

**SOYBEANS
2021
PLANNING BUDGETS**

**Mississippi State University
Department of Agricultural Economics
Budget Report 2020-02**

October 2020

Foreword

This report is designed to provide necessary planning data to farmers, research and extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled "**Returns Above Specified Expenses.**" Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. "**Returns Above Direct Expenses**" should be used in making 2021 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses.**"

Acknowledgments

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

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

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

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

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2021 Planning Budgets

Budgets for Agricultural Enterprises

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

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

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

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

Methods and Procedures

Production Practices

The production practices listed in each budget are the result of a combined effort by researchers and extension personnel to represent those practices that producers could use in a specific production system. Producers might use different practices in their own operations. If different types and quantities of operating inputs are to be used, then the budgeted expenses should be changed to more accurately reflect actual input usage.

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 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 2020. (Appendix Tables 1, 2, and 3).

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

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

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

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

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

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

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

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

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

Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2020 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

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

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

Irrigation Costs

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

Net Returns

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

Enterprise Budgets

Table 1.A Estimated costs per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Non-irrigated, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	_____
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	_____
Potash (60% K2O)	cwt	22.11	1.3300	29.41	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	64.0000	8.32	_____
2,4-D Amine 4	pt	2.25	2.0000	4.50	_____
Select Max	pt	12.74	1.0000	12.74	_____
Valor SX	oz	4.51	2.0000	9.02	_____
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Liberty 280	oz	0.44	29.0000	12.76	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Zidua DF	oz	8.72	1.5000	13.08	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.2942	4.30	_____
Harvesters	hour	14.68	0.0851	1.25	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	14.64	0.3414	5.00	_____
DIESEL FUEL					
Tractors	gal	1.53	3.4079	5.22	_____
Harvesters	gal	1.53	1.4243	2.18	_____
REPAIR & MAINTENANCE					
Implements	acre	5.23	1.0000	5.23	_____
Tractors	acre	2.15	1.0000	2.15	_____
Harvesters	acre	3.50	1.0000	3.50	_____
INTEREST ON OP. CAP.	acre	7.65	1.0000	7.65	_____
TOTAL DIRECT EXPENSES				351.66	_____
FIXED EXPENSES					
Implements	acre	10.36	1.0000	10.36	_____
Tractors	acre	13.04	1.0000	13.04	_____
Harvesters	acre	13.41	1.0000	13.41	_____
TOTAL FIXED EXPENSES				36.81	_____
TOTAL SPECIFIED EXPENSES				388.47	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
Non-irrigated, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	42.0000	406.14	_____

TOTAL INCOME				406.14	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	105.01	1.0000	105.01	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	3.30	1.0000	3.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.3794	5.55	_____
UNALLOCATED LABOR	hour	14.64	0.3414	5.00	_____
DIESEL FUEL	gal	1.53	4.8323	7.40	_____
REPAIR & MAINTENANCE	acre	10.88	1.0000	10.88	_____
INTEREST ON OP. CAP.	acre	7.65	1.0000	7.65	_____

TOTAL DIRECT EXPENSES				351.66	_____
RETURNS ABOVE DIRECT EXPENSES				54.48	_____
TOTAL FIXED EXPENSES				36.81	_____

TOTAL SPECIFIED EXPENSES				388.47	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				17.67	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
Non-irrigated, Delta Area, Mississippi, 2021

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	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
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 Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	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
Glyphosate 3lbs a.e	oz					32.0000				
Zidua DF	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							0.37	0.37	0.47	0.34

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
Non-irrigated, Delta Area, Mississippi, 2021

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						0.13	3.46		3.46
Subsoiler	3 shank		0.72	0.39	1.14			0.09	2.34	2.01	4.35
Lime (Spread)	ton	15.80						0.63	16.43		16.43
Custom Apply Fert	acre	7.50						0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06						0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41						1.18	30.59		30.59
Disk Harrow	32'		1.09	1.50	1.71			0.17	4.47	4.85	9.32
Field Cultivate Fld	32'		0.83	0.85	1.30			0.12	3.10	4.14	7.24
App by Air (5 gal)	appl	7.00						0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16						0.11	4.27		4.27
2,4-D Amine 4	pt	4.50						0.12	4.62		4.62
Select Max	pt	12.74						0.34	13.08		13.08
Valor SX	oz	9.02						0.24	9.26		9.26
Surfactant	pt	1.32						0.04	1.36		1.36
Plant & Pre-Folding	12R-30		1.20	2.55	2.49			0.12	6.36	6.79	13.15
Soybean Enlist E3	lb	60.00						1.20	61.20		61.20
CruiserMaxx Vibrance	oz	7.60						0.15	7.75		7.75
Inoculant -Soybean	acre	1.55						0.03	1.58		1.58
Boundary	pt	22.14						0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12						0.18	9.30		9.30
Surfactant	pt	1.32						0.03	1.35		1.35
Soybeans Consultant	acre	6.50						0.11	6.61		6.61
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Liberty 280	oz	12.76						0.21	12.97		12.97
Dual Magnum	pt	13.33						0.22	13.55		13.55
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23		4.23
Zidua DF	oz	13.08						0.22	13.30		13.30
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Acephate 90SP	lb	4.81						0.03	4.84		4.84
Incidental Pest											
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00						0.05	8.05		8.05
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Gramoxone SL	oz	3.04						0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06						0.03	4.09		4.09
Surfactant	pt	0.66							0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37			0.03	9.01	14.76	23.77
Haul Soybeans	bu	11.34						0.04	11.38		11.38
Grain Cart Soybean	700 bu		0.38	0.40	0.59				1.37	1.36	2.73
TOTALS		314.31	7.40	10.88	11.42	0.00		7.65	351.66	36.81	388.47

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
Non-irrigated, Delta Area, Mississippi, 2021

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	406.14
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	21.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.42	0.00	31.26	43.33	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	12.81	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.00	0.66	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	15.80	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	4.15	0.00	0.00	0.00	0.00	0.00	2.49	1.82	0.00	0.00	0.00	2.96
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	2.64	0.00	0.00	0.00	0.00	0.00	1.20	1.00	0.00	0.00	0.00	2.56
REPAIR & MAINTENANCE	2.74	0.00	0.00	0.00	0.00	0.00	2.55	0.76	0.00	0.00	0.00	4.83
INTEREST ON OP. CAP.	3.22	0.00	0.00	0.00	1.04	0.00	2.15	0.89	0.00	0.00	0.28	0.07
TOTAL DIRECT EXPENSES	83.85	0.00	0.00	0.00	39.78	0.00	110.12	54.30	0.00	0.00	41.85	21.76
NET INCOME	-83.85	0.00	0.00	0.00	-39.78	0.00	-110.12	-54.30	0.00	0.00	-41.85	384.38
NET INCOME TO DATE	-83.85	-83.85	-83.85	-83.85	-123.63	-123.63	-233.75	-288.05	-288.05	-288.05	-329.90	54.48

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
 Non-irrigated, Delta Area, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-193 -230	-183 -220	-173 -210	-163 -200	-153 -189	-142 -179	-132 -169	-122 -159	-112 -149	-102 -139	-92 -128
60	25.20	bu	-164 -201	-152 -188	-139 -176	-127 -164	-115 -152	-103 -140	-91 -128	-79 -115	-66 -103	-54 -91	-42 -79
70	29.40	bu	-135 -171	-120 -157	-106 -143	-92 -129	-78 -114	-63 -100	-49 -86	-35 -72	-21 -58	-7 -43	7 -29
80	33.60	bu	-105 -142	-89 -126	-73 -110	-56 -93	-40 -77	-24 -61	-8 -45	8 -28	24 -12	40 3	56 19
90	37.80	bu	-76 -113	-58 -94	-39 -76	-21 -58	-3 -40	15 -21	33 -3	51 14	69 33	88 51	106 69
100	42.00	bu	-47 -83	-26 -63	-6 -43	13 -22	34 -2	54 17	74 37	95 58	115 78	135 98	156 119
110	46.20	bu	-17 -54	4 -32	26 -9	49 12	71 34	93 57	116 79	138 101	160 124	183 146	205 168
120	50.40	bu	11 -25	35 -0	60 23	84 47	109 72	133 96	157 120	182 145	206 169	230 194	255 218
130	54.60	bu	40 4	67 30	93 56	120 83	146 109	172 136	199 162	225 188	252 215	278 241	304 268
140	58.80	bu	70 33	98 61	127 90	155 118	183 147	212 175	240 204	269 232	297 260	326 289	354 317
150	63.00	bu	99 62	130 93	160 123	190 154	221 184	251 215	282 245	312 275	343 306	373 336	404 367

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 2020 input prices.

Table 2.A Estimated costs per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.0000	35.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	_____
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	_____
Potash (60% K2O)	cwt	22.11	1.3300	29.41	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
Miravis Top	oz	1.44	13.7000	19.73	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	64.0000	8.32	_____
2,4-D Amine 4	pt	2.25	2.0000	4.50	_____
Select Max	pt	12.74	1.0000	12.74	_____
Valor SX	oz	4.51	2.0000	9.02	_____
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Liberty 280	oz	0.44	29.0000	12.76	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Zidua DF	oz	8.72	1.5000	13.08	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.4536	6.65	_____
Harvesters	hour	14.68	0.0851	1.25	_____
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	14.65	0.4142	6.07	_____
DIESEL FUEL					
Tractors	gal	1.53	5.0709	7.77	_____
Harvesters	gal	1.53	1.4243	2.18	_____
Roll-Out Pipe Irr.	gal	1.53	7.3316	11.22	_____
REPAIR & MAINTENANCE					
Implements	acre	6.18	1.0000	6.18	_____
Tractors	acre	3.17	1.0000	3.17	_____
Harvesters	acre	3.50	1.0000	3.50	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	8.56	1.0000	8.56	_____
TOTAL DIRECT EXPENSES				422.03	_____
FIXED EXPENSES					
Implements	acre	13.55	1.0000	13.55	_____
Tractors	acre	19.27	1.0000	19.27	_____
Harvesters	acre	13.41	1.0000	13.41	_____
Roll-Out Pipe Irr.	acre	51.84	1.0000	51.84	_____
TOTAL FIXED EXPENSES				98.07	_____
TOTAL SPECIFIED EXPENSES				520.10	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	60.0000	580.20	_____

TOTAL INCOME				580.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	35.00	1.0000	35.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	105.01	1.0000	105.01	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.5388	7.90	_____
UNALLOCATED LABOR	hour	14.65	0.4142	6.07	_____
DIESEL FUEL	gal	1.53	13.8269	21.17	_____
REPAIR & MAINTENANCE	acre	20.01	1.0000	20.01	_____
INTEREST ON OP. CAP.	acre	8.56	1.0000	8.56	_____

TOTAL DIRECT EXPENSES				422.03	_____
RETURNS ABOVE DIRECT EXPENSES				158.17	_____
TOTAL FIXED EXPENSES				98.07	_____

TOTAL SPECIFIED EXPENSES				520.10	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				60.10	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

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	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
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 Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	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
Glyphosate 3lbs a.e	oz					32.0000				
Zidua DF	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Miravis Top	oz					13.7000				
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							0.53	0.53	0.99	0.41

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

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						0.13	3.46		3.46
Subsoiler	3 shank		0.72	0.39	1.14			0.09	2.34	2.01	4.35
Lime (Spread)	ton	15.80						0.63	16.43		16.43
Custom Apply Fert	acre	7.50						0.30	7.80		7.80
Phosphorus(46% P2O5)	cwt	15.06						0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41						1.18	30.59		30.59
Disk Harrow	32'		1.09	1.50	1.71			0.17	4.47	4.85	9.32
Field Cultivate Fld	32'		0.83	0.85	1.30			0.12	3.10	4.14	7.24
Bed/Lister-Roll-Fo	12R-30		1.43	1.35	2.26			0.20	5.24	5.54	10.78
App by Air (5 gal)	appl	7.00						0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16						0.11	4.27		4.27
2,4-D Amine 4	pt	4.50						0.12	4.62		4.62
Select Max	pt	12.74						0.34	13.08		13.08
Valor SX	oz	9.02						0.24	9.26		9.26
Surfactant	pt	1.32						0.04	1.36		1.36
Plant & Pre-Folding	12R-30		1.20	2.55	2.49			0.12	6.36	6.79	13.15
Soybean Enlist E3	lb	60.00						1.20	61.20		61.20
CruiserMaxx Vibrance	oz	7.60						0.15	7.75		7.75
Inoculant -Soybean	acre	1.55						0.03	1.58		1.58
Boundary	pt	22.14						0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12						0.18	9.30		9.30
Surfactant	pt	1.32						0.03	1.35		1.35
Soybeans Consultant	acre	6.50						0.11	6.61		6.61
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Liberty 280	oz	12.76						0.21	12.97		12.97
Dual Magnum	pt	13.33						0.22	13.55		13.55
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23		4.23
Zidua DF	oz	13.08						0.22	13.30		13.30
App by Air (5 gal)	appl	7.00						0.07	7.07		7.07
Miravis Top	oz	19.73						0.20	19.93		19.93
Surfactant	pt	0.33							0.33		0.33
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Acephate 90SP	lb	4.81						0.03	4.84		4.84
Incidental Pest											
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00						0.05	8.05		8.05
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Gramoxone SL	oz	3.04						0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06						0.03	4.09		4.09
Surfactant	pt	0.66							0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37			0.03	9.01	14.76	23.77
Haul Soybeans	bu	16.20						0.05	16.25		16.25
Grain Cart Soybean	700 bu		0.38	0.40	0.59				1.37	1.36	2.73
Roll-Out Pipe Irr.	acre	7.92	12.34	7.78	4.46			0.43	32.93	55.72	88.65
TOTALS		354.15	21.17	20.01	18.14	0.00	8.56	422.03	98.07	520.10	

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

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	580.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	7.00	21.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	19.73	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.42	0.00	31.26	43.33	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	12.81	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.33	0.66	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	15.80	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	6.97	0.00	0.00	0.00	0.00	0.00	2.49	2.05	2.82	0.23	0.00	3.58
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.64	0.00	0.00	0.00	0.00	0.00	1.20	1.00	7.78	3.74	0.00	2.81
REPAIR & MAINTENANCE	4.39	0.00	0.00	0.00	0.00	0.00	2.55	0.76	5.93	1.40	0.00	4.98
INTEREST ON OP. CAP.	3.48	0.00	0.00	0.00	1.04	0.00	2.15	0.89	0.32	0.32	0.28	0.08
TOTAL DIRECT EXPENSES	90.58	0.00	0.00	0.00	39.78	0.00	110.12	54.53	24.77	32.75	41.85	27.65
NET INCOME	-90.58	0.00	0.00	0.00	-39.78	0.00	-110.12	-54.53	-24.77	-32.75	-41.85	552.55
NET INCOME TO DATE	-90.58	-90.58	-90.58	-90.58	-130.36	-130.36	-240.48	-295.01	-319.78	-352.53	-394.38	158.17

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08		
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-196 -294	-181 -279	-167 -265	-152 -250	-138 -236	-123 -221	-109 -207	-94 -192	-80 -178	-65 -163	-51 -149
60	36.00	bu	-154 -252	-137 -235	-119 -217	-102 -200	-84 -182	-67 -165	-50 -148	-32 -130	-15 -113	2 -95	19 -78
70	42.00	bu	-112 -210	-92 -190	-71 -170	-51 -149	-31 -129	-11 -109	9 -88	29 -68	49 -48	70 -27	90 -7
80	48.00	bu	-70 -168	-47 -145	-24 -122	-1 -99	22 -75	45 -52	68 -29	91 -6	115 16	138 40	161 63
90	54.00	bu	-28 -126	-2 -100	23 -74	49 -48	75 -22	101 3	127 29	153 55	180 82	206 108	232 134
100	60.00	bu	13 -84	42 -55	71 -26	100 2	129 31	158 60	187 89	216 118	245 147	274 176	303 205
110	66.00	bu	55 -43	86 -11	118 20	150 52	182 84	214 116	246 148	278 180	310 212	342 244	374 276
120	72.00	bu	96 -1	131 33	166 68	201 103	236 138	270 172	305 207	340 242	375 277	410 312	445 346
130	78.00	bu	138 40	176 78	214 116	251 153	289 191	327 229	365 266	402 304	440 342	478 380	515 417
140	84.00	bu	180 82	221 123	261 163	302 204	343 245	383 285	424 326	464 366	505 407	546 448	586 488
150	90.00	bu	222 124	266 168	309 211	353 255	396 298	440 342	483 385	527 429	570 472	614 516	657 559

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 2020 input prices.

Table 3.A Estimated costs per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	_____
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	_____
Potash (60% K2O)	cwt	22.11	1.3300	29.41	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
Miravis Top	oz	1.44	13.7000	19.73	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	64.0000	8.32	_____
Select Max	pt	12.74	1.0000	12.74	_____
Valor SX	oz	4.51	2.0000	9.02	_____
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Liberty 280	oz	0.44	29.0000	12.76	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.4377	6.37	_____
Harvesters	hour	14.68	0.0851	1.25	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR	hour	14.61	0.2880	4.21	_____
DIESEL FUEL					
Tractors	gal	1.53	4.4959	6.90	_____
Harvesters	gal	1.53	1.4243	2.18	_____
Contour Flood Irr.	gal	1.53	10.9974	16.83	_____
REPAIR & MAINTENANCE					
Implements	acre	5.09	1.0000	5.09	_____
Tractors	acre	2.73	1.0000	2.73	_____
Harvesters	acre	3.50	1.0000	3.50	_____
Contour Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	8.18	1.0000	8.18	_____
TOTAL DIRECT EXPENSES				397.38	_____
FIXED EXPENSES					
Implements	acre	9.53	1.0000	9.53	_____
Tractors	acre	16.59	1.0000	16.59	_____
Harvesters	acre	13.41	1.0000	13.41	_____
Contour Flood Irr.	acre	41.43	1.0000	41.43	_____
TOTAL FIXED EXPENSES				80.96	_____
TOTAL SPECIFIED EXPENSES				478.34	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	53.0000	512.51	_____

TOTAL INCOME				512.51	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	87.43	1.0000	87.43	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
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	15.80	1.0000	15.80	_____
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	14.68	0.5229	7.62	_____
UNALLOCATED LABOR	hour	14.61	0.2880	4.21	_____
DIESEL FUEL	gal	1.53	16.9177	25.91	_____
REPAIR & MAINTENANCE	acre	25.63	1.0000	25.63	_____
INTEREST ON OP. CAP.	acre	8.18	1.0000	8.18	_____

TOTAL DIRECT EXPENSES				397.38	_____
RETURNS ABOVE DIRECT EXPENSES				115.13	_____
TOTAL FIXED EXPENSES				80.96	_____

TOTAL SPECIFIED EXPENSES				478.34	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				34.17	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

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	32'	MFWD 225	0.061	1.00	Nov		0.06	0.06	0.06	0.05
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 225	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	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	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Miravis Top	oz					13.7000				
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 225	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							0.52	0.52	0.94	0.28

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

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						0.13	3.46		3.46
Disk Harrow	32'		1.09	1.50	1.71			0.17	4.47	4.85	9.32
Lime (Spread)	ton	15.80						0.63	16.43		16.43
Custom Apply Fert	acre	7.50						0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06						0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41						1.18	30.59		30.59
Spray (Broadcast)	60'		0.50	0.38	0.91			0.05	1.84	1.45	3.29
Glyphosate 3lbs a.e	oz	4.16						0.12	4.28		4.28
Select Max	pt	12.74						0.38	13.12		13.12
Surfactant	pt	1.32						0.04	1.36		1.36
Valor SX	oz	9.02						0.27	9.29		9.29
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.49			0.12	6.36	6.79	13.15
Soybean Enlist E3	lb	60.00						1.20	61.20		61.20
CruiserMaxx Vibrance	oz	7.60						0.15	7.75		7.75
Inoculant -Soybean	acre	1.55						0.03	1.58		1.58
Boundary	pt	22.14						0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12						0.18	9.30		9.30
Surfactant	pt	1.32						0.03	1.35		1.35
Spray (Broadcast)	60'		0.50	0.38	0.91			0.04	1.83	1.45	3.28
Liberty 280	oz	12.76						0.26	13.02		13.02
Dual Magnum	pt	13.33						0.27	13.60		13.60
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23		4.23
App by Air (5 gal)	appl	7.00						0.09	7.09		7.09
Miravis Top	oz	19.73						0.26	19.99		19.99
Surfactant	pt	0.33							0.33		0.33
App by Air (5 gal)	appl	7.00						0.07	7.07		7.07
Acephate 90SP	lb	4.81						0.05	4.86		4.86
Incidental Pest											
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00						0.05	8.05		8.05
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Gramoxone SL	oz	3.04						0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06						0.03	4.09		4.09
Surfactant	pt	0.66							0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37			0.03	9.01	14.76	23.77
Haul Soybeans	bu	14.31						0.05	14.36		14.36
Grain Cart Soybean	700 bu		0.38	0.40	0.59				1.37	1.36	2.73
Contour Flood Irr.	acre	2.25	19.56	15.61	5.76			0.61	43.79	48.85	92.64
TOTALS		322.01	25.91	25.63	15.65	0.00	8.18	397.38	80.96	478.34	

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

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	512.51
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	7.00	14.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	19.73	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	25.92	0.00	0.00	57.35	4.16	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	4.81	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.32	0.00	0.00	1.32	0.00	0.33	0.00	0.66	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	15.80	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	1.71	0.00	0.00	0.91	0.00	0.00	3.85	2.78	1.63	1.63	0.18	2.96
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.09	0.00	0.00	0.50	0.00	0.00	1.70	7.11	6.39	6.39	0.17	2.56
REPAIR & MAINTENANCE	1.50	0.00	0.00	0.38	0.00	0.00	2.93	9.57	3.17	3.17	0.08	4.83
INTEREST ON OP. CAP.	3.01	0.00	0.00	0.86	0.00	0.00	2.86	0.43	0.50	0.24	0.20	0.08
TOTAL DIRECT EXPENSES	78.41	0.00	0.00	29.89	0.00	0.00	145.66	26.30	38.75	23.24	30.39	24.74
NET INCOME	-78.41	0.00	0.00	-29.89	0.00	0.00	-145.66	-26.30	-38.75	-23.24	-30.39	487.77
NET INCOME TO DATE	-78.41	-78.41	-78.41	-108.30	-108.30	-108.30	-253.96	-280.26	-319.01	-342.25	-372.64	115.13

Note: Cost of production estimates are based on 2020 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, Enlist E3, stale seedbed, 12R30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-198 -278	-185 -266	-172 -253	-159 -240	-146 -227	-133 -214	-121 -202	-108 -189	-95 -176	-82 -163	-69 -150
60	31.80	bu	-161 -241	-145 -226	-130 -211	-114 -195	-99 -180	-84 -165	-68 -149	-53 -134	-38 -118	-22 -103	-7 -88
70	37.10	bu	-124 -204	-106 -187	-88 -169	-70 -151	-52 -133	-34 -115	-16 -97	1 -79	19 -61	37 -43	55 -25
80	42.40	bu	-87 -167	-66 -147	-46 -126	-25 -106	-5 -85	15 -65	36 -44	56 -24	77 -3	97 16	118 37
90	47.70	bu	-50 -130	-26 -107	-3 -84	19 -61	42 -38	65 -15	88 7	111 30	134 53	157 76	180 99
100	53.00	bu	-12 -93	12 -68	38 -42	63 -17	89 8	115 34	140 59	166 85	192 111	217 136	243 162
110	58.30	bu	24 -56	52 -28	80 -0	108 27	136 55	164 83	193 112	221 140	249 168	277 196	305 224
120	63.60	bu	61 -19	91 10	122 41	153 72	184 103	214 133	245 164	276 195	307 226	337 256	368 287
130	68.90	bu	98 17	131 50	164 83	197 116	231 150	264 183	297 216	331 250	364 283	397 316	431 350
140	74.20	bu	135 54	170 89	206 125	242 161	278 197	314 233	350 269	386 305	422 341	457 376	493 412
150	79.50	bu	172 91	210 129	248 167	287 206	325 244	364 283	402 321	441 360	479 398	517 436	556 475

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 2020 input prices.

Table 4.A Estimated costs per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	_____
Potash (60% K2O)	cwt	22.11	1.3300	29.41	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
Miravis Top	oz	1.44	13.7000	19.73	_____
HERBICIDES					
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Liberty 280	oz	0.44	29.0000	12.76	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
Prevathon	oz	1.05	14.0000	14.70	_____
Bifenthrin	oz	0.94	6.4000	6.02	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.1171	1.71	_____
Harvesters	hour	14.68	0.1021	1.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	_____
DIESEL FUEL					
Tractors	gal	1.53	1.3567	2.08	_____
Harvesters	gal	1.53	1.3935	2.13	_____
1/2-mi Pivot Irr.	gal	1.53	16.4057	25.10	_____
REPAIR & MAINTENANCE					
Implements	acre	3.40	1.0000	3.40	_____
Tractors	acre	0.85	1.0000	0.85	_____
Harvesters	acre	4.16	1.0000	4.16	_____
1/2-mi Pivot Irr.	acre	12.00	1.0000	12.00	_____
INTEREST ON OP. CAP.	acre	6.53	1.0000	6.53	_____
TOTAL DIRECT EXPENSES				364.28	_____
FIXED EXPENSES					
Implements	acre	5.75	1.0000	5.75	_____
Tractors	acre	5.19	1.0000	5.19	_____
Harvesters	acre	15.93	1.0000	15.93	_____
1/2-mi Pivot Irr.	acre	40.89	1.0000	40.89	_____
TOTAL FIXED EXPENSES				67.76	_____
TOTAL SPECIFIED EXPENSES				432.04	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, 12R30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	50.0000	483.50	_____

TOTAL INCOME				483.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	57.35	1.0000	57.35	_____
INSECTICIDES	acre	33.53	1.0000	33.53	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.2193	3.21	_____
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	_____
DIESEL FUEL	gal	1.53	19.1560	29.31	_____
REPAIR & MAINTENANCE	acre	20.41	1.0000	20.41	_____
INTEREST ON OP. CAP.	acre	6.53	1.0000	6.53	_____

TOTAL DIRECT EXPENSES				364.28	_____
RETURNS ABOVE DIRECT EXPENSES				119.22	_____
TOTAL FIXED EXPENSES				67.76	_____

TOTAL SPECIFIED EXPENSES				432.04	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				51.46	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, 12R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

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 Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	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				
Miravis Top	oz					13.7000				
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 2020 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, Enlist E3, 12R30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

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						0.13	3.46		3.46
Lime (Spread)	ton	15.80						0.63	16.43		16.43
Custom Apply Fert	acre	7.50						0.30	7.80		7.80
Phosphorus(46% P2O5)	cwt	15.06						0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41						1.18	30.59		30.59
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.45			0.10	6.30	6.79	13.09
Soybean Enlist E3	lb	60.00						1.00	61.00		61.00
CruiserMaxx Vibrance	oz	7.60						0.13	7.73		7.73
Inoculant -Soybean	acre	1.55						0.03	1.58		1.58
Boundary	pt	22.14						0.37	22.51		22.51
Gramoxone SL 2.0	oz	9.12						0.15	9.27		9.27
Surfactant	pt	1.32						0.02	1.34		1.34
Spray (Broadcast)	60'		0.50	0.38	0.90			0.02	1.80	1.45	3.25
Liberty 280	oz	12.76						0.17	12.93		12.93
Dual Magnum	pt	13.33						0.18	13.51		13.51
App by Air (5 gal)	appl	7.00						0.07	7.07		7.07
Miravis Top	oz	19.73						0.20	19.93		19.93
Surfactant	pt	0.33							0.33		0.33
App by Air (5 gal)	appl	7.00						0.07	7.07		7.07
Acephate 90SP	lb	4.81						0.05	4.86		4.86
App by Air (5 gal)	appl	7.00						0.07	7.07		7.07
Prevathon	oz	14.70						0.15	14.85		14.85
Surfactant	pt	0.33							0.33		0.33
Bifenthrin	oz	6.02						0.06	6.08		6.08
Incidental Pest											
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00						0.05	8.05		8.05
Header -Soybean	25' Flex		2.13	5.08	2.79			0.03	10.03	17.27	27.30
Haul Soybeans	bu	13.50						0.05	13.55		13.55
Grain Cart Soybean	700 bu		0.38	0.40	0.58				1.36	1.36	2.72
1/2-mi Pivot Irr.	acre		25.10	12.00	0.47			0.54	38.11	40.89	79.00
TOTALS		300.84	29.31	20.41	7.19	0.00	6.53	364.28	67.76	432.04	

Note: Cost of production estimates are based on 2020 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, Enlist E3, 12R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

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	483.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	7.00	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	19.73	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.26	26.09	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	25.53	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.66	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	15.80	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	2.49	0.95	0.04	0.00	3.37
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	8.73	10.54	7.53	0.00	2.51
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	1.29	0.68	0.00	5.48
INTEREST ON OP. CAP.	2.84	0.00	0.00	0.00	0.00	0.00	0.14	2.10	0.52	0.75	0.10	0.08
TOTAL DIRECT EXPENSES	73.94	0.00	0.00	0.00	0.00	0.00	6.98	128.01	39.39	75.92	15.10	24.94
NET INCOME	-73.94	0.00	0.00	0.00	0.00	0.00	-6.98	-128.01	-39.39	-75.92	-15.10	458.56
NET INCOME TO DATE	-73.94	-73.94	-73.94	-73.94	-73.94	-73.94	-80.92	-208.93	-248.32	-324.24	-339.34	119.22

Note: Cost of production estimates are based on 2020 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, Enlist E3, 12R30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Soybeans			7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08
PERCENT	YIELD	UNIT	-----dollars-----										
50	25.00	bu	-176 -243	-164 -231	-152 -219	-139 -207	-127 -195	-115 -183	-103 -171	-91 -159	-79 -147	-67 -135	-55 -123
60	30.00	bu	-141 -209	-126 -194	-112 -180	-97 -165	-83 -151	-68 -136	-54 -122	-39 -107	-25 -93	-10 -78	3 -63
70	35.00	bu	-106 -174	-89 -157	-72 -140	-55 -123	-38 -106	-21 -89	-4 -72	12 -55	29 -38	45 -21	62 -4
80	40.00	bu	-71 -139	-52 -119	-32 -100	-13 -81	5 -61	25 -42	44 -23	63 -3	83 15	102 34	121 54
90	45.00	bu	-36 -104	-14 -82	6 -60	28 -39	50 -17	72 4	93 26	115 47	137 69	159 91	181 113
100	50.00	bu	-1 -69	22 -45	46 -21	70 3	95 27	119 51	143 75	167 99	191 123	215 148	240 172
110	55.00	bu	33 -34	59 -7	86 18	113 45	139 71	166 98	192 125	219 151	245 178	272 204	299 231
120	60.00	bu	68 0	97 29	126 58	155 87	184 116	213 145	242 174	271 203	300 232	329 261	358 290
130	65.00	bu	103 35	134 66	165 98	197 129	228 161	260 192	291 223	323 255	354 286	385 318	417 349
140	70.00	bu	137 70	171 104	205 137	239 171	273 205	307 239	341 273	374 307	408 340	442 374	476 408
150	75.00	bu	172 105	209 141	245 177	281 213	317 250	354 286	390 322	426 358	462 395	499 431	535 467

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 2020 input prices..

Table 5.A Estimated costs per acre
Soybeans, full-season, Enlist E3, April planted, 12R30"
Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.0000	14.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.6600	11.42	_____
Potash (60% K2O)	cwt	22.11	1.0000	22.11	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	64.0000	8.32	_____
2,4-D Amine 4	pt	2.25	2.0000	4.50	_____
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Liberty 280	oz	0.44	29.0000	12.76	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.2767	4.04	_____
Harvesters	hour	14.68	0.1021	1.50	_____
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	_____
UNALLOCATED LABOR	hour	14.66	0.3410	5.00	_____
DIESEL FUEL					
Tractors	gal	1.53	3.2054	4.91	_____
Harvesters	gal	1.53	1.3935	2.13	_____
REPAIR & MAINTENANCE					
Implements	acre	4.93	1.0000	4.93	_____
Tractors	acre	2.03	1.0000	2.03	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	6.02	1.0000	6.02	_____
TOTAL DIRECT EXPENSES				275.55	_____
FIXED EXPENSES					
Implements	acre	9.67	1.0000	9.67	_____
Tractors	acre	12.27	1.0000	12.27	_____
Harvesters	acre	15.93	1.0000	15.93	_____
TOTAL FIXED EXPENSES				37.87	_____
TOTAL SPECIFIED EXPENSES				313.42	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, April planted, 12R30"
Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	43.0000	415.81	_____

TOTAL INCOME				415.81	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	14.00	1.0000	14.00	_____
HARVEST AIDS	acre	3.04	1.0000	3.04	_____
FERTILIZERS	acre	33.53	1.0000	33.53	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	70.17	1.0000	70.17	_____
INSECTICIDES	acre	4.81	1.0000	4.81	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.3789	5.54	_____
UNALLOCATED LABOR	hour	14.66	0.3410	5.00	_____
DIESEL FUEL	gal	1.53	4.5990	7.04	_____
REPAIR & MAINTENANCE	acre	11.12	1.0000	11.12	_____
INTEREST ON OP. CAP.	acre	6.02	1.0000	6.02	_____

TOTAL DIRECT EXPENSES				275.55	_____
RETURNS ABOVE DIRECT EXPENSES				140.26	_____

TOTAL FIXED EXPENSES				37.87	_____

TOTAL SPECIFIED EXPENSES				313.42	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				102.39	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, April planted, 12R30" Non-Delta Area, Mississippi, 2021

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	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
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 225	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Soybean Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
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				
Spray (Broadcast)	60'	MFWD 225	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 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.37	0.37	0.48	0.34

Note: Cost of production estimates are based on 2020 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, Enlist E3, April planted, 12R30"
Non-Delta Area, Mississippi, 2021

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						0.13	3.46	3.46
Lime (Spread)	ton	15.80						0.63	16.43	16.43
Custom Apply Fert	acre	7.50						0.30	7.80	7.80
Phosphorus(46% P2O5)	cwt	11.42						0.46	11.88	11.88
Potash (60% K2O)	cwt	22.11						0.88	22.99	22.99
Disk Harrow	32'		1.09	1.50	1.71			0.17	4.47	4.85
Field Cultivate Fld	32'		0.83	0.85	1.30			0.12	3.10	4.14
App by Air (5 gal)	appl	7.00						0.16	7.16	7.16
Glyphosate 3lbs a.e	oz	4.16						0.10	4.26	4.26
2,4-D Amine 4	pt	4.50						0.11	4.61	4.61
Plant - Folding	12R-30		1.11	2.15	2.32			0.11	5.69	5.90
Soybean Enlist E3	lb	60.00						1.20	61.20	61.20
CruiserMaxx Vibrance	oz	7.60						0.15	7.75	7.75
Boundary	pt	22.14						0.44	22.58	22.58
Gramoxone SL 2.0	oz	9.12						0.18	9.30	9.30
Surfactant	pt	1.32						0.03	1.35	1.35
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45
Liberty 280	oz	12.76						0.21	12.97	12.97
Dual Magnum	pt	13.33						0.22	13.55	13.55
Soybeans Consultant	acre	6.50						0.11	6.61	6.61
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23	4.23
Spray (Broadcast)	60'		0.50	0.38	0.91			0.01	1.80	1.45
Acephate 90SP	lb	4.81						0.03	4.84	4.84
App by Air (5 gal)	appl	7.00						0.05	7.05	7.05
Gramoxone SL	oz	3.04						0.02	3.06	3.06
Surfactant	pt	0.66							0.66	0.66
Header -Soybean	25' Flex		2.13	5.08	2.85			0.03	10.09	17.27
Haul Soybeans	bu	11.61						0.04	11.65	11.65
Grain Cart Soybean	700 bu		0.38	0.40	0.59				1.37	1.36
TOTALS		239.87	7.04	11.12	11.50	0.00	6.02	275.55	37.87	313.42

Note: Cost of production estimates are based on 2020 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 5.E Estimated monthly income and expense flows per acre
Soybeans, full-season, Enlist E3, April planted, 12R30"
Non-Delta Area, Mississippi, 2021

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	415.81
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	7.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.04	0.00
FERTILIZERS	33.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	8.66	31.26	30.25	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.81	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00	0.66	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	15.80	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	3.01	0.00	0.00	0.00	0.00	0.00	2.32	1.82	0.00	0.00	0.91	3.44
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.92	0.00	0.00	0.00	0.00	0.00	1.11	1.00	0.00	0.00	0.50	2.51
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	2.15	0.76	0.00	0.00	0.38	5.48
INTEREST ON OP. CAP.	2.69	0.00	0.00	0.00	0.00	0.37	2.11	0.67	0.00	0.00	0.11	0.07
TOTAL DIRECT EXPENSES	70.13	0.00	0.00	0.00	0.00	16.03	107.87	41.00	0.00	0.00	17.41	23.11
NET INCOME	-70.13	0.00	0.00	0.00	0.00	-16.03	-107.87	-41.00	0.00	0.00	-17.41	392.70
NET INCOME TO DATE	-70.13	-70.13	-70.13	-70.13	-70.13	-86.16	-194.03	-235.03	-235.03	-235.03	-252.44	140.26

Note: Cost of production estimates are based on 2020 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, Enlist E3, April planted, 12R30"
 Non-Delta Area, Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Soybeans			7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08
PERCENT	YIELD	UNIT	-----dollars-----										
50	21.50	bu	-113 -151	-103 -141	-93 -130	-82 -120	-72 -110	-61 -99	-51 -89	-41 -78	-30 -68	-20 -58	-9 -47
60	25.80	bu	-83 -121	-71 -109	-58 -96	-46 -84	-33 -71	-21 -59	-8 -46	3 -34	16 -21	28 -9	40 3
70	30.10	bu	-53 -91	-39 -77	-24 -62	-10 -47	4 -33	19 -18	33 -4	48 10	62 24	77 39	91 53
80	34.40	bu	-23 -61	-7 -44	9 -28	26 -11	42 4	59 21	76 38	92 54	109 71	125 88	142 104
90	38.70	bu	6 -31	24 -12	43 5	62 24	81 43	99 61	118 80	137 99	155 118	174 136	193 155
100	43.00	bu	36 -1	57 19	77 40	98 60	119 81	140 102	161 123	181 143	202 164	223 185	244 206
110	47.30	bu	66 28	89 51	112 74	134 97	157 119	180 142	203 165	226 188	249 211	272 234	295 257
120	51.60	bu	96 58	121 83	146 108	171 133	196 158	221 183	246 208	270 233	295 258	320 283	345 307
130	55.90	bu	126 88	153 115	180 142	207 169	234 196	261 223	288 250	315 277	342 304	369 331	396 358
140	60.20	bu	156 118	185 147	214 176	243 205	272 234	301 264	331 293	360 322	389 351	418 380	447 409
150	64.50	bu	186 148	217 179	248 210	279 242	311 273	342 304	373 335	404 366	435 398	467 429	498 460

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 2020 input prices.

Table 6.A Estimated costs per acre
Soybeans, full-season, Enlist E3, May planted, 12R30"
Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.6600	11.42	_____
Potash (60% K2O)	cwt	22.11	1.0000	22.11	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	64.0000	8.32	_____
Select Max	pt	12.74	1.0000	12.74	_____
Fierce	oz	7.40	3.5000	25.90	_____
Gramoxone SL 2.0	oz	0.19	96.0000	18.24	_____
Boundary	pt	11.07	2.0000	22.14	_____
Liberty 280	oz	0.44	29.0000	12.76	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
INSECTICIDES					
Dimilin 2L	oz	2.16	1.0000	2.16	_____
Baythroid XL	oz	2.38	1.0650	2.53	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.4500	4.79	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.4189	6.13	_____
Harvesters	hour	14.68	0.1021	1.50	_____
HAND LABOR					
Implements	hour	9.06	0.1382	1.25	_____
UNALLOCATED LABOR	hour	14.67	0.4689	6.88	_____
DIESEL FUEL					
Tractors	gal	1.53	4.8515	7.43	_____
Harvesters	gal	1.53	1.3935	2.13	_____
REPAIR & MAINTENANCE					
Implements	acre	6.41	1.0000	6.41	_____
Tractors	acre	3.06	1.0000	3.06	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	5.68	1.0000	5.68	_____
TOTAL DIRECT EXPENSES				322.64	_____
FIXED EXPENSES					
Implements	acre	12.70	1.0000	12.70	_____
Tractors	acre	18.58	1.0000	18.58	_____
Harvesters	acre	15.93	1.0000	15.93	_____
TOTAL FIXED EXPENSES				47.21	_____
TOTAL SPECIFIED EXPENSES				369.85	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, May planted, 12R30"
Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	40.0000	386.80	_____

TOTAL INCOME				386.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_____
HARVEST AIDS	acre	3.04	1.0000	3.04	_____
FERTILIZERS	acre	33.53	1.0000	33.53	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	113.43	1.0000	113.43	_____
INSECTICIDES	acre	4.69	1.0000	4.69	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	4.79	1.0000	4.79	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.5210	7.63	_____
UNALLOCATED LABOR	hour	14.67	0.4689	6.88	_____
DIESEL FUEL	gal	1.53	6.2451	9.56	_____
REPAIR & MAINTENANCE	acre	13.63	1.0000	13.63	_____
INTEREST ON OP. CAP.	acre	5.68	1.0000	5.68	_____

TOTAL DIRECT EXPENSES				322.64	_____
RETURNS ABOVE DIRECT EXPENSES				64.16	_____
TOTAL FIXED EXPENSES				47.21	_____

TOTAL SPECIFIED EXPENSES				369.85	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				16.95	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, May planted, 12R30"
Non-Delta Area, Mississippi, 2021

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				
Disk Harrow	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
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				
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 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Spray (Broadcast)	60'	MFWD 225	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 225	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 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.52	0.52	0.65	0.46

Note: Cost of production estimates are based on 2020 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, Enlist E3, May planted, 12R30"
Non-Delta Area, Mississippi, 2021

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						0.01	3.34	3.34
Lime (Spread)	ton	15.80						0.05	15.85	15.85
Disk Harrow	32'		1.09	1.50	1.71			0.01	4.31	4.85
Field Cultivate Fld	32'		0.83	0.85	1.30			0.01	2.99	4.14
Bed/Lister-Roll-Fo	12R-30		1.43	1.35	2.26			0.02	5.06	5.54
Spray (Broadcast)	60'		0.50	0.38	0.91			0.05	1.84	1.45
Glyphosate 3lbs a.e	oz	4.16						0.12	4.28	4.28
Select Max	pt	12.74						0.38	13.12	13.12
Surfactant	pt	1.32						0.04	1.36	1.36
Custom Apply Fert	acre	7.50						0.18	7.68	7.68
Phosphorus (46% P2O5)	cwt	11.42						0.27	11.69	11.69
Potash (60% K2O)	cwt	22.11						0.52	22.63	22.63
Spray (Broadcast)	60'		0.50	0.38	0.91			0.04	1.83	1.45
Fierce	oz	25.90						0.60	26.50	26.50
Gramoxone SL 2.0	oz	9.12						0.21	9.33	9.33
Surfactant	pt	1.32						0.03	1.35	1.35
Soybeans Consultant	acre	6.50						0.13	6.63	6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.49			0.12	6.36	6.79
Soybean Enlist E3	lb	60.00						1.20	61.20	61.20
CruiserMaxx Vibrance	oz	7.60						0.15	7.75	7.75
Boundary	pt	22.14						0.44	22.58	22.58
Gramoxone SL 2.0	oz	9.12						0.18	9.30	9.30
Surfactant	pt	1.32						0.03	1.35	1.35
Spray (Broadcast)	60'		0.50	0.38	0.91			0.04	1.83	1.45
Liberty 280	oz	12.76						0.26	13.02	13.02
Dual Magnum	pt	13.33						0.27	13.60	13.60
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23	4.23
Spray (Broadcast)	60'		0.25	0.19	0.46			0.01	0.91	0.73
Dimilin 2L	oz	2.16						0.03	2.19	2.19
Surfactant	pt	0.17							0.17	0.17
Spray (Broadcast)	60'		0.25	0.19	0.46			0.01	0.91	0.73
Baythroid XL	oz	2.53						0.03	2.56	2.56
App by Air (5 gal)	appl	7.00						0.05	7.05	7.05
Gramoxone SL	oz	3.04						0.02	3.06	3.06
Surfactant	pt	0.66							0.66	0.66
Header -Soybean	25' Flex		2.13	5.08	2.85			0.03	10.09	17.27
Haul Soybeans	bu	10.80						0.04	10.84	10.84
Grain Cart Soybean	700 bu		0.38	0.40	0.59				1.37	1.36
TOTALS		278.01	9.56	13.63	15.76	0.00	5.68	322.64	47.21	369.85

Note: Cost of production estimates are based on 2020 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, Enlist E3, May planted, 12R30"
Non-Delta Area, Mississippi, 2021

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	386.80
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.04	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	33.53	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	16.90	0.00	35.02	57.35	4.16	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	2.16	2.53	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.32	0.00	1.32	1.32	0.00	0.17	0.00	0.66	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	15.80
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	0.91	0.00	0.91	3.40	0.91	0.46	0.46	0.00	8.71
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	0.50	0.00	0.50	1.70	0.50	0.25	0.25	0.00	5.86
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.38	0.00	0.38	2.93	0.38	0.19	0.19	0.00	9.18
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.59	0.00	1.85	2.82	0.10	0.04	0.04	0.07	0.17
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	20.60	0.00	81.01	143.62	6.05	3.27	3.47	10.77	53.85
NET INCOME	0.00	0.00	0.00	-20.60	0.00	-81.01	-143.62	-6.05	-3.27	-3.47	-10.77	332.95
NET INCOME TO DATE	0.00	0.00	0.00	-20.60	-20.60	-101.61	-245.23	-251.28	-254.55	-258.02	-268.79	64.16

Note: Cost of production estimates are based on 2020 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, Enlist E3, May planted, 12R30"
 Non-Delta Area, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08
			PRODUCT PRICE										
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-172	-162	-152	-143	-133	-123	-114	-104	-94	-85	-75
			-219	-209	-200	-190	-180	-171	-161	-151	-142	-132	-122
60	24.00	bu	-144	-132	-121	-109	-97	-86	-74	-63	-51	-39	-28
			-191	-179	-168	-156	-145	-133	-121	-110	-98	-87	-75
70	28.00	bu	-116	-102	-89	-75	-62	-48	-35	-21	-8	5	19
			-163	-149	-136	-122	-109	-95	-82	-68	-55	-41	-28
80	32.00	bu	-88	-72	-57	-41	-26	-11	4	19	35	50	66
			-135	-120	-104	-89	-73	-58	-42	-27	-11	3	19
90	36.00	bu	-60	-43	-25	-8	9	26	43	61	78	96	113
			-107	-90	-72	-55	-38	-20	-3	14	31	48	66
100	40.00	bu	-32	-13	6	25	44	64	83	102	122	141	160
			-79	-60	-41	-21	-2	16	36	55	74	94	113
110	44.00	bu	-4	16	37	59	80	101	123	144	165	186	208
			-51	-30	-9	11	33	54	75	97	118	139	160
120	48.00	bu	23	46	69	92	116	139	162	185	208	232	255
			-23	-0	22	45	68	92	115	138	161	184	208
130	52.00	bu	51	76	101	126	151	176	202	227	252	277	302
			4	29	54	79	104	129	154	180	205	230	255
140	56.00	bu	79	106	133	160	187	214	241	268	295	322	349
			31	59	86	113	140	167	194	221	248	275	302
150	60.00	bu	107	136	165	194	223	252	281	310	339	368	397
			59	88	117	146	175	204	233	262	291	320	349

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 2020 input prices.

Table 7.A Estimated costs per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Non-irrigated, All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.0000	21.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	_____
Potash (60% K2O)	cwt	22.11	1.3300	29.41	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
HERBICIDES					
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Liberty 280	oz	0.44	29.0000	12.76	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
Prevathon	oz	1.05	14.0000	14.70	_____
Bifenthrin	oz	0.94	6.4000	6.02	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	_____
ADJUVANTS					
Surfactant	pt	3.30	0.5000	1.65	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.1171	1.71	_____
Harvesters	hour	14.68	0.1021	1.50	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
	hour	14.68	0.1886	2.77	_____
DIESEL FUEL					
Tractors	gal	1.53	1.3567	2.08	_____
Harvesters	gal	1.53	1.3935	2.13	_____
REPAIR & MAINTENANCE					
Implements	acre	3.40	1.0000	3.40	_____
Tractors	acre	0.85	1.0000	0.85	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	5.69	1.0000	5.69	_____
TOTAL DIRECT EXPENSES				292.06	_____
FIXED EXPENSES					
Implements	acre	5.75	1.0000	5.75	_____
Tractors	acre	5.19	1.0000	5.19	_____
Harvesters	acre	15.93	1.0000	15.93	_____
TOTAL FIXED EXPENSES				26.87	_____
TOTAL SPECIFIED EXPENSES				318.93	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, 12R30"
Non-irrigated, All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	25.0000	241.75	_____

TOTAL INCOME				241.75	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	57.35	1.0000	57.35	_____
INSECTICIDES	acre	33.53	1.0000	33.53	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	1.65	1.0000	1.65	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.2193	3.21	_____
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	_____
DIESEL FUEL	gal	1.53	2.7503	4.21	_____
REPAIR & MAINTENANCE	acre	8.41	1.0000	8.41	_____
INTEREST ON OP. CAP.	acre	5.69	1.0000	5.69	_____

TOTAL DIRECT EXPENSES				292.06	_____
RETURNS ABOVE DIRECT EXPENSES				-50.31	_____
TOTAL FIXED EXPENSES				26.87	_____

TOTAL SPECIFIED EXPENSES				318.93	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-77.18	_____

Note: Cost of production estimates are based on 2020 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, Enlist E3, 12R30"
Non-irrigated, All Areas, Mississippi, 2021

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 Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	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 2020 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, Enlist E3, 12R30"
Non-irrigated, All Areas, Mississippi, 2021

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						0.13	3.46	3.46
Lime (Spread)	ton	15.80						0.63	16.43	16.43
Custom Apply Fert	acre	7.50						0.30	7.80	7.80
Phosphorus(46% P2O5)	cwt	15.06						0.60	15.66	15.66
Potash (60% K2O)	cwt	29.41						1.18	30.59	30.59
Soybeans Consultant	acre	6.50						0.13	6.63	6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.45			0.10	6.30	6.79
Soybean Enlist E3	lb	60.00						1.00	61.00	61.00
CruiserMaxx Vibrance	oz	7.60						0.13	7.73	7.73
Inoculant -Soybean	acre	1.55						0.03	1.58	1.58
Boundary	pt	22.14						0.37	22.51	22.51
Gramoxone SL 2.0	oz	9.12						0.15	9.27	9.27
Surfactant	pt	1.32						0.02	1.34	1.34
Spray (Broadcast)	60'		0.50	0.38	0.90			0.02	1.80	1.45
Liberty 280	oz	12.76						0.17	12.93	12.93
Dual Magnum	pt	13.33						0.18	13.51	13.51
App by Air (5 gal)	appl	7.00						0.07	7.07	7.07
Acephate 90SP	lb	4.81						0.05	4.86	4.86
App by Air (5 gal)	appl	7.00						0.07	7.07	7.07
Prevathon	oz	14.70						0.15	14.85	14.85
Surfactant	pt	0.33							0.33	0.33
Bifenthrin	oz	6.02						0.06	6.08	6.08
Incidental Pest										
App by Air (5 gal)	appl	7.00						0.05	7.05	7.05
IncidentalPestTrt \$8	acre	8.00						0.05	8.05	8.05
Header -Soybean	25' Flex		2.13	5.08	2.79			0.03	10.03	17.27
Haul Soybeans	bu	6.75						0.02	6.77	6.77
Grain Cart Soybean	700 bu		0.38	0.40	0.58				1.36	1.36
TOTALS		267.03	4.21	8.41	6.72	0.00	5.69	292.06	26.87	318.93

Note: Cost of production estimates are based on 2020 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, Enlist E3, 12R30"
Non-irrigated, All Areas, Mississippi, 2021

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	241.75
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	7.00	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.26	26.09	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	25.53	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.33	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	15.80	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	2.45	0.90	0.00	0.00	3.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.50	0.00	0.00	2.51
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55	0.38	0.00	0.00	5.48
INTEREST ON OP. CAP.	2.84	0.00	0.00	0.00	0.00	0.00	0.13	1.80	0.37	0.40	0.10	0.05
TOTAL DIRECT EXPENSES	73.94	0.00	0.00	0.00	0.00	0.00	6.63	109.73	28.24	40.26	15.10	18.16
NET INCOME	-73.94	0.00	0.00	0.00	0.00	0.00	-6.63	-109.73	-28.24	-40.26	-15.10	223.59
NET INCOME TO DATE	-73.94	-73.94	-73.94	-73.94	-73.94	-73.94	-80.57	-190.30	-218.54	-258.80	-273.90	-50.31

Note: Cost of production estimates are based on 2020 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, Enlist E3, 12R30"
 Non-irrigated, All Areas, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-198 -224	-191 -218	-185 -212	-179 -206	-173 -200	-167 -194	-161 -188	-155 -182	-149 -176	-143 -170	-137 -164
60	15.00	bu	-180 -207	-173 -200	-166 -192	-158 -185	-151 -178	-144 -171	-137 -163	-129 -156	-122 -149	-115 -142	-108 -134
70	17.50	bu	-163 -189	-154 -181	-146 -173	-137 -164	-129 -156	-120 -147	-112 -139	-103 -130	-95 -122	-86 -113	-78 -105
80	20.00	bu	-145 -172	-135 -162	-126 -153	-116 -143	-106 -133	-97 -124	-87 -114	-77 -104	-68 -95	-58 -85	-48 -75
90	22.50	bu	-128 -155	-117 -144	-106 -133	-95 -122	-84 -111	-73 -100	-62 -89	-52 -78	-41 -68	-30 -57	-19 -46
100	25.00	bu	-110 -137	-98 -125	-86 -113	-74 -101	-62 -89	-50 -77	-38 -65	-26 -53	-14 -40	-1 -28	10 -16
110	27.50	bu	-93 -120	-79 -106	-66 -93	-53 -80	-40 -66	-26 -53	-13 -40	-0 -27	13 -13	26 -0	39 12
120	30.00	bu	-75 -102	-61 -88	-46 -73	-32 -59	-17 -44	-3 -30	11 -15	25 -1	40 13	54 27	69 42
130	32.50	bu	-58 -85	-42 -69	-26 -53	-11 -38	4 -22	20 -6	35 9	51 24	67 40	83 56	98 71
140	35.00	bu	-40 -67	-24 -50	-7 -33	9 -17	26 -0	43 16	60 33	77 50	94 67	111 84	128 101
150	37.50	bu	-23 -50	-5 -32	12 -14	30 4	49 22	67 40	85 58	103 76	121 94	139 112	157 130

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 2020 input prices.

Table 8.A Estimated costs per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	_____
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	_____
Potash (60% K2O)	cwt	22.11	1.3300	29.41	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	96.0000	12.48	_____
2,4-D Amine 4	pt	2.25	2.0000	4.50	_____
Select Max	pt	12.74	1.0000	12.74	_____
Valor SX	oz	4.51	2.0000	9.02	_____
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Prefix	pt	6.64	2.0000	13.28	_____
Zidua DF	oz	8.72	1.5000	13.08	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.2942	4.30	_____
Harvesters	hour	14.68	0.0851	1.25	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	14.64	0.3414	5.00	_____
DIESEL FUEL					
Tractors	gal	1.53	3.4079	5.22	_____
Harvesters	gal	1.53	1.4243	2.18	_____
REPAIR & MAINTENANCE					
Implements	acre	5.23	1.0000	5.23	_____
Tractors	acre	2.15	1.0000	2.15	_____
Harvesters	acre	3.50	1.0000	3.50	_____
INTEREST ON OP. CAP.	acre	7.65	1.0000	7.65	_____
TOTAL DIRECT EXPENSES				350.01	_____
FIXED EXPENSES					
Implements	acre	10.36	1.0000	10.36	_____
Tractors	acre	13.04	1.0000	13.04	_____
Harvesters	acre	13.41	1.0000	13.41	_____
TOTAL FIXED EXPENSES				36.81	_____
TOTAL SPECIFIED EXPENSES				386.82	_____

Note: Cost of production estimates are based on 2020 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, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	42.0000	406.14	_____

TOTAL INCOME				406.14	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	96.36	1.0000	96.36	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	3.30	1.0000	3.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.3794	5.55	_____
UNALLOCATED LABOR	hour	14.64	0.3414	5.00	_____
DIESEL FUEL	gal	1.53	4.8323	7.40	_____
REPAIR & MAINTENANCE	acre	10.88	1.0000	10.88	_____
INTEREST ON OP. CAP.	acre	7.65	1.0000	7.65	_____

TOTAL DIRECT EXPENSES				350.01	_____
RETURNS ABOVE DIRECT EXPENSES				56.13	_____
TOTAL FIXED EXPENSES				36.81	_____

TOTAL SPECIFIED EXPENSES				386.82	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				19.32	_____

Note: Cost of production estimates are based on 2020 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, 2021

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	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
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 Vibrance	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 DF	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							0.37	0.37	0.47	0.34

Note: Cost of production estimates are based on 2020 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, 2021

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						0.13	3.46		3.46
Subsoiler	3 shank		0.72	0.39	1.14			0.09	2.34	2.01	4.35
Lime (Spread)	ton	15.80						0.63	16.43		16.43
Custom Apply Fert	acre	7.50						0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06						0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41						1.18	30.59		30.59
Disk Harrow	32'		1.09	1.50	1.71			0.17	4.47	4.85	9.32
Field Cultivate Fld	32'		0.83	0.85	1.30			0.12	3.10	4.14	7.24
App by Air (5 gal)	appl	7.00						0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16						0.11	4.27		4.27
2,4-D Amine 4	pt	4.50						0.12	4.62		4.62
Select Max	pt	12.74						0.34	13.08		13.08
Valor SX	oz	9.02						0.24	9.26		9.26
Surfactant	pt	1.32						0.04	1.36		1.36
Plant & Pre-Folding	12R-30		1.20	2.55	2.49			0.12	6.36	6.79	13.15
Soybean Seed RR2X	lb	67.00						1.34	68.34		68.34
CruiserMaxx Vibrance	oz	7.60						0.15	7.75		7.75
Inoculant -Soybean	acre	1.55						0.03	1.58		1.58
Boundary	pt	22.14						0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12						0.18	9.30		9.30
Surfactant	pt	1.32						0.03	1.35		1.35
Soybeans Consultant	acre	6.50						0.11	6.61		6.61
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23		4.23
Prefix	pt	13.28						0.22	13.50		13.50
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23		4.23
Zidua DF	oz	13.08						0.22	13.30		13.30
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Acephate 90SP	lb	4.81						0.03	4.84		4.84
Incidental Pest											
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00						0.05	8.05		8.05
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Gramoxone SL	oz	3.04						0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06						0.03	4.09		4.09
Surfactant	pt	0.66							0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37			0.03	9.01	14.76	23.77
Haul Soybeans	bu	11.34						0.04	11.38		11.38
Grain Cart Soybean	700 bu		0.38	0.40	0.59				1.37	1.36	2.73
TOTALS		312.66	7.40	10.88	11.42	0.00		7.65	350.01	36.81	386.82

Note: Cost of production estimates are based on 2020 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, 2021

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	406.14
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	21.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.42	0.00	31.26	34.68	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	12.81	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	1.32	0.00	1.32	0.00	0.00	0.00	0.66	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	15.80	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	4.15	0.00	0.00	0.00	0.00	0.00	2.49	1.82	0.00	0.00	0.00	2.96
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	2.64	0.00	0.00	0.00	0.00	0.00	1.20	1.00	0.00	0.00	0.00	2.56
REPAIR & MAINTENANCE	2.74	0.00	0.00	0.00	0.00	0.00	2.55	0.76	0.00	0.00	0.00	4.83
INTEREST ON OP. CAP.	3.22	0.00	0.00	0.00	1.04	0.00	2.29	0.75	0.00	0.00	0.28	0.07
TOTAL DIRECT EXPENSES	83.85	0.00	0.00	0.00	39.78	0.00	117.26	45.51	0.00	0.00	41.85	21.76
NET INCOME	-83.85	0.00	0.00	0.00	-39.78	0.00	-117.26	-45.51	0.00	0.00	-41.85	384.38
NET INCOME TO DATE	-83.85	-83.85	-83.85	-83.85	-123.63	-123.63	-240.89	-286.40	-286.40	-286.40	-328.25	56.13

Note: Cost of production estimates are based on 2020 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, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-192 -228	-181 -218	-171 -208	-161 -198	-151 -188	-141 -178	-131 -167	-120 -157	-110 -147	-100 -137	-90 -127
60	25.20	bu	-162 -199	-150 -187	-138 -175	-126 -162	-113 -150	-101 -138	-89 -126	-77 -114	-65 -102	-53 -89	-40 -77
70	29.40	bu	-133 -170	-119 -155	-104 -141	-90 -127	-76 -113	-62 -99	-48 -84	-33 -70	-19 -56	-5 -42	8 -28
80	33.60	bu	-104 -140	-87 -124	-71 -108	-55 -92	-39 -75	-22 -59	-6 -43	9 -27	25 -10	42 5	58 21
90	37.80	bu	-74 -111	-56 -93	-38 -74	-19 -56	-1 -38	16 -20	34 -1	53 16	71 34	89 52	108 71
100	42.00	bu	-45 -82	-25 -61	-4 -41	15 -21	35 -0	56 19	76 39	96 59	117 80	137 100	157 120
110	46.20	bu	-16 -52	6 -30	28 -8	50 14	73 36	95 58	117 81	140 103	162 125	184 148	207 170
120	50.40	bu	13 -23	37 0	61 25	86 49	110 73	135 98	159 122	183 147	208 171	232 195	256 220
130	54.60	bu	42 5	68 32	95 58	121 84	148 111	174 137	200 164	227 190	253 216	280 243	306 269
140	58.80	bu	71 35	100 63	128 91	157 120	185 148	214 177	242 205	270 234	299 262	327 290	356 319
150	63.00	bu	101 64	131 94	162 125	192 155	223 186	253 216	283 247	314 277	344 308	375 338	405 369

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 2020 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, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.0000	35.00	
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
Miravis Top	oz	1.44	13.7000	19.73	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	96.0000	12.48	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Select Max	pt	12.74	1.0000	12.74	
Valor SX	oz	4.51	2.0000	9.02	
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Prefix	pt	6.64	2.0000	13.28	
Zidua DF	oz	8.72	1.5000	13.08	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	
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	47.45	0.3330	15.80	
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	14.68	0.4536	6.65	
Harvesters	hour	14.68	0.0851	1.25	
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	14.65	0.4142	6.07	
DIESEL FUEL					
Tractors	gal	1.53	4.9868	7.64	
Harvesters	gal	1.53	1.4243	2.18	
Roll-Out Pipe Irr.	gal	1.53	7.3316	11.22	
REPAIR & MAINTENANCE					
Implements	acre	6.18	1.0000	6.18	
Tractors	acre	3.11	1.0000	3.11	
Harvesters	acre	3.50	1.0000	3.50	
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	
INTEREST ON OP. CAP.					
	acre	8.55	1.0000	8.55	
TOTAL DIRECT EXPENSES				420.18	
FIXED EXPENSES					
Implements	acre	13.55	1.0000	13.55	
Tractors	acre	18.92	1.0000	18.92	
Harvesters	acre	13.41	1.0000	13.41	
Roll-Out Pipe Irr.	acre	51.84	1.0000	51.84	
TOTAL FIXED EXPENSES				97.72	
TOTAL SPECIFIED EXPENSES				517.90	

Note: Cost of production estimates are based on 2020 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, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	60.0000	580.20	_____

TOTAL INCOME				580.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	35.00	1.0000	35.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	96.36	1.0000	96.36	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.5388	7.90	_____
UNALLOCATED LABOR	hour	14.65	0.4142	6.07	_____
DIESEL FUEL	gal	1.53	13.7429	21.04	_____
REPAIR & MAINTENANCE	acre	19.95	1.0000	19.95	_____
INTEREST ON OP. CAP.	acre	8.55	1.0000	8.55	_____

TOTAL DIRECT EXPENSES				420.18	_____
RETURNS ABOVE DIRECT EXPENSES				160.02	_____
TOTAL FIXED EXPENSES				97.72	_____

TOTAL SPECIFIED EXPENSES				517.90	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				62.30	_____

Note: Cost of production estimates are based on 2020 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, 2021

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	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 190	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
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 Vibrance	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 DF	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Miravis Top	oz					13.7000				
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							0.53	0.53	0.99	0.41

Note: Cost of production estimates are based on 2020 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, 2021

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						0.13	3.46		3.46
Subsoiler	3 shank		0.72	0.39	1.14			0.09	2.34	2.01	4.35
Lime (Spread)	ton	15.80						0.63	16.43		16.43
Custom Apply Fert	acre	7.50						0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06						0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41						1.18	30.59		30.59
Disk Harrow	32'		1.09	1.50	1.71			0.17	4.47	4.85	9.32
Field Cultivate Fld	32'		0.70	0.79	1.30			0.11	2.90	3.79	6.69
Bed/Lister-Roll-Fo	12R-30		1.43	1.35	2.26			0.20	5.24	5.54	10.78
App by Air (5 gal)	appl	7.00						0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16						0.11	4.27		4.27
2,4-D Amine 4	pt	4.50						0.12	4.62		4.62
Select Max	pt	12.74						0.34	13.08		13.08
Valor SX	oz	9.02						0.24	9.26		9.26
Surfactant	pt	1.32						0.04	1.36		1.36
Plant & Pre-Folding	12R-30		1.20	2.55	2.49			0.12	6.36	6.79	13.15
Soybean Seed RR2X	lb	67.00						1.34	68.34		68.34
CruiserMaxx Vibrance	oz	7.60						0.15	7.75		7.75
Inoculant -Soybean	acre	1.55						0.03	1.58		1.58
Boundary	pt	22.14						0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12						0.18	9.30		9.30
Surfactant	pt	1.32						0.03	1.35		1.35
Soybeans Consultant	acre	6.50						0.11	6.61		6.61
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23		4.23
Prefix	pt	13.28						0.22	13.50		13.50
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23		4.23
Zidua DF	oz	13.08						0.22	13.30		13.30
App by Air (5 gal)	appl	7.00						0.07	7.07		7.07
Miravis Top	oz	19.73						0.20	19.93		19.93
Surfactant	pt	0.33							0.33		0.33
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Acephate 90SP	lb	4.81						0.03	4.84		4.84
Incidental Pest											
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00						0.05	8.05		8.05
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Gramoxone SL	oz	3.04						0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06						0.03	4.09		4.09
Surfactant	pt	0.66							0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37			0.03	9.01	14.76	23.77
Haul Soybeans	bu	16.20						0.05	16.25		16.25
Grain Cart Soybean	700 bu		0.38	0.40	0.59				1.37	1.36	2.73
Roll-Out Pipe Irr.	acre	7.92	12.34	7.78	4.46			0.43	32.93	55.72	88.65
TOTALS		352.50	21.04	19.95	18.14	0.00	8.55	420.18	97.72	517.90	

Note: Cost of production estimates are based on 2020 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, 2021

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	580.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	7.00	21.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	19.73	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.42	0.00	31.26	34.68	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	12.81	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.33	0.66	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	15.80	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	6.97	0.00	0.00	0.00	0.00	0.00	2.49	2.05	2.82	0.23	0.00	3.58
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.51	0.00	0.00	0.00	0.00	0.00	1.20	1.00	7.78	3.74	0.00	2.81
REPAIR & MAINTENANCE	4.33	0.00	0.00	0.00	0.00	0.00	2.55	0.76	5.93	1.40	0.00	4.98
INTEREST ON OP. CAP.	3.47	0.00	0.00	0.00	1.04	0.00	2.29	0.75	0.32	0.32	0.28	0.08
TOTAL DIRECT EXPENSES	90.38	0.00	0.00	0.00	39.78	0.00	117.26	45.74	24.77	32.75	41.85	27.65
NET INCOME	-90.38	0.00	0.00	0.00	-39.78	0.00	-117.26	-45.74	-24.77	-32.75	-41.85	552.55
NET INCOME TO DATE	-90.38	-90.38	-90.38	-90.38	-130.16	-130.16	-247.42	-293.16	-317.93	-350.68	-392.53	160.02

Note: Cost of production estimates are based on 2020 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, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08
			dollars										
PERCENT	YIELD	UNIT											
50	30.00	bu	-194 -292	-179 -277	-165 -263	-150 -248	-136 -234	-121 -219	-107 -205	-92 -190	-78 -176	-63 -161	-49 -147
60	36.00	bu	-152 -250	-135 -232	-117 -215	-100 -198	-82 -180	-65 -163	-48 -145	-30 -128	-13 -111	4 -93	21 -76
70	42.00	bu	-110 -208	-90 -188	-70 -167	-49 -147	-29 -127	-9 -106	11 -86	31 -66	51 -45	72 -25	92 -5
80	48.00	bu	-68 -166	-45 -143	-22 -120	0 -96	24 -73	47 -50	70 -27	93 -4	116 19	140 42	163 65
90	54.00	bu	-26 -124	-0 -98	25 -72	51 -46	77 -20	103 5	129 32	155 58	181 84	208 110	234 136
100	60.00	bu	14 -82	43 -53	72 -24	102 4	131 33	160 62	189 91	218 120	247 149	276 178	305 207
110	66.00	bu	56 -40	88 -8	120 22	152 54	184 86	216 118	248 150	280 182	312 214	344 246	375 278
120	72.00	bu	98 1	133 35	168 70	203 105	237 140	272 175	307 209	342 244	377 279	412 314	446 349
130	78.00	bu	140 42	178 80	216 118	253 156	291 193	329 231	366 269	404 306	442 344	480 382	517 420
140	84.00	bu	182 84	223 125	263 166	304 206	344 247	385 287	426 328	466 369	507 409	548 450	588 490
150	90.00	bu	224 126	267 170	311 213	354 257	398 300	441 344	485 387	529 431	572 474	616 518	659 561

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 2020 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, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	_____
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	_____
Potash (60% K2O)	cwt	22.11	1.3300	29.41	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
Miravis Top	oz	1.44	13.7000	19.73	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	96.0000	12.48	_____
Select Max	pt	12.74	1.0000	12.74	_____
Valor SX	oz	4.51	2.0000	9.02	_____
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Prefix	pt	6.64	2.0000	13.28	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.4377	6.37	_____
Harvesters	hour	14.68	0.0851	1.25	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR					
	hour	14.61	0.2880	4.21	_____
DIESEL FUEL					
Tractors	gal	1.53	4.4959	6.90	_____
Harvesters	gal	1.53	1.4243	2.18	_____
Contour Flood Irr.	gal	1.53	10.9974	16.83	_____
REPAIR & MAINTENANCE					
Implements	acre	5.09	1.0000	5.09	_____
Tractors	acre	2.73	1.0000	2.73	_____
Harvesters	acre	3.50	1.0000	3.50	_____
Contour Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	8.14	1.0000	8.14	_____
TOTAL DIRECT EXPENSES				395.69	_____
FIXED EXPENSES					
Implements	acre	9.53	1.0000	9.53	_____
Tractors	acre	16.59	1.0000	16.59	_____
Harvesters	acre	13.41	1.0000	13.41	_____
Contour Flood Irr.	acre	41.43	1.0000	41.43	_____
TOTAL FIXED EXPENSES				80.96	_____
TOTAL SPECIFIED EXPENSES				476.65	_____

Note: Cost of production estimates are based on 2020 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, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	53.0000	512.51	_____

TOTAL INCOME				512.51	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	78.78	1.0000	78.78	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
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	15.80	1.0000	15.80	_____
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	14.68	0.5229	7.62	_____
UNALLOCATED LABOR	hour	14.61	0.2880	4.21	_____
DIESEL FUEL	gal	1.53	16.9177	25.91	_____
REPAIR & MAINTENANCE	acre	25.63	1.0000	25.63	_____
INTEREST ON OP. CAP.	acre	8.14	1.0000	8.14	_____

TOTAL DIRECT EXPENSES				395.69	_____
RETURNS ABOVE DIRECT EXPENSES				116.82	_____
TOTAL FIXED EXPENSES				80.96	_____

TOTAL SPECIFIED EXPENSES				476.65	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				35.86	_____

Note: Cost of production estimates are based on 2020 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, 2021

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	32'	MFWD 225	0.061	1.00	Nov		0.06	0.06	0.06	0.05
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 225	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	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	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Miravis Top	oz					13.7000				
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 225	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							0.52	0.52	0.94	0.28

Note: Cost of production estimates are based on 2020 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, 2021

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						0.13	3.46		3.46
Disk Harrow	32'		1.09	1.50	1.71			0.17	4.47	4.85	9.32
Lime (Spread)	ton	15.80						0.63	16.43		16.43
Custom Apply Fert	acre	7.50						0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06						0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41						1.18	30.59		30.59
Spray (Broadcast)	60'		0.50	0.38	0.91			0.05	1.84	1.45	3.29
Glyphosate 3lbs a.e	oz	4.16						0.12	4.28		4.28
Select Max	pt	12.74						0.38	13.12		13.12
Surfactant	pt	1.32						0.04	1.36		1.36
Valor SX	oz	9.02						0.27	9.29		9.29
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.49			0.12	6.36	6.79	13.15
Soybean Seed RR2X	lb	67.00						1.34	68.34		68.34
CruiserMaxx Vibrance	oz	7.60						0.15	7.75		7.75
Inoculant -Soybean	acre	1.55						0.03	1.58		1.58
Boundary	pt	22.14						0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12						0.18	9.30		9.30
Surfactant	pt	1.32						0.03	1.35		1.35
Spray (Broadcast)	60'		0.50	0.38	0.91			0.04	1.83	1.45	3.28
Glyphosate 3lbs a.e	oz	4.16						0.08	4.24		4.24
Prefix	pt	13.28						0.27	13.55		13.55
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23		4.23
App by Air (5 gal)	appl	7.00						0.09	7.09		7.09
Miravis Top	oz	19.73						0.26	19.99		19.99
Surfactant	pt	0.33							0.33		0.33
App by Air (5 gal)	appl	7.00						0.07	7.07		7.07
Acephate 90SP	lb	4.81						0.05	4.86		4.86
Incidental Pest											
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00						0.05	8.05		8.05
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Gramoxone SL	oz	3.04						0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06						0.03	4.09		4.09
Surfactant	pt	0.66							0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37			0.03	9.01	14.76	23.77
Haul Soybeans	bu	14.31						0.05	14.36		14.36
Grain Cart Soybean	700 bu		0.38	0.40	0.59				1.37	1.36	2.73
Contour Flood Irr.	acre	2.25	19.56	15.61	5.76			0.61	43.79	48.85	92.64
TOTALS		320.36	25.91	25.63	15.65	0.00	8.14	395.69	80.96	476.65	

Note: Cost of production estimates are based on 2020 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, 2021

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	512.51
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	7.00	14.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	19.73	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	25.92	0.00	0.00	48.70	4.16	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	4.81	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	1.32	0.00	0.00	1.32	0.00	0.33	0.00	0.66	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	15.80	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	1.71	0.00	0.00	0.91	0.00	0.00	3.85	2.78	1.63	1.63	0.18	2.96
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.09	0.00	0.00	0.50	0.00	0.00	1.70	7.11	6.39	6.39	0.17	2.56
REPAIR & MAINTENANCE	1.50	0.00	0.00	0.38	0.00	0.00	2.93	9.57	3.17	3.17	0.08	4.83
INTEREST ON OP. CAP.	3.01	0.00	0.00	0.86	0.00	0.00	2.82	0.43	0.50	0.24	0.20	0.08
TOTAL DIRECT EXPENSES	78.41	0.00	0.00	29.89	0.00	0.00	143.97	26.30	38.75	23.24	30.39	24.74
NET INCOME	-78.41	0.00	0.00	-29.89	0.00	0.00	-143.97	-26.30	-38.75	-23.24	-30.39	487.77
NET INCOME TO DATE	-78.41	-78.41	-78.41	-108.30	-108.30	-108.30	-252.27	-278.57	-317.32	-340.56	-370.95	116.82

Note: Cost of production estimates are based on 2020 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, 2021

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08		
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-196	-183	-170	-157	-145	-132	-119	-106	-93	-81	-68
			-277	-264	-251	-238	-226	-213	-200	-187	-174	-161	-149
60	31.80	bu	-159	-143	-128	-113	-97	-82	-67	-51	-36	-20	-5
			-240	-224	-209	-194	-178	-163	-148	-132	-117	-101	-86
70	37.10	bu	-122	-104	-86	-68	-50	-32	-14	3	21	39	57
			-203	-185	-167	-149	-131	-113	-95	-77	-59	-41	-23
80	42.40	bu	-85	-64	-44	-23	-3	17	37	58	78	99	119
			-166	-145	-125	-104	-84	-63	-43	-22	-2	18	38
90	47.70	bu	-48	-25	-2	20	43	67	90	113	136	159	182
			-129	-106	-83	-60	-37	-13	9	32	55	78	101
100	53.00	bu	-11	14	39	65	91	116	142	168	193	219	244
			-92	-66	-41	-15	10	35	61	87	112	138	163
110	58.30	bu	25	53	82	110	138	166	194	223	251	279	307
			-55	-27	1	29	57	85	113	142	170	198	226
120	63.60	bu	62	93	124	154	185	216	247	277	308	339	370
			-18	12	43	73	104	135	166	196	227	258	289
130	68.90	bu	99	133	166	199	232	266	299	332	366	399	432
			18	52	85	118	151	185	218	251	285	318	351
140	74.20	bu	136	172	208	244	280	316	351	387	423	459	495
			55	91	127	163	199	235	270	306	342	378	414
150	79.50	bu	173	212	250	289	327	365	404	442	481	519	558
			92	131	169	208	246	284	323	361	400	438	477

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 2020 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, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	_____
Potash (60% K2O)	cwt	22.11	1.3300	29.41	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
Miravis Top	oz	1.44	13.7000	19.73	_____
HERBICIDES					
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Prefix	pt	6.64	2.0000	13.28	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
Prevathon	oz	1.05	14.0000	14.70	_____
Bifenthrin	oz	0.94	6.4000	6.02	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.1171	1.71	_____
Harvesters	hour	14.68	0.1021	1.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
	hour	14.68	0.1886	2.77	_____
DIESEL FUEL					
Tractors	gal	1.53	1.3567	2.08	_____
Harvesters	gal	1.53	1.3935	2.13	_____
1/2-mi Pivot Irr.	gal	1.53	16.4057	25.10	_____
REPAIR & MAINTENANCE					
Implements	acre	3.40	1.0000	3.40	_____
Tractors	acre	0.85	1.0000	0.85	_____
Harvesters	acre	4.16	1.0000	4.16	_____
1/2-mi Pivot Irr.	acre	12.00	1.0000	12.00	_____
INTEREST ON OP. CAP.	acre	6.54	1.0000	6.54	_____
TOTAL DIRECT EXPENSES				362.64	_____
FIXED EXPENSES					
Implements	acre	5.75	1.0000	5.75	_____
Tractors	acre	5.19	1.0000	5.19	_____
Harvesters	acre	15.93	1.0000	15.93	_____
1/2-mi Pivot Irr.	acre	40.89	1.0000	40.89	_____
TOTAL FIXED EXPENSES				67.76	_____
TOTAL SPECIFIED EXPENSES				430.40	_____

Note: Cost of production estimates are based on 2020 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.B Summary of estimated costs and returns per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	50.0000	483.50	_____

TOTAL INCOME				483.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	48.70	1.0000	48.70	_____
INSECTICIDES	acre	33.53	1.0000	33.53	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.2193	3.21	_____
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	_____
DIESEL FUEL	gal	1.53	19.1560	29.31	_____
REPAIR & MAINTENANCE	acre	20.41	1.0000	20.41	_____
INTEREST ON OP. CAP.	acre	6.54	1.0000	6.54	_____

TOTAL DIRECT EXPENSES				362.64	_____
RETURNS ABOVE DIRECT EXPENSES				120.86	_____
TOTAL FIXED EXPENSES				67.76	_____

TOTAL SPECIFIED EXPENSES				430.40	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				53.10	_____

Note: Cost of production estimates are based on 2020 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

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 Vibrance	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				
Miravis Top	oz					13.7000				
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 2020 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, 2021

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						0.13	3.46	3.46
Lime (Spread)	ton	15.80						0.63	16.43	16.43
Custom Apply Fert	acre	7.50						0.30	7.80	7.80
Phosphorus(46% P2O5)	cwt	15.06						0.60	15.66	15.66
Potash (60% K2O)	cwt	29.41						1.18	30.59	30.59
Soybeans Consultant	acre	6.50						0.13	6.63	6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.45			0.10	6.30	6.79
Soybean Seed RR2X	lb	67.00						1.12	68.12	68.12
CruiserMaxx Vibrance	oz	7.60						0.13	7.73	7.73
Inoculant -Soybean	acre	1.55						0.03	1.58	1.58
Boundary	pt	22.14						0.37	22.51	22.51
Gramoxone SL 2.0	oz	9.12						0.15	9.27	9.27
Surfactant	pt	1.32						0.02	1.34	1.34
Spray (Broadcast)	60'		0.50	0.38	0.90			0.02	1.80	1.45
Glyphosate 3lbs a.e	oz	4.16						0.06	4.22	4.22
Prefix	pt	13.28						0.18	13.46	13.46
App by Air (5 gal)	appl	7.00						0.07	7.07	7.07
Miravis Top	oz	19.73						0.20	19.93	19.93
Surfactant	pt	0.33							0.33	0.33
App by Air (5 gal)	appl	7.00						0.07	7.07	7.07
Acephate 90SP	lb	4.81						0.05	4.86	4.86
App by Air (5 gal)	appl	7.00						0.07	7.07	7.07
Prevathon	oz	14.70						0.15	14.85	14.85
Surfactant	pt	0.33							0.33	0.33
Bifenthrin	oz	6.02						0.06	6.08	6.08
Incidental Pest										
App by Air (5 gal)	appl	7.00						0.05	7.05	7.05
IncidentalPestTrt \$8	acre	8.00						0.05	8.05	8.05
Header -Soybean	25' Flex		2.13	5.08	2.79			0.03	10.03	17.27
Haul Soybeans	bu	13.50						0.05	13.55	13.55
Grain Cart Soybean	700 bu		0.38	0.40	0.58				1.36	1.36
1/2-mi Pivot Irr.	acre		25.10	12.00	0.47			0.54	38.11	40.89
TOTALS		299.19	29.31	20.41	7.19	0.00	6.54	362.64	67.76	430.40

Note: Cost of production estimates are based on 2020 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, 2021

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	483.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	7.00	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	19.73	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.26	17.44	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	25.53	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	1.32	0.00	0.66	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	15.80	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	2.49	0.95	0.04	0.00	3.37
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	8.73	10.54	7.53	0.00	2.51
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	1.29	0.68	0.00	5.48
INTEREST ON OP. CAP.	2.84	0.00	0.00	0.00	0.00	0.00	0.14	2.22	0.41	0.75	0.10	0.08
TOTAL DIRECT EXPENSES	73.94	0.00	0.00	0.00	0.00	0.00	6.98	135.13	30.63	75.92	15.10	24.94
NET INCOME	-73.94	0.00	0.00	0.00	0.00	0.00	-6.98	-135.13	-30.63	-75.92	-15.10	458.56
NET INCOME TO DATE	-73.94	-73.94	-73.94	-73.94	-73.94	-73.94	-80.92	-216.05	-246.68	-322.60	-337.70	120.86

Note: Cost of production estimates are based on 2020 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 11.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Soybeans			7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08
PERCENT	YIELD	UNIT	-----dollars-----										
50	25.00	bu	-174	-162	-150	-138	-126	-114	-102	-89	-77	-65	-53
			-242	-230	-218	-206	-193	-181	-169	-157	-145	-133	-121
60	30.00	bu	-139	-125	-110	-96	-81	-67	-52	-38	-23	-9	5
			-207	-192	-178	-163	-149	-134	-120	-105	-91	-76	-62
70	35.00	bu	-104	-87	-70	-53	-37	-20	-3	13	30	47	64
			-172	-155	-138	-121	-104	-87	-70	-54	-37	-20	-3
80	40.00	bu	-69	-50	-31	-11	7	26	46	65	84	104	123
			-137	-118	-98	-79	-60	-40	-21	-2	17	36	55
90	45.00	bu	-34	-13	8	30	52	73	95	117	139	160	182
			-102	-80	-59	-37	-15	6	27	49	71	93	114
100	50.00	bu	-0	24	48	72	96	120	145	169	193	217	241
			-67	-43	-19	4	28	53	77	101	125	149	173
110	55.00	bu	34	61	88	114	141	167	194	221	247	274	300
			-32	-6	20	46	73	100	126	153	179	206	233
120	60.00	bu	69	98	127	156	185	214	243	272	301	330	359
			2	31	60	89	118	147	176	205	234	263	292
130	65.00	bu	104	136	167	198	230	261	293	324	356	387	418
			36	68	99	131	162	194	225	256	288	319	351
140	70.00	bu	139	173	207	241	274	308	342	376	410	444	478
			71	105	139	173	207	241	274	308	342	376	410
150	75.00	bu	174	210	247	283	319	355	392	428	464	500	537
			106	143	179	215	251	288	324	360	396	433	469

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 2020 input prices.

Table 12.A Estimated costs per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.0000	14.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.6600	11.42	_____
Potash (60% K2O)	cwt	22.11	1.0000	22.11	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	96.0000	12.48	_____
2,4-D Amine 4	pt	2.25	2.0000	4.50	_____
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Prefix	pt	6.64	2.0000	13.28	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.2767	4.04	_____
Harvesters	hour	14.68	0.1021	1.50	_____
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	_____
UNALLOCATED LABOR					
	hour	14.66	0.3410	5.00	_____
DIESEL FUEL					
Tractors	gal	1.53	3.2054	4.91	_____
Harvesters	gal	1.53	1.3935	2.13	_____
REPAIR & MAINTENANCE					
Implements	acre	4.93	1.0000	4.93	_____
Tractors	acre	2.03	1.0000	2.03	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	6.02	1.0000	6.02	_____
TOTAL DIRECT EXPENSES				273.90	_____
FIXED EXPENSES					
Implements	acre	9.67	1.0000	9.67	_____
Tractors	acre	12.27	1.0000	12.27	_____
Harvesters	acre	15.93	1.0000	15.93	_____
TOTAL FIXED EXPENSES				37.87	_____
TOTAL SPECIFIED EXPENSES				311.77	_____

Note: Cost of production estimates are based on 2020 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	43.0000	415.81	_____

TOTAL INCOME				415.81	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	14.00	1.0000	14.00	_____
HARVEST AIDS	acre	3.04	1.0000	3.04	_____
FERTILIZERS	acre	33.53	1.0000	33.53	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	61.52	1.0000	61.52	_____
INSECTICIDES	acre	4.81	1.0000	4.81	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.3789	5.54	_____
UNALLOCATED LABOR	hour	14.66	0.3410	5.00	_____
DIESEL FUEL	gal	1.53	4.5990	7.04	_____
REPAIR & MAINTENANCE	acre	11.12	1.0000	11.12	_____
INTEREST ON OP. CAP.	acre	6.02	1.0000	6.02	_____

TOTAL DIRECT EXPENSES				273.90	_____
RETURNS ABOVE DIRECT EXPENSES				141.91	_____
TOTAL FIXED EXPENSES				37.87	_____

TOTAL SPECIFIED EXPENSES				311.77	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				104.04	_____

Note: Cost of production estimates are based on 2020 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2021

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	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
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 225	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
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				
Spray (Broadcast)	60'	MFWD 225	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 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.37	0.37	0.48	0.34

Note: Cost of production estimates are based on 2020 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2021

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						0.13	3.46	3.46
Lime (Spread)	ton	15.80						0.63	16.43	16.43
Custom Apply Fert	acre	7.50						0.30	7.80	7.80
Phosphorus(46% P2O5)	cwt	11.42						0.46	11.88	11.88
Potash (60% K2O)	cwt	22.11						0.88	22.99	22.99
Disk Harrow	32'		1.09	1.50	1.71			0.17	4.47	4.85
Field Cultivate Fld	32'		0.83	0.85	1.30			0.12	3.10	4.14
App by Air (5 gal)	appl	7.00						0.16	7.16	7.16
Glyphosate 3lbs a.e	oz	4.16						0.10	4.26	4.26
2,4-D Amine 4	pt	4.50						0.11	4.61	4.61
Plant - Folding	12R-30		1.11	2.15	2.32			0.11	5.69	5.90
Soybean Seed RR2X	lb	67.00						1.34	68.34	68.34
CruiserMaxx Vibrance	oz	7.60						0.15	7.75	7.75
Boundary	pt	22.14						0.44	22.58	22.58
Gramoxone SL 2.0	oz	9.12						0.18	9.30	9.30
Surfactant	pt	1.32						0.03	1.35	1.35
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23	4.23
Prefix	pt	13.28						0.22	13.50	13.50
Soybeans Consultant	acre	6.50						0.11	6.61	6.61
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23	4.23
Spray (Broadcast)	60'		0.50	0.38	0.91			0.01	1.80	1.45
Acephate 90SP	lb	4.81						0.03	4.84	4.84
App by Air (5 gal)	appl	7.00						0.05	7.05	7.05
Gramoxone SL	oz	3.04						0.02	3.06	3.06
Surfactant	pt	0.66							0.66	0.66
Header -Soybean	25' Flex		2.13	5.08	2.85			0.03	10.09	17.27
Haul Soybeans	bu	11.61						0.04	11.65	11.65
Grain Cart Soybean	700 bu		0.38	0.40	0.59				1.37	1.36
TOTALS		238.22	7.04	11.12	11.50	0.00	6.02	273.90	37.87	311.77

Note: Cost of production estimates are based on 2020 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2021

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	415.81
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	7.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.04	0.00
FERTILIZERS	33.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	8.66	31.26	21.60	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	4.81	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	1.32	0.00	0.00	0.00	0.66	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	15.80	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	3.01	0.00	0.00	0.00	0.00	0.00	2.32	1.82	0.00	0.00	0.91	3.44
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.92	0.00	0.00	0.00	0.00	0.00	1.11	1.00	0.00	0.00	0.50	2.51
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	2.15	0.76	0.00	0.00	0.38	5.48
INTEREST ON OP. CAP.	2.69	0.00	0.00	0.00	0.00	0.37	2.25	0.53	0.00	0.00	0.11	0.07
TOTAL DIRECT EXPENSES	70.13	0.00	0.00	0.00	0.00	16.03	115.01	32.21	0.00	0.00	17.41	23.11
NET INCOME	-70.13	0.00	0.00	0.00	0.00	-16.03	-115.01	-32.21	0.00	0.00	-17.41	392.70
NET INCOME TO DATE	-70.13	-70.13	-70.13	-70.13	-70.13	-86.16	-201.17	-233.38	-233.38	-233.38	-250.79	141.91

Note: Cost of production estimates are based on 2020 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 12.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2021

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08		
PERCENT	YIELD	UNIT	dollars										
50	21.50	bu	-112 -150	-101 -139	-91 -129	-80 -118	-70 -108	-60 -98	-49 -87	-39 -77	-28 -66	-18 -56	-8 -46
60	25.80	bu	-82 -119	-69 -107	-57 -95	-44 -82	-32 -70	-19 -57	-7 -45	5 -32	17 -20	30 -7	42 4
70	30.10	bu	-52 -89	-37 -75	-22 -60	-8 -46	6 -31	20 -17	35 -2	49 11	64 26	78 41	93 55
80	34.40	bu	-22 -59	-5 -43	11 -26	27 -10	44 6	61 23	77 39	94 56	110 73	127 89	144 106
90	38.70	bu	7 -29	26 -11	45 7	64 26	82 44	101 63	120 82	138 101	157 119	176 138	195 157
100	43.00	bu	37 0	58 20	79 41	100 62	121 83	141 104	162 124	183 145	204 166	225 187	245 207
110	47.30	bu	67 30	90 52	113 75	136 98	159 121	182 144	205 167	228 190	250 213	273 235	296 258
120	51.60	bu	97 60	122 85	147 110	172 134	197 159	222 184	247 209	272 234	297 259	322 284	347 309
130	55.90	bu	128 90	155 117	182 144	209 171	236 198	263 225	290 252	317 279	344 306	371 333	398 360
140	60.20	bu	158 120	187 149	216 178	245 207	274 236	303 265	332 294	361 323	390 353	420 382	449 411
150	64.50	bu	188 150	219 181	250 212	281 243	312 274	343 306	375 337	406 368	437 399	468 430	499 462

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 2020 input prices.

Table 13.A Estimated costs per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.6600	11.42	_____
Potash (60% K2O)	cwt	22.11	1.0000	22.11	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	96.0000	12.48	_____
Select Max	pt	12.74	1.0000	12.74	_____
Fierce	oz	7.40	3.5000	25.90	_____
Gramoxone SL 2.0	oz	0.19	96.0000	18.24	_____
Boundary	pt	11.07	2.0000	22.14	_____
Prefix	pt	6.64	2.0000	13.28	_____
INSECTICIDES					
Dimilin 2L	oz	2.16	1.0000	2.16	_____
Baythroid XL	oz	2.38	1.0650	2.53	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.4500	4.79	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.4189	6.13	_____
Harvesters	hour	14.68	0.1021	1.50	_____
HAND LABOR					
Implements	hour	9.06	0.1382	1.25	_____
UNALLOCATED LABOR					
	hour	14.67	0.4689	6.88	_____
DIESEL FUEL					
Tractors	gal	1.53	4.8515	7.43	_____
Harvesters	gal	1.53	1.3935	2.13	_____
REPAIR & MAINTENANCE					
Implements	acre	6.41	1.0000	6.41	_____
Tractors	acre	3.06	1.0000	3.06	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	5.64	1.0000	5.64	_____
TOTAL DIRECT EXPENSES				320.95	_____
FIXED EXPENSES					
Implements	acre	12.70	1.0000	12.70	_____
Tractors	acre	18.58	1.0000	18.58	_____
Harvesters	acre	15.93	1.0000	15.93	_____
TOTAL FIXED EXPENSES				47.21	_____
TOTAL SPECIFIED EXPENSES				368.16	_____

Note: Cost of production estimates are based on 2020 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	40.0000	386.80	_____

TOTAL INCOME				386.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_____
HARVEST AIDS	acre	3.04	1.0000	3.04	_____
FERTILIZERS	acre	33.53	1.0000	33.53	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	104.78	1.0000	104.78	_____
INSECTICIDES	acre	4.69	1.0000	4.69	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	4.79	1.0000	4.79	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.5210	7.63	_____
UNALLOCATED LABOR	hour	14.67	0.4689	6.88	_____
DIESEL FUEL	gal	1.53	6.2451	9.56	_____
REPAIR & MAINTENANCE	acre	13.63	1.0000	13.63	_____
INTEREST ON OP. CAP.	acre	5.64	1.0000	5.64	_____

TOTAL DIRECT EXPENSES				320.95	_____
RETURNS ABOVE DIRECT EXPENSES				65.85	_____
TOTAL FIXED EXPENSES				47.21	_____

TOTAL SPECIFIED EXPENSES				368.16	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				18.64	_____

Note: Cost of production estimates are based on 2020 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre..

Table 13.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2021

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				
Disk Harrow	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
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				
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 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Spray (Broadcast)	60'	MFWD 225	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 225	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 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.52	0.52	0.65	0.46

Note: Cost of production estimates are based on 2020 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2021

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						0.01	3.34		3.34
Lime (Spread)	ton	15.80						0.05	15.85		15.85
Disk Harrow	32'		1.09	1.50	1.71			0.01	4.31	4.85	9.16
Field Cultivate Fld	32'		0.83	0.85	1.30			0.01	2.99	4.14	7.13
Bed/Lister-Roll-Fo	12R-30		1.43	1.35	2.26			0.02	5.06	5.54	10.60
Spray (Broadcast)	60'		0.50	0.38	0.91			0.05	1.84	1.45	3.29
Glyphosate 3lbs a.e	oz	4.16						0.12	4.28		4.28
Select Max	pt	12.74						0.38	13.12		13.12
Surfactant	pt	1.32						0.04	1.36		1.36
Custom Apply Fert	acre	7.50						0.18	7.68		7.68
Phosphorus (46% P2O5)	cwt	11.42						0.27	11.69		11.69
Potash (60% K2O)	cwt	22.11						0.52	22.63		22.63
Spray (Broadcast)	60'		0.50	0.38	0.91			0.04	1.83	1.45	3.28
Fierce	oz	25.90						0.60	26.50		26.50
Gramoxone SL 2.0	oz	9.12						0.21	9.33		9.33
Surfactant	pt	1.32						0.03	1.35		1.35
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.49			0.12	6.36	6.79	13.15
Soybean Seed RR2X	lb	67.00						1.34	68.34		68.34
CruiserMaxx Vibrance	oz	7.60						0.15	7.75		7.75
Boundary	pt	22.14						0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12						0.18	9.30		9.30
Surfactant	pt	1.32						0.03	1.35		1.35
Spray (Broadcast)	60'		0.50	0.38	0.91			0.04	1.83	1.45	3.28
Glyphosate 3lbs a.e	oz	4.16						0.08	4.24		4.24
Prefix	pt	13.28						0.27	13.55		13.55
Spray (Broadcast)	60'		0.50	0.38	0.91			0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16						0.07	4.23		4.23
Spray (Broadcast)	60'		0.25	0.19	0.46			0.01	0.91	0.73	1.64
Dimilin 2L	oz	2.16						0.03	2.19		2.19
Surfactant	pt	0.17							0.17		0.17
Spray (Broadcast)	60'		0.25	0.19	0.46			0.01	0.91	0.73	1.64
Baythroid XL	oz	2.53						0.03	2.56		2.56
App by Air (5 gal)	appl	7.00						0.05	7.05		7.05
Gramoxone SL	oz	3.04						0.02	3.06		3.06
Surfactant	pt	0.66							0.66		0.66
Header -Soybean	25' Flex		2.13	5.08	2.85			0.03	10.09	17.27	27.36
Haul Soybeans	bu	10.80						0.04	10.84		10.84
Grain Cart Soybean	700 bu		0.38	0.40	0.59				1.37	1.36	2.73
TOTALS		276.36	9.56	13.63	15.76	0.00	5.64	320.95	47.21	368.16	

Note: Cost of production estimates are based on 2020 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2021

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	386.80
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.04	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	33.53	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	16.90	0.00	35.02	48.70	4.16	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	2.16	2.53	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	1.32	0.00	1.32	1.32	0.00	0.17	0.00	0.66	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	15.80
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	0.91	0.00	0.91	3.40	0.91	0.46	0.46	0.00	8.71
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	0.50	0.00	0.50	1.70	0.50	0.25	0.25	0.00	5.86
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.38	0.00	0.38	2.93	0.38	0.19	0.19	0.00	9.18
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.59	0.00	1.85	2.78	0.10	0.04	0.04	0.07	0.17
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	20.60	0.00	81.01	141.93	6.05	3.27	3.47	10.77	53.85
NET INCOME	0.00	0.00	0.00	-20.60	0.00	-81.01	-141.93	-6.05	-3.27	-3.47	-10.77	332.95
NET INCOME TO DATE	0.00	0.00	0.00	-20.60	-20.60	-101.61	-243.54	-249.59	-252.86	-256.33	-267.10	65.85

Note: Cost of production estimates are based on 2020 input prices.

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

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

* Lease costs are based on hourly usage costs.

Table 13.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2021

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
-----PRODUCT PRICE-----													
Soybeans	7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08		
PERCENT	YIELD	UNIT	-----dollars-----										
50	20.00	bu	-170	-160	-151	-141	-131	-122	-112	-102	-93	-83	-73
			-217	-208	-198	-188	-179	-169	-159	-150	-140	-130	-120
60	24.00	bu	-142	-130	-119	-107	-96	-84	-72	-61	-49	-38	-26
			-189	-178	-166	-154	-143	-131	-120	-108	-96	-85	-73
70	28.00	bu	-114	-101	-87	-74	-60	-46	-33	-19	-6	7	20
			-161	-148	-134	-121	-107	-94	-80	-67	-53	-39	-26
80	32.00	bu	-86	-71	-55	-40	-24	-9	6	21	37	52	68
			-133	-118	-102	-87	-72	-56	-41	-25	-10	5	20
90	36.00	bu	-58	-41	-23	-6	10	28	45	63	80	97	115
			-105	-88	-71	-53	-36	-18	-1	15	33	50	68
100	40.00	bu	-30	-11	7	27	46	65	85	104	123	143	162
			-78	-58	-39	-20	-0	18	37	57	76	96	115
110	44.00	bu	-2	18	39	60	82	103	124	145	167	188	209
			-50	-28	-7	13	34	56	77	98	120	141	162
120	48.00	bu	25	48	71	94	117	141	164	187	210	233	257
			-22	1	24	47	70	93	117	140	163	186	209
130	52.00	bu	52	78	103	128	153	178	203	228	254	279	304
			5	30	56	81	106	131	156	181	206	231	257
140	56.00	bu	80	107	135	162	189	216	243	270	297	324	351
			33	60	87	114	141	169	196	223	250	277	304
150	60.00	bu	108	137	166	195	224	253	282	311	340	369	398
			61	90	119	148	177	206	235	264	293	322	351

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 2020 input prices.

Table 14.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.0000	21.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	_____
Potash (60% K2O)	cwt	22.11	1.3300	29.41	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	_____
HERBICIDES					
Boundary	pt	11.07	2.0000	22.14	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Prefix	pt	6.64	2.0000	13.28	_____
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	_____
Prevathon	oz	1.05	14.0000	14.70	_____
Bifenthrin	oz	0.94	6.4000	6.02	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.30	0.5000	1.65	_____
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	47.45	0.3330	15.80	_____
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	14.68	0.1171	1.71	_____
Harvesters	hour	14.68	0.1021	1.50	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	_____
DIESEL FUEL					
Tractors	gal	1.53	1.3567	2.08	_____
Harvesters	gal	1.53	1.3935	2.13	_____
REPAIR & MAINTENANCE					
Implements	acre	3.40	1.0000	3.40	_____
Tractors	acre	0.85	1.0000	0.85	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	5.70	1.0000	5.70	_____
TOTAL DIRECT EXPENSES				290.42	_____
FIXED EXPENSES					
Implements	acre	5.75	1.0000	5.75	_____
Tractors	acre	5.19	1.0000	5.19	_____
Harvesters	acre	15.93	1.0000	15.93	_____
TOTAL FIXED EXPENSES				26.87	_____
TOTAL SPECIFIED EXPENSES				317.29	_____

Note: Cost of production estimates are based on 2020 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, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.67	25.0000	241.75	_____

TOTAL INCOME				241.75	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	48.70	1.0000	48.70	_____
INSECTICIDES	acre	33.53	1.0000	33.53	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	1.65	1.0000	1.65	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
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	14.68	0.2193	3.21	_____
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	_____
DIESEL FUEL	gal	1.53	2.7503	4.21	_____
REPAIR & MAINTENANCE	acre	8.41	1.0000	8.41	_____
INTEREST ON OP. CAP.	acre	5.70	1.0000	5.70	_____

TOTAL DIRECT EXPENSES				290.42	_____
RETURNS ABOVE DIRECT EXPENSES				-48.67	_____
TOTAL FIXED EXPENSES				26.87	_____

TOTAL SPECIFIED EXPENSES				317.29	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-75.54	_____

Note: Cost of production estimates are based on 2020 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, 2021

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 Vibrance	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 2020 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, 2021

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						0.13	3.46	3.46
Lime (Spread)	ton	15.80						0.63	16.43	16.43
Custom Apply Fert	acre	7.50						0.30	7.80	7.80
Phosphorus(46% P2O5)	cwt	15.06						0.60	15.66	15.66
Potash (60% K2O)	cwt	29.41						1.18	30.59	30.59
Soybeans Consultant	acre	6.50						0.13	6.63	6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.45			0.10	6.30	6.79
Soybean Seed RR2X	lb	67.00						1.12	68.12	68.12
CruiserMaxx Vibrance	oz	7.60						0.13	7.73	7.73
Inoculant -Soybean	acre	1.55						0.03	1.58	1.58
Boundary	pt	22.14						0.37	22.51	22.51
Gramoxone SL 2.0	oz	9.12						0.15	9.27	9.27
Surfactant	pt	1.32						0.02	1.34	1.34
Spray (Broadcast)	60'		0.50	0.38	0.90			0.02	1.80	1.45
Glyphosate 3lbs a.e	oz	4.16						0.06	4.22	4.22
Prefix	pt	13.28						0.18	13.46	13.46
App by Air (5 gal)	appl	7.00						0.07	7.07	7.07
Acephate 90SP	lb	4.81						0.05	4.86	4.86
App by Air (5 gal)	appl	7.00						0.07	7.07	7.07
Prevathon	oz	14.70						0.15	14.85	14.85
Surfactant	pt	0.33							0.33	0.33
Bifenthrin	oz	6.02						0.06	6.08	6.08
Incidental Pest										
App by Air (5 gal)	appl	7.00						0.05	7.05	7.05
IncidentalPestTrt \$8	acre	8.00						0.05	8.05	8.05
Header -Soybean	25' Flex		2.13	5.08	2.79			0.03	10.03	17.27
Haul Soybeans	bu	6.75						0.02	6.77	6.77
Grain Cart Soybean	700 bu		0.38	0.40	0.58				1.36	1.36
TOTALS		265.38	4.21	8.41	6.72	0.00	5.70	290.42	26.87	317.29

Note: Cost of production estimates are based on 2020 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, 2021

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	241.75
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	7.00	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.26	17.44	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	25.53	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	1.32	0.00	0.33	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	15.80	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	2.45	0.90	0.00	0.00	3.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.50	0.00	0.00	2.51
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55	0.38	0.00	0.00	5.48
INTEREST ON OP. CAP.	2.84	0.00	0.00	0.00	0.00	0.00	0.13	1.92	0.26	0.40	0.10	0.05
TOTAL DIRECT EXPENSES	73.94	0.00	0.00	0.00	0.00	0.00	6.63	116.85	19.48	40.26	15.10	18.16
NET INCOME	-73.94	0.00	0.00	0.00	0.00	0.00	-6.63	-116.85	-19.48	-40.26	-15.10	223.59
NET INCOME TO DATE	-73.94	-73.94	-73.94	-73.94	-73.94	-73.94	-80.57	-197.42	-216.90	-257.16	-272.26	-48.67

Note: Cost of production estimates are based on 2020 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, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.25	7.73	8.21	8.70	9.18	9.67	10.15	10.63	11.12	11.60	12.08
			PRODUCT PRICE										
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-196	-190	-184	-178	-172	-166	-160	-154	-148	-141	-135
			-223	-217	-211	-205	-199	-193	-186	-180	-174	-168	-162
60	15.00	bu	-178	-171	-164	-157	-149	-142	-135	-128	-120	-113	-106
			-205	-198	-191	-184	-176	-169	-162	-155	-147	-140	-133
70	17.50	bu	-161	-153	-144	-136	-127	-119	-110	-102	-93	-85	-76
			-188	-179	-171	-162	-154	-146	-137	-129	-120	-112	-103
80	20.00	bu	-144	-134	-124	-115	-105	-95	-85	-76	-66	-56	-47
			-170	-161	-151	-141	-132	-122	-112	-103	-93	-83	-74
90	22.50	bu	-126	-115	-104	-93	-83	-72	-61	-50	-39	-28	-17
			-153	-142	-131	-120	-109	-99	-88	-77	-66	-55	-44
100	25.00	bu	-109	-97	-84	-72	-60	-48	-36	-24	-12	-0	11
			-135	-123	-111	-99	-87	-75	-63	-51	-39	-27	-15
110	27.50	bu	-91	-78	-65	-51	-38	-25	-11	1	14	28	41
			-118	-105	-91	-78	-65	-52	-38	-25	-12	1	14
120	30.00	bu	-74	-59	-45	-30	-16	-1	12	27	41	56	70
			-101	-86	-72	-57	-43	-28	-14	0	14	29	43
130	32.50	bu	-56	-41	-25	-9	6	21	37	53	68	84	100
			-83	-67	-52	-36	-20	-5	10	26	42	57	73
140	35.00	bu	-39	-22	-5	11	28	45	62	79	96	113	129
			-66	-49	-32	-15	1	18	35	52	69	86	103
150	37.50	bu	-21	-3	14	32	50	68	86	105	123	141	159
			-48	-30	-12	5	23	41	60	78	96	114	132

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 2020 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, 2021

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	391,000	300	8	13.64	14.68	20.86	40.72	76.27	155.91	232.19
Combine (300-349 hp)	325 hp	395,000	300	8	16.73	14.68	25.59	41.14	81.42	157.50	238.93
Combine (350-399 hp)	355 hp	401,000	300	8	18.27	14.68	27.95	41.77	84.40	159.90	244.30
Combine (400-449 hp)	425 hp	436,000	300	8	21.87	14.68	33.47	45.41	93.56	173.85	267.42
Combine (450-499hp)	475 hp	462,000	300	8	24.44	14.68	37.40	48.12	100.21	184.22	284.43
Tractor(20-39hp)CB	MFWD 30	30,100	600	8	1.54	14.68	2.36	0.94	17.98	5.46	23.44
Tractor(20-39hp)RB	MFWD 30	20,700	600	8	1.54	14.68	2.36	0.64	17.68	3.75	21.44
Tractor(40-59hp)CB	2WD 50	30,900	600	8	2.57	14.68	3.93	0.96	19.58	5.61	25.19
Tractor(40-59hp)CB	MFWD 50	41,400	600	8	2.57	14.68	3.93	1.29	19.91	7.51	27.43
Tractor(40-59hp)RB	2WD 50	21,700	600	8	2.57	14.68	3.93	0.67	19.29	3.94	23.23
Tractor(40-59hp)RB	MFWD 50	27,200	600	8	2.57	14.68	3.93	0.85	19.46	4.93	24.40
Tractor(60-89hp)CB	2WD 75	53,200	600	8	3.86	14.68	5.90	1.66	22.24	9.66	31.91
Tractor(60-89hp)CB	MFWD 75	57,600	600	8	3.86	14.68	5.90	1.80	22.38	10.46	32.84
Tractor(60-89hp)RB	2WD 75	38,400	600	8	3.86	14.68	5.90	1.20	21.78	6.97	28.76
Tractor(60-89hp)RB	MFWD 75	41,800	600	8	3.86	14.68	5.90	1.30	21.89	7.59	29.48
Tractor(90-119hp)CB	2WD 105	71,200	600	8	5.40	14.68	8.26	2.22	25.17	12.93	38.10
Tractor(90-119hp)CB	MFWD 105	91,700	600	8	5.40	14.68	8.26	2.86	25.81	16.65	42.46
Tractor(90-119hp)RB	2WD 105	64,600	600	8	5.40	14.68	8.26	2.01	24.96	11.73	36.69
Tractor(90-119hp)RB	MFWD 105	71,900	600	8	5.40	14.68	8.26	2.24	25.19	13.05	38.25
Tractor(120-139hp)CB	2WD 130	113,000	600	8	6.69	14.68	10.23	3.53	28.44	20.52	48.97
Tractor(120-139hp)CB	MFWD 130	126,000	600	8	6.69	14.68	10.23	3.93	28.85	22.88	51.73
Tractor(140-159hp)	2WD 150	111,000	600	8	7.72	14.68	11.81	3.46	29.96	20.15	50.12
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	14.68	11.81	4.46	30.96	25.97	56.93
Tractor(160-179hp)CB	MFWD 170	160,000	600	8	8.75	14.68	13.38	5.00	33.06	30.47	63.54
Tractor(180-199hp)CB	MFWD 190	194,000	600	8	9.77	14.68	14.96	6.06	35.70	36.95	72.66
Tractor(200-249hp)CB	MFWD 225	233,000	600	8	11.58	14.68	17.71	7.28	39.68	44.38	84.06
Tractor(250-349hp)CB	4WD 300	314,000	600	8	15.44	14.68	23.62	9.81	48.11	59.81	107.93
Tractor(250-349hp)CB	MFWD 300	321,000	600	8	15.44	14.68	23.62	10.03	48.33	61.14	109.48
Tractor(250-349hp)CB	Track 300	329,000	600	8	15.44	14.68	23.62	10.28	48.58	62.67	111.25
Tractor(350-449hp)	Track 400	453,000	600	8	20.58	14.68	31.50	14.15	60.33	86.29	146.63
Tractor(350-449hp)CB	4WD 400	366,000	600	8	20.58	14.68	31.50	11.43	57.61	69.72	127.33
Tractor(450-550hp)CB	4WD 500	412,000	600	8	25.73	14.68	39.37	12.87	66.93	78.48	145.41
Tractor(450-550hp)CB	Track 500	470,000	600	8	25.73	14.68	39.37	14.68	68.74	89.53	158.27
Utility Vehicle	800 CC	12,200	200	8	0.70	14.68	1.32	1.90	17.90	7.29	25.20
Utility Vehicle	900 CC	15,800	200	8	1.00	14.68	1.89	2.46	19.03	9.45	28.48

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, 2021

Item Name	Size	Purchase	Annual	Useful	Fuel	Perf	Labor	Fuel	R&M	Total	Fixed	Total
		Price	Use	Life	Use	Rate			Direct	Cost		
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
Cotton Picker	4R-38(250)	268,000	200	8	12.86	0.257	6.11	5.07	10.79	21.98	41.32	63.31
Cotton Picker	4R-38(350)	351,000	200	8	18.01	0.257	6.11	7.10	14.13	27.36	54.11	81.48
Cotton Picker	4R2x1(350)	357,000	200	8	18.01	0.172	4.09	4.74	9.61	18.45	36.79	55.24
Cotton Picker	6R-30(355)	465,000	200	8	18.27	0.218	5.18	6.10	15.85	27.14	60.70	87.84
Cotton Picker	6R-38(355)	465,000	200	8	18.27	0.172	4.09	4.81	12.51	21.42	47.92	69.35
Cotton Picker/Modu	4R-38(365)	536,000	200	8	20.58	0.257	6.11	8.12	21.58	35.82	82.64	118.47
Cotton Picker/Module	6R-30(500)	808,000	200	8	25.73	0.218	5.18	8.59	27.55	41.32	105.47	146.80
Cotton Picker/Module	6R-38(500)	807,000	200	8	25.73	0.172	4.09	6.78	21.72	32.60	83.17	115.77
Dry Applicator SP	70'300cuft	365,000	350	8	16.98	0.015	0.29	0.39	0.29	0.97	1.88	2.86
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.33	0.24	0.20	0.78	1.30	2.08
Sprayer 600-825gal	80' 175hp	225,000	350	8	11.81	0.013	0.25	0.23	0.15	0.65	1.01	1.66
Sprayer 600-825gal	90' 250hp	322,000	350	8	12.73	0.011	0.22	0.22	0.20	0.65	1.29	1.95
Sprayer 800gal	100' 250hp	324,000	350	8	14.15	0.010	0.20	0.22	0.18	0.61	1.17	1.78
Sprayer 800gal	80' 250hp	292,000	350	8	12.86	0.013	0.25	0.26	0.20	0.72	1.31	2.04
Sprayer 1000-1400gal	90' 275hp	322,000	350	8	14.15	0.010	0.20	0.22	0.18	0.61	1.16	1.77
Sprayer 1000gal	100' 300hp	365,000	350	8	15.44	0.010	0.20	0.24	0.20	0.66	1.31	1.97
Sprayer 1200+gal	120' 300hp	392,000	350	8	15.44	0.008	0.16	0.20	0.18	0.56	1.18	1.74

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, 2021

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Bed-Paratill w/ro	4R-30	MFWD 225	18,700	150	12	0.204	2.99	3.62	1.37	1.48	9.48	2.29	9.06	20.85
Bed-Paratill w/ro	4R-38	MFWD 225	18,700	150	12	0.160	2.36	2.85	1.08	1.17	7.47	1.81	7.14	16.42
Bed-Paratill w/ro	6R-38	MFWD 225	25,500	150	12	0.107	1.57	1.90	0.99	0.78	5.25	1.65	4.77	11.68
Bed-Rip/Disk Fold.	8R-38	MFWD 190	46,900	300	20	0.073	1.07	1.09	0.17	0.44	2.78	0.76	2.70	6.24
Bed-Rip/Disk Fold.	12R-30	MFWD 225	67,900	300	20	0.061	0.90	1.09	0.20	0.44	2.65	0.93	2.73	6.32
Bed-Rip/Disk Fold.	12R-38	MFWD 225	67,900	300	20	0.046	0.67	0.81	0.15	0.33	1.99	0.70	2.05	4.74
Bed-Rip/Disk Rigid	4R-30	MFWD 190	21,300	300	20	0.184	2.71	2.76	0.19	1.12	6.79	0.88	6.83	14.51
Bed-Rip/Disk Rigid	4R-38	MFWD 190	21,300	300	20	0.146	2.15	2.19	0.15	0.88	5.39	0.70	5.42	11.51
Bed-Rip/Disk Rigid	6R-30	MFWD 190	29,700	300	20	0.123	1.80	1.84	0.18	0.74	4.58	0.82	4.55	9.95
Bed-Rip/Disk Rigid	6R-38	MFWD 190	29,700	300	20	0.097	1.42	1.45	0.14	0.58	3.61	0.64	3.59	7.86
Bed-Rip/Disk Rigid	8R-30	MFWD 190	39,800	300	20	0.139	2.04	2.07	0.27	0.84	5.23	1.24	5.13	11.61
Bed-Rip/Disk Rigid	8R-38	MFWD 190	39,800	300	20	0.073	1.07	1.09	0.14	0.44	2.75	0.65	2.70	6.10
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	24,800	150	12	0.107	1.57	1.90	0.96	0.78	5.23	1.60	4.77	11.60
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	33,000	150	12	0.080	1.18	1.43	0.96	0.58	4.16	1.60	3.58	9.35
Bed-Subsoil Fold	8R-38	MFWD 225	46,900	150	12	0.080	1.18	1.43	1.36	0.58	4.57	2.27	3.58	10.43
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	67,900	150	12	0.053	0.78	0.95	1.31	0.39	3.45	2.19	2.38	8.03
Bed-Subsoil Fold	12R-38	MFWD 225	67,900	150	12	0.053	0.78	0.95	1.31	0.39	3.45	2.19	2.38	8.03
Bed-Subsoil Rigid	4R-30	MFWD 225	17,500	150	12	0.204	2.99	3.62	1.29	1.48	9.39	2.15	9.06	20.62
Bed-Subsoil Rigid	4R-38	MFWD 225	16,800	150	12	0.160	2.36	2.85	0.97	1.17	7.36	1.62	7.14	16.12
Bed-Subsoil Rigid	6R-30	MFWD 225	24,300	150	12	0.136	1.99	2.41	1.19	0.99	6.60	1.99	6.04	14.63
Bed-Subsoil Rigid	6R-38	MFWD 225	25,300	150	12	0.107	1.57	1.90	0.98	0.78	5.24	1.63	4.77	11.66
Bed-Subsoil Rigid	8R-30	MFWD 225	32,500	150	12	0.102	1.49	1.81	1.19	0.74	5.25	1.99	4.53	11.78
Bed-Subsoil Rigid	8R-38	MFWD 225	33,600	150	12	0.080	1.18	1.43	0.97	0.58	4.18	1.63	3.58	9.40
Bed/Disk (Hipper)	4R-38	MFWD 150	10,500	160	10	0.147	2.16	1.74	0.38	0.65	4.95	0.98	3.83	9.78
Bed/Disk (Hipper)	6R-38	MFWD 170	16,200	160	10	0.098	1.44	1.32	0.39	0.49	3.66	1.01	3.00	7.68
Bed/Disk (Hipper)	8R-30	MFWD 190	20,800	160	10	0.093	1.37	1.40	0.48	0.56	3.83	1.24	3.46	8.54
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	51,400	160	10	0.049	0.72	0.73	0.63	0.29	2.39	1.61	1.82	5.83
Bed/Disk (Hipper)	12R-30	MFWD 225	40,100	160	10	0.062	0.91	1.10	0.62	0.45	3.10	1.59	2.77	7.47
Bed/Disk (Hipper)	12R-38	MFWD 225	51,400	160	10	0.049	0.72	0.87	0.63	0.35	2.59	1.61	2.18	6.39
Bed/Disk (Hipper)	16R40	MFWD 300	60,800	160	10	0.035	0.51	0.83	0.53	0.35	2.24	1.37	2.16	5.78
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	22,000	160	10	0.074	1.08	1.10	0.40	0.44	3.05	1.03	2.73	6.83
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	19,700	160	10	0.074	1.08	1.10	0.36	0.44	3.01	0.93	2.73	6.68
Bed/Disk w/roller	8R-30	MFWD 190	26,900	160	10	0.093	1.37	1.40	0.63	0.56	3.97	1.60	3.46	9.04
Bed/Disk w/roller	8R-38	MFWD 190	30,800	160	10	0.074	1.08	1.10	0.57	0.44	3.21	1.45	2.73	7.41
Bed/Disk w/roller	12R-30/40	MFWD 225	50,900	160	10	0.062	0.91	1.10	0.79	0.45	3.27	2.02	2.77	8.07
Bed/Lister	4R-38	MFWD 150	18,100	160	8	0.228	3.35	2.69	0.96	1.02	8.03	2.95	5.93	16.92
Bed/Lister	6R-38	MFWD 150	20,400	160	8	0.120	1.76	1.41	0.57	0.53	4.29	1.75	3.12	9.16
Bed/Lister	8R-30	MFWD 190	24,900	160	8	0.114	1.67	1.70	0.66	0.69	4.74	2.03	4.21	10.99
Bed/Lister	8R-38	MFWD 190	25,000	160	8	0.090	1.32	1.35	0.52	0.54	3.75	1.61	3.33	8.70
Bed/Lister	8R-38 2x1	MFWD 190	40,400	160	8	0.060	0.88	0.89	0.56	0.36	2.71	1.73	2.22	6.67
Bed/Lister	12R-38	MFWD 225	40,400	160	8	0.060	0.88	1.06	0.56	0.43	2.95	1.73	2.66	7.35
Bed/Lister	16R-30	MFWD 225	54,700	160	8	0.035	0.51	0.62	0.45	0.25	1.84	1.37	1.55	4.77
Bed/Lister	16R40	MFWD 300	57,000	160	8	0.043	0.63	1.01	0.57	0.43	2.65	1.75	2.63	7.04
Bed/Lister-Roll-Fo	8R-38	MFWD 190	24,300	160	10	0.095	1.40	1.43	0.58	0.58	4.00	1.48	3.54	9.03
Bed/Lister-Roll-Fo	12R-30	MFWD 225	37,800	160	10	0.080	1.18	1.43	0.76	0.58	3.97	1.94	3.58	9.51
Bed/Lister-Roll-Fo	12R-38	MFWD 225	36,700	160	10	0.063	0.93	1.13	0.58	0.46	3.11	1.49	2.83	7.44
Bed/Lister-Roll-Fo	16R-30	MFWD 225	48,700	160	10	0.060	0.89	1.07	0.73	0.44	3.14	1.88	2.69	7.72
Bed/Lister-Roll-Ri	8R-38	MFWD 190	25,000	160	10	0.095	1.40	1.43	0.59	0.58	4.02	1.52	3.54	9.09
Blade-Box	6'-7'	MFWD 105	1,470	200	20	0.020	0.29	0.16	0.01	0.04	0.51	0.01	0.26	0.78
Blade-Box	8'-10'	MFWD 105	3,830	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box	12'-16'	MFWD 105	6,190	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	1,270	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	3,870	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	12'-16'	MFWD 105	9,810	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	3.78	3.85	1.96	1.56	11.16	3.84	9.52	24.54
Boll Buggy	4R-38(350)	MFWD 190	30,500	200	10	0.257	3.78	3.85	1.96	1.56	11.16	3.84	9.52	24.54
Boll Buggy	4R2x1	MFWD 190	30,500	200	10	0.172	2.52	2.57	1.31	1.04	7.46	2.57	6.36	16.40
Boll Buggy	6R-30(355)	MFWD 190	30,500	200	10	0.218	3.20	3.26	1.66	1.32	9.45	3.25	8.06	20.78
Boll Buggy	6R-38(355)	MFWD 190	30,500	200	10	0.172	2.52	2.57	1.31	1.04	7.46	2.57	6.36	16.40
Chisel Plow-Folding	24'	MFWD 190	43,500	150	12	0.076	1.12	1.14	1.20	0.46	3.93	2.00	2.82	8.75
Chisel Plow-Folding	32'	MFWD 225	54,500	150	12	0.057	0.84	1.02	1.13	0.42	3.42	1.89	2.56	7.88
Chisel Plow-Folding	42'	MFWD 225	65,700	150	12	0.044	0.64	0.78	1.04	0.32	2.79	1.74	1.95	6.48
Chisel Plow-Folding	50'	MFWD 225	85,900	150	12	0.036	0.54	0.65	1.14	0.26	2.61	1.91	1.64	6.16
Chisel Plow-Folding	61'	MFWD 225	99,100	150	12	0.030	0.44	0.53	1.08	0.22	2.28	1.80	1.34	5.44
Chisel Plow-Rigid	10'	MFWD 170	7,790	150	12	0.184	2.71	2.47	0.52	0.92	6.63	0.86	5.63	13.13
Chisel Plow-Rigid	15'	2WD 130	13,200	150	12	0.123	1.80	1.26	0.58	0.43	4.09	0.97	2.52	7.60
Chisel Plow-Rigid	20'	MFWD 225	13,400	150	12	0.102	1.50	1.81	0.49	0.74	4.57	0.82	4.55	9.95
Cultivate	4R-30	2WD 105	14,600	150	10	0.206	3.02	1.70	0.80	0.45	5.99	2.04	2.66	10.70
Cultivate	4R-38	2WD 105	14,200	150	10	0.162	2.38	1.34	0.61	0.32	4.66	1.56	1.90	8.14
Cultivate	6R-30	MFWD 150	18,500	150	10	0.137	2.01	1.62	0.67	0.61	4.93	1.72	3.57	10.23
Cultivate	6R-38	MFWD 150	19,300	150	10	0.108	1.59	1.28	0.55	0.48	3.91	1.42	2.81	8.16
Cultivate	8R-30	MFWD 190	23,800	150	10	0.103	1.51	1.54	0.65	0.62	4.33	1.66	3.81	9.81
Cultivate	8R-38	MFWD 190	28,400	150	10	0.073	1.08	1.10	0.55	0.44	3.18	1.42	2.72	7.33
Cultivate	8R-38 2x1	MFWD 190	35,200	150	10	0.054	0.79	0.81	0.50	0.32	2.44	1.29	2.00	5.75
Cultivate	12R-30	MFWD 225	42,500	150	10	0.068	1.00	1.21	0.77	0.50	3.50	1.98	3.05	8.54
Cultivate	12R-38	MFWD 225	43,800	150	10	0.054	0.79	0.96	0.63	0.39	2.78	1.61	2.40	6.81
Cultivate	16R-30	MFWD 225	58,400	150	10	0.051	0.75	0.91	0.80	0.37	2.84	2.04	2.28	7.18
Cultivate & Post	4R-30	2WD 105	21,900	150	10	0.220	4.22	1.81	1.28	0.44	7.77	3.27	2.58	13.63
Cultivate & Post	4R-38	2WD 105	21,600	150	10	0.173	3.32	1.43	0.99	0.34	6.10	2.54	2.03	10.68

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (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	6R-30	MFWD 150	25,900	150	10	0.146	2.81	1.73	1.01	0.65	6.21	2.58	3.80	12.60
Cultivate & Post	6R-38	MFWD 150	26,600	150	10	0.115	2.22	1.36	0.82	0.51	4.93	2.09	3.00	10.03
Cultivate & Post	8R-30	MFWD 190	31,200	150	10	0.110	2.11	1.64	0.91	0.66	5.34	2.33	4.06	11.73
Cultivate & Post	8R-38	MFWD 190	35,800	150	10	0.086	1.67	1.30	0.83	0.52	4.32	2.11	3.21	9.65
Cultivate & Post	8R-38 2x1	MFWD 190	45,400	150	10	0.057	1.11	0.86	0.70	0.35	3.03	1.78	2.13	6.95
Cultivate & Post	12R-30	MFWD 225	49,800	150	10	0.073	1.40	1.29	0.97	0.53	4.21	2.48	3.25	9.95
Cultivate & Post	12R-38	MFWD 225	54,000	150	10	0.057	1.11	1.02	0.83	0.42	3.39	2.12	2.56	8.08
Cultivate & Post	16R-30	MFWD 225	68,600	150	10	0.055	1.05	0.97	1.00	0.40	3.43	2.56	2.44	8.44
Disk & Incorporate	14'	2WD 130	33,700	200	10	0.149	2.87	1.53	1.51	0.52	6.44	2.57	3.07	12.09
Disk & Incorporate	20'	MFWD 190	71,100	200	10	0.092	1.77	1.38	1.45	0.56	5.17	2.46	3.41	11.05
Disk & Incorporate	24'	MFWD 190	53,600	200	10	0.087	1.67	1.30	1.40	0.52	4.91	2.38	3.22	10.52
Disk & Incorporate	28'	MFWD 225	63,300	200	10	0.074	1.43	1.32	1.42	0.54	4.72	2.41	3.32	10.46
Disk & Incorporate	32'	MFWD 225	68,700	200	10	0.065	1.25	1.16	1.34	0.47	4.24	2.29	2.90	9.44
Disk Harrow	14'	2WD 130	26,400	180	10	0.140	2.05	1.43	1.02	0.49	5.02	2.09	2.87	9.99
Disk Harrow	20'	MFWD 190	45,000	180	10	0.098	1.44	1.46	1.22	0.59	4.73	2.50	3.62	10.86
Disk Harrow	24'	MFWD 190	46,200	180	10	0.081	1.20	1.22	1.05	0.49	3.97	2.14	3.02	9.13
Disk Harrow	28'	MFWD 225	56,000	180	10	0.070	1.02	1.24	1.09	0.51	3.87	2.22	3.11	9.21
Disk Harrow	32'	MFWD 225	61,400	180	10	0.061	0.90	1.08	1.04	0.44	3.48	2.13	2.72	8.34
Disk Harrow	42'	MFWD 225	107,000	180	10	0.046	0.68	0.82	1.39	0.34	3.24	2.83	2.07	8.15
Disk Harrow 40-100hp	14'	2WD 75	16,700	180	10	0.140	2.05	0.82	0.65	0.16	3.70	1.32	0.97	6.01
Disk Heavy	14'	MFWD 150	26,400	180	10	0.145	2.14	1.72	1.07	0.65	5.58	2.18	3.79	11.56
Disk Heavy	20'	MFWD 190	45,000	180	10	0.097	1.42	1.45	1.21	0.58	4.69	2.48	3.59	10.76
Disk Heavy	28'	MFWD 225	56,000	180	10	0.075	1.11	1.34	1.17	0.55	4.18	2.40	3.35	9.94
Disk Ripper	15'	MFWD 225	50,800	180	10	0.136	1.99	2.41	1.92	0.99	7.32	3.91	6.04	17.29
Ditcher		2WD 130	6,120	200	10	0.020	0.29	0.20	0.04	0.07	0.61	0.06	0.41	1.09
Ditcher (1m/160a)		2WD 130	6,120	200	10	0.009	0.13	0.09	0.02	0.03	0.28	0.02	0.19	0.51
Fert Appl (Liquid)	4R-38	MFWD 150	15,200	150	8	0.154	2.97	1.82	1.56	0.69	7.05	1.70	4.01	12.78
Fert Appl (Liquid)	6R-30	MFWD 170	17,900	150	8	0.130	2.51	1.75	1.56	0.65	6.48	1.70	3.99	12.18
Fert Appl (Liquid)	6R-38	MFWD 170	17,900	150	8	0.103	1.98	1.38	1.23	0.51	5.12	1.34	3.15	9.61
Fert Appl (Liquid)	8R-30	MFWD 190	18,600	150	8	0.098	1.88	1.46	1.21	0.59	5.16	1.32	3.62	10.12
Fert Appl (Liquid)	8R-38	MFWD 190	20,600	150	8	0.077	1.49	1.16	1.06	0.47	4.19	1.16	2.86	8.22
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	21,000	150	8	0.051	0.99	0.77	0.72	0.31	2.80	0.78	1.91	5.50
Fert Appl (Liquid)	12R-30	MFWD 225	24,700	150	8	0.078	1.50	1.39	1.29	0.57	4.76	1.40	3.48	9.66
Fert Appl (Liquid)	12R-38	MFWD 225	19,300	150	8	0.051	0.99	0.91	0.66	0.37	2.95	0.72	2.29	5.96
Field Cult & Inc	42'	MFWD 225	69,500	100	10	0.037	0.72	0.66	0.65	0.27	2.32	2.67	1.67	6.67
Field Cult & Inc	50'	MFWD 225	82,200	100	10	0.031	0.60	0.56	0.65	0.23	2.05	2.65	1.40	6.12
Field Cult & Inc Fld	24'	MFWD 170	38,500	100	10	0.066	1.26	0.88	0.63	0.33	3.12	2.59	2.01	7.73
Field Cult & Inc Fld	32'	MFWD 190	50,900	100	10	0.049	0.95	0.74	0.63	0.30	2.62	2.57	1.83	7.03
Field Cult & Inc Rdg	12'	2WD 150	19,600	100	10	0.132	2.53	1.56	0.64	0.45	5.20	2.64	2.66	10.51
Field Cultivate Fld	24'	MFWD 170	31,100	100	10	0.062	0.91	0.83	0.48	0.31	2.54	1.97	1.89	6.41
Field Cultivate Fld	32'	MFWD 190	43,500	100	10	0.046	0.68	0.69	0.50	0.28	2.17	2.06	1.72	5.96
Field Cultivate Fld	42'	MFWD 225	59,400	100	10	0.035	0.52	0.62	0.52	0.25	1.93	2.15	1.57	5.66
Field Cultivate Fld	50'	MFWD 225	69,000	100	10	0.029	0.43	0.52	0.51	0.21	1.69	2.10	1.32	5.12
Field Cultivate Rdg	12'	2WD 150	12,300	100	10	0.124	1.82	1.46	0.38	0.43	4.11	1.56	2.50	8.17
Grain Cart Corn	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.37	0.18	0.15	1.09	0.31	0.93	2.33
Grain Cart Corn	700 bu	MFWD 190	44,000	200	12	0.025	0.37	0.37	0.30	0.15	1.20	0.50	0.93	2.64
Grain Cart Corn	1000 bu	MFWD 225	57,900	200	12	0.025	0.37	0.44	0.39	0.18	1.40	0.66	1.12	3.18
Grain Cart Rice	500 bu	MFWD 190	27,300	200	12	0.062	0.91	0.93	0.46	0.37	2.69	0.77	2.30	5.77
Grain Cart Rice	700 bu	MFWD 190	44,000	200	12	0.055	0.80	0.82	0.65	0.33	2.61	1.09	2.03	5.74
Grain Cart Rice	1000 bu	MFWD 190	57,900	200	12	0.045	0.67	0.68	0.71	0.27	2.35	1.19	1.69	5.24
Grain Cart Soybean	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.38	0.18	0.15	1.09	0.31	0.94	2.35
Grain Cart Soybean	700 bu	MFWD 190	44,000	200	12	0.021	0.31	0.31	0.25	0.12	1.01	0.42	0.78	2.21
Grain Cart Soybean	1000 bu	MFWD 190	57,900	200	12	0.021	0.31	0.31	0.33	0.12	1.09	0.55	0.78	2.43
Grain Cart Wht/Sor	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.38	0.18	0.15	1.09	0.31	0.94	2.35
Grain Cart Wht/Sor	700 bu	MFWD 190	44,000	200	12	0.021	0.31	0.31	0.25	0.12	1.01	0.42	0.78	2.21
Grain Cart Wht/Sor	1000 bu	MFWD 190	57,900	200	12	0.021	0.31	0.31	0.33	0.12	1.09	0.55	0.78	2.43
Grain Drill	10'	2WD 130	28,000	150	8	0.188	4.47	1.93	1.97	0.66	9.05	3.64	3.86	16.57
Grain Drill	12'	2WD 130	28,100	150	8	0.157	3.73	1.60	1.65	0.55	7.55	3.05	3.22	13.82
Grain Drill	15'	MFWD 150	33,900	150	8	0.125	2.98	1.48	1.59	0.56	6.62	2.94	3.26	12.83
Grain Drill	20'	MFWD 170	41,400	150	8	0.094	2.23	1.26	1.46	0.47	5.43	2.69	2.87	11.00
Grain Drill	24'	MFWD 190	66,800	150	8	0.078	1.86	1.17	1.96	0.47	5.48	3.62	2.90	12.01
Grain Drill	30'	MFWD 225	68,500	150	8	0.062	1.49	1.11	1.61	0.45	4.67	2.97	2.79	10.44
Grain Drill	35'	MFWD 225	91,900	150	8	0.053	1.27	0.95	1.85	0.39	4.48	3.42	2.39	10.29
Grain Drill & Pre	10'	2WD 130	35,400	150	8	0.203	4.82	2.07	2.69	0.71	10.31	4.96	4.16	19.44
Grain Drill & Pre	12'	2WD 130	35,400	150	8	0.169	4.01	1.73	2.24	0.59	8.59	4.13	3.47	16.20
Grain Drill & Pre	15'	MFWD 150	41,200	150	8	0.135	3.21	1.59	2.09	0.60	7.50	3.85	3.51	14.87
Grain Drill & Pre	20'	MFWD 170	48,800	150	8	0.101	2.41	1.35	1.85	0.50	6.13	3.42	3.09	12.65
Grain Drill & Pre	24'	MFWD 190	74,200	150	8	0.084	2.00	1.26	2.35	0.51	6.14	4.33	3.12	13.60
Grain Drill & Pre	30'	MFWD 225	75,800	150	8	0.067	1.60	1.19	1.92	0.49	5.22	3.54	3.00	11.77
Grain Drill & Pre	35'	MFWD 225	101,000	150	8	0.058	1.37	1.02	2.19	0.42	5.02	4.04	2.57	11.64
Grain Drill & Pre T	8R-38	MFWD 225	59,000	150	8	0.062	1.49	1.11	1.39	0.45	4.45	2.56	2.79	9.80
Harrow - Folding	24'	MFWD 190	13,800	200	10	0.064	0.94	0.96	0.31	0.39	2.62	0.45	2.39	5.46
Harrow - Folding	30'	MFWD 190	15,300	200	10	0.051	0.75	0.77	0.27	0.31	2.12	0.40	1.91	4.44
Harrow - Folding	40'	MFWD 190	21,300	200	10	0.038	0.56	0.58	0.28	0.23	1.67	0.42	1.43	3.53
Harrow - Folding	48'	MFWD 225	26,000	200	10	0.032	0.47	0.57	0.29	0.23	1.57	0.42	1.43	3.44
Header - Corn	6R-30	265 hp	51,400	300	8	0.170	2.49	3.55	2.18	6.93	15.17	3.17	26.54	44.90
Header - Corn	6R-38	265 hp	52,300	300	8	0.134	1.97	2.80	1.75	5.47	12.01	2.55	20.95	35.52
Header - Corn	8R-30	265 hp	66,800	300	8	0.127	1.87	2.66	2.13	5.20	11.87	3.09	19.91	34.88

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (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	8R-38	325 hp	67,900	300	8	0.100	1.48	2.58	1.71	4.15	9.93	2.48	15.90	28.32
Header - Corn	12R-20	325 hp	102,000	300	8	0.127	1.87	3.26	3.25	5.25	13.65	4.73	20.11	38.50
Header - Corn	12R-30	325 hp	112,000	300	8	0.085	1.24	2.17	2.38	3.50	9.31	3.46	13.41	26.19
Header - Draper (CL)	25' Rigid	265 hp	61,400	300	8	0.203	2.98	4.23	2.85	8.27	18.34	4.30	31.66	54.31
Header - Draper (CL)	30' Rigid	325 hp	73,700	300	8	0.169	2.48	4.33	2.85	6.96	16.63	4.30	26.65	47.60
Header - Draper (CL)	36' Rigid	355 hp	77,300	300	8	0.141	2.07	3.94	2.49	5.89	14.40	3.76	22.55	40.71
Header - Draper (CL)	40' Rigid	425 hp	82,700	300	8	0.126	1.86	4.24	2.40	5.76	14.28	3.62	22.06	39.97
Header - Draper (SL)	25' Rigid	325 hp	61,400	300	8	0.176	2.58	4.50	2.47	7.24	16.80	3.73	27.72	48.26
Header - Draper (SL)	30' Rigid	325 hp	73,700	300	8	0.146	2.15	3.75	2.47	6.03	14.41	3.73	23.10	41.25
Header - Draper (SL)	36' Rigid	355 hp	77,300	300	8	0.122	1.79	3.41	2.16	5.10	12.48	3.26	19.54	35.28
Header - Draper (SL)	40' Rigid	425 hp	82,700	300	8	0.110	1.61	3.68	2.08	4.99	12.37	3.14	19.12	34.64
Header -RiceStrp(CL)	20'	265 hp	50,600	300	8	0.253	3.72	5.29	3.21	10.33	22.57	4.66	39.57	66.81
Header -RiceStrp(CL)	24'	325 hp	54,000	300	8	0.211	3.10	5.41	2.85	8.70	20.07	4.14	33.31	57.54
Header -RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.32	4.06	2.41	6.52	15.32	3.50	24.98	43.82
Header -RiceStrp(SL)	20'	265 hp	50,600	300	8	0.220	3.22	4.59	2.78	8.96	19.56	4.04	34.30	57.90
Header -RiceStrp(SL)	24'	325 hp	54,000	300	8	0.183	2.69	4.69	2.47	7.54	17.40	3.59	28.87	49.87
Header -RiceStrp(SL)	32'	325 hp	60,800	300	8	0.137	2.01	3.51	2.09	5.65	13.28	3.03	21.65	37.97
Header -Soybean	22' Flex	265 hp	33,700	300	8	0.116	1.70	2.42	0.97	4.72	9.83	1.42	18.10	29.35
Header -Soybean	25' Flex	325 hp	36,200	300	8	0.102	1.49	2.61	0.92	4.20	9.24	1.34	16.09	26.67
Header -Soybean	30' Flex	325 hp	43,800	300	8	0.085	1.24	2.17	0.93	3.50	7.86	1.35	13.41	22.62
Header -Soybean	35' Flex	355 hp	50,100	300	8	0.072	1.07	2.04	0.91	3.04	7.07	1.32	11.66	20.07
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.70	2.42	0.57	4.72	9.43	0.83	18.10	28.36
Header Wheat/Sorghum	25' Rigid	325 hp	25,400	300	8	0.102	1.49	2.61	0.64	4.20	8.96	0.94	16.09	26.00
Header Wheat/Sorghum	30' Rigid	325 hp	29,100	300	8	0.085	1.24	2.17	0.61	3.50	7.55	0.89	13.41	21.86
Land Plane	50'x16'	MFWD 190	9,700	200	10	0.151	2.22	2.26	0.29	0.91	5.70	0.74	5.60	12.06
Levee Pull & Seed	8 Blade	MFWD 170	9,700	100	10	0.003	0.05	0.04	0.00	0.01	0.12	0.03	0.10	0.26
Levee Pull (1m/80a)	8 blade	MFWD 170	8,270	100	10	0.003	0.05	0.04	0.00	0.01	0.12	0.03	0.10	0.26
Levee Splitter (1/80	32"	MFWD 150	8,270	100	10	0.004	0.06	0.04	0.00	0.01	0.13	0.03	0.10	0.27
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	6.11	3.85	2.23	1.56	13.77	4.37	9.52	27.68
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	6.11	3.85	2.23	1.56	13.77	4.37	9.52	27.68
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	4.09	2.57	1.49	1.04	9.20	2.92	6.36	18.50
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	5.18	3.26	1.89	1.32	11.66	3.70	8.06	23.43
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	4.09	2.57	1.49	1.04	9.20	2.92	6.36	18.50
NT Grain Drill	10'	2WD 130	34,400	150	8	0.235	5.59	2.41	3.04	0.83	11.88	5.60	4.83	22.32
NT Grain Drill	12'	2WD 130	46,600	150	8	0.163	3.88	1.67	2.86	0.57	9.00	5.27	3.35	17.62
NT Grain Drill	15'	MFWD 150	56,000	150	8	0.130	3.10	1.54	2.74	0.58	7.99	5.06	3.40	16.45
NT Grain Drill	20'	MFWD 170	67,400	150	8	0.098	2.33	1.31	2.48	0.49	6.61	4.57	2.99	14.18
NT Grain Drill	24'	MFWD 190	98,000	150	8	0.081	1.94	1.22	3.00	0.49	6.67	5.54	3.02	15.23
NT Grain Drill	30'	MFWD 225	104,300	150	8	0.065	1.55	1.16	2.56	0.47	5.75	4.71	2.90	13.37
NT Grain Drill & Pre	10'	2WD 130	41,800	150	8	0.211	5.02	2.16	3.31	0.74	11.25	6.10	4.34	21.70
NT Grain Drill & Pre	12'	2WD 130	54,000	150	8	0.176	4.18	1.80	3.56	0.62	10.18	6.57	3.61	20.37
NT Grain Drill & Pre	15'	MFWD 150	63,300	150	8	0.141	3.34	1.66	3.34	0.63	8.99	6.16	3.66	18.82
NT Grain Drill & Pre	20'	MFWD 170	74,700	150	8	0.105	2.51	1.41	2.96	0.52	7.41	5.45	3.22	16.10
NT Grain Drill & Pre	24'	MFWD 190	105,000	150	8	0.088	2.09	1.31	3.47	0.53	7.41	6.39	3.25	17.06
NT Grain Drill & Pre	30'	MFWD 225	112,000	150	8	0.070	1.67	1.24	2.96	0.51	6.39	5.45	3.12	14.98
NT Plant&Pre-Folding	8R-38	MFWD 170	67,700	150	8	0.083	1.98	1.11	2.12	0.41	5.64	3.91	2.54	12.10
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	103,000	150	8	0.055	1.32	0.74	2.15	0.27	4.49	3.96	1.69	10.15
NT Plant&Pre-Folding	12R-20	MFWD 190	82,600	150	8	0.105	2.51	1.58	3.27	0.64	8.01	6.03	3.90	17.95
NT Plant&Pre-Folding	12R-30	MFWD 190	91,000	150	8	0.070	1.67	1.05	2.40	0.42	5.56	4.43	2.60	12.60
NT Plant&Pre-Folding	12R-38	MFWD 190	103,000	150	8	0.055	1.32	0.83	2.15	0.33	4.64	3.96	2.05	10.66
NT Plant&Pre-Folding	16R-30	MFWD 190	137,000	150	8	0.052	1.25	0.79	2.71	0.32	5.08	5.00	1.95	12.04
NT Plant&Pre-Folding	23R-15	MFWD 190	186,000	150	8	0.073	1.74	1.09	5.12	0.44	8.41	9.43	2.71	20.56
NT Plant&Pre-Folding	24R-20	MFWD 190	207,000	150	8	0.052	1.25	0.79	4.10	0.32	6.47	7.56	1.95	15.98
NT Plant&Pre-Folding	24R-30	MFWD 190	217,000	150	8	0.035	0.83	0.52	2.86	0.21	4.44	5.28	1.30	11.03
NT Plant&Pre-Folding	31R-15	MFWD 225	222,000	150	8	0.054	1.29	0.96	4.55	0.39	7.21	8.38	2.42	18.02
NT Plant&Pre-Folding	32R-15	MFWD 225	216,200	150	8	0.052	1.25	0.93	4.28	0.38	6.86	7.89	2.34	17.11
NT Plant&Pre-Rigid	4R-30	2WD 130	34,600	150	8	0.211	5.02	2.16	2.74	0.74	10.67	5.05	4.34	20.07
NT Plant&Pre-Rigid	4R-38	2WD 130	36,000	150	8	0.166	3.95	1.70	2.24	0.58	8.49	4.14	3.41	16.05
NT Plant&Pre-Rigid	6R-30	MFWD 150	44,300	150	8	0.141	3.34	1.66	2.34	0.63	7.98	4.31	3.66	15.96
NT Plant&Pre-Rigid	6R-38	MFWD 150	43,500	150	8	0.111	2.64	1.31	1.81	0.49	6.27	3.34	2.89	12.51
NT Plant&Pre-Rigid	8R-30	MFWD 170	54,500	150	8	0.105	2.51	1.41	2.16	0.52	6.61	3.98	3.22	13.82
NT Plant&Pre-Rigid	8R-38	MFWD 170	52,400	150	8	0.083	1.98	1.11	1.64	0.41	5.16	3.02	2.54	10.74
NT Plant&Pre-Rigid	11R-15	MFWD 170	63,900	150	8	0.143	3.41	1.92	3.44	0.71	9.51	6.35	4.38	20.24
NT Plant&Pre-Rigid	11R-20	MFWD 170	63,200	150	8	0.115	2.74	1.54	2.73	0.57	7.60	5.04	3.52	16.17
NT Plant&Pre-Rigid	12R-20	MFWD 190	65,700	150	8	0.105	2.51	1.58	2.60	0.64	7.34	4.80	3.90	16.05
NT Plant&Pre-Rigid	12R-30	MFWD 190	82,800	150	8	0.070	1.67	1.05	2.18	0.42	5.34	4.03	2.60	11.98
NT Plant&Pre-Rigid	15R-15	MFWD 190	82,000	150	8	0.113	2.68	1.69	3.47	0.68	8.54	6.40	4.18	19.13
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	170,000	150	8	0.055	1.32	0.98	3.54	0.40	6.26	6.53	2.47	15.27
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	135,000	150	8	0.083	1.98	1.48	4.23	0.60	8.30	7.79	3.71	19.81
NT Plant-Folding	8R-38	MFWD 170	60,400	150	8	0.077	1.84	1.03	1.75	0.38	5.02	3.23	2.36	10.63
NT Plant-Folding	8R-38 2x1	MFWD 170	93,400	150	8	0.051	1.22	0.69	1.81	0.25	3.98	3.33	1.57	8.89
NT Plant-Folding	12R-20	MFWD 190	75,200	150	8	0.098	2.33	1.46	2.76	0.59	7.16	5.10	3.62	15.89
NT Plant-Folding	12R-30	MFWD 190	81,700	150	8	0.065	1.55	0.97	2.00	0.39	4.93	3.69	2.41	11.05
NT Plant-Folding	12R-38	MFWD 190	93,400	150	8	0.051	1.22	0.77	1.81	0.31	4.12	3.33	1.91	9.37
NT Plant-Folding	16R-30	MFWD 190	128,000	150	8	0.049	1.16	0.73	2.35	0.29	4.55	4.34	1.81	10.71
NT Plant-Folding	23R-15	MFWD 190	176,000	150	8	0.068	1.61	1.02	4.50	0.41	7.55	8.29	2.52	18.36
NT Plant-Folding	24R-20	MFWD 190	197,000	150	8	0.049	1.16	0.73	3.62	0.29	5.82	6.68	1.81	14.32
NT Plant-Folding	24R-30	MFWD 190	204,000	150	8	0.032	0.77	0.48	2.50	0.19	3.97	4.61	1.20	9.79
NT Plant-Folding	31R-15	MFWD 225	213,000	150	8	0.050	1.20	0.89	4.05	0.36	6.52	7.46	2.25	16.25

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
NT Plant-Folding	32R-15	MFWD 225	207,000	150	8	0.049	1.16	0.87	3.81	0.35	6.20	7.02	2.17	15.40
NT Plant-Rigid	4R-30	2WD 130	27,200	150	8	0.196	4.66	2.01	2.00	0.69	9.37	3.69	4.03	17.09
NT Plant-Rigid	4R-38	2WD 130	28,600	150	8	0.154	3.67	1.58	1.65	0.54	7.46	3.05	3.17	13.69
NT Plant-Rigid	6R-30	MFWD 150	37,000	150	8	0.130	3.10	1.54	1.81	0.58	7.05	3.34	3.40	13.80
NT Plant-Rigid	6R-38	MFWD 150	36,100	150	8	0.103	2.45	1.22	1.39	0.46	5.53	2.57	2.68	10.80
NT Plant-Rigid	8R-30	MFWD 170	47,100	150	8	0.098	2.33	1.31	1.73	0.49	5.87	3.19	2.99	12.06
NT Plant-Rigid	8R-38	MFWD 170	45,000	150	8	0.077	1.84	1.03	1.31	0.38	4.58	2.41	2.36	9.36
NT Plant-Rigid	11R-15	MFWD 170	56,500	150	8	0.133	3.17	1.78	2.83	0.66	8.46	5.21	4.07	17.74
NT Plant-Rigid	11R-20	MFWD 170	55,800	150	8	0.107	2.54	1.43	2.24	0.53	6.76	4.13	3.27	14.17
NT Plant-Rigid	12R-20	MFWD 190	58,400	150	8	0.098	2.33	1.46	2.15	0.59	6.54	3.96	3.62	14.13
NT Plant-Rigid	12R-30	MFWD 190	73,500	150	8	0.065	1.55	0.97	1.80	0.39	4.73	3.32	2.41	10.48
NT Plant-Rigid	15R-15	MFWD 190	72,700	150	8	0.105	2.49	1.57	2.86	0.63	7.56	5.27	3.88	16.72
NT Plant-TwinRow	12R-30/40	MFWD 225	160,000	150	8	0.051	1.22	0.91	3.10	0.37	5.62	5.71	2.29	13.62
NT Plant-TwinRow	8R-30/40	MFWD 225	128,000	150	8	0.077	1.84	1.37	3.72	0.56	7.51	6.86	3.44	17.82
Peanut Cond.& Lifter	6-Row	MFWD 190	14,800	300	20	0.100	1.46	1.49	0.24	0.60	3.81	0.34	3.69	7.86
Peanut Conditioner	6-Row	MFWD 190	17,500	300	20	0.100	1.46	1.49	0.35	0.60	3.92	0.35	3.69	7.97
Peanut Dig/Invertor	4R-30	MFWD 190	33,500	300	15	0.235	3.46	3.52	1.96	1.42	10.38	2.26	8.71	21.36
Peanut Dig/Invertor	4R-38	MFWD 190	33,500	300	15	0.186	2.73	2.78	1.55	1.12	8.20	1.78	6.88	16.86
Peanut Dig/Invertor	6R-38	MFWD 190	47,900	300	15	0.124	1.82	1.85	1.04	0.75	5.47	1.70	4.58	11.75
Peanut Dump Cart	6-Row	MFWD 190	55,800	300	20	0.310	4.55	4.63	1.00	1.87	12.07	3.88	11.45	27.41
Peanut Harvester	4R-30	MFWD 225	155,000	300	20	0.849	12.47	15.06	7.46	6.18	41.19	26.76	37.72	105.68
Peanut Harvester	4R-38	MFWD 225	155,000	300	20	0.934	13.71	16.56	8.20	6.80	45.29	30.96	41.48	117.73
Peanut Harvester	6R-38	MFWD 225	172,000	300	20	0.625	9.17	11.07	5.19	4.55	29.99	22.97	27.74	80.71
Peanut Lifter	6-Row	MFWD 225	7,440	300	20	0.100	1.46	1.77	0.15	0.72	4.12	0.15	4.43	8.71
Peanut Plt&Pre Fold.	12R-38	MFWD 190	92,700	150	8	0.080	1.90	1.20	2.79	0.48	6.39	5.14	2.97	14.51
Peanut Plt&Pre Rigid	8R-30	MFWD 190	47,800	150	8	0.152	3.62	2.28	2.73	0.92	9.57	5.04	5.64	20.26
Peanut Plt&Pre Rigid	8R-38	MFWD 190	45,700	150	8	0.120	2.86	1.80	2.06	0.73	7.47	3.81	4.46	15.75
Peanut Plt&PreTwin	8R-30/40	MFWD 190	129,000	150	8	0.120	2.86	1.80	5.84	0.73	11.24	10.76	4.46	26.47
Pipe Spool 160ac	1/4m roll	2WD 130	5,400	15	12	0.003	0.10	0.03	0.00	0.01	0.15	0.10	0.06	0.32
Pipe Trailer 1m/160a	30'	2WD 130	2,700	100	15	0.003	0.19	0.03	0.00	0.01	0.24	0.00	0.07	0.32
Plant & Pre-Folding	8R-38	MFWD 170	61,000	150	8	0.080	1.90	1.07	1.83	0.40	5.21	3.38	2.44	11.04
Plant & Pre-Folding	8R-38 2x1	MFWD 170	92,700	150	8	0.053	1.26	0.71	1.85	0.26	4.10	3.42	1.62	9.16
Plant & Pre-Folding	12R-20	MFWD 190	72,600	150	8	0.101	2.41	1.51	2.76	0.61	7.30	5.09	3.75	16.15
Plant & Pre-Folding	12R-30	MFWD 190	81,000	150	8	0.067	1.60	1.01	2.05	0.41	5.08	3.78	2.50	11.37
Plant & Pre-Folding	12R-38	MFWD 190	92,700	150	8	0.053	1.26	0.79	1.85	0.32	4.24	3.42	1.97	9.64
Plant & Pre-Folding	16R-30	MFWD 190	124,000	150	8	0.050	1.20	0.75	2.36	0.30	4.63	4.34	1.87	10.85
Plant & Pre-Folding	23R-15	MFWD 190	166,000	150	8	0.070	1.67	1.05	4.38	0.42	7.54	8.08	2.60	18.23
Plant & Pre-Folding	24R-20	MFWD 190	187,000	150	8	0.050	1.20	0.75	3.56	0.30	5.83	6.55	1.87	14.26
Plant & Pre-Folding	24R-30	MFWD 190	197,000	150	8	0.033	0.80	0.50	2.50	0.20	4.01	4.60	1.25	9.87
Plant & Pre-Folding	31R-15	MFWD 225	196,000	150	8	0.052	1.24	0.92	3.85	0.38	6.41	7.10	2.32	15.84
Plant & Pre-Folding	32R-15	MFWD 225	189,000	150	8	0.050	1.20	0.89	3.59	0.36	6.07	6.62	2.25	14.95
Plant & Pre-Rigid	4R-30	2WD 130	31,600	150	8	0.203	4.82	2.07	2.40	0.71	10.02	4.43	4.16	18.62
Plant & Pre-Rigid	4R-38	2WD 130	32,600	150	8	0.159	3.79	1.63	1.95	0.56	7.95	3.60	3.28	14.83
Plant & Pre-Rigid	6R-30	MFWD 150	39,300	150	8	0.135	3.21	1.59	1.99	0.60	7.41	3.67	3.51	14.60
Plant & Pre-Rigid	6R-38	MFWD 150	38,500	150	8	0.106	2.53	1.26	1.54	0.47	5.82	2.84	2.77	11.43
Plant & Pre-Rigid	8R-30	MFWD 170	47,800	150	8	0.101	2.41	1.35	1.82	0.50	6.09	3.35	3.09	12.54
Plant & Pre-Rigid	8R-38	MFWD 170	45,700	150	8	0.080	1.90	1.07	1.37	0.40	4.75	2.53	2.44	9.73
Plant & Pre-Rigid	11R-15	MFWD 170	54,700	150	8	0.148	3.51	1.98	3.04	0.74	9.28	5.60	4.51	19.40
Plant & Pre-Rigid	11R-20	MFWD 170	54,000	150	8	0.110	2.63	1.48	2.24	0.55	6.92	4.14	3.38	14.44
Plant & Pre-Rigid	12R-20	MFWD 190	55,700	150	8	0.101	2.41	1.51	2.12	0.61	6.66	3.90	3.75	14.32
Plant & Pre-Rigid	12R-30	MFWD 190	72,700	150	8	0.067	1.60	1.01	1.84	0.41	4.87	3.39	2.50	10.77
Plant & Pre-Rigid	15R-15	MFWD 190	69,500	150	8	0.108	2.57	1.62	2.83	0.65	7.69	5.21	4.01	16.92
Plant & Pre-TwinRow	12R-30/40	MFWD 225	160,000	150	8	0.053	1.26	0.94	3.20	0.38	5.81	5.90	2.37	14.09
Plant & Pre-TwinRow	8R-30/40	MFWD 225	129,000	150	8	0.080	1.90	1.42	3.88	0.58	7.79	7.15	3.56	18.51
Plant - Folding	8R-38	MFWD 170	53,700	150	8	0.074	1.76	0.99	1.50	0.37	4.64	2.76	2.27	9.67
Plant - Folding	8R-38 2x1	MFWD 170	83,400	150	8	0.049	1.17	0.66	1.55	0.24	3.64	2.85	1.51	8.01
Plant - Folding	12R-20	MFWD 190	65,200	150	8	0.094	2.23	1.41	2.30	0.57	6.52	4.24	3.48	14.25
Plant - Folding	12R-30	MFWD 190	71,700	150	8	0.062	1.49	0.94	1.69	0.38	4.50	3.11	2.32	9.94
Plant - Folding	12R-38	MFWD 190	83,400	150	8	0.049	1.17	0.74	1.55	0.30	3.77	2.85	1.83	8.46
Plant - Folding	16R-30	MFWD 190	114,000	150	8	0.047	1.11	0.70	2.01	0.28	4.12	3.71	1.74	9.58
Plant - Folding	23R-15	MFWD 190	157,000	150	8	0.065	1.55	0.97	3.85	0.39	6.78	7.10	2.41	16.30
Plant - Folding	24R-20	MFWD 190	177,000	150	8	0.047	1.11	0.70	3.12	0.28	5.23	5.76	1.74	12.74
Plant - Folding	24R-30	MFWD 190	184,000	150	8	0.031	0.74	0.47	2.16	0.19	3.57	3.99	1.16	8.73
Plant - Folding	31R-15	MFWD 225	187,000	150	8	0.048	1.15	0.86	3.41	0.35	5.79	6.29	2.16	14.25
Plant - Folding	32R-15	MFWD 225	180,000	150	8	0.047	1.11	0.83	3.18	0.34	5.47	5.86	2.09	13.43
Plant - Rigid	4R-30	2WD 130	24,200	150	8	0.188	4.47	1.93	1.71	0.66	8.78	3.15	3.86	15.80
Plant - Rigid	4R-38	2WD 130	25,300	150	8	0.148	3.52	1.52	1.40	0.52	6.97	2.59	3.04	12.62
Plant - Rigid	6R-30	MFWD 150	32,000	150	8	0.125	2.98	1.48	1.50	0.56	6.53	2.77	3.26	12.58
Plant - Rigid	6R-38	MFWD 150	31,100	150	8	0.099	2.35	1.17	1.15	0.44	5.12	2.13	2.57	9.83
Plant - Rigid	8R-30	MFWD 170	40,500	150	8	0.094	2.23	1.26	1.43	0.47	5.40	2.63	2.87	10.91
Plant - Rigid	8R-38	MFWD 170	38,400	150	8	0.074	1.76	0.99	1.07	0.37	4.21	1.97	2.27	8.46
Plant - Rigid	11R-15	MFWD 170	47,300	150	8	0.137	3.26	1.84	2.44	0.68	8.23	4.49	4.19	16.93
Plant - Rigid	11R-20	MFWD 170	46,600	150	8	0.103	2.44	1.37	1.80	0.51	6.14	3.31	3.14	12.59
Plant - Rigid	12R-20	MFWD 190	48,300	150	8	0.094	2.23	1.41	1.70	0.57	5.92	3.14	3.48	12.55
Plant - Rigid	12R-30	MFWD 190	63,400	150	8	0.062	1.49	0.94	1.49	0.38	4.30	2.75	2.32	9.38
Plant - Rigid	15R-15	2WD 150	60,200	150	8	0.094	2.23	1.11	2.12	0.32	5.80	3.92	1.90	11.63
Plant - TwinRow	12R-30/40	MFWD 225	150,000	150	8	0.049	1.17	0.87	2.79	0.36	5.20	5.14	2.20	12.55
Plant - TwinRow	8R-30/40	MFWD 225	121,000	150	8	0.074	1.76	1.32	3.38	0.54	7.01	6.23	3.30	16.55
Roller/Cultipacker	12'	2WD 130	6,720	300	12	0.124	1.82	1.27	0.19	0.43	3.73	0.26	2.55	6.55

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (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-----							
Roller/Cultipacker	20'	MFWD 150	10,900	300	12	0.074	1.09	0.88	0.19	0.33	2.50	0.25	1.93	4.69
Roller/Cultipacker	30'	MFWD 170	14,300	300	12	0.049	0.73	0.66	0.16	0.24	1.81	0.22	1.51	3.55
Roller/Cultipacker	38'	MFWD 225	19,600	300	12	0.039	0.57	0.69	0.18	0.28	1.74	0.24	1.74	3.72
Roller/Stubble	20'	2WD 50	12,700	300	12	0.074	1.09	0.29	0.22	0.05	1.66	0.29	0.29	2.25
Roller/Stubble	32'	MFWD 225	22,200	300	12	0.046	0.68	0.82	0.24	0.33	2.09	0.32	2.07	4.48
Rotary Cutter	7'	MFWD 130	4,500	185	10	0.168	2.47	1.72	0.61	0.66	5.47	0.41	3.85	9.74
Rotary Cutter	12'	2WD 150	13,100	185	10	0.098	1.44	1.16	1.04	0.34	3.98	0.70	1.97	6.67
Rotary Cutter-Flex	15'	MFWD 150	22,100	185	10	0.078	1.15	0.92	1.40	0.35	3.84	0.95	2.04	6.83
Rotary Cutter-Flex	20'	MFWD 150	30,000	185	10	0.058	0.86	0.69	1.43	0.26	3.25	0.97	1.53	5.76
Row Cond & Inc-Fold.	26'	MFWD 190	28,500	100	10	0.063	1.21	0.94	0.45	0.38	3.00	1.84	2.34	7.19
Row Cond & Inc-Fold.	38'	MFWD 225	38,000	100	10	0.043	0.83	0.76	0.41	0.31	2.33	1.68	1.92	5.94
Row Cond & Inc-Rigid	13'	2WD 130	16,000	100	10	0.126	2.43	1.29	0.50	0.44	4.69	2.07	2.60	9.36
Row Cond & Inc-Rigid	21'	2WD 170	21,600	100	10	0.078	1.50	1.05	0.42	0.29	3.27	1.73	1.78	6.78
Row Cond & Inc-Rigid	26'	MFWD 190	24,700	100	10	0.026	0.51	0.39	0.16	0.16	1.23	0.67	0.98	2.88
Row Cond Folding	26'	MFWD 225	21,100	100	10	0.059	0.87	1.05	0.31	0.43	2.68	1.28	2.65	6.62
Row Cond Folding	38'	MFWD 225	27,800	100	10	0.040	0.59	0.72	0.28	0.29	1.90	1.15	1.81	4.87
Row Cond Rigid	13'	2WD 130	8,670	100	10	0.119	1.75	1.22	0.25	0.42	3.65	1.05	2.45	7.16
Row Cond Rigid	21'	2WD 170	14,200	100	10	0.073	1.08	0.99	0.26	0.27	2.61	1.07	1.67	5.36
Row Cond Rigid	26'	MFWD 190	17,300	100	10	0.059	0.87	0.89	0.25	0.36	2.39	1.05	2.20	5.65
Row Cond./Roll-Fol	30'	MFWD 190	46,200	160	10	0.062	0.91	0.93	0.72	0.37	2.95	1.84	2.30	7.10
Row Cond./Roll-Fold.	26'	MFWD 190	26,500	160	10	0.072	1.05	1.07	0.47	0.43	3.05	1.21	2.66	6.93
Row Cond./Roll-Fold.	40'	MFWD 225	34,000	160	10	0.046	0.68	0.83	0.39	0.34	2.25	1.01	2.08	5.35
Row Cond./Roll-Rig	21'	MFWD 190	25,800	160	10	0.089	1.31	1.33	0.57	0.54	3.76	1.46	3.29	8.53
Row Cond./Roll-Rig	26'	MFWD 190	28,400	160	10	0.072	1.05	1.07	0.51	0.43	3.08	1.30	2.66	7.05
Spin Spreader	5 ton	MFWD 190	11,600	100	8	0.042	0.99	0.62	0.27	0.25	2.15	0.53	1.55	4.24
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	5.00	0.34	0.08	0.49	5.92	0.10	1.89	7.93
Spray (ATV)	20'	800 CC	1,690	200	8	0.084	1.62	0.11	0.06	0.16	1.96	0.07	0.61	2.66
Spray (Band)	27' Fold	MFWD 170	7,400	200	8	0.062	1.20	0.83	0.21	0.31	2.57	0.25	1.91	4.73
Spray (Band)	40' Fold	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Band)	50' Fold	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Band)	60' Fold	MFWD 170	13,200	200	8	0.028	0.54	0.37	0.17	0.14	1.23	0.20	0.85	2.29
Spray (Bcast/HB)	13' Rigid	MFWD 150	7,860	200	8	0.130	2.50	1.53	0.47	0.58	5.09	0.55	3.38	9.03
Spray (Bcast/HB)	20' Rigid	MFWD 150	9,400	200	8	0.084	1.62	0.99	0.37	0.37	3.37	0.43	2.19	6.00
Spray (Bcast/HB)	27' Fold	MFWD 170	16,200	200	8	0.062	1.20	0.83	0.47	0.31	2.83	0.55	1.91	5.29
Spray (Bcast/HB)	27' Rigid	MFWD 170	10,900	200	8	0.062	1.20	0.83	0.32	0.31	2.67	0.37	1.91	4.95
Spray (Bcast/HB)	30' Fold	MFWD 170	18,900	200	8	0.056	1.08	0.75	0.49	0.28	2.62	0.58	1.71	4.92
Spray (Bcast/HB)	40' Fold	MFWD 170	19,100	200	8	0.042	0.81	0.56	0.37	0.21	1.96	0.44	1.28	3.69
Spray (Broadcast)	27'	MFWD 170	7,400	200	8	0.062	1.20	0.83	0.21	0.31	2.57	0.25	1.91	4.73
Spray (Broadcast)	40'	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Broadcast)	50'	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Broadcast)	60'	MFWD 170	13,200	200	8	0.028	0.54	0.37	0.17	0.14	1.23	0.20	0.85	2.29
Spray (Direct/Hood)	8R-30	MFWD 170	17,000	200	8	0.084	1.62	1.13	0.67	0.42	3.85	0.78	2.57	7.21
Spray (Direct/Hood)	8R-38	MFWD 170	17,900	200	8	0.066	1.28	0.89	0.56	0.33	3.07	0.65	2.03	5.76
Spray (Direct/Hood)	12R-30	MFWD 170	23,900	200	8	0.056	1.08	0.75	0.63	0.28	2.75	0.73	1.71	5.20
Spray (Direct/Hood)	12R-38	MFWD 170	25,100	200	8	0.044	0.85	0.59	0.52	0.22	2.19	0.60	1.35	4.16
Spray (Direct/Layby)	8R-30	MFWD 170	15,500	200	8	0.084	1.62	1.13	0.61	0.42	3.79	0.71	2.57	7.09
Spray (Direct/Layby)	8R-38	MFWD 170	15,500	200	8	0.066	1.28	0.89	0.48	0.33	3.00	0.56	2.03	5.60
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	19,400	200	8	0.044	0.85	0.59	0.40	0.22	2.07	0.47	1.35	3.90
Spray (Direct/Layby)	12R-30	MFWD 170	19,400	200	8	0.056	1.08	0.75	0.51	0.28	2.63	0.59	1.71	4.94
Spray (Direct/Layby)	12R-38	MFWD 170	19,400	200	8	0.044	0.85	0.59	0.40	0.22	2.07	0.47	1.35	3.90
Spray (Direct/Layby)	16R-20/30	MFWD 225	22,500	200	8	0.062	1.20	1.11	0.66	0.45	3.43	0.76	2.78	6.98
Spray (Levee Leaper)	50'	MFWD 225	12,800	200	8	0.033	0.65	0.59	0.20	0.24	1.69	0.23	1.50	3.43
Spray (Pull Type)	60'	MFWD 225	40,700	200	8	0.028	0.54	0.49	0.53	0.20	1.78	0.62	1.25	3.66
Spray (Pull Type)	80'	MFWD 225	52,000	200	8	0.021	0.40	0.37	0.51	0.15	1.45	0.59	0.93	2.98
Spray (Pull Type)	90'	MFWD 225	52,900	200	8	0.018	0.36	0.33	0.46	0.13	1.29	0.54	0.83	2.67
Spray (Pull Type)	120'	MFWD 225	80,900	200	8	0.014	0.27	0.24	0.53	0.10	1.15	0.62	0.62	2.40
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.084	1.62	1.26	0.16	0.51	3.56	0.18	3.12	6.88
Spray (Spot)	27'	MFWD 170	7,400	200	8	0.062	1.20	0.83	0.21	0.31	2.57	0.25	1.91	4.73
Spray (Spot)	40'	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Spot)	50'	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Spot)	60'	MFWD 225	13,200	200	8	0.028	0.54	0.49	0.17	0.20	1.42	0.20	1.25	2.87
Stalk Shredder	14'	MFWD 150	14,900	200	10	0.117	1.73	1.39	1.53	0.52	5.18	0.89	3.06	9.14
Stalk Shredder Flex	20'	MFWD 150	33,100	200	10	0.082	1.21	0.97	2.38	0.36	4.94	1.39	2.14	8.47
Stalk Shredder-Flail	12'	MFWD 150	21,700	200	10	0.137	2.01	1.62	2.61	0.61	6.86	1.52	3.57	11.96
Stalk Shredder-Flail	15'	MFWD 150	24,500	200	10	0.110	1.61	1.29	2.35	0.49	5.76	1.37	2.85	9.99
Stalk Shredder-Flail	18'	MFWD 150	28,900	200	10	0.091	1.34	1.08	2.31	0.40	5.15	1.35	2.38	8.88
Stalk Shredder-Flail	20'	MFWD 150	30,400	200	10	0.082	1.21	0.97	2.19	0.36	4.74	1.27	2.14	8.17
Stalk Shredder-Flail	25'	MFWD 150	46,400	200	10	0.066	0.96	0.77	2.67	0.29	4.72	1.56	1.71	7.99
Strip Till	8R-38	MFWD 225	28,100	150	10	0.061	0.90	1.09	0.75	0.44	3.19	1.17	2.73	7.10
Strip Till	12R-30	MFWD 225	68,900	150	10	0.061	0.90	1.09	1.83	0.44	4.28	2.88	2.73	9.90
Strip Till	12R-40	MFWD 225	67,200	150	10	0.046	0.67	0.81	1.34	0.33	3.17	2.11	2.05	7.34
Subsoiler	3 shank	MFWD 190	6,360	100	15	0.204	2.99	3.05	0.43	1.23	7.72	1.02	7.55	16.30
Subsoiler	4 shank	MFWD 225	11,210	100	15	0.153	2.25	2.72	0.57	1.11	6.67	1.35	6.81	14.84
Subsoiler	5 shank	MFWD 225	14,300	100	15	0.122	1.79	2.16	0.58	0.89	5.43	1.37	5.43	12.24
Subsoiler low-till	6 shank	MFWD 225	19,400	100	15	0.102	1.49	1.81	0.66	0.74	4.71	1.55	4.53	10.80
Subsoiler low-till	8 shank	MFWD 225	21,400	100	15	0.076	1.12	1.35	0.54	0.55	3.58	1.28	3.39	8.26

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, 2021

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Apron Maxx RTA	oz	1.69
Agri-Dex	pt	2.42	Artisan	oz	0.23
AMS SuperMax	pt	3.81	Avaris	oz	0.35
Class Act NG	pt	1.75	Avicta Complete Bean	oz	3.91
Crop Oil Conc. (Pet.)	pt	2.86	Bravo Weather Stick	pt	5.30
Crop Oil Conc. (Veg.)	pt	2.90	Captan 50 WP	lb	5.94
Dyne-A-Pak	pt	5.16	Convoy	oz	0.95
Fire-Zone	pt	3.40	Cotton Seed Trt.	acre	20.00
Herbimax	pt	3.99	CruiserMaxx Vibrance	oz	4.75
Induce	pt	3.48	Elatus	oz	2.94
MSO	pt	2.40	Flint Extra	oz	8.88
Penetrator Plus	pt	2.90	Headline EC	oz	1.83
Surfactant	pt	3.30	Miravis Top	oz	1.44
CLEANING			Prior Xemium	oz	4.53
Cleaning Peanuts	ton	18.00	Propimax EC	pt	11.10
CROP CONSULTANT			Prosaro	oz	2.42
Corn Consultant	acre	6.00	Provost Optimum	oz	2.43
Cotton Consultant	acre	8.00	Quadris	oz	1.50
Peanut Consultant	acre	9.25	Quadris Top	oz	2.37
Rice Consultant	acre	8.00	Quadris Top SBX	oz	1.99
Sorghum Consultant	acre	6.00	Quilt	pt	16.63
Soybeans Consultant	acre	6.50	Quilt XCEL	pt	19.82
Wheat Consultant	acre	5.50	Stratego	pt	21.97
CUSTOM FERTILIZE			Stratego YLD	oz	3.46
App Fert by Air	cwt	7.50	Tilt 3.6 EC	oz	0.76
App Fert by Air (Mi)	appl	7.50	Tilt/ Bravo SE	oz	0.76
Custom Apply Fert	acre	7.50	Trivapro	oz	1.53
CUSTOM LIME			GINNING		
Lime (Spread)	ton	47.45	Gin & Haul	lb	0.11
CUSTOM PLANT			GROWTH REGULATORS		
Custom Plant	acre	7.50	Mepex	oz	0.06
Custom Plant Air	cwt	7.50	Mepichlor 4.2%	oz	0.06
CUSTOM SPRAY			Mepiquat	oz	0.06
App by Air (3 gal)	appl	5.50	Mepstar 6	oz	0.08
App by Air (5 gal)	appl	7.00	Palisade	oz	1.13
App by Air (10 gal)	appl	9.00	Pentia	oz	0.45
Custom Spray Ground	acre	7.00	Pix WSB	oz	1.37
DRYING			Stance	oz	1.24
Dry Corn	bu	0.19	Veto	oz	0.06
Dry Grain Sorghum	cwt	0.25	HARVEST AIDS		
Dry Peanuts	ton	24.00	Adios	oz	0.99
Dry Rice	bu	0.40	Boll Buster	oz	0.24
ERADICATION FEE			Def/Folex	pt	10.21
Eradication	acre	1.00	Defol 5	gal	6.77
FERTILIZERS			Display	oz	9.63
Agrotain Ultra	pt	11.30	Ethephon 6E	pt	4.00
Amm Sulfate (21% N)	cwt	18.66	Finish 6	pt	8.00
Boron Plus	pt	2.56	Folex 6EC	pt	10.21
DAP	cwt	20.99	Freefall SC	oz	1.59
Fert 10-34-0	cwt	24.08	Ginstar EC	pt	26.68
Fert 10-34-0	gal	2.80	Gramoxone SL	oz	0.19
Fert 11-37-0	cwt	28.53	Sharpen	oz	6.04
Fert 41-0-0-4	cwt	18.22	Sodium Chlorate 5L	gal	6.77
Lime	ton	37.45	SuperBoll	oz	0.27
NBPT	pt	11.06	Thidiazuron 4lb	oz	1.49
Phosphorus (46% P2O5)	cwt	17.31	Tribufos 6lb	pt	10.21
Potash (60% K2O)	cwt	22.11	Vacate	oz	1.39
Sulfur Plus	pt	2.62	HAULING		
UAN (32% N)	cwt	12.03	Haul Corn	bu	0.23
UAN (32%)	gal	1.34	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	cwt	14.49	Haul Rice	bu	0.35
UAN + Sulfur (28%)	gal	1.61	Haul Sorghum	bu	0.25
Urea, Solid (46% N)	cwt	19.74	Haul Soybeans	bu	0.27
Zinc Plus	pt	2.99	Haul Wheat	bu	0.26
FUNGICIDES			HERBICIDES		
Abound	oz	1.83	2,4-D Amine 4	pt	2.25
Alfa Guard	lb	1.31	2,4-D Ester	pt	2.68
Allegiance Flowabl	oz	5.27	AAtrex 4L	pt	2.23
Ameristar Top	oz	2.51	Accent Q	oz	19.09
Approach Prima	pt	28.11	Acuron	oz	0.53

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2021 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Aim	oz	5.67	Harmony Extra SG	oz	11.06
Anthem Flex	oz	2.67	Helmet	oz	0.26
Anthem Maxx	oz	4.94	Huskie	oz	0.78
Armezon Pro	oz	1.22	Impact	oz	17.60
Atrazine 4L	pt	1.91	Intimidator	oz	0.59
Atrazine 90DF	lb	3.59	Leadoff	oz	5.61
Authority First	lb	73.87	League	oz	3.83
Authority Elite	pt	16.43	Lexar	pt	7.55
Authority Maxx	lb	58.84	Liberty 280	oz	0.44
Authority MTZ	lb	43.24	Loyant	oz	2.21
Avatar	pt	8.50	Makaze	oz	0.14
Avenger	pt	4.52	Metolachlor	pt	5.59
Axial XL	oz	1.15	Metribuzin 4L	pt	9.04
Axiom	oz	1.94	Metribuzin 75	lb	18.30
Banvel	pt	6.67	MSMA	pt	3.86
Barrage	pt	4.15	Newpath	oz	3.83
Basagran	pt	5.43	Obey	oz	0.98
Boundary	pt	11.07	Osprey	oz	3.50
Brake	oz	1.46	Outlook	pt	17.66
Broadaxe	pt	16.31	Panther Pro	oz	1.60
Broadhead	lb	58.21	Parallel	pt	5.65
Bucaneer Plus	pt	2.90	Paraquat	oz	0.18
Bucril	pt	4.28	Parazone 3SL	oz	0.18
Butyrac 200 (2,4-DB)	pt	3.64	Permit	oz	21.99
Cadre	oz	2.90	Permit Plus	oz	21.18
Canopy	oz	2.32	PowerFlex	oz	6.99
Caparol	pt	4.67	Preface	oz	4.05
Capreno	oz	4.93	Prefix	pt	6.64
Cinch	pt	14.18	Provisia	oz	0.85
Cinch ATZ	pt	5.20	Prowl 3.3 EC	pt	6.49
Clarity	pt	10.73	Quelex	oz	7.85
Classic	oz	16.86	RealmQ	oz	5.08
Clearpath	lb	60.12	RebelEx	oz	2.13
Clethodim 2E	oz	0.50	Reflex	pt	6.20
Clincher SF	oz	2.26	Regiment	oz	43.56
Cobra	oz	1.70	Resicore	oz	0.48
Command 3ME	pt	18.17	Resource	oz	1.82
Corvus	oz	6.48	RiceBeaux	pt	5.95
Cotoran	pt	6.01	Riceshot	pt	4.69
Cotton Pro	pt	3.45	Ricestar HT	pt	24.49
Dicamba	pt	5.50	Ringside	pt	4.88
Direx	pt	3.02	Roundup Power Max	oz	0.20
Diuron	pt	3.03	Roundup PowerMax	pt	3.25
Dual II Magnum	pt	13.98	Roundup PowerMax ii	oz	0.19
Dual Magnum	pt	13.33	Roundup Pro	pt	0.20
Duet	pt	5.63	Scepter 70 DG	oz	4.82
Engenia	oz	0.89	Select Max	pt	12.74
Envive	oz	4.76	Sencor/Tricor.Metrib	lb	19.00
Envoke	oz	0.80	Sequence	pt	5.45
Facet L	pt	14.57	Sharpen	oz	6.04
Fierce	oz	7.40	Sinister	pt	14.96
Fierce XLT	oz	6.64	Sonic	oz	5.48
Finesse	oz	15.79	Stalwart	pt	3.95
Firestorm	pt	3.44	Stam 80 EDF	lb	9.45
First Rate	oz	42.57	Stam M4	qt	7.72
Flexstar	pt	8.33	Staple LX	oz	0.74
Flexstar GT	pt	4.66	Storm	pt	11.91
Fusilade DX	oz	1.15	Strada	oz	7.34
Gambit	oz	16.32	Strada Pro	oz	7.70
Glyphosate 3lbs a.e	pt	2.11	Strada XT2	pt	3.20
Glyphosate 3lbs a.e	oz	0.13	Superwham	qt	8.61
Goal 2XL	pt	7.52	Suprend	lb	13.52
Gramoxone SL 2.0	oz	0.19	SureStart II	oz	0.56
Grandstand R	pt	15.39	Surveil	oz	6.32
Grasp	oz	12.07	Synchrony XP	oz	11.99
Grasp Xtra	oz	1.58	Tempest	pt	29.82
Halex GT	pt	7.13	Touchdown Total	qt	10.21
Halomax	oz	19.93	Treflan	pt	3.49

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2021 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Trifluralin	pt	3.68	Malathion 8E	pt	10.56
Triflurex	pt	3.30	Mustang Max	oz	1.10
Ultra Blazer	pt	8.58	Nuprid 4F	oz	0.88
Valor EZ	oz	5.04	Oberon	oz	3.09
Valor SX	oz	4.51	Orthene 90	lb	7.45
Valor XLT	oz	5.28	Permethrin	oz	0.48
Vamos	pt	6.49	Portal XLO	oz	0.74
Verdict	oz	1.73	Pounce 25WP	lb	16.50
Veritas	pt	7.49	Prevathon	oz	1.05
Villain	pt	5.24	Python WDG	oz	14.32
Volunteer	pt	10.63	Radiant	oz	5.74
Warrant	pt	4.39	Sevin 4F	pt	6.97
XtendiMax	oz	0.56	Sevin XLR Plus	qt	15.43
Zidua DF	oz	8.72	Sivanto Prime	oz	2.67
Zidua SC	oz	5.55	Tempest	oz	1.86
INOCULANT			Transform WG	oz	7.35
Inoculant-Soybean	acre	1.55	Up-Cyde	oz	0.44
Optimize LIFT	oz	0.53	Warrior ZT	oz	2.43
INSECTICIDES			Zeal	oz	17.67
Abamectin .15EC	oz	1.89	IRRIGATION SUPPLIES		
Acephate 90%	lb	6.94	Roll-Out Pipe	ft	0.24
Acephate 90SP	lb	6.42	SEED/PLANTS		
Admire Pro	oz	1.80	Corn Seed BtRR	thous	3.99
Agri-Mek	oz	2.72	Corn Seed Conv.	thous	2.76
Asana .66 XL	oz	0.55	Corn Seed Op Leptra	thous	3.66
Avenger	oz	0.28	Corn Seed RR2	thous	3.03
Baythroid XL	oz	2.38	Corn Seed VT2P	thous	3.98
Belt	oz	7.50	Cot. Seed B3XF/W3FE	thous	2.58
Besiege	oz	2.31	Cotton Seed B3XF	thous	2.66
Bidrin 8EC	oz	1.16	Cotton Seed GLB2	thous	2.05
Bifenthrin	oz	0.94	Cotton Seed W3FE	thous	2.49
Bifenture 2EC	oz	0.91	Cotton Seed W3RF	thous	1.98
Brigade EC	pt	16.30	Peanut Seed	lb	0.87
Capture LFR	oz	2.32	Rice Conv Hyb Trt	lb	6.19
Centric 40WG	oz	5.08	Rice Fullpage Hyb Tr	lb	6.97
Cypermethrin	oz	0.44	Rice Seed CF (Levees)	lb	0.96
Declare	oz	1.89	Rice Seed Clearfield	lb	0.96
Diamond .83EC	oz	1.28	Rice Seed Conv.	lb	0.32
Dimethoate 4E	pt	5.44	Rice Seed Cv (Levees)	lb	0.32
Dimilin 2L	oz	2.16	Rice Seed CvH (Levee)	lb	1.93
Endigo	oz	1.48	Rice Seed FPH (Levee)	lb	2.67
Force 3G	lb	7.28	Rice Seed Provisia	lb	1.23
Hero	oz	1.30	Rice Seed Trt/Insect	lbseed	0.29
Imidacloprid 4F	oz	1.31	Sorghum Concept	lb	2.64
Imidan 70 WSB	oz	0.89	Sorghum Concept+ Po	lb	3.82
IncidentalPestTrt \$8	acre	8.00	Soybean Enlist E3	lb	1.20
IncidentalPestTrt\$15	acre	15.00	Soybean Seed LL	lb	1.16
IncidentalPestTrt\$22	acre	22.00	Soybean Seed RR2	lb	1.16
IncidentalPestTrt\$30	acre	30.00	Soybean Seed RR2X	lb	1.34
Intrepid 2F	oz	1.94	Wheat Seed Private	lb	0.28
Intruder 70WSP	oz	1.13	SOIL TEST		
Karate Z	oz	2.52	Soil Test	acre	10.00
Lambda	oz	0.95	SURVEY & MARK LEVEES		
Lannate LV	pt	9.00	Survey & Mark Levees	acre	4.50
Macho	oz	0.78	Survey & Mark Levees	acre	4.50

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2021

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	1.53
Gasoline	gal	1.89
INTEREST RATES		
Short-term	%	4.00
Intermediate-term	%	4.50

Appendix Table 6. Labor types, wage rates and unallocated labor
Multipliers for crop enterprises, Mississippi, 2021

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	14.68
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, 2021

Crop	uni	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '21	3.93	-0.20	3.73	2.35	3.73
Cotton Lint	lb	Dec '21	0.66	-0.0158	0.6442	0.52	0.6442
Cottonseed	lb						0.08 ^f
Grain Sorghum	bu				3.55	4.08	3.55
Peanuts	ton				400.00	354.55	400.00
Soybeans	bu	Nov '21	9.69	-0.02	9.67	6.41	9.67
Rice	bu	Nov '21	5.47	-0.37	5.10	3.21	5.10
Wheat	bu	Jul '21	5.90	-0.15	5.75	3.35	5.75

- ^a Average of the daily closing futures contract prices during the first 5 trading days in October 2020 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 2019 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 2020 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2020 Farm-stored Loan Rate for long grain rough rice. National 2020 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 2008-2020.

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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			
-----dollars-----										
Land Plane	50'x16'		0.57	0.30	0.56		0.06	1.49	1.59	3.08
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.13	0.07	0.14			0.34	0.32	0.66
Roll-Out Pipe	ft	7.92					0.11	8.03		8.03
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.17	0.10	0.41		0.01	0.69	0.79	1.48
IRRIGATE LABOR	hour				1.81		0.02	1.83		1.83
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		0.25	0.15	0.62			1.02	1.18	2.20
Land Forming (\$450)	each								30.35	30.35
Well & Pump, Furrow	each			2.96			0.04	3.00	8.30	11.30
Main Line Pipe	each								4.59	4.59
Engine, RPF, ESB	each								8.60	8.60
1st June Irrigation	ac-in		3.74	1.40			0.07	5.21		5.21
2nd June Irrigation	ac-in		3.74	1.40			0.07	5.21		5.21
July Irrigation	ac-in		3.74	1.40			0.05	5.19		5.19
TOTALS		7.92	12.34	7.78	4.46	0.00	0.43	32.93	55.72	88.65

Note: Cost of production estimates are based on 2020 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, 2021

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		0.22	0.11	0.24			0.01	0.58	1.21
Survey & Mark Levees	acre	2.25						0.04	2.29	2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.29	0.15	0.31			0.01	0.76	1.59
Butt Levees										
Blade-Box	6'-7'		0.27	0.11	0.29			0.01	0.68	1.30
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"		0.22	0.11	0.24			0.01	0.58	1.23
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.29	0.15	0.31			0.01	0.76	1.59
Butt Levees										
Blade-Box	6'-7'		0.27	0.11	0.29			0.01	0.68	1.30
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"		0.22	0.11	0.24			0.01	0.58	1.23
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.29	0.15	0.31			0.01	0.76	1.59
Butt Levees										
Blade-Box	6'-7'		0.27	0.11	0.29			0.01	0.68	1.30
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"		0.22	0.11	0.24			0.01	0.58	1.23
Tear Down Levees										
Levee Splitter (1/80)	32"		0.17	0.08	0.18				0.43	0.92
Land Forming (\$113)	each								7.62	7.62
Well & Pump, Flood	each			5.91				0.10	6.01	22.62
Engine, CF, 75	each								17.20	17.20
June Irrigation	ac-in		5.61	2.80				0.14	8.55	8.55
July Irrigation	ac-in		5.61	2.80				0.11	8.52	8.52
August Irrigation	ac-in		5.61	2.80				0.08	8.49	8.49
TOTALS		2.25	19.56	15.61	5.76	0.00	0.61	43.79	48.85	92.64

Note: Cost of production estimates are based on 2020 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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----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			0.14	8.74	33.07
Well & Pump, 1/2 CP	each			1.13			0.02	1.15	3.18
Engine, 1/2 CP, 174	each								4.64
June Irr. 3app@.75"	ac-in		7.53	0.68			0.14	8.35	8.35
July Irr. 4app@.75"	ac-in		10.04	0.91			0.15	11.10	11.10
Aug Irr. 3app@.75"	ac-in		7.53	0.68			0.08	8.29	8.29
TOTALS		0.00	25.10	12.00	0.47	0.00	0.54	38.11	40.89

Note: Cost of production estimates are based on 2020 input prices.

Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.
2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.
3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968."
4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961
5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.
6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.
7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.
8. "Corn, Grain Sorghum & Wheat 2020 Planning Budgets." Budget Report No. 2019-03, Department of Agricultural Economics, Mississippi State University, October 2019.
9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.
- 9
10. "Cotton 2020 Planning Budgets." Budget Report No. 2019-01, Department of Agricultural Economics, Mississippi State University, October 2019.
11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.
12. "Forage 2021 Planning Budgets." Budget Report No. 2020-08, Department of Agricultural Economics, Mississippi State University, June 2020.
13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.
14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.
15. "Peanuts 2020 Planning Budgets." Budget Report No. 2019-07, Department of Agricultural Economics, Mississippi State University, October 2019.
16. "Rice 2020 Planning Budgets." Budget Report No. 2019-04, Department of Agricultural Economics, Mississippi State University, October 2019.
17. "Soybeans 2020 Planning Budgets." Budget Report No. 2019-02, Department of Agricultural Economics, Mississippi State University, October 2019.
18. "United States Department of Agriculture Farm Service Agency. *Commodity Loan Rates*. <https://www.fsa.usda.gov/programs-and-services/price-support/commodity-loan-rates/index>. Accessed October 7,2020.
19. "Vegetables 2018 Planning Budgets." Budget Report No. 2017-09, Department of Agricultural Economics, Mississippi State University December 2017.



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