

**NON-DELTA  
2021  
PLANNING BUDGETS**

**Mississippi State University  
Department of Agricultural Economics  
Budget Report 2020-06**

**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 operations.

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 through 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  
 Cotton, 8R-38" solid, conservation tillage  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethephon 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	28.9332	38.77	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	3.2000	3.71	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	32.0000	1.92	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.9288	13.63	_____
Self-Propelled	hour	14.68	0.3221	4.74	_____
HAND LABOR					
Implements	hour	9.06	0.3579	3.24	_____
Self-Propelled	hour	9.06	0.2472	2.24	_____
UNALLOCATED LABOR					
	hour	14.69	1.0008	14.71	_____
DIESEL FUEL					
Tractors	gal	1.53	10.7574	16.47	_____
Self-Propelled	gal	1.53	4.4973	6.86	_____
REPAIR & MAINTENANCE					
Implements	acre	11.10	1.0000	11.10	_____
Tractors	acre	6.76	1.0000	6.76	_____
Self-Propelled	acre	14.22	1.0000	14.22	_____
INTEREST ON OP. CAP.	acre	10.31	1.0000	10.31	_____
TOTAL DIRECT EXPENSES				605.34	_____
FIXED EXPENSES					
Implements	acre	16.32	1.0000	16.32	_____
Tractors	acre	41.23	1.0000	41.23	_____
Self-Propelled	acre	58.97	1.0000	58.97	_____
TOTAL FIXED EXPENSES				116.52	_____
TOTAL SPECIFIED EXPENSES				721.86	_____

Note: Cost of production estimates are based on 2020 input prices..  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year**

Table 1.B Summary of estimated costs and returns per acre  
 Cotton, 8R-38" solid, conservation tillage  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.64	1000.0000	644.20	_____
Cotton Seed	lb	0.08	1350.0000	108.00	_____
				-----	
TOTAL INCOME				752.20	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	110.00	1.0000	110.00	_____
FERTILIZERS	acre	71.95	1.0000	71.95	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	69.52	1.0000	69.52	_____
INSECTICIDES	acre	41.03	1.0000	41.03	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	1.92	1.0000	1.92	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.6051	5.48	_____
OPERATOR LABOR	hour	14.68	1.2510	18.37	_____
UNALLOCATED LABOR	hour	14.69	1.0008	14.71	_____
DIESEL FUEL	gal	1.53	15.2547	23.33	_____
REPAIR & MAINTENANCE	acre	32.08	1.0000	32.08	_____
INTEREST ON OP. CAP.	acre	10.31	1.0000	10.31	_____
				-----	
TOTAL DIRECT EXPENSES				605.34	_____
RETURNS ABOVE DIRECT EXPENSES				146.86	_____
				-----	
TOTAL FIXED EXPENSES				116.52	_____
				-----	
TOTAL SPECIFIED EXPENSES				721.86	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				30.34	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 1.C Estimated resource use for field operations, per acre  
Cotton, 8R-38" solid, conservation tillage  
B3XF/W3FE variety, 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	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	8R-38	MFWD 225	0.080	1.00	Nov		0.08	0.08	0.08	0.06
Bed/Disk (Hipper)Rd	8R-38	MFWD 225	0.074	0.50	Nov		0.03	0.03	0.03	0.02
Sprayer 600-750gal	60' 175hp		0.017	1.00	Mar			0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	8R-38	MFWD 225	0.077	1.00	Apr		0.07	0.07	0.11	0.06
UAN (32%)	gal					14.4666				
Row Cond Rigid	26'	MFWD 225	0.059	1.00	May		0.05	0.05	0.05	0.04
Plant - Folding	8R-38	MFWD 225	0.074	1.00	May		0.07	0.07	0.14	0.05
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	8R-38	MFWD 225	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32%)	gal					14.4666				
Spray (Direct/Layby)	8R-38	MFWD 225	0.066	1.00	Jun		0.06	0.06	0.10	0.05
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Mepiquat Chloride	oz					16.0000				
Acephate 90%	lb					0.7500				
Incidental Pest				1.00	Jul					
Sprayer 600-750gal	60' 175hp		0.017					0.01	0.02	0.01
IncidentalPestTrt\$15	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Acephate 90%	lb					0.7500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.50	Sep			0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker	6R-38(355)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	6R-38(355)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	6R-38(355)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1000.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.25	0.92	1.85	1.00

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 1.D Estimated costs for field operations, per acre  
Cotton, 8R-38" solid, conservation tillage  
B3XF/W3FE variety, 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	31.60						1.26	32.86	32.86
Custom Apply Fert	acre	7.50						0.30	7.80	7.80
Potash (60% K2O)	cwt	33.17						1.33	34.50	34.50
Bed-Subsoil Fold	8R-38		1.43	1.96	2.14			0.22	5.75	5.86
Bed/Disk (Hipper)Rd	8R-38		0.66	0.45	0.98			0.08	2.17	2.11
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.03	1.02	1.30
Clarity	pt	5.37						0.14	5.51	5.51
Glyphosate 3lbs a.e	oz	4.16						0.11	4.27	4.27
Surfactant	pt	0.66						0.02	0.68	0.68
Fert Appl (Liquid)	8R-38		1.38	1.64	2.40			0.13	5.55	4.61
UAN (32%)	gal	19.39						0.45	19.84	19.84
Row Cond Rigid	26'		1.06	0.69	1.58			0.07	3.40	3.70
Plant - Folding	8R-38		1.32	2.04	2.65			0.12	6.13	6.08
Cot. Seed B3XF/W3FE	thous	116.10						2.32	118.42	118.42
Cotton Seed Trt.	acre	20.00						0.40	20.40	20.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Gramoxone SL 2.0	oz	9.12						0.18	9.30	9.30
Cotoran	pt	12.02						0.24	12.26	12.26
Surfactant	pt	0.66						0.01	0.67	0.67
Cotton Consultant	acre	8.00						0.16	8.16	8.16
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Dual Magnum	pt	13.33						0.27	13.60	13.60
Liberty 280	oz	12.76						0.26	13.02	13.02
Acephate 90%	lb	1.74						0.03	1.77	1.77
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Bidrin 8EC	oz	3.71						0.06	3.77	3.77
Fert Appl (Liquid)	8R-38		1.38	1.64	2.40			0.09	5.51	4.61
UAN (32%)	gal	19.39						0.32	19.71	19.71
Spray (Direct/Layby)	8R-38		1.19	0.98	2.07			0.07	4.31	3.53
Liberty 280	oz	12.76						0.21	12.97	12.97
Mepiquat Chloride	oz	0.96						0.02	0.98	0.98
Centric 40WG	oz	10.16						0.17	10.33	10.33
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Mepiquat Chloride	oz	0.96						0.01	0.97	0.97
Acephate 90%	lb	5.21						0.07	5.28	5.28
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
IncidentalPestTrt\$15	acre	15.00						0.20	15.20	15.20
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Acephate 90%	lb	5.21						0.05	5.26	5.26
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Thidiazuron 4lb	oz	3.43						0.02	3.45	3.45
Ethephon 6E	pt	8.00						0.05	8.05	8.05
Sprayer 600-750gal	60' 175hp		0.12	0.10	0.27				0.49	0.65
Tribufos 6lb	pt	5.11						0.03	5.14	5.14
Ethephon 6E	pt	1.25						0.01	1.26	1.26
Cotton Picker	6R-38(355)		4.82	12.52	6.11			0.08	23.53	47.92
Boll Buggy	6R-38(355)		3.05	2.56	4.55			0.03	10.19	10.22
Module Builder	6R-38(355)		3.05	2.74	6.11			0.04	11.94	10.58
Gin & Haul	lb	110.00						0.37	110.37	110.37
Stalk Shredder-Flail	15'		1.95	3.16	2.90			0.03	8.04	6.25
TOTALS		501.06	23.33	32.08	38.56	0.00	10.31	605.34	116.52	721.86

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 1.E Estimated monthly income and expense flows per acre  
 Cotton, 8R-38" solid, conservation tillage  
 B3XF/W3FE variety, 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	752.20
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	110.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	19.39	0.00	19.39	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.53	0.00	47.23	12.76	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	20.21	5.21	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.96	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	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
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	31.60	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	8.00	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	3.12	0.00	0.00	0.00	0.55	2.40	5.33	5.02	1.10	0.55	0.82	19.67
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.09	0.00	0.00	0.00	0.24	1.38	2.86	2.81	0.48	0.24	0.36	12.87
REPAIR & MAINTENANCE	2.41	0.00	0.00	0.00	0.20	1.64	3.13	2.82	0.40	0.20	0.30	20.98
INTEREST ON OP. CAP.	3.32	0.00	0.00	0.00	0.30	0.58	4.12	0.96	0.30	0.06	0.12	0.55
TOTAL DIRECT EXPENSES	86.54	0.00	0.00	0.00	11.48	25.39	210.17	58.59	23.45	6.26	19.39	164.07
NET INCOME	-86.54	0.00	0.00	0.00	-11.48	-25.39	-210.17	-58.59	-23.45	-6.26	-19.39	588.13
NET INCOME TO DATE	-86.54	-86.54	-86.54	-86.54	-98.02	-123.41	-333.58	-392.17	-415.62	-421.88	-441.27	146.86

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.



Table 1.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 8R-38" solid, conservation tillage  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80		
PERCENT	YIELD	UNIT	dollars										
50	500.00	lb	-200	-184	-168	-152	-136	-120	-103	-87	-71	-55	-39
			-317	-300	-284	-268	-252	-236	-220	-204	-188	-172	-156
60	600.00	lb	-163	-143	-124	-105	-85	-66	-47	-28	-8	10	29
			-279	-260	-241	-221	-202	-183	-163	-144	-125	-105	-86
70	700.00	lb	-126	-103	-80	-58	-35	-13	9	31	54	76	99
			-242	-219	-197	-174	-152	-129	-107	-84	-62	-39	-17
80	800.00	lb	-88	-62	-37	-11	14	40	65	91	117	143	168
			-205	-179	-153	-127	-102	-76	-50	-24	0	26	52
90	900.00	lb	-51	-22	6	35	64	93	122	151	180	209	238
			-167	-138	-110	-81	-52	-23	5	34	63	92	121
100	1000.00	lb	-14	18	50	82	114	146	179	211	243	275	307
			-130	-98	-66	-34	-1	30	62	94	126	159	191
110	1100.00	lb	23	58	93	129	164	200	235	271	306	341	377
			-93	-58	-22	12	48	83	119	154	190	225	260
120	1200.00	lb	60	99	137	176	214	253	292	330	369	408	446
			-56	-17	21	59	98	137	175	214	253	291	330
130	1300.00	lb	97	139	181	223	265	307	348	390	432	474	516
			-18	22	64	106	148	190	232	274	316	357	399
140	1400.00	lb	134	180	225	270	315	360	405	450	495	540	585
			18	63	108	153	198	243	288	334	379	424	469
150	1500.00	lb	172	220	268	317	365	413	462	510	558	607	655
			55	103	152	200	248	297	345	393	442	490	538

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  
 Cotton, 8R-38" solid, no-till  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethephon 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	18.4000	24.66	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	3.2000	3.71	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	32.0000	1.92	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.7365	10.81	_____
Self-Propelled	hour	14.68	0.3221	4.74	_____
HAND LABOR					
Implements	hour	9.06	0.3222	2.91	_____
Self-Propelled	hour	9.06	0.2472	2.24	_____
UNALLOCATED LABOR					
	hour	14.68	0.8469	12.44	_____
DIESEL FUEL					
Tractors	gal	1.53	8.5298	13.06	_____
Self-Propelled	gal	1.53	4.4973	6.86	_____
REPAIR & MAINTENANCE					
Implements	acre	8.74	1.0000	8.74	_____
Tractors	acre	5.36	1.0000	5.36	_____
Self-Propelled	acre	14.22	1.0000	14.22	_____
INTEREST ON OP. CAP.	acre	9.49	1.0000	9.49	_____
TOTAL DIRECT EXPENSES				566.81	_____
FIXED EXPENSES					
Implements	acre	12.88	1.0000	12.88	_____
Tractors	acre	32.70	1.0000	32.70	_____
Self-Propelled	acre	58.97	1.0000	58.97	_____
TOTAL FIXED EXPENSES				104.55	_____
TOTAL SPECIFIED EXPENSES				671.36	_____

Note: Cost of production estimates are based on 2020 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 2.B Summary of estimated costs and returns per acre  
 Cotton, 8R-38" solid, no-till  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.64	900.0000	579.78	_____
Cotton Seed	lb	0.08	1215.0000	97.20	_____
				-----	
TOTAL INCOME				676.98	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	57.83	1.0000	57.83	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	69.52	1.0000	69.52	_____
INSECTICIDES	acre	41.03	1.0000	41.03	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	1.92	1.0000	1.92	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5694	5.15	_____
OPERATOR LABOR	hour	14.68	1.0586	15.55	_____
UNALLOCATED LABOR	hour	14.68	0.8469	12.44	_____
DIESEL FUEL	gal	1.53	13.0271	19.92	_____
REPAIR & MAINTENANCE	acre	28.32	1.0000	28.32	_____
INTEREST ON OP. CAP.	acre	9.49	1.0000	9.49	_____
				-----	
TOTAL DIRECT EXPENSES				566.81	_____
RETURNS ABOVE DIRECT EXPENSES				110.17	_____
				-----	
TOTAL FIXED EXPENSES				104.55	_____
				-----	
TOTAL SPECIFIED EXPENSES				671.36	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				5.62	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 2.C Estimated resource use for field operations, per acre  
 Cotton, 8R-38" solid, no-till  
 B3XF/W3FE variety, 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	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Mar			0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Surfactant	pt					0.2000				
Row Cond Rigid	26'	MFWD 225	0.059	1.00	May		0.05	0.05	0.05	0.04
NT Plant-Folding	8R-38	MFWD 225	0.077	1.00	May		0.07	0.07	0.15	0.06
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	8R-38	MFWD 225	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32%)	gal					18.4000				
Spray (Direct/Layby)	8R-38	MFWD 225	0.066	1.00	Jun		0.06	0.06	0.10	0.05
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Mepiquat Chloride	oz					16.0000				
Acephate 90%	lb					0.7500				
Incidental Pest				1.00	Jul					
Sprayer 600-750gal	60' 175hp		0.017					0.01	0.02	0.01
IncidentalPestTrt\$15	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Acephate 90%	lb					0.7500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.50	Sep			0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker	6R-38 (355)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	6R-38 (355)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	6R-38 (355)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	900.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.05	0.73	1.62	0.84

Note: Cost of production estimates are based on 2020 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 2.D Estimated costs for field operations, per acre  
 Cotton, 8R-38" solid, no-till  
 B3XF/W3FE variety, 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	31.60						1.26	32.86	32.86
Custom Apply Fert	acre	7.50						0.30	7.80	7.80
Potash (60% K2O)	cwt	33.17						1.33	34.50	34.50
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.03	1.02	1.30
Clarity	pt	5.37						0.14	5.51	5.51
Glyphosate 3lbs a.e	oz	4.16						0.11	4.27	4.27
Surfactant	pt	0.66						0.02	0.68	0.68
Row Cond Rigid	26'		1.06	0.69	1.58			0.07	3.40	3.70
NT Plant-Folding	8R-38		1.38	2.33	2.75			0.13	6.59	6.69
Cot. Seed B3XF/W3FE	thous	116.10						2.32	118.42	118.42
Cotton Seed Trt.	acre	20.00						0.40	20.40	20.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Gramoxone SL 2.0	oz	9.12						0.18	9.30	9.30
Cotoran	pt	12.02						0.24	12.26	12.26
Surfactant	pt	0.66						0.01	0.67	0.67
Cotton Consultant	acre	8.00						0.16	8.16	8.16
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Dual Magnum	pt	13.33						0.27	13.60	13.60
Liberty 280	oz	12.76						0.26	13.02	13.02
Acephate 90%	lb	1.74						0.03	1.77	1.77
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Bidrin 8EC	oz	3.71						0.06	3.77	3.77
Fert Appl (Liquid)	8R-38		1.38	1.64	2.40			0.09	5.51	4.61
UAN (32%)	gal	24.66						0.41	25.07	25.07
Spray (Direct/Layby)	8R-38		1.19	0.98	2.07			0.07	4.31	3.53
Liberty 280	oz	12.76						0.21	12.97	12.97
Mepiquat Chloride	oz	0.96						0.02	0.98	0.98
Centric 40WG	oz	10.16						0.17	10.33	10.33
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Mepiquat Chloride	oz	0.96						0.01	0.97	0.97
Acephate 90%	lb	5.21						0.07	5.28	5.28
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
IncidentalPestTrt\$15	acre	15.00						0.20	15.20	15.20
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Acephate 90%	lb	5.21						0.05	5.26	5.26
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Thidiazuron 4lb	oz	3.43						0.02	3.45	3.45
Ethephon 6E	pt	8.00						0.05	8.05	8.05
Sprayer 600-750gal	60' 175hp		0.12	0.10	0.27				0.49	0.65
Tribufos 6lb	pt	5.11						0.03	5.14	5.14
Ethephon 6E	pt	1.25						0.01	1.26	1.26
Cotton Picker	6R-38(355)		4.82	12.52	6.11			0.08	23.53	47.92
Boll Buggy	6R-38(355)		3.05	2.56	4.55			0.03	10.19	10.22
Module Builder	6R-38(355)		3.05	2.74	6.11			0.04	11.94	10.58
Gin & Haul	lb	99.00						0.33	99.33	99.33
Stalk Shredder-Flail	15'		1.95	3.16	2.90			0.03	8.04	6.25
TOTALS		475.94	19.92	28.32	33.14	0.00	9.49	566.81	104.55	671.36

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 2.E Estimated monthly income and expense flows per acre  
 Cotton, 8R-38" solid, no-till  
 B3XF/W3FE variety, 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	676.98
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	0.00	0.00	24.66	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.53	0.00	47.23	12.76	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	20.21	5.21	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.96	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	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
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	31.60	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	8.00	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	0.00	0.00	0.00	0.00	0.55	0.00	5.43	5.02	1.10	0.55	0.82	19.67
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.24	0.00	2.92	2.81	0.48	0.24	0.36	12.87
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.20	0.00	3.42	2.82	0.40	0.20	0.30	20.98
INTEREST ON OP. CAP.	3.02	0.00	0.00	0.00	0.30	0.00	4.13	1.05	0.30	0.06	0.12	0.51
TOTAL DIRECT EXPENSES	78.62	0.00	0.00	0.00	11.48	0.00	210.63	63.95	23.45	6.26	19.39	153.03
NET INCOME	-78.62	0.00	0.00	0.00	-11.48	0.00	-210.63	-63.95	-23.45	-6.26	-19.39	523.95
NET INCOME TO DATE	-78.62	-78.62	-78.62	-78.62	-90.10	-90.10	-300.73	-364.68	-388.13	-394.39	-413.78	110.17

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 8R-38" solid, no-till  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80		
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-202	-188	-173	-159	-144	-130	-115	-101	-86	-72	-57
			-307	-292	-278	-263	-249	-234	-220	-205	-191	-176	-162
60	540.00	lb	-168	-151	-134	-116	-99	-82	-64	-47	-29	-12	4
			-273	-256	-238	-221	-203	-186	-169	-151	-134	-116	-99
70	630.00	lb	-135	-115	-94	-74	-54	-33	-13	6	26	47	67
			-239	-219	-199	-179	-158	-138	-118	-97	-77	-57	-37
80	720.00	lb	-101	-78	-55	-32	-9	14	37	60	83	106	130
			-206	-183	-160	-136	-113	-90	-67	-44	-20	2	25
90	810.00	lb	-68	-42	-16	9	36	62	88	114	140	166	192
			-172	-146	-120	-94	-68	-42	-16	9	35	61	88
100	900.00	lb	-34	-5	23	52	81	110	139	168	197	226	255
			-139	-110	-81	-52	-23	5	34	63	92	121	150
110	990.00	lb	-1	30	62	94	126	158	190	221	253	285	317
			-105	-73	-41	-10	21	53	85	117	149	181	213
120	1080.00	lb	32	67	101	136	171	206	241	275	310	345	380
			-72	-37	-2	32	66	101	136	171	206	240	275
130	1170.00	lb	65	103	141	178	216	254	291	329	367	405	442
			-38	-0	36	74	112	149	187	225	262	300	338
140	1260.00	lb	99	140	180	221	261	302	342	383	424	464	505
			-5	35	76	116	157	197	238	278	319	360	400
150	1350.00	lb	132	176	219	263	306	350	393	437	480	524	567
			28	71	115	158	202	245	289	332	376	419	463

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  
Cotton, 12R-38" solid, conservation tillage  
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethephon 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	28.9332	38.77	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	3.2000	3.71	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	32.0000	1.92	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.4268	6.26	_____
Self-Propelled	hour	14.68	0.3221	4.74	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2472	2.24	_____
UNALLOCATED LABOR					
	hour	14.70	0.5992	8.81	_____
DIESEL FUEL					
Tractors	gal	1.53	4.9433	7.57	_____
Self-Propelled	gal	1.53	5.7832	8.82	_____
REPAIR & MAINTENANCE					
Implements	acre	7.57	1.0000	7.57	_____
Tractors	acre	3.11	1.0000	3.11	_____
Self-Propelled	acre	23.43	1.0000	23.43	_____
INTEREST ON OP. CAP.	acre	10.05	1.0000	10.05	_____
TOTAL DIRECT EXPENSES				584.77	_____
FIXED EXPENSES					
Implements	acre	10.31	1.0000	10.31	_____
Tractors	acre	18.93	1.0000	18.93	_____
Self-Propelled	acre	94.22	1.0000	94.22	_____
TOTAL FIXED EXPENSES				123.46	_____
TOTAL SPECIFIED EXPENSES				708.23	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 3.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.64	1000.0000	644.20	_____
Cotton Seed	lb	0.08	1350.0000	108.00	_____
				-----	
TOTAL INCOME				752.20	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	110.00	1.0000	110.00	_____
FERTILIZERS	acre	71.95	1.0000	71.95	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	69.52	1.0000	69.52	_____
INSECTICIDES	acre	41.03	1.0000	41.03	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	1.92	1.0000	1.92	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3708	3.35	_____
OPERATOR LABOR	hour	14.68	0.7490	11.00	_____
UNALLOCATED LABOR	hour	14.70	0.5992	8.81	_____
DIESEL FUEL	gal	1.53	10.7266	16.39	_____
REPAIR & MAINTENANCE	acre	34.11	1.0000	34.11	_____
INTEREST ON OP. CAP.	acre	10.05	1.0000	10.05	_____
				-----	
TOTAL DIRECT EXPENSES				584.77	_____
RETURNS ABOVE DIRECT EXPENSES				167.43	_____
TOTAL FIXED EXPENSES					
				123.46	_____
				-----	
TOTAL SPECIFIED EXPENSES				708.23	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				43.97	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 3.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE variety, 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	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
Sprayer 600-750gal	60' 175hp		0.017	1.00	Mar			0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					14.4666				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					14.4666				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Mepiquat Chloride	oz					16.0000				
Acephate 90%	lb					0.7500				
Incidental Pest				1.00	Jul					
Sprayer 600-750gal	60' 175hp		0.017					0.01	0.02	0.01
IncidentalPestTrt\$15	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Acephate 90%	lb					0.7500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.50	Sep			0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1000.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							0.74	0.42	1.11	0.59

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 3.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE variety, 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	31.60						1.26	32.86	32.86
Custom Apply Fert	acre	7.50						0.30	7.80	7.80
Potash (60% K2O)	cwt	33.17						1.33	34.50	34.50
Bed-Subsoil Fold	12R-38		0.95	1.71	1.42			0.16	4.24	4.59
Bed/Disk (Hipper)	12R-38		0.44	0.50	0.65			0.06	1.65	1.90
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.03	1.02	1.30
Clarity	pt	5.37						0.14	5.51	5.51
Glyphosate 3lbs a.e	oz	4.16						0.11	4.27	4.27
Surfactant	pt	0.66						0.02	0.68	0.68
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60			0.08	3.65	3.01
UAN (32%)	gal	19.39						0.45	19.84	19.84
Row Cond Folding	38'		0.72	0.58	1.08			0.05	2.43	2.97
Plant - Folding	12R-38		0.88	1.91	1.76			0.09	4.64	5.06
Cot. Seed B3XF/W3FE	thous	116.10						2.32	118.42	118.42
Cotton Seed Trt.	acre	20.00						0.40	20.40	20.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Gramoxone SL 2.0	oz	9.12						0.18	9.30	9.30
Cotoran	pt	12.02						0.24	12.26	12.26
Surfactant	pt	0.66						0.01	0.67	0.67
Cotton Consultant	acre	8.00						0.16	8.16	8.16
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Dual Magnum	pt	13.33						0.27	13.60	13.60
Liberty 280	oz	12.76						0.26	13.02	13.02
Acephate 90%	lb	1.74						0.03	1.77	1.77
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Bidrin 8EC	oz	3.71						0.06	3.77	3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60			0.06	3.63	3.01
UAN (32%)	gal	19.39						0.32	19.71	19.71
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37			0.05	2.93	2.45
Liberty 280	oz	12.76						0.21	12.97	12.97
Mepiquat Chloride	oz	0.96						0.02	0.98	0.98
Centric 40WG	oz	10.16						0.17	10.33	10.33
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Mepiquat Chloride	oz	0.96						0.01	0.97	0.97
Acephate 90%	lb	5.21						0.07	5.28	5.28
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
IncidentalPestTrt\$15	acre	15.00						0.20	15.20	15.20
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Acephate 90%	lb	5.21						0.05	5.26	5.26
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Thidiazuron 4lb	oz	3.43						0.02	3.45	3.45
Ethephon 6E	pt	8.00						0.05	8.05	8.05
Sprayer 600-750gal	60' 175hp		0.12	0.10	0.27				0.49	0.65
Tribufos 6lb	pt	5.11						0.03	5.14	5.14
Ethephon 6E	pt	1.25						0.01	1.26	1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11			0.12	34.74	83.17
Gin & Haul	lb	110.00						0.37	110.37	110.37
Stalk Shredder-Flail	15'		1.95	3.16	2.90			0.03	8.04	6.25
TOTALS		501.06	16.39	34.11	23.16	0.00	10.05	584.77	123.46	708.23

Note: Cost of production estimates are based on 2020 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 3.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE variety, 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	752.20
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	110.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	19.39	0.00	19.39	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.53	0.00	47.23	12.76	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	20.21	5.21	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.96	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	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
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	31.60	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	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.07	0.00	0.00	0.00	0.55	1.60	3.94	3.52	1.10	0.55	0.82	9.01
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.39	0.00	0.00	0.00	0.24	0.92	2.08	1.95	0.48	0.24	0.36	8.73
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.20	1.05	2.89	1.97	0.40	0.20	0.30	24.89
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.30	0.53	4.07	0.91	0.30	0.06	0.12	0.52
TOTAL DIRECT EXPENSES	84.51	0.00	0.00	0.00	11.48	23.49	207.71	55.33	23.45	6.26	19.39	153.15
NET INCOME	-84.51	0.00	0.00	0.00	-11.48	-23.49	-207.71	-55.33	-23.45	-6.26	-19.39	599.05
NET INCOME TO DATE	-84.51	-84.51	-84.51	-84.51	-95.99	-119.48	-327.19	-382.52	-405.97	-412.23	-431.62	167.43

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars										
50	500.00	lb	-180 -303	-163 -287	-147 -271	-131 -255	-115 -239	-99 -222	-83 -206	-67 -190	-51 -174	-35 -158	-18 -142
60	600.00	lb	-142 -266	-123 -246	-104 -227	-84 -208	-65 -188	-46 -169	-26 -150	-7 -130	11 -111	31 -92	50 -72
70	700.00	lb	-105 -228	-82 -206	-60 -183	-37 -161	-15 -138	7 -116	29 -93	52 -71	74 -48	97 -25	120 -3
80	800.00	lb	-68 -191	-42 -165	-16 -140	9 -114	34 -88	60 -62	86 -37	112 -11	137 14	163 40	189 66
90	900.00	lb	-30 -154	-1 -125	27 -96	56 -67	85 -38	114 -9	143 19	172 48	201 77	230 106	258 135
100	1000.00	lb	6 -117	38 -84	70 -52	103 -20	135 11	167 43	199 76	231 108	264 140	296 172	328 205
110	1100.00	lb	43 -79	79 -44	114 -8	149 26	185 61	220 97	256 132	291 168	327 203	362 239	397 274
120	1200.00	lb	80 -42	119 -3	158 34	196 73	235 112	274 150	312 189	351 228	390 266	428 305	467 343
130	1300.00	lb	118 -5	160 36	201 78	243 120	285 162	327 204	369 245	411 287	453 329	495 371	536 413
140	1400.00	lb	155 32	200 77	245 122	290 167	335 212	380 257	426 302	471 347	516 392	561 437	606 482
150	1500.00	lb	192 69	241 117	289 165	337 214	386 262	434 310	482 359	530 407	579 455	627 504	675 552

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  
Cotton, 12R-38" solid, no-till  
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethephon 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	18.4000	24.66	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	3.2000	3.71	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	32.0000	1.92	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.2987	4.38	_____
Self-Propelled	hour	14.68	0.3221	4.74	_____
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.2472	2.24	_____
UNALLOCATED LABOR					
	hour	14.71	0.4967	7.31	_____
DIESEL FUEL					
Tractors	gal	1.53	3.4602	5.30	_____
Self-Propelled	gal	1.53	5.7832	8.82	_____
REPAIR & MAINTENANCE					
Implements	acre	5.52	1.0000	5.52	_____
Tractors	acre	2.18	1.0000	2.18	_____
Self-Propelled	acre	23.43	1.0000	23.43	_____
INTEREST ON OP. CAP.	acre	9.36	1.0000	9.36	_____
TOTAL DIRECT EXPENSES				550.12	_____
FIXED EXPENSES					
Implements	acre	7.06	1.0000	7.06	_____
Tractors	acre	13.25	1.0000	13.25	_____
Self-Propelled	acre	94.22	1.0000	94.22	_____
TOTAL FIXED EXPENSES				114.53	_____
TOTAL SPECIFIED EXPENSES				664.65	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 4.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.64	900.0000	579.78	_____
Cotton Seed	lb	0.08	1215.0000	97.20	_____
				-----	
TOTAL INCOME				676.98	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	57.83	1.0000	57.83	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	69.52	1.0000	69.52	_____
INSECTICIDES	acre	41.03	1.0000	41.03	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	1.92	1.0000	1.92	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3470	3.14	_____
OPERATOR LABOR	hour	14.68	0.6209	9.12	_____
UNALLOCATED LABOR	hour	14.71	0.4967	7.31	_____
DIESEL FUEL	gal	1.53	9.2435	14.12	_____
REPAIR & MAINTENANCE	acre	31.13	1.0000	31.13	_____
INTEREST ON OP. CAP.	acre	9.36	1.0000	9.36	_____
				-----	
TOTAL DIRECT EXPENSES				550.12	_____
RETURNS ABOVE DIRECT EXPENSES				126.86	_____
TOTAL FIXED EXPENSES					
				114.53	_____
				-----	
TOTAL SPECIFIED EXPENSES				664.65	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				12.33	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 4.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF/W3FE variety, 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	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Mar			0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Surfactant	pt					0.2000				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.10	0.04
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					18.4000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Mepiquat Chloride	oz					16.0000				
Acephate 90%	lb					0.7500				
Incidental Pest				1.00	Jul					
Sprayer 600-750gal	60' 175hp		0.017					0.01	0.02	0.01
IncidentalPestTrt\$15	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Acephate 90%	lb					0.7500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.50	Sep			0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	900.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							0.62	0.29	0.96	0.49

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

- Fertilization decisions should be based on soil tests.**
- Soil test cost is prorated for a test every 3<sup>rd</sup> year.**
- Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 4.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF/W3FE variety, 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	31.60						1.26	32.86	32.86
Custom Apply Fert	acre	7.50						0.30	7.80	7.80
Potash (60% K2O)	cwt	33.17						1.33	34.50	34.50
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.03	1.02	1.30
Clarity	pt	5.37						0.14	5.51	5.51
Glyphosate 3lbs a.e	oz	4.16						0.11	4.27	4.27
Surfactant	pt	0.66						0.02	0.68	0.68
Row Cond Folding	38'		0.72	0.58	1.08			0.05	2.43	2.97
NT Plant-Folding	12R-38		0.92	2.19	1.84			0.10	5.05	5.63
Cot. Seed B3XF/W3FE	thous	116.10						2.32	118.42	118.42
Cotton Seed Trt.	acre	20.00						0.40	20.40	20.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Gramoxone SL 2.0	oz	9.12						0.18	9.30	9.30
Cotoran	pt	12.02						0.24	12.26	12.26
Surfactant	pt	0.66						0.01	0.67	0.67
Cotton Consultant	acre	8.00						0.16	8.16	8.16
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Dual Magnum	pt	13.33						0.27	13.60	13.60
Liberty 280	oz	12.76						0.26	13.02	13.02
Acephate 90%	lb	1.74						0.03	1.77	1.77
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Bidrin 8EC	oz	3.71						0.06	3.77	3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60			0.06	3.63	3.01
UAN (32%)	gal	24.66						0.41	25.07	25.07
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37			0.05	2.93	2.45
Liberty 280	oz	12.76						0.21	12.97	12.97
Mepiquat Chloride	oz	0.96						0.02	0.98	0.98
Centric 40WG	oz	10.16						0.17	10.33	10.33
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Mepiquat Chloride	oz	0.96						0.01	0.97	0.97
Acephate 90%	lb	5.21						0.07	5.28	5.28
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
IncidentalPestTrt\$15	acre	15.00						0.20	15.20	15.20
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Acephate 90%	lb	5.21						0.05	5.26	5.26
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Thidiazuron 4lb	oz	3.43						0.02	3.45	3.45
Ethephon 6E	pt	8.00						0.05	8.05	8.05
Sprayer 600-750gal	60' 175hp		0.12	0.10	0.27				0.49	0.65
Tribufos 6lb	pt	5.11						0.03	5.14	5.14
Ethephon 6E	pt	1.25						0.01	1.26	1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11			0.12	34.74	83.17
Gin & Haul	lb	99.00						0.33	99.33	99.33
Stalk Shredder-Flail	15'		1.95	3.16	2.90			0.03	8.04	6.25
TOTALS		475.94	14.12	31.13	19.57	0.00	9.36	550.12	114.53	664.65

Note: Cost of production estimates are based on 2020 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 4.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF/W3FE variety, 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	676.98
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	0.00	0.00	24.66	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.53	0.00	47.23	12.76	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	20.21	5.21	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.96	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	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
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	31.60	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	8.00	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	0.00	0.00	0.00	0.00	0.55	0.00	4.02	3.52	1.10	0.55	0.82	9.01
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.24	0.00	2.12	1.95	0.48	0.24	0.36	8.73
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.20	0.00	3.17	1.97	0.40	0.20	0.30	24.89
INTEREST ON OP. CAP.	3.02	0.00	0.00	0.00	0.30	0.00	4.08	1.00	0.30	0.06	0.12	0.48
TOTAL DIRECT EXPENSES	78.62	0.00	0.00	0.00	11.48	0.00	208.12	60.69	23.45	6.26	19.39	142.11
NET INCOME	-78.62	0.00	0.00	0.00	-11.48	0.00	-208.12	-60.69	-23.45	-6.26	-19.39	534.87
NET INCOME TO DATE	-78.62	-78.62	-78.62	-78.62	-90.10	-90.10	-298.22	-358.91	-382.36	-388.62	-408.01	126.86

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE	dollars												
Cotton Lint	0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80		
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-185 -300	-171 -285	-156 -271	-142 -256	-127 -242	-113 -227	-98 -213	-84 -198	-69 -184	-55 -169	-40 -155
60	540.00	lb	-152 -266	-134 -249	-117 -232	-100 -214	-82 -197	-65 -179	-47 -162	-30 -145	-13 -127	4 -110	21 -92
70	630.00	lb	-118 -233	-98 -212	-78 -192	-57 -172	-37 -152	-17 -131	3 -111	23 -91	43 -70	63 -50	84 -30
80	720.00	lb	-85 -199	-61 -176	-38 -153	-15 -130	7 -106	30 -83	53 -60	77 -37	100 -14	123 9	146 32
90	810.00	lb	-51 -166	-25 -140	0 -113	26 -87	52 -61	78 -35	104 -9	130 16	157 42	183 68	209 94
100	900.00	lb	-18 -132	10 -103	39 -74	68 -45	97 -16	126 12	155 41	184 70	213 99	242 128	271 157
110	990.00	lb	15 -99	47 -67	79 -35	111 -3	143 28	174 60	206 92	238 124	270 156	302 187	334 219
120	1080.00	lb	49 -65	83 -30	118 4	153 38	188 73	222 108	257 143	292 177	327 212	362 247	396 282
130	1170.00	lb	82 -31	120 5	157 43	195 81	233 118	270 156	308 194	346 231	384 269	421 307	459 344
140	1260.00	lb	116 1	156 42	197 82	237 123	278 163	319 204	359 245	400 285	440 326	481 366	521 407
150	1350.00	lb	149 35	193 78	236 122	280 165	323 209	367 252	410 296	454 339	497 383	541 426	584 469

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 5.A Estimated costs per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethephon 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	28.9332	38.77	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	3.2000	3.71	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
IncidentalPestTrt\$15	acre	15.00	1.5000	22.50	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	32.0000	1.92	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.4268	6.26	_____
Self-Propelled	hour	14.68	0.3309	4.87	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2516	2.28	_____
UNALLOCATED LABOR					
	hour	14.69	0.6062	8.91	_____
DIESEL FUEL					
Tractors	gal	1.53	4.9433	7.57	_____
Self-Propelled	gal	1.53	5.8626	8.94	_____
1/4-mi. Pivot Irr.	gal	1.53	11.2011	17.14	_____
REPAIR & MAINTENANCE					
Implements	acre	7.57	1.0000	7.57	_____
Tractors	acre	3.11	1.0000	3.11	_____
Self-Propelled	acre	23.54	1.0000	23.54	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.					
	acre	10.84	1.0000	10.84	_____
TOTAL DIRECT EXPENSES				656.49	_____
FIXED EXPENSES					
Implements	acre	10.31	1.0000	10.31	_____
Tractors	acre	18.93	1.0000	18.93	_____
Self-Propelled	acre	94.87	1.0000	94.87	_____
1/4-mi. Pivot Irr.	acre	71.85	1.0000	71.85	_____
TOTAL FIXED EXPENSES				195.96	_____
TOTAL SPECIFIED EXPENSES				852.45	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.64	1200.0000	773.04	_____
Cotton Seed	lb	0.08	1620.0000	129.60	_____
				-----	
TOTAL INCOME				902.64	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	71.95	1.0000	71.95	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	69.52	1.0000	69.52	_____
INSECTICIDES	acre	48.53	1.0000	48.53	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	1.92	1.0000	1.92	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3752	3.39	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	14.68	0.7578	11.13	_____
UNALLOCATED LABOR	hour	14.69	0.6062	8.91	_____
DIESEL FUEL	gal	1.53	22.0071	33.65	_____
REPAIR & MAINTENANCE	acre	56.17	1.0000	56.17	_____
INTEREST ON OP. CAP.	acre	10.84	1.0000	10.84	_____
				-----	
TOTAL DIRECT EXPENSES				656.49	_____
RETURNS ABOVE DIRECT EXPENSES				246.15	_____
TOTAL FIXED EXPENSES					
				195.96	_____
				-----	
TOTAL SPECIFIED EXPENSES				852.45	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				50.19	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, 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	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
Sprayer 600-750gal	60' 175hp		0.017	1.00	Mar			0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					14.4666				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May					
Eradication	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					14.4666				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Mepiquat Chloride	oz					16.0000				
Acephate 90%	lb					0.7500				
Incidental Pest				1.50	Jul					
Sprayer 600-750gal	60' 175hp		0.017					0.02	0.03	0.02
IncidentalPestTrt\$15	acre					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Acephate 90%	lb					0.7500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.50	Sep			0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
1/4-mi. Pivot Irr.	acre				Jan	1.0000			0.20	
TOTALS							0.75	0.42	1.33	0.60

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, 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	31.60						1.26	32.86	32.86
Custom Apply Fert	acre	7.50						0.30	7.80	7.80
Potash (60% K2O)	cwt	33.17						1.33	34.50	34.50
Bed-Subsoil Fold	12R-38		0.95	1.71	1.42			0.16	4.24	4.59
Bed/Disk (Hipper)	12R-38		0.44	0.50	0.65			0.06	1.65	1.90
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.03	1.02	1.30
Clarity	pt	5.37						0.14	5.51	5.51
Glyphosate 3lbs a.e	oz	4.16						0.11	4.27	4.27
Surfactant	pt	0.66						0.02	0.68	0.68
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60			0.08	3.65	3.01
UAN (32%)	gal	19.39						0.45	19.84	19.84
Row Cond Folding	38'		0.72	0.58	1.08			0.05	2.43	2.97
Plant - Folding	12R-38		0.88	1.91	1.76			0.09	4.64	5.06
Cot. Seed B3XF/W3FE	thous	116.10						2.32	118.42	118.42
Cotton Seed Trt.	acre	20.00						0.40	20.40	20.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Gramoxone SL 2.0	oz	9.12						0.18	9.30	9.30
Cotoran	pt	12.02						0.24	12.26	12.26
Surfactant	pt	0.66						0.01	0.67	0.67
Cotton Consultant	acre	8.00						0.16	8.16	8.16
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Dual Magnum	pt	13.33						0.27	13.60	13.60
Liberty 280	oz	12.76						0.26	13.02	13.02
Acephate 90%	lb	1.74						0.03	1.77	1.77
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30
Bidrin 8EC	oz	3.71						0.06	3.77	3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60			0.06	3.63	3.01
UAN (32%)	gal	19.39						0.32	19.71	19.71
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37			0.05	2.93	2.45
Liberty 280	oz	12.76						0.21	12.97	12.97
Mepiquat Chloride	oz	0.96						0.02	0.98	0.98
Centric 40WG	oz	10.16						0.17	10.33	10.33
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Mepiquat Chloride	oz	0.96						0.01	0.97	0.97
Acephate 90%	lb	5.21						0.07	5.28	5.28
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.36	0.31	0.82			0.02	1.51	1.95
IncidentalPestTrt\$15	acre	22.50						0.30	22.80	22.80
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Acephate 90%	lb	5.21						0.05	5.26	5.26
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30
Thidiazuron 4lb	oz	3.43						0.02	3.45	3.45
Ethephon 6E	pt	8.00						0.05	8.05	8.05
Sprayer 600-750gal	60' 175hp		0.12	0.10	0.27				0.49	0.65
Tribufos 6lb	pt	5.11						0.03	5.14	5.14
Ethephon 6E	pt	1.25						0.01	1.26	1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11			0.12	34.74	83.17
Gin & Haul	lb	132.00						0.44	132.44	132.44
Stalk Shredder-Flail	15'		1.95	3.16	2.90			0.03	8.04	6.25
1/4-mi. Pivot Irr.	acre		17.14	21.95	1.84			0.61	41.54	71.85
TOTALS		530.56	33.65	56.17	25.27	0.00	10.84	656.49	195.96	852.45

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, 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	902.64
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	19.39	0.00	19.39	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	9.53	0.00	47.23	12.76	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	27.71	5.21	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.96	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	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
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	31.60	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	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.07	0.00	0.00	0.00	0.55	1.60	5.28	3.67	1.57	0.70	0.82	9.01
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.39	0.00	0.00	0.00	0.24	0.92	2.08	7.09	7.46	5.38	0.36	8.73
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.20	1.05	2.89	20.44	2.50	1.69	0.30	24.89
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.30	0.53	4.10	1.30	0.53	0.13	0.12	0.59
TOTAL DIRECT EXPENSES	84.51	0.00	0.00	0.00	11.48	23.49	209.08	79.48	40.73	13.11	19.39	175.22
NET INCOME	-84.51	0.00	0.00	0.00	-11.48	-23.49	-209.08	-79.48	-40.73	-13.11	-19.39	727.42
NET INCOME TO DATE	-84.51	-84.51	-84.51	-84.51	-95.99	-119.48	-328.56	-408.04	-448.77	-461.88	-481.27	246.15

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.



Table 5.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-PRODUCT PRICE-										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	-dollars-										
50	600.00	lb	-170 -366	-151 -347	-132 -328	-112 -308	-93 -289	-74 -270	-54 -250	-35 -231	-16 -212	3 -192	22 -173
60	720.00	lb	-126 -322	-102 -298	-79 -275	-56 -252	-33 -229	-10 -206	13 -182	36 -159	59 -136	82 -113	105 -90
70	840.00	lb	-81 -277	-54 -250	-27 -223	-0 -196	26 -169	53 -141	81 -114	108 -87	135 -60	162 -33	189 -6
80	960.00	lb	-36 -232	-5 -201	25 -170	56 -139	87 -108	118 -77	148 -47	179 -16	210 14	241 45	272 76
90	1080.00	lb	8 -187	42 -153	77 -118	112 -83	147 -48	182 -13	216 20	251 55	286 90	321 125	356 160
100	1200.00	lb	52 -143	91 -104	130 -65	168 -27	207 11	246 50	284 88	323 127	362 166	400 204	439 243
110	1320.00	lb	97 -98	140 -55	182 -13	225 29	267 71	310 114	352 156	395 199	437 241	480 284	522 326
120	1440.00	lb	142 -53	188 -7	235 39	281 85	327 131	374 178	420 224	467 271	513 317	559 363	606 410
130	1560.00	lb	187 -8	237 41	287 91	337 141	388 192	438 242	488 292	538 342	589 393	639 443	689 493
140	1680.00	lb	231 35	285 89	340 144	394 198	448 252	502 306	556 360	610 414	664 468	718 522	772 576
150	1800.00	lb	276 80	334 138	392 196	450 254	508 312	566 370	624 428	682 486	740 544	798 602	856 660

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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 7.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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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	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 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
<b>TOTALS</b>							<b>0.37</b>	<b>0.37</b>	<b>0.48</b>	<b>0.34</b>

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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 8.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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, Enlist E3, May planted, 12R30"  
 Non-Delta Area, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Soybeans			PRODUCT PRICE										
			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	-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 9.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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, double crop after wheat, Enlist E3, 12R30"  
 Non-irrigated, All Areas, 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	12.50	bu	-198	-191	-185	-179	-173	-167	-161	-155	-149	-143	-137
			-224	-218	-212	-206	-200	-194	-188	-182	-176	-170	-164
60	15.00	bu	-180	-173	-166	-158	-151	-144	-137	-129	-122	-115	-108
			-207	-200	-192	-185	-178	-171	-163	-156	-149	-142	-134
70	17.50	bu	-163	-154	-146	-137	-129	-120	-112	-103	-95	-86	-78
			-189	-181	-173	-164	-156	-147	-139	-130	-122	-113	-105
80	20.00	bu	-145	-135	-126	-116	-106	-97	-87	-77	-68	-58	-48
			-172	-162	-153	-143	-133	-124	-114	-104	-95	-85	-75
90	22.50	bu	-128	-117	-106	-95	-84	-73	-62	-52	-41	-30	-19
			-155	-144	-133	-122	-111	-100	-89	-78	-68	-57	-46
100	25.00	bu	-110	-98	-86	-74	-62	-50	-38	-26	-14	-1	10
			-137	-125	-113	-101	-89	-77	-65	-53	-40	-28	-16
110	27.50	bu	-93	-79	-66	-53	-40	-26	-13	-0	13	26	39
			-120	-106	-93	-80	-66	-53	-40	-27	-13	-0	12
120	30.00	bu	-75	-61	-46	-32	-17	-3	11	25	40	54	69
			-102	-88	-73	-59	-44	-30	-15	-1	13	27	42
130	32.50	bu	-58	-42	-26	-11	4	20	35	51	67	83	98
			-85	-69	-53	-38	-22	-6	9	24	40	56	71
140	35.00	bu	-40	-24	-7	9	26	43	60	77	94	111	128
			-67	-50	-33	-17	-0	16	33	50	67	84	101
150	37.50	bu	-23	-5	12	30	49	67	85	103	121	139	157
			-50	-32	-14	4	22	40	58	76	94	112	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 10.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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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	13.09
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	3.25
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	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		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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 -242	-162 -230	-150 -218	-138 -206	-126 -193	-114 -181	-102 -169	-89 -157	-77 -145	-65 -133	-53 -121
60	30.00	bu	-139 -207	-125 -192	-110 -178	-96 -163	-81 -149	-67 -134	-52 -120	-38 -105	-23 -91	-9 -76	5 -62
70	35.00	bu	-104 -172	-87 -155	-70 -138	-53 -121	-37 -104	-20 -87	-3 -70	13 -54	30 -37	47 -20	64 -3
80	40.00	bu	-69 -137	-50 -118	-31 -98	-11 -79	7 -60	26 -40	46 -21	65 -2	84 17	104 36	123 55
90	45.00	bu	-34 -102	-13 -80	8 -59	30 -37	52 -15	73 6	95 27	117 49	139 71	160 93	182 114
100	50.00	bu	-0 -67	24 -43	48 -19	72 4	96 28	120 53	145 77	169 101	193 125	217 149	241 173
110	55.00	bu	34 -32	61 -6	88 20	114 46	141 73	167 100	194 126	221 153	247 179	274 206	300 233
120	60.00	bu	69 2	98 31	127 60	156 89	185 118	214 147	243 176	272 205	301 234	330 263	359 292
130	65.00	bu	104 36	136 68	167 99	198 131	230 162	261 194	293 225	324 256	356 288	387 319	418 351
140	70.00	bu	139 71	173 105	207 139	241 173	274 207	308 241	342 274	376 308	410 342	444 376	478 410
150	75.00	bu	174 106	210 143	247 179	283 215	319 251	355 288	392 324	428 360	464 396	500 433	537 469

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 11.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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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	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
<b>TOTALS</b>							<b>0.37</b>	<b>0.37</b>	<b>0.48</b>	<b>0.34</b>

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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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		
Soybeans	PRODUCT PRICE												
	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	-101	-91	-80	-70	-60	-49	-39	-28	-18	-8
			-150	-139	-129	-118	-108	-98	-87	-77	-66	-56	-46
60	25.80	bu	-82	-69	-57	-44	-32	-19	-7	5	17	30	42
			-119	-107	-95	-82	-70	-57	-45	-32	-20	-7	4
70	30.10	bu	-52	-37	-22	-8	6	20	35	49	64	78	93
			-89	-75	-60	-46	-31	-17	-2	11	26	41	55
80	34.40	bu	-22	-5	11	27	44	61	77	94	110	127	144
			-59	-43	-26	-10	6	23	39	56	73	89	106
90	38.70	bu	7	26	45	64	82	101	120	138	157	176	195
			-29	-11	7	26	44	63	82	101	119	138	157
100	43.00	bu	37	58	79	100	121	141	162	183	204	225	245
			0	20	41	62	83	104	124	145	166	187	207
110	47.30	bu	67	90	113	136	159	182	205	228	250	273	296
			30	52	75	98	121	144	167	190	213	235	258
120	51.60	bu	97	122	147	172	197	222	247	272	297	322	347
			60	85	110	134	159	184	209	234	259	284	309
130	55.90	bu	128	155	182	209	236	263	290	317	344	371	398
			90	117	144	171	198	225	252	279	306	333	360
140	60.20	bu	158	187	216	245	274	303	332	361	390	420	449
			120	149	178	207	236	265	294	323	353	382	411
150	64.50	bu	188	219	250	281	312	343	375	406	437	468	499
			150	181	212	243	274	306	337	368	399	430	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 12.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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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
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 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
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
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		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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 13.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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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	13.09
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	3.25
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	27.30
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	2.72
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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a 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, 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.

Table 14.A Estimated costs per acre  
 Corn, stale seedbed, RR2 seed, 12-row 30",  
 170 bu yield goal, Non-Delta, 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	_____
App by Air ( 3 gal)	appl	5.50	1.2000	6.60	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	17.31	1.6300	28.22	_____
Potash (60% K2O)	cwt	22.11	1.2500	27.64	_____
UAN + Sulfur (28%)	gal	1.61	56.0263	90.20	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Clarity	pt	10.73	0.5000	5.37	_____
Select Max	pt	12.74	1.0000	12.74	_____
Atrazine 4L	pt	1.91	4.0000	7.64	_____
Halex GT	pt	7.13	3.6000	25.67	_____
INSECTICIDES					
Bifenthrin	oz	0.94	1.2804	1.20	_____
Intrepid 2F	oz	1.94	4.0000	7.76	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.03	28.0000	84.84	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.4295	6.30	_____
Harvesters	hour	14.68	0.1277	1.87	_____
Self-Propelled	hour	14.68	0.0176	0.26	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
	hour	14.69	0.5173	7.60	_____
DIESEL FUEL					
Tractors	gal	1.53	4.9741	7.61	_____
Harvesters	gal	1.53	1.7419	2.67	_____
Self-Propelled	gal	1.53	0.1586	0.24	_____
REPAIR & MAINTENANCE					
Implements	acre	9.74	1.0000	9.74	_____
Tractors	acre	3.13	1.0000	3.13	_____
Harvesters	acre	5.20	1.0000	5.20	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	10.07	1.0000	10.07	_____
TOTAL DIRECT EXPENSES				452.85	_____
FIXED EXPENSES					
Implements	acre	13.92	1.0000	13.92	_____
Tractors	acre	19.06	1.0000	19.06	_____
Harvesters	acre	19.91	1.0000	19.91	_____
Self-Propelled	acre	1.30	1.0000	1.30	_____
TOTAL FIXED EXPENSES				54.19	_____
TOTAL SPECIFIED EXPENSES				507.04	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 14.B Summary of estimated costs and returns per acre  
 Corn, stale seedbed, RR2 seed, 12-row 30",  
 170 bu yield goal, Non-Delta, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.73	170.0000	634.10	_____
				-----	
TOTAL INCOME				634.10	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.60	1.0000	13.60	_____
FERTILIZERS	acre	146.06	1.0000	146.06	_____
HERBICIDES	acre	55.58	1.0000	55.58	_____
INSECTICIDES	acre	8.96	1.0000	8.96	_____
SEED/PLANTS	acre	84.84	1.0000	84.84	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1530	1.39	_____
OPERATOR LABOR	hour	14.68	0.5748	8.43	_____
UNALLOCATED LABOR	hour	14.69	0.5173	7.60	_____
DIESEL FUEL	gal	1.53	6.8748	10.52	_____
REPAIR & MAINTENANCE	acre	18.27	1.0000	18.27	_____
INTEREST ON OP. CAP.	acre	10.07	1.0000	10.07	_____
				-----	
TOTAL DIRECT EXPENSES				452.85	_____
RETURNS ABOVE DIRECT EXPENSES				181.25	_____
TOTAL FIXED EXPENSES				54.19	_____
				-----	
TOTAL SPECIFIED EXPENSES				507.04	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				127.06	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 14.C Estimated resource use for field operations, per acre  
 Corn, stale seedbed, RR2 seed, 12-row 30",  
 170 bu yield goal, Non-Delta, 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	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus (46% P2O5)	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
Disk Heavy	28'	MFWD 225	0.075	1.00	Oct		0.07	0.07	0.07	0.06
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant - Rigid	12R-30	MFWD 225	0.062	1.00	Mar		0.06	0.06	0.12	0.05
Corn Seed RR2	thous					28.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					19.3063				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	gal					36.7200				
Corn Consultant	acre			1.00	May	1.0000				
App by Air ( 3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2804				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	500 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					170.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.57	0.55	0.72	0.51

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 14.D Estimated costs for field operations, per acre  
 Corn, stale seedbed, RR2 seed, 12-row 30",  
 170 bu yield goal, Non-Delta, 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	31.60						1.26	32.86		32.86
Spin Spreader	5 ton		0.75	0.58	1.56			0.12	3.01	2.40	5.41
Phosphorus(46% P2O5)	cwt	28.22						1.13	29.35		29.35
Potash (60% K2O)	cwt	27.64						1.11	28.75		28.75
Disk Heavy	28'		1.34	1.73	2.11			0.21	5.39	5.76	11.15
Bed/Disk w/roller	12R-30/40		1.11	1.26	1.75			0.16	4.28	4.80	9.08
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
Clarity	pt	5.37						0.14	5.51		5.51
Select Max	pt	12.74						0.34	13.08		13.08
Plant - Rigid	12R-30		1.11	1.95	2.32			0.13	5.51	5.54	11.05
Corn Seed RR2	thous	84.84						1.98	86.82		86.82
Custom Apply Fert	acre	7.50						0.15	7.65		7.65
UAN + Sulfur (28%)	gal	31.08						0.62	31.70		31.70
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.57			0.02	1.03	1.30	2.33
Atrazine 4L	pt	7.64						0.15	7.79		7.79
Halex GT	pt	25.67						0.51	26.18		26.18
Fert Appl (Liquid)	12R-30		1.39	1.86	2.55			0.10	5.90	4.90	10.80
UAN + Sulfur (28%)	gal	59.12						0.99	60.11		60.11
Corn Consultant	acre	6.00						0.10	6.10		6.10
App by Air ( 3 gal)	appl	1.10						0.02	1.12		1.12
Bifenthrin	oz	1.20						0.02	1.22		1.22
App by Air ( 3 gal)	appl	5.50						0.07	5.57		5.57
Intrepid 2F	oz	7.76						0.10	7.86		7.86
Header - Corn	8R-30		2.67	7.33	3.56			0.05	13.61	23.01	36.62
Grain Cart Corn	500 bu		0.45	0.37	0.70			0.01	1.53	1.43	2.96
Haul Corn	bu	39.10						0.13	39.23		39.23
Stalk Shredder Flex	20'		1.46	2.99	2.30			0.02	6.77	5.05	11.82
TOTALS		396.57	10.52	18.27	17.42	0.00	10.07	452.85	54.19	507.04	

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 14.E Estimated monthly income and expense flows per acre  
 Corn, stale seedbed, RR2 seed, 12-row 30",  
 170 bu yield goal, Non-Delta, 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	634.10
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.10	5.50	0.00	0.00	0.00
FERTILIZERS	55.86	0.00	0.00	0.00	0.00	0.00	31.08	59.12	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.27	0.00	33.31	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	7.76	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	84.84	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	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	39.10
CUSTOM LIME	31.60	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	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.42	0.00	0.00	0.00	0.00	2.32	0.57	2.55	0.00	0.00	0.00	6.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.20	0.00	0.00	0.00	0.00	1.11	0.24	1.39	0.00	0.00	0.00	4.58
REPAIR & MAINTENANCE	3.57	0.00	0.00	0.00	0.00	1.95	0.20	1.86	0.00	0.00	0.00	10.69
INTEREST ON OP. CAP.	4.12	0.00	0.00	0.00	0.78	2.11	1.45	1.23	0.17	0.00	0.00	0.21
TOTAL DIRECT EXPENSES	107.10	0.00	0.00	0.00	30.05	92.33	74.35	74.45	13.43	0.00	0.00	61.14
NET INCOME	-107.10	0.00	0.00	0.00	-30.05	-92.33	-74.35	-74.45	-13.43	0.00	0.00	572.96
NET INCOME TO DATE	-107.10	-107.10	-107.10	-107.10	-137.15	-229.48	-303.83	-378.28	-391.71	-391.71	-391.71	181.25

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 14.F Estimated returns for various price/yield combinations, per acre  
 Corn, stale seedbed, RR2 seed, 12-row 30",  
 170 bu yield goal, Non-Delta, Mississippi, 2021

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Corn	2.79	2.98	3.17	3.35	3.54	3.73	3.91	4.10	4.28	4.47	4.66		
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-195 -249	-179 -233	-163 -217	-147 -202	-132 -186	-116 -170	-100 -154	-84 -138	-68 -122	-52 -106	-36 -91
60	102.00	bu	-151 -206	-132 -186	-113 -167	-94 -148	-75 -129	-56 -110	-37 -91	-18 -72	0 -53	19 -34	38 -15
70	119.00	bu	-108 -162	-85 -140	-63 -117	-41 -95	-19 -73	2 -51	24 -29	47 -7	69 15	91 37	113 59
80	136.00	bu	-64 -118	-39 -93	-13 -68	11 -42	36 -17	62 8	87 33	113 58	138 84	163 109	189 134
90	153.00	bu	-20 -75	7 -46	36 -18	64 10	93 39	121 67	150 96	178 124	207 153	235 181	264 210
100	170.00	bu	22 -31	54 0	86 31	117 63	149 95	181 127	212 158	244 190	276 222	308 253	339 285
110	187.00	bu	66 12	101 47	136 81	170 116	205 151	240 186	275 221	310 256	345 291	380 326	415 360
120	204.00	bu	109 55	148 93	186 131	224 169	262 207	300 246	338 284	376 322	414 360	452 398	490 436
130	221.00	bu	153 99	194 140	236 181	277 223	318 264	359 305	400 346	442 387	483 429	524 470	565 511
140	238.00	bu	197 143	241 187	286 231	330 276	374 320	419 365	463 409	507 453	552 498	596 542	641 586
150	255.00	bu	240 186	288 234	336 281	383 329	431 376	478 424	526 472	573 519	621 567	668 614	716 662

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 15.A Estimated costs per acre  
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal  
 Non-Delta Areas, 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	_____
App by Air ( 3 gal)	appl	5.50	1.0000	5.50	_____
FERTILIZERS					
DAP	cwt	20.99	1.6300	34.21	_____
Potash (60% K2O)	cwt	22.11	1.2500	27.64	_____
Fert 10-34-0	gal	2.80	5.0000	14.00	_____
UAN (32%)	gal	1.34	43.8348	58.74	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Clarity	pt	10.73	0.5000	5.37	_____
Select Max	pt	12.74	1.0000	12.74	_____
Atrazine 4L	pt	1.91	4.0000	7.64	_____
Halex GT	pt	7.13	3.6000	25.67	_____
INSECTICIDES					
Bifenthrin	oz	0.94	6.4020	6.02	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.99	28.0000	111.72	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.3616	5.31	_____
Harvesters	hour	14.68	0.1277	1.87	_____
HAND LABOR					
Implements	hour	9.06	0.1832	1.66	_____
UNALLOCATED LABOR	hour	14.69	0.4404	6.47	_____
DIESEL FUEL					
Tractors	gal	1.53	4.0613	6.22	_____
Harvesters	gal	1.53	1.7419	2.67	_____
REPAIR & MAINTENANCE					
Implements	acre	8.68	1.0000	8.68	_____
Tractors	acre	2.55	1.0000	2.55	_____
Harvesters	acre	5.20	1.0000	5.20	_____
INTEREST ON OP. CAP.	acre	9.30	1.0000	9.30	_____
TOTAL DIRECT EXPENSES				450.37	_____
FIXED EXPENSES					
Implements	acre	11.02	1.0000	11.02	_____
Tractors	acre	15.53	1.0000	15.53	_____
Harvesters	acre	19.91	1.0000	19.91	_____
TOTAL FIXED EXPENSES				46.46	_____
TOTAL SPECIFIED EXPENSES				496.83	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 15.B Summary of estimated costs and returns per acre  
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal  
 Non-Delta Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.73	170.0000	634.10	_____
				-----	
TOTAL INCOME				634.10	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	12.50	1.0000	12.50	_____
FERTILIZERS	acre	134.59	1.0000	134.59	_____
HERBICIDES	acre	55.58	1.0000	55.58	_____
INSECTICIDES	acre	6.02	1.0000	6.02	_____
SEED/PLANTS	acre	111.72	1.0000	111.72	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1832	1.66	_____
OPERATOR LABOR	hour	14.68	0.4893	7.18	_____
UNALLOCATED LABOR	hour	14.69	0.4404	6.47	_____
DIESEL FUEL	gal	1.53	5.8033	8.89	_____
REPAIR & MAINTENANCE	acre	16.43	1.0000	16.43	_____
INTEREST ON OP. CAP.	acre	9.30	1.0000	9.30	_____
				-----	
TOTAL DIRECT EXPENSES				450.37	_____
RETURNS ABOVE DIRECT EXPENSES				183.73	_____
TOTAL FIXED EXPENSES				46.46	_____
				-----	
TOTAL SPECIFIED EXPENSES				496.83	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				137.27	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 15.C Estimated resource use for field operations, per acre  
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal  
 Non-Delta 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	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Mar		0.04	0.04	0.08	0.03
DAP	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
NT Plant&Pre-Rigid	12R-30	MFWD 190	0.070	1.00	Mar		0.07	0.07	0.14	0.06
Corn Seed BtRR	thous					28.0000				
Fert 10-34-0	gal					5.0000				
Spray (Broadcast)	27'	MFWD 225	0.062	1.00	Apr		0.06	0.06	0.09	0.05
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.11	0.07
UAN (32%)	gal					43.8348				
Corn Consultant	acre			1.00	May	1.0000				
App by Air ( 3 gal)	appl			1.00	May	1.0000				
Bifenthrin	oz					6.4020				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	500 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					170.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.48	0.48	0.67	0.44

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 15.D Estimated costs for field operations, per acre  
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal  
 Non-Delta 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	31.60						1.26	32.86	32.86
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
Clarity	pt	5.37						0.14	5.51	5.51
Select Max	pt	12.74						0.34	13.08	13.08
Spin Spreader	5 ton		0.75	0.58	1.56			0.07	2.96	2.40
DAP	cwt	34.21						0.80	35.01	35.01
Potash (60% K2O)	cwt	27.64						0.64	28.28	28.28
NT Plant&Pre-Rigid	12R-30		1.06	2.62	2.61			0.15	6.44	6.64
Corn Seed BtRR	thous	111.72						2.61	114.33	114.33
Fert 10-34-0	gal	14.00						0.33	14.33	14.33
Spray (Broadcast)	27'		1.11	0.68	2.03			0.08	3.90	3.03
Atrazine 4L	pt	7.64						0.15	7.79	7.79
Halex GT	pt	25.67						0.51	26.18	26.18
Fert Appl (Liquid)	12R-30		1.39	1.86	2.55			0.12	5.92	4.90
UAN (32%)	gal	58.74						1.17	59.91	59.91
Corn Consultant	acre	6.00						0.10	6.10	6.10
App by Air ( 3 gal)	appl	5.50						0.09	5.59	5.59
Bifenthrin	oz	6.02						0.10	6.12	6.12
Header - Corn	8R-30		2.67	7.33	3.56			0.05	13.61	23.01
Grain Cart Corn	500 bu		0.45	0.37	0.70			0.01	1.53	1.43
Haul Corn	bu	39.10						0.13	39.23	39.23
Stalk Shredder Flex	20'		1.46	2.99	2.30			0.02	6.77	5.05
TOTALS		400.44	8.89	16.43	15.31	0.00	9.30	450.37	46.46	496.83

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 15.E Estimated monthly income and expense flows per acre  
 Corn, no-tillage, BTRR, 12-row 30", 170 bu yield goal  
 Non-Delta Areas, 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	634.10
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	5.50	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	75.85	58.74	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.27	0.00	33.31	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.02	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	111.72	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	39.10
CUSTOM LIME	31.60	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	6.00	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	0.00	0.00	0.00	0.00	0.00	4.17	4.58	0.00	0.00	0.00	0.00	6.56
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	1.81	2.50	0.00	0.00	0.00	0.00	4.58
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	3.20	2.54	0.00	0.00	0.00	0.00	10.69
INTEREST ON OP. CAP.	1.39	0.00	0.00	0.00	0.78	4.60	2.03	0.29	0.00	0.00	0.00	0.21
TOTAL DIRECT EXPENSES	36.32	0.00	0.00	0.00	30.05	201.35	103.70	17.81	0.00	0.00	0.00	61.14
NET INCOME	-36.32	0.00	0.00	0.00	-30.05	-201.35	-103.70	-17.81	0.00	0.00	0.00	572.96
NET INCOME TO DATE	-36.32	-36.32	-36.32	-36.32	-66.37	-267.72	-371.42	-389.23	-389.23	-389.23	-389.23	183.73

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre  
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal  
 Non-Delta Areas, Mississippi, 2021

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Corn	2.79	2.98	3.17	3.35	3.54	3.73	3.91	4.10	4.28	4.47	4.66		
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-192 -239	-177 -223	-161 -207	-145 -191	-129 -176	-113 -160	-97 -144	-82 -128	-66 -112	-50 -96	-34 -80
60	102.00	bu	-149 -195	-130 -176	-111 -157	-92 -138	-73 -119	-54 -100	-35 -81	-16 -62	2 -43	21 -24	40 -5
70	119.00	bu	-105 -152	-83 -129	-61 -107	-39 -85	-16 -63	5 -41	27 -18	49 3	71 25	94 47	116 69
80	136.00	bu	-62 -108	-36 -83	-11 -57	14 -32	39 -7	64 18	90 43	115 69	140 94	166 119	191 145
90	153.00	bu	-18 -64	10 -36	38 -7	67 20	95 49	124 77	152 106	181 134	209 163	238 191	266 220
100	170.00	bu	25 -21	56 10	88 42	120 73	152 105	183 137	215 168	247 200	278 232	310 264	342 295
110	187.00	bu	68 22	103 57	138 92	173 127	208 161	243 196	278 231	312 266	347 301	382 336	417 371
120	204.00	bu	112 66	150 104	188 142	226 180	264 218	302 256	340 294	378 332	416 370	454 408	492 446
130	221.00	bu	156 109	197 150	238 192	279 233	320 274	362 315	403 356	444 398	485 439	527 480	568 521
140	238.00	bu	199 153	244 197	288 242	332 286	377 330	421 375	466 419	510 463	554 508	599 552	643 597
150	255.00	bu	243 196	290 244	338 292	386 339	433 387	481 434	528 482	576 529	623 577	671 624	718 672

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 16.A Estimated costs per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 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	1.0000	7.00	_____
FERTILIZERS					
DAP	cwt	20.99	1.3000	27.29	_____
Potash (60% K2O)	cwt	22.11	1.0000	22.11	_____
UAN + Sulfur (28%)	gal	1.61	38.2883	61.64	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
2,4-D Amine 4	pt	2.25	2.0000	4.50	_____
Select Max	pt	12.74	1.0000	12.74	_____
Lexar	pt	7.55	6.0000	45.30	_____
INSECTICIDES					
Sivanto Prime	oz	2.67	8.0000	21.36	_____
Karate Z	oz	2.52	1.5000	3.78	_____
Prevathon	oz	1.05	14.0000	14.70	_____
SEED/PLANTS					
Sorghum Concept+ Po	lb	3.82	4.5000	17.19	_____
ADJUVANTS					
Surfactant	pt	3.30	0.3000	0.99	_____
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Sorghum Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.2915	4.27	_____
Harvesters	hour	14.68	0.1021	1.50	_____
Self-Propelled	hour	14.68	0.0661	0.95	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0330	0.30	_____
UNALLOCATED LABOR					
	hour	14.64	0.4138	6.06	_____
DIESEL FUEL					
Tractors	gal	1.53	3.3766	5.17	_____
Harvesters	gal	1.53	1.3935	2.13	_____
Self-Propelled	gal	1.53	0.8505	1.30	_____
REPAIR & MAINTENANCE					
Implements	acre	5.46	1.0000	5.46	_____
Tractors	acre	2.13	1.0000	2.13	_____
Harvesters	acre	4.16	1.0000	4.16	_____
Self-Propelled	acre	1.05	1.0000	1.05	_____
INTEREST ON OP. CAP.	acre	6.65	1.0000	6.65	_____
TOTAL DIRECT EXPENSES				351.13	_____
FIXED EXPENSES					
Implements	acre	10.19	1.0000	10.19	_____
Tractors	acre	12.94	1.0000	12.94	_____
Harvesters	acre	15.93	1.0000	15.93	_____
Self-Propelled	acre	6.60	1.0000	6.60	_____
TOTAL FIXED EXPENSES				45.66	_____
TOTAL SPECIFIED EXPENSES				396.79	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 16.B Summary of estimated costs and returns per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Grain Sorghum	bu	3.55	100.0000	355.00	_____
				-----	
TOTAL INCOME				355.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_____
FERTILIZERS	acre	111.04	1.0000	111.04	_____
HERBICIDES	acre	66.70	1.0000	66.70	_____
INSECTICIDES	acre	39.84	1.0000	39.84	_____
SEED/PLANTS	acre	17.19	1.0000	17.19	_____
ADJUVANTS	acre	0.99	1.0000	0.99	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1772	1.61	_____
OPERATOR LABOR	hour	14.68	0.4598	6.72	_____
UNALLOCATED LABOR	hour	14.64	0.4138	6.06	_____
DIESEL FUEL	gal	1.53	5.6208	8.60	_____
REPAIR & MAINTENANCE	acre	12.80	1.0000	12.80	_____
INTEREST ON OP. CAP.	acre	6.65	1.0000	6.65	_____
				-----	
TOTAL DIRECT EXPENSES				351.13	_____
RETURNS ABOVE DIRECT EXPENSES				3.87	_____
TOTAL FIXED EXPENSES				45.66	_____
				-----	
TOTAL SPECIFIED EXPENSES				396.79	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-41.79	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 16.C Estimated resource use for field operations, per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 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	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Disk Harrow	32'	MFWD 225	0.061	1.00	Nov		0.06	0.06	0.06	0.05
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.3000				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Apr		0.04	0.04	0.08	0.03
DAP	cwt					1.3000				
Potash (60% K2O)	cwt					1.0000				
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Apr		0.04	0.04	0.04	0.04
Plant - Folding	12R-30	MFWD 225	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Sorghum Concept+ Po	lb					4.5000				
Sprayer 800gal	80' 250hp		0.013	1.00	Apr			0.01	0.01	0.01
Lexar	pt					6.0000				
Sorghum Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	gal					38.2883				
Sprayer 800gal	80' 250hp		0.013	1.00	Jun			0.01	0.01	0.01
Sivanto Prime	oz					4.0000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Karate Z	oz					1.5000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Prevathon	oz					14.0000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Sivanto Prime	oz					4.0000				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Sorghum	bu					100.0000				
TOTALS							0.45	0.39	0.63	0.41

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 16.D Estimated costs for field operations, per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 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	31.60						1.26	32.86	32.86
Disk Harrow	32'		1.09	1.50	1.71			0.16	4.46	4.85
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
Surfactant	pt	0.99						0.03	1.02	1.02
Spin Spreader	5 ton		0.75	0.58	1.56			0.06	2.95	2.40
DAP	cwt	27.29						0.55	27.84	27.84
Potash (60% K2O)	cwt	22.11						0.44	22.55	22.55
Field Cultivate Fld	32'		0.83	0.85	1.30			0.06	3.04	4.14
Plant - Folding	12R-30		1.11	2.15	2.32			0.11	5.69	5.90
Sorghum Concept+ Po	lb	17.19						0.34	17.53	17.53
Sprayer 800gal	80' 250hp		0.26	0.21	0.42			0.02	0.91	1.32
Lexar	pt	45.30						0.91	46.21	46.21
Sorghum Consultant	acre	6.00						0.10	6.10	6.10
Fert Appl (Liquid)	12R-30		1.39	1.86	2.55			0.10	5.90	4.90
UAN + Sulfur (28%)	gal	61.64						1.03	62.67	62.67
Sprayer 800gal	80' 250hp		0.26	0.21	0.42			0.01	0.90	1.32
Sivanto Prime	oz	10.68						0.14	10.82	10.82
Sprayer 800gal	80' 250hp		0.26	0.21	0.42			0.01	0.90	1.32
Karate Z	oz	3.78						0.04	3.82	3.82
Sprayer 800gal	80' 250hp		0.26	0.21	0.42			0.01	0.90	1.32
Prevathon	oz	14.70						0.15	14.85	14.85
Sprayer 800gal	80' 250hp		0.26	0.21	0.42			0.01	0.90	1.32
Sivanto Prime	oz	10.68						0.11	10.79	10.79
Header Wheat/Sorghum	25' Rigid		2.13	4.81	2.85			0.03	9.82	16.87
Haul Sorghum	bu	25.00						0.08	25.08	25.08
TOTALS		308.69	8.60	12.80	14.39	0.00	6.65	351.13	45.66	396.79

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 16.E Estimated monthly income and expense flows per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, 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	355.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	49.40	61.64	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.40	0.00	45.30	0.00	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	10.68	29.16	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	17.19	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	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	25.00
CUSTOM LIME	31.60	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	6.00	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	0.00	1.71	0.00	0.00	0.00	0.00	5.60	2.55	0.42	1.26	0.00	2.85
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	1.09	0.00	0.00	0.00	0.00	2.95	1.39	0.26	0.78	0.00	2.13
REPAIR & MAINTENANCE	0.00	1.50	0.00	0.00	0.00	0.00	3.79	1.86	0.21	0.63	0.00	4.81
INTEREST ON OP. CAP.	1.39	0.16	0.00	0.00	0.79	0.00	2.49	1.23	0.15	0.33	0.00	0.11
TOTAL DIRECT EXPENSES	36.32	4.46	0.00	0.00	30.18	0.00	126.72	74.67	11.72	32.16	0.00	34.90
NET INCOME	-36.32	-4.46	0.00	0.00	-30.18	0.00	-126.72	-74.67	-11.72	-32.16	0.00	320.10
NET INCOME TO DATE	-36.32	-40.78	-40.78	-40.78	-70.96	-70.96	-197.68	-272.35	-284.07	-316.23	-316.23	3.87

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 16.F Estimated returns for various price/yield combinations, per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Grain Sorghum			2.66	2.84	3.01	3.19	3.37	3.55	3.72	3.90	4.08	4.26	4.43
PERCENT	YIELD	UNIT	-----dollars-----										
50	50.00	bu	-205	-196	-187	-178	-169	-161	-152	-143	-134	-125	-116
			-251	-242	-233	-224	-215	-206	-197	-189	-180	-171	-162
60	60.00	bu	-181	-170	-160	-149	-138	-128	-117	-106	-96	-85	-74
			-227	-216	-205	-195	-184	-173	-163	-152	-141	-131	-120
70	70.00	bu	-157	-144	-132	-119	-107	-95	-82	-70	-57	-45	-32
			-202	-190	-178	-165	-153	-140	-128	-115	-103	-91	-78
80	80.00	bu	-133	-118	-104	-90	-76	-62	-47	-33	-19	-5	8
			-178	-164	-150	-136	-121	-107	-93	-79	-65	-50	-36
90	90.00	bu	-108	-93	-77	-61	-45	-29	-13	2	18	34	50
			-154	-138	-122	-106	-90	-74	-58	-42	-26	-10	5
100	100.00	bu	-84	-67	-49	-31	-13	3	21	39	57	74	92
			-130	-112	-95	-77	-59	-41	-24	-6	11	29	46
110	110.00	bu	-60	-41	-21	-2	17	36	56	75	95	114	134
			-106	-86	-67	-47	-28	-8	10	30	49	69	88
120	120.00	bu	-36	-15	5	27	48	69	91	112	133	155	176
			-82	-61	-39	-18	2	24	45	66	88	109	130
130	130.00	bu	-12	10	33	56	79	102	125	148	172	195	218
			-58	-35	-12	11	34	57	80	103	126	149	172
140	140.00	bu	11	36	61	86	110	135	160	185	210	235	260
			-34	-9	15	40	65	90	115	139	164	189	214
150	150.00	bu	35	62	88	115	142	168	195	222	248	275	301
			-9	16	43	69	96	123	149	176	203	229	256

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 17.A Estimated costs per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 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	2.0000	14.00	_____
App by Air ( 3 gal)	appl	5.50	1.0000	5.50	_____
FERTILIZERS					
DAP	cwt	20.99	1.0000	20.99	_____
Potash (60% K2O)	cwt	22.11	0.7500	16.58	_____
Fert 41-0-0-4	cwt	18.22	3.0480	55.53	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	4.5000	21.38	_____
Prosaro	oz	2.42	8.0000	19.36	_____
HERBICIDES					
Axiom	oz	1.94	10.0000	19.40	_____
Harmony Extra SG	oz	11.06	0.7500	8.30	_____
Axial XL	oz	1.15	16.4000	18.86	_____
INSECTICIDES					
Karate Z	oz	2.52	1.5000	3.78	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.28	90.0000	25.20	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	3.0480	22.86	_____
HAULING					
Haul Wheat	bu	0.26	70.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Wheat Consultant	acre	5.50	1.0000	5.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.2129	3.12	_____
Harvesters	hour	14.68	0.1021	1.50	_____
HAND LABOR					
Implements	hour	9.06	0.1049	0.95	_____
UNALLOCATED LABOR					
	hour	14.67	0.2521	3.70	_____
DIESEL FUEL					
Tractors	gal	1.53	2.4667	3.78	_____
Harvesters	gal	1.53	1.3935	2.13	_____
REPAIR & MAINTENANCE					
Implements	acre	4.09	1.0000	4.09	_____
Tractors	acre	1.56	1.0000	1.56	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	7.30	1.0000	7.30	_____
TOTAL DIRECT EXPENSES				342.67	_____
FIXED EXPENSES					
Implements	acre	8.64	1.0000	8.64	_____
Tractors	acre	9.45	1.0000	9.45	_____
Harvesters	acre	15.93	1.0000	15.93	_____
TOTAL FIXED EXPENSES				34.02	_____
TOTAL SPECIFIED EXPENSES				376.69	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 17.B Summary of estimated costs and returns per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	5.75	70.0000	402.50	_____
				-----	
TOTAL INCOME				402.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
FERTILIZERS	acre	93.11	1.0000	93.11	_____
FUNGICIDES	acre	40.74	1.0000	40.74	_____
HERBICIDES	acre	46.56	1.0000	46.56	_____
INSECTICIDES	acre	3.78	1.0000	3.78	_____
SEED/PLANTS	acre	25.20	1.0000	25.20	_____
CUSTOM FERTILIZE	acre	22.86	1.0000	22.86	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	5.50	1.0000	5.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1049	0.95	_____
OPERATOR LABOR	hour	14.68	0.3151	4.62	_____
UNALLOCATED LABOR	hour	14.67	0.2521	3.70	_____
DIESEL FUEL	gal	1.53	3.8602	5.91	_____
REPAIR & MAINTENANCE	acre	9.81	1.0000	9.81	_____
INTEREST ON OP. CAP.	acre	7.30	1.0000	7.30	_____
				-----	
TOTAL DIRECT EXPENSES				342.67	_____
RETURNS ABOVE DIRECT EXPENSES				59.83	_____
TOTAL FIXED EXPENSES				34.02	_____
				-----	
TOTAL SPECIFIED EXPENSES				376.69	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				25.81	_____

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 17.C Estimated resource use for field operations, per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 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	Sep	0.3330				
Lime (Spread)	ton			0.33	Sep	0.6660				
Disk Harrow	32'	MFWD 225	0.061	1.00	Sep		0.06	0.06	0.06	0.04
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Sep		0.04	0.04	0.08	0.03
DAP	cwt					1.0000				
Potash (60% K2O)	cwt					0.7500				
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Sep		0.04	0.04	0.04	0.03
Grain Drill	30'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.12	0.05
Wheat Seed Private	lb					90.0000				
CruiserMaxx Vibrance	oz					4.5000				
Wheat Consultant	acre			1.00	Oct	1.0000				
App by Air ( 5 gal)	appl			1.00	Nov	1.0000				
Axiom	oz					10.0000				
App by Air ( 3 gal)	appl			1.00	Feb	1.0000				
Karate Z	oz					1.5000				
Harmony Extra SG	oz					0.7500				
Axial XL	oz					16.4000				
App Fert by Air	cwt			1.00	Feb	1.5240				
Fert 41-0-0-4	cwt					1.5240				
App Fert by Air	cwt			1.00	Mar	1.5240				
Fert 41-0-0-4	cwt					1.5240				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Prosaro	oz					8.0000				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Jun		0.10	0.10	0.10	0.08
Haul Wheat	bu					70.0000				
TOTALS							0.31	0.31	0.42	0.25

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 17.D Estimated costs for field operations, per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 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						0.11	3.44	3.44
Lime (Spread)	ton	31.60						1.05	32.65	32.65
Disk Harrow	32'		1.09	1.50	1.62			0.14	4.35	4.85
Spin Spreader	5 ton		0.75	0.58	1.49			0.09	2.91	2.40
DAP	cwt	20.99						0.70	21.69	21.69
Potash (60% K2O)	cwt	16.58						0.55	17.13	17.13
Field Cultivate Fld	32'		0.83	0.85	1.23			0.10	3.01	4.14
Grain Drill	30'		1.11	2.07	2.23			0.16	5.57	5.76
Wheat Seed Private	lb	25.20						0.76	25.96	25.96
CruiserMaxx Vibrance	oz	21.38						0.64	22.02	22.02
Wheat Consultant	acre	5.50						0.17	5.67	5.67
App by Air ( 5 gal)	appl	7.00						0.19	7.19	7.19
Axiom	oz	19.40						0.52	19.92	19.92
App by Air ( 3 gal)	appl	5.50						0.09	5.59	5.59
Karate Z	oz	3.78						0.06	3.84	3.84
Harmony Extra SG	oz	8.30						0.14	8.44	8.44
Axial XL	oz	18.86						0.31	19.17	19.17
App Fert by Air	cwt	11.43						0.19	11.62	11.62
Fert 41-0-0-4	cwt	27.77						0.46	28.23	28.23
App Fert by Air	cwt	11.43						0.15	11.58	11.58
Fert 41-0-0-4	cwt	27.77						0.37	28.14	28.14
App by Air ( 5 gal)	appl	7.00						0.07	7.07	7.07
Prosaro	oz	19.36						0.19	19.55	19.55
Header Wheat/Sorghum	25' Rigid		2.13	4.81	2.70			0.03	9.67	16.87
Haul Wheat	bu	18.20						0.06	18.26	18.26
TOTALS		310.38	5.91	9.81	9.27	0.00	7.30	342.67	34.02	376.69

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 17.E Estimated monthly income and expense flows per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2021

ITEM	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
-----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	402.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	5.50	0.00	7.00	0.00	0.00
FERTILIZERS	0.00	0.00	37.57	0.00	0.00	0.00	0.00	27.77	27.77	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	21.38	0.00	0.00	0.00	0.00	0.00	19.36	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	19.40	0.00	0.00	27.16	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.78	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	25.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.43	11.43	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	18.20
CUSTOM LIME	0.00	0.00	31.60	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	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	4.34	2.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.70
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	2.67	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.13
REPAIR & MAINTENANCE	0.00	0.00	2.93	2.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.81
INTEREST ON OP. CAP.	0.00	0.00	2.74	1.73	0.71	0.00	0.00	1.25	0.52	0.26	0.00	0.09
TOTAL DIRECT EXPENSES	0.00	0.00	85.18	59.22	27.11	0.00	0.00	76.89	39.72	26.62	0.00	27.93
NET INCOME	0.00	0.00	-85.18	-59.22	-27.11	0.00	0.00	-76.89	-39.72	-26.62	0.00	374.57
NET INCOME TO DATE	0.00	0.00	-85.18	-144.40	-171.51	-171.51	-171.51	-248.40	-288.12	-314.74	-314.74	59.83

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

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.



Table 17.F Estimated returns for various price/yield combinations, per acre  
Wheat followed by soybeans, 70 bu yield goal  
All Areas, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Wheat			4.31	4.60	4.88	5.17	5.46	5.75	6.03	6.32	6.61	6.90	7.18
PERCENT			dollars										
YIELD	UNIT												
50	35.00	bu	-182	-172	-162	-152	-142	-132	-122	-112	-102	-92	-81
			-216	-206	-196	-186	-176	-166	-156	-146	-136	-126	-115
60	42.00	bu	-154	-142	-130	-118	-105	-93	-81	-69	-57	-45	-33
			-188	-176	-164	-152	-139	-127	-115	-103	-91	-79	-67
70	49.00	bu	-125	-111	-97	-83	-69	-55	-41	-27	-13	0	14
			-159	-145	-131	-117	-103	-89	-75	-61	-47	-33	-19
80	56.00	bu	-97	-81	-65	-49	-33	-17	-0	15	31	47	63
			-131	-115	-99	-83	-67	-51	-34	-18	-2	13	29
90	63.00	bu	-69	-51	-32	-14	3	21	39	57	75	93	111
			-103	-85	-66	-48	-30	-12	5	23	41	59	77
100	70.00	bu	-40	-20	-0	19	39	59	79	100	120	140	160
			-74	-54	-34	-14	5	25	45	66	86	106	126
110	77.00	bu	-12	9	31	53	76	98	120	142	164	186	208
			-46	-24	-2	19	42	64	86	108	130	152	174
120	84.00	bu	15	40	64	88	112	136	160	184	209	233	257
			-18	6	30	54	78	102	126	150	175	199	223
130	91.00	bu	44	70	96	122	148	175	201	227	253	279	305
			10	36	62	88	114	141	167	193	219	245	271
140	98.00	bu	72	100	129	157	185	213	241	269	298	326	354
			38	66	94	123	151	179	207	235	264	292	320
150	105.00	bu	101	131	161	191	221	251	282	312	342	372	402
			66	97	127	157	187	217	248	278	308	338	368

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 18.A Estimated costs per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	5.30	5.5000	29.15	_____
Abound	oz	1.83	36.0000	65.88	_____
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.11	4.0000	8.44	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Valor SX	oz	4.51	3.0000	13.53	_____
Storm	pt	11.91	1.5000	17.87	_____
Cadre	oz	2.90	4.0000	11.60	_____
Butyrac 200 (2,4-DB)	pt	3.64	2.0000	7.28	_____
Select Max	pt	12.74	1.0000	12.74	_____
INSECTICIDES					
Admire Pro	oz	1.80	9.0000	16.20	_____
Acephate 90%	lb	6.94	0.1375	0.95	_____
SEED/PLANTS					
Peanut Seed	lb	0.87	125.0000	108.75	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	2.90	6.0000	17.40	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.6200	29.16	_____
DRYING					
Dry Peanuts	ton	24.00	1.1400	27.36	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	_____
INOCULANT					
Optimize LIFT	oz	0.53	14.8000	7.84	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	1.6246	23.84	_____
Self-Propelled	hour	14.68	0.1983	2.92	_____
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	14.70	1.4583	21.45	_____
DIESEL FUEL					
Tractors	gal	1.53	17.7898	27.22	_____
Self-Propelled	gal	1.53	1.7850	2.70	_____
REPAIR & MAINTENANCE					
Implements	acre	13.01	1.0000	13.01	_____
Tractors	acre	11.13	1.0000	11.13	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	5.69	1.0000	5.69	_____
TOTAL DIRECT EXPENSES				523.92	_____
FIXED EXPENSES					
Implements	acre	41.21	1.0000	41.21	_____
Tractors	acre	67.88	1.0000	67.88	_____
Self-Propelled	acre	14.63	1.0000	14.63	_____
TOTAL FIXED EXPENSES				123.72	_____
TOTAL SPECIFIED EXPENSES				647.64	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 18.B Summary of estimated costs and returns per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	_____
				-----	
TOTAL INCOME				760.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	_____
HERBICIDES	acre	84.79	1.0000	84.79	_____
INSECTICIDES	acre	17.15	1.0000	17.15	_____
SEED/PLANTS	acre	108.75	1.0000	108.75	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
INOCULANT	acre	7.84	1.0000	7.84	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	14.68	1.8229	26.76	_____
UNALLOCATED LABOR	hour	14.70	1.4583	21.45	_____
DIESEL FUEL	gal	1.53	19.5748	29.92	_____
REPAIR & MAINTENANCE	acre	26.39	1.0000	26.39	_____
INTEREST ON OP. CAP.	acre	5.69	1.0000	5.69	_____
				-----	
TOTAL DIRECT EXPENSES				523.92	_____
RETURNS ABOVE DIRECT EXPENSES				236.08	_____
TOTAL FIXED EXPENSES				123.72	_____
				-----	
TOTAL SPECIFIED EXPENSES				647.64	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				112.36	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 18.C Estimated resource use for field operations, per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch  
 All Areas, 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	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Plt&Pre Rigid	8R-38	MFWD 225	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	4R-38	MFWD 190	0.186	1.00	Sep		0.18	0.18	0.18	0.14
Peanut Harvester	4R-38	MFWD 225	0.934	1.00	Sep		0.93	0.93	0.93	0.74
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.82	1.62	2.04	1.45

Note: Cost of production estimates are based on 2020 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 18.D Estimated costs for field operations, per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch  
 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						0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30	2.31
Glyphosate 3lbs a.e	pt	8.44						0.17	8.61		8.61
Lime (Spread)	ton	15.80						0.32	16.12		16.12
Bed-Rip/Disk Fold.	8R-38		1.09	0.61	1.93			0.06	3.69	3.47	7.16
Peanut Plt&Pre Rigid	8R-38		2.14	2.95	4.28			0.16	9.53	9.17	18.70
Peanut Seed	lb	108.75						1.81	110.56		110.56
Optimize LIFT	oz	7.84						0.13	7.97		7.97
Admire Pro	oz	16.20						0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33						0.22	13.55		13.55
Valor SX	oz	13.53						0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13				0.24	0.33	0.57
Acephate 90%	lb	0.95						0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Storm	pt	17.87						0.24	18.11		18.11
Cadre	oz	11.60						0.15	11.75		11.75
Butyrac 200 (2,4-DB)	pt	3.64						0.05	3.69		3.69
Crop Oil Conc.(Veg.)	pt	5.80						0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95						0.11	8.06		8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Abound	oz	32.94						0.33	33.27		33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	pt	3.64						0.04	3.68		3.68
Crop Oil Conc.(Veg.)	pt	5.80						0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Select Max	pt	12.74						0.13	12.87		12.87
Crop Oil Conc.(Veg.)	pt	5.80						0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	5.30						0.05	5.35		5.35
Tebuconazole 3.6	oz	5.11						0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Abound	oz	32.94						0.22	33.16		33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95						0.05	8.00		8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55				0.99	1.30	2.29
Bravo Weather Stick	pt	7.95						0.03	7.98		7.98
Peanut Dig/Invertor	4R-38		2.79	2.68	4.92			0.03	10.42	8.67	19.09
Peanut Harvester	4R-38		16.56	15.01	24.70			0.19	56.46	72.44	128.90
Dry Peanuts	ton	27.36						0.09	27.45		27.45
Cleaning Peanuts	ton	29.16						0.10	29.26		29.26
Peanut Dump Cart	6-Row		4.64	2.89	8.19			0.05	15.77	15.34	31.11
TOTALS		411.72	29.92	26.39	50.20	0.00	5.69	523.92	123.72	647.64	

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 18.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch  
 All Areas, 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	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	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	7.84	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.55	6.89	1.10	2.20	1.10	38.36
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	0.24	3.53	0.48	0.96	0.48	24.23
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	3.81	0.40	0.80	0.40	20.78
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.58	2.92	0.65	0.76	0.29	0.49
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.14	177.75	49.49	76.05	43.16	148.33
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-177.75	-49.49	-76.05	-43.16	611.67
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-206.89	-256.38	-332.43	-375.59	236.08

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 18.F Estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	0.95	ton	-210 -334	-191 -315	-172 -296	-153 -277	-134 -258	-115 -239	-96 -220	-77 -201	-58 -182	-39 -163	-20 -144
60	1.14	ton	-159 -282	-136 -260	-113 -237	-90 -214	-68 -191	-45 -168	-22 -146	0 -123	23 -100	45 -77	68 -54
70	1.33	ton	-107 -231	-81 -205	-54 -178	-28 -151	-1 -125	25 -98	51 -72	78 -45	104 -18	131 7	158 34
80	1.52	ton	-56 -180	-26 -149	4 -119	34 -89	65 -58	95 -28	125 2	156 32	186 62	217 93	247 123
90	1.71	ton	-5 -128	28 -94	63 -60	97 -26	131 7	165 42	199 76	234 110	268 144	302 178	336 213
100	1.90	ton	46 -77	84 -39	122 -1	160 36	198 74	236 112	274 150	312 188	350 226	388 264	426 302
110	2.09	ton	97 -26	139 15	181 57	222 99	264 140	306 182	348 224	390 266	431 308	473 349	515 391
120	2.28	ton	148 25	194 70	239 116	285 161	331 207	376 253	422 298	467 344	513 389	559 435	604 481
130	2.47	ton	200 76	249 125	298 175	348 224	397 273	447 323	496 372	545 422	595 471	644 520	694 570
140	2.66	ton	251 127	304 180	357 234	410 287	464 340	517 393	570 446	623 500	676 553	730 606	783 659
150	2.85	ton	302 179	359 236	416 293	473 350	530 407	587 464	644 521	701 578	758 635	815 692	872 749

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 19.A Estimated costs per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin  
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	5.30	5.5000	29.15	_____
Abound	oz	1.83	36.0000	65.88	_____
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.11	4.0000	8.44	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Valor SX	oz	4.51	3.0000	13.53	_____
Storm	pt	11.91	1.5000	17.87	_____
Cadre	oz	2.90	4.0000	11.60	_____
Butyrac 200 (2,4-DB)	pt	3.64	2.0000	7.28	_____
Select Max	pt	12.74	1.0000	12.74	_____
INSECTICIDES					
Admire Pro	oz	1.80	9.0000	16.20	_____
Acephate 90%	lb	6.94	0.1375	0.95	_____
SEED/PLANTS					
Peanut Seed	lb	0.87	125.0000	108.75	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	2.90	6.0000	17.40	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.6200	29.16	_____
DRYING					
Dry Peanuts	ton	24.00	1.1400	27.36	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	_____
INOCULANT					
Optimize LIFT	oz	0.53	29.6000	15.69	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	1.6246	23.84	_____
Self-Propelled	hour	14.68	0.1983	2.92	_____
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	14.70	1.4583	21.45	_____
DIESEL FUEL					
Tractors	gal	1.53	17.7898	27.22	_____
Self-Propelled	gal	1.53	1.7850	2.70	_____
REPAIR & MAINTENANCE					
Implements	acre	16.76	1.0000	16.76	_____
Tractors	acre	11.13	1.0000	11.13	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	5.88	1.0000	5.88	_____
TOTAL DIRECT EXPENSES				535.71	_____
FIXED EXPENSES					
Implements	acre	48.04	1.0000	48.04	_____
Tractors	acre	67.88	1.0000	67.88	_____
Self-Propelled	acre	14.63	1.0000	14.63	_____
TOTAL FIXED EXPENSES				130.55	_____
TOTAL SPECIFIED EXPENSES				666.26	_____

Note: Cost of production estimates are based on 2020 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.



Table 19.B Summary of estimated costs and returns per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin  
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	_____
				-----	
TOTAL INCOME				760.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	_____
HERBICIDES	acre	84.79	1.0000	84.79	_____
INSECTICIDES	acre	17.15	1.0000	17.15	_____
SEED/PLANTS	acre	108.75	1.0000	108.75	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
INOCULANT	acre	15.69	1.0000	15.69	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	14.68	1.8229	26.76	_____
UNALLOCATED LABOR	hour	14.70	1.4583	21.45	_____
DIESEL FUEL	gal	1.53	19.5748	29.92	_____
REPAIR & MAINTENANCE	acre	30.14	1.0000	30.14	_____
INTEREST ON OP. CAP.	acre	5.88	1.0000	5.88	_____
				-----	
TOTAL DIRECT EXPENSES				535.71	_____
RETURNS ABOVE DIRECT EXPENSES				224.29	_____
TOTAL FIXED EXPENSES				130.55	_____
				-----	
TOTAL SPECIFIED EXPENSES				666.26	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				93.74	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 19.C Estimated resource use for field operations, per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin  
 All Areas, 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	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Rigid	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Ptl&PreTwin	8R-30/40	MFWD 225	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					29.6000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	4R-38	MFWD 190	0.186	1.00	Sep		0.18	0.18	0.18	0.14
Peanut Harvester	4R-38	MFWD 225	0.934	1.00	Sep		0.93	0.93	0.93	0.74
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.82	1.62	2.04	1.45

Note: Cost of production estimates are based on 2020 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 19.D Estimated costs for field operations, per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin  
 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						0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30	2.31
Glyphosate 3lbs a.e	pt	8.44						0.17	8.61		8.61
Lime (Spread)	ton	15.80						0.32	16.12		16.12
Bed-Rip/Disk Rigid	8R-38		1.09	0.59	1.93			0.06	3.67	3.35	7.02
Peanut Ptl&PreTwin	8R-30/40		2.14	6.72	4.28			0.22	13.36	16.12	29.48
Peanut Seed	lb	108.75						1.81	110.56		110.56
Optimize LIFT	oz	15.69						0.26	15.95		15.95
Admire Pro	oz	16.20						0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33						0.22	13.55		13.55
Valor SX	oz	13.53						0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13				0.24	0.33	0.57
Acephate 90%	lb	0.95						0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Storm	pt	17.87						0.24	18.11		18.11
Cadre	oz	11.60						0.15	11.75		11.75
Butyrac 200 (2,4-DB)	pt	3.64						0.05	3.69		3.69
Crop Oil Conc.(Veg.)	pt	5.80						0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95						0.11	8.06		8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Abound	oz	32.94						0.33	33.27		33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	pt	3.64						0.04	3.68		3.68
Crop Oil Conc.(Veg.)	pt	5.80						0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Select Max	pt	12.74						0.13	12.87		12.87
Crop Oil Conc.(Veg.)	pt	5.80						0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	5.30						0.05	5.35		5.35
Tebuconazole 3.6	oz	5.11						0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Abound	oz	32.94						0.22	33.16		33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95						0.05	8.00		8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55				0.99	1.30	2.29
Bravo Weather Stick	pt	7.95						0.03	7.98		7.98
Peanut Dig/Invertor	4R-38		2.79	2.68	4.92			0.03	10.42	8.67	19.09
Peanut Harvester	4R-38		16.56	15.01	24.70			0.19	56.46	72.44	128.90
Dry Peanuts	ton	27.36						0.09	27.45		27.45
Cleaning Peanuts	ton	29.16						0.10	29.26		29.26
Peanut Dump Cart	6-Row		4.64	2.89	8.19			0.05	15.77	15.34	31.11
TOTALS		419.57	29.92	30.14	50.20	0.00	5.88	535.71	130.55	666.26	

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 19.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin  
 All Areas, 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	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	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	15.69	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.55	6.89	1.10	2.20	1.10	38.36
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	0.24	3.53	0.48	0.96	0.48	24.23
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	7.56	0.40	0.80	0.40	20.78
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.58	3.11	0.65	0.76	0.29	0.49
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.14	189.54	49.49	76.05	43.16	148.33
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-189.54	-49.49	-76.05	-43.16	611.67
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-218.68	-268.17	-344.22	-387.38	224.29

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 19.F Estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin  
 All Areas, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	0.95	ton	-222 -352	-203 -333	-184 -314	-165 -295	-146 -276	-127 -257	-108 -238	-89 -219	-70 -200	-51 -181	-32 -162
60	1.14	ton	-171 -301	-148 -278	-125 -255	-102 -233	-79 -210	-57 -187	-34 -164	-11 -141	11 -119	34 -96	56 -73
70	1.33	ton	-119 -250	-93 -223	-66 -197	-39 -170	-13 -143	13 -117	39 -90	66 -64	93 -37	119 -10	146 15
80	1.52	ton	-68 -198	-37 -168	-7 -138	22 -107	53 -77	83 -46	114 -16	144 13	174 44	205 74	235 105
90	1.71	ton	-17 -147	17 -113	51 -79	85 -44	119 -10	153 23	188 57	222 91	256 126	290 160	324 194
100	1.90	ton	34 -96	72 -58	110 -20	148 17	186 55	224 93	262 131	300 169	338 207	376 245	414 283
110	2.09	ton	85 -44	127 -3	169 38	211 80	252 122	294 164	336 205	378 247	420 289	461 331	503 373
120	2.28	ton	136 6	182 51	228 97	273 143	319 188	364 234	410 279	456 325	501 371	547 416	592 462
130	2.47	ton	188 57	237 107	287 156	336 205	385 255	435 304	484 354	534 403	583 452	632 502	682 551
140	2.66	ton	239 109	292 162	346 215	399 268	452 321	505 375	558 428	612 481	665 534	718 587	771 641
150	2.85	ton	290 160	347 217	404 274	461 331	518 388	575 445	632 502	689 559	746 616	803 673	860 730

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 20.A Estimated costs per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	5.30	5.5000	29.15	_____
Abound	oz	1.83	36.0000	65.88	_____
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.11	4.0000	8.44	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Valor SX	oz	4.51	3.0000	13.53	_____
Storm	pt	11.91	1.5000	17.87	_____
Cadre	oz	2.90	4.0000	11.60	_____
Butyrac 200 (2,4-DB)	pt	3.64	2.0000	7.28	_____
Select Max	pt	12.74	1.0000	12.74	_____
INSECTICIDES					
Admire Pro	oz	1.80	9.0000	16.20	_____
Acephate 90%	lb	6.94	0.1375	0.95	_____
SEED/PLANTS					
Peanut Seed	lb	0.87	125.0000	108.75	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	2.90	6.0000	17.40	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.6200	29.16	_____
DRYING					
Dry Peanuts	ton	24.00	1.1400	27.36	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	_____
INOCULANT					
Optimize LIFT	oz	0.53	14.8000	7.84	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	1.1856	17.41	_____
Self-Propelled	hour	14.68	0.1983	2.92	_____
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	14.70	1.1072	16.28	_____
DIESEL FUEL					
Tractors	gal	1.53	12.9499	19.81	_____
Self-Propelled	gal	1.53	1.7850	2.70	_____
REPAIR & MAINTENANCE					
Implements	acre	10.21	1.0000	10.21	_____
Tractors	acre	8.11	1.0000	8.11	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	5.56	1.0000	5.56	_____
TOTAL DIRECT EXPENSES				498.60	_____
FIXED EXPENSES					
Implements	acre	34.41	1.0000	34.41	_____
Tractors	acre	49.41	1.0000	49.41	_____
Self-Propelled	acre	14.63	1.0000	14.63	_____
TOTAL FIXED EXPENSES				98.45	_____
TOTAL SPECIFIED EXPENSES				597.05	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 20.B Summary of estimated costs and returns per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	_____
				-----	
TOTAL INCOME				760.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	_____
HERBICIDES	acre	84.79	1.0000	84.79	_____
INSECTICIDES	acre	17.15	1.0000	17.15	_____
SEED/PLANTS	acre	108.75	1.0000	108.75	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
INOCULANT	acre	7.84	1.0000	7.84	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
OPERATOR LABOR	hour	14.68	1.3840	20.33	_____
UNALLOCATED LABOR	hour	14.70	1.1072	16.28	_____
DIESEL FUEL	gal	1.53	14.7349	22.51	_____
REPAIR & MAINTENANCE	acre	20.57	1.0000	20.57	_____
INTEREST ON OP. CAP.	acre	5.56	1.0000	5.56	_____
				-----	
TOTAL DIRECT EXPENSES				498.60	_____
RETURNS ABOVE DIRECT EXPENSES				261.40	_____
TOTAL FIXED EXPENSES				98.45	_____
				-----	
TOTAL SPECIFIED EXPENSES				597.05	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				162.95	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 20.C Estimated resource use for field operations, per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch  
 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	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00	May		0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 225	0.080	1.00	May		0.08	0.08	0.16	0.06
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
<b>TOTALS</b>							<b>1.38</b>	<b>1.18</b>	<b>1.56</b>	<b>1.10</b>

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.



Table 20.D Estimated costs for field operations, per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch  
 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						0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30	2.31
Glyphosate 3lbs a.e	pt	8.44						0.17	8.61		8.61
Lime (Spread)	ton	15.80						0.32	16.12		16.12
Bed-Rip/Disk Fold.	12R-38		0.82	0.50	1.22			0.04	2.58	2.75	5.33
Peanut Plt&Pre Fold.	12R-38		1.42	3.39	2.85			0.13	7.79	8.72	16.51
Peanut Seed	lb	108.75						1.81	110.56		110.56
Optimize LIFT	oz	7.84						0.13	7.97		7.97
Admire Pro	oz	16.20						0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33						0.22	13.55		13.55
Valor SX	oz	13.53						0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13				0.24	0.33	0.57
Acephate 90%	lb	0.95						0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Storm	pt	17.87						0.24	18.11		18.11
Cadre	oz	11.60						0.15	11.75		11.75
Butyrac 200 (2,4-DB)	pt	3.64						0.05	3.69		3.69
Crop Oil Conc.(Veg.)	pt	5.80						0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95						0.11	8.06		8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Abound	oz	32.94						0.33	33.27		33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	pt	3.64						0.04	3.68		3.68
Crop Oil Conc.(Veg.)	pt	5.80						0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Select Max	pt	12.74						0.13	12.87		12.87
Crop Oil Conc.(Veg.)	pt	5.80						0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	5.30						0.05	5.35		5.35
Tebuconazole 3.6	oz	5.11						0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Abound	oz	32.94						0.22	33.16		33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95						0.05	8.00		8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55				0.99	1.30	2.29
Bravo Weather Stick	pt	7.95						0.03	7.98		7.98
Peanut Dig/Invertor	6R-38		1.86	1.79	3.28			0.02	6.95	6.29	13.24
Peanut Harvester	6R-38		11.07	9.75	16.52			0.12	37.46	50.72	88.18
Dry Peanuts	ton	27.36						0.09	27.45		27.45
Cleaning Peanuts	ton	29.16						0.10	29.26		29.26
Peanut Dump Cart	6-Row		4.64	2.89	8.19			0.05	15.77	15.34	31.11
TOTALS		411.72	22.51	20.57	38.24	0.00	5.56	498.60	98.45	597.05	

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 20.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch  
 All Areas, 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	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	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	7.84	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.55	4.75	1.10	2.20	1.10	28.54
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	0.24	2.54	0.48	0.96	0.48	17.81
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	4.14	0.40	0.80	0.40	14.63
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.58	2.87	0.65	0.76	0.29	0.41
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.14	174.90	49.49	76.05	43.16	125.86
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-174.90	-49.49	-76.05	-43.16	634.14
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-204.04	-253.53	-329.58	-372.74	261.40

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 20.F Estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	0.95	ton	-185 -283	-166 -264	-147 -245	-128 -226	-109 -207	-90 -188	-71 -169	-52 -150	-33 -131	-14 -112	4 -93
60	1.14	ton	-133 -232	-111 -209	-88 -186	-65 -163	-42 -141	-19 -118	2 -95	25 -72	48 -49	71 -27	94 -4
70	1.33	ton	-82 -181	-55 -154	-29 -127	-2 -101	23 -74	50 -48	77 -21	103 5	130 31	156 58	183 84
80	1.52	ton	-31 -129	-0 -99	29 -68	59 -38	90 -8	120 22	151 52	181 83	211 113	242 143	272 174
90	1.71	ton	20 -78	54 -44	88 -9	122 24	156 58	191 92	225 126	259 161	293 195	327 229	362 263
100	1.90	ton	71 -27	109 10	147 48	185 86	223 124	261 162	299 200	337 238	375 276	413 314	451 352
110	2.09	ton	122 24	164 66	206 107	248 149	289 191	331 233	373 275	415 316	457 358	498 400	540 442
120	2.28	ton	174 75	219 121	265 166	310 212	356 258	402 303	447 349	493 394	538 440	584 486	630 531
130	2.47	ton	225 126	274 176	324 225	373 275	422 324	472 373	521 423	571 472	620 522	669 571	719 620
140	2.66	ton	276 178	329 231	383 284	436 337	489 391	542 444	595 497	649 550	702 603	755 657	808 710
150	2.85	ton	328 229	385 286	442 343	499 400	556 457	613 514	670 571	727 628	784 685	841 742	898 799

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 21.A Estimated costs per acre  
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch  
 Furrow irrigated, All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	5.30	5.5000	29.15	_____
Abound	oz	1.83	36.0000	65.88	_____
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.11	4.0000	8.44	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Valor SX	oz	4.51	3.0000	13.53	_____
Storm	pt	11.91	1.5000	17.87	_____
Cadre	oz	2.90	4.0000	11.60	_____
Butyrac 200 (2,4-DB)	pt	3.64	2.0000	7.28	_____
Select Max	pt	12.74	1.0000	12.74	_____
INSECTICIDES					
Admire Pro	oz	1.80	9.0000	16.20	_____
Acephate 90%	lb	6.94	0.1375	0.95	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Peanut Seed	lb	0.87	125.0000	108.75	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	2.90	6.0000	17.40	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.8700	33.66	_____
DRYING					
Dry Peanuts	ton	24.00	1.3200	31.68	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	_____
INOCULANT					
Optimize LIFT	oz	0.53	14.8000	7.84	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	1.2642	18.57	_____
Self-Propelled	hour	14.68	0.1983	2.92	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	14.70	1.1072	16.28	_____
DIESEL FUEL					
Tractors	gal	1.53	13.6762	20.93	_____
Self-Propelled	gal	1.53	1.7850	2.70	_____
Irrigate Peanuts	gal	1.53	9.7755	14.96	_____
REPAIR & MAINTENANCE					
Implements	acre	10.40	1.0000	10.40	_____
Tractors	acre	8.54	1.0000	8.54	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
Irrigate Peanuts	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	6.08	1.0000	6.08	_____
TOTAL DIRECT EXPENSES				544.41	_____
FIXED EXPENSES					
Implements	acre	35.65	1.0000	35.65	_____
Tractors	acre	52.05	1.0000	52.05	_____
Self-Propelled	acre	14.63	1.0000	14.63	_____
Irrigate Peanuts	acre	51.84	1.0000	51.84	_____
TOTAL FIXED EXPENSES				154.17	_____
TOTAL SPECIFIED EXPENSES				698.58	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 21.B Summary of estimated costs and returns per acre  
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch  
 Furrow irrigated, All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	2.2000	880.00	_____
				-----	
TOTAL INCOME				880.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	_____
HERBICIDES	acre	84.79	1.0000	84.79	_____
INSECTICIDES	acre	17.15	1.0000	17.15	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	108.75	1.0000	108.75	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	33.66	1.0000	33.66	_____
DRYING	acre	31.68	1.0000	31.68	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
INOCULANT	acre	7.84	1.0000	7.84	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	14.68	1.4625	21.49	_____
UNALLOCATED LABOR	hour	14.70	1.1072	16.28	_____
DIESEL FUEL	gal	1.53	25.2367	38.59	_____
REPAIR & MAINTENANCE	acre	28.35	1.0000	28.35	_____
INTEREST ON OP. CAP.	acre	6.08	1.0000	6.08	_____
				-----	
TOTAL DIRECT EXPENSES				544.41	_____
RETURNS ABOVE DIRECT EXPENSES				335.59	_____
TOTAL FIXED EXPENSES				154.17	_____
				-----	
TOTAL SPECIFIED EXPENSES				698.58	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				181.42	_____

Note: Cost of production estimates are based on 2020 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 21.C Estimated resource use for field operations, per acre  
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch  
 Furrow 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	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00	May		0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 225	0.080	1.00	May		0.08	0.08	0.16	0.06
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton					1.3200				
Cleaning Peanuts	ton					1.8700				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
Irrigate Peanuts	acre				Jan	1.0000	0.07	0.07	0.46	
<b>TOTALS</b>							<b>1.46</b>	<b>1.26</b>	<b>2.02</b>	<b>1.10</b>

Note: Cost of production estimates are based on 2020 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 21.D Estimated costs for field operations, per acre  
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch  
 Furrow 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						0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30	2.31
Glyphosate 3lbs a.e	pt	8.44						0.17	8.61		8.61
Lime (Spread)	ton	15.80						0.32	16.12		16.12
Bed-Rip/Disk Fold.	12R-38		0.82	0.50	1.22			0.04	2.58	2.75	5.33
Peanut Plt&Pre Fold.	12R-38		1.42	3.39	2.85			0.13	7.79	8.72	16.51
Peanut Seed	lb	108.75						1.81	110.56		110.56
Optimize LIFT	oz	7.84						0.13	7.97		7.97
Admire Pro	oz	16.20						0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33						0.22	13.55		13.55
Valor SX	oz	13.53						0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13				0.24	0.33	0.57
Acephate 90%	lb	0.95						0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Storm	pt	17.87						0.24	18.11		18.11
Cadre	oz	11.60						0.15	11.75		11.75
Butyrac 200 (2,4-DB)	pt	3.64						0.05	3.69		3.69
Crop Oil Conc.(Veg.)	pt	5.80						0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95						0.11	8.06		8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Abound	oz	32.94						0.33	33.27		33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	pt	3.64						0.04	3.68		3.68
Crop Oil Conc.(Veg.)	pt	5.80						0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Select Max	pt	12.74						0.13	12.87		12.87
Crop Oil Conc.(Veg.)	pt	5.80						0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	5.30						0.05	5.35		5.35
Tebuconazole 3.6	oz	5.11						0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Abound	oz	32.94						0.22	33.16		33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95						0.05	8.00		8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55				0.99	1.30	2.29
Bravo Weather Stick	pt	7.95						0.03	7.98		7.98
Peanut Dig/Invertor	6R-38		1.86	1.79	3.28			0.02	6.95	6.29	13.24
Peanut Harvester	6R-38		11.07	9.75	16.52			0.12	37.46	50.72	88.18
Dry Peanuts	ton	31.68						0.11	31.79		31.79
Cleaning Peanuts	ton	33.66						0.11	33.77		33.77
Peanut Dump Cart	6-Row		4.64	2.89	8.19			0.05	15.77	15.34	31.11
Irrigate Peanuts	acre	7.92	16.08	7.78	4.69			0.49	36.96	55.72	92.68
<b>TOTALS</b>		<b>428.46</b>	<b>38.59</b>	<b>28.35</b>	<b>42.93</b>	<b>0.00</b>	<b>6.08</b>	<b>544.41</b>	<b>154.17</b>	<b>698.58</b>	

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 21.E Estimated monthly income and expense flows per acre  
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch  
 Furrow irrigated, All Areas, 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	880.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.66
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.68
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	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	7.84	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.56	0.00	0.00	0.00	0.00	0.00	0.78	7.11	1.33	2.66	1.95	28.54
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	0.57	0.00	0.00	0.00	0.00	0.00	0.24	2.84	4.22	8.44	4.47	17.81
REPAIR & MAINTENANCE	0.30	0.00	0.00	0.00	0.00	0.00	0.20	7.27	1.45	2.90	1.60	14.63
INTEREST ON OP. CAP.	0.06	0.00	0.00	0.00	0.00	0.00	0.58	3.10	0.71	0.86	0.33	0.44
TOTAL DIRECT EXPENSES	1.49	0.00	0.00	0.00	0.00	0.00	29.37	188.84	54.57	86.19	49.24	134.71
NET INCOME	-1.49	0.00	0.00	0.00	0.00	0.00	-29.37	-188.84	-54.57	-86.19	-49.24	745.29
NET INCOME TO DATE	-1.49	-1.49	-1.49	-1.49	-1.49	-1.49	-30.86	-219.70	-274.27	-360.46	-409.70	335.59

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.



Table 21.F Estimated returns for various price/yield combinations, per acre  
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch  
 Furrow irrigated, All Areas, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	1.10	ton	-181 -335	-159 -313	-137 -291	-115 -269	-93 -247	-71 -225	-49 -203	-27 -181	-5 -159	16 -137	38 -115
60	1.32	ton	-122 -276	-95 -249	-69 -223	-42 -197	-16 -170	9 -144	36 -117	62 -91	89 -65	115 -38	141 -12
70	1.54	ton	-62 -216	-31 -186	-1 -155	29 -124	60 -93	91 -62	122 -32	152 -1	183 29	214 60	245 91
80	1.76	ton	-3 -157	31 -122	67 -87	102 -51	137 -16	172 18	207 53	243 88	278 124	313 159	348 194
90	1.98	ton	56 -98	95 -58	135 -18	174 20	214 60	254 99	293 139	333 179	372 218	412 258	452 297
100	2.20	ton	115 -38	159 5	203 49	247 93	291 137	335 181	379 225	423 269	467 313	511 357	555 401
110	2.42	ton	175 20	223 69	271 117	320 166	368 214	417 262	465 311	513 359	562 408	610 456	659 504
120	2.64	ton	234 80	287 133	340 185	392 238	445 291	498 344	551 397	604 449	656 502	709 555	762 608
130	2.86	ton	293 139	351 196	408 254	465 311	522 368	579 425	637 482	694 540	751 597	808 654	865 711
140	3.08	ton	353 199	414 260	476 322	538 383	599 445	661 507	722 568	784 630	846 691	907 753	969 815
150	3.30	ton	412 258	478 324	544 390	610 456	676 522	742 588	808 654	874 720	940 786	1006 852	1072 918

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	unit	Futures Contract Month	Futures Contract Price <sup>a</sup>	Basis <sup>b</sup>	Forward Contract Price <sup>c</sup>	Loan Rate <sup>d</sup>	Budget Price <sup>e</sup>
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 <sup>f</sup>
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

<sup>a</sup> Average of the daily closing futures contract prices during the first 5 trading days in October 2020 for the stated contract months.

<sup>b</sup> 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.

<sup>c</sup> 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.

<sup>d</sup> 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.

<sup>e</sup> Price used in MSU Extension Service Planning Budgets.

<sup>f</sup> Cottonseed price is the average marketing year price over the years 2008-2020.

Appendix Table 8. Estimated costs for field operations, per acre  
 Cotton irrigated with center pivot  
 135-acre 1/4-mile pivot system, 7.5 ac-in., Non-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				0.27		0.01	0.28	0.28
Maintenance									
IRRIGATE LABOR	hour				1.07		0.02	1.09	1.09
Apply Water									
IRRIGATE LABOR	hour				0.15			0.15	0.15
Apply Water									
IRRIGATE LABOR	hour				0.20			0.20	0.20
Apply Water									
IRRIGATE LABOR	hour				0.15			0.15	0.15
Pivot, 1/4 CP	each			13.48			0.22	13.70	51.82
Well & Pump, 1/4 CP	each			3.50			0.06	3.56	9.84
Engine, 1/4 CP, 65	each								10.19
June Irr. 3app@.75"	ac-in		5.14	1.49			0.11	6.74	6.74
July Irr. 4app@.75"	ac-in		6.86	1.99			0.12	8.97	8.97
Aug Irr. 3app@.75"	ac-in		5.14	1.49			0.07	6.70	6.70
TOTALS		0.00	17.14	21.95	1.84	0.00	0.61	41.54	71.85

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



Appendix Table 9. Estimated costs for field operations, per acre  
 Irrigation with a ¼ mile center pivot system  
 135-acre system, 7.5 ac-in., 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-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Maintenance										
IRRIGATE LABOR	hour				1.07		0.02	1.09		1.09
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Apply Water										
IRRIGATE LABOR	hour				0.20			0.20		0.20
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Pivot, 1/4 CP	each			13.48			0.22	13.70	51.82	65.52
Well & Pump, 1/4 CP	each			3.50			0.06	3.56	9.84	13.40
Engine, 1/4 CP, 65	each								10.19	10.19
June Irr. 3app@.75"	ac-in		5.14	1.49			0.11	6.74		6.74
July Irr. 4app@.75"	ac-in		6.86	1.99			0.12	8.97		8.97
Aug Irr. 3app@.75"	ac-in		5.14	1.49			0.07	6.70		6.70
TOTALS		0.00	17.14	21.95	1.84	0.00	0.61	41.54	71.85	113.39

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

Appendix Table 10. Estimated costs for field operations, per acre  
 Peanuts irrigated with roll-out pipe  
 160-acre system, 12 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		0.01	0.35	0.32	0.67
Roll-Out Pipe	ft	7.92					0.13	8.05		8.05
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		0.03	1.84		1.84
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
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		0.01	1.03	1.18	2.21
Land Forming (\$450)	each								30.35	30.35
Well & Pump, Furrow	each			2.96			0.05	3.01	8.30	11.31
Main Line Pipe	each								4.59	4.59
Engine, RPF, PNUT	each								8.60	8.60
1st July Irrigation	ac-in		3.74	1.05			0.06	4.85		4.85
1st Aug Irrigation	ac-in		3.74	1.05			0.05	4.84		4.84
2nd Aug Irrigation	ac-in		3.74	1.05			0.05	4.84		4.84
1st Sep Irrigation	ac-in		3.74	1.05			0.03	4.82		4.82
TOTALS		7.92	16.08	7.78	4.69	0.00	0.49	36.96	55.72	92.68

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

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