

Soybeans 2019 Planning Budgets



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 2019 planning decisions. This would be a 1-year short-run decision. Decisions beyond 1 year, or long-run decisions, should be based on **“Returns Above Specified Expenses.”**

Acknowledgments

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2019 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 to provide educational programs to farmers,
- by lenders as a basis for credit,
- to provide basic data for research, and
- to inform nonfarmers 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. You 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 your specific situation.

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 2018. (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 that 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:

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

$$CRCPA = CRCPH \times PR$$

where:

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

Estimates of Returns

It is difficult to estimate crop yields that may be expected 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 2018 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 and 9. 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 (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. You should, however, consider these items and factor them into the final budget for your own situation.

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Table 1.A Estimated costs per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.0000	3.59	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3302	4.69	_____
Harvesters	hour	14.23	0.0851	1.21	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	14.22	0.3738	5.32	_____
DIESEL FUEL					
Tractors	gal	2.60	3.8252	9.94	_____
Harvesters	gal	2.60	1.4243	3.70	_____
REPAIR & MAINTENANCE					
Implements	acre	4.94	1.0000	4.94	_____
Tractors	acre	1.97	1.0000	1.97	_____
Harvesters	acre	3.21	1.0000	3.21	_____
INTEREST ON OP. CAP.	acre	11.69	1.0000	11.69	_____
TOTAL DIRECT EXPENSES				357.05	_____
FIXED EXPENSES					
Implements	acre	11.12	1.0000	11.12	_____
Tractors	acre	13.61	1.0000	13.61	_____
Harvesters	acre	13.81	1.0000	13.81	_____
TOTAL FIXED EXPENSES				38.54	_____
TOTAL SPECIFIED EXPENSES				395.59	_____

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	42.0000	390.60	_____

TOTAL INCOME				390.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
HARVEST AIDS	acre	5.64	1.0000	5.64	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	96.35	1.0000	96.35	_____
INSECTICIDES	acre	13.94	1.0000	13.94	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	3.60	1.0000	3.60	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	14.23	0.4154	5.90	_____
UNALLOCATED LABOR	hour	14.22	0.3738	5.32	_____
DIESEL FUEL	gal	2.60	5.2496	13.64	_____
REPAIR & MAINTENANCE	acre	10.12	1.0000	10.12	_____
INTEREST ON OP. CAP.	acre	11.69	1.0000	11.69	_____

TOTAL DIRECT EXPENSES				357.05	_____
RETURNS ABOVE DIRECT EXPENSES				33.55	_____
TOTAL FIXED EXPENSES				38.54	_____

TOTAL SPECIFIED EXPENSES				395.59	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-4.99	_____

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

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	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
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				
Inoculant -Soybean	acre					1.0000				
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				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
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							0.41	0.41	0.51	0.37

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Subsoiler	3 shank		1.23	0.32	1.10			0.16	2.81	1.90	4.71
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Disk Harrow	24'		2.46	1.46	2.21			0.37	6.50	5.64	12.14
Field Cultivate Fld	24'		1.87	0.81	1.69			0.26	4.63	4.65	9.28
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Select Max	pt	12.71						0.51	13.22		13.22
Valor SX	oz	9.14						0.37	9.51		9.51
Surfactant	pt	1.44						0.06	1.50		1.50
Plant & Pre-Folding	12R-30		2.04	2.35	2.44			0.20	7.03	6.93	13.96
Soybean Seed RR2	lb	67.00						2.01	69.01		69.01
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Inoculant -Soybean	acre	1.55						0.05	1.60		1.60
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Soybeans Consultant	acre	6.50						0.16	6.66		6.66
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Prefix	pt	13.06						0.33	13.39		13.39
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Zidua	oz	13.58						0.34	13.92		13.92
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Acephate 90SP	lb	5.94						0.06	6.00		6.00
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Sodium Chlorate 5L	gal	3.24						0.03	3.27		3.27
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	30' Flex		3.70	4.08	2.30			0.05	10.13	15.26	25.39
Haul Soybeans	bu	11.34						0.06	11.40		11.40
Grain Cart Soybean	700 bu		0.64	0.34	0.57			0.01	1.56	1.30	2.86
TOTALS			309.51	13.64	10.12	12.09	0.00	11.69	357.05	38.54	395.59

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	390.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	35.60	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	13.94	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.00	0.00	0.00	0.00	0.00	0.00	2.44	1.78	0.00	0.00	0.00	2.87
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	5.56	0.00	0.00	0.00	0.00	0.00	2.04	1.70	0.00	0.00	0.00	4.34
REPAIR & MAINTENANCE	2.59	0.00	0.00	0.00	0.00	0.00	2.35	0.76	0.00	0.00	0.00	4.42
INTEREST ON OP. CAP.	5.04	0.00	0.00	0.00	1.57	0.00	3.40	1.15	0.00	0.00	0.41	0.12
TOTAL DIRECT EXPENSES	88.93	0.00	0.00	0.00	40.64	0.00	116.69	47.49	0.00	0.00	40.21	23.09
NET INCOME	-88.93	0.00	0.00	0.00	-40.64	0.00	-116.69	-47.49	0.00	0.00	-40.21	367.51
NET INCOME TO DATE	-88.93	-88.93	-88.93	-88.93	-129.57	-129.57	-246.26	-293.75	-293.75	-293.75	-333.96	33.55

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

PRODUCT	PERCENT											
	75	80	85	90	95	100	105	110	115	120		
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62	
	-----PRODUCT PRICE-----											
PERCENT	-----dollars-----											
YIELD UNIT												
50	21.00 bu	-204	-195	-185	-175	-165	-156	-146	-136	-126	-116	-107
		-243	-233	-223	-214	-204	-194	-184	-175	-165	-155	-145
60	25.20 bu	-176	-165	-153	-141	-129	-118	-106	-94	-82	-71	-59
		-215	-203	-191	-180	-168	-156	-144	-133	-121	-109	-98
70	29.40 bu	-148	-134	-121	-107	-93	-80	-66	-52	-39	-25	-11
		-187	-173	-159	-146	-132	-118	-105	-91	-77	-64	-50
80	33.60 bu	-120	-104	-89	-73	-57	-42	-26	-11	4	20	35
		-158	-143	-127	-112	-96	-80	-65	-49	-33	-18	-2
90	37.80 bu	-92	-74	-57	-39	-21	-4	13	30	48	65	83
		-130	-113	-95	-78	-60	-42	-25	-7	9	27	44
100	42.00 bu	-64	-44	-25	-5	14	33	53	72	92	111	131
		-102	-83	-63	-44	-24	-4	14	34	53	73	92
110	46.20 bu	-35	-14	7	28	49	71	92	114	135	157	178
		-74	-53	-31	-10	11	32	54	75	97	118	140
120	50.40 bu	-7	15	39	62	85	109	132	156	179	203	226
		-46	-22	0	23	47	70	94	117	141	164	188
130	54.60 bu	20	45	71	96	121	147	172	198	223	248	274
		-18	7	32	57	83	108	134	159	184	210	235
140	58.80 bu	48	75	103	130	157	185	212	239	267	294	321
		9	37	64	92	119	146	174	201	228	256	283
150	63.00 bu	76	105	135	164	193	223	252	281	311	340	369
		38	67	96	126	155	184	213	243	272	301	331

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 2018 input prices.

Table 2.A Estimated costs per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 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	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4713	6.70	_____
Harvesters	hour	14.23	0.0851	1.21	_____
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	14.22	0.4301	6.12	_____
DIESEL FUEL					
Tractors	gal	2.60	5.2753	13.70	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Roll-Out Pipe Irr.	gal	2.60	7.3316	19.05	_____
REPAIR & MAINTENANCE					
Implements	acre	5.60	1.0000	5.60	_____
Tractors	acre	2.74	1.0000	2.74	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	13.20	1.0000	13.20	_____
TOTAL DIRECT EXPENSES				435.02	_____
FIXED EXPENSES					
Implements	acre	13.59	1.0000	13.59	_____
Tractors	acre	18.92	1.0000	18.92	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Roll-Out Pipe Irr.	acre	61.50	1.0000	61.50	_____
TOTAL FIXED EXPENSES				107.82	_____
TOTAL SPECIFIED EXPENSES				542.84	_____

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	60.0000	558.00	_____

TOTAL INCOME				558.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	5.64	1.0000	5.64	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	26.10	1.0000	26.10	_____
HERBICIDES	acre	96.35	1.0000	96.35	_____
INSECTICIDES	acre	13.94	1.0000	13.94	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	3.96	1.0000	3.96	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	14.23	0.5564	7.91	_____
UNALLOCATED LABOR	hour	14.22	0.4301	6.12	_____
DIESEL FUEL	gal	2.60	14.0313	36.45	_____
REPAIR & MAINTENANCE	acre	18.44	1.0000	18.44	_____
INTEREST ON OP. CAP.	acre	13.20	1.0000	13.20	_____

TOTAL DIRECT EXPENSES				435.02	_____
RETURNS ABOVE DIRECT EXPENSES				122.98	_____
TOTAL FIXED EXPENSES				107.82	_____

TOTAL SPECIFIED EXPENSES				542.84	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				15.16	_____

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
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				
Inoculant -Soybean	acre					1.0000				
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				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
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							0.55	0.55	1.01	0.43

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Subsoiler	3 shank		1.23	0.32	1.10			0.16	2.81	1.90	4.71
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Disk Harrow	24'		2.46	1.46	2.21			0.37	6.50	5.64	12.14
Field Cultivate Fld	24'		1.87	0.81	1.69			0.26	4.63	4.65	9.28
Bed/Lister-Roll-Fold	12R-30		1.88	0.83	1.69			0.26	4.66	3.91	8.57
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Select Max	pt	12.71						0.51	13.22		13.22
Valor SX	oz	9.14						0.37	9.51		9.51
Surfactant	pt	1.44						0.06	1.50		1.50
Plant & Pre-Folding	12R-30		2.04	2.35	2.44			0.20	7.03	6.93	13.96
Soybean Seed RR2	lb	67.00						2.01	69.01		69.01
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Inoculant -Soybean	acre	1.55						0.05	1.60		1.60
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Soybeans Consultant	acre	6.50						0.16	6.66		6.66
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Prefix	pt	13.06						0.33	13.39		13.39
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Zidua	oz	13.58						0.34	13.92		13.92
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Quadris Top SBX	oz	19.25						0.29	19.54		19.54
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Acephate 90SP	lb	5.94						0.06	6.00		6.00
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Sodium Chlorate 5L	gal	3.24						0.03	3.27		3.27
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	30' Flex		3.70	4.08	2.30			0.05	10.13	15.26	25.39
Haul Soybeans	bu	16.20						0.08	16.28		16.28
Grain Cart Soybean	700 bu		0.64	0.34	0.57			0.01	1.56	1.30	2.86
Roll-Out Pipe Irr.	acre	8.25	20.93	7.49	4.42			0.83	41.92	65.37	107.29
TOTALS		348.73	36.45	18.44	18.20	0.00	13.20	435.02	107.82	542.84	

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	558.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	35.60	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	13.94	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	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.36	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.23	0.00	0.00	0.00	0.00	0.00	2.44	2.01	2.81	0.23	0.00	3.48
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	8.40	0.00	0.00	0.00	0.00	0.00	2.04	1.70	13.19	6.35	0.00	4.77
REPAIR & MAINTENANCE	3.74	0.00	0.00	0.00	0.00	0.00	2.35	0.76	5.73	1.31	0.00	4.55
INTEREST ON OP. CAP.	5.41	0.00	0.00	0.00	1.57	0.00	3.40	1.16	0.59	0.51	0.41	0.15
TOTAL DIRECT EXPENSES	95.52	0.00	0.00	0.00	40.64	0.00	116.69	47.73	30.57	34.51	40.21	29.15
NET INCOME	-95.52	0.00	0.00	0.00	-40.64	0.00	-116.69	-47.73	-30.57	-34.51	-40.21	528.85
NET INCOME TO DATE	-95.52	-95.52	-95.52	-95.52	-136.16	-136.16	-252.85	-300.58	-331.15	-365.66	-405.87	122.98

Note: Cost of production estimates are based on 2018 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 2.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

PRODUCT	---PERCENT---										115	120	125
	75	80	85	90	95	100	105	110	10.23	10.69			
Soybeans	---PRODUCT PRICE---												
	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62	11.62	
PERCENT	---dollars---												
YIELD													
UNIT													
50	30.00	bu	-217	-203	-189	-175	-161	-147	-133	-119	-106	-92	-78
			-325	-311	-297	-283	-269	-255	-241	-227	-213	-199	-185
60	36.00	bu	-177	-160	-143	-127	-110	-93	-76	-60	-43	-26	-10
			-285	-268	-251	-235	-218	-201	-184	-168	-151	-134	-117
70	42.00	bu	-137	-117	-98	-78	-59	-39	-20	-0	19	38	58
			-245	-225	-205	-186	-166	-147	-127	-108	-88	-69	-49
80	48.00	bu	-96	-74	-52	-30	-7	14	36	59	81	103	126
			-204	-182	-160	-137	-115	-93	-70	-48	-26	-3	18
90	54.00	bu	-56	-31	-6	18	43	68	93	119	144	169	194
			-164	-139	-114	-89	-64	-39	-13	11	36	61	86
100	60.00	bu	-16	11	39	67	95	122	150	178	206	234	262
			-124	-96	-68	-40	-12	15	43	70	98	126	154
110	66.00	bu	23	54	85	115	146	177	207	238	269	299	330
			-84	-53	-22	7	38	69	100	130	161	192	222
120	72.00	bu	63	97	130	164	197	231	264	298	331	365	398
			-43	-10	23	56	90	123	156	190	223	257	290
130	78.00	bu	104	140	176	212	249	285	321	358	394	430	466
			-3	32	68	105	141	177	213	250	286	322	359
140	84.00	bu	144	183	222	261	300	339	378	417	456	495	534
			36	75	114	153	192	231	270	309	349	388	427
150	90.00	bu	184	226	268	310	351	393	435	477	519	561	603
			76	118	160	202	244	286	327	369	411	453	495

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2018 input prices.

Table 3.A Estimated costs per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
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	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4582	6.49	_____
Harvesters	hour	14.23	0.0851	1.21	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR					
	hour	14.22	0.3065	4.36	_____
DIESEL FUEL					
Tractors	gal	2.60	4.3236	11.27	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Contour Flood Irr.	gal	2.60	10.9974	28.59	_____
REPAIR & MAINTENANCE					
Implements	acre	4.85	1.0000	4.85	_____
Tractors	acre	2.35	1.0000	2.35	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Contour Flood Irr.	acre	13.80	1.0000	13.80	_____
INTEREST ON OP. CAP.	acre	12.54	1.0000	12.54	_____
TOTAL DIRECT EXPENSES				412.15	_____
FIXED EXPENSES					
Implements	acre	10.31	1.0000	10.31	_____
Tractors	acre	16.21	1.0000	16.21	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Contour Flood Irr.	acre	48.51	1.0000	48.51	_____
TOTAL FIXED EXPENSES				88.84	_____
TOTAL SPECIFIED EXPENSES				500.99	_____

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	53.0000	492.90	_____

TOTAL INCOME				492.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
HARVEST AIDS	acre	5.64	1.0000	5.64	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	26.10	1.0000	26.10	_____
HERBICIDES	acre	77.97	1.0000	77.97	_____
INSECTICIDES	acre	13.94	1.0000	13.94	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	3.96	1.0000	3.96	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1100	1.00	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	14.23	0.5433	7.70	_____
UNALLOCATED LABOR	hour	14.22	0.3065	4.36	_____
DIESEL FUEL	gal	2.60	16.7455	43.56	_____
REPAIR & MAINTENANCE	acre	24.21	1.0000	24.21	_____
INTEREST ON OP. CAP.	acre	12.54	1.0000	12.54	_____

TOTAL DIRECT EXPENSES				412.15	_____
RETURNS ABOVE DIRECT EXPENSES				80.75	_____

TOTAL FIXED EXPENSES				88.84	_____

TOTAL SPECIFIED EXPENSES				500.99	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-8.09	_____

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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	0.3330				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3330				
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				
Valor SX	oz					2.0000				
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				
Inoculant -Soybean	acre					1.0000				
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 SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct		0.08	0.08	0.08	0.07
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							0.54	0.54	0.96	0.30

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Disk Harrow	24'		2.08	1.42	2.21			0.34	6.05	5.36	11.41
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Spray (Broadcast)	60'		0.85	0.38	0.89			0.10	2.22	1.43	3.65
Glyphosate 3lbs a.e	oz	4.48						0.20	4.68		4.68
Select Max	pt	12.71						0.57	13.28		13.28
Surfactant	pt	1.44						0.06	1.50		1.50
Valor SX	oz	9.14						0.41	9.55		9.55
Soybeans Consultant	acre	6.50						0.20	6.70		6.70
Plant & Pre-Folding	12R-30		1.72	2.32	2.44			0.19	6.67	6.70	13.37
Soybean Seed RR2	lb	67.00						2.01	69.01		69.01
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Inoculant -Soybean	acre	1.55						0.05	1.60		1.60
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Spray (Broadcast)	60'		0.72	0.36	0.89			0.06	2.03	1.34	3.37
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Prefix	pt	13.06						0.39	13.45		13.45
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34	3.36
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
App by Air (5 gal)	appl	6.50						0.13	6.63		6.63
Quadris Top SBX	oz	19.25						0.39	19.64		19.64
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Acephate 90SP	lb	5.94						0.09	6.03		6.03
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Sodium Chlorate 5L	gal	3.24						0.03	3.27		3.27
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	30' Flex		3.70	4.08	2.30			0.05	10.13	15.26	25.39
Haul Soybeans	bu	14.31						0.07	14.38		14.38
Grain Cart Soybean	700 bu		0.54	0.33	0.57			0.01	1.45	1.22	2.67
Contour Flood Irr.	acre	2.25	33.23	14.96	5.69			1.15	57.28	56.19	113.47
TOTALS			315.96	43.56	24.21	15.88	0.00	12.54	412.15	88.84	500.99

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	492.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	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	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	19.25	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	26.33	0.00	0.00	47.16	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	5.94	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.44	0.00	0.00	1.44	0.00	0.36	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.21	0.00	0.00	0.89	0.00	0.00	3.78	2.73	1.61	1.61	0.18	2.87
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	2.08	0.00	0.00	0.85	0.00	0.00	2.44	11.95	10.86	10.86	0.28	4.24
REPAIR & MAINTENANCE	1.42	0.00	0.00	0.38	0.00	0.00	2.68	9.32	2.96	2.96	0.08	4.41
INTEREST ON OP. CAP.	4.59	0.00	0.00	1.34	0.00	0.00	4.18	0.77	0.83	0.41	0.29	0.13
TOTAL DIRECT EXPENSES	81.04	0.00	0.00	31.23	0.00	0.00	143.58	31.50	42.37	28.28	28.19	25.96
NET INCOME	-81.04	0.00	0.00	-31.23	0.00	0.00	-143.58	-31.50	-42.37	-28.28	-28.19	466.94
NET INCOME TO DATE	-81.04	-81.04	-81.04	-112.27	-112.27	-112.27	-255.85	-287.35	-329.72	-358.00	-386.19	80.75

Note: Cost of production estimates are based on 2018 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, full-season, RR2, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

PRODUCT	PERCENT											
	75	80	85	90	95	100	105	110	115	120		
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62	
	-----PRODUCT PRICE-----											
PERCENT	-----dollars-----											
YIELD UNIT												
50	26.50 bu	-220	-207	-195	-183	-170	-158	-146	-133	-121	-109	-96
		-308	-296	-284	-271	-259	-247	-235	-222	-210	-198	-185
60	31.80 bu	-184	-169	-155	-140	-125	-110	-95	-81	-66	-51	-36
		-273	-258	-243	-229	-214	-199	-184	-169	-155	-140	-125
70	37.10 bu	-149	-131	-114	-97	-80	-62	-45	-28	-11	6	23
		-237	-220	-203	-186	-168	-151	-134	-117	-99	-82	-65
80	42.40 bu	-113	-93	-74	-54	-34	-14	4	24	44	63	83
		-202	-182	-162	-143	-123	-103	-84	-64	-44	-24	-5
90	47.70 bu	-78	-55	-33	-11	10	32	55	77	99	121	143
		-166	-144	-122	-100	-78	-55	-33	-11	10	32	54
100	53.00 bu	-42	-17	6	31	56	80	105	130	154	179	203
		-131	-106	-82	-57	-32	-8	16	41	65	90	115
110	58.30 bu	-6	20	47	74	101	128	155	182	209	237	264
		-95	-68	-41	-14	12	39	66	93	121	148	175
120	63.60 bu	28	58	87	117	146	176	206	235	265	294	324
		-60	-30	-1	28	58	87	117	146	176	205	235
130	68.90 bu	64	96	128	160	192	224	256	288	320	352	384
		-24	7	39	71	103	135	167	199	231	263	295
140	74.20 bu	99	134	168	203	237	272	306	341	375	410	444
		10	45	79	114	148	183	217	252	286	321	355
150	79.50 bu	135	172	209	246	283	320	356	393	430	467	504
		46	83	120	157	194	231	268	305	342	379	416

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 2018 input prices.

Table 4.A Estimated costs per acre
 Soybeans, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	0.6000	2.15	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
1/2-mi Pivot Irr.	gal	2.60	16.4057	42.66	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
1/2-mi Pivot Irr.	acre	11.57	1.0000	11.57	_____
INTEREST ON OP. CAP.	acre	10.15	1.0000	10.15	_____
TOTAL DIRECT EXPENSES				384.10	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
1/2-mi Pivot Irr.	acre	47.36	1.0000	47.36	_____
TOTAL FIXED EXPENSES				74.02	_____
TOTAL SPECIFIED EXPENSES				458.12	_____

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	50.0000	465.00	_____

TOTAL INCOME				465.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	26.10	1.0000	26.10	_____
HERBICIDES	acre	47.16	1.0000	47.16	_____
INSECTICIDES	acre	37.28	1.0000	37.28	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	2.16	1.0000	2.16	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	14.23	0.2193	3.11	_____
UNALLOCATED LABOR	hour	14.26	0.1886	2.69	_____
DIESEL FUEL	gal	2.60	19.1560	49.81	_____
REPAIR & MAINTENANCE	acre	19.14	1.0000	19.14	_____
INTEREST ON OP. CAP.	acre	10.15	1.0000	10.15	_____

TOTAL DIRECT EXPENSES				384.10	_____
RETURNS ABOVE DIRECT EXPENSES				80.90	_____
TOTAL FIXED EXPENSES				74.02	_____

TOTAL SPECIFIED EXPENSES				458.12	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				6.88	_____

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
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				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
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				
Prefix	pt					2.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Quadris Top SBX	oz					7.0000				
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				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	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							0.21	0.21	0.35	0.18

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	12.65						0.76	13.41	13.41
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90	21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20	28.20
Soybeans Consultant	acre	6.50						0.20	6.70	6.70
Plant & Pre-Folding	12R-30		2.04	2.35	2.40			0.17	6.96	6.93
Soybean Seed RR2	lb	67.00						1.67	68.67	68.67
CruiserMaxx	oz	6.85						0.17	7.02	7.02
Inoculant -Soybean	acre	1.55						0.04	1.59	1.59
Boundary	pt	22.42						0.56	22.98	22.98
Gramoxone SL 2.0	oz	7.20						0.18	7.38	7.38
Surfactant	pt	1.44						0.04	1.48	1.48
Spray (Broadcast)	60'		0.85	0.38	0.88			0.04	2.15	1.43
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
Prefix	pt	13.06						0.26	13.32	13.32
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Quadris Top SBX	oz	19.25						0.29	19.54	19.54
Surfactant	pt	0.36						0.01	0.37	0.37
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Acephate 90SP	lb	5.94						0.09	6.03	6.03
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Prevathon	oz	18.48						0.28	18.76	18.76
Surfactant	pt	0.36						0.01	0.37	0.37
Bifenthrin	oz	4.86						0.07	4.93	4.93
Incidental Pest										
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08	8.08
Header -Soybean	25' Flex		3.62	4.50	2.70			0.05	10.87	17.00
Haul Soybeans	bu	13.50						0.07	13.57	13.57
Grain Cart Soybean	700 bu		0.64	0.34	0.56			0.01	1.55	1.30
1/2-mi Pivot Irr.	acre		42.66	11.57	0.47			1.15	55.85	47.36
TOTALS		297.99	49.81	19.14	7.01	0.00	10.15	384.10	74.02	458.12

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	465.00
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	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.62	17.54	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	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.72	0.00	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	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	2.44	0.93	0.04	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.84	17.91	12.80	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.63	1.12	0.55	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.21	3.41	0.75	1.25	0.15	0.13
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	7.05	139.78	38.25	83.39	14.65	25.99
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-7.05	-139.78	-38.25	-83.39	-14.65	439.01
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-82.04	-221.82	-260.07	-343.46	-358.11	80.90

Note: Cost of production estimates are based on 2018 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 4.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
PERCENT	YIELD UNIT												
	---dollars---												
50	25.00	bu	-202	-191	-179	-168	-156	-144	-133	-121	-109	-98	-86
			-276	-265	-253	-242	-230	-218	-207	-195	-183	-172	-160
60	30.00	bu	-169	-155	-141	-127	-113	-99	-85	-71	-57	-43	-29
			-243	-229	-215	-201	-187	-173	-159	-145	-131	-117	-103
70	35.00	bu	-135	-119	-103	-87	-70	-54	-38	-21	-5	10	26
			-209	-193	-177	-161	-144	-128	-112	-95	-79	-63	-47
80	40.00	bu	-102	-83	-65	-46	-27	-9	9	27	46	65	83
			-176	-157	-139	-120	-102	-83	-64	-46	-27	-9	9
90	45.00	bu	-68	-47	-27	-6	14	35	56	77	98	119	140
			-142	-121	-101	-80	-59	-38	-17	3	24	45	66
100	50.00	bu	-35	-12	11	34	57	80	104	127	150	173	197
			-109	-86	-62	-39	-16	6	30	53	76	99	123
110	55.00	bu	-1	23	49	74	100	126	151	177	202	228	253
			-75	-50	-24	0	26	52	77	103	128	154	179
120	60.00	bu	31	59	87	115	143	171	199	226	254	282	310
			-42	-14	13	41	69	97	125	152	180	208	236
130	65.00	bu	65	95	125	155	186	216	246	276	307	337	367
			-8	21	51	81	112	142	172	202	232	263	293
140	70.00	bu	98	131	163	196	228	261	294	326	359	391	424
			24	57	89	122	154	187	220	252	285	317	350
150	75.00	bu	132	167	201	236	271	306	341	376	411	446	480
			58	93	127	162	197	232	267	302	337	372	406

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 2018 input prices.

Table 5.A Estimated costs per acre
 Soybeans, full-season, RR2, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.6600	15.68	_____
Potash (60% K2O)	cwt	20.00	1.0000	20.00	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	0.6000	2.15	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	43.0000	11.61	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3128	4.44	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	_____
UNALLOCATED LABOR					
	hour	14.24	0.3734	5.32	_____
DIESEL FUEL					
Tractors	gal	2.60	3.0592	7.96	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	4.75	1.0000	4.75	_____
Tractors	acre	1.70	1.0000	1.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	9.12	1.0000	9.12	_____
TOTAL DIRECT EXPENSES				278.47	_____
FIXED EXPENSES					
Implements	acre	10.48	1.0000	10.48	_____
Tractors	acre	11.82	1.0000	11.82	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				37.82	_____
TOTAL SPECIFIED EXPENSES				316.29	_____

Note: Cost of production estimates are based on 2018 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, full-season, RR2, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	43.0000	399.90	_____

TOTAL INCOME				399.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.00	1.0000	13.00	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	35.68	1.0000	35.68	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	60.92	1.0000	60.92	_____
INSECTICIDES	acre	5.94	1.0000	5.94	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	2.16	1.0000	2.16	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1051	0.96	_____
OPERATOR LABOR	hour	14.23	0.4149	5.89	_____
UNALLOCATED LABOR	hour	14.24	0.3734	5.32	_____
DIESEL FUEL	gal	2.60	4.4528	11.58	_____
REPAIR & MAINTENANCE	acre	10.06	1.0000	10.06	_____
INTEREST ON OP. CAP.	acre	9.12	1.0000	9.12	_____

TOTAL DIRECT EXPENSES				278.47	_____
RETURNS ABOVE DIRECT EXPENSES				121.43	_____
TOTAL FIXED EXPENSES				37.82	_____

TOTAL SPECIFIED EXPENSES				316.29	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				83.61	_____

Note: Cost of production estimates are based on 2018 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, full-season, RR2, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Oct	0.3330				
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 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				
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
Glyphosate 3lbs a.e	oz					32.0000				
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				
Gramoxone SL	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 2018 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, full-season, RR2, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	12.65						0.76	13.41	13.41
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Phosphorus (46% P2O5)	cwt	15.68						0.94	16.62	16.62
Potash (60% K2O)	cwt	20.00						1.20	21.20	21.20
Disk Harrow	24'		2.08	1.42	2.21			0.34	6.05	5.36
Field Cultivate Fld	24'		1.58	0.78	1.69			0.24	4.29	4.43
App by Air (5 gal)	appl	6.50						0.23	6.73	6.73
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64	4.64
2,4-D Amine 4	pt	4.80						0.17	4.97	4.97
Plant - Folding	12R-30		1.60	1.95	2.27			0.17	5.99	5.79
Soybean Seed RR2	lb	67.00						2.01	69.01	69.01
CruiserMaxx	oz	6.85						0.21	7.06	7.06
Boundary	pt	22.42						0.67	23.09	23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Surfactant	pt	1.44						0.04	1.48	1.48
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Prefix	pt	13.06						0.33	13.39	13.39
Soybeans Consultant	acre	6.50						0.16	6.66	6.66
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Spray (Broadcast)	60'		0.72	0.36	0.89			0.02	1.99	1.34
Acephate 90SP	lb	5.94						0.06	6.00	6.00
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Gramoxone SL	oz	2.40						0.02	2.42	2.42
Surfactant	pt	0.72						0.01	0.73	0.73
Header -Soybean	25' Flex		3.62	4.50	2.76			0.05	10.93	17.00
Haul Soybeans	bu	11.61						0.06	11.67	11.67
Grain Cart Soybean	700 bu		0.54	0.33	0.57			0.01	1.45	1.22
TOTALS		235.54	11.58	10.06	12.17	0.00	9.12	278.47	37.82	316.29

Note: Cost of production estimates are based on 2018 input price.
 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, full-season, RR2, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	399.90
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	2.40	0.00
FERTILIZERS	35.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.28	29.62	22.02	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	5.94	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.90	0.00	0.00	0.00	0.00	0.00	2.27	1.78	0.00	0.00	0.89	3.33
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	3.66	0.00	0.00	0.00	0.00	0.00	1.60	1.44	0.00	0.00	0.72	4.16
REPAIR & MAINTENANCE	2.20	0.00	0.00	0.00	0.00	0.00	1.95	0.72	0.00	0.00	0.36	4.83
INTEREST ON OP. CAP.	4.13	0.00	0.00	0.00	0.00	0.56	3.32	0.81	0.00	0.00	0.18	0.12
TOTAL DIRECT EXPENSES	73.05	0.00	0.00	0.00	0.00	16.34	114.05	33.27	0.00	0.00	17.71	24.05
NET INCOME	-73.05	0.00	0.00	0.00	0.00	-16.34	-114.05	-33.27	0.00	0.00	-17.71	375.85
NET INCOME TO DATE	-73.05	-73.05	-73.05	-73.05	-73.05	-89.39	-203.44	-236.71	-236.71	-236.71	-254.42	121.43

Note: Cost of production estimates are based on 2018 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 5.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE	YIELD	UNIT
	75	80	85	90	95	100	105	110	115	120			
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
	-----dollars-----												
50	21.50	bu	-122	-112	-102	-92	-82	-72	-62	-52	-42	-32	-22
			-160	-150	-140	-130	-120	-110	-100	-90	-80	-70	-60
60	25.80	bu	-93	-81	-69	-57	-45	-33	-21	-9	2	14	26
			-131	-119	-107	-95	-83	-71	-59	-47	-35	-23	-11
70	30.10	bu	-65	-51	-37	-23	-9	4	18	32	46	60	74
			-102	-88	-74	-60	-46	-32	-18	-4	9	23	37
80	34.40	bu	-36	-20	-4	11	27	43	59	75	91	107	123
			-74	-58	-42	-26	-10	5	21	37	53	69	85
90	38.70	bu	-7	10	28	46	64	82	100	118	136	154	172
			-45	-27	-9	8	26	44	62	80	98	116	134
100	43.00	bu	21	41	61	81	101	121	141	161	181	201	221
			-16	3	23	43	63	83	103	123	143	163	183
110	47.30	bu	50	72	94	116	138	160	182	204	226	248	270
			12	34	56	78	100	122	144	166	188	210	232
120	51.60	bu	79	103	127	151	175	199	223	247	271	295	319
			41	65	89	113	137	161	185	209	233	257	281
130	55.90	bu	107	133	159	185	211	237	263	289	315	341	367
			70	96	122	148	174	200	226	252	278	304	330
140	60.20	bu	136	164	192	220	248	276	304	332	360	388	416
			98	126	154	182	210	238	266	294	322	350	378
150	64.50	bu	165	195	225	255	285	315	345	375	405	435	465
			127	157	187	217	247	277	307	337	367	397	427

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2018 input prices.

Table 6.A Estimated costs per acre
Soybeans, full-season, RR2, May planted, 12R 30"
Non-Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.6600	15.68	_____
Potash (60% K2O)	cwt	20.00	1.0000	20.00	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	12.71	1.0000	12.71	_____
Fierce	oz	7.54	3.5000	26.39	_____
Gramoxone SL 2.0	oz	0.15	96.0000	14.40	_____
Boundary	pt	11.21	2.0000	22.42	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Dimilin 2L	oz	2.13	1.0000	2.13	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Baythroid XL	oz	2.65	1.0650	2.82	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.4500	5.21	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	40.0000	10.80	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4647	6.60	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.1523	1.38	_____
UNALLOCATED LABOR	hour	14.22	0.5102	7.26	_____
DIESEL FUEL					
Tractors	gal	2.60	4.6579	12.12	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	6.17	1.0000	6.17	_____
Tractors	acre	2.56	1.0000	2.56	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	8.78	1.0000	8.78	_____
TOTAL DIRECT EXPENSES				343.83	_____
FIXED EXPENSES					
Implements	acre	13.35	1.0000	13.35	_____
Tractors	acre	17.79	1.0000	17.79	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				46.66	_____
TOTAL SPECIFIED EXPENSES				390.49	_____

Note: Cost of production estimates are based on 2018 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, full-season, RR2, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	40.0000	372.00	_____

TOTAL INCOME				372.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	35.68	1.0000	35.68	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	102.42	1.0000	102.42	_____
INSECTICIDES	acre	23.43	1.0000	23.43	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	5.22	1.0000	5.22	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1523	1.38	_____
OPERATOR LABOR	hour	14.23	0.5669	8.05	_____
UNALLOCATED LABOR	hour	14.22	0.5102	7.26	_____
DIESEL FUEL	gal	2.60	6.0515	15.74	_____
REPAIR & MAINTENANCE	acre	12.34	1.0000	12.34	_____
INTEREST ON OP. CAP.	acre	8.78	1.0000	8.78	_____

TOTAL DIRECT EXPENSES				343.83	_____
RETURNS ABOVE DIRECT EXPENSES				28.17	_____
TOTAL FIXED EXPENSES				46.66	_____

TOTAL SPECIFIED EXPENSES				390.49	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-18.49	_____

Note: Cost of production estimates are based on 2018 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, full-season, RR2, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Oct	0.3330				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fold	12R-30	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
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				
Gramoxone SL	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							0.56	0.56	0.71	0.51

Note: Cost of production estimates are based on 2018 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, full-season, RR2, May planted, 12R 30"
Non-Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.02	3.35	3.35
Lime (Spread)	ton	12.65						0.06	12.71	12.71
Disk Harrow	24'		2.08	1.42	2.21			0.03	5.74	5.36
Field Cultivate Fld	24'		1.58	0.78	1.69			0.02	4.07	4.43
Bed/Lister-Roll-Fold	12R-30		1.88	0.83	1.69			0.02	4.42	3.91
Spray (Broadcast)	60'		0.72	0.36	0.89			0.09	2.06	1.34
Glyphosate 3lbs a.e	oz	4.48						0.20	4.68	4.68
Select Max	pt	12.71						0.57	13.28	13.28
Surfactant	pt	1.44						0.06	1.50	1.50
Custom Apply Fert	acre	7.50						0.26	7.76	7.76
Phosphorus(46% P2O5)	cwt	15.68						0.55	16.23	16.23
Potash (60% K2O)	cwt	20.00						0.70	20.70	20.70
Spray (Broadcast)	60'		0.72	0.36	0.89			0.07	2.04	1.34
Fierce	oz	26.39						0.92	27.31	27.31
Gramoxone SL 2.0	oz	7.20						0.25	7.45	7.45
Surfactant	pt	1.44						0.05	1.49	1.49
Soybeans Consultant	acre	6.50						0.20	6.70	6.70
Plant & Pre-Folding	12R-30		1.72	2.32	2.44			0.19	6.67	6.70
Soybean Seed RR2	lb	67.00						2.01	69.01	69.01
CruiserMaxx	oz	6.85						0.21	7.06	7.06
Boundary	pt	22.42						0.67	23.09	23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Surfactant	pt	1.44						0.04	1.48	1.48
Spray (Broadcast)	60'		0.72	0.36	0.89			0.06	2.03	1.34
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Prefix	pt	13.06						0.39	13.45	13.45
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Spray (Broadcast)	60'		0.36	0.18	0.44			0.02	1.00	0.67
Dimilin 2L	oz	2.13						0.04	2.17	2.17
Surfactant	pt	0.18							0.18	0.18
Spray (Broadcast)	60'		0.72	0.36	0.89			0.03	2.00	1.34
Prevathon	oz	18.48						0.28	18.76	18.76
Spray (Broadcast)	60'		0.36	0.18	0.44			0.01	0.99	0.67
Baythroid XL	oz	2.82						0.04	2.86	2.86
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Gramoxone SL	oz	2.40						0.02	2.42	2.42
Surfactant	pt	0.72						0.01	0.73	0.73
Header -Soybean	25' Flex		3.62	4.50	2.76			0.05	10.93	17.00
Haul Soybeans	bu	10.80						0.05	10.85	10.85
Grain Cart Soybean	700 bu		0.54	0.33	0.57			0.01	1.45	1.22
TOTALS		290.28	15.74	12.34	16.69	0.00	8.78	343.83	46.66	390.49

Note: Cost of production estimates are based on 2018 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, full-season, RR2, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	372.00
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	2.40	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	35.68	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	17.19	0.00	33.59	47.16	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	2.13	21.30	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.44	0.00	1.44	1.44	0.00	0.18	0.00	0.72	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	7.50	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.65
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
LABOR	0.00	0.00	0.00	0.89	0.00	0.89	3.33	0.89	0.44	1.33	0.00	8.92
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	0.72	0.00	0.72	2.44	0.72	0.36	1.08	0.00	9.70
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.36	0.00	0.36	2.68	0.36	0.18	0.54	0.00	7.86
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.92	0.00	2.80	4.12	0.16	0.06	0.36	0.10	0.26
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	21.52	0.00	82.98	141.52	6.61	3.35	24.61	9.72	53.52
NET INCOME	0.00	0.00	0.00	-21.52	0.00	-82.98	-141.52	-6.61	-3.35	-24.61	-9.72	318.48
NET INCOME TO DATE	0.00	0.00	0.00	-21.52	-21.52	-104.50	-246.02	-252.63	-255.98	-280.59	-290.31	28.17

Note: Cost of production estimates are based on 2018 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, full-season, RR2, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE	PERCENT
	75	80	85	90	95	100	105	110	115	120		
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62	
PERCENT	dollars											
YIELD	bu											
UNIT												
50	20.00	-198	-189	-180	-171	-161	-152	-143	-133	-124	-115	-105
		-245	-236	-226	-217	-208	-199	-189	-180	-171	-161	-152
60	24.00	-172	-160	-149	-138	-127	-116	-105	-93	-82	-71	-60
		-218	-207	-196	-185	-174	-162	-151	-140	-129	-118	-107
70	28.00	-145	-132	-119	-106	-93	-80	-67	-54	-41	-28	-15
		-191	-178	-165	-152	-139	-126	-113	-100	-87	-74	-61
80	32.00	-118	-103	-88	-73	-58	-44	-29	-14	0	15	30
		-165	-150	-135	-120	-105	-90	-75	-60	-46	-31	-16
90	36.00	-91	-74	-58	-41	-24	-7	8	25	42	59	75
		-138	-121	-104	-88	-71	-54	-37	-21	-4	12	29
100	40.00	-64	-46	-27	-9	9	28	46	65	83	102	121
		-111	-92	-74	-55	-37	-18	0	18	37	55	74
110	44.00	-38	-17	2	23	43	64	84	105	125	146	166
		-84	-64	-43	-23	-2	17	38	58	79	99	119
120	48.00	-11	11	33	55	78	100	122	145	167	189	212
		-57	-35	-13	9	31	53	76	98	120	143	165
130	52.00	15	39	63	88	112	136	160	184	209	233	257
		-31	-6	17	41	65	89	114	138	162	186	210
140	56.00	42	68	94	120	146	172	198	224	250	276	302
		-4	21	47	73	99	125	152	178	204	230	256
150	60.00	69	97	125	152	180	208	236	264	292	320	348
		22	50	78	106	134	162	189	217	245	273	301

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 2018 input prices.

Table 7.A Estimated costs per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

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	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	0.5000	1.80	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	8.56	1.0000	8.56	_____
TOTAL DIRECT EXPENSES				294.95	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				26.66	_____
TOTAL SPECIFIED EXPENSES				321.61	_____

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	25.0000	232.50	_____

TOTAL INCOME				232.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	47.16	1.0000	47.16	_____
INSECTICIDES	acre	37.28	1.0000	37.28	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	1.80	1.0000	1.80	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	14.23	0.2193	3.11	_____
UNALLOCATED LABOR	hour	14.26	0.1886	2.69	_____
DIESEL FUEL	gal	2.60	2.7503	7.15	_____
REPAIR & MAINTENANCE	acre	7.57	1.0000	7.57	_____
INTEREST ON OP. CAP.	acre	8.56	1.0000	8.56	_____

TOTAL DIRECT EXPENSES				294.95	_____
RETURNS ABOVE DIRECT EXPENSES				-62.45	_____
TOTAL FIXED EXPENSES				26.66	_____

TOTAL SPECIFIED EXPENSES				321.61	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-89.11	_____

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
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				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
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				
Prefix	pt					2.0000				
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				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	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					25.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.21	0.21	0.30	0.18

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Soybeans Consultant	acre	6.50						0.20	6.70		6.70
Plant & Pre-Folding	12R-30		2.04	2.35	2.40			0.17	6.96	6.93	13.89
Soybean Seed RR2	lb	67.00						1.67	68.67		68.67
CruiserMaxx	oz	6.85						0.17	7.02		7.02
Inoculant -Soybean	acre	1.55						0.04	1.59		1.59
Boundary	pt	22.42						0.56	22.98		22.98
Gramoxone SL 2.0	oz	7.20						0.18	7.38		7.38
Surfactant	pt	1.44						0.04	1.48		1.48
Spray (Broadcast)	60'		0.85	0.38	0.88			0.04	2.15	1.43	3.58
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
Prefix	pt	13.06						0.26	13.32		13.32
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Acephate 90SP	lb	5.94						0.09	6.03		6.03
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Prevathon	oz	18.48						0.28	18.76		18.76
Surfactant	pt	0.36						0.01	0.37		0.37
Bifenthrin	oz	4.86						0.07	4.93		4.93
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
Header -Soybean	25' Flex		3.62	4.50	2.70			0.05	10.87	17.00	27.87
Haul Soybeans	bu	6.75						0.03	6.78		6.78
Grain Cart Soybean	700 bu		0.64	0.34	0.56			0.01	1.55	1.30	2.85
TOTALS			265.13	7.15	7.57	6.54	0.00	8.56	294.95	26.66	321.61

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	232.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	6.50	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	29.62	17.54	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	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.36	0.00	0.00
CUSTOM FERTILIZE	7.50	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
CUSTOM LIME	12.65	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	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	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	0.00	2.40	0.88	0.00	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.85	0.85	0.00	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	2.35	0.38	0.38	0.00	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.20	2.83	0.39	0.65	0.15	0.09
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	6.70	116.08	20.04	43.29	14.65	19.20
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-6.70	-116.08	-20.04	-43.29	-14.65	213.30
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-81.69	-197.77	-217.81	-261.10	-275.75	-62.45

Note: Cost of production estimates are based on 2018 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 7.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, RR2, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE													
	75	80	85	90	95	100	105	110	115	120	125	9.30	9.30	9.30	9.76	10.23	10.69	11.16	11.62					
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62													
PERCENT	YIELD UNIT -----dollars-----																							
50	12.50	bu	-204	-198	-192	-186	-181	-175	-169	-163	-157	-152	-146	-231	-225	-219	-213	-207	-201	-196	-190	-184	-178	
60	15.00	bu	-187	-180	-173	-166	-159	-152	-145	-138	-131	-124	-117	-214	-207	-200	-193	-186	-179	-172	-165	-158	-151	-144
70	17.50	bu	-170	-162	-154	-146	-138	-130	-122	-113	-105	-97	-89	-197	-189	-181	-173	-164	-156	-148	-140	-132	-124	-116
80	20.00	bu	-154	-144	-135	-126	-116	-107	-98	-88	-79	-70	-61	-180	-171	-162	-152	-143	-134	-124	-115	-106	-97	-87
90	22.50	bu	-137	-126	-116	-105	-95	-85	-74	-64	-53	-43	-32	-163	-153	-143	-132	-122	-111	-101	-90	-80	-69	-59
100	25.00	bu	-120	-108	-97	-85	-74	-62	-50	-39	-27	-15	-4	-147	-135	-123	-112	-100	-89	-77	-65	-54	-42	-30
110	27.50	bu	-103	-91	-78	-65	-52	-39	-27	-14	-1	11	24	-130	-117	-104	-92	-79	-66	-53	-40	-28	-15	-2
120	30.00	bu	-87	-73	-59	-45	-31	-17	-3	10	24	38	52	-113	-99	-85	-71	-57	-43	-30	-16	-2	11	25
130	32.50	bu	-70	-55	-40	-24	-9	5	20	35	50	65	80	-96	-81	-66	-51	-36	-21	-6	8	23	39	54
140	35.00	bu	-53	-37	-20	-4	11	27	44	60	76	92	109	-80	-63	-47	-31	-15	1	17	33	50	66	82
150	37.50	bu	-36	-19	-1	15	32	50	67	85	102	120	137	-63	-46	-28	-11	6	23	41	58	76	93	110

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 2018 input prices.

Table 8.A Estimated costs per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	1.0000	3.59	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3302	4.69	_____
Harvesters	hour	14.23	0.0851	1.21	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	14.22	0.3738	5.32	_____
DIESEL FUEL					
Tractors	gal	2.60	3.8252	9.94	_____
Harvesters	gal	2.60	1.4243	3.70	_____
REPAIR & MAINTENANCE					
Implements	acre	4.94	1.0000	4.94	_____
Tractors	acre	1.97	1.0000	1.97	_____
Harvesters	acre	3.21	1.0000	3.21	_____
INTEREST ON OP. CAP.	acre	12.00	1.0000	12.00	_____
TOTAL DIRECT EXPENSES				367.86	_____
FIXED EXPENSES					
Implements	acre	11.12	1.0000	11.12	_____
Tractors	acre	13.61	1.0000	13.61	_____
Harvesters	acre	13.81	1.0000	13.81	_____
TOTAL FIXED EXPENSES				38.54	_____
TOTAL SPECIFIED EXPENSES				406.40	_____

Note: Cost of production estimates are based on 2018 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.B Summary of estimated costs and returns per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	42.0000	390.60	_____

TOTAL INCOME				390.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
HARVEST AIDS	acre	5.64	1.0000	5.64	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	96.35	1.0000	96.35	_____
INSECTICIDES	acre	13.94	1.0000	13.94	_____
SEED/PLANTS	acre	77.50	1.0000	77.50	_____
ADJUVANTS	acre	3.60	1.0000	3.60	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	14.23	0.4154	5.90	_____
UNALLOCATED LABOR	hour	14.22	0.3738	5.32	_____
DIESEL FUEL	gal	2.60	5.2496	13.64	_____
REPAIR & MAINTENANCE	acre	10.12	1.0000	10.12	_____
INTEREST ON OP. CAP.	acre	12.00	1.0000	12.00	_____

TOTAL DIRECT EXPENSES				367.86	_____
RETURNS ABOVE DIRECT EXPENSES				22.74	_____
TOTAL FIXED EXPENSES				38.54	_____

TOTAL SPECIFIED EXPENSES				406.40	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-15.80	_____

Note: Cost of production estimates are based on 2018 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.C Estimated resource use for field operations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

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	0.3330					
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03	
Lime (Spread)	ton			0.33	Oct	0.3330					
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 RR2X	lb					50.0000					
CruiserMaxx	oz					1.6000					
Inoculant -Soybean	acre					1.0000					
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					
Zidua	oz					1.5000					
App by Air (5 gal)	appl			1.00	Aug	1.0000					
Acephate 90SP	lb					0.7500					
Incidental Pest				1.00	Aug						
App by Air (5 gal)	appl					1.0000					
IncidentalPestTrt \$8	acre					1.0000					
App by Air (5 gal)	appl			1.00	Aug	1.0000					
Gramoxone SL	oz					16.0000					
Sodium Chlorate 5L	gal					0.6000					
Surfactant	pt					0.2000					
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07	
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								0.41	0.41	0.51	0.37

Note: Cost of production estimates are based on 2018 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, full-season, RR2X, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Subsoiler	3 shank		1.23	0.32	1.10			0.16	2.81	1.90	4.71
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Disk Harrow	24'		2.46	1.46	2.21			0.37	6.50	5.64	12.14
Field Cultivate Fld	24'		1.87	0.81	1.69			0.26	4.63	4.65	9.28
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Select Max	pt	12.71						0.51	13.22		13.22
Valor SX	oz	9.14						0.37	9.51		9.51
Surfactant	pt	1.44						0.06	1.50		1.50
Plant & Pre-Folding	12R-30		2.04	2.35	2.44			0.20	7.03	6.93	13.96
Soybean Seed RR2X	lb	77.50						2.32	79.82		79.82
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Inoculant -Soybean	acre	1.55						0.05	1.60		1.60
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Soybeans Consultant	acre	6.50						0.16	6.66		6.66
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Prefix	pt	13.06						0.33	13.39		13.39
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Zidua	oz	13.58						0.34	13.92		13.92
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Acephate 90SP	lb	5.94						0.06	6.00		6.00
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Sodium Chlorate 5L	gal	3.24						0.03	3.27		3.27
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	30' Flex		3.70	4.08	2.30			0.05	10.13	15.26	25.39
Haul Soybeans	bu	11.34						0.06	11.40		11.40
Grain Cart Soybean	700 bu		0.64	0.34	0.57			0.01	1.56	1.30	2.86
TOTALS		320.01	13.64	10.12	12.09	0.00	12.00	367.86	38.54	406.40	

Note: Cost of production estimates are based on 2018 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, full-season, RR2X, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	390.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	35.60	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	13.94	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.00	0.00	0.00	0.00	0.00	0.00	2.44	1.78	0.00	0.00	0.00	2.87
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	5.56	0.00	0.00	0.00	0.00	0.00	2.04	1.70	0.00	0.00	0.00	4.34
REPAIR & MAINTENANCE	2.59	0.00	0.00	0.00	0.00	0.00	2.35	0.76	0.00	0.00	0.00	4.42
INTEREST ON OP. CAP.	5.04	0.00	0.00	0.00	1.57	0.00	3.71	1.15	0.00	0.00	0.41	0.12
TOTAL DIRECT EXPENSES	88.93	0.00	0.00	0.00	40.64	0.00	127.50	47.49	0.00	0.00	40.21	23.09
NET INCOME	-88.93	0.00	0.00	0.00	-40.64	0.00	-127.50	-47.49	0.00	0.00	-40.21	367.51
NET INCOME TO DATE	-88.93	-88.93	-88.93	-88.93	-129.57	-129.57	-257.07	-304.56	-304.56	-304.56	-344.77	22.74

Note: Cost of production estimates are based on 2018 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 8.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE	UNIT	
	75	80	85	90	95	100	105	110	115	120			
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
	-----dollars-----												
50	21.00	bu	-215	-205	-196	-186	-176	-166	-157	-147	-137	-127	-118
			-254	-244	-234	-224	-215	-205	-195	-185	-176	-166	-156
60	25.20	bu	-187	-175	-164	-152	-140	-128	-117	-105	-93	-82	-70
			-226	-214	-202	-190	-179	-167	-155	-144	-132	-120	-108
70	29.40	bu	-159	-145	-132	-118	-104	-91	-77	-63	-50	-36	-22
			-197	-184	-170	-156	-143	-129	-115	-102	-88	-74	-61
80	33.60	bu	-131	-115	-99	-84	-68	-53	-37	-21	-6	9	25
			-169	-154	-138	-122	-107	-91	-76	-60	-44	-29	-13
90	37.80	bu	-103	-85	-67	-50	-32	-15	2	19	37	55	72
			-141	-124	-106	-88	-71	-53	-36	-18	-0	16	34
100	42.00	bu	-74	-55	-35	-16	3	22	42	61	81	100	120
			-113	-93	-74	-54	-35	-15	3	23	42	62	81
110	46.20	bu	-46	-25	-3	17	39	60	82	103	125	146	168
			-85	-63	-42	-20	0	22	43	65	86	108	129
120	50.40	bu	-18	4	28	51	75	98	122	145	168	192	215
			-57	-33	-10	13	36	60	83	106	130	153	177
130	54.60	bu	9	34	60	85	111	136	161	187	212	238	263
			-28	-3	21	47	72	97	123	148	174	199	224
140	58.80	bu	37	65	92	119	147	174	201	229	256	283	311
			-0	26	53	81	108	135	163	190	217	245	272
150	63.00	bu	65	95	124	153	183	212	241	270	300	329	358
			27	56	85	115	144	173	203	232	261	290	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 2018 input prices.

Table 9.A Estimated costs per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4713	6.70	_____
Harvesters	hour	14.23	0.0851	1.21	_____
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	14.22	0.4301	6.12	_____
DIESEL FUEL					
Tractors	gal	2.60	5.2753	13.70	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Roll-Out Pipe Irr.	gal	2.60	7.3316	19.05	_____
REPAIR & MAINTENANCE					
Implements	acre	5.60	1.0000	5.60	_____
Tractors	acre	2.74	1.0000	2.74	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	13.51	1.0000	13.51	_____
TOTAL DIRECT EXPENSES				445.83	_____
FIXED EXPENSES					
Implements	acre	13.59	1.0000	13.59	_____
Tractors	acre	18.92	1.0000	18.92	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Roll-Out Pipe Irr.	acre	61.50	1.0000	61.50	_____
TOTAL FIXED EXPENSES				107.82	_____
TOTAL SPECIFIED EXPENSES				553.65	_____

Note: Cost of production estimates are based on 2018 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 9.B Summary of estimated costs and returns per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	60.0000	558.00	_____

TOTAL INCOME				558.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	5.64	1.0000	5.64	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	26.10	1.0000	26.10	_____
HERBICIDES	acre	96.35	1.0000	96.35	_____
INSECTICIDES	acre	13.94	1.0000	13.94	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	77.50	1.0000	77.50	_____
ADJUVANTS	acre	3.96	1.0000	3.96	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	14.23	0.5564	7.91	_____
UNALLOCATED LABOR	hour	14.22	0.4301	6.12	_____
DIESEL FUEL	gal	2.60	14.0313	36.45	_____
REPAIR & MAINTENANCE	acre	18.44	1.0000	18.44	_____
INTEREST ON OP. CAP.	acre	13.51	1.0000	13.51	_____
TOTAL DIRECT EXPENSES				445.83	_____
RETURNS ABOVE DIRECT EXPENSES				112.17	_____
TOTAL FIXED EXPENSES				107.82	_____

TOTAL SPECIFIED EXPENSES				553.65	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				4.35	_____

Note: Cost of production estimates are based on 2018 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 9.C Estimated resource use for field operations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
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 RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
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				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
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							0.55	0.55	1.01	0.43

Note: Cost of production estimates are based on 2018 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 9.D Estimated costs for field operations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Subsoiler	3 shank		1.23	0.32	1.10			0.16	2.81	1.90	4.71
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Disk Harrow	24'		2.46	1.46	2.21			0.37	6.50	5.64	12.14
Field Cultivate Fld	24'		1.87	0.81	1.69			0.26	4.63	4.65	9.28
Bed/Lister-Roll-Fold	12R-30		1.88	0.83	1.69			0.26	4.66	3.91	8.57
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Select Max	pt	12.71						0.51	13.22		13.22
Valor SX	oz	9.14						0.37	9.51		9.51
Surfactant	pt	1.44						0.06	1.50		1.50
Plant & Pre-Folding	12R-30		2.04	2.35	2.44			0.20	7.03	6.93	13.96
Soybean Seed RR2X	lb	77.50						2.32	79.82		79.82
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Inoculant -Soybean	acre	1.55						0.05	1.60		1.60
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Soybeans Consultant	acre	6.50						0.16	6.66		6.66
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Prefix	pt	13.06						0.33	13.39		13.39
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Zidua	oz	13.58						0.34	13.92		13.92
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Quadris Top SBX	oz	19.25						0.29	19.54		19.54
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Acephate 90SP	lb	5.94						0.06	6.00		6.00
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Sodium Chlorate 5L	gal	3.24						0.03	3.27		3.27
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	30' Flex		3.70	4.08	2.30			0.05	10.13	15.26	25.39
Haul Soybeans	bu	16.20						0.08	16.28		16.28
Grain Cart Soybean	700 bu		0.64	0.34	0.57			0.01	1.56	1.30	2.86
Roll-Out Pipe Irr.	acre	8.25	20.93	7.49	4.42			0.83	41.92	65.37	107.29
TOTALS		359.23	36.45	18.44	18.20	0.00	13.51	445.83	107.82	553.65	

Note: Cost of production estimates are based on 2018 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 9.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	558.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	35.60	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	13.94	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	77.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.36	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.23	0.00	0.00	0.00	0.00	0.00	2.44	2.01	2.81	0.23	0.00	3.48
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	8.40	0.00	0.00	0.00	0.00	0.00	2.04	1.70	13.19	6.35	0.00	4.77
REPAIR & MAINTENANCE	3.74	0.00	0.00	0.00	0.00	0.00	2.35	0.76	5.73	1.31	0.00	4.55
INTEREST ON OP. CAP.	5.41	0.00	0.00	0.00	1.57	0.00	3.71	1.16	0.59	0.51	0.41	0.15
TOTAL DIRECT EXPENSES	95.52	0.00	0.00	0.00	40.64	0.00	127.50	47.73	30.57	34.51	40.21	29.15
NET INCOME	-95.52	0.00	0.00	0.00	-40.64	0.00	-127.50	-47.73	-30.57	-34.51	-40.21	528.85
NET INCOME TO DATE	-95.52	-95.52	-95.52	-95.52	-136.16	-136.16	-263.66	-311.39	-341.96	-376.47	-416.68	112.17

Note: Cost of production estimates are based on 2018 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 9.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

PRODUCT	-----PERCENT-----										-----PRODUCT PRICE-----													
	75	80	85	90	95	100	105	110	115	120	125	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
PERCENT	-----dollars-----																							
YIELD UNIT																								
50	30.00	bu	-228	-214	-200	-186	-172	-158	-144	-130	-116	-102	-88	-336	-322	-308	-294	-280	-266	-252	-238	-224	-210	-196
60	36.00	bu	-188	-171	-154	-137	-121	-104	-87	-71	-54	-37	-20	-296	-279	-262	-245	-229	-212	-195	-178	-162	-145	-128
70	42.00	bu	-147	-128	-108	-89	-69	-50	-30	-11	8	27	47	-255	-236	-216	-197	-177	-158	-138	-119	-99	-80	-60
80	48.00	bu	-107	-85	-63	-40	-18	3	26	48	70	93	115	-215	-193	-170	-148	-126	-103	-81	-59	-37	-14	7
90	54.00	bu	-67	-42	-17	7	32	57	83	108	133	158	183	-175	-150	-125	-100	-74	-49	-24	0	25	50	75
100	60.00	bu	-27	0	28	56	84	112	140	167	195	223	251	-135	-107	-79	-51	-23	4	32	60	88	115	143
110	66.00	bu	12	43	74	104	135	166	197	227	258	289	319	-94	-64	-33	-2	27	58	89	119	150	181	211
120	72.00	bu	53	86	120	153	187	220	253	287	320	354	387	-54	-21	12	45	79	112	146	179	213	246	280
130	78.00	bu	93	129	165	202	238	274	310	347	383	419	456	-14	21	58	94	130	166	203	239	275	311	348
140	84.00	bu	133	172	211	250	289	328	367	406	446	485	524	25	64	103	142	181	221	260	299	338	377	416
150	90.00	bu	173	215	257	299	341	383	424	466	508	550	592	65	107	149	191	233	275	317	358	400	442	484

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 2018 input prices.

Table 10.A Estimated costs per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
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	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4582	6.49	_____
Harvesters	hour	14.23	0.0851	1.21	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR					
	hour	14.22	0.3065	4.36	_____
DIESEL FUEL					
Tractors	gal	2.60	4.3236	11.27	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Contour Flood Irr.	gal	2.60	10.9974	28.59	_____
REPAIR & MAINTENANCE					
Implements	acre	4.85	1.0000	4.85	_____
Tractors	acre	2.35	1.0000	2.35	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Contour Flood Irr.	acre	13.80	1.0000	13.80	_____
INTEREST ON OP. CAP.	acre	12.85	1.0000	12.85	_____
TOTAL DIRECT EXPENSES				422.96	_____
FIXED EXPENSES					
Implements	acre	10.31	1.0000	10.31	_____
Tractors	acre	16.21	1.0000	16.21	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Contour Flood Irr.	acre	48.51	1.0000	48.51	_____
TOTAL FIXED EXPENSES				88.84	_____
TOTAL SPECIFIED EXPENSES				511.80	_____

Note: Cost of production estimates are based on 2018 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 10.B Summary of estimated costs and returns per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	53.0000	492.90	_____

TOTAL INCOME				492.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
HARVEST AIDS	acre	5.64	1.0000	5.64	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	26.10	1.0000	26.10	_____
HERBICIDES	acre	77.97	1.0000	77.97	_____
INSECTICIDES	acre	13.94	1.0000	13.94	_____
SEED/PLANTS	acre	77.50	1.0000	77.50	_____
ADJUVANTS	acre	3.96	1.0000	3.96	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1100	1.00	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	14.23	0.5433	7.70	_____
UNALLOCATED LABOR	hour	14.22	0.3065	4.36	_____
DIESEL FUEL	gal	2.60	16.7455	43.56	_____
REPAIR & MAINTENANCE	acre	24.21	1.0000	24.21	_____
INTEREST ON OP. CAP.	acre	12.85	1.0000	12.85	_____

TOTAL DIRECT EXPENSES				422.96	_____
RETURNS ABOVE DIRECT EXPENSES				69.94	_____

TOTAL FIXED EXPENSES				88.84	_____

TOTAL SPECIFIED EXPENSES				511.80	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-18.90	_____

Note: Cost of production estimates are based on 2018 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 10.C Estimated resource use for field operations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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	0.3330				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3330				
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				
Valor SX	oz					2.0000				
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 RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
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 SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct		0.08	0.08	0.08	0.07
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							0.54	0.54	0.96	0.30

Note: Cost of production estimates are based on 2018 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 10.D Estimated costs for field operations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Disk Harrow	24'		2.08	1.42	2.21			0.34	6.05	5.36	11.41
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Spray (Broadcast)	60'		0.85	0.38	0.89			0.10	2.22	1.43	3.65
Glyphosate 3lbs a.e	oz	4.48						0.20	4.68		4.68
Select Max	pt	12.71						0.57	13.28		13.28
Surfactant	pt	1.44						0.06	1.50		1.50
Valor SX	oz	9.14						0.41	9.55		9.55
Soybeans Consultant	acre	6.50						0.20	6.70		6.70
Plant & Pre-Folding	12R-30		1.72	2.32	2.44			0.19	6.67	6.70	13.37
Soybean Seed RR2X	lb	77.50						2.32	79.82		79.82
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Inoculant -Soybean	acre	1.55						0.05	1.60		1.60
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Spray (Broadcast)	60'		0.72	0.36	0.89			0.06	2.03	1.34	3.37
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Prefix	pt	13.06						0.39	13.45		13.45
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34	3.36
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
App by Air (5 gal)	appl	6.50						0.13	6.63		6.63
Quadris Top SBX	oz	19.25						0.39	19.64		19.64
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Acephate 90SP	lb	5.94						0.09	6.03		6.03
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Sodium Chlorate 5L	gal	3.24						0.03	3.27		3.27
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	30' Flex		3.70	4.08	2.30			0.05	10.13	15.26	25.39
Haul Soybeans	bu	14.31						0.07	14.38		14.38
Grain Cart Soybean	700 bu		0.54	0.33	0.57			0.01	1.45	1.22	2.67
Contour Flood Irr.	acre	2.25	33.23	14.96	5.69			1.15	57.28	56.19	113.47
TOTALS			326.46	43.56	24.21	15.88	0.00	12.85	422.96	88.84	511.80

Note: Cost of production estimates are based on 2018 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 10.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	492.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	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	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	19.25	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	26.33	0.00	0.00	47.16	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	5.94	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.44	0.00	0.00	1.44	0.00	0.36	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.21	0.00	0.00	0.89	0.00	0.00	3.78	2.73	1.61	1.61	0.18	2.87
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	2.08	0.00	0.00	0.85	0.00	0.00	2.44	11.95	10.86	10.86	0.28	4.24
REPAIR & MAINTENANCE	1.42	0.00	0.00	0.38	0.00	0.00	2.68	9.32	2.96	2.96	0.08	4.41
INTEREST ON OP. CAP.	4.59	0.00	0.00	1.34	0.00	0.00	4.49	0.77	0.83	0.41	0.29	0.13
TOTAL DIRECT EXPENSES	81.04	0.00	0.00	31.23	0.00	0.00	154.39	31.50	42.37	28.28	28.19	25.96
NET INCOME	-81.04	0.00	0.00	-31.23	0.00	0.00	-154.39	-31.50	-42.37	-28.28	-28.19	466.94
NET INCOME TO DATE	-81.04	-81.04	-81.04	-112.27	-112.27	-112.27	-266.66	-298.16	-340.53	-368.81	-397.00	69.94

Note: Cost of production estimates are based on 2018 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 10.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE	YIELD UNIT	
	75	80	85	90	95	100	105	110	115	120			
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
50	26.50	bu	-230	-218	-206	-193	-181	-169	-156	-144	-132	-120	-107
			-319	-307	-295	-282	-270	-258	-245	-233	-221	-208	-196
60	31.80	bu	-195	-180	-165	-151	-136	-121	-106	-91	-77	-62	-47
			-284	-269	-254	-239	-225	-210	-195	-180	-165	-151	-136
70	37.10	bu	-159	-142	-125	-108	-90	-73	-56	-39	-21	-4	12
			-248	-231	-214	-196	-179	-162	-145	-127	-110	-93	-76
80	42.40	bu	-124	-104	-84	-65	-45	-25	-6	13	33	53	72
			-213	-193	-173	-154	-134	-114	-94	-75	-55	-35	-16
90	47.70	bu	-88	-66	-44	-22	-0	22	44	66	88	110	132
			-177	-155	-133	-111	-88	-66	-44	-22	-0	21	44
100	53.00	bu	-53	-28	-3	20	45	69	94	119	143	168	193
			-142	-117	-92	-68	-43	-18	5	30	55	79	104
110	58.30	bu	-17	9	36	63	90	117	144	172	199	226	253
			-106	-79	-52	-25	1	28	56	83	110	137	164
120	63.60	bu	17	47	76	106	136	165	195	224	254	283	313
			-71	-41	-11	17	47	76	106	135	165	195	224
130	68.90	bu	53	85	117	149	181	213	245	277	309	341	373
			-35	-3	28	60	92	124	156	188	220	252	284
140	74.20	bu	88	123	157	192	226	261	295	330	364	399	433
			-0	34	68	103	138	172	207	241	276	310	345
150	79.50	bu	124	161	198	235	272	309	346	383	420	457	494
			35	72	109	146	183	220	257	294	331	368	405

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 2018 input prices.

Table 11.A Estimated costs per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	0.6000	2.15	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
1/2-mi Pivot Irr.	gal	2.60	16.4057	42.66	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
1/2-mi Pivot Irr.	acre	11.57	1.0000	11.57	_____
INTEREST ON OP. CAP.	acre	10.42	1.0000	10.42	_____
TOTAL DIRECT EXPENSES				394.87	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
1/2-mi Pivot Irr.	acre	47.36	1.0000	47.36	_____
TOTAL FIXED EXPENSES				74.02	_____
TOTAL SPECIFIED EXPENSES				468.89	_____

Note: Cost of production estimates are based on 2018 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 11.B Summary of estimated costs and returns per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	50.0000	465.00	_____

TOTAL INCOME				465.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	26.10	1.0000	26.10	_____
HERBICIDES	acre	47.16	1.0000	47.16	_____
INSECTICIDES	acre	37.28	1.0000	37.28	_____
SEED/PLANTS	acre	77.50	1.0000	77.50	_____
ADJUVANTS	acre	2.16	1.0000	2.16	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	14.23	0.2193	3.11	_____
UNALLOCATED LABOR	hour	14.26	0.1886	2.69	_____
DIESEL FUEL	gal	2.60	19.1560	49.81	_____
REPAIR & MAINTENANCE	acre	19.14	1.0000	19.14	_____
INTEREST ON OP. CAP.	acre	10.42	1.0000	10.42	_____

TOTAL DIRECT EXPENSES				394.87	_____
RETURNS ABOVE DIRECT EXPENSES				70.13	_____
TOTAL FIXED EXPENSES				74.02	_____

TOTAL SPECIFIED EXPENSES				468.89	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-3.89	_____

Note: Cost of production estimates are based on 2018 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 11.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
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 RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
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				
Prefix	pt					2.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Quadris Top SBX	oz					7.0000				
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				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	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							0.21	0.21	0.35	0.18

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	12.65						0.76	13.41	13.41
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90	21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20	28.20
Soybeans Consultant	acre	6.50						0.20	6.70	6.70
Plant & Pre-Folding	12R-30		2.04	2.35	2.40			0.17	6.96	6.93
Soybean Seed RR2X	lb	77.50						1.94	79.44	79.44
CruiserMaxx	oz	6.85						0.17	7.02	7.02
Inoculant -Soybean	acre	1.55						0.04	1.59	1.59
Boundary	pt	22.42						0.56	22.98	22.98
Gramoxone SL 2.0	oz	7.20						0.18	7.38	7.38
Surfactant	pt	1.44						0.04	1.48	1.48
Spray (Broadcast)	60'		0.85	0.38	0.88			0.04	2.15	1.43
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
Prefix	pt	13.06						0.26	13.32	13.32
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Quadris Top SBX	oz	19.25						0.29	19.54	19.54
Surfactant	pt	0.36						0.01	0.37	0.37
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Acephate 90SP	lb	5.94						0.09	6.03	6.03
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Prevathon	oz	18.48						0.28	18.76	18.76
Surfactant	pt	0.36						0.01	0.37	0.37
Bifenthrin	oz	4.86						0.07	4.93	4.93
Incidental Pest										
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08	8.08
Header -Soybean	25' Flex		3.62	4.50	2.70			0.05	10.87	17.00
Haul Soybeans	bu	13.50						0.07	13.57	13.57
Grain Cart Soybean	700 bu		0.64	0.34	0.56			0.01	1.55	1.30
1/2-mi Pivot Irr.	acre		42.66	11.57	0.47			1.15	55.85	47.36
TOTALS		308.49	49.81	19.14	7.01	0.00	10.42	394.87	74.02	468.89

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	465.00
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	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.62	17.54	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	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.72	0.00	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	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	2.44	0.93	0.04	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.84	17.91	12.80	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.63	1.12	0.55	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.21	3.68	0.75	1.25	0.15	0.13
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	7.05	150.55	38.25	83.39	14.65	25.99
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-7.05	-150.55	-38.25	-83.39	-14.65	439.01
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-82.04	-232.59	-270.84	-354.23	-368.88	70.13

Note: Cost of production estimates are based on 2018 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 11.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE	YIELD UNIT	
	75	80	85	90	95	100	105	110	115	120			
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
50	25.00	bu	-213	-202	-190	-178	-167	-155	-143	-132	-120	-109	-97
			-287	-276	-264	-252	-241	-229	-217	-206	-194	-183	-171
60	30.00	bu	-180	-166	-152	-138	-124	-110	-96	-82	-68	-54	-40
			-254	-240	-226	-212	-198	-184	-170	-156	-142	-128	-114
70	35.00	bu	-146	-130	-114	-97	-81	-65	-49	-32	-16	-0	16
			-220	-204	-188	-171	-155	-139	-123	-106	-90	-74	-57
80	40.00	bu	-113	-94	-75	-57	-38	-20	-1	17	35	54	72
			-187	-168	-149	-131	-112	-94	-75	-56	-38	-19	-1
90	45.00	bu	-79	-58	-37	-16	4	24	45	66	87	108	129
			-153	-132	-111	-90	-69	-49	-28	-7	13	34	55
100	50.00	bu	-46	-22	0	23	46	70	93	116	139	163	186
			-120	-96	-73	-50	-27	-3	19	42	65	89	112
110	55.00	bu	-12	12	38	64	89	115	140	166	191	217	243
			-86	-61	-35	-9	15	41	66	92	117	143	169
120	60.00	bu	20	48	76	104	132	160	188	216	244	272	299
			-53	-25	2	30	58	86	114	142	170	197	225
130	65.00	bu	54	84	114	145	175	205	235	266	296	326	356
			-19	10	40	71	101	131	161	191	222	252	282
140	70.00	bu	87	120	153	185	218	250	283	315	348	380	413
			13	46	79	111	144	176	209	241	274	306	339
150	75.00	bu	121	156	191	226	260	295	330	365	400	435	470
			47	82	117	152	186	221	256	291	326	361	396

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 2018 input prices.

Table 12.A Estimated costs per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.6600	15.68	_____
Potash (60% K2O)	cwt	20.00	1.0000	20.00	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	0.6000	2.15	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	43.0000	11.61	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3128	4.44	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	_____
UNALLOCATED LABOR					
	hour	14.24	0.3734	5.32	_____
DIESEL FUEL					
Tractors	gal	2.60	3.0592	7.96	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	4.75	1.0000	4.75	_____
Tractors	acre	1.70	1.0000	1.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	9.43	1.0000	9.43	_____
TOTAL DIRECT EXPENSES				289.28	_____
FIXED EXPENSES					
Implements	acre	10.48	1.0000	10.48	_____
Tractors	acre	11.82	1.0000	11.82	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				37.82	_____
TOTAL SPECIFIED EXPENSES				327.10	_____

Note: Cost of production estimates are based on 2018 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 12.B Summary of estimated costs and returns per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	43.0000	399.90	_____

TOTAL INCOME				399.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.00	1.0000	13.00	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	35.68	1.0000	35.68	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	60.92	1.0000	60.92	_____
INSECTICIDES	acre	5.94	1.0000	5.94	_____
SEED/PLANTS	acre	77.50	1.0000	77.50	_____
ADJUVANTS	acre	2.16	1.0000	2.16	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1051	0.96	_____
OPERATOR LABOR	hour	14.23	0.4149	5.89	_____
UNALLOCATED LABOR	hour	14.24	0.3734	5.32	_____
DIESEL FUEL	gal	2.60	4.4528	11.58	_____
REPAIR & MAINTENANCE	acre	10.06	1.0000	10.06	_____
INTEREST ON OP. CAP.	acre	9.43	1.0000	9.43	_____

TOTAL DIRECT EXPENSES				289.28	_____
RETURNS ABOVE DIRECT EXPENSES				110.62	_____
TOTAL FIXED EXPENSES				37.82	_____

TOTAL SPECIFIED EXPENSES				327.10	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				72.80	_____

Note: Cost of production estimates are based on 2018 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 12.C Estimated resource use for field operations, per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Oct	0.3330				
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 RR2X	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				
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
Glyphosate 3lbs a.e	oz					32.0000				
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				
Gramoxone SL	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 2018 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 12.D Estimated costs for field operations, per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	12.65						0.76	13.41	13.41
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Phosphorus (46% P2O5)	cwt	15.68						0.94	16.62	16.62
Potash (60% K2O)	cwt	20.00						1.20	21.20	21.20
Disk Harrow	24'		2.08	1.42	2.21			0.34	6.05	5.36
Field Cultivate Fld	24'		1.58	0.78	1.69			0.24	4.29	4.43
App by Air (5 gal)	appl	6.50						0.23	6.73	6.73
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64	4.64
2,4-D Amine 4	pt	4.80						0.17	4.97	4.97
Plant - Folding	12R-30		1.60	1.95	2.27			0.17	5.99	5.79
Soybean Seed RR2X	lb	77.50						2.32	79.82	79.82
CruiserMaxx	oz	6.85						0.21	7.06	7.06
Boundary	pt	22.42						0.67	23.09	23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Surfactant	pt	1.44						0.04	1.48	1.48
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Prefix	pt	13.06						0.33	13.39	13.39
Soybeans Consultant	acre	6.50						0.16	6.66	6.66
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Spray (Broadcast)	60'		0.72	0.36	0.89			0.02	1.99	1.34
Acephate 90SP	lb	5.94						0.06	6.00	6.00
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Gramoxone SL	oz	2.40						0.02	2.42	2.42
Surfactant	pt	0.72						0.01	0.73	0.73
Header -Soybean	25' Flex		3.62	4.50	2.76			0.05	10.93	17.00
Haul Soybeans	bu	11.61						0.06	11.67	11.67
Grain Cart Soybean	700 bu		0.54	0.33	0.57			0.01	1.45	1.22
TOTALS		246.04	11.58	10.06	12.17	0.00	9.43	289.28	37.82	327.10

Note: Cost of production estimates are based on 2018 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 12.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	399.90
-----dollars-----												
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	2.40	0.00
FERTILIZERS	35.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.28	29.62	22.02	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	5.94	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.90	0.00	0.00	0.00	0.00	0.00	2.27	1.78	0.00	0.00	0.89	3.33
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	3.66	0.00	0.00	0.00	0.00	0.00	1.60	1.44	0.00	0.00	0.72	4.16
REPAIR & MAINTENANCE	2.20	0.00	0.00	0.00	0.00	0.00	1.95	0.72	0.00	0.00	0.36	4.83
INTEREST ON OP. CAP.	4.13	0.00	0.00	0.00	0.00	0.56	3.63	0.81	0.00	0.00	0.18	0.12
TOTAL DIRECT EXPENSES	73.05	0.00	0.00	0.00	0.00	16.34	124.86	33.27	0.00	0.00	17.71	24.05
NET INCOME	-73.05	0.00	0.00	0.00	0.00	-16.34	-124.86	-33.27	0.00	0.00	-17.71	375.85
NET INCOME TO DATE	-73.05	-73.05	-73.05	-73.05	-73.05	-89.39	-214.25	-247.52	-247.52	-247.52	-265.23	110.62

Note: Cost of production estimates are based on 2018 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 12.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE	PERCENT	
	75	80	85	90	95	100	105	110	115	120			
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
PERCENT	YIELD UNIT dollars												
50	21.50	bu	-133	-123	-113	-103	-93	-83	-73	-63	-53	-43	-33
			-171	-161	-151	-141	-131	-121	-111	-101	-91	-81	-71
60	25.80	bu	-104	-92	-80	-68	-56	-44	-32	-20	-8	3	15
			-142	-130	-118	-106	-94	-82	-70	-58	-46	-34	-22
70	30.10	bu	-75	-61	-47	-33	-19	-5	8	22	36	50	64
			-113	-99	-85	-71	-57	-43	-29	-15	-1	12	26
80	34.40	bu	-47	-31	-15	0	16	32	48	64	80	96	112
			-84	-68	-52	-36	-20	-4	11	27	43	59	75
90	38.70	bu	-18	-0	17	35	53	71	89	107	125	143	161
			-56	-38	-20	-2	15	33	51	69	87	105	123
100	43.00	bu	10	30	50	70	90	110	130	150	170	190	210
			-27	-7	12	32	52	72	92	112	132	152	172
110	47.30	bu	39	61	83	105	127	149	171	193	215	237	259
			1	23	45	67	89	111	133	155	177	199	221
120	51.60	bu	68	92	116	140	164	188	212	236	260	284	308
			30	54	78	102	126	150	174	198	222	246	270
130	55.90	bu	97	123	149	175	201	227	253	279	305	331	357
			59	85	111	137	163	189	215	241	267	293	319
140	60.20	bu	125	153	181	209	237	265	293	321	349	377	405
			88	116	144	172	200	228	256	284	312	340	368
150	64.50	bu	154	184	214	244	274	304	334	364	394	424	454
			116	146	176	206	236	266	296	326	356	386	416

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 2018 input prices.

Table 13.A Estimated costs per acre
 Soybeans, full-season, RR2X, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.6600	15.68	_____
Potash (60% K2O)	cwt	20.00	1.0000	20.00	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	12.71	1.0000	12.71	_____
Fierce	oz	7.54	3.5000	26.39	_____
Gramoxone SL 2.0	oz	0.15	96.0000	14.40	_____
Boundary	pt	11.21	2.0000	22.42	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Dimilin 2L	oz	2.13	1.0000	2.13	_____
Baythroid XL	oz	2.65	1.0650	2.82	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	1.4500	5.21	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	40.0000	10.80	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4365	6.20	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.1382	1.25	_____
UNALLOCATED LABOR	hour	14.23	0.4848	6.90	_____
DIESEL FUEL					
Tractors	gal	2.60	4.3820	11.40	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	5.96	1.0000	5.96	_____
Tractors	acre	2.41	1.0000	2.41	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	8.78	1.0000	8.78	_____
TOTAL DIRECT EXPENSES				333.88	_____
FIXED EXPENSES					
Implements	acre	13.08	1.0000	13.08	_____
Tractors	acre	16.72	1.0000	16.72	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				45.32	_____
TOTAL SPECIFIED EXPENSES				379.20	_____

Note: Cost of production estimates are based on 2018 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 13.B Summary of estimated costs and returns per acre
 Soybeans, full-season, RR2X, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	40.0000	372.00	_____

TOTAL INCOME				372.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	35.68	1.0000	35.68	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	102.42	1.0000	102.42	_____
INSECTICIDES	acre	4.95	1.0000	4.95	_____
SEED/PLANTS	acre	77.50	1.0000	77.50	_____
ADJUVANTS	acre	5.22	1.0000	5.22	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1382	1.25	_____
OPERATOR LABOR	hour	14.23	0.5387	7.65	_____
UNALLOCATED LABOR	hour	14.23	0.4848	6.90	_____
DIESEL FUEL	gal	2.60	5.7756	15.02	_____
REPAIR & MAINTENANCE	acre	11.98	1.0000	11.98	_____
INTEREST ON OP. CAP.	acre	8.78	1.0000	8.78	_____

TOTAL DIRECT EXPENSES				333.88	_____
RETURNS ABOVE DIRECT EXPENSES				38.12	_____
TOTAL FIXED EXPENSES				45.32	_____

TOTAL SPECIFIED EXPENSES				379.20	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-7.20	_____

Note: Cost of production estimates are based on 2018 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 13.C Estimated resource use for field operations, per acre
 Soybeans, full-season, RR2X, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Oct	0.3330				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fold	12R-30	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
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 RR2X	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	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				
Gramoxone SL	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							0.53	0.53	0.67	0.48

Note: Cost of production estimates are based on 2018 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 13.D Estimated costs for field operations, per acre
 Soybeans, full-season, RR2X, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.02	3.35		3.35
Lime (Spread)	ton	12.65						0.06	12.71		12.71
Disk Harrow	24'		2.08	1.42	2.21			0.03	5.74	5.36	11.10
Field Cultivate Fld	24'		1.58	0.78	1.69			0.02	4.07	4.43	8.50
Bed/Lister-Roll-Fold	12R-30		1.88	0.83	1.69			0.02	4.42	3.91	8.33
Spray (Broadcast)	60'		0.72	0.36	0.89			0.09	2.06	1.34	3.40
Glyphosate 3lbs a.e	oz	4.48						0.20	4.68		4.68
Select Max	pt	12.71						0.57	13.28		13.28
Surfactant	pt	1.44						0.06	1.50		1.50
Custom Apply Fert	acre	7.50						0.26	7.76		7.76
Phosphorus (46% P2O5)	cwt	15.68						0.55	16.23		16.23
Potash (60% K2O)	cwt	20.00						0.70	20.70		20.70
Spray (Broadcast)	60'		0.72	0.36	0.89			0.07	2.04	1.34	3.38
Fierce	oz	26.39						0.92	27.31		27.31
Gramoxone SL 2.0	oz	7.20						0.25	7.45		7.45
Surfactant	pt	1.44						0.05	1.49		1.49
Soybeans Consultant	acre	6.50						0.20	6.70		6.70
Plant & Pre-Folding	12R-30		1.72	2.32	2.44			0.19	6.67	6.70	13.37
Soybean Seed RR2X	lb	77.50						2.32	79.82		79.82
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Spray (Broadcast)	60'		0.72	0.36	0.89			0.06	2.03	1.34	3.37
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Prefix	pt	13.06						0.39	13.45		13.45
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34	3.36
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Spray (Broadcast)	60'		0.36	0.18	0.44			0.02	1.00	0.67	1.67
Dimilin 2L	oz	2.13						0.04	2.17		2.17
Surfactant	pt	0.18							0.18		0.18
Spray (Broadcast)	60'		0.36	0.18	0.44			0.01	0.99	0.67	1.66
Baythroid XL	oz	2.82						0.04	2.86		2.86
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	25' Flex		3.62	4.50	2.76			0.05	10.93	17.00	27.93
Haul Soybeans	bu	10.80						0.05	10.85		10.85
Grain Cart Soybean	700 bu		0.54	0.33	0.57			0.01	1.45	1.22	2.67
TOTALS		282.30	15.02	11.98	15.80	0.00	8.78	333.88	45.32	379.20	

Note: Cost of production estimates are based on 2018 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 13.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	372.00
-----dollars-----												
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	2.40	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	35.68	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	17.19	0.00	33.59	47.16	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	2.13	2.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.44	0.00	1.44	1.44	0.00	0.18	0.00	0.72	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	7.50	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.65
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
LABOR	0.00	0.00	0.00	0.89	0.00	0.89	3.33	0.89	0.44	0.44	0.00	8.92
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	0.72	0.00	0.72	2.44	0.72	0.36	0.36	0.00	9.70
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.36	0.00	0.36	2.68	0.36	0.18	0.18	0.00	7.86
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.92	0.00	2.80	4.43	0.16	0.06	0.05	0.10	0.26
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	21.52	0.00	82.98	152.33	6.61	3.35	3.85	9.72	53.52
NET INCOME	0.00	0.00	0.00	-21.52	0.00	-82.98	-152.33	-6.61	-3.35	-3.85	-9.72	318.48
NET INCOME TO DATE	0.00	0.00	0.00	-21.52	-21.52	-104.50	-256.83	-263.44	-266.79	-270.64	-280.36	38.12

Note: Cost of production estimates are based on 2018 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 13.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE	YIELD UNIT	
	75	80	85	90	95	100	105	110	115	120			
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
												dollars	
50	20.00	bu	-188	-179	-170	-161	-151	-142	-133	-123	-114	-105	-95
			-234	-224	-215	-206	-197	-187	-178	-169	-159	-150	-141
60	24.00	bu	-162	-150	-139	-128	-117	-106	-95	-84	-72	-61	-50
			-207	-196	-185	-173	-162	-151	-140	-129	-118	-107	-95
70	28.00	bu	-135	-122	-109	-96	-83	-70	-57	-44	-31	-18	-5
			-180	-167	-154	-141	-128	-115	-102	-89	-76	-63	-50
80	32.00	bu	-108	-93	-78	-63	-48	-34	-19	-4	10	25	40
			-153	-138	-124	-109	-94	-79	-64	-49	-34	-19	-5
90	36.00	bu	-81	-64	-48	-31	-14	2	18	35	52	68	85
			-127	-110	-93	-76	-60	-43	-26	-9	6	23	40
100	40.00	bu	-54	-36	-17	0	19	38	56	75	93	112	131
			-100	-81	-63	-44	-25	-7	11	30	48	67	85
110	44.00	bu	-28	-7	12	33	53	74	94	115	135	156	176
			-73	-52	-32	-12	8	28	49	69	90	110	131
120	48.00	bu	-1	21	43	65	88	110	132	154	177	199	221
			-46	-24	-1	20	42	65	87	109	131	154	176
130	52.00	bu	25	49	73	98	122	146	170	194	219	243	267
			-19	4	28	52	76	101	125	149	173	197	222
140	56.00	bu	52	78	104	130	156	182	208	234	260	286	312
			7	33	59	85	111	137	163	189	215	241	267
150	60.00	bu	79	107	134	162	190	218	246	274	302	330	358
			33	61	89	117	145	173	201	229	257	284	312

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2018 input prices.

Table 14.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

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	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	0.5000	1.80	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	8.83	1.0000	8.83	_____
TOTAL DIRECT EXPENSES				305.72	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				26.66	_____
TOTAL SPECIFIED EXPENSES				332.38	_____

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	25.0000	232.50	_____

TOTAL INCOME				232.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	47.16	1.0000	47.16	_____
INSECTICIDES	acre	37.28	1.0000	37.28	_____
SEED/PLANTS	acre	77.50	1.0000	77.50	_____
ADJUVANTS	acre	1.80	1.0000	1.80	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	14.23	0.2193	3.11	_____
UNALLOCATED LABOR	hour	14.26	0.1886	2.69	_____
DIESEL FUEL	gal	2.60	2.7503	7.15	_____
REPAIR & MAINTENANCE	acre	7.57	1.0000	7.57	_____
INTEREST ON OP. CAP.	acre	8.83	1.0000	8.83	_____

TOTAL DIRECT EXPENSES				305.72	_____
RETURNS ABOVE DIRECT EXPENSES				-73.22	_____
TOTAL FIXED EXPENSES				26.66	_____

TOTAL SPECIFIED EXPENSES				332.38	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-99.88	_____

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2X, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
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 RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
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				
Prefix	pt					2.0000				
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				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	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					25.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.21	0.21	0.30	0.18

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2X, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Soybeans Consultant	acre	6.50						0.20	6.70		6.70
Plant & Pre-Folding	12R-30		2.04	2.35	2.40			0.17	6.96	6.93	13.89
Soybean Seed RR2X	lb	77.50						1.94	79.44		79.44
CruiserMaxx	oz	6.85						0.17	7.02		7.02
Inoculant -Soybean	acre	1.55						0.04	1.59		1.59
Boundary	pt	22.42						0.56	22.98		22.98
Gramoxone SL 2.0	oz	7.20						0.18	7.38		7.38
Surfactant	pt	1.44						0.04	1.48		1.48
Spray (Broadcast)	60'		0.85	0.38	0.88			0.04	2.15	1.43	3.58
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
Prefix	pt	13.06						0.26	13.32		13.32
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Acephate 90SP	lb	5.94						0.09	6.03		6.03
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Prevathon	oz	18.48						0.28	18.76		18.76
Surfactant	pt	0.36						0.01	0.37		0.37
Bifenthrin	oz	4.86						0.07	4.93		4.93
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
Header -Soybean	25' Flex		3.62	4.50	2.70			0.05	10.87	17.00	27.87
Haul Soybeans	bu	6.75						0.03	6.78		6.78
Grain Cart Soybean	700 bu		0.64	0.34	0.56			0.01	1.55	1.30	2.85
TOTALS			275.63	7.15	7.57	6.54	0.00	8.83	305.72	26.66	332.38

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2X, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	232.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	6.50	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.62	17.54	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	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.36	0.00	0.00
CUSTOM FERTILIZE	7.50	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
CUSTOM LIME	12.65	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	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	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	0.00	2.40	0.88	0.00	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.85	0.00	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35	0.38	0.00	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.20	3.10	0.39	0.65	0.15	0.09
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	6.70	126.85	20.04	43.29	14.65	19.20
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-6.70	-126.85	-20.04	-43.29	-14.65	213.30
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-81.69	-208.54	-228.58	-271.87	-286.52	-73.22

Note: Cost of production estimates are based on 2018 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, double crop after wheat, RR2X, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE	UNIT	
	75	80	85	90	95	100	105	110	115	120			
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
	dollars												
50	12.50	bu	-215	-209	-203	-197	-191	-186	-180	-174	-168	-162	-157
			-241	-235	-230	-224	-218	-212	-206	-201	-195	-189	-183
60	15.00	bu	-198	-191	-184	-177	-170	-163	-156	-149	-142	-135	-128
			-225	-218	-211	-204	-197	-190	-183	-176	-169	-162	-155
70	17.50	bu	-181	-173	-165	-157	-149	-140	-132	-124	-116	-108	-100
			-208	-200	-192	-183	-175	-167	-159	-151	-143	-135	-126
80	20.00	bu	-164	-155	-146	-136	-127	-118	-109	-99	-90	-81	-71
			-191	-182	-172	-163	-154	-145	-135	-126	-117	-107	-98
90	22.50	bu	-148	-137	-127	-116	-106	-95	-85	-74	-64	-53	-43
			-174	-164	-153	-143	-132	-122	-111	-101	-91	-80	-70
100	25.00	bu	-131	-119	-108	-96	-84	-73	-61	-49	-38	-26	-15
			-158	-146	-134	-123	-111	-99	-88	-76	-65	-53	-41
110	27.50	bu	-114	-101	-89	-76	-63	-50	-37	-25	-12	0	13
			-141	-128	-115	-102	-90	-77	-64	-51	-38	-26	-13
120	30.00	bu	-97	-83	-69	-55	-42	-28	-14	-0	13	27	41
			-124	-110	-96	-82	-68	-54	-40	-26	-12	1	15
130	32.50	bu	-81	-65	-50	-35	-20	-5	9	24	39	54	70
			-107	-92	-77	-62	-47	-32	-17	-1	13	28	43
140	35.00	bu	-64	-48	-31	-15	0	17	33	49	65	82	98
			-90	-74	-58	-42	-25	-9	6	22	39	55	71
150	37.50	bu	-47	-30	-12	4	22	39	57	74	91	109	126
			-74	-56	-39	-21	-4	12	30	47	65	82	100

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 2018 input prices.

Table 15.A Estimated costs per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.0000	3.59	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3302	4.69	_____
Harvesters	hour	14.23	0.0851	1.21	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	14.22	0.3738	5.32	_____
DIESEL FUEL					
Tractors	gal	2.60	3.8252	9.94	_____
Harvesters	gal	2.60	1.4243	3.70	_____
REPAIR & MAINTENANCE					
Implements	acre	4.94	1.0000	4.94	_____
Tractors	acre	1.97	1.0000	1.97	_____
Harvesters	acre	3.21	1.0000	3.21	_____
INTEREST ON OP. CAP.	acre	12.47	1.0000	12.47	_____
TOTAL DIRECT EXPENSES				387.84	_____
FIXED EXPENSES					
Implements	acre	11.12	1.0000	11.12	_____
Tractors	acre	13.61	1.0000	13.61	_____
Harvesters	acre	13.81	1.0000	13.81	_____
TOTAL FIXED EXPENSES				38.54	_____
TOTAL SPECIFIED EXPENSES				426.38	_____

Note: Cost of production estimates are based on 2018 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, full-season, LL, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	42.0000	390.60	_____

TOTAL INCOME				390.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
HARVEST AIDS	acre	5.64	1.0000	5.64	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	122.36	1.0000	122.36	_____
INSECTICIDES	acre	13.94	1.0000	13.94	_____
SEED/PLANTS	acre	71.00	1.0000	71.00	_____
ADJUVANTS	acre	3.60	1.0000	3.60	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	14.23	0.4154	5.90	_____
UNALLOCATED LABOR	hour	14.22	0.3738	5.32	_____
DIESEL FUEL	gal	2.60	5.2496	13.64	_____
REPAIR & MAINTENANCE	acre	10.12	1.0000	10.12	_____
INTEREST ON OP. CAP.	acre	12.47	1.0000	12.47	_____

TOTAL DIRECT EXPENSES				387.84	_____
RETURNS ABOVE DIRECT EXPENSES				2.76	_____
TOTAL FIXED EXPENSES				38.54	_____

TOTAL SPECIFIED EXPENSES				426.38	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-35.78	_____

Note: Cost of production estimates are based on 2018 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, full-season, LL, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

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	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
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				
Inoculant -Soybean	acre					1.0000				
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				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
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							0.41	0.41	0.51	0.37

Note: Cost of production estimates are based on 2018 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, full-season, LL, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Subsoiler	3 shank		1.23	0.32	1.10			0.16	2.81	1.90	4.71
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Disk Harrow	24'		2.46	1.46	2.21			0.37	6.50	5.64	12.14
Field Cultivate Fld	24'		1.87	0.81	1.69			0.26	4.63	4.65	9.28
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Select Max	pt	12.71						0.51	13.22		13.22
Valor SX	oz	9.14						0.37	9.51		9.51
Surfactant	pt	1.44						0.06	1.50		1.50
Plant & Pre-Folding	12R-30		2.04	2.35	2.44			0.20	7.03	6.93	13.96
Soybean Seed LL	lb	71.00						2.13	73.13		73.13
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Inoculant -Soybean	acre	1.55						0.05	1.60		1.60
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Soybeans Consultant	acre	6.50						0.16	6.66		6.66
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Liberty 280	oz	17.11						0.43	17.54		17.54
Dual Magnum	pt	13.81						0.35	14.16		14.16
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Liberty 280	oz	17.11						0.43	17.54		17.54
Zidua	oz	13.58						0.34	13.92		13.92
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Acephate 90SP	lb	5.94						0.06	6.00		6.00
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Sodium Chlorate 5L	gal	3.24						0.03	3.27		3.27
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	30' Flex		3.70	4.08	2.30			0.05	10.13	15.26	25.39
Haul Soybeans	bu	11.34						0.06	11.40		11.40
Grain Cart Soybean	700 bu		0.64	0.34	0.57			0.01	1.56	1.30	2.86
TOTALS		339.52	13.64	10.12	12.09	0.00	12.47	387.84	38.54	426.38	

Note: Cost of production estimates are based on 2018 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, full-season, IL, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

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	390.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	31.13	0.00	0.00	29.62	61.61	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	13.94	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.00	0.00	0.00	0.00	0.00	0.00	2.44	1.78	0.00	0.00	0.00	2.87
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	5.56	0.00	0.00	0.00	0.00	0.00	2.04	1.70	0.00	0.00	0.00	4.34
REPAIR & MAINTENANCE	2.59	0.00	0.00	0.00	0.00	0.00	2.35	0.76	0.00	0.00	0.00	4.42
INTEREST ON OP. CAP.	5.04	0.00	0.00	0.00	1.57	0.00	3.52	1.81	0.00	0.00	0.41	0.12

TOTAL DIRECT EXPENSES	88.93	0.00	0.00	0.00	40.64	0.00	120.81	74.16	0.00	0.00	40.21	23.09
NET INCOME	-88.93	0.00	0.00	0.00	-40.64	0.00	-120.81	-74.16	0.00	0.00	-40.21	367.51
NET INCOME TO DATE	-88.93	-88.93	-88.93	-88.93	-129.57	-129.57	-250.38	-324.54	-324.54	-324.54	-364.75	2.76

Note: Cost of production estimates are based on 2018 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 15.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

PRODUCT	PERCENT										110	115	120	125																
	75	80	85	90	95	100	105	110	115	120																				
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62																			
PERCENT	YIELD UNIT															dollars														
50	21.00	bu	-235	-225	-216	-206	-196	-186	-177	-167	-157	-147	-138																	
			-274	-264	-254	-244	-235	-225	-215	-205	-196	-186	-176																	
60	25.20	bu	-207	-195	-184	-172	-160	-148	-137	-125	-113	-102	-90																	
			-246	-234	-222	-210	-199	-187	-175	-164	-152	-140	-128																	
70	29.40	bu	-179	-165	-152	-138	-124	-111	-97	-83	-69	-56	-42																	
			-217	-204	-190	-176	-163	-149	-135	-122	-108	-94	-81																	
80	33.60	bu	-151	-135	-119	-104	-88	-73	-57	-41	-26	-10	5																	
			-189	-174	-158	-142	-127	-111	-95	-80	-64	-49	-33																	
90	37.80	bu	-123	-105	-87	-70	-52	-35	-17	-0	17	35	52																	
			-161	-144	-126	-108	-91	-73	-56	-38	-20	-3	14																	
100	42.00	bu	-94	-75	-55	-36	-16	2	22	41	61	80	100																	
			-133	-113	-94	-74	-55	-35	-16	3	22	42	61																	
110	46.20	bu	-66	-45	-23	-2	19	40	62	83	105	126	148																	
			-105	-83	-62	-40	-19	2	23	45	66	88	109																	
120	50.40	bu	-38	-15	8	31	55	78	102	125	148	172	195																	
			-77	-53	-30	-6	16	40	63	86	110	133	157																	
130	54.60	bu	-10	14	40	65	91	116	141	167	192	218	243																	
			-48	-23	1	27	52	77	103	128	154	179	204																	
140	58.80	bu	17	45	72	99	127	154	181	209	236	263	291																	
			-20	6	33	61	88	115	143	170	197	225	252																	
150	63.00	bu	45	75	104	133	163	192	221	250	280	309	338																	
			7	36	65	95	124	153	183	212	241	271	300																	

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 2018 input prices.

Table 16.A Estimated costs per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 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	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4713	6.70	_____
Harvesters	hour	14.23	0.0851	1.21	_____
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	14.22	0.4301	6.12	_____
DIESEL FUEL					
Tractors	gal	2.60	5.2753	13.70	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Roll-Out Pipe Irr.	gal	2.60	7.3316	19.05	_____
REPAIR & MAINTENANCE					
Implements	acre	5.60	1.0000	5.60	_____
Tractors	acre	2.74	1.0000	2.74	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	13.98	1.0000	13.98	_____
TOTAL DIRECT EXPENSES				465.81	_____
FIXED EXPENSES					
Implements	acre	13.59	1.0000	13.59	_____
Tractors	acre	18.92	1.0000	18.92	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Roll-Out Pipe Irr.	acre	61.50	1.0000	61.50	_____
TOTAL FIXED EXPENSES				107.82	_____
TOTAL SPECIFIED EXPENSES				573.63	_____

Note: Cost of production estimates are based on 2018 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.B Summary of estimated costs and returns per acre
 Soybeans, full-season, 1L, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	60.0000	558.00	_____

TOTAL INCOME				558.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	5.64	1.0000	5.64	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	26.10	1.0000	26.10	_____
HERBICIDES	acre	122.36	1.0000	122.36	_____
INSECTICIDES	acre	13.94	1.0000	13.94	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	71.00	1.0000	71.00	_____
ADJUVANTS	acre	3.96	1.0000	3.96	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	14.23	0.5564	7.91	_____
UNALLOCATED LABOR	hour	14.22	0.4301	6.12	_____
DIESEL FUEL	gal	2.60	14.0313	36.45	_____
REPAIR & MAINTENANCE	acre	18.44	1.0000	18.44	_____
INTEREST ON OP. CAP.	acre	13.98	1.0000	13.98	_____

TOTAL DIRECT EXPENSES				465.81	_____
RETURNS ABOVE DIRECT EXPENSES				92.19	_____
TOTAL FIXED EXPENSES				107.82	_____

TOTAL SPECIFIED EXPENSES				573.63	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-15.63	_____

Note: Cost of production estimates are based on 2018 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.C Estimated resource use for field operations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
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				
Inoculant -Soybean	acre					1.0000				
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				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
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							0.55	0.55	1.01	0.43

Note: Cost of production estimates are based on 2018 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, full-season, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Subsoiler	3 shank		1.23	0.32	1.10			0.16	2.81	1.90	4.71
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Disk Harrow	24'		2.46	1.46	2.21			0.37	6.50	5.64	12.14
Field Cultivate Fld	24'		1.87	0.81	1.69			0.26	4.63	4.65	9.28
Bed/Lister-Roll-Fold	12R-30		1.88	0.83	1.69			0.26	4.66	3.91	8.57
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Select Max	pt	12.71						0.51	13.22		13.22
Valor SX	oz	9.14						0.37	9.51		9.51
Surfactant	pt	1.44						0.06	1.50		1.50
Plant & Pre-Folding	12R-30		2.04	2.35	2.44			0.20	7.03	6.93	13.96
Soybean Seed LL	lb	71.00						2.13	73.13		73.13
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Inoculant -Soybean	acre	1.55						0.05	1.60		1.60
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Soybeans Consultant	acre	6.50						0.16	6.66		6.66
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Liberty 280	oz	17.11						0.43	17.54		17.54
Dual Magnum	pt	13.81						0.35	14.16		14.16
Spray (Broadcast)	60'		0.85	0.38	0.89			0.05	2.17	1.43	3.60
Liberty 280	oz	17.11						0.43	17.54		17.54
Zidua	oz	13.58						0.34	13.92		13.92
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Quadris Top SBX	oz	19.25						0.29	19.54		19.54
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Acephate 90SP	lb	5.94						0.06	6.00		6.00
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Sodium Chlorate 5L	gal	3.24						0.03	3.27		3.27
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	30' Flex		3.70	4.08	2.30			0.05	10.13	15.26	25.39
Haul Soybeans	bu	16.20						0.08	16.28		16.28
Grain Cart Soybean	700 bu		0.64	0.34	0.57			0.01	1.56	1.30	2.86
Roll-Out Pipe Irr.	acre	8.25	20.93	7.49	4.42			0.83	41.92	65.37	107.29
TOTALS		378.74	36.45	18.44	18.20	0.00	13.98	465.81	107.82	573.63	

Note: Cost of production estimates are based on 2018 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, full-season, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	558.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	61.61	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	13.94	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	71.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.36	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.23	0.00	0.00	0.00	0.00	0.00	2.44	2.01	2.81	0.23	0.00	3.48
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	8.40	0.00	0.00	0.00	0.00	0.00	2.04	1.70	13.19	6.35	0.00	4.77
REPAIR & MAINTENANCE	3.74	0.00	0.00	0.00	0.00	0.00	2.35	0.76	5.73	1.31	0.00	4.55
INTEREST ON OP. CAP.	5.41	0.00	0.00	0.00	1.57	0.00	3.52	1.82	0.59	0.51	0.41	0.15
TOTAL DIRECT EXPENSES	95.52	0.00	0.00	0.00	40.64	0.00	120.81	74.40	30.57	34.51	40.21	29.15
NET INCOME	-95.52	0.00	0.00	0.00	-40.64	0.00	-120.81	-74.40	-30.57	-34.51	-40.21	528.85
NET INCOME TO DATE	-95.52	-95.52	-95.52	-95.52	-136.16	-136.16	-256.97	-331.37	-361.94	-396.45	-436.66	92.19

Note: Cost of production estimates are based on 2018 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 16.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE	YIELD UNIT	
	75	80	85	90	95	100	105	110	115	120			
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
50	30.00	bu	-248	-234	-220	-206	-192	-178	-164	-150	-136	-122	-108
			-356	-342	-328	-314	-300	-286	-272	-258	-244	-230	-216
60	36.00	bu	-208	-191	-174	-157	-141	-124	-107	-91	-74	-57	-40
			-316	-299	-282	-265	-249	-232	-215	-198	-182	-165	-148
70	42.00	bu	-167	-148	-128	-109	-89	-70	-50	-31	-11	7	27
			-275	-256	-236	-217	-197	-178	-158	-139	-119	-100	-80
80	48.00	bu	-127	-105	-83	-60	-38	-16	6	28	50	73	95
			-235	-213	-190	-168	-146	-123	-101	-79	-57	-34	-12
90	54.00	bu	-87	-62	-37	-12	12	38	63	88	113	138	163
			-195	-170	-145	-120	-94	-69	-44	-19	5	30	55
100	60.00	bu	-47	-19	8	36	64	92	120	147	175	203	231
			-155	-127	-99	-71	-43	-15	12	40	68	95	123
110	66.00	bu	-7	23	54	84	115	146	177	207	238	269	299
			-114	-84	-53	-22	7	38	69	99	130	161	191
120	72.00	bu	33	66	100	133	167	200	234	267	300	334	367
			-74	-41	-7	25	59	92	126	159	193	226	260
130	78.00	bu	73	109	145	182	218	254	290	327	363	399	436
			-34	1	38	74	110	146	183	219	255	291	328
140	84.00	bu	113	152	191	230	269	308	347	386	426	465	504
			5	44	83	122	161	201	240	279	318	357	396
150	90.00	bu	153	195	237	279	321	363	404	446	488	530	572
			45	87	129	171	213	255	297	338	380	422	464

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 2018 input prices.

Table 17.A Estimated costs per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
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	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4582	6.49	_____
Harvesters	hour	14.23	0.0851	1.21	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR					
	hour	14.22	0.3065	4.36	_____
DIESEL FUEL					
Tractors	gal	2.60	4.3236	11.27	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Contour Flood Irr.	gal	2.60	10.9974	28.59	_____
REPAIR & MAINTENANCE					
Implements	acre	4.85	1.0000	4.85	_____
Tractors	acre	2.35	1.0000	2.35	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Contour Flood Irr.	acre	13.80	1.0000	13.80	_____
INTEREST ON OP. CAP.	acre	13.72	1.0000	13.72	_____
TOTAL DIRECT EXPENSES				456.92	_____
FIXED EXPENSES					
Implements	acre	10.31	1.0000	10.31	_____
Tractors	acre	16.21	1.0000	16.21	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Contour Flood Irr.	acre	48.51	1.0000	48.51	_____
TOTAL FIXED EXPENSES				88.84	_____
TOTAL SPECIFIED EXPENSES				545.76	_____

Note: Cost of production estimates are based on 2018 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 17.B Summary of estimated costs and returns per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	53.0000	492.90	_____

TOTAL INCOME				492.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
HARVEST AIDS	acre	5.64	1.0000	5.64	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	26.10	1.0000	26.10	_____
HERBICIDES	acre	117.56	1.0000	117.56	_____
INSECTICIDES	acre	13.94	1.0000	13.94	_____
SEED/PLANTS	acre	71.00	1.0000	71.00	_____
ADJUVANTS	acre	3.96	1.0000	3.96	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1100	1.00	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	14.23	0.5433	7.70	_____
UNALLOCATED LABOR	hour	14.22	0.3065	4.36	_____
DIESEL FUEL	gal	2.60	16.7455	43.56	_____
REPAIR & MAINTENANCE	acre	24.21	1.0000	24.21	_____
INTEREST ON OP. CAP.	acre	13.72	1.0000	13.72	_____

TOTAL DIRECT EXPENSES				456.92	_____
RETURNS ABOVE DIRECT EXPENSES				35.98	_____
TOTAL FIXED EXPENSES				88.84	_____

TOTAL SPECIFIED EXPENSES				545.76	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-52.86	_____

Note: Cost of production estimates are based on 2018 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 17.C Estimated resource use for field operations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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	0.3330				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3330				
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				
Valor SX	oz					2.0000				
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				
Inoculant -Soybean	acre					1.0000				
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				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct		0.08	0.08	0.08	0.07
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							0.54	0.54	0.96	0.30

Note: Cost of production estimates are based on 2018 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 17.D Estimated costs for field operations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Disk Harrow	24'		2.08	1.42	2.21			0.34	6.05	5.36	11.41
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Spray (Broadcast)	60'		0.85	0.38	0.89			0.10	2.22	1.43	3.65
Glyphosate 3lbs a.e	oz	4.48						0.20	4.68		4.68
Select Max	pt	12.71						0.57	13.28		13.28
Surfactant	pt	1.44						0.06	1.50		1.50
Valor SX	oz	9.14						0.41	9.55		9.55
Soybeans Consultant	acre	6.50						0.20	6.70		6.70
Plant & Pre-Folding	12R-30		1.72	2.32	2.44			0.19	6.67	6.70	13.37
Soybean Seed LL	lb	71.00						2.13	73.13		73.13
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Inoculant -Soybean	acre	1.55						0.05	1.60		1.60
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Spray (Broadcast)	60'		0.72	0.36	0.89			0.06	2.03	1.34	3.37
Liberty 280	oz	17.11						0.51	17.62		17.62
Dual Magnum	pt	13.81						0.41	14.22		14.22
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34	3.36
Liberty 280	oz	17.11						0.43	17.54		17.54
Zidua	oz	13.58						0.34	13.92		13.92
App by Air (5 gal)	appl	6.50						0.13	6.63		6.63
Quadris Top SBX	oz	19.25						0.39	19.64		19.64
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Acephate 90SP	lb	5.94						0.09	6.03		6.03
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Sodium Chlorate 5L	gal	3.24						0.03	3.27		3.27
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	30' Flex		3.70	4.08	2.30			0.05	10.13	15.26	25.39
Haul Soybeans	bu	14.31						0.07	14.38		14.38
Grain Cart Soybean	700 bu		0.54	0.33	0.57			0.01	1.45	1.22	2.67
Contour Flood Irr.	acre	2.25	33.23	14.96	5.69			1.15	57.28	56.19	113.47
TOTALS		359.55	43.56	24.21	15.88	0.00	13.72	456.92	88.84	545.76	

Note: Cost of production estimates are based on 2018 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 17.E Estimated monthly income and expense flows per acre
Soybeans, full-season, IL, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	492.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	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	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	19.25	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	26.33	0.00	0.00	60.54	30.69	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	5.94	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.44	0.00	0.00	1.44	0.00	0.36	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.21	0.00	0.00	0.89	0.00	0.00	3.78	2.73	1.61	1.61	0.18	2.87
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	2.08	0.00	0.00	0.85	0.00	0.00	2.44	11.95	10.86	10.86	0.28	4.24
REPAIR & MAINTENANCE	1.42	0.00	0.00	0.38	0.00	0.00	2.68	9.32	2.96	2.96	0.08	4.41
INTEREST ON OP. CAP.	4.59	0.00	0.00	1.34	0.00	0.00	4.70	1.43	0.83	0.41	0.29	0.13
TOTAL DIRECT EXPENSES	81.04	0.00	0.00	31.23	0.00	0.00	161.48	58.37	42.37	28.28	28.19	25.96
NET INCOME	-81.04	0.00	0.00	-31.23	0.00	0.00	-161.48	-58.37	-42.37	-28.28	-28.19	466.94
NET INCOME TO DATE	-81.04	-81.04	-81.04	-112.27	-112.27	-112.27	-273.75	-332.12	-374.49	-402.77	-430.96	35.98

Note: Cost of production estimates are based on 2018 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 17.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

PRODUCT	PERCENT													
	75	80	85	90	95	100	105	110	115	120	125			
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62			
PERCENT	YIELD UNIT													
	dollars													
50	26.50	bu	-264	-252	-240	-227	-215	-203	-190	-178	-166	-153	-141	-230
			-353	-341	-329	-316	-304	-292	-279	-267	-255	-242		
60	31.80	bu	-229	-214	-199	-185	-170	-155	-140	-125	-111	-96	-81	-170
			-318	-303	-288	-273	-259	-244	-229	-214	-199	-185		
70	37.10	bu	-193	-176	-159	-142	-124	-107	-90	-73	-55	-38	-21	-110
			-282	-265	-248	-230	-213	-196	-179	-161	-144	-127		
80	42.40	bu	-158	-138	-118	-99	-79	-59	-40	-20	-0	19	38	-49
			-247	-227	-207	-187	-168	-148	-128	-109	-89	-69		
90	47.70	bu	-122	-100	-78	-56	-34	-11	10	32	54	76	99	10
			-211	-189	-167	-145	-122	-100	-78	-56	-34	-11		
100	53.00	bu	-87	-62	-37	-13	11	35	60	85	109	134	159	70
			-176	-151	-126	-102	-77	-52	-28	-3	21	45		
110	58.30	bu	-51	-24	2	29	56	83	110	138	165	192	219	130
			-140	-113	-86	-59	-32	-5	22	49	76	103		
120	63.60	bu	-16	13	42	72	102	131	161	190	220	249	279	190
			-105	-75	-45	-16	13	42	72	101	131	161		
130	68.90	bu	19	51	83	115	147	179	211	243	275	307	339	250
			-69	-37	-5	26	58	90	122	154	186	218		
140	74.20	bu	54	89	123	158	192	227	261	296	330	365	399	311
			-33	0	35	69	104	138	173	207	242	276		
150	79.50	bu	90	127	164	201	238	275	312	349	386	423	460	371
			1	38	75	112	149	186	223	260	297	334		

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 2018 input prices.

Table 18.A Estimated costs per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	29.0000	17.11	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	0.6000	2.15	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
1/2-mi Pivot Irr.	gal	2.60	16.4057	42.66	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
1/2-mi Pivot Irr.	acre	11.57	1.0000	11.57	_____
INTEREST ON OP. CAP.	acre	10.53	1.0000	10.53	_____

TOTAL DIRECT EXPENSES				401.86	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
1/2-mi Pivot Irr.	acre	47.36	1.0000	47.36	_____

TOTAL FIXED EXPENSES				74.02	_____

TOTAL SPECIFIED EXPENSES				475.88	_____

Note: Cost of production estimates are based on 2018 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 18.B Summary of estimated costs and returns per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	50.0000	465.00	_____

TOTAL INCOME				465.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	26.10	1.0000	26.10	_____
HERBICIDES	acre	60.54	1.0000	60.54	_____
INSECTICIDES	acre	37.28	1.0000	37.28	_____
SEED/PLANTS	acre	71.00	1.0000	71.00	_____
ADJUVANTS	acre	2.16	1.0000	2.16	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	14.23	0.2193	3.11	_____
UNALLOCATED LABOR	hour	14.26	0.1886	2.69	_____
DIESEL FUEL	gal	2.60	19.1560	49.81	_____
REPAIR & MAINTENANCE	acre	19.14	1.0000	19.14	_____
INTEREST ON OP. CAP.	acre	10.53	1.0000	10.53	_____

TOTAL DIRECT EXPENSES				401.86	_____
RETURNS ABOVE DIRECT EXPENSES				63.14	_____

TOTAL FIXED EXPENSES				74.02	_____

TOTAL SPECIFIED EXPENSES				475.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-10.88	_____

Note: Cost of production estimates are based on 2018 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 18.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
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				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
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 SBX	oz					7.0000				
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				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	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							0.21	0.21	0.35	0.18

Note: Cost of production estimates are based on 2018 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 18.D Estimated costs for field operations, per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Soybeans Consultant	acre	6.50						0.20	6.70		6.70
Plant & Pre-Folding	12R-30		2.04	2.35	2.40			0.17	6.96	6.93	13.89
Soybean Seed LL	lb	71.00						1.78	72.78		72.78
CruiserMaxx	oz	6.85						0.17	7.02		7.02
Inoculant -Soybean	acre	1.55						0.04	1.59		1.59
Boundary	pt	22.42						0.56	22.98		22.98
Gramoxone SL 2.0	oz	7.20						0.18	7.38		7.38
Surfactant	pt	1.44						0.04	1.48		1.48
Spray (Broadcast)	60'		0.85	0.38	0.88			0.04	2.15	1.43	3.58
Liberty 280	oz	17.11						0.34	17.45		17.45
Dual Magnum	pt	13.81						0.28	14.09		14.09
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Quadris Top SBX	oz	19.25						0.29	19.54		19.54
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Acephate 90SP	lb	5.94						0.09	6.03		6.03
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Prevathon	oz	18.48						0.28	18.76		18.76
Surfactant	pt	0.36						0.01	0.37		0.37
Bifenthrin	oz	4.86						0.07	4.93		4.93
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
Header -Soybean	25' Flex		3.62	4.50	2.70			0.05	10.87	17.00	27.87
Haul Soybeans	bu	13.50						0.07	13.57		13.57
Grain Cart Soybean	700 bu		0.64	0.34	0.56			0.01	1.55	1.30	2.85
1/2-mi Pivot Irr.	acre		42.66	11.57	0.47			1.15	55.85	47.36	103.21
TOTALS			315.37	49.81	19.14	7.01	0.00	10.53	401.86	74.02	475.88

Note: Cost of production estimates are based on 2018 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 18.E Estimated monthly income and expense flows per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	465.00
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	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.62	30.92	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	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.72	0.00	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	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	2.44	0.93	0.04	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.84	17.91	12.80	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.63	1.12	0.55	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.21	3.52	1.02	1.25	0.15	0.13
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	7.05	143.89	51.90	83.39	14.65	25.99
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-7.05	-143.89	-51.90	-83.39	-14.65	439.01
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-82.04	-225.93	-277.83	-361.22	-375.87	63.14

Note: Cost of production estimates are based on 2018 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 18.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, IL, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

PRODUCT	PERCENT										110	115	120	125	
	75	80	85	90	95	100	105	110	115	120					
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62				
PERCENT	YIELD UNIT														
	dollars														
50	25.00	bu	-220	-209	-197	-185	-174	-162	-150	-139	-127	-116	-104		
			-294	-283	-271	-259	-248	-236	-224	-213	-201	-190	-178		
60	30.00	bu	-187	-173	-159	-145	-131	-117	-103	-89	-75	-61	-47		
			-261	-247	-233	-219	-205	-191	-177	-163	-149	-135	-121		
70	35.00	bu	-153	-137	-121	-104	-88	-72	-56	-39	-23	-7	9		
			-227	-211	-195	-178	-162	-146	-130	-113	-97	-81	-64		
80	40.00	bu	-120	-101	-82	-64	-45	-27	-8	10	28	47	65		
			-194	-175	-156	-138	-119	-101	-82	-63	-45	-26	-8		
90	45.00	bu	-86	-65	-44	-23	-2	17	38	59	80	101	122		
			-160	-139	-118	-97	-76	-56	-35	-14	6	27	48		
100	50.00	bu	-53	-29	-6	16	39	63	86	109	132	156	179		
			-127	-103	-80	-57	-34	-10	12	35	58	82	105		
110	55.00	bu	-19	5	31	57	82	108	133	159	185	210	236		
			-93	-68	-42	-16	8	34	59	85	110	136	162		
120	60.00	bu	13	41	69	97	125	153	181	209	237	265	292		
			-60	-32	-4	23	51	79	107	135	163	191	218		
130	65.00	bu	47	77	107	138	168	198	228	259	289	319	349		
			-26	3	33	64	94	124	154	184	215	245	275		
140	70.00	bu	80	113	146	178	211	243	276	308	341	373	406		
			6	39	72	104	137	169	202	234	267	299	332		
150	75.00	bu	114	149	184	219	253	288	323	358	393	428	463		
			40	75	110	145	179	214	249	284	319	354	389		

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 2018 input prices.

Table 19.A Estimated costs per acre
Soybeans, full-season, LL, April planted, 12R 30"
Non-Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.6600	15.68	_____
Potash (60% K2O)	cwt	20.00	1.0000	20.00	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	0.6000	2.15	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	43.0000	11.61	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3128	4.44	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	_____
UNALLOCATED LABOR	hour	14.24	0.3734	5.32	_____
DIESEL FUEL					
Tractors	gal	2.60	3.0592	7.96	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	4.75	1.0000	4.75	_____
Tractors	acre	1.70	1.0000	1.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	10.24	1.0000	10.24	_____
TOTAL DIRECT EXPENSES				323.18	_____
FIXED EXPENSES					
Implements	acre	10.48	1.0000	10.48	_____
Tractors	acre	11.82	1.0000	11.82	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				37.82	_____
TOTAL SPECIFIED EXPENSES				361.00	_____

Note: Cost of production estimates are based on 2018 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 19.B Summary of estimated costs and returns per acre
 Soybeans, full-season, LL, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	43.0000	399.90	_____

TOTAL INCOME				399.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.00	1.0000	13.00	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	35.68	1.0000	35.68	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	100.51	1.0000	100.51	_____
INSECTICIDES	acre	5.94	1.0000	5.94	_____
SEED/PLANTS	acre	71.00	1.0000	71.00	_____
ADJUVANTS	acre	2.16	1.0000	2.16	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1051	0.96	_____
OPERATOR LABOR	hour	14.23	0.4149	5.89	_____
UNALLOCATED LABOR	hour	14.24	0.3734	5.32	_____
DIESEL FUEL	gal	2.60	4.4528	11.58	_____
REPAIR & MAINTENANCE	acre	10.06	1.0000	10.06	_____
INTEREST ON OP. CAP.	acre	10.24	1.0000	10.24	_____

TOTAL DIRECT EXPENSES				323.18	_____
RETURNS ABOVE DIRECT EXPENSES				76.72	_____
TOTAL FIXED EXPENSES				37.82	_____

TOTAL SPECIFIED EXPENSES				361.00	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				38.90	_____

Note: Cost of production estimates are based on 2018 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 19.C Estimated resource use for field operations, per acre
 Soybeans, full-season, LL, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Oct	0.3330				
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				
Zidua	oz					1.5000				
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				
Gramoxone SL	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 2018 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 19.D Estimated costs for field operations, per acre
 Soybeans, full-season, LL, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	12.65						0.76	13.41	13.41
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Phosphorus (46% P2O5)	cwt	15.68						0.94	16.62	16.62
Potash (60% K2O)	cwt	20.00						1.20	21.20	21.20
Disk Harrow	24'		2.08	1.42	2.21			0.34	6.05	5.36
Field Cultivate Fld	24'		1.58	0.78	1.69			0.24	4.29	4.43
App by Air (5 gal)	appl	6.50						0.23	6.73	6.73
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64	4.64
2,4-D Amine 4	pt	4.80						0.17	4.97	4.97
Plant - Folding	12R-30		1.60	1.95	2.27			0.17	5.99	5.79
Soybean Seed LL	lb	71.00						2.13	73.13	73.13
CruiserMaxx	oz	6.85						0.21	7.06	7.06
Boundary	pt	22.42						0.67	23.09	23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Surfactant	pt	1.44						0.04	1.48	1.48
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34
Liberty 280	oz	17.11						0.43	17.54	17.54
Dual Magnum	pt	13.81						0.35	14.16	14.16
Soybeans Consultant	acre	6.50						0.16	6.66	6.66
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34
Liberty 280	oz	17.11						0.43	17.54	17.54
Zidua	oz	13.58						0.34	13.92	13.92
Spray (Broadcast)	60'		0.72	0.36	0.89			0.02	1.99	1.34
Acephate 90SP	lb	5.94						0.06	6.00	6.00
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Gramoxone SL	oz	2.40						0.02	2.42	2.42
Surfactant	pt	0.72						0.01	0.73	0.73
Header -Soybean	25' Flex		3.62	4.50	2.76			0.05	10.93	17.00
Haul Soybeans	bu	11.61						0.06	11.67	11.67
Grain Cart Soybean	700 bu		0.54	0.33	0.57			0.01	1.45	1.22
TOTALS		279.13	11.58	10.06	12.17	0.00	10.24	323.18	37.82	361.00

Note: Cost of production estimates are based on 2018 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 19.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, IL, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	399.90
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	2.40	0.00
FERTILIZERS	35.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.28	29.62	61.61	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	5.94	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	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	12.65	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.90	0.00	0.00	0.00	0.00	0.00	2.27	1.78	0.00	0.00	0.89	3.33
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	3.66	0.00	0.00	0.00	0.00	0.00	1.60	1.44	0.00	0.00	0.72	4.16
REPAIR & MAINTENANCE	2.20	0.00	0.00	0.00	0.00	0.00	1.95	0.72	0.00	0.00	0.36	4.83
INTEREST ON OP. CAP.	4.13	0.00	0.00	0.00	0.00	0.56	3.44	1.81	0.00	0.00	0.18	0.12
TOTAL DIRECT EXPENSES	73.05	0.00	0.00	0.00	0.00	16.34	118.17	73.86	0.00	0.00	17.71	24.05
NET INCOME	-73.05	0.00	0.00	0.00	0.00	-16.34	-118.17	-73.86	0.00	0.00	-17.71	375.85
NET INCOME TO DATE	-73.05	-73.05	-73.05	-73.05	-73.05	-89.39	-207.56	-281.42	-281.42	-281.42	-299.13	76.72

Note: Cost of production estimates are based on 2018 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 19.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, LL, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE	PERCENT
	75	80	85	90	95	100	105	110	115	120		
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62	
PERCENT	dollars											
YIELD	bu											
UNIT	bu											
50	21.50	-167	-157	-147	-137	-127	-117	-107	-97	-87	-77	-67
		-205	-195	-185	-175	-165	-155	-145	-135	-125	-115	-105
60	25.80	-138	-126	-114	-102	-90	-78	-66	-54	-42	-30	-18
		-176	-164	-152	-140	-128	-116	-104	-92	-80	-68	-56
70	30.10	-109	-95	-81	-67	-53	-39	-25	-11	2	16	30
		-147	-133	-119	-105	-91	-77	-63	-49	-35	-21	-7
80	34.40	-80	-64	-48	-32	-16	-0	15	31	47	63	79
		-118	-102	-86	-70	-54	-38	-22	-6	9	25	41
90	38.70	-52	-34	-16	1	19	37	55	73	91	109	127
		-89	-71	-53	-35	-17	0	18	36	54	72	90
100	43.00	-23	-3	16	36	56	76	96	116	136	156	176
		-61	-41	-21	-1	18	38	58	78	98	118	138
110	47.30	5	27	49	71	93	115	137	159	181	203	225
		-32	-10	11	33	55	77	99	121	143	165	187
120	51.60	34	58	82	106	130	154	178	202	226	250	274
		-3	20	44	68	92	116	140	164	188	212	236
130	55.90	63	89	115	141	167	193	219	245	271	297	323
		25	51	77	103	129	155	181	207	233	259	285
140	60.20	92	120	148	176	204	232	260	287	315	343	371
		54	82	110	138	166	194	222	250	278	306	334
150	64.50	120	150	180	210	240	270	300	330	360	390	420
		83	113	143	173	203	233	263	293	322	352	382

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 2018 input prices.

Table 20.A Estimated costs per acre
Soybeans, full-season, LL, May planted, 12R 30"
Non-Delta Area, Mississippi, 2019

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					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.6600	15.68	_____
Potash (60% K2O)	cwt	20.00	1.0000	20.00	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	12.71	1.0000	12.71	_____
Fierce	oz	7.54	3.5000	26.39	_____
Gramoxone SL 2.0	oz	0.15	96.0000	14.40	_____
Boundary	pt	11.21	2.0000	22.42	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Dimilin 2L	oz	2.13	1.0000	2.13	_____
Baythroid XL	oz	2.65	1.0650	2.82	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.4500	5.21	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	40.0000	10.80	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4365	6.20	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.1382	1.25	_____
UNALLOCATED LABOR					
	hour	14.23	0.4848	6.90	_____
DIESEL FUEL					
Tractors	gal	2.60	4.3820	11.40	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	5.96	1.0000	5.96	_____
Tractors	acre	2.41	1.0000	2.41	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	9.65	1.0000	9.65	_____
TOTAL DIRECT EXPENSES				367.84	_____
FIXED EXPENSES					
Implements	acre	13.08	1.0000	13.08	_____
Tractors	acre	16.72	1.0000	16.72	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				45.32	_____
TOTAL SPECIFIED EXPENSES				413.16	_____

Note: Cost of production estimates are based on 2018 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 20.B Summary of estimated costs and returns per acre
 Soybeans, full-season, LL, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	40.0000	372.00	_____

TOTAL INCOME				372.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	35.68	1.0000	35.68	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	142.01	1.0000	142.01	_____
INSECTICIDES	acre	4.95	1.0000	4.95	_____
SEED/PLANTS	acre	71.00	1.0000	71.00	_____
ADJUVANTS	acre	5.22	1.0000	5.22	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1382	1.25	_____
OPERATOR LABOR	hour	14.23	0.5387	7.65	_____
UNALLOCATED LABOR	hour	14.23	0.4848	6.90	_____
DIESEL FUEL	gal	2.60	5.7756	15.02	_____
REPAIR & MAINTENANCE	acre	11.98	1.0000	11.98	_____
INTEREST ON OP. CAP.	acre	9.65	1.0000	9.65	_____

TOTAL DIRECT EXPENSES				367.84	_____
RETURNS ABOVE DIRECT EXPENSES				4.16	_____
TOTAL FIXED EXPENSES				45.32	_____

TOTAL SPECIFIED EXPENSES				413.16	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-41.16	_____

Note: Cost of production estimates are based on 2018 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 20.C Estimated resource use for field operations, per acre
 Soybeans, full-season, LL, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Oct	0.3330				
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	
Bed/Lister-Roll-Fold	12R-30	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.05	
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Feb		0.02	0.02	0.04	
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	
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	
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	
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	
Liberty 280	oz					29.0000				
Zidua	oz					1.5000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	
Dimilin 2L	oz					1.0000				
Surfactant	pt					0.0500				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Aug		0.01	0.01	0.02	
Baythroid XL	oz					1.0650				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	
Haul Soybeans	bu					40.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	
TOTALS							0.53	0.53	0.67	0.48

Note: Cost of production estimates are based on 2018 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 20.D Estimated costs for field operations, per acre
 Soybeans, full-season, LL, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.02	3.35		3.35
Lime (Spread)	ton	12.65						0.06	12.71		12.71
Disk Harrow	24'		2.08	1.42	2.21			0.03	5.74	5.36	11.10
Field Cultivate Fld	24'		1.58	0.78	1.69			0.02	4.07	4.43	8.50
Bed/Lister-Roll-Fold	12R-30		1.88	0.83	1.69			0.02	4.42	3.91	8.33
Spray (Broadcast)	60'		0.72	0.36	0.89			0.09	2.06	1.34	3.40
Glyphosate 3lbs a.e	oz	4.48						0.20	4.68		4.68
Select Max	pt	12.71						0.57	13.28		13.28
Surfactant	pt	1.44						0.06	1.50		1.50
Custom Apply Fert	acre	7.50						0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	15.68						0.55	16.23		16.23
Potash (60% K2O)	cwt	20.00						0.70	20.70		20.70
Spray (Broadcast)	60'		0.72	0.36	0.89			0.07	2.04	1.34	3.38
Fierce	oz	26.39						0.92	27.31		27.31
Gramoxone SL 2.0	oz	7.20						0.25	7.45		7.45
Surfactant	pt	1.44						0.05	1.49		1.49
Soybeans Consultant	acre	6.50						0.20	6.70		6.70
Plant & Pre-Folding	12R-30		1.72	2.32	2.44			0.19	6.67	6.70	13.37
Soybean Seed LL	lb	71.00						2.13	73.13		73.13
CruiserMaxx	oz	6.85						0.21	7.06		7.06
Boundary	pt	22.42						0.67	23.09		23.09
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Surfactant	pt	1.44						0.04	1.48		1.48
Spray (Broadcast)	60'		0.72	0.36	0.89			0.06	2.03	1.34	3.37
Liberty 280	oz	17.11						0.51	17.62		17.62
Dual Magnum	pt	13.81						0.41	14.22		14.22
Spray (Broadcast)	60'		0.72	0.36	0.89			0.05	2.02	1.34	3.36
Liberty 280	oz	17.11						0.43	17.54		17.54
Zidua	oz	13.58						0.34	13.92		13.92
Spray (Broadcast)	60'		0.36	0.18	0.44			0.02	1.00	0.67	1.67
Dimilin 2L	oz	2.13						0.04	2.17		2.17
Surfactant	pt	0.18							0.18		0.18
Spray (Broadcast)	60'		0.36	0.18	0.44			0.01	0.99	0.67	1.66
Baythroid XL	oz	2.82						0.04	2.86		2.86
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Gramoxone SL	oz	2.40						0.02	2.42		2.42
Surfactant	pt	0.72						0.01	0.73		0.73
Header -Soybean	25' Flex		3.62	4.50	2.76			0.05	10.93	17.00	27.93
Haul Soybeans	bu	10.80						0.05	10.85		10.85
Grain Cart Soybean	700 bu		0.54	0.33	0.57			0.01	1.45	1.22	2.67
TOTALS		315.39	15.02	11.98	15.80	0.00	9.65	367.84	45.32	413.16	

Note: Cost of production estimates are based on 2018 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 20.E Estimated monthly income and expense flows per acre
Soybeans, full-season, IL, May planted, 12R 30"
Non-Delta Area, Mississippi, 2019

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	372.00
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	2.40	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	35.68	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	17.19	0.00	33.59	60.54	30.69	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	2.13	2.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.44	0.00	1.44	1.44	0.00	0.18	0.00	0.72	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	7.50	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.65
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
LABOR	0.00	0.00	0.00	0.89	0.00	0.89	3.33	0.89	0.44	0.44	0.00	8.92
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	0.72	0.00	0.72	2.44	0.72	0.36	0.36	0.00	9.70
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.36	0.00	0.36	2.68	0.36	0.18	0.18	0.00	7.86
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.92	0.00	2.80	4.64	0.82	0.06	0.05	0.10	0.26
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	21.52	0.00	82.98	159.42	33.48	3.35	3.85	9.72	53.52
NET INCOME	0.00	0.00	0.00	-21.52	0.00	-82.98	-159.42	-33.48	-3.35	-3.85	-9.72	318.48
NET INCOME TO DATE	0.00	0.00	0.00	-21.52	-21.52	-104.50	-263.92	-297.40	-300.75	-304.60	-314.32	4.16

Note: Cost of production estimates are based on 2018 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 20.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, LL, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2019

PRODUCT	YIELD	UNIT	PERCENT											
			75	80	85	90	95	100	105	110	115	120	125	
Soybeans	6.97		7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
			PRODUCT PRICE											
			dollars											
50	20.00	bu	-222	-213	-204	-195	-185	-176	-157	-148	-139	-129		
			-268	-258	-249	-240	-231	-221	-203	-193	-184	-175		
60	24.00	bu	-196	-184	-173	-162	-151	-140	-117	-106	-95	-84		
			-241	-230	-219	-207	-196	-185	-163	-152	-140	-129		
70	28.00	bu	-169	-156	-143	-130	-117	-104	-78	-65	-52	-39		
			-214	-201	-188	-175	-162	-149	-123	-110	-97	-84		
80	32.00	bu	-142	-127	-112	-97	-82	-68	-38	-23	-8	6		
			-187	-172	-158	-143	-128	-113	-83	-68	-53	-38		
90	36.00	bu	-115	-98	-82	-65	-48	-31	1	18	35	51		
			-160	-144	-127	-110	-94	-77	-43	-27	-10	6		
100	40.00	bu	-88	-70	-51	-33	-14	4	22	41	59	78		
			-134	-115	-96	-78	-59	-41	-3	14	33	51		
110	44.00	bu	-62	-41	-21	-0	19	40	60	81	101	122		
			-107	-86	-66	-45	-25	-5	15	35	56	76		
120	48.00	bu	-35	-12	9	31	54	76	98	121	143	165		
			-80	-58	-35	-13	8	31	53	75	98	120		
130	52.00	bu	-8	15	39	64	88	112	136	160	185	209		
			-53	-29	-5	18	43	67	91	115	139	163		
140	56.00	bu	18	44	70	96	122	148	174	200	226	252		
			-26	-0	25	51	77	103	129	155	181	207		
150	60.00	bu	45	73	101	128	156	184	212	240	268	296		
			-0	27	55	83	111	139	167	195	223	251		

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 2018 input prices.

Table 21.A Estimated costs per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

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	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	29.0000	17.11	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	0.5000	1.80	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	8.94	1.0000	8.94	_____
TOTAL DIRECT EXPENSES				312.71	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				26.66	_____
TOTAL SPECIFIED EXPENSES				339.37	_____

Note: Cost of production estimates are based on 2018 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 21.B Summary of estimated costs and returns per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.30	25.0000	232.50	_____

TOTAL INCOME				232.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
FERTILIZERS	acre	47.26	1.0000	47.26	_____
FUNGICIDES	acre	6.85	1.0000	6.85	_____
HERBICIDES	acre	60.54	1.0000	60.54	_____
INSECTICIDES	acre	37.28	1.0000	37.28	_____
SEED/PLANTS	acre	71.00	1.0000	71.00	_____
ADJUVANTS	acre	1.80	1.0000	1.80	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	14.23	0.2193	3.11	_____
UNALLOCATED LABOR	hour	14.26	0.1886	2.69	_____
DIESEL FUEL	gal	2.60	2.7503	7.15	_____
REPAIR & MAINTENANCE	acre	7.57	1.0000	7.57	_____
INTEREST ON OP. CAP.	acre	8.94	1.0000	8.94	_____

TOTAL DIRECT EXPENSES				312.71	_____
RETURNS ABOVE DIRECT EXPENSES				-80.21	_____
TOTAL FIXED EXPENSES				26.66	_____

TOTAL SPECIFIED EXPENSES				339.37	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-106.87	_____

Note: Cost of production estimates are based on 2018 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 21.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

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	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
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				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
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				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	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					25.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.21	0.21	0.30	0.18

Note: Cost of production estimates are based on 2018 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 21.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----								FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	12.65						0.76	13.41		13.41
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Phosphorus (46% P2O5)	cwt	20.66						1.24	21.90		21.90
Potash (60% K2O)	cwt	26.60						1.60	28.20		28.20
Soybeans Consultant	acre	6.50						0.20	6.70		6.70
Plant & Pre-Folding	12R-30		2.04	2.35	2.40			0.17	6.96	6.93	13.89
Soybean Seed LL	lb	71.00						1.78	72.78		72.78
CruiserMaxx	oz	6.85						0.17	7.02		7.02
Inoculant -Soybean	acre	1.55						0.04	1.59		1.59
Boundary	pt	22.42						0.56	22.98		22.98
Gramoxone SL 2.0	oz	7.20						0.18	7.38		7.38
Surfactant	pt	1.44						0.04	1.48		1.48
Spray (Broadcast)	60'		0.85	0.38	0.88			0.04	2.15	1.43	3.58
Liberty 280	oz	17.11						0.34	17.45		17.45
Dual Magnum	pt	13.81						0.28	14.09		14.09
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Acephate 90SP	lb	5.94						0.09	6.03		6.03
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Prevathon	oz	18.48						0.28	18.76		18.76
Surfactant	pt	0.36						0.01	0.37		0.37
Bifenthrin	oz	4.86						0.07	4.93		4.93
Incidental Pest											
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
IncidentalPestTrt \$8	acre	8.00						0.08	8.08		8.08
Header -Soybean	25' Flex		3.62	4.50	2.70			0.05	10.87	17.00	27.87
Haul Soybeans	bu	6.75						0.03	6.78		6.78
Grain Cart Soybean	700 bu		0.64	0.34	0.56			0.01	1.55	1.30	2.85
TOTALS		282.51	7.15	7.57	6.54	0.00	8.94	312.71	26.66	339.37	

Note: Cost of production estimates are based on 2018 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 21.E Estimated monthly income and expense flows per acre
 Soybeans, double crop after wheat, IL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	232.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	6.50	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	29.62	30.92	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	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.36	0.00	0.00
CUSTOM FERTILIZE	7.50	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
CUSTOM LIME	12.65	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	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	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	0.00	2.40	0.88	0.00	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.85	0.00	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35	0.38	0.00	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.20	2.94	0.66	0.65	0.15	0.09
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	6.70	120.19	33.69	43.29	14.65	19.20
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-6.70	-120.19	-33.69	-43.29	-14.65	213.30
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-81.69	-201.88	-235.57	-278.86	-293.51	-80.21

Note: Cost of production estimates are based on 2018 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 21.F Table 21.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

PRODUCT	PERCENT										PRODUCT PRICE		
	75	80	85	90	95	100	105	110	115	120			
Soybeans	6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62		
PERCENT	YIELD UNIT												
50	12.50	bu	-222	-216	-210	-204	-198	-193	-187	-181	-175	-169	-164
			-248	-242	-237	-231	-225	-219	-213	-208	-202	-196	-190
60	15.00	bu	-205	-198	-191	-184	-177	-170	-163	-156	-149	-142	-135
			-232	-225	-218	-211	-204	-197	-190	-183	-176	-169	-162
70	17.50	bu	-188	-180	-172	-164	-156	-147	-139	-131	-123	-115	-107
			-215	-207	-198	-190	-182	-174	-166	-158	-150	-142	-133
80	20.00	bu	-171	-162	-153	-143	-134	-125	-116	-106	-97	-88	-78
			-198	-189	-179	-170	-161	-152	-142	-133	-124	-114	-105
90	22.50	bu	-155	-144	-134	-123	-113	-102	-92	-81	-71	-60	-50
			-181	-171	-160	-150	-139	-129	-118	-108	-98	-87	-77
100	25.00	bu	-138	-126	-115	-103	-91	-80	-68	-56	-45	-33	-22
			-164	-153	-141	-130	-118	-106	-95	-83	-71	-60	-48
110	27.50	bu	-121	-108	-96	-83	-70	-57	-44	-32	-19	-6	6
			-148	-135	-122	-109	-97	-84	-71	-58	-45	-33	-20
120	30.00	bu	-104	-90	-76	-62	-49	-35	-21	-7	6	20	34
			-131	-117	-103	-89	-75	-61	-47	-33	-19	-5	8
130	32.50	bu	-88	-72	-57	-42	-27	-12	2	17	32	47	63
			-114	-99	-84	-69	-54	-39	-24	-8	6	21	36
140	35.00	bu	-71	-55	-38	-22	-6	10	26	42	58	75	91
			-97	-81	-65	-49	-32	-16	-0	15	32	48	64
150	37.50	bu	-54	-37	-19	-2	15	32	50	67	84	102	119
			-81	-63	-46	-28	-11	5	23	40	58	75	93

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 2018 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, 2019

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	339,000	300	8	13.64	13.51	35.46	35.31	84.28	151.94	236.23
Combine (300-349 hp)	325 hp	362,000	300	8	16.73	13.51	43.49	37.70	94.71	162.25	256.97
Combine (350-399 hp)	355 hp	391,000	300	8	18.27	13.51	47.50	40.72	101.74	175.25	276.99
Combine (400-449 hp)	425 hp	412,000	300	8	21.87	13.51	56.87	42.91	113.30	184.66	297.97
Combine (450-499hp)	475 hp	434,000	300	8	24.44	13.51	63.56	45.20	122.28	194.52	316.81
Tractor (20-39hp)CB	MFWD 30	25,500	600	8	1.54	13.51	4.01	0.79	18.32	5.29	23.61
Tractor (20-39hp)RB	MFWD 30	20,400	600	8	1.54	13.51	4.01	0.63	18.16	4.23	22.39
Tractor (40-59hp)CB	2WD 50	29,400	600	8	2.57	13.51	6.69	0.91	21.12	6.10	27.22
Tractor (40-59hp)CB	MFWD 50	39,500	600	8	2.57	13.51	6.69	1.23	21.43	8.19	29.63
Tractor (40-59hp)RB	2WD 50	22,900	600	8	2.57	13.51	6.69	0.71	20.91	4.75	25.67
Tractor (40-59hp)RB	MFWD 50	27,800	600	8	2.57	13.51	6.69	0.86	21.07	5.77	26.84
Tractor (60-89hp)CB	2WD 75	52,800	600	8	3.86	13.51	10.03	1.65	25.19	10.95	36.15
Tractor (60-89hp)CB	MFWD 75	62,500	600	8	3.86	13.51	10.03	1.95	25.50	12.97	38.47
Tractor (60-89hp)RB	2WD 75	38,600	600	8	3.86	13.51	10.03	1.20	24.75	8.01	32.76
Tractor (60-89hp)RB	MFWD 75	40,100	600	8	3.86	13.51	10.03	1.25	24.80	8.32	33.12
Tractor (90-119hp)CB	2WD 105	69,200	600	8	5.40	13.51	14.05	2.16	29.72	14.36	44.08
Tractor (90-119hp)CB	MFWD 105	83,000	600	8	5.40	13.51	14.05	2.59	30.15	17.22	47.38
Tractor (90-119hp)RB	2WD 105	61,200	600	8	5.40	13.51	14.05	1.91	29.47	12.70	42.17
Tractor (90-119hp)RB	MFWD 105	67,500	600	8	5.40	13.51	14.05	2.10	29.67	14.01	43.68
Tractor (120-139hp)CB	2WD 130	103,000	600	8	6.69	13.51	17.39	3.21	34.12	21.37	55.50
Tractor (120-139hp)CB	MFWD 130	114,000	600	8	6.69	13.51	17.39	3.56	34.47	23.66	58.13
Tractor (140-159hp)	2WD 150	109,000	600	8	7.72	13.51	20.07	3.40	36.99	22.62	59.61
Tractor (140-159hp)CB	MFWD 150	130,000	600	8	7.72	13.51	20.07	4.06	37.64	26.98	64.63
Tractor (160-179hp)CB	MFWD 170	148,000	600	8	8.75	13.51	22.75	4.62	40.88	31.94	72.83
Tractor (180-199hp)CB	MFWD 190	175,000	600	8	9.77	13.51	25.42	5.46	44.40	37.77	82.17
Tractor (200-249hp)CB	MFWD 225	191,000	600	8	11.58	13.51	30.11	5.96	49.59	41.22	90.81
Tractor (250-349hp)CB	4WD 300	286,000	600	8	15.44	13.51	40.14	8.93	62.59	61.73	124.32
Tractor (250-349hp)CB	MFWD 300	278,000	600	8	15.44	13.51	40.14	8.68	62.34	60.00	122.34
Tractor (250-349hp)CB	Track 300	317,000	600	8	15.44	13.51	40.14	9.90	63.56	68.42	131.98
Tractor (350-449hp)	Track 400	420,000	600	8	20.58	13.51	53.53	13.12	80.16	90.65	170.81
Tractor (350-449hp)CB	4WD 400	328,000	600	8	20.58	13.51	53.53	10.25	77.29	70.79	148.08
Tractor (450-550hp)CB	4WD 500	394,000	600	8	25.73	13.51	66.91	12.31	92.73	85.04	177.77
Tractor (450-550hp)CB	Track 500	444,000	600	8	25.73	13.51	66.91	13.87	94.29	95.83	190.13
Utility Vehicle	800 CC	12,200	200	8	0.70	13.51	1.75	1.90	17.16	8.20	25.36
Utility Vehicle	900 CC	15,800	200	8	1.00	13.51	2.50	2.46	18.47	10.62	29.10

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

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, 2019

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	5.81	8.62	10.79	25.23	46.44	71.68
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	5.81	12.07	14.13	32.02	60.83	92.86
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	3.88	8.07	9.61	21.57	41.35	62.92
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	4.92	10.36	15.85	31.15	68.23	99.38
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	3.88	8.18	12.51	24.59	53.86	78.46
Cotton Picker/Module	4R-38 (365)	536,000	200	8	20.58	0.257	5.81	13.79	21.58	41.20	92.89	134.10
Cotton Picker/Module	6R-30 (500)	776,000	200	8	25.73	0.218	4.92	14.60	26.46	45.99	113.86	159.85
Cotton Picker/Module	6R-38 (500)	777,000	200	8	25.73	0.172	3.88	11.52	20.91	36.33	90.01	126.35
Dry Applicator SP	70'300cuft	347,000	350	8	16.98	0.015	0.27	0.66	0.28	1.22	2.01	3.23
Sprayer 600-750gal	60' 175hp	208,000	350	8	9.00	0.017	0.31	0.41	0.19	0.92	1.40	2.33
Sprayer 600-825gal	80' 175hp	210,000	350	8	11.81	0.013	0.23	0.40	0.14	0.79	1.06	1.85
Sprayer 600-825gal	90' 250hp	288,000	350	8	12.73	0.011	0.21	0.38	0.18	0.78	1.30	2.08
Sprayer 800gal	100' 250hp	303,000	350	8	14.15	0.010	0.19	0.38	0.17	0.75	1.23	1.98
Sprayer 800gal	80' 250hp	255,000	350	8	12.86	0.013	0.23	0.44	0.18	0.86	1.29	2.15
Sprayer 1000-1400gal	90' 275hp	289,000	350	8	14.15	0.010	0.19	0.38	0.16	0.74	1.17	1.91
Sprayer 1000gal	100' 300hp	328,000	350	8	15.44	0.010	0.19	0.42	0.18	0.80	1.33	2.13
Sprayer 1200+gal	120' 300hp	332,000	350	8	15.44	0.008	0.15	0.35	0.15	0.66	1.12	1.79

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, 2019

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp.	P.U.	Total Direct	--Fixed-- Imp.	P.U.	Total Cost	
			dollars	hours	years	hr/ac	-----\$/acre-----								
Bed-Paratill	Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.09	2.43	1.58	0.48	5.59	3.08	3.32	12.00
Bed-Paratill	Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.72	1.61	1.34	0.32	4.00	2.60	2.21	8.83
Bed-Paratill	Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.72	1.61	1.34	0.32	4.00	2.60	2.21	8.83
Bed-Paratill	Rigid	4R-30	MFWD 225	12,300	150	12	0.204	2.76	6.15	0.90	1.21	11.04	1.76	8.42	21.22
Bed-Paratill	Rigid	4R-38	MFWD 225	12,300	150	12	0.160	2.17	4.84	0.71	0.96	8.69	1.38	6.63	16.71
Bed-Paratill	Rigid	6R-30	MFWD 225	17,300	150	12	0.136	1.84	4.10	0.85	0.81	7.60	1.65	5.61	14.87
Bed-Paratill	Rigid	6R-38	MFWD 225	17,200	150	12	0.107	1.45	3.23	0.66	0.64	6.00	1.29	4.43	11.73
Bed-Paratill	Rigid	8R-30	MFWD 225	22,600	150	12	0.102	1.38	3.07	0.83	0.60	5.90	1.62	4.21	11.73
Bed-Paratill	Rigid	8R-38	MFWD 225	22,600	150	12	0.080	1.09	2.43	0.65	0.48	4.66	1.28	3.32	9.27
Bed-Rip/Disk	Fold.	8R-38	MFWD 190	36,900	300	20	0.073	0.98	1.85	0.13	0.39	3.37	0.74	2.76	6.88
Bed-Rip/Disk	Fold.	12R-30	MFWD 225	56,600	300	20	0.061	0.83	1.85	0.17	0.36	3.23	0.96	2.54	6.73
Bed-Rip/Disk	Fold.	12R-38	MFWD 225	56,600	300	20	0.046	0.62	1.39	0.13	0.27	2.42	0.72	1.90	5.05
Bed-Rip/Disk	Rigid	4R-30	MFWD 190	17,300	300	20	0.184	2.49	4.70	0.15	1.01	8.36	0.88	6.98	16.23
Bed-Rip/Disk	Rigid	4R-38	MFWD 190	17,300	300	20	0.146	1.98	3.73	0.12	0.80	6.64	0.70	5.54	12.88
Bed-Rip/Disk	Rigid	6R-38	MFWD 190	23,900	300	20	0.097	1.31	2.47	0.11	0.53	4.43	0.64	3.67	8.75
Bed-Rip/Disk	Rigid	8R-30	MFWD 190	31,300	300	20	0.139	1.87	3.53	0.21	0.76	6.39	1.20	5.25	12.84
Bed-Rip/Disk	Rigid	8R-38	MFWD 190	31,300	300	20	0.073	0.98	1.85	0.11	0.39	3.35	0.63	2.76	6.75
Bed-Rip/Disk	Rigid	6R-30	MFWD 190	23,900	300	20	0.123	1.66	3.13	0.14	0.67	5.62	0.81	4.65	11.09
Bed-Rip/Disk/Cond.		6-Row	MFWD 225	24,600	150	12	0.107	1.45	3.23	0.95	0.64	6.28	1.85	4.43	12.57
Bed-Rip/Disk/Cond.		8-Row	MFWD 225	32,700	150	12	0.080	1.09	2.43	0.95	0.48	4.95	1.85	3.32	10.14
Bed/Disk (Hipper)		4R-38	MFWD 150	9,200	160	10	0.147	1.99	2.96	0.33	0.59	5.89	0.99	3.98	10.87
Bed/Disk (Hipper)		6R-38	MFWD 170	13,000	160	10	0.098	1.33	2.24	0.32	0.45	4.35	0.93	3.15	8.44
Bed/Disk (Hipper)		8R-30	MFWD 190	17,800	160	10	0.093	1.26	2.38	0.41	0.51	4.58	1.21	3.54	9.34
Bed/Disk (Hipper)		8R-38 2x1	MFWD 190	29,200	160	10	0.049	0.66	1.25	0.36	0.26	2.55	1.05	1.86	5.46
Bed/Disk (Hipper)		12R-30	MFWD 225	31,000	160	10	0.062	0.84	1.88	0.48	0.37	3.58	1.41	2.57	7.57
Bed/Disk (Hipper)		12R-38	MFWD 225	29,200	160	10	0.049	0.66	1.48	0.36	0.29	2.80	1.05	2.03	5.89
Bed/Disk (Hipper)Fl		8R-38	MFWD 190	2,000	160	10	0.074	1.00	1.88	0.03	0.40	3.32	0.10	2.79	6.23
Bed/Disk (Hipper)Rd		8R-38	MFWD 190	18,400	160	10	0.074	1.00	1.88	0.34	0.40	3.63	0.99	2.79	7.42
Bed/Disk w/roller		8R-30	MFWD 190	26,600	160	10	0.093	1.26	2.38	0.62	0.51	4.78	1.82	3.54	10.14
Bed/Disk w/roller		8R-38	MFWD 190	26,600	160	10	0.074	1.00	1.88	0.49	0.40	3.78	1.43	2.79	8.02
Bed/Disk w/roller		12R-30/40	MFWD 225	47,000	160	10	0.062	0.84	1.88	0.73	0.37	3.83	2.14	2.57	8.55
Bed/Lister		4R-38	MFWD 150	18,200	160	8	0.228	3.08	4.58	0.97	0.92	9.57	3.36	6.16	19.09
Bed/Lister		6R-38	MFWD 150	19,100	160	8	0.120	1.62	2.41	0.53	0.48	5.06	1.85	3.24	10.16
Bed/Lister		8R-30	MFWD 190	23,100	160	8	0.114	1.54	2.90	0.61	0.62	5.68	2.13	4.31	12.13
Bed/Lister		8R-38	MFWD 190	23,400	160	8	0.090	1.21	2.29	0.49	0.49	4.50	1.70	3.40	9.62
Bed/Lister		8R-38 2x1	MFWD 190	46,700	160	8	0.060	0.81	1.52	0.65	0.32	3.32	2.27	2.27	7.86
Bed/Lister		12R-38	MFWD 225	46,700	160	8	0.060	0.81	1.80	0.65	0.35	3.63	2.27	2.47	8.38
Bed/Lister		16R-30	MFWD 225	58,100	160	8	0.035	0.47	1.05	0.47	0.20	2.22	1.65	1.44	5.32
Bed/Lister		16R40	MFWD 300	60,900	160	8	0.043	0.58	1.73	0.61	0.37	3.30	2.12	2.58	8.01
Bed/Lister-Roll-Fold		8R-38	MFWD 190	24,300	160	10	0.074	1.00	1.88	0.45	0.40	3.74	1.31	2.79	7.85
Bed/Lister-Roll-Fold		12R-30	MFWD 225	29,200	160	10	0.062	0.84	1.88	0.45	0.37	3.55	1.33	2.57	7.46
Bed/Lister-Roll-Fold		12R-38	MFWD 225	33,700	160	10	0.049	0.66	1.48	0.41	0.29	2.86	1.21	2.03	6.11
Bed/Lister-Roll-Fold		16R-30	MFWD 225	34,800	160	10	0.046	0.63	1.41	0.40	0.27	2.73	1.19	1.93	5.85
Bed/Lister-Roll-Rig.		8R-38	MFWD 190	20,300	160	10	0.074	1.00	1.88	0.37	0.40	3.66	1.09	2.79	7.56
Blade-Box		6'-7'	MFWD 105	1,221	200	20	0.020	0.27	0.28	0.01	0.04	0.60	0.01	0.28	0.89
Blade-Box		8'-10'	MFWD 105	3,700	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	1,213	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	3,550	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	3.48	6.55	1.96	1.40	13.41	4.44	9.73	27.59
Boll Buggy		4R-38(350)	MFWD 190	30,500	200	10	0.257	3.48	6.55	1.96	1.40	13.41	4.44	9.73	27.59
Boll Buggy		4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.32	4.38	1.31	0.94	8.96	2.97	6.50	18.44
Boll Buggy		6R-30(355)	MFWD 190	30,500	200	10	0.218	2.94	5.54	1.66	1.19	11.35	3.76	8.24	23.36
Boll Buggy		6R-38(355)	MFWD 190	30,500	200	10	0.172	2.32	4.38	1.31	0.94	8.96	2.97	6.50	18.44
Chisel Plow-Folding		24'	MFWD 190	39,900	150	12	0.076	1.03	1.94	1.10	0.41	4.49	2.14	2.88	9.52
Chisel Plow-Folding		32'	MFWD 225	51,900	150	12	0.057	0.78	1.73	1.08	0.34	3.94	2.10	2.38	8.43
Chisel Plow-Folding		42'	MFWD 225	62,500	150	12	0.044	0.59	1.32	0.99	0.26	3.17	1.93	1.81	6.92
Chisel Plow-Folding		50'	MFWD 225	81,900	150	10	0.036	0.49	1.11	1.31	0.22	3.14	2.35	1.52	7.02
Chisel Plow-Folding		61'	MFWD 225	92,400	150	12	0.030	0.40	0.91	1.01	0.18	2.51	1.96	1.24	5.72
Chisel Plow-Rigid		10'	MFWD 170	7,090	150	12	0.184	2.49	4.20	0.47	0.85	8.03	0.92	5.90	14.85
Chisel Plow-Rigid		15'	2WD 130	11,800	150	12	0.123	1.66	2.14	0.52	0.39	4.73	1.02	2.63	8.38
Chisel Plow-Rigid		20'	MFWD 225	11,300	150	12	0.102	1.38	3.09	0.41	0.61	5.51	0.81	4.23	10.56
Chisel Plow-Rigid		24'	MFWD 190	11,700	150	12	0.077	1.04	1.95	0.32	0.42	3.74	0.63	2.90	7.28
Cultivate		4R-30	2WD 105	12,100	150	10	0.206	2.78	2.89	0.66	0.44	6.79	1.94	2.96	11.70
Cultivate		4R-38	2WD 105	12,200	150	10	0.162	2.19	2.28	0.52	0.31	5.31	1.54	2.06	8.92
Cultivate		6R-30	MFWD 150	16,300	150	10	0.137	1.85	2.76	0.59	0.55	5.77	1.74	3.71	11.23
Cultivate		6R-38	MFWD 150	17,200	150	10	0.108	1.46	2.17	0.49	0.44	4.58	1.45	2.92	8.96
Cultivate		8R-30	MFWD 190	21,400	150	10	0.103	1.39	2.62	0.58	0.56	5.16	1.71	3.89	10.78
Cultivate		8R-38	MFWD 190	22,600	150	10	0.073	0.99	1.87	0.44	0.40	3.71	1.29	2.78	7.79
Cultivate		8R-38 2x1	MFWD 190	35,400	150	10	0.054	0.73	1.38	0.51	0.29	2.92	1.49	2.05	6.47
Cultivate		12R-30	MFWD 225	39,900	150	10	0.068	0.92	2.07	0.73	0.41	4.14	2.13	2.83	9.11
Cultivate		12R-38	MFWD 225	39,100	150	10	0.054	0.73	1.63	0.56	0.32	3.25	1.65	2.23	7.14
Cultivate		16R-30	MFWD 225	47,800	150	10	0.051	0.69	1.55	0.65	0.30	3.21	1.92	2.12	7.25
Cultivate & Post		4R-30	2WD 105	19,400	150	10	0.220	3.96	3.09	1.13	0.42	8.61	3.32	2.79	14.73
Cultivate & Post		4R-38	2WD 105	19,500	150	10	0.173	3.12	2.43	0.90	0.33	6.79	2.63	2.20	11.62
Cultivate & Post		6R-30	MFWD 150	23,600	150	10	0.146	2.64	2.94	0.92	0.59	7.10	2.69	3.95	13.76
Cultivate & Post		6R-38	MFWD 150	24,500	150	10	0.115	2.08	2.32	0.75	0.47	5.64	2.21	3.12	10.97
Cultivate & Post		8R-30	MFWD 190	28,700	150	10	0.110	1.98	2.79	0.84	0.60	6.22	2.45	4.15	12.83
Cultivate & Post		8R-38	MFWD 190	29,800	150	10	0.086	1.56	2.21	0.69	0.47	4.94	2.01	3.28	10.25
Cultivate & Post		8R-38 2x1	MFWD 190	47,800	150	10	0.057	1.04	1.47	0.73	0.31	3.57	2.15	2.18	7.91

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2019 (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 & Post	12R-30	MFWD 225	47,200	150	10	0.073	1.32	2.20	0.92	0.43	4.89	2.69	3.02	10.61
Cultivate & Post	12R-38	MFWD 225	47,800	150	10	0.057	1.04	1.74	0.73	0.34	3.87	2.15	2.38	8.41
Cultivate & Post	16R-30	MFWD 225	56,500	150	10	0.055	0.99	1.65	0.82	0.32	3.80	2.42	2.26	8.49
Disk & Incorporate	14'	2WD 130	31,900	200	10	0.149	2.69	2.60	1.43	0.48	7.21	2.78	3.19	13.20
Disk & Incorporate	20'	MFWD 190	44,500	180	10	0.092	1.24	2.35	1.37	0.50	5.47	2.67	3.49	11.63
Disk & Incorporate	24'	MFWD 190	50,000	200	10	0.087	1.57	2.21	1.30	0.47	5.58	2.55	3.29	11.42
Disk & Incorporate	28'	MFWD 225	59,200	200	10	0.074	1.34	2.25	1.32	0.44	5.37	2.58	3.08	11.05
Disk & Incorporate	32'	MFWD 225	66,000	200	10	0.065	1.18	1.97	1.29	0.39	4.84	2.52	2.69	10.06
Disk Harrow	14'	2WD 130	24,600	180	10	0.140	1.89	2.44	0.95	0.45	5.74	2.24	2.99	10.98
Disk Harrow	20'	MFWD 190	39,200	180	10	0.098	1.32	2.49	1.06	0.53	5.43	2.49	3.70	11.63
Disk Harrow	24'	MFWD 190	42,700	180	10	0.081	1.10	2.08	0.97	0.44	4.60	2.26	3.09	9.96
Disk Harrow	28'	MFWD 225	52,000	180	10	0.070	0.94	2.11	1.01	0.41	4.49	2.36	2.89	9.75
Disk Harrow	32'	MFWD 225	58,700	180	10	0.061	0.82	1.84	1.00	0.36	4.04	2.33	2.53	8.91
Disk Harrow	42'	MFWD 225	104,000	180	10	0.046	0.63	1.40	1.35	0.27	3.67	3.15	1.92	8.75
Disk Harrow 40-100hp	14'	2WD 75	15,000	180	10	0.140	1.89	1.40	0.58	0.16	4.05	1.36	1.12	6.54
Disk Heavy	14'	MFWD 150	31,900	180	10	0.145	1.97	2.92	1.29	0.59	6.78	3.02	3.93	13.74
Disk Heavy	20'	MFWD 190	39,200	180	10	0.097	1.31	2.47	1.05	0.53	5.38	2.47	3.67	11.53
Disk Heavy	28'	MFWD 225	52,000	180	10	0.075	1.02	2.27	1.09	0.45	4.84	2.55	3.11	10.52
Disk Ripper	15'	MFWD 225	45,200	180	10	0.136	1.84	4.10	1.71	0.81	8.46	3.99	5.61	18.07
Ditcher		2WD 130	5,700	200	10	0.020	0.27	0.34	0.04	0.06	0.72	0.06	0.42	1.22
Ditcher (1m/160a)		2WD 130	5,700	200	10	0.009	0.12	0.16	0.02	0.03	0.34	0.03	0.20	0.57
Fert Appl (Liquid)	4R-38	MFWD 150	12,900	150	8	0.154	2.79	3.10	1.33	0.62	7.85	1.65	4.17	13.68
Fert Appl (Liquid)	6R-30	MFWD 170	16,700	150	8	0.130	2.36	2.97	1.45	0.60	7.40	1.81	4.18	13.40
Fert Appl (Liquid)	6R-38	MFWD 170	16,100	150	8	0.103	1.86	2.35	1.10	0.47	5.80	1.38	3.30	10.48
Fert Appl (Liquid)	8R-30	MFWD 190	16,900	150	8	0.098	1.77	2.49	1.10	0.53	5.91	1.37	3.70	11.00
Fert Appl (Liquid)	8R-38	MFWD 190	19,000	150	8	0.077	1.40	1.97	0.98	0.42	4.78	1.22	2.93	8.94
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	20,300	150	8	0.051	0.93	1.31	0.69	0.28	3.22	0.87	1.95	6.05
Fert Appl (Liquid)	12R-30	MFWD 225	22,600	150	8	0.078	1.41	2.36	1.18	0.46	5.43	1.47	3.23	10.14
Fert Appl (Liquid)	12R-38	MFWD 225	19,900	150	8	0.051	0.93	1.55	0.68	0.30	3.48	0.85	2.13	6.46
Field Cult & Inc	42'	MFWD 225	69,400	100	10	0.037	0.68	1.13	0.65	0.22	2.69	3.06	1.55	7.32
Field Cult & Inc	50'	MFWD 225	81,500	100	10	0.031	0.57	0.95	0.64	0.18	2.36	3.02	1.30	6.69
Field Cult & Inc Fld	24'	MFWD 170	34,000	100	10	0.066	1.19	1.50	0.56	0.30	3.56	2.62	2.11	8.30
Field Cult & Inc Fld	32'	MFWD 190	48,700	100	10	0.049	0.89	1.26	0.60	0.27	3.02	2.82	1.87	7.72
Field Cult & Inc Rdg	12'	2WD 150	15,800	100	10	0.132	2.38	2.65	0.52	0.45	6.01	2.44	2.99	11.44
Field Cultivate Fld	24'	MFWD 170	28,600	100	10	0.062	0.84	1.41	0.44	0.28	2.98	2.07	1.98	7.05
Field Cultivate Fld	32'	MFWD 190	43,300	100	10	0.046	0.63	1.18	0.50	0.25	2.57	2.36	1.76	6.70
Field Cultivate Fld	42'	MFWD 225	60,700	100	10	0.035	0.48	1.07	0.53	0.21	2.30	2.52	1.46	6.28
Field Cultivate Fld	50'	MFWD 225	65,900	100	10	0.029	0.40	0.89	0.49	0.17	1.97	2.29	1.23	5.50
Field Cultivate Rdg	12'	2WD 150	10,400	100	10	0.124	1.68	2.49	0.32	0.42	4.92	1.51	2.81	9.25
Grain Cart Corn	500 bu	MFWD 190	25,700	200	12	0.025	0.34	0.64	0.17	0.13	1.29	0.34	0.95	2.59
Grain Cart Corn	700 bu	MFWD 190	37,300	200	12	0.025	0.34	0.64	0.25	0.13	1.37	0.49	0.95	2.83
Grain Cart Corn	1000 bu	MFWD 225	46,900	200	12	0.025	0.34	0.76	0.32	0.15	1.57	0.62	1.04	3.24
Grain Cart Rice	500 bu	MFWD 190	25,700	200	12	0.062	0.84	1.58	0.43	0.34	3.21	0.84	2.36	6.41
Grain Cart Rice	700 bu	MFWD 190	37,300	200	12	0.055	0.74	1.39	0.55	0.30	2.99	1.08	2.07	6.15
Grain Cart Rice	1000 bu	MFWD 190	46,900	200	12	0.045	0.61	1.16	0.58	0.25	2.61	1.13	1.73	5.48
Grain Cart Soybean	500 bu	MFWD 190	25,700	200	12	0.025	0.34	0.64	0.17	0.13	1.30	0.34	0.96	2.61
Grain Cart Soybean	700 bu	MFWD 190	37,300	200	12	0.021	0.28	0.54	0.21	0.11	1.15	0.41	0.80	2.37
Grain Cart Soybean	1000 bu	MFWD 190	46,900	200	12	0.021	0.28	0.54	0.26	0.11	1.21	0.52	0.80	2.54
Grain Cart Wht/Sor	500 bu	MFWD 190	25,700	200	12	0.025	0.34	0.64	0.17	0.13	1.30	0.34	0.96	2.61
Grain Cart Wht/Sor	700 bu	MFWD 190	37,300	200	12	0.021	0.28	0.54	0.21	0.11	1.15	0.41	0.80	2.37
Grain Cart Wht/Sor	1000 bu	MFWD 190	46,900	200	12	0.021	0.28	0.54	0.26	0.11	1.21	0.52	0.80	2.54
Grain Drill	10'	2WD 130	26,700	150	8	0.188	4.25	3.28	1.88	0.60	10.03	4.01	4.03	18.07
Grain Drill	12'	2WD 130	26,800	150	8	0.157	3.54	2.73	1.57	0.50	8.36	3.35	3.35	15.08
Grain Drill	15'	MFWD 150	32,600	150	8	0.125	2.83	2.52	1.53	0.51	7.40	3.26	3.39	14.06
Grain Drill	20'	MFWD 170	38,800	150	8	0.094	2.12	2.14	1.37	0.43	6.08	2.91	3.01	12.00
Grain Drill	24'	MFWD 190	65,600	150	8	0.078	1.77	1.99	1.93	0.42	6.13	4.10	2.96	13.21
Grain Drill	30'	MFWD 225	63,800	150	8	0.062	1.41	1.89	1.50	0.37	5.19	3.19	2.59	10.97
Grain Drill	35'	MFWD 225	91,000	150	8	0.053	1.21	1.62	1.83	0.32	4.99	3.90	2.22	11.12
Grain Drill & Pre	10'	2WD 130	33,900	150	8	0.203	4.58	3.53	2.58	0.65	11.35	5.48	4.34	21.18
Grain Drill & Pre	12'	2WD 130	34,100	150	8	0.169	3.81	2.94	2.16	0.54	9.47	4.60	3.61	17.69
Grain Drill & Pre	15'	MFWD 150	39,900	150	8	0.135	3.05	2.71	2.02	0.54	8.34	4.30	3.65	16.30
Grain Drill & Pre	20'	MFWD 170	46,000	150	8	0.101	2.29	2.31	1.75	0.46	6.82	3.72	3.24	13.79
Grain Drill & Pre	24'	MFWD 190	71,000	150	8	0.084	1.90	2.15	2.25	0.46	6.77	4.78	3.19	14.76
Grain Drill & Pre	30'	MFWD 225	71,000	150	8	0.067	1.52	2.03	1.80	0.40	5.77	3.83	2.79	12.39
Grain Drill & Pre	35'	MFWD 225	98,200	150	8	0.058	1.30	1.74	2.13	0.34	5.53	4.54	2.39	12.47
Grain Drill & Pre T	8R-38	MFWD 225	51,800	150	8	0.062	1.41	1.89	1.22	0.37	4.90	2.59	2.59	10.09
Harrow - Rigid	21'	2WD 150	6,750	200	10	0.073	0.99	1.48	0.17	0.25	2.91	0.29	1.67	4.87
Harrow - Folding	24'	MFWD 190	15,800	200	10	0.064	0.87	1.64	0.35	0.35	3.23	0.59	2.44	6.27
Harrow - Folding	30'	MFWD 190	17,700	200	10	0.051	0.69	1.31	0.32	0.28	2.61	0.53	1.95	5.10
Harrow - Folding	40'	MFWD 190	20,200	200	10	0.038	0.52	0.98	0.27	0.21	1.99	0.45	1.46	3.92
Harrow - Folding	48'	MFWD 225	23,700	200	10	0.032	0.43	0.97	0.26	0.19	1.87	0.44	1.33	3.65
Harrow - Rigid	13'	2WD 130	4,950	200	10	0.119	1.61	2.07	0.20	0.38	4.28	0.34	2.55	7.18
Header - Corn	6R-30	265 hp	48,500	300	8	0.170	2.30	6.03	2.06	6.01	16.41	3.42	25.87	45.71
Header - Corn	6R-38	265 hp	48,800	300	8	0.134	1.81	4.76	1.64	4.74	12.97	2.72	20.42	36.12
Header - Corn	8R-30	265 hp	62,300	300	8	0.127	1.72	4.52	1.98	4.50	12.75	3.30	19.40	35.46
Header - Corn	8R-38	325 hp	63,000	300	8	0.100	1.36	4.39	1.59	3.80	11.15	2.64	16.38	30.17
Header - Corn	12R-20	325 hp	95,600	300	8	0.127	1.72	5.55	3.05	4.81	15.14	5.06	20.72	40.93

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2019 (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							
Header - Corn	12R-30	325 hp	98,200	300	8	0.085	1.15	3.70	2.09	3.21	10.15	3.47	13.81	27.43
Header - Draper (CL)	25' Rigid	265 hp	60,300	300	8	0.203	2.74	7.20	2.80	7.17	19.92	4.88	30.85	55.66
Header - Draper (CL)	30' Rigid	325 hp	70,600	300	8	0.169	2.28	7.36	2.73	6.38	18.76	4.76	27.45	50.98
Header - Draper (CL)	36' Rigid	355 hp	74,100	300	8	0.141	1.90	6.69	2.39	5.74	16.74	4.16	24.71	45.62
Header - Draper (CL)	40' Rigid	425 hp	79,500	30	8	0.126	1.71	7.21	23.12	5.44	37.50	40.21	23.43	101.16
Header - Draper (SL)	25' Rigid	325 hp	60,300	300	8	0.176	2.37	7.65	2.43	6.63	19.10	4.23	28.55	51.88
Header - Draper (SL)	30' Rigid	325 hp	70,600	300	8	0.146	1.98	6.37	2.37	5.53	16.26	4.12	23.79	44.19
Header - Draper (SL)	36' Rigid	355 hp	74,100	300	8	0.122	1.65	5.80	2.07	4.97	14.51	3.60	21.41	39.53
Header - Drapper	40' Rigid	425 hp	79,500	30	8	0.110	1.48	6.25	20.04	4.72	32.50	34.85	20.31	87.67
Header -RiceStrp(CL)	20'	265 hp	50,000	300	8	0.253	3.42	9.00	3.17	8.96	24.56	5.26	38.57	68.41
Header -RiceStrp(CL)	24'	325 hp	55,400	300	8	0.211	2.85	9.20	2.92	7.97	22.96	4.86	34.32	62.15
Header -RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.14	6.90	2.41	5.98	17.43	4.00	25.74	47.18
Header -RiceStrp(SL)	20'	265 hp	50,000	300	8	0.220	2.97	7.80	2.75	7.76	21.29	4.56	33.42	59.28
Header -RiceStrp(SL)	24'	325 hp	55,400	300	8	0.183	2.47	7.97	2.53	6.91	19.90	4.21	29.74	53.86
Header -RiceStrp(SL)	32'	325 hp	60,800	300	8	0.137	1.85	5.98	2.09	5.18	15.11	3.47	22.31	40.89
Header -Soybean	22' Flex	265 hp	32,600	300	8	0.116	1.56	4.11	0.94	4.09	10.73	1.57	17.64	29.94
Header -Soybean	25' Flex	325 hp	35,000	300	8	0.102	1.38	4.44	0.89	3.85	10.57	1.48	16.57	28.63
Header -Soybean	30' Flex	325 hp	40,900	300	8	0.085	1.15	3.70	0.87	3.21	8.93	1.44	13.81	24.19
Header -Soybean	35' Flex	355 hp	47,000	300	8	0.072	0.98	3.46	0.85	2.97	8.28	1.42	12.79	22.49
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.56	4.11	0.57	4.09	10.36	0.95	17.64	28.95
Header Wheat/Sorghum	25' Rigid	325 hp	21,000	300	8	0.102	1.38	4.44	0.53	3.85	10.21	0.89	16.57	27.68
Header Wheat/Sorghum	30' Rigid	325 hp	25,700	300	8	0.085	1.15	3.70	0.54	3.21	8.61	0.90	13.81	23.33
Land Plane	50'x16"	MFWD 190	14,300	200	10	0.151	2.04	3.85	0.43	0.82	7.16	1.26	5.72	14.16
Levee Pull & Seed	8 Blade	MFWD 170	10,400	100	10	0.003	0.04	0.08	0.00	0.01	0.15	0.04	0.11	0.31
Levee Pull (1m/80a)	8 blade	MFWD 170	7,180	100	10	0.003	0.04	0.08	0.00	0.01	0.15	0.02	0.11	0.29
Levee Splitter (1/80	32"	MFWD 150	7,180	100	10	0.004	0.05	0.08	0.00	0.01	0.16	0.03	0.11	0.31
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	5.81	6.55	2.23	1.40	16.01	5.06	9.73	30.81
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	5.81	6.55	2.23	1.40	16.01	5.06	9.73	30.81
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	3.88	4.38	1.49	0.94	10.70	3.38	6.50	20.59
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	4.92	5.54	1.89	1.19	13.56	4.28	8.24	26.09
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	3.88	4.38	1.49	0.94	10.70	3.38	6.50	20.59
NT Grain Drill	10'	2WD 130	34,100	150	8	0.235	5.31	4.10	3.01	0.75	13.19	6.40	5.03	24.64
NT Grain Drill	12'	2WD 130	47,900	150	8	0.163	3.69	2.84	2.94	0.52	10.00	6.25	3.49	19.75
NT Grain Drill	15'	MFWD 150	55,200	150	8	0.130	2.95	2.62	2.71	0.53	8.82	5.76	3.53	18.12
NT Grain Drill	20'	MFWD 170	71,200	150	8	0.098	2.21	2.23	2.62	0.45	7.52	5.57	3.13	16.23
NT Grain Drill	24'	MFWD 190	90,400	150	8	0.081	1.84	2.08	2.77	0.44	7.15	5.89	3.09	16.14
NT Grain Drill	30'	MFWD 225	103,000	150	8	0.065	1.47	1.97	2.52	0.39	6.36	5.37	2.69	14.44
NT Grain Drill & Pre	10'	2WD 130	41,400	150	8	0.211	4.77	3.68	3.28	0.68	12.41	6.98	4.52	23.92
NT Grain Drill & Pre	12'	2WD 130	55,200	150	8	0.176	3.97	3.06	3.64	0.56	11.26	7.75	3.76	22.78
NT Grain Drill & Pre	15'	MFWD 150	62,400	150	8	0.141	3.18	2.83	3.30	0.57	9.88	7.01	3.80	20.70
NT Grain Drill & Pre	20'	MFWD 170	78,400	150	8	0.105	2.38	2.40	3.10	0.48	8.39	6.61	3.37	18.38
NT Grain Drill & Pre	24'	MFWD 190	97,700	150	8	0.088	1.98	2.24	3.22	0.48	7.94	6.86	3.32	18.13
NT Grain Drill & Pre	30'	MFWD 225	111,000	150	8	0.070	1.59	2.12	2.93	0.42	7.07	6.23	2.90	16.21
NT Plant&Pre-Folding	8R-38	MFWD 170	65,000	150	8	0.083	1.88	1.90	2.03	0.38	6.21	4.33	2.67	13.21
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	102,000	150	8	0.055	1.25	1.26	2.12	0.25	4.90	4.52	1.77	11.21
NT Plant&Pre-Folding	12R-20	MFWD 190	78,300	150	8	0.105	2.38	2.68	3.10	0.57	8.76	6.60	3.99	19.35
NT Plant&Pre-Folding	12R-30	MFWD 190	87,500	150	8	0.070	1.59	1.79	2.31	0.38	6.08	4.91	2.66	13.66
NT Plant&Pre-Folding	12R-38	MFWD 190	102,000	150	8	0.055	1.25	1.41	2.12	0.30	5.10	4.52	2.10	11.73
NT Plant&Pre-Folding	16R-30	MFWD 190	130,000	150	8	0.052	1.19	1.34	2.57	0.28	5.40	5.48	1.99	12.88
NT Plant&Pre-Folding	23R-15	MFWD 190	163,000	150	8	0.073	1.65	1.86	4.48	0.40	8.41	9.54	2.77	20.73
NT Plant&Pre-Folding	24R-20	MFWD 190	182,000	150	8	0.052	1.19	1.34	3.60	0.28	6.43	7.67	1.99	16.10
NT Plant&Pre-Folding	24R-30	MFWD 190	200,000	150	8	0.035	0.79	0.89	2.64	0.19	4.52	5.62	1.33	11.48
NT Plant&Pre-Folding	31R-15	MFWD 225	194,000	150	8	0.054	1.23	1.64	3.97	0.32	7.18	8.45	2.25	17.88
NT Plant&Pre-Folding	32R-15	MFWD 225	210,000	150	8	0.052	1.19	1.59	4.16	0.31	7.26	8.85	2.18	18.29
NT Plant&Pre-Rigid	4R-30	2WD 130	29,300	150	8	0.211	4.77	3.68	2.32	0.68	11.45	4.94	4.52	20.92
NT Plant&Pre-Rigid	4R-38	2WD 130	35,200	150	8	0.166	3.75	2.89	2.19	0.53	9.39	4.67	3.56	17.62
NT Plant&Pre-Rigid	6R-30	MFWD 150	43,100	150	8	0.141	3.18	2.83	2.27	0.57	8.86	4.84	3.80	17.51
NT Plant&Pre-Rigid	6R-38	MFWD 150	41,800	150	8	0.111	2.51	2.23	1.74	0.45	6.94	3.71	3.00	13.66
NT Plant&Pre-Rigid	8R-30	MFWD 170	53,100	150	8	0.105	2.38	2.40	2.10	0.48	7.38	4.47	3.37	15.24
NT Plant&Pre-Rigid	8R-38	MFWD 170	50,600	150	8	0.083	1.88	1.90	1.58	0.38	5.76	3.37	2.67	11.80
NT Plant&Pre-Rigid	11R-15	MFWD 170	63,500	150	8	0.143	3.24	3.27	3.42	0.66	10.61	7.28	4.59	22.49
NT Plant&Pre-Rigid	11R-20	MFWD 170	62,300	150	8	0.115	2.60	2.62	2.70	0.53	8.47	5.74	3.69	17.90
NT Plant&Pre-Rigid	12R-20	MFWD 190	65,000	150	8	0.105	2.38	2.68	2.57	0.57	8.23	5.48	3.99	17.70
NT Plant&Pre-Rigid	12R-30	MFWD 190	79,300	150	8	0.070	1.59	1.79	2.09	0.38	5.86	4.45	2.66	12.98
NT Plant&Pre-Rigid	15R-15	MFWD 190	80,900	150	8	0.113	2.55	2.87	3.43	0.61	9.47	7.29	4.27	21.04
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	148,000	150	8	0.055	1.25	1.67	3.08	0.33	6.35	6.56	2.29	15.21
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	121,000	150	8	0.083	1.88	2.51	3.79	0.49	8.69	8.06	3.44	20.20
NT Plant-Folding	8R-38	MFWD 170	57,800	150	8	0.077	1.75	1.76	1.68	0.35	5.56	3.57	2.48	11.61
NT Plant-Folding	8R-38 2x1	MFWD 170	93,000	150	8	0.051	1.16	1.17	1.80	0.23	4.38	3.83	1.65	9.86
NT Plant-Folding	12R-20	MFWD 190	71,100	150	8	0.098	2.21	2.49	2.61	0.53	7.86	5.56	3.70	17.14
NT Plant-Folding	12R-30	MFWD 190	78,900	150	8	0.065	1.47	1.66	1.93	0.35	5.43	4.11	2.47	12.03
NT Plant-Folding	12R-38	MFWD 190	93,000	150	8	0.051	1.16	1.31	1.80	0.28	4.56	3.83	1.95	10.35
NT Plant-Folding	16R-30	MFWD 190	122,000	150	8	0.049	1.10	1.24	2.24	0.26	4.87	4.77	1.85	11.50
NT Plant-Folding	23R-15	MFWD 190	155,000	150	8	0.068	1.53	1.73	3.96	0.37	7.61	8.42	2.57	18.61
NT Plant-Folding	24R-20	MFWD 190	174,000	150	8	0.049	1.10	1.24	3.20	0.26	5.83	6.81	1.85	14.49
NT Plant-Folding	24R-30	MFWD 190	184,000	150	8	0.032	0.73	0.83	2.25	0.17	4.00	4.80	1.23	10.04
NT Plant-Folding	31R-15	MFWD 225	185,000	150	8	0.050	1.14	1.52	3.52	0.30	6.49	7.48	2.09	16.07
NT Plant-Folding	32R-15	MFWD 225	201,000	150	8	0.049	1.10	1.47	3.70	0.29	6.58	7.86	2.02	16.47
NT Plant-Rigid	4R-30	2WD 130	22,100	150	8	0.196	4.43	3.41	1.62	0.63	10.11	3.46	4.19	17.77
NT Plant-Rigid	4R-38	2WD 130	27,900	150	8	0.154	3.49	2.69	1.61	0.49	8.29	3.44	3.30	15.04

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2019 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---	Total P.U. Direct	--Fixed-- Imp. P.U.	Total Cost		
			dollars	hours	years	hr/ac	\$/acre							
NT Plant-Rigid	6R-30	MFWD 150	35,800	150	8	0.130	2.95	2.62	1.75	0.53	7.87	3.73	3.53	15.14
NT Plant-Rigid	6R-38	MFWD 150	34,500	150	8	0.103	2.33	2.07	1.33	0.41	6.16	2.84	2.78	11.79
NT Plant-Rigid	8R-30	MFWD 170	45,800	150	8	0.098	2.21	2.23	1.68	0.45	6.59	3.58	3.13	13.31
NT Plant-Rigid	8R-38	MFWD 170	43,300	150	8	0.077	1.75	1.76	1.26	0.35	5.13	2.68	2.48	10.29
NT Plant-Rigid	11R-15	MFWD 170	56,200	150	8	0.133	3.01	3.03	2.81	0.61	9.48	5.98	4.26	19.74
NT Plant-Rigid	11R-20	MFWD 170	55,000	150	8	0.107	2.42	2.44	2.21	0.49	7.57	4.70	3.42	15.71
NT Plant-Rigid	12R-20	MFWD 190	57,800	150	8	0.098	2.21	2.49	2.12	0.53	7.37	4.52	3.70	15.61
NT Plant-Rigid	12R-30	MFWD 190	70,700	150	8	0.065	1.47	1.66	1.73	0.35	5.23	3.69	2.47	11.40
NT Plant-Rigid	15R-15	MFWD 190	72,300	150	8	0.105	2.37	2.67	2.84	0.57	8.46	6.05	3.96	18.48
NT Plant-TwinRow	12R-30/40	MFWD 225	139,000	150	8	0.051	1.16	1.55	2.69	0.30	5.72	5.72	2.13	13.58
NT Plant-TwinRow	8R-30/40	MFWD 225	114,000	150	8	0.077	1.75	2.33	3.31	0.46	7.87	7.05	3.20	18.12
Peanut Cond. & Lifter	6-Row	MFWD 190	13,300	300	20	0.100	1.35	2.54	0.22	0.54	4.66	0.37	3.77	8.81
Peanut Conditioner	6-Row	MFWD 190	15,300	300	20	0.100	1.35	2.54	0.30	0.54	4.74	0.39	3.77	8.92
Peanut Dig/Invertor	4R-30	MFWD 190	29,800	300	15	0.235	3.18	5.99	1.74	1.28	12.22	2.34	8.90	23.47
Peanut Dig/Invertor	4R-38	MFWD 190	29,800	300	15	0.186	2.51	4.73	1.38	1.01	9.65	1.85	7.03	18.53
Peanut Dig/Invertor	6R-38	MFWD 190	43,400	300	15	0.124	1.67	3.15	0.94	0.67	6.45	1.79	4.68	12.93
Peanut Dump Cart	6-Row	MFWD 190	48,500	300	20	0.310	4.18	7.88	0.87	1.69	14.64	4.16	11.70	30.51
Peanut Harvester	4R-30	MFWD 225	137,000	300	20	0.849	11.48	25.59	6.59	5.07	48.75	30.22	35.04	114.02
Peanut Harvester	4R-38	MFWD 225	137,000	300	20	0.934	12.62	28.14	7.25	5.57	53.60	34.33	38.52	126.46
Peanut Harvester	6R-38	MFWD 225	151,000	300	20	0.625	8.44	18.81	4.56	3.73	35.55	25.30	25.76	86.63
Peanut Lifter	6-Row	MFWD 225	6,500	300	20	0.100	1.35	3.01	0.13	0.59	5.09	0.16	4.12	9.38
Peanut Plt&Pre Fold.	12R-38	MFWD 190	91,000	150	8	0.080	1.81	2.04	2.74	0.43	7.04	5.83	3.03	15.91
Peanut Plt&Pre Rigid	8R-30	MFWD 190	46,000	150	8	0.152	3.44	3.88	2.63	0.83	10.80	5.60	5.77	22.17
Peanut Plt&Pre Rigid	8R-38	MFWD 190	43,400	150	8	0.120	2.72	3.07	1.96	0.66	8.42	4.17	4.56	17.16
Pipe Spool 160ac	1/4m roll	2WD 130	3,600	15	12	0.003	0.09	0.05	0.00	0.01	0.16	0.07	0.06	0.31
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.18	0.06	0.00	0.01	0.26	0.00	0.08	0.35
Plant & Pre-Folding	8R-38	MFWD 170	57,900	150	8	0.080	1.81	1.82	1.74	0.37	5.75	3.70	2.56	12.02
Plant & Pre-Folding	8R-38 2x1	MFWD 170	91,000	150	8	0.053	1.20	1.21	1.82	0.24	4.49	3.87	1.70	10.07
Plant & Pre-Folding	12R-20	MFWD 190	67,600	150	8	0.101	2.29	2.58	2.57	0.55	8.00	5.47	3.83	17.31
Plant & Pre-Folding	12R-30	MFWD 190	76,800	150	8	0.067	1.52	1.72	1.94	0.37	5.56	4.14	2.55	12.26
Plant & Pre-Folding	12R-38	MFWD 190	91,000	150	8	0.053	1.20	1.35	1.82	0.29	4.68	3.87	2.01	10.57
Plant & Pre-Folding	16R-30	MFWD 190	116,000	150	8	0.050	1.14	1.29	2.20	0.27	4.92	4.69	1.91	11.53
Plant & Pre-Folding	23R-15	MFWD 190	143,000	150	8	0.070	1.59	1.79	3.78	0.38	7.55	8.03	2.66	18.25
Plant & Pre-Folding	24R-20	MFWD 190	161,000	150	8	0.050	1.14	1.29	3.06	0.27	5.77	6.51	1.91	14.21
Plant & Pre-Folding	24R-30	MFWD 190	178,000	150	8	0.033	0.76	0.86	2.25	0.18	4.06	4.80	1.27	10.15
Plant & Pre-Folding	31R-15	MFWD 225	166,000	150	8	0.052	1.18	1.57	3.26	0.31	6.34	6.94	2.16	15.45
Plant & Pre-Folding	32R-15	MFWD 225	181,000	150	8	0.050	1.14	1.52	3.44	0.30	6.42	7.32	2.09	15.84
Plant & Pre-Rigid	4R-30	2WD 130	25,800	150	8	0.203	4.58	3.53	1.96	0.65	10.73	4.17	4.34	19.25
Plant & Pre-Rigid	4R-38	2WD 130	31,600	150	8	0.159	3.60	2.78	1.89	0.51	8.80	4.02	3.41	16.24
Plant & Pre-Rigid	6R-30	MFWD 150	25,900	150	8	0.135	3.05	2.71	1.31	0.54	7.63	2.79	3.65	14.08
Plant & Pre-Rigid	6R-38	MFWD 150	36,400	150	8	0.106	2.41	2.14	1.45	0.43	6.45	3.10	2.88	12.43
Plant & Pre-Rigid	8R-30	MFWD 170	46,000	150	8	0.101	2.29	2.31	1.75	0.46	6.82	3.72	3.24	13.79
Plant & Pre-Rigid	8R-38	MFWD 170	43,400	150	8	0.080	1.81	1.82	1.30	0.37	5.31	2.77	2.56	10.65
Plant & Pre-Rigid	11R-15	MFWD 170	53,700	150	8	0.148	3.34	3.37	2.98	0.68	10.38	6.34	4.73	21.46
Plant & Pre-Rigid	11R-20	MFWD 170	52,500	150	8	0.110	2.50	2.52	2.18	0.51	7.72	4.64	3.54	15.91
Plant & Pre-Rigid	12R-20	MFWD 190	54,300	150	8	0.101	2.29	2.58	2.06	0.55	7.49	4.39	3.83	15.72
Plant & Pre-Rigid	12R-30	MFWD 190	68,600	150	8	0.067	1.52	1.72	1.74	0.37	5.36	3.70	2.55	11.61
Plant & Pre-Rigid	15R-15	MFWD 190	67,500	150	8	0.108	2.45	2.76	2.74	0.59	8.55	5.84	4.10	18.50
Plant & Pre-TwinRow	12R-30/40	MFWD 225	137,000	150	8	0.053	1.20	1.60	2.74	0.31	5.87	5.83	2.20	13.91
Plant & Pre-TwinRow	8R-30/40	MFWD 225	114,000	150	8	0.080	1.81	2.41	3.43	0.47	8.13	7.29	3.30	18.74
Plant - Folding	8R-38	MFWD 170	50,600	150	8	0.074	1.68	1.69	1.41	0.34	5.13	3.00	2.38	10.52
Plant - Folding	8R-38 2x1	MFWD 170	82,300	150	8	0.049	1.11	1.12	1.53	0.22	4.00	3.25	1.58	8.85
Plant - Folding	12R-20	MFWD 190	60,400	150	8	0.094	2.12	2.39	2.13	0.51	7.17	4.54	3.56	15.27
Plant - Folding	12R-30	MFWD 190	68,200	150	8	0.062	1.41	1.59	1.60	0.34	4.96	3.41	2.37	10.76
Plant - Folding	12R-38	MFWD 190	82,300	150	8	0.049	1.11	1.26	1.53	0.27	4.18	3.25	1.87	9.31
Plant - Folding	16R-30	MFWD 190	10,700	150	8	0.047	1.06	1.19	0.18	0.25	2.70	0.40	1.78	4.89
Plant - Folding	23R-15	MFWD 190	134,000	150	8	0.065	1.47	1.66	3.29	0.35	6.79	6.99	2.47	16.25
Plant - Folding	24R-20	MFWD 190	152,000	150	8	0.047	1.06	1.19	2.68	0.25	5.20	5.71	1.78	12.70
Plant - Folding	24R-30	MFWD 190	178,000	150	8	0.031	0.70	0.79	2.09	0.17	3.77	4.45	1.18	9.42
Plant - Folding	31R-15	MFWD 225	157,000	150	8	0.048	1.09	1.46	2.86	0.29	5.72	6.09	2.00	13.83
Plant - Folding	32R-15	MFWD 225	173,000	150	8	0.047	1.06	1.41	3.05	0.28	5.82	6.50	1.94	14.26
Plant - Rigid	4R-30	2WD 130	18,500	150	8	0.188	4.25	3.28	1.30	0.60	9.45	2.78	4.03	16.26
Plant - Rigid	4R-38	2WD 130	24,300	150	8	0.148	3.35	2.58	1.35	0.47	7.76	2.87	3.17	13.81
Plant - Rigid	6R-30	MFWD 150	30,500	150	8	0.125	2.83	2.52	1.43	0.51	7.30	3.05	3.39	13.75
Plant - Rigid	6R-38	MFWD 150	29,200	150	8	0.099	2.24	1.99	1.08	0.40	5.72	2.31	2.67	10.71
Plant - Rigid	8R-30	MFWD 170	38,700	150	8	0.094	2.12	2.14	1.36	0.43	6.07	2.90	3.01	11.99
Plant - Rigid	8R-38	MFWD 170	36,200	150	8	0.074	1.68	1.69	1.01	0.34	4.73	2.15	2.38	9.26
Plant - Rigid	11R-15	MFWD 170	46,400	150	8	0.137	3.10	3.13	2.39	0.63	9.26	5.09	4.39	18.75
Plant - Rigid	11R-20	MFWD 170	45,200	150	8	0.103	2.32	2.34	1.74	0.47	6.89	3.71	3.29	13.89
Plant - Rigid	12R-20	MFWD 190	47,100	150	8	0.094	2.12	2.39	1.66	0.51	6.70	3.54	3.56	13.80
Plant - Rigid	12R-30	MFWD 190	59,900	150	8	0.062	1.41	1.59	1.41	0.34	4.77	3.00	2.37	10.14
Plant - Rigid	15R-15	2WD 150	58,900	150	8	0.094	2.12	1.89	2.08	0.32	6.42	4.42	2.13	12.98
Plant - TwinRow	12R-30/40	MFWD 225	128,000	150	8	0.049	1.11	1.49	2.38	0.29	5.29	5.06	2.04	12.40
Plant - TwinRow	8R-30/40	MFWD 225	107,000	150	8	0.074	1.68	2.24	2.99	0.44	7.36	6.35	3.07	16.79
Roller/Cultipacker	12'	2WD 130	6,910	300	12	0.124	1.68	2.16	0.20	0.40	4.44	0.31	2.66	7.41
Roller/Cultipacker	20'	MFWD 150	17,000	300	12	0.074	1.00	1.49	0.29	0.30	3.11	0.45	2.01	5.58
Roller/Cultipacker	30'	MFWD 170	19,100	300	12	0.049	0.67	1.13	0.22	0.23	2.25	0.34	1.58	4.19
Roller/Cultipacker	38'	MFWD 225	21,300	300	12	0.039	0.53	1.18	0.19	0.23	2.14	0.30	1.62	4.06
Roller/Stubble	20'	2WD 50	13,500	300	12	0.074	1.00	0.49	0.23	0.05	1.79	0.36	0.35	2.51
Roller/Stubble	32'	MFWD 225	22,800	300	12	0.046	0.63	1.40	0.25	0.27	2.56	0.38	1.92	4.87

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2019 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---		Total	--Fixed--		Total
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	Cost
			dollars	hours	years	hr/ac	-----\$/acre-----							
Rotary Cutter	7'	MFWD 130	5,245	185	10	0.168	2.27	2.92	0.71	0.59	6.51	0.55	3.98	11.06
Rotary Cutter	12'	2WD 150	11,500	185	10	0.098	1.32	1.97	0.91	0.33	4.54	0.71	2.22	7.48
Rotary Cutter-Flex	15'	MFWD 150	21,100	185	10	0.078	1.06	1.57	1.34	0.31	4.30	1.04	2.12	7.46
Rotary Cutter-Flex	20'	MFWD 150	29,300	185	10	0.058	0.79	1.18	1.39	0.23	3.61	1.09	1.59	6.29
Row Cond & Inc-Fold.	26'	MFWD 190	26,600	100	10	0.063	1.14	1.61	0.42	0.34	3.52	1.97	2.39	7.89
Row Cond & Inc-Fold.	38'	MFWD 225	33,800	100	10	0.043	0.78	1.30	0.36	0.25	2.71	1.71	1.79	6.22
Row Cond & Inc-Rigid	13'	2WD 130	16,800	100	10	0.126	2.28	2.20	0.53	0.40	5.43	2.49	2.71	10.64
Row Cond & Inc-Rigid	21'	2WD 170	20,700	100	10	0.078	1.41	1.78	0.40	0.29	3.90	1.90	2.01	7.82
Row Cond & Inc-Rigid	26'	MFWD 190	23,400	100	10	0.026	0.48	0.67	0.15	0.14	1.45	0.72	1.00	3.19
Row Cond Folding	26'	MFWD 225	19,300	100	10	0.059	0.80	1.79	0.28	0.35	3.25	1.34	2.46	7.05
Row Cond Folding	38'	MFWD 225	25,800	100	10	0.040	0.55	1.23	0.26	0.24	2.29	1.23	1.68	5.20
Row Cond Rigid	13'	2WD 130	9,540	100	10	0.119	1.61	2.07	0.28	0.38	4.36	1.33	2.55	8.24
Row Cond Rigid	21'	2WD 170	13,400	100	10	0.073	0.99	1.68	0.24	0.27	3.20	1.15	1.89	6.26
Row Cond Rigid	26'	MFWD 190	16,200	100	10	0.059	0.80	1.51	0.24	0.32	2.89	1.13	2.25	6.28
Row Cond./Roll-Fol	30'	MFWD 190	35,600	160	10	0.062	0.84	1.58	0.55	0.34	3.33	1.62	2.36	7.31
Row Cond./Roll-Fold.	26'	MFWD 190	26,800	160	10	0.072	0.97	1.83	0.48	0.39	3.68	1.41	2.72	7.82
Row Cond./Roll-Fold.	40'	MFWD 225	23,700	160	10	0.046	0.63	1.41	0.27	0.27	2.60	0.81	1.93	5.34
Row Cond./Roll-Rig	21'	MFWD 190	23,000	160	10	0.089	1.20	2.27	0.51	0.48	4.47	1.50	3.37	9.35
Row Cond./Roll-Rig	26'	MFWD 190	25,800	160	10	0.072	0.97	1.83	0.46	0.39	3.66	1.35	2.72	7.75
Spin Spreader	5 ton	MFWD 190	12,400	100	8	0.042	0.94	1.07	0.29	0.23	2.54	0.65	1.58	4.78
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	4.69	0.45	0.08	0.49	5.73	0.11	2.13	7.98
Spray (ATV)	20'	800 CC	1,700	200	8	0.084	1.52	0.14	0.06	0.16	1.90	0.08	0.69	2.68
Spray (Band)	27' Fold	MFWD 170	7,270	200	8	0.062	1.13	1.42	0.21	0.28	3.06	0.28	2.00	5.34
Spray (Band)	40' Fold	MFWD 170	8,630	200	8	0.042	0.76	0.96	0.17	0.19	2.09	0.22	1.35	3.67
Spray (Band)	50' Fold	MFWD 170	13,700	200	8	0.033	0.61	0.77	0.21	0.15	1.75	0.28	1.08	3.12
Spray (Band)	60' Fold	MFWD 170	15,600	200	8	0.028	0.50	0.64	0.20	0.13	1.48	0.27	0.90	2.66
Spray (Bcast/HB)	13' Rigid	MFWD 150	6,760	200	8	0.130	2.34	2.61	0.41	0.52	5.90	0.54	3.51	9.96
Spray (Bcast/HB)	20' Rigid	MFWD 150	7,920	200	8	0.084	1.52	1.69	0.31	0.34	3.88	0.41	2.28	6.58
Spray (Bcast/HB)	27' Fold	MFWD 170	15,100	200	8	0.062	1.13	1.42	0.44	0.28	3.29	0.58	2.00	5.88
Spray (Bcast/HB)	27' Rigid	MFWD 170	9,570	200	8	0.062	1.13	1.42	0.28	0.28	3.12	0.37	2.00	5.50
Spray (Bcast/HB)	30' Fold	MFWD 170	18,600	200	8	0.056	1.01	1.28	0.49	0.26	3.05	0.65	1.80	5.50
Spray (Bcast/HB)	40' Fold	MFWD 170	21,800	200	8	0.042	0.76	0.96	0.43	0.19	2.35	0.57	1.35	4.27
Spray (Broadcast)	27'	MFWD 170	7,270	200	8	0.062	1.13	1.42	0.21	0.28	3.06	0.28	2.00	5.34
Spray (Broadcast)	40'	MFWD 170	8,630	200	8	0.042	0.76	0.96	0.17	0.19	2.09	0.22	1.35	3.67
Spray (Broadcast)	50'	MFWD 170	13,700	200	8	0.033	0.61	0.77	0.21	0.15	1.75	0.28	1.08	3.12
Spray (Broadcast)	60'	MFWD 170	15,600	200	8	0.028	0.50	0.64	0.20	0.13	1.48	0.27	0.90	2.66
Spray (Direct/Hood)	8R-30	MFWD 170	20,000	200	8	0.084	1.52	1.92	0.79	0.39	4.63	1.05	2.70	8.39
Spray (Direct/Hood)	8R-38	MFWD 170	21,500	200	8	0.066	1.20	1.52	0.67	0.30	3.71	0.89	2.13	6.74
Spray (Direct/Hood)	12R-30	MFWD 170	24,800	200	8	0.056	1.01	1.28	0.65	0.26	3.21	0.87	1.80	5.89
Spray (Direct/Hood)	12R-38	MFWD 170	26,600	200	8	0.044	0.80	1.01	0.55	0.20	2.57	0.73	1.42	4.73
Spray (Direct/Layby)	8R-30	MFWD 170	11,300	200	8	0.084	1.52	1.92	0.44	0.39	4.29	0.59	2.70	7.58
Spray (Direct/Layby)	8R-38	MFWD 170	11,300	200	8	0.066	1.20	1.52	0.35	0.30	3.39	0.47	2.13	5.99
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	14,900	200	8	0.044	0.80	1.01	0.31	0.20	2.33	0.41	1.42	4.16
Spray (Direct/Layby)	12R-30	MFWD 170	14,900	200	8	0.056	1.01	1.28	0.39	0.26	2.95	0.52	1.80	5.28
Spray (Direct/Layby)	12R-38	MFWD 170	14,900	200	8	0.044	0.80	1.01	0.31	0.20	2.33	0.41	1.42	4.16
Spray (Direct/Layby)	16R-20	MFWD 225	17,100	200	8	0.062	1.13	1.88	0.50	0.37	3.89	0.66	2.58	7.14
Spray (Levee Leaper)	50'	MFWD 225	13,200	200	8	0.033	0.61	1.01	0.20	0.20	2.04	0.27	1.39	3.71
Spray (Pull Type)	60'	MFWD 225	40,700	200	8	0.028	0.50	0.84	0.53	0.16	2.06	0.71	1.16	3.94
Spray (Pull Type)	80'	MFWD 225	52,500	200	8	0.021	0.38	0.63	0.52	0.12	1.66	0.69	0.87	3.22
Spray (Pull Type)	90'	2WD 50	53,200	200	8	0.018	0.33	0.12	0.46	0.01	0.94	0.62	0.08	1.65
Spray (Pull Type)	120'	MFWD 225	80,900	200	8	0.014	0.25	0.42	0.53	0.08	1.29	0.71	0.58	2.58
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.084	1.52	2.15	0.16	0.46	4.30	0.21	3.19	7.71
Spray (Spot)	27'	MFWD 170	7,270	200	8	0.062	1.13	1.42	0.21	0.28	3.06	0.28	2.00	5.34
Spray (Spot)	40'	MFWD 170	8,630	200	8	0.042	0.76	0.96	0.17	0.19	2.09	0.22	1.35	3.67
Spray (Spot)	50'	MFWD 170	13,700	200	8	0.033	0.61	0.77	0.21	0.15	1.75	0.28	1.08	3.12
Spray (Spot)	60'	MFWD 225	15,600	200	8	0.028	0.50	0.84	0.20	0.16	1.73	0.27	1.16	3.17
Stalk Shredder	14'	MFWD 150	21,100	200	10	0.117	1.59	2.36	2.17	0.47	6.61	1.45	3.18	11.24
Stalk Shredder Flex	20'	MFWD 150	29,300	200	10	0.082	1.11	1.65	2.11	0.33	5.22	1.41	2.22	8.85
Stalk Shredder-Flail	12'	MFWD 150	17,400	200	10	0.137	1.85	2.76	2.09	0.55	7.26	1.39	3.71	12.37
Stalk Shredder-Flail	15'	MFWD 150	21,900	200	10	0.110	1.48	2.20	2.10	0.44	6.24	1.40	2.96	10.62
Stalk Shredder-Flail	18'	MFWD 150	29,200	200	10	0.091	1.23	1.84	2.34	0.37	5.79	1.56	2.47	9.83
Stalk Shredder-Flail	20'	MFWD 150	29,000	200	10	0.082	1.11	1.65	2.09	0.33	5.19	1.39	2.22	8.82
Stalk Shredder-Flail	25'	MFWD 150	41,000	200	10	0.066	0.89	1.32	2.36	0.26	4.85	1.58	1.78	8.21
Subsoiler	3 shank	MFWD 190	5,810	100	15	0.204	2.76	5.19	0.39	1.11	9.46	1.11	7.71	18.30
Subsoiler	4 shank	MFWD 225	9,200	100	15	0.153	2.07	4.62	0.47	0.91	8.08	1.32	6.33	15.75
Subsoiler	5 shank	MFWD 225	12,600	100	15	0.122	1.65	3.68	0.51	0.73	6.58	1.44	5.04	13.07
Subsoiler low-till	6 shank	MFWD 225	14,600	100	15	0.102	1.38	3.07	0.49	0.60	5.56	1.40	4.21	11.17
Subsoiler low-till	8 shank	MFWD 225	20,000	100	15	0.076	1.03	2.30	0.51	0.45	4.30	1.43	3.15	8.89

Notes:

Labor: Includes labor from Power unit plus additional labor from the implement.
 Total Direct: Does not include interest on operating capital.

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2019

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Captan 50 WP	lb	4.28
Agri-Dex	pt	2.39	Cotton Seed Trt.	acre	20.00
Crop Oil Conc. (Pet.)	pt	2.37	CruiserMaxx	oz	4.28
Crop Oil Conc. (Veg.)	pt	2.58	Headline EC	oz	3.11
Dyne-A-Pak	pt	4.80	Propimax EC	pt	12.88
Induce	pt	3.59	Prosaro	oz	2.56
MSO	pt	2.09	Quadris	oz	2.25
Penetrator Plus	pt	2.34	Quadris Top	oz	2.61
Surfactant	pt	3.59	Quadris Top SBX	oz	2.75
CLEANING			Quilt	pt	18.55
Cleaning Peanuts	ton	18.00	Quilt XCEL	pt	25.43
CROP CONSULTANT			Stratego	pt	24.58
Corn Consultant	acre	6.00	Stratego YLD	oz	4.28
Cotton Consultant	acre	8.00	Tilt 3.6 EC	oz	0.75
Peanut Consultant	acre	9.25	Tilt/ Bravo SE	oz	0.41
Rice Consultant	acre	8.00	GINNING		
Sorghum Consultant	acre	6.00	Gin & Haul	lb	0.11
Soybeans Consultant	acre	6.50	GROWTH REGULATORS		
Wheat Consultant	acre	5.50	Mepex	oz	0.08
CUSTOM FERTILIZE			Mepichlor 4.2%	oz	0.08
App Fert by Air	cwt	7.00	Mepiquat	oz	0.08
App Fert by Air (Mi)	appl	7.00	Mepstar	oz	0.08
Custom Apply Fert	acre	7.50	Palisade	oz	1.25
CUSTOM LIME			Stance	oz	1.25
Lime (Spread)	ton	38.00	HARVEST AIDS		
CUSTOM PLANT			Adios	oz	1.99
Custom Plant	acre	7.50	Aim 2EC	oz	5.65
Custom Plant Air	cwt	7.00	Def/Folex	pt	10.90
CUSTOM			Defol 5	gal	5.40
App by Air (3 gal)	appl	5.00	Display	pt	40.61
App by Air (5 gal)	appl	6.50	Ethephon 6E	pt	3.53
App by Air (10 gal)	appl	9.00	Finish 6	pt	9.60
Custom Spray Ground	acre	7.00	Folex 6EC	pt	10.90
DRYING			Freefall SC	oz	0.97
Dry Corn	bu	0.19	Ginstar EC	pt	26.41
Dry Grain Sorghum	cwt	0.25	Gramoxone SL	oz	0.15
Dry Peanuts	ton	24.00	Sharpen	oz	6.45
Dry Rice	bu	0.40	Sodium Chlorate 5L	gal	5.40
ERADICATION FEE			SuperBoll	oz	0.22
Eradication	acre	1.00	Thidiazuron 4lb	oz	0.97
FERTILIZERS			Tribufos 6lb	pt	10.90
Agrotain Ultra	pt	9.12	HAULING		
Amm Sulfate (21% N)	cwt	14.50	Haul Corn	bu	0.23
Boron Plus	pt	3.50	Haul Peanuts	ton	14.50
DAP	cwt	23.76	Haul Rice	bu	0.35
Fert 10-34-0	cwt	22.25	Haul Sorghum	bu	0.25
Fert 10-34-0	gal	2.59	Haul Soybeans	bu	0.27
Fert 11-37-0	cwt	26.50	Haul Wheat	bu	0.26
Fert 33-0-0-12S	cwt	18.00	HERBICIDES		
Fert 41-0-0-4	cwt	14.25	2,4-D Ester	pt	4.17
Lime	ton	28.00	2,4-D Amine 4	pt	2.40
NBPT	pt	9.12	AAtrex 4L	pt	2.12
Phosphorus (46% P2O5)	cwt	23.75	Accent Q	oz	23.85
Potash (60% K2O)	cwt	20.00	Aim	oz	5.65
Sulfur Plus	pt	3.15	Anthem	oz	3.08
UAN (32% N)	cwt	11.25	Anthem Maxx	oz	6.16
UAN (32%)	gal	1.24	Armezon Pro	oz	1.26
UAN + Sulfur (28%)	cwt	12.40	Atrazine 4L	pt	1.98
UAN + Sulfur (28%)	gal	1.38	Atrazine 90DF	lb	3.38
Urea, Solid (46% N)	cwt	14.50	Authority Elite	pt	15.67
Zinc Plus	pt	4.99	Authority Maxx	lb	64.05
FUNGICIDES			Authority MTZ	lb	26.30
Aframe	oz	1.91	Axial XL	oz	1.18
Alfa Guard	lb	1.55	Axiom	oz	1.92
Allegiance Flowable	pt	49.00	Barrage	pt	6.63
Approach Prima	pt	42.10	Boundary	pt	11.21
Apron Maxx RTA	oz	0.95	Broadaxe	pt	16.57
Avicta Complete Bean	oz	0.49	Bucaneer Plus	pt	1.48
Bravo Weather Stick	pt	6.88			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2019(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Butyrac 200 (2,4-DB)	pt	4.34	Stalwart	pt	4.80
Bxxolero	pt	7.73	Stam 80 EDF	lb	9.64
Cadre	oz	3.54	Stam M4	qt	7.84
Caparol	pt	4.52	Staple LX	oz	7.63
Capreno	oz	7.13	Sterling Blue	pt	7.82
Cinch ATZ	pt	5.89	Storm	pt	11.41
Clarity	pt	11.51	Superwham	qt	9.20
Classic	oz	17.18	Suprend	lb	13.74
Clearpath	lb	61.27	Synchrony XP	oz	12.71
Clethomine 2E	oz	0.56	Tempest	oz	1.84
Clincher SF	oz	2.34	Touchdown Total	qt	6.97
Command 3ME	pt	19.93	Trifluralin	pt	3.56
Corvus	oz	7.29	Triflurex	pt	3.86
Cotoran	pt	6.42	Ultra Blazer	pt	10.26
Declare	oz	1.64	Valor SX	oz	4.57
Dicamba	pt	8.48	Warrant	pt	4.84
Direx	pt	2.93	XtendiMax	oz	9.10
Diuron	pt	2.90	Zidua	oz	9.05
Dual II Magnum	pt	14.83	INOCULANT		
Dual Magnum	pt	13.81	Inoculant-Soybean	acre	1.55
Duet	pt	5.35	Optimize LIFT	oz	0.55
Endigo	oz	1.80	INSECTICIDES		
Engenia	oz	1.02	Abamectin .15EC	oz	0.95
Facet L	pt	15.25	Acephate 90%	lb	8.70
Fierce	oz	7.54	Acephate 90SP	lb	7.92
First Rate	oz	43.40	Admire Pro	oz	1.80
Flexstar	pt	8.41	Baythroid XL	oz	2.65
Fusilade DX	oz	1.00	Belt	oz	7.90
Glyphosate 3lbs a.e	pt	2.16	Bidrin 8EC	oz	1.26
Glyphosate 3lbs a.e	oz	0.14	Bifenthrin	oz	0.76
Gramoxone SL 2.0	oz	0.15	Bifenture 2EC	oz	0.76
Grandstand R	pt	15.86	Brigade EC	pt	12.37
Halex GT	pt	7.80	Capture LFR	oz	2.28
Halomax	oz	21.44	Centric 40WG	oz	5.37
Harmony Extra SG	oz	13.79	Diamond .83EC	oz	1.40
Hero	pt	25.77	Dimethoate 4E	pt	5.35
Leadoff	oz	5.82	Dimilin 2L	oz	2.13
Lexar	pt	8.01	Force 3G	lb	6.03
Liberty 280	oz	0.59	Gaucho 600	oz	2.36
Loyant	oz	0.00	Imidacloprid 4F	oz	1.00
Metribuzin 4L	pt	9.98	Imidan 70 WSB	oz	0.67
Metribuzin 75	lb	16.40	IncidentalPestTrt \$8	acre	8.00
Newpath	oz	3.83	IncidentalPestTrt\$15	acre	15.00
Osprey	oz	3.62	IncidentalPestTrt\$22	acre	22.00
Outlook	pt	16.60	IncidentalPestTrt\$30	acre	30.00
Paraquat	oz	0.24	Intrepid 2F	oz	2.03
Parazone 3SL	oz	0.24	Intruder 70WSP	oz	9.05
Permit	oz	22.46	Karate Z	oz	2.74
Permit Plus	oz	21.02	Lambda	oz	1.09
Prefix	pt	6.53	Lannate LV	pt	10.99
Provisia	oz	0.78	Macho	oz	0.64
Prowl 3.3 EC	pt	6.09	Malathion 5E	pt	5.50
RealmQ	oz	4.97	Malathion 8E	pt	5.50
RebelEx	oz	2.51	Mustang Max	oz	1.34
Reflex	pt	6.53	Nuprid 4F	oz	1.06
Regiment	oz	44.90	Orthene 90	lb	9.49
Resicore	oz	0.58	Permethrin	oz	0.49
Resource	oz	1.83	Pounce 25WP	lb	14.15
RiceBeaux	pt	5.85	Prevathon	oz	1.32
Riceshot	pt	3.87	Radiant	oz	6.82
Ricestar HT	pt	24.35	Sevin 4F	pt	6.22
Roundup Power Max	oz	0.18	Sevin XLR Plus	qt	13.23
Roundup PowerMax	pt	2.80	Sivanto Prime	oz	2.52
Roundup WeatherMax	oz	0.26	Transform WG	oz	8.18
Roundup WeatherMax	pt	4.17	Warrior II	oz	2.67
Select Max	pt	12.71	IRRIGATION SUPPLIES		
Sequence	pt	5.94	Roll-Out Pipe	ft	0.25
Sharpen	oz	6.45	SEED/PLANTS		
Sinister	pt	15.63			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2019 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Corn Seed Conv.	thous	2.26	Rice Seed Trt/Insect	lbseed	0.23
Corn Seed BtRR	thous	3.63	Sorghum Concept	lb	2.10
Corn Seed RR2	thous	3.36	Sorghum Concept+ Po	lb	3.96
Cotton Seed B3XF	thous	2.40	Soybean Seed LL	lb	1.42
Cotton Seed GLB2	thous	2.54	Soybean Seed RR2	lb	1.34
Cotton Seed GLTP	thous	2.11	Soybean Seed RR2X	lb	1.55
Cotton Seed W3FE	thous	2.34	SOIL TEST		
CSeed B3XF/W3RE/GLTP	thous	2.28	Soil Test	acre	10.00
Peanut Seed	lb	0.84	SURVEY & MARK LEVEES		
Rice Clearfield	lb	1.06	Survey & Mark Levees	acre	4.50
Rice Clrflld Hyb Trt	lb	5.70			
Rice Conv Hyb Trt	lb	5.70			
Rice Seed CF(Levees)	lb	1.06			
Rice Seed CFH(Levee)	lb	1.78			
Rice Seed Conv.	lb	0.28			
Rice Seed Cv(Levees)	lb	0.28			
Rice Seed CvH(Levee)	lb	1.66			
Rice Seed Provisia	lb	1.15			

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2019

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	2.60
Gasoline	gal	2.50
INTEREST RATES		
Short-term	%	6.00
Intermediate-term	%	6.50

Appendix Table 6. Labor types, wage rates and unallocated labor
Multipliers for crop enterprises, Mississippi, 2019

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	14.23
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, 2019

Crop	unit	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '19	4.00	-0.20	3.80	2.10	3.80
Cotton Lint	lb	Dec '19	0.7572	-0.0158	0.7414	0.52	0.7414
Cottonseed	lb						0.10 ^f
Grain Sorghum	bu				3.61	2.02	3.61
Peanuts	ton				385.00	355.00	385.00
Soybeans	bu	Nov '19	9.29	+0.01	9.30	5.21	9.30
Rice	bu	Nov '19	4.98	-0.38	4.60	2.96	4.60
Wheat	bu	Jul '19	5.52	-0.15	5.37	2.76	5.37

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2018 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 2018 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 2018 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2018 Farm-stored Loan Rate for long grain rough rice. National 2019 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 2008-2017.

Appendix Table 8. Estimated costs for field operations, per acre
 Full-season soybeans irrigated with roll-out pipe
 160-acre system, 9 ac-in., Delta Area, Mississippi, 2019

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'		0.96	0.32	0.51			0.11	1.90	1.75	3.65
Set Up Engine											
IRRIGATE LABOR	hour				0.23			0.01	0.24		0.24
Ditcher (1m/160a)			0.21	0.06	0.13			0.01	0.41	0.33	0.74
Roll-Out Pipe	ft	8.25						0.16	8.41		8.41
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.28	0.09	0.40			0.02	0.79	0.72	1.51
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
Pick Up Pipe											
Pipe Spool 160ac	1/4m roll		0.43	0.13	0.59			0.01	1.16	1.07	2.23
Land Forming (\$450)	each									36.89	36.89
Well & Pump, Furrow	each			2.96				0.06	3.02	10.09	13.11
Main Line Pipe	each									4.99	4.99
Engine, RPF, ESB	each									9.53	9.53
1st June Irrigation	ac-in		6.35	1.31				0.15	7.81		7.81
2nd June Irrigation	ac-in		6.35	1.31				0.15	7.81		7.81
July Irrigation	ac-in		6.35	1.31				0.11	7.77		7.77
TOTALS		8.25	20.93	7.49	4.36	0.00	0.83	41.86	65.37	107.23	

Note: Cost of production estimates are based on 2018 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, 2019

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		0.37	0.09	0.22			0.02	0.70	1.34
Survey & Mark Levees	acre	2.25						0.06	2.31	2.31
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.49	0.13	0.29			0.02	0.93	1.79
Butt Levees										
Blade-Box	6'-7'		0.46	0.10	0.27			0.02	0.85	1.50
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Apply Water										
IRRIGATE LABOR	hour				0.11				0.11	0.11
Tear Down Levees										
Levee Splitter (1/80)	32"		0.38	0.10	0.23			0.02	0.73	1.40
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.49	0.13	0.29			0.02	0.93	1.79
Butt Levees										
Blade-Box	6'-7'		0.46	0.10	0.27			0.02	0.85	1.50
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"		0.38	0.10	0.23			0.01	0.72	1.39
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.49	0.13	0.29			0.01	0.92	1.78
Butt Levees										
Blade-Box	6'-7'		0.46	0.10	0.27			0.01	0.84	1.49
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"		0.38	0.10	0.23			0.01	0.72	1.39
Tear Down Levees										
Levee Splitter (1/80)	32"		0.28	0.08	0.17			0.01	0.54	1.04
Land Forming (\$113)	each								9.26	9.26
Well & Pump, Flood	each			5.91				0.15	6.06	26.25
Engine, CF, 75	each								19.06	19.06
June Irrigation	ac-in		9.53	2.63				0.30	12.46	12.46
July Irrigation	ac-in		9.53	2.63				0.24	12.40	12.40
August Irrigation	ac-in		9.53	2.63				0.18	12.34	12.34
TOTALS		2.25	33.23	14.96	5.58	0.00	1.15	57.17	56.19	113.36

Note: Cost of production estimates are based on 2018 input prices.

Appendix Table 10. Estimated costs for field operations, per acre
 Irrigation with a 1/2-mile center pivot system
 530-acre system, 7.5 ac-in., Delta Area, Mississippi, 2019

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			8.60			0.22	8.82	39.04	47.86
Well & Pump, 1/2 CP	each			1.13			0.03	1.16	3.87	5.03
Engine, 1/2 CP, 174	each								4.45	4.45
June Irr. 3app@.75"	ac-in		12.80	0.55			0.33	13.68		13.68
July Irr. 4app@.75"	ac-in		17.06	0.74			0.36	18.16		18.16
Aug Irr. 3app@.75"	ac-in		12.80	0.55			0.20	13.55		13.55
TOTALS		0.00	42.66	11.57	0.47	0.00	1.15	55.85	47.36	103.21

Note: Cost of production estimates are based on 2018 input prices.

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