3.85
June Irr. 3app@.75"	ac-in		8.37	0.54			0.18	9.09		9.09
July Irr. 4app@.75"	ac-in		11.16	0.72			0.19	12.07		12.07
Aug Irr. 3app@.75"	ac-in		8.37	0.54			0.11	9.02		9.02
TOTALS		0.00	27.90	9.62	0.47	0.00	0.65	38.64	34.22	72.86

Note: Cost of production estimates are based on 2016 input prices.

Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.
2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.
3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968."
4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961
5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.
6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.
7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.
8. "Corn, Grain Sorghum & Wheat 2016 Planning Budgets." Budget Report No. 2015-03, Department of Agricultural Economics, Mississippi State University, October 2015.
9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.
10. "Cotton 2016 Planning Budgets." Budget Report No. 2015-01, Department of Agricultural Economics, Mississippi State University, October 2015.
11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.
12. "Forage 2012 Planning Budgets." Budget Report No. 2012-01, Department of Agricultural Economics, Mississippi State University, May 2012.
13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.
14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.
15. "Mississippi Agricultural Statistics." Mississippi Department of Agriculture and Commerce and Department of Agriculture, Mississippi Agriculture Statistical Service, Jackson, Mississippi.
16. "Rice 2016 Planning Budgets." Budget Report No. 2015-04, Department of Agricultural Economics, Mississippi State University, October 2015.
17. "Soybeans 2016 Planning Budgets." Budget Report No. 2015-02, Department of Agricultural Economics, Mississippi State University, October 2015.
18. "Vegetables 2015 Planning Budgets." Budget Report No. 2014-08, Department of Agricultural Economics, Mississippi State University December 2014.
19. "Peanuts 2016 Planning Budgets." Budget Report No. 2015-07, Department of Agricultural Economics, Mississippi State University, October 2015.



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