NON-DELTA
2020
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2019-06

October 2019

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 2020 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.

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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 2019. (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:

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

$$CRCPA = CRCPH \ x \ PR$$

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 2018 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

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

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

Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8 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, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	_________
Ethephon 6E	pt	2.90	2.3125	6.71	_________
Tribufos 6lb	pt	8.61	0.5000	4.31	_________
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	_________
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_________
UAN (32%)	gal	1.51	28.9332	43.69	_________
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_________
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	_________
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Cotoran	pt	5.85	2.0000	11.70	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Liberty 280	oz	0.49	58.0000	28.42	_________
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	_________
Bidrin 8EC	oz	1.28	3.2000	4.10	_________
Centric 40WG	oz	4.89	2.0000	9.78	_________
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_________
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	_________
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	32.0000	3.20	_________
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	_________
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	43.00	0.6660	28.64	_________
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	15.22	0.9288	14.12	_________
Self-Propelled	hour	15.22	0.3221	4.91	_________
HAND LABOR					
Implements	hour	9.06	0.3579	3.24	_________
Self-Propelled	hour	9.06	0.2472	2.24	_________
UNALLOCATED LABOR	hour	15.19	1.0008	15.21	_________
DIESEL FUEL					
Tractors	gal	2.30	9.0841	20.90	_________
Self-Propelled	gal	2.30	4.4973	10.30	_________
REPAIR & MAINTENANCE					
Implements	acre	10.73	1.0000	10.73	_________
Tractors	acre	5.50	1.0000	5.50	_________
Self-Propelled	acre	14.22	1.0000	14.22	_________
INTEREST ON OP. CAP.	acre	13.77	1.0000	13.77	_________

TOTAL DIRECT EXPENSES				613.14	_________
FIXED EXPENSES					
Implements	acre	18.13	1.0000	18.13	_________
Tractors	acre	37.35	1.0000	37.35	_________
Self-Propelled	acre	65.36	1.0000	65.36	_________

TOTAL FIXED EXPENSES				120.84	_________

TOTAL SPECIFIED EXPENSES				733.98	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 1.B Summary of estimated costs and returns per acre
Cotton, 8R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1000.0000	628.90	_________
Cotton Seed	lb	0.10	1350.0000	135.00	_________

TOTAL INCOME				763.90	_________
DIRECT EXPENSES					
HARVEST AIDS	acre	13.73	1.0000	13.73	_________
GINNING	acre	110.00	1.0000	110.00	_________
FERTILIZERS	acre	84.93	1.0000	84.93	_________
FUNGICIDES	acre	20.00	1.0000	20.00	_________
HERBICIDES	acre	68.82	1.0000	68.82	_________
INSECTICIDES	acre	41.43	1.0000	41.43	_________
SEED/PLANTS	acre	105.30	1.0000	105.30	_________
GROWTH REGULATORS	acre	3.20	1.0000	3.20	_________
ADJUVANTS	acre	2.12	1.0000	2.12	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
ERADICATION FEE	acre	1.00	1.0000	1.00	_________
CUSTOM LIME	acre	28.64	1.0000	28.64	_________
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	15.22	1.2510	19.03	_________
UNALLOCATED LABOR	hour	15.19	1.0008	15.21	_________
DIESEL FUEL	gal	2.30	13.5814	31.20	_________
REPAIR & MAINTENANCE	acre	30.45	1.0000	30.45	_________
INTEREST ON OP. CAP.	acre	13.77	1.0000	13.77	_________

TOTAL DIRECT EXPENSES				613.14	_________
RETURNS ABOVE DIRECT EXPENSES				150.76	_________
TOTAL FIXED EXPENSES				120.84	_________

TOTAL SPECIFIED EXPENSES				733.98	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				29.92	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 1.C Estimated resource use for field operations, per acre
Cotton, 8R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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 190	0.080	1.00	Nov		0.08	0.08	0.08	0.06
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	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 190	0.077	1.00	Apr		0.07	0.07	0.11	0.06
UAN (32%)	gal					14.4666				
Row Cond Rigid	26'	MFWD 190	0.059	1.00	May		0.05	0.05	0.05	0.04
Plant - Folding	8R-38	MFWD 190	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 190	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32%)	gal					14.4666				
Spray (Direct/Layby)	8R-38	MFWD 190	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 190	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	6R-38(355)	MFWD 190	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 190	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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 1.D Estimated costs for field operations, per acre
Cotton, 8R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	8R-38		1.82	1.90	2.21		0.31	6.24	5.96	12.20
Bed/Disk (Hipper)Rd	8R-38		0.83	0.41	1.01		0.12	2.37	2.05	4.42
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.04	1.16	1.44	2.60
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	8R-38		1.75	1.44	2.48		0.17	5.84	4.33	10.17
UAN (32%)	gal	21.84					0.67	22.51		22.51
Row Cond Rigid	26'		1.34	0.60	1.64		0.09	3.67	3.55	7.22
Plant - Folding	8R-38		1.68	1.91	2.72		0.17	6.48	6.07	12.55
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	8R-38		1.75	1.44	2.48		0.12	5.79	4.33	10.12
UAN (32%)	gal	21.84					0.48	22.32		22.32
Spray (Direct/Layby)	8R-38		1.50	0.75	2.13		0.10	4.48	3.15	7.63
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Acephate 90%	lb	5.38					0.09	5.47		5.47
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
IncidentalPestTrt$15	acre	15.00					0.26	15.26		15.26
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.18	0.10	0.28			0.56	0.72	1.28
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker	6R-38(355)		7.24	12.52	6.28		0.11	26.15	53.12	79.27
Boll Buggy	6R-38(355)		3.88	2.33	4.72		0.05	10.98	9.85	20.83
Module Builder	6R-38(355)		3.88	2.51	6.28		0.06	12.73	10.26	22.99
Gin & Haul	lb	110.00					0.48	110.48		110.48
Stalk Shredder-Flail	15'		2.47	2.94	3.01		0.04	8.46	5.93	14.39
TOTALS		498.00	31.20	30.45	39.72	0.00	13.77	613.14	120.84	733.98

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 1.E Estimated monthly income and expense flows per acre
Cotton, 8R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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	763.90
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	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	41.25	0.00	0.00	0.00	0.00	21.84	0.00	21.84	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	10.28	0.00	44.33	14.21	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	20.38	5.38	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	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	1.60	1.60	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	3.22	0.00	0.00	0.00	0.56	2.48	5.48	5.17	1.12	0.56	0.84	20.29
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	2.65	0.00	0.00	0.00	0.36	1.75	3.74	3.61	0.72	0.36	0.54	17.47
REPAIR & MAINTENANCE	2.31	0.00	0.00	0.00	0.20	1.44	2.91	2.39	0.40	0.20	0.30	20.30
INTEREST ON OP. CAP.	4.66	0.00	0.00	0.00	0.44	0.84	5.09	1.37	0.42	0.08	0.13	0.74
TOTAL DIRECT EXPENSES	93.56	0.00	0.00	0.00	12.90	28.35	198.70	64.07	24.64	6.58	15.54	168.80
NET INCOME	-93.56	0.00	0.00	0.00	-12.90	-28.35	-198.70	-64.07	-24.64	-6.58	-15.54	595.10
NET INCOME TO DATE	-93.56	-93.56	-93.56	-93.56	-106.46	-134.81	-333.51	-397.58	-422.22	-428.80	-444.34	150.76

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* 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, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	500.00	lb	-187	-171	-155	-139	-124	-108	-92	-77	-61	-45	-29
			-307	-292	-276	-260	-245	-229	-213	-197	-182	-166	-150
60	600.00	lb	-150	-132	-113	-94	-75	-56	-37	-18	-0	18	37
			-271	-252	-234	-215	-196	-177	-158	-139	-120	-101	-83
70	700.00	lb	-114	-92	-70	-48	-26	-4	17	39	61	83	105
			-235	-213	-191	-169	-147	-125	-103	-81	-59	-37	-15
80	800.00	lb	-78	-53	-28	-3	21	47	72	97	122	147	172
			-199	-174	-149	-124	-98	-73	-48	-23	1	26	52
90	900.00	lb	-42	-14	14	42	70	98	127	155	183	212	240
			-163	-135	-106	-78	-50	-21	6	34	62	91	119
100	1000.00	lb	-6	24	56	87	119	150	182	213	245	276	307
			-127	-95	-64	-32	-1	29	61	92	124	155	187
110	1100.00	lb	29	64	98	133	168	202	237	271	306	340	375
			-91	-56	-22	12	47	81	116	150	185	220	254
120	1200.00	lb	65	103	141	178	216	254	292	329	367	405	443
			-55	-17	20	58	95	133	171	209	246	284	322
130	1300.00	lb	101	142	183	224	265	306	347	388	428	469	510
			-18	21	62	103	144	185	226	267	308	348	389
140	1400.00	lb	138	182	226	270	314	358	402	446	490	534	578
			17	61	105	149	193	237	281	325	369	413	457
150	1500.00	lb	174	221	268	315	362	409	457	504	551	598	645
			53	100	147	194	241	289	336	383	430	477	524

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 2019 input prices.

Table 2.A Estimated costs per acre
Cotton, 8R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	_________
Ethephon 6E	pt	2.90	2.3125	6.71	_________
Tribufos 6lb	pt	8.61	0.5000	4.31	_________
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_________
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_________
UAN (32%)	gal	1.51	18.4000	27.78	_________
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_________
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	_________
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Cotoran	pt	5.85	2.0000	11.70	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Liberty 280	oz	0.49	58.0000	28.42	_________
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	_________
Bidrin 8EC	oz	1.28	3.2000	4.10	_________
Centric 40WG	oz	4.89	2.0000	9.78	_________
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_________
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	_________
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	32.0000	3.20	_________
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	_________
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	43.00	0.6660	28.64	_________
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	15.22	0.7365	11.20	_________
Self-Propelled	hour	15.22	0.3221	4.91	_________
HAND LABOR					
Implements	hour	9.06	0.3222	2.91	_________
Self-Propelled	hour	9.06	0.2472	2.24	_________
UNALLOCATED LABOR	hour	15.19	0.8469	12.87	_________
DIESEL FUEL					
Tractors	gal	2.30	7.2030	16.57	_________
Self-Propelled	gal	2.30	4.4973	10.30	_________
REPAIR & MAINTENANCE					
Implements	acre	8.41	1.0000	8.41	_________
Tractors	acre	4.36	1.0000	4.36	_________
Self-Propelled	acre	14.22	1.0000	14.22	_________
INTEREST ON OP. CAP.	acre	12.59	1.0000	12.59	_________
TOTAL DIRECT EXPENSES				571.68	_________
FIXED EXPENSES					
Implements	acre	14.21	1.0000	14.21	_________
Tractors	acre	29.61	1.0000	29.61	_________
Self-Propelled	acre	65.36	1.0000	65.36	_________
TOTAL FIXED EXPENSES				109.18	_________
TOTAL SPECIFIED EXPENSES				680.86	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 2.B Summary of estimated costs and returns per acre
Cotton, 8R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	900.0000	566.01	_________
Cotton Seed	lb	0.10	1215.0000	121.50	_________

TOTAL INCOME				687.51	_________
DIRECT EXPENSES					
HARVEST AIDS	acre	13.73	1.0000	13.73	_________
GINNING	acre	99.00	1.0000	99.00	_________
FERTILIZERS	acre	69.03	1.0000	69.03	_________
FUNGICIDES	acre	20.00	1.0000	20.00	_________
HERBICIDES	acre	68.82	1.0000	68.82	_________
INSECTICIDES	acre	41.43	1.0000	41.43	_________
SEED/PLANTS	acre	105.30	1.0000	105.30	_________
GROWTH REGULATORS	acre	3.20	1.0000	3.20	_________
ADJUVANTS	acre	2.12	1.0000	2.12	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
ERADICATION FEE	acre	1.00	1.0000	1.00	_________
CUSTOM LIME	acre	28.64	1.0000	28.64	_________
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	15.22	1.0586	16.11	_________
UNALLOCATED LABOR	hour	15.19	0.8469	12.87	_________
DIESEL FUEL	gal	2.30	11.7003	26.87	_________
REPAIR & MAINTENANCE	acre	26.99	1.0000	26.99	_________
INTEREST ON OP. CAP.	acre	12.59	1.0000	12.59	_________

TOTAL DIRECT EXPENSES				571.68	_________
RETURNS ABOVE DIRECT EXPENSES				115.83	_________
TOTAL FIXED EXPENSES				109.18	_________

TOTAL SPECIFIED EXPENSES				680.86	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				6.65	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 2.C Estimated resource use for field operations, per acre
Cotton, 8R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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 190	0.059	1.00	May		0.05	0.05	0.05	0.04
NT Plant-Folding	8R-38	MFWD 190	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 190	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32%)	gal					18.4000				
Spray (Direct/Layby)	8R-38	MFWD 190	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 190	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	6R-38(355)	MFWD 190	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 190	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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 2.D Estimated costs for field operations, per acre
Cotton, 8R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.04	1.16	1.44	2.60
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Surfactant	pt	1.06					0.04	1.10		1.10
Row Cond Rigid	26'		1.34	0.60	1.64		0.09	3.67	3.55	7.22
NT Plant-Folding	8R-38		1.75	2.20	2.83		0.18	6.96	6.75	13.71
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	8R-38		1.75	1.44	2.48		0.12	5.79	4.33	10.12
UAN (32%)	gal	27.78					0.61	28.39		28.39
Spray (Direct/Layby)	8R-38		1.50	0.75	2.13		0.10	4.48	3.15	7.63
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Acephate 90%	lb	5.38					0.09	5.47		5.47
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
IncidentalPestTrt$15	acre	15.00					0.26	15.26		15.26
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.18	0.10	0.28			0.56	0.72	1.28
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker	6R-38(355)		7.24	12.52	6.28		0.11	26.15	53.12	79.27
Boll Buggy	6R-38(355)		3.88	2.33	4.72		0.05	10.98	9.85	20.83
Module Builder	6R-38(355)		3.88	2.51	6.28		0.06	12.73	10.26	22.99
Gin & Haul	lb	99.00					0.43	99.43		99.43
Stalk Shredder-Flail	15'		2.47	2.94	3.01		0.04	8.46	5.93	14.39
TOTALS		471.10	26.87	26.99	34.13	0.00	12.59	571.68	109.18	680.86

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 2.E Estimated monthly income and expense flows per acre
Cotton, 8R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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	687.51
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	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	41.25	0.00	0.00	0.00	0.00	0.00	0.00	27.78	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	10.28	0.00	44.33	14.21	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	20.38	5.38	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	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	1.60	1.60	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	0.56	0.00	5.59	5.17	1.12	0.56	0.84	20.29
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	0.36	0.00	3.81	3.61	0.72	0.36	0.54	17.47
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.20	0.00	3.20	2.39	0.40	0.20	0.30	20.30
INTEREST ON OP. CAP.	4.23	0.00	0.00	0.00	0.44	0.00	5.10	1.50	0.42	0.08	0.13	0.69
TOTAL DIRECT EXPENSES	84.95	0.00	0.00	0.00	12.90	0.00	199.18	70.14	24.64	6.58	15.54	157.75
NET INCOME	-84.95	0.00	0.00	0.00	-12.90	0.00	-199.18	-70.14	-24.64	-6.58	-15.54	529.76
NET INCOME TO DATE	-84.95	-84.95	-84.95	-84.95	-97.85	-97.85	-297.03	-367.17	-391.81	-398.39	-413.93	115.83

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* 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, 2020

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PERCENT										
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-188	-174	-159	-145	-131	-117	-103	-89	-75	-60	-46
			-297	-283	-269	-254	-240	-226	-212	-198	-184	-170	-155
60	540.00	lb	-155	-138	-121	-104	-87	-70	-53	-36	-19	-2	14
			-264	-247	-230	-213	-196	-179	-163	-146	-129	-112	-95
70	630.00	lb	-123	-103	-83	-63	-43	-24	-4	15	35	55	74
			-232	-212	-192	-172	-153	-133	-113	-93	-73	-54	-34
80	720.00	lb	-90	-68	-45	-22	-0	22	45	67	90	113	135
			-199	-177	-154	-131	-109	-86	-64	-41	-18	3	26
90	810.00	lb	-58	-32	-7	18	43	69	94	120	145	171	196
			-167	-141	-116	-90	-65	-40	-14	10	36	61	87
100	900.00	lb	-25	2	30	59	87	115	144	172	200	229	257
			-134	-106	-78	-49	-21	6	34	63	91	119	148
110	990.00	lb	6	37	69	100	131	162	193	224	255	287	318
			-102	-71	-40	-8	22	53	84	115	146	177	208
120	1080.00	lb	39	73	107	141	175	209	243	277	311	344	378
			-69	-35	-1	32	66	99	133	167	201	235	269
130	1170.00	lb	71	108	145	182	219	255	292	329	366	402	439
			-37	-0	36	73	109	146	183	220	256	293	330
140	1260.00	lb	104	143	183	223	262	302	342	381	421	460	500
			-4	34	74	114	153	193	232	272	312	351	391
150	1350.00	lb	136	179	221	264	306	349	391	434	476	518	561
			27	70	112	155	197	239	282	324	367	409	452

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 2019 input prices.

Table 3.A Estimated costs per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	_________
Ethephon 6E	pt	2.90	2.3125	6.71	_________
Tribufos 6lb	pt	8.61	0.5000	4.31	_________
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	_________
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_________
UAN (32%)	gal	1.51	28.9332	43.69	_________
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_________
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	_________
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Cotoran	pt	5.85	2.0000	11.70	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Liberty 280	oz	0.49	58.0000	28.42	_________
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	_________
Bidrin 8EC	oz	1.28	3.2000	4.10	_________
Centric 40WG	oz	4.89	2.0000	9.78	_________
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_________
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	_________
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	32.0000	3.20	_________
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	_________
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	43.00	0.6660	28.64	_________
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	15.22	0.4268	6.51	_________
Self-Propelled	hour	15.22	0.3221	4.91	_________
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_________
Self-Propelled	hour	9.06	0.2472	2.24	_________
UNALLOCATED LABOR	hour	15.15	0.5992	9.08	_________
DIESEL FUEL					
Tractors	gal	2.30	4.7451	10.92	_________
Self-Propelled	gal	2.30	5.7832	13.26	_________
REPAIR & MAINTENANCE					
Implements	acre	7.42	1.0000	7.42	_________
Tractors	acre	2.91	1.0000	2.91	_________
Self-Propelled	acre	23.45	1.0000	23.45	_________
INTEREST ON OP. CAP.	acre	13.46	1.0000	13.46	_________

TOTAL DIRECT EXPENSES				593.27	_________
FIXED EXPENSES					
Implements	acre	11.43	1.0000	11.43	_________
Tractors	acre	19.73	1.0000	19.73	_________
Self-Propelled	acre	104.54	1.0000	104.54	_________

TOTAL FIXED EXPENSES				135.70	_________

TOTAL SPECIFIED EXPENSES				728.97	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 3.B Summary of estimated costs and returns per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1000.0000	628.90	_________
Cotton Seed	lb	0.10	1350.0000	135.00	_________

TOTAL INCOME				763.90	_________
DIRECT EXPENSES					
HARVEST AIDS	acre	13.73	1.0000	13.73	_________
GINNING	acre	110.00	1.0000	110.00	_________
FERTILIZERS	acre	84.93	1.0000	84.93	_________
FUNGICIDES	acre	20.00	1.0000	20.00	_________
HERBICIDES	acre	68.82	1.0000	68.82	_________
INSECTICIDES	acre	41.43	1.0000	41.43	_________
SEED/PLANTS	acre	105.30	1.0000	105.30	_________
GROWTH REGULATORS	acre	3.20	1.0000	3.20	_________
ADJUVANTS	acre	2.12	1.0000	2.12	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
ERADICATION FEE	acre	1.00	1.0000	1.00	_________
CUSTOM LIME	acre	28.64	1.0000	28.64	_________
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	15.22	0.7490	11.42	_________
UNALLOCATED LABOR	hour	15.15	0.5992	9.08	_________
DIESEL FUEL	gal	2.30	10.5284	24.18	_________
REPAIR & MAINTENANCE	acre	33.78	1.0000	33.78	_________
INTEREST ON OP. CAP.	acre	13.46	1.0000	13.46	_________

TOTAL DIRECT EXPENSES				593.27	_________
RETURNS ABOVE DIRECT EXPENSES				170.63	_________
TOTAL FIXED EXPENSES				135.70	_________

TOTAL SPECIFIED EXPENSES				728.97	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				34.93	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 3.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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 190	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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 3.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	12R-38		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	12R-38		0.66	0.41	0.68		0.09	1.84	1.85	3.69
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.04	1.16	1.44	2.60
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	21.84					0.67	22.51		22.51
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	12R-38		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	21.84					0.48	22.32		22.32
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Acephate 90%	lb	5.38					0.09	5.47		5.47
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
IncidentalPestTrt$15	acre	15.00					0.26	15.26		15.26
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.18	0.10	0.28			0.56	0.72	1.28
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	110.00					0.48	110.48		110.48
Stalk Shredder-Flail	15'		2.47	2.94	3.01		0.04	8.46	5.93	14.39
TOTALS		498.00	24.18	33.78	23.85	0.00	13.46	593.27	135.70	728.97

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 3.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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	763.90
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	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	41.25	0.00	0.00	0.00	0.00	21.84	0.00	21.84	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	10.28	0.00	44.33	14.21	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	20.38	5.38	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	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	1.60	1.60	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	2.15	0.00	0.00	0.00	0.56	1.65	4.05	3.63	1.12	0.56	0.84	9.29
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	0.36	1.38	3.13	2.93	0.72	0.36	0.54	12.67
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.20	1.11	2.83	1.94	0.40	0.20	0.30	24.69
INTEREST ON OP. CAP.	4.56	0.00	0.00	0.00	0.44	0.80	5.03	1.31	0.42	0.08	0.13	0.69
TOTAL DIRECT EXPENSES	91.63	0.00	0.00	0.00	12.90	26.78	196.52	61.34	24.64	6.58	15.54	157.34
NET INCOME	-91.63	0.00	0.00	0.00	-12.90	-26.78	-196.52	-61.34	-24.64	-6.58	-15.54	606.56
NET INCOME TO DATE	-91.63	-91.63	-91.63	-91.63	-104.53	-131.31	-327.83	-389.17	-413.81	-420.39	-435.93	170.63

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* 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, 2020

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	500.00	lb	-167	-151	-135	-120	-104	-88	-72	-57	-41	-25	-9
			-302	-287	-271	-255	-240	-224	-208	-192	-177	-161	-145
60	600.00	lb	-131	-112	-93	-74	-55	-36	-17	0	19	38	57
			-266	-247	-229	-210	-191	-172	-153	-134	-115	-96	-78
70	700.00	lb	-94	-72	-50	-28	-6	15	37	59	81	103	125
			-230	-208	-186	-164	-142	-120	-98	-76	-54	-32	-10
80	800.00	lb	-58	-33	-8	16	41	66	92	117	142	167	192
			-194	-169	-144	-119	-93	-68	-43	-18	6	31	57
90	900.00	lb	-22	5	33	62	90	118	147	175	203	231	260
			-158	-130	-101	-73	-45	-16	11	39	67	96	124
100	1000.00	lb	13	44	76	107	139	170	202	233	264	296	327
			-122	-90	-59	-27	3	34	66	97	129	160	192
110	1100.00	lb	49	84	118	153	187	222	257	291	326	360	395
			-86	-51	-16	17	52	86	121	155	190	225	259
120	1200.00	lb	85	123	161	198	236	274	312	349	387	425	462
			-50	-12	25	63	100	138	176	214	251	289	327
130	1300.00	lb	121	162	203	244	285	326	367	407	448	489	530
			-13	26	67	108	149	190	231	272	313	353	394
140	1400.00	lb	157	201	245	289	333	377	422	466	510	554	598
			22	66	110	154	198	242	286	330	374	418	462
150	1500.00	lb	194	241	288	335	382	429	477	524	571	618	665
			58	105	152	199	246	294	341	388	435	482	529

Header row 75–125: PERCENT.

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 2019 input prices.

Table 4.A Estimated costs per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	_________
Ethephon 6E	pt	2.90	2.3125	6.71	_________
Tribufos 6lb	pt	8.61	0.5000	4.31	_________
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_________
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_________
UAN (32%)	gal	1.51	18.4000	27.78	_________
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_________
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	_________
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Cotoran	pt	5.85	2.0000	11.70	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Liberty 280	oz	0.49	58.0000	28.42	_________
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	_________
Bidrin 8EC	oz	1.28	3.2000	4.10	_________
Centric 40WG	oz	4.89	2.0000	9.78	_________
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_________
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	_________
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	32.0000	3.20	_________
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	_________
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	43.00	0.6660	28.64	_________
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	15.22	0.2987	4.55	_________
Self-Propelled	hour	15.22	0.3221	4.91	_________
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_________
Self-Propelled	hour	9.06	0.2472	2.24	_________
UNALLOCATED LABOR	hour	15.15	0.4967	7.53	_________
DIESEL FUEL					
Tractors	gal	2.30	3.2620	7.51	_________
Self-Propelled	gal	2.30	5.7832	13.26	_________
REPAIR & MAINTENANCE					
Implements	acre	5.40	1.0000	5.40	_________
Tractors	acre	2.00	1.0000	2.00	_________
Self-Propelled	acre	23.45	1.0000	23.45	_________
INTEREST ON OP. CAP.	acre	12.42	1.0000	12.42	_________

TOTAL DIRECT EXPENSES				555.27	_________
FIXED EXPENSES					
Implements	acre	7.91	1.0000	7.91	_________
Tractors	acre	13.54	1.0000	13.54	_________
Self-Propelled	acre	104.54	1.0000	104.54	_________

TOTAL FIXED EXPENSES				125.99	_________

TOTAL SPECIFIED EXPENSES				681.26	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 4.B Summary of estimated costs and returns per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	900.0000	566.01	________
Cotton Seed	lb	0.10	1215.0000	121.50	________

TOTAL INCOME				687.51	________
DIRECT EXPENSES					
HARVEST AIDS	acre	13.73	1.0000	13.73	________
GINNING	acre	99.00	1.0000	99.00	________
FERTILIZERS	acre	69.03	1.0000	69.03	________
FUNGICIDES	acre	20.00	1.0000	20.00	________
HERBICIDES	acre	68.82	1.0000	68.82	________
INSECTICIDES	acre	41.43	1.0000	41.43	________
SEED/PLANTS	acre	105.30	1.0000	105.30	________
GROWTH REGULATORS	acre	3.20	1.0000	3.20	________
ADJUVANTS	acre	2.12	1.0000	2.12	________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	________
ERADICATION FEE	acre	1.00	1.0000	1.00	________
CUSTOM LIME	acre	28.64	1.0000	28.64	________
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	15.22	0.6209	9.46	________
UNALLOCATED LABOR	hour	15.15	0.4967	7.53	________
DIESEL FUEL	gal	2.30	9.0453	20.77	________
REPAIR & MAINTENANCE	acre	30.85	1.0000	30.85	________
INTEREST ON OP. CAP.	acre	12.42	1.0000	12.42	________

TOTAL DIRECT EXPENSES				555.27	________
RETURNS ABOVE DIRECT EXPENSES				132.24	________
TOTAL FIXED EXPENSES				125.99	________

TOTAL SPECIFIED EXPENSES				681.26	________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				6.25	________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 4.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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 190	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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 4.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.04	1.16	1.44	2.60
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Surfactant	pt	1.06					0.04	1.10		1.10
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
NT Plant-Folding	12R-38		1.38	2.13	1.89		0.14	5.54	6.19	11.73
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	27.78					0.61	28.39		28.39
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Acephate 90%	lb	5.38					0.09	5.47		5.47
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
IncidentalPestTrt$15	acre	15.00					0.26	15.26		15.26
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.18	0.10	0.28			0.56	0.72	1.28
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	99.00					0.43	99.43		99.43
Stalk Shredder-Flail	15'		2.47	2.94	3.01		0.04	8.46	5.93	14.39
TOTALS		471.10	20.77	30.85	20.13	0.00	12.42	555.27	125.99	681.26

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 4.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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	687.51
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	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	41.25	0.00	0.00	0.00	0.00	0.00	0.00	27.78	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	10.28	0.00	44.33	14.21	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	20.38	5.38	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	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	1.60	1.60	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	0.56	0.00	4.13	3.63	1.12	0.56	0.84	9.29
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	0.36	0.00	3.19	2.93	0.72	0.36	0.54	12.67
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.20	0.00	3.12	1.94	0.40	0.20	0.30	24.69
INTEREST ON OP. CAP.	4.23	0.00	0.00	0.00	0.44	0.00	5.04	1.44	0.42	0.08	0.13	0.64
TOTAL DIRECT EXPENSES	84.95	0.00	0.00	0.00	12.90	0.00	196.96	67.41	24.64	6.58	15.54	146.29
NET INCOME	-84.95	0.00	0.00	0.00	-12.90	0.00	-196.96	-67.41	-24.64	-6.58	-15.54	541.22
NET INCOME TO DATE	-84.95	-84.95	-84.95	-84.95	-97.85	-97.85	-294.81	-362.22	-386.86	-393.44	-408.98	132.24

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* 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, 2020

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-171	-157	-143	-129	-115	-101	-86	-72	-58	-44	-30
			-297	-283	-269	-255	-241	-227	-212	-198	-184	-170	-156
60	540.00	lb	-139	-122	-105	-88	-71	-54	-37	-20	-3	13	30
			-265	-248	-231	-214	-197	-180	-163	-146	-129	-112	-95
70	630.00	lb	-106	-86	-67	-47	-27	-7	12	31	51	71	91
			-232	-212	-193	-173	-153	-133	-113	-94	-74	-54	-34
80	720.00	lb	-74	-51	-28	-6	16	38	61	84	106	129	152
			-200	-177	-154	-132	-109	-87	-64	-41	-19	3	26
90	810.00	lb	-41	-16	9	34	60	85	111	136	161	187	212
			-167	-142	-116	-91	-65	-40	-14	10	36	61	86
100	900.00	lb	-9	19	47	75	103	132	160	188	217	245	273
			-135	-106	-78	-50	-22	6	34	62	91	119	147
110	990.00	lb	23	54	85	116	147	178	210	241	272	303	334
			-102	-71	-40	-9	21	52	84	115	146	177	208
120	1080.00	lb	55	89	123	157	191	225	259	293	327	361	395
			-70	-36	-2	31	65	99	133	167	201	235	269
130	1170.00	lb	88	125	161	198	235	272	309	345	382	419	456
			-37	-0	35	72	109	146	183	219	256	293	330
140	1260.00	lb	120	160	200	239	279	318	358	398	437	477	516
			-5	34	74	113	153	192	232	272	311	351	390
150	1350.00	lb	153	195	238	280	323	365	407	450	492	535	577
			27	69	112	154	197	239	281	324	366	409	451

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 2019 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, Mississip

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	_________
Ethephon 6E	pt	2.90	2.3125	6.71	_________
Tribufos 6lb	pt	8.61	0.5000	4.31	_________
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_________
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_________
UAN (32%)	gal	1.51	28.9332	43.69	_________
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_________
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	_________
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Cotoran	pt	5.85	2.0000	11.70	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Liberty 280	oz	0.49	58.0000	28.42	_________
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	_________
Bidrin 8EC	oz	1.28	3.2000	4.10	_________
Centric 40WG	oz	4.89	2.0000	9.78	_________
IncidentalPestTrt$15	acre	15.00	1.5000	22.50	_________
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	_________
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	32.0000	3.20	_________
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	_________
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	43.00	0.6660	28.64	_________
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	15.22	0.4268	6.51	_________
Self-Propelled	hour	15.22	0.3309	5.04	_________
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	15.15	0.6062	9.19	_________
DIESEL FUEL					
Tractors	gal	2.30	4.7451	10.92	_________
Self-Propelled	gal	2.30	5.8626	13.45	_________
1/4-mi. Pivot Irr.	gal	2.30	11.2011	25.77	_________
REPAIR & MAINTENANCE					
Implements	acre	7.42	1.0000	7.42	_________
Tractors	acre	2.91	1.0000	2.91	_________
Self-Propelled	acre	23.56	1.0000	23.56	_________
1/4-mi. Pivot Irr.	acre	21.65	1.0000	21.65	_________
INTEREST ON OP. CAP.	acre	14.64	1.0000	14.64	_________
TOTAL DIRECT EXPENSES				673.79	_________
FIXED EXPENSES					
Implements	acre	11.43	1.0000	11.43	_________
Tractors	acre	19.73	1.0000	19.73	_________
Self-Propelled	acre	105.26	1.0000	105.26	_________
1/4-mi. Pivot Irr.	acre	82.73	1.0000	82.73	_________
TOTAL FIXED EXPENSES				219.15	_________
TOTAL SPECIFIED EXPENSES				892.94	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

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, Mississip

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1200.0000	754.68	_________
Cotton Seed	lb	0.10	1620.0000	162.00	_________

TOTAL INCOME				916.68	_________
DIRECT EXPENSES					
HARVEST AIDS	acre	13.73	1.0000	13.73	_________
GINNING	acre	132.00	1.0000	132.00	_________
FERTILIZERS	acre	84.93	1.0000	84.93	_________
FUNGICIDES	acre	20.00	1.0000	20.00	_________
HERBICIDES	acre	68.82	1.0000	68.82	_________
INSECTICIDES	acre	48.93	1.0000	48.93	_________
SEED/PLANTS	acre	105.30	1.0000	105.30	_________
GROWTH REGULATORS	acre	3.20	1.0000	3.20	_________
ADJUVANTS	acre	2.12	1.0000	2.12	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
ERADICATION FEE	acre	1.00	1.0000	1.00	_________
CUSTOM LIME	acre	28.64	1.0000	28.64	_________
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	15.22	0.7578	11.55	_________
UNALLOCATED LABOR	hour	15.15	0.6062	9.19	_________
DIESEL FUEL	gal	2.30	21.8089	50.14	_________
REPAIR & MAINTENANCE	acre	55.54	1.0000	55.54	_________
INTEREST ON OP. CAP.	acre	14.64	1.0000	14.64	_________

TOTAL DIRECT EXPENSES				673.79	_________
RETURNS ABOVE DIRECT EXPENSES				242.89	_________
TOTAL FIXED EXPENSES				219.15	_________

TOTAL SPECIFIED EXPENSES				892.94	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				23.74	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

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, 2020

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				1.50	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 190	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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	12R-38		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	12R-38		0.66	0.41	0.68		0.09	1.84	1.85	3.69
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.04	1.16	1.44	2.60
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	21.84					0.67	22.51		22.51
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	12R-38		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	21.84					0.48	22.32		22.32
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Acephate 90%	lb	5.38					0.09	5.47		5.47
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.55	0.31	0.84		0.03	1.73	2.16	3.89
IncidentalPestTrt$15	acre	22.50					0.39	22.89		22.89
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.18	0.10	0.28			0.56	0.72	1.28
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	132.00					0.58	132.58		132.58
Stalk Shredder-Flail	15'		2.47	2.94	3.01		0.04	8.46	5.93	14.39
1/4-mi. Pivot Irr.	acre		25.77	21.65	1.84		0.94	50.20	82.73	132.93
TOTALS		527.50	50.14	55.54	25.97	0.00	14.64	673.79	219.15	892.94

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

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, 2020

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	916.68
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	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	41.25	0.00	0.00	0.00	0.00	21.84	0.00	21.84	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	10.28	0.00	44.33	14.21	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	27.88	5.38	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	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	1.60	1.60	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	2.15	0.00	0.00	0.00	0.56	1.65	5.39	3.78	1.60	0.71	0.84	9.29
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	0.36	1.38	3.13	10.66	11.22	8.09	0.54	12.67
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.20	1.11	2.83	20.32	2.38	1.60	0.30	24.69
INTEREST ON OP. CAP.	4.56	0.00	0.00	0.00	0.44	0.80	5.07	1.88	0.77	0.20	0.13	0.79
TOTAL DIRECT EXPENSES	91.63	0.00	0.00	0.00	12.90	26.78	197.90	88.17	45.45	15.98	15.54	179.44
NET INCOME	-91.63	0.00	0.00	0.00	-12.90	-26.78	-197.90	-88.17	-45.45	-15.98	-15.54	737.24
NET INCOME TO DATE	-91.63	-91.63	-91.63	-91.63	-104.53	-131.31	-329.21	-417.38	-462.83	-478.81	-494.35	242.89

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* 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, 2020

PRODUCT			PERCENT 75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-162	-143	-124	-105	-87	-68	-49	-30	-11	7	26
			-381	-362	-343	-325	-306	-287	-268	-249	-230	-211	-192
60	720.00	lb	-119	-96	-73	-51	-28	-5	16	39	61	84	107
			-338	-315	-293	-270	-247	-225	-202	-179	-157	-134	-111
70	840.00	lb	-75	-49	-22	3	29	56	82	109	135	161	188
			-294	-268	-242	-215	-189	-162	-136	-110	-83	-57	-30
80	960.00	lb	-32	-2	27	58	88	118	148	178	209	239	269
			-251	-221	-191	-161	-130	-100	-70	-40	-10	20	50
90	1080.00	lb	10	44	78	112	146	180	214	248	282	316	350
			-208	-174	-140	-106	-72	-38	-4	29	63	97	131
100	1200.00	lb	54	91	129	167	205	242	280	318	356	393	431
			-164	-127	-89	-51	-13	23	61	99	136	174	212
110	1320.00	lb	97	139	180	222	263	305	346	388	429	471	512
			-121	-80	-38	2	44	85	127	168	210	251	293
120	1440.00	lb	140	186	231	276	322	367	412	457	503	548	593
			-78	-32	12	57	102	148	193	238	284	329	374
130	1560.00	lb	184	233	282	331	380	429	478	527	576	625	674
			-34	14	63	112	161	210	259	308	357	406	455
140	1680.00	lb	227	280	333	386	438	491	544	597	650	703	755
			8	61	114	166	219	272	325	378	431	483	536
150	1800.00	lb	270	327	384	440	497	553	610	667	723	780	836
			51	108	164	221	278	334	391	447	504	561	617

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 2019 input prices.

Table 6.A Estimated costs per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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	18.11	0.8700	15.76	_________
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
Quadris Top SBX	oz	2.36	7.0000	16.52	_________
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Prefix	pt	5.69	2.0000	11.38	_________
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_________
Prevathon	oz	1.12	14.0000	15.68	_________
Bifenthrin	oz	0.82	6.4000	5.25	_________
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_________
SEED/PLANTS					
Soybean Seed RR2	lb	1.39	50.0000	69.50	_________
ADJUVANTS					
Surfactant	pt	5.31	0.6000	3.19	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.1171	1.78	_________
Harvesters	hour	15.22	0.1021	1.56	_________
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_________
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_________
Harvesters	gal	2.30	1.3935	3.21	_________
1/2-mi Pivot Irr.	gal	2.30	16.4057	37.73	_________
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_________
Tractors	acre	0.83	1.0000	0.83	_________
Harvesters	acre	3.75	1.0000	3.75	_________
1/2-mi Pivot Irr.	acre	11.79	1.0000	11.79	_________
INTEREST ON OP. CAP.	acre	9.05	1.0000	9.05	_________

TOTAL DIRECT EXPENSES				379.50	_________
FIXED EXPENSES					
Implements	acre	6.37	1.0000	6.37	_________
Tractors	acre	5.66	1.0000	5.66	_________
Harvesters	acre	15.90	1.0000	15.90	_________
1/2-mi Pivot Irr.	acre	46.92	1.0000	46.92	_________

TOTAL FIXED EXPENSES				74.85	_________

TOTAL SPECIFIED EXPENSES				454.35	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 6.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	50.0000	480.00	_________

TOTAL INCOME				480.00	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_________
FERTILIZERS	acre	52.34	1.0000	52.34	_________
FUNGICIDES	acre	23.21	1.0000	23.21	_________
HERBICIDES	acre	41.70	1.0000	41.70	_________
INSECTICIDES	acre	34.62	1.0000	34.62	_________
SEED/PLANTS	acre	69.50	1.0000	69.50	_________
ADJUVANTS	acre	3.18	1.0000	3.18	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	13.50	1.0000	13.50	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
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	15.22	0.2193	3.34	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL	gal	2.30	19.1560	44.06	_________
REPAIR & MAINTENANCE	acre	19.71	1.0000	19.71	_________
INTEREST ON OP. CAP.	acre	9.05	1.0000	9.05	_________

TOTAL DIRECT EXPENSES				379.50	_________
RETURNS ABOVE DIRECT EXPENSES				100.50	_________
TOTAL FIXED EXPENSES				74.85	_________

TOTAL SPECIFIED EXPENSES				454.35	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				25.65	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 6.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-------------hours------------			
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt $8	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					50.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.21	0.21	0.35	0.18

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 6.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.80	2.48	2.53		0.15	6.96	7.46	14.42
Soybean Seed RR2	lb	69.50					1.52	71.02		71.02
CruiserMaxx	oz	6.69					0.15	6.84		6.84
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	17.68					0.39	18.07		18.07
Gramoxone SL 2.0	oz	8.16					0.18	8.34		8.34
Surfactant	pt	2.12					0.05	2.17		2.17
Spray (Broadcast)	60'		0.75	0.41	0.93		0.04	2.13	1.63	3.76
Glyphosate 3lbs a.e	oz	4.48					0.08	4.56		4.56
Prefix	pt	11.38					0.20	11.58		11.58
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Quadris Top SBX	oz	16.52					0.22	16.74		16.74
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Acephate 90SP	lb	5.69					0.07	5.76		5.76
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Prevathon	oz	15.68					0.21	15.89		15.89
Surfactant	pt	0.53					0.01	0.54		0.54
Bifenthrin	oz	5.25					0.07	5.32		5.32
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
Header -Soybean	25' Flex		3.21	4.67	2.90		0.05	10.83	17.40	28.23
Haul Soybeans	bu	13.50					0.06	13.56		13.56
Grain Cart Soybean	700 bu		0.57	0.36	0.60		0.01	1.54	1.44	2.98
1/2-mi Pivot Irr.	acre		37.73	11.79	0.47		0.92	50.91	46.92	97.83
TOTALS		299.25	44.06	19.71	7.43	0.00	9.05	379.50	74.85	454.35

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 6.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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	480.00
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	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	16.52	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	15.86	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	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	1.06	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	14.32	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	2.57	0.98	0.04	0.00	3.50
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	13.12	15.84	11.32	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.83	1.23	0.62	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.18	2.94	0.60	1.02	0.13	0.12
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	7.02	137.16	34.51	78.20	15.13	25.93
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-7.02	-137.16	-34.51	-78.20	-15.13	454.07
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.57	-225.73	-260.24	-338.44	-353.57	100.50

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre

* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	25.00	bu	-192	-180	-168	-156	-144	-132	-120	-108	-96	-84	-72
			-267	-255	-243	-231	-219	-207	-195	-183	-171	-159	-147
60	30.00	bu	-158	-143	-129	-114	-100	-86	-71	-57	-42	-28	-14
			-232	-218	-204	-189	-175	-160	-146	-132	-117	-103	-88
70	35.00	bu	-123	-106	-89	-73	-56	-39	-22	-5	10	27	44
			-198	-181	-164	-147	-131	-114	-97	-80	-63	-47	-30
80	40.00	bu	-88	-69	-50	-31	-11	7	26	45	64	84	103
			-163	-144	-125	-106	-86	-67	-48	-29	-10	9	28
90	45.00	bu	-54	-32	-10	10	32	53	75	97	118	140	161
			-128	-107	-85	-64	-42	-20	0	22	43	65	87
100	50.00	bu	-19	4	28	52	76	100	124	148	172	196	220
			-94	-70	-46	-22	1	25	49	73	97	121	145
110	55.00	bu	15	41	67	94	120	147	173	199	226	252	279
			-59	-33	-6	19	45	72	98	125	151	177	204
120	60.00	bu	49	78	107	136	164	193	222	251	280	308	337
			-25	3	32	61	90	118	147	176	205	234	262
130	65.00	bu	84	115	146	178	209	240	271	302	334	365	396
			9	40	71	103	134	165	196	227	259	290	321
140	70.00	bu	119	152	186	219	253	287	320	354	387	421	455
			44	77	111	145	178	212	245	279	313	346	380
150	75.00	bu	153	189	225	261	297	333	369	405	441	477	513
			78	114	150	186	222	258	294	330	366	402	438

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 2019 input prices.

Table 7.A Estimated costs per acre
Soybeans, full-season, RR2, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	0.17	16.0000	2.72	_________
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.6600	11.95	_________
Potash (60% K2O)	cwt	27.50	1.0000	27.50	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_________
2,4-D Amine 4	pt	2.73	2.0000	5.46	_________
Boundary	pt	8.84	2.0000	17.68	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Prefix	pt	5.69	2.0000	11.38	_________
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_________
SEED/PLANTS					
Soybean Seed RR2	lb	1.39	50.0000	69.50	_________
ADJUVANTS					
Surfactant	pt	5.31	0.6000	3.19	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.3128	4.77	_________
Harvesters	hour	15.22	0.1021	1.56	_________
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	_________
UNALLOCATED LABOR	hour	15.23	0.3734	5.69	_________
DIESEL FUEL					
Tractors	gal	2.30	3.0592	7.02	_________
Harvesters	gal	2.30	1.3935	3.21	_________
REPAIR & MAINTENANCE					
Implements	acre	4.91	1.0000	4.91	_________
Tractors	acre	1.86	1.0000	1.86	_________
Harvesters	acre	3.75	1.0000	3.75	_________
INTEREST ON OP. CAP.	acre	8.23	1.0000	8.23	_________
TOTAL DIRECT EXPENSES				282.57	_________
FIXED EXPENSES					
Implements	acre	10.69	1.0000	10.69	_________
Tractors	acre	12.56	1.0000	12.56	_________
Harvesters	acre	15.90	1.0000	15.90	_________
TOTAL FIXED EXPENSES				39.15	_________
TOTAL SPECIFIED EXPENSES				321.72	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.**The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 7.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	43.0000	412.80	________

TOTAL INCOME				412.80	________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	14.00	1.0000	14.00	________
HARVEST AIDS	acre	2.72	1.0000	2.72	________
FERTILIZERS	acre	39.45	1.0000	39.45	________
FUNGICIDES	acre	6.69	1.0000	6.69	________
HERBICIDES	acre	56.12	1.0000	56.12	________
INSECTICIDES	acre	5.69	1.0000	5.69	________
SEED/PLANTS	acre	69.50	1.0000	69.50	________
ADJUVANTS	acre	3.18	1.0000	3.18	________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	________
HAULING	acre	11.61	1.0000	11.61	________
CUSTOM LIME	acre	14.32	1.0000	14.32	________
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	15.22	0.4149	6.33	________
UNALLOCATED LABOR	hour	15.23	0.3734	5.69	________
DIESEL FUEL	gal	2.30	4.4528	10.23	________
REPAIR & MAINTENANCE	acre	10.52	1.0000	10.52	________
INTEREST ON OP. CAP.	acre	8.23	1.0000	8.23	________

TOTAL DIRECT EXPENSES				282.57	________
RETURNS ABOVE DIRECT EXPENSES				130.23	________
TOTAL FIXED EXPENSES				39.15	________

TOTAL SPECIFIED EXPENSES				321.72	________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				91.08	________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 7.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-------------	hours	------------	
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Plant - Folding	12R-30	MFWD 190	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					43.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.41	0.41	0.52	0.37

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 7.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	11.95					0.63	12.58		12.58
Potash (60% K2O)	cwt	27.50					1.44	28.94		28.94
Disk Harrow	24'		1.84	1.49	2.37		0.30	6.00	5.61	11.61
Field Cultivate Fld	24'		1.40	0.85	1.80		0.21	4.26	4.69	8.95
App by Air (5 gal)	appl	7.00					0.21	7.21		7.21
Glyphosate 3lbs a.e	oz	4.48					0.14	4.62		4.62
2,4-D Amine 4	pt	5.46					0.17	5.63		5.63
Plant - Folding	12R-30		1.41	2.03	2.39		0.15	5.98	5.99	11.97
Soybean Seed RR2	lb	69.50					1.82	71.32		71.32
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Prefix	pt	11.38					0.25	11.63		11.63
Soybeans Consultant	acre	6.50					0.14	6.64		6.64
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Spray (Broadcast)	60'		0.63	0.38	0.95		0.02	1.98	1.40	3.38
Acephate 90SP	lb	5.69					0.05	5.74		5.74
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	25' Flex		3.21	4.67	2.96		0.05	10.89	17.40	28.29
Haul Soybeans	bu	11.61					0.05	11.66		11.66
Grain Cart Soybean	700 bu		0.48	0.34	0.61		0.01	1.44	1.26	2.70
TOTALS		240.61	10.23	10.52	12.98	0.00	8.23	282.57	39.15	321.72

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 7.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	412.80
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	2.72	0.00
FERTILIZERS	39.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.94	25.84	20.34	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.69	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	69.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.00	0.00	1.06	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	14.32	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	4.17	0.00	0.00	0.00	0.00	0.00	2.39	1.90	0.00	0.00	0.95	3.57
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	3.24	0.00	0.00	0.00	0.00	0.00	1.41	1.26	0.00	0.00	0.63	3.69
REPAIR & MAINTENANCE	2.34	0.00	0.00	0.00	0.00	0.00	2.03	0.76	0.00	0.00	0.38	5.01
INTEREST ON OP. CAP.	3.89	0.00	0.00	0.00	0.00	0.52	2.88	0.67	0.00	0.00	0.16	0.11
TOTAL DIRECT EXPENSES	78.24	0.00	0.00	0.00	0.00	17.46	112.86	31.43	0.00	0.00	18.59	23.99
NET INCOME	-78.24	0.00	0.00	0.00	0.00	-17.46	-112.86	-31.43	0.00	0.00	-18.59	388.81
NET INCOME TO DATE	-78.24	-78.24	-78.24	-78.24	-78.24	-95.70	-208.56	-239.99	-239.99	-239.99	-258.58	130.23

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	21.50	bu	-121	-111	-101	-90	-80	-70	-60	-49	-39	-29	-18
			-161	-150	-140	-130	-119	-109	-99	-88	-78	-68	-57
60	25.80	bu	-92	-79	-67	-54	-42	-30	-17	-5	6	19	31
			-131	-118	-106	-94	-81	-69	-56	-44	-32	-19	-7
70	30.10	bu	-62	-47	-33	-19	-4	9	24	38	53	67	82
			-101	-87	-72	-58	-43	-29	-14	-0	14	28	42
80	34.40	bu	-32	-16	0	16	33	50	66	83	99	116	132
			-71	-55	-38	-22	-5	10	27	43	60	76	93
90	38.70	bu	-2	15	34	52	71	90	108	127	145	164	182
			-41	-23	-4	13	32	50	69	88	106	125	143
100	43.00	bu	27	47	68	88	109	130	150	171	192	212	233
			-12	8	29	49	70	91	111	132	153	173	194
110	47.30	bu	56	79	102	124	147	170	193	215	238	261	283
			17	40	63	85	108	131	153	176	199	222	244
120	51.60	bu	86	111	136	160	185	210	235	259	284	309	334
			47	72	97	121	146	171	196	220	245	270	295
130	55.90	bu	116	143	170	196	223	250	277	304	331	357	384
			77	104	130	157	184	211	238	265	291	318	345
140	60.20	bu	146	175	203	232	261	290	319	348	377	406	435
			107	135	164	193	222	251	280	309	338	367	396
150	64.50	bu	176	206	237	268	299	330	361	392	423	454	485
			136	167	198	229	260	291	322	353	384	415	446

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 2019 input prices.

Table 8.A Estimated costs per acre
Soybeans, full-season, RR2, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	0.17	16.0000	2.72	_________
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.6600	11.95	_________
Potash (60% K2O)	cwt	27.50	1.0000	27.50	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_________
Select Max	pt	10.87	1.0000	10.87	_________
Fierce	oz	7.44	3.5000	26.04	_________
Gramoxone SL 2.0	oz	0.17	96.0000	16.32	_________
Boundary	pt	8.84	2.0000	17.68	_________
Prefix	pt	5.69	2.0000	11.38	_________
INSECTICIDES					
Dimilin 2L	oz	1.91	1.0000	1.91	_________
Prevathon	oz	1.12	14.0000	15.68	_________
Baythroid XL	oz	1.06	1.0650	1.13	_________
SEED/PLANTS					
Soybean Seed RR2	lb	1.39	50.0000	69.50	_________
ADJUVANTS					
Surfactant	pt	5.31	1.4500	7.70	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.4831	7.35	_________
Harvesters	hour	15.22	0.1021	1.56	_________
HAND LABOR					
Implements	hour	9.06	0.1523	1.38	_________
UNALLOCATED LABOR	hour	15.24	0.5267	8.03	_________
DIESEL FUEL					
Tractors	gal	2.30	4.8708	11.18	_________
Harvesters	gal	2.30	1.3935	3.21	_________
REPAIR & MAINTENANCE					
Implements	acre	6.60	1.0000	6.60	_________
Tractors	acre	2.96	1.0000	2.96	_________
Harvesters	acre	3.75	1.0000	3.75	_________
INTEREST ON OP. CAP.	acre	7.71	1.0000	7.71	_________

TOTAL DIRECT EXPENSES				343.68	_________
FIXED EXPENSES					
Implements	acre	14.32	1.0000	14.32	_________
Tractors	acre	20.05	1.0000	20.05	_________
Harvesters	acre	15.90	1.0000	15.90	_________

TOTAL FIXED EXPENSES				50.27	_________

TOTAL SPECIFIED EXPENSES				393.95	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 8.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	40.0000	384.00	_________
TOTAL INCOME				384.00	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_________
HARVEST AIDS	acre	2.72	1.0000	2.72	_________
FERTILIZERS	acre	39.45	1.0000	39.45	_________
FUNGICIDES	acre	6.69	1.0000	6.69	_________
HERBICIDES	acre	95.73	1.0000	95.73	_________
INSECTICIDES	acre	18.72	1.0000	18.72	_________
SEED/PLANTS	acre	69.50	1.0000	69.50	_________
ADJUVANTS	acre	7.69	1.0000	7.69	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	10.80	1.0000	10.80	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
CROP CONSULTANT	acre	6.50	1.0000	6.50	_________
SOIL TEST	acre	3.33	1.0000	3.33	_________
HAND LABOR	hour	9.06	0.1523	1.38	_________
OPERATOR LABOR	hour	15.22	0.5853	8.91	_________
UNALLOCATED LABOR	hour	15.24	0.5267	8.03	_________
DIESEL FUEL	gal	2.30	6.2644	14.39	_________
REPAIR & MAINTENANCE	acre	13.31	1.0000	13.31	_________
INTEREST ON OP. CAP.	acre	7.71	1.0000	7.71	_________
TOTAL DIRECT EXPENSES				343.68	_________
RETURNS ABOVE DIRECT EXPENSES				40.32	_________
TOTAL FIXED EXPENSES				50.27	_________
TOTAL SPECIFIED EXPENSES				393.95	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-9.95	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 8.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Dimilin 2L	oz					1.0000				
Surfactant	pt					0.0500				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Prevathon	oz					14.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Aug		0.01	0.01	0.02	0.01
Baythroid XL	oz					1.0650				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					40.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.58	0.58	0.73	0.52

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 8.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

OPERATION/	SIZE/	DIRECT COST							FIXED	TOTAL
OPERATING INPUT	UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	COST	COST
		dollars								
Soil Test	acre	3.33					0.01	3.34		3.34
Lime (Spread)	ton	14.32					0.06	14.38		14.38
Disk Harrow	24'		1.84	1.49	2.37		0.02	5.72	5.61	11.33
Field Cultivate Fld	24'		1.40	0.85	1.80		0.02	4.07	4.69	8.76
Bed/Lister-Roll-Fo	12R-30		2.15	1.30	2.34		0.03	5.82	6.00	11.82
Spray (Broadcast)	60'		0.63	0.38	0.95		0.08	2.04	1.40	3.44
Glyphosate 3lbs a.e	oz	4.48					0.18	4.66		4.66
Select Max	pt	10.87					0.43	11.30		11.30
Surfactant	pt	2.12					0.08	2.20		2.20
Custom Apply Fert	acre	7.50					0.23	7.73		7.73
Phosphorus(46% P2O5)	cwt	11.95					0.37	12.32		12.32
Potash (60% K2O)	cwt	27.50					0.84	28.34		28.34
Spray (Broadcast)	60'		0.63	0.38	0.95		0.06	2.02	1.40	3.42
Fierce	oz	26.04					0.80	26.84		26.84
Gramoxone SL 2.0	oz	8.16					0.25	8.41		8.41
Surfactant	pt	2.12					0.06	2.18		2.18
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.52	2.40	2.57		0.17	6.66	6.91	13.57
Soybean Seed RR2	lb	69.50					1.82	71.32		71.32
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Spray (Broadcast)	60'		0.63	0.38	0.95		0.05	2.01	1.40	3.41
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Prefix	pt	11.38					0.30	11.68		11.68
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Spray (Broadcast)	60'		0.32	0.18	0.46		0.02	0.98	0.70	1.68
Dimilin 2L	oz	1.91					0.03	1.94		1.94
Surfactant	pt	0.27						0.27		0.27
Spray (Broadcast)	60'		0.63	0.38	0.95		0.03	1.99	1.40	3.39
Prevathon	oz	15.68					0.21	15.89		15.89
Spray (Broadcast)	60'		0.32	0.18	0.46		0.01	0.97	0.70	1.67
Baythroid XL	oz	1.13					0.01	1.14		1.14
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	25' Flex		3.21	4.67	2.96		0.05	10.89	17.40	28.29
Haul Soybeans	bu	10.80					0.05	10.85		10.85
Grain Cart Soybean	700 bu		0.48	0.34	0.61		0.01	1.44	1.26	2.70
TOTALS		289.95	14.39	13.31	18.32	0.00	7.71	343.68	50.27	393.95

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 8.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	384.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.72	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	39.45	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	15.35	0.00	34.20	41.70	4.48	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	16.81	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	69.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	2.12	0.00	2.12	2.12	0.00	0.27	0.00	1.06	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	14.32
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	0.95	0.00	0.95	3.52	0.95	0.46	1.41	0.00	10.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.63	0.00	0.63	2.15	0.63	0.32	0.95	0.00	9.08
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.38	0.00	0.38	2.78	0.38	0.18	0.56	0.00	8.65
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.77	0.00	2.61	3.54	0.14	0.05	0.26	0.09	0.25
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	20.20	0.00	87.84	138.50	6.58	3.19	19.99	10.87	56.51
NET INCOME	0.00	0.00	0.00	-20.20	0.00	-87.84	-138.50	-6.58	-3.19	-19.99	-10.87	327.49
NET INCOME TO DATE	0.00	0.00	0.00	-20.20	-20.20	-108.04	-246.54	-253.12	-256.31	-276.30	-287.17	40.32

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre

* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-194	-184	-175	-165	-155	-146	-136	-127	-117	-107	-98
			-244	-234	-225	-215	-206	-196	-186	-177	-167	-158	-148
60	24.00	bu	-166	-155	-143	-131	-120	-108	-97	-85	-74	-62	-51
			-216	-205	-193	-182	-170	-159	-147	-136	-124	-113	-101
70	28.00	bu	-138	-125	-111	-98	-85	-71	-58	-44	-31	-17	-4
			-189	-175	-162	-148	-135	-121	-108	-95	-81	-68	-54
80	32.00	bu	-111	-95	-80	-65	-49	-34	-18	-3	11	27	42
			-161	-146	-130	-115	-99	-84	-69	-53	-38	-23	-7
90	36.00	bu	-83	-66	-48	-31	-14	3	20	37	54	72	89
			-133	-116	-99	-81	-64	-47	-29	-12	4	21	39
100	40.00	bu	-55	-36	-17	1	21	40	59	78	97	117	136
			-105	-86	-67	-48	-29	-9	9	28	47	66	86
110	44.00	bu	-27	-6	14	35	56	77	98	119	140	162	183
			-78	-57	-35	-14	6	27	48	69	90	111	132
120	48.00	bu	-0	22	45	68	91	114	137	161	184	207	230
			-50	-27	-4	18	41	64	87	110	133	156	179
130	52.00	bu	27	52	77	102	127	152	177	202	227	252	277
			-22	2	27	52	77	101	126	151	176	201	226
140	56.00	bu	55	82	108	135	162	189	216	243	270	297	323
			4	31	58	85	112	139	166	193	219	246	273
150	60.00	bu	82	111	140	169	198	226	255	284	313	342	370
			32	61	90	119	147	176	205	234	263	291	320

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2019 input prices.

Table 9.A Estimated costs per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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	18.11	0.8700	15.76	_________
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Prefix	pt	5.69	2.0000	11.38	_________
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_________
Prevathon	oz	1.12	14.0000	15.68	_________
Bifenthrin	oz	0.82	6.4000	5.25	_________
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_________
SEED/PLANTS					
Soybean Seed RR2	lb	1.39	50.0000	69.50	_________
ADJUVANTS					
Surfactant	pt	5.31	0.5000	2.66	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.1171	1.78	_________
Harvesters	hour	15.22	0.1021	1.56	_________
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_________
Harvesters	gal	2.30	1.3935	3.21	_________
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_________
Tractors	acre	0.83	1.0000	0.83	_________
Harvesters	acre	3.75	1.0000	3.75	_________
INTEREST ON OP. CAP.	acre	7.78	1.0000	7.78	_________
TOTAL DIRECT EXPENSES				297.44	_________
FIXED EXPENSES					
Implements	acre	6.37	1.0000	6.37	_________
Tractors	acre	5.66	1.0000	5.66	_________
Harvesters	acre	15.90	1.0000	15.90	_________
TOTAL FIXED EXPENSES				27.93	_________
TOTAL SPECIFIED EXPENSES				325.37	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 9.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	25.0000	240.00	_________

TOTAL INCOME				240.00	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_________
FERTILIZERS	acre	52.34	1.0000	52.34	_________
FUNGICIDES	acre	6.69	1.0000	6.69	_________
HERBICIDES	acre	41.70	1.0000	41.70	_________
INSECTICIDES	acre	34.62	1.0000	34.62	_________
SEED/PLANTS	acre	69.50	1.0000	69.50	_________
ADJUVANTS	acre	2.65	1.0000	2.65	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	6.75	1.0000	6.75	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
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	15.22	0.2193	3.34	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL	gal	2.30	2.7503	6.33	_________
REPAIR & MAINTENANCE	acre	7.92	1.0000	7.92	_________
INTEREST ON OP. CAP.	acre	7.78	1.0000	7.78	_________

TOTAL DIRECT EXPENSES				297.44	_________
RETURNS ABOVE DIRECT EXPENSES				-57.44	_________
TOTAL FIXED EXPENSES				27.93	_________

TOTAL SPECIFIED EXPENSES				325.37	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-85.37	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 9.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt $8	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					25.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.21	0.21	0.30	0.18

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 9.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.80	2.48	2.53		0.15	6.96	7.46	14.42
Soybean Seed RR2	lb	69.50					1.52	71.02		71.02
CruiserMaxx	oz	6.69					0.15	6.84		6.84
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	17.68					0.39	18.07		18.07
Gramoxone SL 2.0	oz	8.16					0.18	8.34		8.34
Surfactant	pt	2.12					0.05	2.17		2.17
Spray (Broadcast)	60'		0.75	0.41	0.93		0.04	2.13	1.63	3.76
Glyphosate 3lbs a.e	oz	4.48					0.08	4.56		4.56
Prefix	pt	11.38					0.20	11.58		11.58
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Acephate 90SP	lb	5.69					0.07	5.76		5.76
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Prevathon	oz	15.68					0.21	15.89		15.89
Surfactant	pt	0.53					0.01	0.54		0.54
Bifenthrin	oz	5.25					0.07	5.32		5.32
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
Header -Soybean	25' Flex		3.21	4.67	2.90		0.05	10.83	17.40	28.23
Haul Soybeans	bu	6.75					0.03	6.78		6.78
Grain Cart Soybean	700 bu		0.57	0.36	0.60		0.01	1.54	1.44	2.98
TOTALS		268.45	6.33	7.92	6.96	0.00	7.78	297.44	27.93	325.37

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 9.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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	240.00
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	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	15.86	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	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.53	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	14.32	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	2.53	0.93	0.00	0.00	3.50
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	1.80	0.75	0.00	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48	0.41	0.00	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.17	2.47	0.32	0.54	0.13	0.09
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	6.67	114.98	18.27	41.69	15.13	19.15
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-6.67	-114.98	-18.27	-41.69	-15.13	220.85
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.22	-203.20	-221.47	-263.16	-278.29	-57.44

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

PRODUCT			PERCENT 75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-204	-198	-192	-186	-180	-174	-168	-162	-156	-150	-144
			-231	-225	-219	-213	-207	-201	-195	-189	-183	-177	-171
60	15.00	bu	-186	-179	-172	-165	-157	-150	-143	-136	-129	-121	-114
			-214	-207	-200	-193	-185	-178	-171	-164	-157	-149	-142
70	17.50	bu	-169	-161	-152	-144	-135	-127	-119	-110	-102	-93	-85
			-197	-188	-180	-172	-163	-155	-146	-138	-130	-121	-113
80	20.00	bu	-152	-142	-132	-123	-113	-104	-94	-84	-75	-65	-56
			-180	-170	-160	-151	-141	-132	-122	-112	-103	-93	-84
90	22.50	bu	-134	-123	-113	-102	-91	-80	-69	-59	-48	-37	-26
			-162	-151	-141	-130	-119	-108	-97	-87	-76	-65	-54
100	25.00	bu	-117	-105	-93	-81	-69	-57	-45	-33	-21	-9	2
			-145	-133	-121	-109	-97	-85	-73	-61	-49	-37	-25
110	27.50	bu	-100	-86	-73	-60	-47	-34	-20	-7	5	18	31
			-128	-114	-101	-88	-75	-62	-48	-35	-22	-9	3
120	30.00	bu	-82	-68	-53	-39	-25	-10	3	18	32	46	61
			-110	-96	-81	-67	-53	-38	-24	-9	4	18	33
130	32.50	bu	-65	-49	-34	-18	-3	12	28	43	59	74	90
			-93	-77	-62	-46	-31	-15	0	15	31	46	62
140	35.00	bu	-48	-31	-14	2	19	35	52	69	86	103	119
			-76	-59	-42	-25	-8	7	24	41	58	75	91
150	37.50	bu	-30	-12	5	23	41	59	77	95	113	131	149
			-58	-40	-22	-4	13	31	49	67	85	103	121

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 2019 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, 2020

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	18.11	0.8700	15.76	_________
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
Quadris Top SBX	oz	2.36	7.0000	16.52	_________
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Prefix	pt	5.69	2.0000	11.38	_________
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_________
Prevathon	oz	1.12	14.0000	15.68	_________
Bifenthrin	oz	0.82	6.4000	5.25	_________
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_________
SEED/PLANTS					
Soybean Seed RR2X	lb	1.32	50.0000	66.00	_________
ADJUVANTS					
Surfactant	pt	5.31	0.6000	3.19	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.1171	1.78	_________
Harvesters	hour	15.22	0.1021	1.56	_________
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_________
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_________
Harvesters	gal	2.30	1.3935	3.21	_________
1/2-mi Pivot Irr.	gal	2.30	16.4057	37.73	_________
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_________
Tractors	acre	0.83	1.0000	0.83	_________
Harvesters	acre	3.75	1.0000	3.75	_________
1/2-mi Pivot Irr.	acre	11.79	1.0000	11.79	_________
INTEREST ON OP. CAP.	acre	8.97	1.0000	8.97	_________

TOTAL DIRECT EXPENSES				375.92	_________
FIXED EXPENSES					
Implements	acre	6.37	1.0000	6.37	_________
Tractors	acre	5.66	1.0000	5.66	_________
Harvesters	acre	15.90	1.0000	15.90	_________
1/2-mi Pivot Irr.	acre	46.92	1.0000	46.92	_________

TOTAL FIXED EXPENSES				74.85	_________

TOTAL SPECIFIED EXPENSES				450.77	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 10.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	50.0000	480.00	_________
TOTAL INCOME				480.00	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_________
FERTILIZERS	acre	52.34	1.0000	52.34	_________
FUNGICIDES	acre	23.21	1.0000	23.21	_________
HERBICIDES	acre	41.70	1.0000	41.70	_________
INSECTICIDES	acre	34.62	1.0000	34.62	_________
SEED/PLANTS	acre	66.00	1.0000	66.00	_________
ADJUVANTS	acre	3.18	1.0000	3.18	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	13.50	1.0000	13.50	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
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	15.22	0.2193	3.34	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL	gal	2.30	19.1560	44.06	_________
REPAIR & MAINTENANCE	acre	19.71	1.0000	19.71	_________
INTEREST ON OP. CAP.	acre	8.97	1.0000	8.97	_________
TOTAL DIRECT EXPENSES				375.92	_________
RETURNS ABOVE DIRECT EXPENSES				104.08	_________
TOTAL FIXED EXPENSES				74.85	_________
TOTAL SPECIFIED EXPENSES				450.77	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				29.23	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 10.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-------------	hours	------------	
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt $8	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					50.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.21	0.21	0.35	0.18

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 10.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.80	2.48	2.53		0.15	6.96	7.46	14.42
Soybean Seed RR2X	lb	66.00					1.44	67.44		67.44
CruiserMaxx	oz	6.69					0.15	6.84		6.84
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	17.68					0.39	18.07		18.07
Gramoxone SL 2.0	oz	8.16					0.18	8.34		8.34
Surfactant	pt	2.12					0.05	2.17		2.17
Spray (Broadcast)	60'		0.75	0.41	0.93		0.04	2.13	1.63	3.76
Glyphosate 3lbs a.e	oz	4.48					0.08	4.56		4.56
Prefix	pt	11.38					0.20	11.58		11.58
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Quadris Top SBX	oz	16.52					0.22	16.74		16.74
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Acephate 90SP	lb	5.69					0.07	5.76		5.76
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Prevathon	oz	15.68					0.21	15.89		15.89
Surfactant	pt	0.53					0.01	0.54		0.54
Bifenthrin	oz	5.25					0.07	5.32		5.32
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
Header -Soybean	25' Flex		3.21	4.67	2.90		0.05	10.83	17.40	28.23
Haul Soybeans	bu	13.50					0.06	13.56		13.56
Grain Cart Soybean	700 bu		0.57	0.36	0.60		0.01	1.54	1.44	2.98
1/2-mi Pivot Irr.	acre		37.73	11.79	0.47		0.92	50.91	46.92	97.83
TOTALS		295.75	44.06	19.71	7.43	0.00	8.97	375.92	74.85	450.77

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 10.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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	480.00
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	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	16.52	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	15.86	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	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	1.06	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	14.32	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	2.57	0.98	0.04	0.00	3.50
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	13.12	15.84	11.32	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.83	1.23	0.62	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.18	2.86	0.60	1.02	0.13	0.12
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	7.02	133.58	34.51	78.20	15.13	25.93
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-7.02	-133.58	-34.51	-78.20	-15.13	454.07
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.57	-222.15	-256.66	-334.86	-349.99	104.08

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 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, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	25.00	bu	-189	-177	-165	-153	-141	-129	-117	-105	-93	-81	-69
			-263	-251	-239	-227	-215	-203	-191	-179	-167	-155	-143
60	30.00	bu	-154	-140	-125	-111	-96	-82	-68	-53	-39	-24	-10
			-229	-214	-200	-186	-171	-157	-142	-128	-114	-99	-85
70	35.00	bu	-119	-103	-86	-69	-52	-35	-19	-2	14	31	48
			-194	-177	-161	-144	-127	-110	-93	-77	-60	-43	-26
80	40.00	bu	-85	-66	-46	-27	-8	10	29	49	68	87	106
			-160	-140	-121	-102	-83	-64	-44	-25	-6	12	31
90	45.00	bu	-50	-28	-7	14	35	57	79	100	122	143	165
			-125	-103	-82	-60	-39	-17	4	25	47	68	90
100	50.00	bu	-15	8	32	56	80	104	128	152	176	200	224
			-90	-66	-42	-18	5	29	53	77	101	125	149
110	55.00	bu	18	45	71	97	124	150	177	203	229	256	282
			-56	-29	-3	23	49	75	102	128	155	181	207
120	60.00	bu	53	82	110	139	168	197	226	254	283	312	341
			-21	7	36	64	93	122	151	180	208	237	266
130	65.00	bu	88	119	150	181	212	244	275	306	337	368	400
			13	44	75	106	137	169	200	231	262	293	325
140	70.00	bu	122	156	189	223	257	290	324	357	391	425	458
			47	81	115	148	182	215	249	283	316	350	383
150	75.00	bu	157	193	229	265	301	337	373	409	445	481	517
			82	118	154	190	226	262	298	334	370	406	442

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2019 input prices.

Table 11.A Estimated costs per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	0.17	16.0000	2.72	________
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.6600	11.95	________
Potash (60% K2O)	cwt	27.50	1.0000	27.50	________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	________
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	________
2,4-D Amine 4	pt	2.73	2.0000	5.46	________
Boundary	pt	8.84	2.0000	17.68	________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	________
Prefix	pt	5.69	2.0000	11.38	________
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	________
SEED/PLANTS					
Soybean Seed RR2X	lb	1.32	50.0000	66.00	________
ADJUVANTS					
Surfactant	pt	5.31	0.6000	3.19	________
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	43.00	0.3330	14.32	________
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	15.22	0.3128	4.77	________
Harvesters	hour	15.22	0.1021	1.56	________
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	________
UNALLOCATED LABOR	hour	15.23	0.3734	5.69	________
DIESEL FUEL					
Tractors	gal	2.30	3.0592	7.02	________
Harvesters	gal	2.30	1.3935	3.21	________
REPAIR & MAINTENANCE					
Implements	acre	4.91	1.0000	4.91	________
Tractors	acre	1.86	1.0000	1.86	________
Harvesters	acre	3.75	1.0000	3.75	________
INTEREST ON OP. CAP.	acre	8.14	1.0000	8.14	________
TOTAL DIRECT EXPENSES				278.98	________
FIXED EXPENSES					
Implements	acre	10.69	1.0000	10.69	________
Tractors	acre	12.56	1.0000	12.56	________
Harvesters	acre	15.90	1.0000	15.90	________
TOTAL FIXED EXPENSES				39.15	________
TOTAL SPECIFIED EXPENSES				318.13	________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 11.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	43.0000	412.80	_________

TOTAL INCOME				412.80	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	14.00	1.0000	14.00	_________
HARVEST AIDS	acre	2.72	1.0000	2.72	_________
FERTILIZERS	acre	39.45	1.0000	39.45	_________
FUNGICIDES	acre	6.69	1.0000	6.69	_________
HERBICIDES	acre	56.12	1.0000	56.12	_________
INSECTICIDES	acre	5.69	1.0000	5.69	_________
SEED/PLANTS	acre	66.00	1.0000	66.00	_________
ADJUVANTS	acre	3.18	1.0000	3.18	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	11.61	1.0000	11.61	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
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	15.22	0.4149	6.33	_________
UNALLOCATED LABOR	hour	15.23	0.3734	5.69	_________
DIESEL FUEL	gal	2.30	4.4528	10.23	_________
REPAIR & MAINTENANCE	acre	10.52	1.0000	10.52	_________
INTEREST ON OP. CAP.	acre	8.14	1.0000	8.14	_________

TOTAL DIRECT EXPENSES				278.98	_________
RETURNS ABOVE DIRECT EXPENSES				133.82	_________
TOTAL FIXED EXPENSES				39.15	_________

TOTAL SPECIFIED EXPENSES				318.13	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				94.67	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 11.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-------------hours	------------		
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Plant - Folding	12R-30	MFWD 190	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					43.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.41	0.41	0.52	0.37

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 11.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	11.95					0.63	12.58		12.58
Potash (60% K2O)	cwt	27.50					1.44	28.94		28.94
Disk Harrow	24'		1.84	1.49	2.37		0.30	6.00	5.61	11.61
Field Cultivate Fld	24'		1.40	0.85	1.80		0.21	4.26	4.69	8.95
App by Air (5 gal)	appl	7.00					0.21	7.21		7.21
Glyphosate 3lbs a.e	oz	4.48					0.14	4.62		4.62
2,4-D Amine 4	pt	5.46					0.17	5.63		5.63
Plant - Folding	12R-30		1.41	2.03	2.39		0.15	5.98	5.99	11.97
Soybean Seed RR2X	lb	66.00					1.73	67.73		67.73
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Prefix	pt	11.38					0.25	11.63		11.63
Soybeans Consultant	acre	6.50					0.14	6.64		6.64
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Spray (Broadcast)	60'		0.63	0.38	0.95		0.02	1.98	1.40	3.38
Acephate 90SP	lb	5.69					0.05	5.74		5.74
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	25' Flex		3.21	4.67	2.96		0.05	10.89	17.40	28.29
Haul Soybeans	bu	11.61					0.05	11.66		11.66
Grain Cart Soybean	700 bu		0.48	0.34	0.61		0.01	1.44	1.26	2.70
TOTALS		237.11	10.23	10.52	12.98	0.00	8.14	278.98	39.15	318.13

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 11.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	412.80
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	2.72	0.00
FERTILIZERS	39.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.94	25.84	20.34	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.69	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	66.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.00	0.00	1.06	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	14.32	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	4.17	0.00	0.00	0.00	0.00	0.00	2.39	1.90	0.00	0.00	0.95	3.57
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	3.24	0.00	0.00	0.00	0.00	0.00	1.41	1.26	0.00	0.00	0.63	3.69
REPAIR & MAINTENANCE	2.34	0.00	0.00	0.00	0.00	0.00	2.03	0.76	0.00	0.00	0.38	5.01
INTEREST ON OP. CAP.	3.89	0.00	0.00	0.00	0.00	0.52	2.79	0.67	0.00	0.00	0.16	0.11
TOTAL DIRECT EXPENSES	78.24	0.00	0.00	0.00	0.00	17.46	109.27	31.43	0.00	0.00	18.59	23.99
NET INCOME	-78.24	0.00	0.00	0.00	0.00	-17.46	-109.27	-31.43	0.00	0.00	-18.59	388.81
NET INCOME TO DATE	-78.24	-78.24	-78.24	-78.24	-78.24	-95.70	-204.97	-236.40	-236.40	-236.40	-254.99	133.82

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 11.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2X, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

PRODUCT			PERCENT 75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	21.50	bu	-118	-108	-97	-87	-77	-66	-56	-46	-35	-25	-15
			-157	-147	-136	-126	-116	-105	-95	-85	-74	-64	-54
60	25.80	bu	-88	-76	-63	-51	-39	-26	-14	-1	10	22	35
			-127	-115	-102	-90	-78	-65	-53	-41	-28	-16	-3
70	30.10	bu	-58	-44	-29	-15	-0	13	27	42	56	71	85
			-97	-83	-69	-54	-40	-25	-11	3	17	32	46
80	34.40	bu	-28	-12	4	20	37	53	70	86	103	119	136
			-68	-51	-35	-18	-2	14	30	47	63	80	97
90	38.70	bu	0	19	37	56	75	93	112	130	149	168	186
			-38	-19	-1	17	35	54	73	91	110	128	147
100	43.00	bu	30	51	71	92	113	133	154	175	195	216	237
			-8	12	32	53	74	94	115	135	156	177	197
110	47.30	bu	60	83	105	128	151	173	196	219	242	264	287
			21	43	66	89	112	134	157	180	202	225	248
120	51.60	bu	90	114	139	164	189	214	238	263	288	313	337
			51	75	100	125	150	174	199	224	249	273	298
130	55.90	bu	120	146	173	200	227	254	280	307	334	361	388
			80	107	134	161	188	215	241	268	295	322	349
140	60.20	bu	149	178	207	236	265	294	323	352	380	409	438
			110	139	168	197	226	255	284	312	341	370	399
150	64.50	bu	179	210	241	272	303	334	365	396	427	458	489
			140	171	202	233	264	295	326	357	388	419	450

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2019 input prices.

Table 12.A Estimated costs per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	0.17	16.0000	2.72	_________
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.6600	11.95	_________
Potash (60% K2O)	cwt	27.50	1.0000	27.50	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_________
Select Max	pt	10.87	1.0000	10.87	_________
Fierce	oz	7.44	3.5000	26.04	_________
Gramoxone SL 2.0	oz	0.17	96.0000	16.32	_________
Boundary	pt	8.84	2.0000	17.68	_________
Prefix	pt	5.69	2.0000	11.38	_________
INSECTICIDES					
Dimilin 2L	oz	1.91	1.0000	1.91	_________
Baythroid XL	oz	1.06	1.0650	1.13	_________
SEED/PLANTS					
Soybean Seed RR2X	lb	1.32	50.0000	66.00	_________
ADJUVANTS					
Surfactant	pt	5.31	1.4500	7.70	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.4549	6.92	_________
Harvesters	hour	15.22	0.1021	1.56	_________
HAND LABOR					
Implements	hour	9.06	0.1382	1.25	_________
UNALLOCATED LABOR	hour	15.23	0.5013	7.64	_________
DIESEL FUEL					
Tractors	gal	2.30	4.5949	10.55	_________
Harvesters	gal	2.30	1.3935	3.21	_________
REPAIR & MAINTENANCE					
Implements	acre	6.39	1.0000	6.39	_________
Tractors	acre	2.79	1.0000	2.79	_________
Harvesters	acre	3.75	1.0000	3.75	_________
INTEREST ON OP. CAP.	acre	7.38	1.0000	7.38	_________

TOTAL DIRECT EXPENSES				322.21	_________
FIXED EXPENSES					
Implements	acre	14.05	1.0000	14.05	_________
Tractors	acre	18.92	1.0000	18.92	_________
Harvesters	acre	15.90	1.0000	15.90	_________

TOTAL FIXED EXPENSES				48.87	_________

TOTAL SPECIFIED EXPENSES				371.08	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.**The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 12.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	40.0000	384.00	_________

TOTAL INCOME				384.00	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_________
HARVEST AIDS	acre	2.72	1.0000	2.72	_________
FERTILIZERS	acre	39.45	1.0000	39.45	_________
FUNGICIDES	acre	6.69	1.0000	6.69	_________
HERBICIDES	acre	95.73	1.0000	95.73	_________
INSECTICIDES	acre	3.04	1.0000	3.04	_________
SEED/PLANTS	acre	66.00	1.0000	66.00	_________
ADJUVANTS	acre	7.69	1.0000	7.69	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	10.80	1.0000	10.80	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
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	15.22	0.5571	8.48	_________
UNALLOCATED LABOR	hour	15.23	0.5013	7.64	_________
DIESEL FUEL	gal	2.30	5.9885	13.76	_________
REPAIR & MAINTENANCE	acre	12.93	1.0000	12.93	_________
INTEREST ON OP. CAP.	acre	7.38	1.0000	7.38	_________

TOTAL DIRECT EXPENSES				322.21	_________
RETURNS ABOVE DIRECT EXPENSES				61.79	_________
TOTAL FIXED EXPENSES				48.87	_________

TOTAL SPECIFIED EXPENSES				371.08	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				12.92	_________

Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 12.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Dimilin 2L	oz					1.0000				
Surfactant	pt					0.0500				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Aug		0.01	0.01	0.02	0.01
Baythroid XL	oz					1.0650				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					40.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.55	0.55	0.69	0.50

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.01	3.34		3.34
Lime (Spread)	ton	14.32					0.06	14.38		14.38
Disk Harrow	24'		1.84	1.49	2.37		0.02	5.72	5.61	11.33
Field Cultivate Fld	24'		1.40	0.85	1.80		0.02	4.07	4.69	8.76
Bed/Lister-Roll-Fo	12R-30		2.15	1.30	2.34		0.03	5.82	6.00	11.82
Spray (Broadcast)	60'		0.63	0.38	0.95		0.08	2.04	1.40	3.44
Glyphosate 3lbs a.e	oz	4.48					0.18	4.66		4.66
Select Max	pt	10.87					0.43	11.30		11.30
Surfactant	pt	2.12					0.08	2.20		2.20
Custom Apply Fert	acre	7.50					0.23	7.73		7.73
Phosphorus(46% P2O5)	cwt	11.95					0.37	12.32		12.32
Potash (60% K2O)	cwt	27.50					0.84	28.34		28.34
Spray (Broadcast)	60'		0.63	0.38	0.95		0.06	2.02	1.40	3.42
Fierce	oz	26.04					0.80	26.84		26.84
Gramoxone SL 2.0	oz	8.16					0.25	8.41		8.41
Surfactant	pt	2.12					0.06	2.18		2.18
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.52	2.40	2.57		0.17	6.66	6.91	13.57
Soybean Seed RR2X	lb	66.00					1.73	67.73		67.73
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Spray (Broadcast)	60'		0.63	0.38	0.95		0.05	2.01	1.40	3.41
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Prefix	pt	11.38					0.30	11.68		11.68
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Spray (Broadcast)	60'		0.32	0.18	0.46		0.02	0.98	0.70	1.68
Dimilin 2L	oz	1.91					0.03	1.94		1.94
Surfactant	pt	0.27						0.27		0.27
Spray (Broadcast)	60'		0.32	0.18	0.46		0.01	0.97	0.70	1.67
Baythroid XL	oz	1.13					0.01	1.14		1.14
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	25' Flex		3.21	4.67	2.96		0.05	10.89	17.40	28.29
Haul Soybeans	bu	10.80					0.05	10.85		10.85
Grain Cart Soybean	700 bu		0.48	0.34	0.61		0.01	1.44	1.26	2.70
TOTALS		270.77	13.76	12.93	17.37	0.00	7.38	322.21	48.87	371.08

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	384.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.72	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	39.45	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	15.35	0.00	34.20	41.70	4.48	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	1.13	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	66.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	2.12	0.00	2.12	2.12	0.00	0.27	0.00	1.06	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	14.32
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	0.95	0.00	0.95	3.52	0.95	0.46	0.46	0.00	10.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.63	0.00	0.63	2.15	0.63	0.32	0.32	0.00	9.08
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.38	0.00	0.38	2.78	0.38	0.18	0.18	0.00	8.65
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.77	0.00	2.61	3.45	0.14	0.05	0.02	0.09	0.25
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	20.20	0.00	87.84	134.91	6.58	3.19	2.11	10.87	56.51
NET INCOME	0.00	0.00	0.00	-20.20	0.00	-87.84	-134.91	-6.58	-3.19	-2.11	-10.87	327.49
NET INCOME TO DATE	0.00	0.00	0.00	-20.20	-20.20	-108.04	-242.95	-249.53	-252.72	-254.83	-265.70	61.79

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 12.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2X, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-172	-163	-153	-143	-134	-124	-115	-105	-95	-86	-76
			-221	-212	-202	-192	-183	-173	-164	-154	-144	-135	-125
60	24.00	bu	-145	-133	-122	-110	-98	-87	-75	-64	-52	-41	-29
			-193	-182	-170	-159	-147	-136	-124	-113	-101	-90	-78
70	28.00	bu	-117	-103	-90	-77	-63	-50	-36	-23	-9	3	17
			-166	-152	-139	-125	-112	-99	-85	-72	-58	-45	-31
80	32.00	bu	-89	-74	-58	-43	-28	-12	2	17	33	48	63
			-138	-123	-107	-92	-77	-61	-46	-30	-15	-0	15
90	36.00	bu	-61	-44	-27	-10	7	24	41	59	76	93	110
			-110	-93	-76	-58	-41	-24	-7	10	27	44	62
100	40.00	bu	-34	-15	4	23	42	61	80	100	119	138	157
			-83	-63	-44	-25	-6	12	32	51	70	89	108
110	44.00	bu	-6	14	35	56	77	99	120	141	162	183	204
			-55	-34	-13	7	29	50	71	92	113	134	155
120	48.00	bu	21	44	67	90	113	136	159	182	205	228	251
			-27	-4	18	41	64	87	110	133	156	179	202
130	52.00	bu	48	73	98	123	148	173	198	223	248	273	298
			0	25	49	74	99	124	149	174	199	224	249
140	56.00	bu	76	103	130	157	184	211	237	264	291	318	345
			27	54	81	108	135	162	189	215	242	269	296
150	60.00	bu	104	133	161	190	219	248	277	305	334	363	392
			55	84	113	141	170	199	228	257	285	314	343

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 2019 input prices.

Table 13.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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	18.11	0.8700	15.76	_________
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Prefix	pt	5.69	2.0000	11.38	_________
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_________
Prevathon	oz	1.12	14.0000	15.68	_________
Bifenthrin	oz	0.82	6.4000	5.25	_________
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_________
SEED/PLANTS					
Soybean Seed RR2X	lb	1.32	50.0000	66.00	_________
ADJUVANTS					
Surfactant	pt	5.31	0.5000	2.66	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.1171	1.78	_________
Harvesters	hour	15.22	0.1021	1.56	_________
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_________
Harvesters	gal	2.30	1.3935	3.21	_________
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_________
Tractors	acre	0.83	1.0000	0.83	_________
Harvesters	acre	3.75	1.0000	3.75	_________
INTEREST ON OP. CAP.	acre	7.70	1.0000	7.70	_________

TOTAL DIRECT EXPENSES				293.86	_________
FIXED EXPENSES					
Implements	acre	6.37	1.0000	6.37	_________
Tractors	acre	5.66	1.0000	5.66	_________
Harvesters	acre	15.90	1.0000	15.90	_________

TOTAL FIXED EXPENSES				27.93	_________

TOTAL SPECIFIED EXPENSES				321.79	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 13.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	25.0000	240.00	________

TOTAL INCOME				240.00	________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	________
FERTILIZERS	acre	52.34	1.0000	52.34	________
FUNGICIDES	acre	6.69	1.0000	6.69	________
HERBICIDES	acre	41.70	1.0000	41.70	________
INSECTICIDES	acre	34.62	1.0000	34.62	________
SEED/PLANTS	acre	66.00	1.0000	66.00	________
ADJUVANTS	acre	2.65	1.0000	2.65	________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	________
HAULING	acre	6.75	1.0000	6.75	________
CUSTOM LIME	acre	14.32	1.0000	14.32	________
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	15.22	0.2193	3.34	________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	________
DIESEL FUEL	gal	2.30	2.7503	6.33	________
REPAIR & MAINTENANCE	acre	7.92	1.0000	7.92	________
INTEREST ON OP. CAP.	acre	7.70	1.0000	7.70	________

TOTAL DIRECT EXPENSES				293.86	________
RETURNS ABOVE DIRECT EXPENSES				-53.86	________
TOTAL FIXED EXPENSES				27.93	________

TOTAL SPECIFIED EXPENSES				321.79	________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-81.79	________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.**The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 13.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-------------hours------------			
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt $8	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					25.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.21	0.21	0.30	0.18

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 13.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.80	2.48	2.53		0.15	6.96	7.46	14.42
Soybean Seed RR2X	lb	66.00					1.44	67.44		67.44
CruiserMaxx	oz	6.69					0.15	6.84		6.84
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	17.68					0.39	18.07		18.07
Gramoxone SL 2.0	oz	8.16					0.18	8.34		8.34
Surfactant	pt	2.12					0.05	2.17		2.17
Spray (Broadcast)	60'		0.75	0.41	0.93		0.04	2.13	1.63	3.76
Glyphosate 3lbs a.e	oz	4.48					0.08	4.56		4.56
Prefix	pt	11.38					0.20	11.58		11.58
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Acephate 90SP	lb	5.69					0.07	5.76		5.76
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Prevathon	oz	15.68					0.21	15.89		15.89
Surfactant	pt	0.53					0.01	0.54		0.54
Bifenthrin	oz	5.25					0.07	5.32		5.32
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
Header -Soybean	25' Flex		3.21	4.67	2.90		0.05	10.83	17.40	28.23
Haul Soybeans	bu	6.75					0.03	6.78		6.78
Grain Cart Soybean	700 bu		0.57	0.36	0.60		0.01	1.54	1.44	2.98
TOTALS		264.95	6.33	7.92	6.96	0.00	7.70	293.86	27.93	321.79

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 13.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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	240.00
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	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	15.86	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	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.53	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	14.32	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	2.53	0.93	0.00	0.00	3.50
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	1.80	0.75	0.00	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48	0.41	0.00	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.17	2.39	0.32	0.54	0.13	0.09
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	6.67	111.40	18.27	41.69	15.13	19.15
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-6.67	-111.40	-18.27	-41.69	-15.13	220.85
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.22	-199.62	-217.89	-259.58	-274.71	-53.86

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre

* Lease costs are based on hourly usage costs.

Table 13.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-200	-194	-188	-182	-176	-170	-164	-158	-152	-146	-140
			-228	-222	-216	-210	-204	-198	-192	-186	-180	-174	-168
60	15.00	bu	-183	-175	-168	-161	-154	-147	-139	-132	-125	-118	-111
			-211	-203	-196	-189	-182	-175	-167	-160	-153	-146	-139
70	17.50	bu	-165	-157	-149	-140	-132	-123	-115	-107	-98	-90	-81
			-193	-185	-176	-168	-160	-151	-143	-134	-126	-118	-109
80	20.00	bu	-148	-138	-129	-119	-110	-100	-90	-81	-71	-62	-52
			-176	-166	-157	-147	-138	-128	-118	-109	-99	-90	-80
90	22.50	bu	-131	-120	-109	-98	-87	-77	-66	-55	-44	-33	-23
			-159	-148	-137	-126	-115	-105	-94	-83	-72	-61	-51
100	25.00	bu	-113	-101	-89	-77	-65	-53	-41	-29	-17	-5	6
			-141	-129	-117	-105	-93	-81	-69	-57	-45	-33	-21
110	27.50	bu	-96	-83	-70	-56	-43	-30	-17	-4	9	22	35
			-124	-111	-98	-84	-71	-58	-45	-32	-18	-5	7
120	30.00	bu	-79	-64	-50	-36	-21	-7	7	21	35	50	64
			-107	-92	-78	-63	-49	-35	-20	-6	8	22	36
130	32.50	bu	-61	-46	-30	-15	0	16	31	47	62	78	94
			-89	-74	-58	-43	-27	-11	3	19	34	50	66
140	35.00	bu	-44	-27	-10	5	22	39	56	73	89	106	123
			-72	-55	-38	-22	-5	11	28	45	61	78	95
150	37.50	bu	-27	-9	8	26	44	62	80	98	116	134	152
			-55	-37	-19	-1	16	34	52	70	88	106	124

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 2019 input prices.

Table 14.A Estimated costs per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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	18.11	0.8700	15.76	_________
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
Quadris Top SBX	oz	2.36	7.0000	16.52	_________
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Liberty 280	oz	0.49	29.0000	14.21	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_________
Prevathon	oz	1.12	14.0000	15.68	_________
Bifenthrin	oz	0.82	6.4000	5.25	_________
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_________
SEED/PLANTS					
Soybean Seed LL	lb	1.27	50.0000	63.50	_________
ADJUVANTS					
Surfactant	pt	5.31	0.6000	3.19	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.1171	1.78	_________
Harvesters	hour	15.22	0.1021	1.56	_________
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_________
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_________
Harvesters	gal	2.30	1.3935	3.21	_________
1/2-mi Pivot Irr.	gal	2.30	16.4057	37.73	_________
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_________
Tractors	acre	0.83	1.0000	0.83	_________
Harvesters	acre	3.75	1.0000	3.75	_________
1/2-mi Pivot Irr.	acre	11.79	1.0000	11.79	_________
INTEREST ON OP. CAP.	acre	9.07	1.0000	9.07	_________

TOTAL DIRECT EXPENSES				382.13	_________
FIXED EXPENSES					
Implements	acre	6.37	1.0000	6.37	_________
Tractors	acre	5.66	1.0000	5.66	_________
Harvesters	acre	15.90	1.0000	15.90	_________
1/2-mi Pivot Irr.	acre	46.92	1.0000	46.92	_________

TOTAL FIXED EXPENSES				74.85	_________

TOTAL SPECIFIED EXPENSES				456.98	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 14.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	50.0000	480.00	_________

TOTAL INCOME				480.00	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_________
FERTILIZERS	acre	52.34	1.0000	52.34	_________
FUNGICIDES	acre	23.21	1.0000	23.21	_________
HERBICIDES	acre	50.31	1.0000	50.31	_________
INSECTICIDES	acre	34.62	1.0000	34.62	_________
SEED/PLANTS	acre	63.50	1.0000	63.50	_________
ADJUVANTS	acre	3.18	1.0000	3.18	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	13.50	1.0000	13.50	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
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	15.22	0.2193	3.34	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL	gal	2.30	19.1560	44.06	_________
REPAIR & MAINTENANCE	acre	19.71	1.0000	19.71	_________
INTEREST ON OP. CAP.	acre	9.07	1.0000	9.07	_________

TOTAL DIRECT EXPENSES				382.13	_________
RETURNS ABOVE DIRECT EXPENSES				97.87	_________
TOTAL FIXED EXPENSES				74.85	_________

TOTAL SPECIFIED EXPENSES				456.98	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				23.02	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 14.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							------------hours------------			
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt $8	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					50.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.21	0.21	0.35	0.18

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 14.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.80	2.48	2.53		0.15	6.96	7.46	14.42
Soybean Seed LL	lb	63.50					1.39	64.89		64.89
CruiserMaxx	oz	6.69					0.15	6.84		6.84
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	17.68					0.39	18.07		18.07
Gramoxone SL 2.0	oz	8.16					0.18	8.34		8.34
Surfactant	pt	2.12					0.05	2.17		2.17
Spray (Broadcast)	60'		0.75	0.41	0.93		0.04	2.13	1.63	3.76
Liberty 280	oz	14.21					0.25	14.46		14.46
Dual Magnum	pt	10.26					0.18	10.44		10.44
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Quadris Top SBX	oz	16.52					0.22	16.74		16.74
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Acephate 90SP	lb	5.69					0.07	5.76		5.76
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Prevathon	oz	15.68					0.21	15.89		15.89
Surfactant	pt	0.53					0.01	0.54		0.54
Bifenthrin	oz	5.25					0.07	5.32		5.32
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
Header -Soybean	25' Flex		3.21	4.67	2.90		0.05	10.83	17.40	28.23
Haul Soybeans	bu	13.50					0.06	13.56		13.56
Grain Cart Soybean	700 bu		0.57	0.36	0.60		0.01	1.54	1.44	2.98
1/2-mi Pivot Irr.	acre		37.73	11.79	0.47		0.92	50.91	46.92	97.83
TOTALS		301.86	44.06	19.71	7.43	0.00	9.07	382.13	74.85	456.98

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust,but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 14.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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	480.00
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	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	16.52	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	24.47	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	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	1.06	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	14.32	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	2.57	0.98	0.04	0.00	3.50
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	13.12	15.84	11.32	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.83	1.23	0.62	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.18	2.81	0.75	1.02	0.13	0.12
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	7.02	131.03	43.27	78.20	15.13	25.93
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-7.02	-131.03	-43.27	-78.20	-15.13	454.07
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.57	-219.60	-262.87	-341.07	-356.20	97.87

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.
* Lease costs are based on hourly usage costs.

Table 14.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	25.00	bu	-195	-183	-171	-159	-147	-135	-123	-111	-99	-87	-75
			-270	-258	-246	-234	-222	-210	-198	-186	-174	-162	-150
60	30.00	bu	-160	-146	-131	-117	-103	-88	-74	-59	-45	-31	-16
			-235	-221	-206	-192	-177	-163	-149	-134	-120	-105	-91
70	35.00	bu	-126	-109	-92	-75	-58	-42	-25	-8	8	25	41
			-200	-184	-167	-150	-133	-116	-100	-83	-66	-49	-32
80	40.00	bu	-91	-72	-53	-33	-14	4	23	42	62	81	100
			-166	-147	-127	-108	-89	-70	-51	-31	-12	6	25
90	45.00	bu	-56	-35	-13	8	29	51	72	94	116	137	159
			-131	-110	-88	-66	-45	-23	-2	19	41	62	84
100	50.00	bu	-22	1	25	49	73	97	121	145	169	193	217
			-96	-72	-48	-24	-0	23	47	71	95	119	143
110	55.00	bu	12	38	65	91	118	144	170	197	223	250	276
			-62	-35	-9	16	43	69	96	122	148	175	201
120	60.00	bu	47	75	104	133	162	191	219	248	277	306	335
			-27	1	29	58	87	116	145	173	202	231	260
130	65.00	bu	81	113	144	175	206	237	269	300	331	362	393
			6	38	69	100	131	162	194	225	256	287	318
140	70.00	bu	116	150	183	217	250	284	318	351	385	418	452
			41	75	108	142	175	209	243	276	310	343	377
150	75.00	bu	151	187	223	259	295	331	367	403	439	475	511
			76	112	148	184	220	256	292	328	364	400	436

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 2019 input prices.

Table 15.A Estimated costs per acre
Soybeans, full-season, LL, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	0.17	16.0000	2.72	_________
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.6600	11.95	_________
Potash (60% K2O)	cwt	27.50	1.0000	27.50	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
2,4-D Amine 4	pt	2.73	2.0000	5.46	_________
Boundary	pt	8.84	2.0000	17.68	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Liberty 280	oz	0.49	58.0000	28.42	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Zidua DF	oz	8.23	1.5000	12.35	_________
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_________
SEED/PLANTS					
Soybean Seed LL	lb	1.27	50.0000	63.50	_________
ADJUVANTS					
Surfactant	pt	5.31	0.6000	3.19	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.3128	4.77	_________
Harvesters	hour	15.22	0.1021	1.56	_________
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	_________
UNALLOCATED LABOR	hour	15.23	0.3734	5.69	_________
DIESEL FUEL					
Tractors	gal	2.30	3.0592	7.02	_________
Harvesters	gal	2.30	1.3935	3.21	_________
REPAIR & MAINTENANCE					
Implements	acre	4.91	1.0000	4.91	_________
Tractors	acre	1.86	1.0000	1.86	_________
Harvesters	acre	3.75	1.0000	3.75	_________
INTEREST ON OP. CAP.	acre	8.74	1.0000	8.74	_________
TOTAL DIRECT EXPENSES				307.77	_________
FIXED EXPENSES					
Implements	acre	10.69	1.0000	10.69	_________
Tractors	acre	12.56	1.0000	12.56	_________
Harvesters	acre	15.90	1.0000	15.90	_________
TOTAL FIXED EXPENSES				39.15	_________
TOTAL SPECIFIED EXPENSES				346.92	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 15.B Summary of estimated costs and returns per acre
Soybeans, full-season, LL, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	43.0000	412.80	_________

TOTAL INCOME				412.80	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	14.00	1.0000	14.00	_________
HARVEST AIDS	acre	2.72	1.0000	2.72	_________
FERTILIZERS	acre	39.45	1.0000	39.45	_________
FUNGICIDES	acre	6.69	1.0000	6.69	_________
HERBICIDES	acre	86.81	1.0000	86.81	_________
INSECTICIDES	acre	5.69	1.0000	5.69	_________
SEED/PLANTS	acre	63.50	1.0000	63.50	_________
ADJUVANTS	acre	3.18	1.0000	3.18	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	11.61	1.0000	11.61	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
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	15.22	0.4149	6.33	_________
UNALLOCATED LABOR	hour	15.23	0.3734	5.69	_________
DIESEL FUEL	gal	2.30	4.4528	10.23	_________
REPAIR & MAINTENANCE	acre	10.52	1.0000	10.52	_________
INTEREST ON OP. CAP.	acre	8.74	1.0000	8.74	_________

TOTAL DIRECT EXPENSES				307.77	_________
RETURNS ABOVE DIRECT EXPENSES				105.03	_________
TOTAL FIXED EXPENSES				39.15	_________

TOTAL SPECIFIED EXPENSES				346.92	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				65.88	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 15.C Estimated resource use for field operations, per acre
Soybeans, full-season, LL, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-------------hours------------			
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Disk Harrow	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Plant - Folding	12R-30	MFWD 190	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Zidua DF	oz					1.5000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					43.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Sep		0.02	0.02	0.02	0.01
							-------	-------	-------	-------
TOTALS							0.41	0.41	0.52	0.37

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 15.D Estimated costs for field operations, per acre
Soybeans, full-season, LL, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	11.95					0.63	12.58		12.58
Potash (60% K2O)	cwt	27.50					1.44	28.94		28.94
Disk Harrow	24'		1.84	1.49	2.37		0.30	6.00	5.61	11.61
Field Cultivate Fld	24'		1.40	0.85	1.80		0.21	4.26	4.69	8.95
App by Air (5 gal)	appl	7.00					0.21	7.21		7.21
Glyphosate 3lbs a.e	oz	4.48					0.14	4.62		4.62
2,4-D Amine 4	pt	5.46					0.17	5.63		5.63
Plant - Folding	12R-30		1.41	2.03	2.39		0.15	5.98	5.99	11.97
Soybean Seed LL	lb	63.50					1.67	65.17		65.17
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Liberty 280	oz	14.21					0.31	14.52		14.52
Dual Magnum	pt	10.26					0.22	10.48		10.48
Soybeans Consultant	acre	6.50					0.14	6.64		6.64
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Liberty 280	oz	14.21					0.31	14.52		14.52
Zidua DF	oz	12.35					0.27	12.62		12.62
Spray (Broadcast)	60'		0.63	0.38	0.95		0.02	1.98	1.40	3.38
Acephate 90SP	lb	5.69					0.05	5.74		5.74
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	25' Flex		3.21	4.67	2.96		0.05	10.89	17.40	28.29
Haul Soybeans	bu	11.61					0.05	11.66		11.66
Grain Cart Soybean	700 bu		0.48	0.34	0.61		0.01	1.44	1.26	2.70
TOTALS		265.30	10.23	10.52	12.98	0.00	8.74	307.77	39.15	346.92

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.E Estimated monthly income and expense flows per acre
Soybeans, full-season, LL, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	412.80
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	2.72	0.00
FERTILIZERS	39.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.94	25.84	51.03	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.69	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.00	0.00	1.06	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	14.32	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	4.17	0.00	0.00	0.00	0.00	0.00	2.39	1.90	0.00	0.00	0.95	3.57
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	3.24	0.00	0.00	0.00	0.00	0.00	1.41	1.26	0.00	0.00	0.63	3.69
REPAIR & MAINTENANCE	2.34	0.00	0.00	0.00	0.00	0.00	2.03	0.76	0.00	0.00	0.38	5.01
INTEREST ON OP. CAP.	3.89	0.00	0.00	0.00	0.00	0.52	2.73	1.33	0.00	0.00	0.16	0.11
TOTAL DIRECT EXPENSES	78.24	0.00	0.00	0.00	0.00	17.46	106.71	62.78	0.00	0.00	18.59	23.99
NET INCOME	-78.24	0.00	0.00	0.00	0.00	-17.46	-106.71	-62.78	0.00	0.00	-18.59	388.81
NET INCOME TO DATE	-78.24	-78.24	-78.24	-78.24	-78.24	-95.70	-202.41	-265.19	-265.19	-265.19	-283.78	105.03

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, LL, April planted, 12R 30"
Non-Delta Area, Mississippi, 2020

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	21.50	bu	-147	-136	-126	-116	-105	-95	-85	-74	-64	-54	-43
			-186	-175	-165	-155	-145	-134	-124	-114	-103	-93	-83
60	25.80	bu	-117	-104	-92	-80	-67	-55	-43	-30	-18	-5	6
			-156	-144	-131	-119	-106	-94	-82	-69	-57	-45	-32
70	30.10	bu	-87	-73	-58	-44	-29	-15	-0	13	28	42	56
			-126	-112	-97	-83	-68	-54	-40	-25	-11	3	17
80	34.40	bu	-57	-41	-24	-8	8	24	41	57	74	90	107
			-96	-80	-63	-47	-30	-14	2	18	35	51	68
90	38.70	bu	-27	-9	9	27	46	64	83	102	120	139	157
			-67	-48	-29	-11	7	25	44	62	81	100	118
100	43.00	bu	1	22	43	63	84	105	125	146	166	187	208
			-37	-16	3	24	45	65	86	107	127	148	169
110	47.30	bu	31	54	77	99	122	145	167	190	213	235	258
			-7	15	37	60	83	105	128	151	174	196	219
120	51.60	bu	61	86	110	135	160	185	210	234	259	284	309
			22	47	71	96	121	146	170	195	220	245	269
130	55.90	bu	91	118	144	171	198	225	252	279	305	332	359
			52	78	105	132	159	186	213	239	266	293	320
140	60.20	bu	121	149	178	207	236	265	294	323	352	381	409
			81	110	139	168	197	226	255	284	313	341	370
150	64.50	bu	150	181	212	243	274	305	336	367	398	429	460
			111	142	173	204	235	266	297	328	359	390	421

(Column headers 75–125 are PERCENT.)

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 2019 input prices.

Table 16.A Estimated costs per acre
Soybeans, full-season, LL, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	0.17	16.0000	2.72	_________
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.6600	11.95	_________
Potash (60% K2O)	cwt	27.50	1.0000	27.50	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Select Max	pt	10.87	1.0000	10.87	_________
Fierce	oz	7.44	3.5000	26.04	_________
Gramoxone SL 2.0	oz	0.17	96.0000	16.32	_________
Boundary	pt	8.84	2.0000	17.68	_________
Liberty 280	oz	0.49	58.0000	28.42	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Zidua DF	oz	8.23	1.5000	12.35	_________
INSECTICIDES					
Dimilin 2L	oz	1.91	1.0000	1.91	_________
Baythroid XL	oz	1.06	1.0650	1.13	_________
SEED/PLANTS					
Soybean Seed LL	lb	1.27	50.0000	63.50	_________
ADJUVANTS					
Surfactant	pt	5.31	1.4500	7.70	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.4549	6.92	_________
Harvesters	hour	15.22	0.1021	1.56	_________
HAND LABOR					
Implements	hour	9.06	0.1382	1.25	_________
UNALLOCATED LABOR	hour	15.23	0.5013	7.64	_________
DIESEL FUEL					
Tractors	gal	2.30	4.5949	10.55	_________
Harvesters	gal	2.30	1.3935	3.21	_________
REPAIR & MAINTENANCE					
Implements	acre	6.39	1.0000	6.39	_________
Tractors	acre	2.79	1.0000	2.79	_________
Harvesters	acre	3.75	1.0000	3.75	_________
INTEREST ON OP. CAP.	acre	8.02	1.0000	8.02	_________
TOTAL DIRECT EXPENSES				351.04	_________
FIXED EXPENSES					
Implements	acre	14.05	1.0000	14.05	_________
Tractors	acre	18.92	1.0000	18.92	_________
Harvesters	acre	15.90	1.0000	15.90	_________
TOTAL FIXED EXPENSES				48.87	_________
TOTAL SPECIFIED EXPENSES				399.91	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.**The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 16.B Summary of estimated costs and returns per acre
Soybeans, full-season, LL, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	40.0000	384.00	_________
TOTAL INCOME				384.00	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_________
HARVEST AIDS	acre	2.72	1.0000	2.72	_________
FERTILIZERS	acre	39.45	1.0000	39.45	_________
FUNGICIDES	acre	6.69	1.0000	6.69	_________
HERBICIDES	acre	126.42	1.0000	126.42	_________
INSECTICIDES	acre	3.04	1.0000	3.04	_________
SEED/PLANTS	acre	63.50	1.0000	63.50	_________
ADJUVANTS	acre	7.69	1.0000	7.69	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	10.80	1.0000	10.80	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
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	15.22	0.5571	8.48	_________
UNALLOCATED LABOR	hour	15.23	0.5013	7.64	_________
DIESEL FUEL	gal	2.30	5.9885	13.76	_________
REPAIR & MAINTENANCE	acre	12.93	1.0000	12.93	_________
INTEREST ON OP. CAP.	acre	8.02	1.0000	8.02	_________
TOTAL DIRECT EXPENSES				351.04	_________
RETURNS ABOVE DIRECT EXPENSES				32.96	_________
TOTAL FIXED EXPENSES				48.87	_________
TOTAL SPECIFIED EXPENSES				399.91	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-15.91	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 16.C Estimated resource use for field operations, per acre
Soybeans, full-season, LL, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	24'	MFWD 190	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
Phosphorus(46% P2O5)	cwt					0.6600				
Potash (60% K2O)	cwt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Zidua DF	oz					1.5000				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Dimilin 2L	oz					1.0000				
Surfactant	pt					0.0500				
Spray (Broadcast)	60'	MFWD 190	0.028	0.50	Aug		0.01	0.01	0.02	0.01
Baythroid XL	oz					1.0650				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					40.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.55	0.55	0.69	0.50

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 16.D Estimated costs for field operations, per acre
Soybeans, full-season, LL, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.01	3.34		3.34
Lime (Spread)	ton	14.32					0.06	14.38		14.38
Disk Harrow	24'		1.84	1.49	2.37		0.02	5.72	5.61	11.33
Field Cultivate Fld	24'		1.40	0.85	1.80		0.02	4.07	4.69	8.76
Bed/Lister-Roll-Fo	12R-30		2.15	1.30	2.34		0.03	5.82	6.00	11.82
Spray (Broadcast)	60'		0.63	0.38	0.95		0.08	2.04	1.40	3.44
Glyphosate 3lbs a.e	oz	4.48					0.18	4.66		4.66
Select Max	pt	10.87					0.43	11.30		11.30
Surfactant	pt	2.12					0.08	2.20		2.20
Custom Apply Fert	acre	7.50					0.23	7.73		7.73
Phosphorus(46% P2O5)	cwt	11.95					0.37	12.32		12.32
Potash (60% K2O)	cwt	27.50					0.84	28.34		28.34
Spray (Broadcast)	60'		0.63	0.38	0.95		0.06	2.02	1.40	3.42
Fierce	oz	26.04					0.80	26.84		26.84
Gramoxone SL 2.0	oz	8.16					0.25	8.41		8.41
Surfactant	pt	2.12					0.06	2.18		2.18
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.52	2.40	2.57		0.17	6.66	6.91	13.57
Soybean Seed LL	lb	63.50					1.67	65.17		65.17
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Spray (Broadcast)	60'		0.63	0.38	0.95		0.05	2.01	1.40	3.41
Liberty 280	oz	14.21					0.37	14.58		14.58
Dual Magnum	pt	10.26					0.27	10.53		10.53
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Liberty 280	oz	14.21					0.31	14.52		14.52
Zidua DF	oz	12.35					0.27	12.62		12.62
Spray (Broadcast)	60'		0.32	0.18	0.46		0.02	0.98	0.70	1.68
Dimilin 2L	oz	1.91					0.03	1.94		1.94
Surfactant	pt	0.27						0.27		0.27
Spray (Broadcast)	60'		0.32	0.18	0.46		0.01	0.97	0.70	1.67
Baythroid XL	oz	1.13					0.01	1.14		1.14
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	25' Flex		3.21	4.67	2.96		0.05	10.89	17.40	28.29
Haul Soybeans	bu	10.80					0.05	10.85		10.85
Grain Cart Soybean	700 bu		0.48	0.34	0.61		0.01	1.44	1.26	2.70
TOTALS		298.96	13.76	12.93	17.37	0.00	8.02	351.04	48.87	399.91

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 16.E Estimated monthly income and expense flows per acre
Soybeans, full-season, LL, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

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	384.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.72	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	39.45	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	15.35	0.00	34.20	50.31	26.56	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	1.13	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	2.12	0.00	2.12	2.12	0.00	0.27	0.00	1.06	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	14.32
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	0.95	0.00	0.95	3.52	0.95	0.46	0.46	0.00	10.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.63	0.00	0.63	2.15	0.63	0.32	0.32	0.00	9.08
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.38	0.00	0.38	2.78	0.38	0.18	0.18	0.00	8.65
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.77	0.00	2.61	3.61	0.62	0.05	0.02	0.09	0.25
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	20.20	0.00	87.84	141.18	29.14	3.19	2.11	10.87	56.51
NET INCOME	0.00	0.00	0.00	-20.20	0.00	-87.84	-141.18	-29.14	-3.19	-2.11	-10.87	327.49
NET INCOME TO DATE	0.00	0.00	0.00	-20.20	-20.20	-108.04	-249.22	-278.36	-281.55	-283.66	-294.53	32.96

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 16.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, LL, May planted, 12R 30"
Non-Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-201	-192	-182	-172	-163	-153	-144	-134	-124	-115	-105
			-250	-240	-231	-221	-212	-202	-192	-183	-173	-164	-154
60	24.00	bu	-173	-162	-150	-139	-127	-116	-104	-93	-81	-70	-58
			-222	-211	-199	-188	-176	-165	-153	-142	-130	-119	-107
70	28.00	bu	-146	-132	-119	-105	-92	-78	-65	-52	-38	-25	-11
			-195	-181	-168	-154	-141	-127	-114	-100	-87	-74	-60
80	32.00	bu	-118	-103	-87	-72	-57	-41	-26	-10	4	19	35
			-167	-151	-136	-121	-105	-90	-75	-59	-44	-29	-13
90	36.00	bu	-90	-73	-56	-38	-21	-4	12	30	47	64	82
			-139	-122	-105	-87	-70	-53	-35	-18	-1	15	33
100	40.00	bu	-63	-43	-24	-5	13	32	52	71	90	109	128
			-111	-92	-73	-54	-35	-15	3	22	41	60	80
110	44.00	bu	-35	-14	6	28	49	70	91	112	133	154	175
			-84	-63	-41	-20	0	21	42	63	84	105	127
120	48.00	bu	-7	15	38	61	84	107	130	153	176	199	222
			-56	-33	-10	12	35	58	81	104	127	150	173
130	52.00	bu	20	45	70	94	119	144	169	194	219	244	269
			-28	-3	21	46	71	96	120	145	170	195	220
140	56.00	bu	47	74	101	128	155	182	209	235	262	289	316
			-1	25	52	79	106	133	160	187	213	240	267
150	60.00	bu	75	104	133	161	190	219	248	277	305	334	363
			26	55	84	113	141	170	199	228	257	285	314

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 2019 input prices.

Table 17.A Estimated costs per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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	18.11	0.8700	15.76	_________
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_________
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_________
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_________
Liberty 280	oz	0.49	29.0000	14.21	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_________
Prevathon	oz	1.12	14.0000	15.68	_________
Bifenthrin	oz	0.82	6.4000	5.25	_________
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_________
SEED/PLANTS					
Soybean Seed LL	lb	1.27	50.0000	63.50	_________
ADJUVANTS					
Surfactant	pt	5.31	0.5000	2.66	_________
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	43.00	0.3330	14.32	_________
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	15.22	0.1171	1.78	_________
Harvesters	hour	15.22	0.1021	1.56	_________
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_________
Harvesters	gal	2.30	1.3935	3.21	_________
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_________
Tractors	acre	0.83	1.0000	0.83	_________
Harvesters	acre	3.75	1.0000	3.75	_________
INTEREST ON OP. CAP.	acre	7.80	1.0000	7.80	_________
TOTAL DIRECT EXPENSES				300.07	_________
FIXED EXPENSES					
Implements	acre	6.37	1.0000	6.37	_________
Tractors	acre	5.66	1.0000	5.66	_________
Harvesters	acre	15.90	1.0000	15.90	_________
TOTAL FIXED EXPENSES				27.93	_________
TOTAL SPECIFIED EXPENSES				328.00	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 17.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	25.0000	240.00	_________
TOTAL INCOME				240.00	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_________
FERTILIZERS	acre	52.34	1.0000	52.34	_________
FUNGICIDES	acre	6.69	1.0000	6.69	_________
HERBICIDES	acre	50.31	1.0000	50.31	_________
INSECTICIDES	acre	34.62	1.0000	34.62	_________
SEED/PLANTS	acre	63.50	1.0000	63.50	_________
ADJUVANTS	acre	2.65	1.0000	2.65	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	6.75	1.0000	6.75	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
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	15.22	0.2193	3.34	_________
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_________
DIESEL FUEL	gal	2.30	2.7503	6.33	_________
REPAIR & MAINTENANCE	acre	7.92	1.0000	7.92	_________
INTEREST ON OP. CAP.	acre	7.80	1.0000	7.80	_________
TOTAL DIRECT EXPENSES				300.07	_________
RETURNS ABOVE DIRECT EXPENSES				-60.07	_________
TOTAL FIXED EXPENSES				27.93	_________
TOTAL SPECIFIED EXPENSES				328.00	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-88.00	_________

Note: Cost of production estimates are based on 2019 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 17.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-------------	hours	------------	
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
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 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 17.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.80	2.48	2.53		0.15	6.96	7.46	14.42
Soybean Seed LL	lb	63.50					1.39	64.89		64.89
CruiserMaxx	oz	6.69					0.15	6.84		6.84
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	17.68					0.39	18.07		18.07
Gramoxone SL 2.0	oz	8.16					0.18	8.34		8.34
Surfactant	pt	2.12					0.05	2.17		2.17
Spray (Broadcast)	60'		0.75	0.41	0.93		0.04	2.13	1.63	3.76
Liberty 280	oz	14.21					0.25	14.46		14.46
Dual Magnum	pt	10.26					0.18	10.44		10.44
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Acephate 90SP	lb	5.69					0.07	5.76		5.76
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Prevathon	oz	15.68					0.21	15.89		15.89
Surfactant	pt	0.53					0.01	0.54		0.54
Bifenthrin	oz	5.25					0.07	5.32		5.32
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
Header -Soybean	25' Flex		3.21	4.67	2.90		0.05	10.83	17.40	28.23
Haul Soybeans	bu	6.75					0.03	6.78		6.78
Grain Cart Soybean	700 bu		0.57	0.36	0.60		0.01	1.54	1.44	2.98
TOTALS		271.06	6.33	7.92	6.96	0.00	7.80	300.07	27.93	328.00

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 17.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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	240.00
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	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	24.47	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	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.53	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	14.32	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	2.53	0.93	0.00	0.00	3.50
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	1.80	0.75	0.00	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48	0.41	0.00	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.17	2.34	0.47	0.54	0.13	0.09
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	6.67	108.85	27.03	41.69	15.13	19.15
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-6.67	-108.85	-27.03	-41.69	-15.13	220.85
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.22	-197.07	-224.10	-265.79	-280.92	-60.07

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 17.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PERCENT										
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-206	-200	-194	-188	-182	-176	-170	-164	-158	-152	-146
			-234	-228	-222	-216	-210	-204	-198	-192	-186	-180	-174
60	15.00	bu	-189	-182	-174	-167	-160	-153	-146	-138	-131	-124	-117
			-217	-210	-202	-195	-188	-181	-174	-166	-159	-152	-145
70	17.50	bu	-172	-163	-155	-146	-138	-130	-121	-113	-104	-96	-88
			-199	-191	-183	-174	-166	-157	-149	-141	-132	-124	-115
80	20.00	bu	-154	-145	-135	-125	-116	-106	-97	-87	-77	-68	-58
			-182	-173	-163	-153	-144	-134	-125	-115	-105	-96	-86
90	22.50	bu	-137	-126	-115	-104	-94	-83	-72	-61	-50	-40	-29
			-165	-154	-143	-132	-122	-111	-100	-89	-78	-68	-57
100	25.00	bu	-120	-108	-96	-84	-72	-60	-48	-36	-24	-12	-0
			-148	-136	-124	-112	-100	-88	-76	-64	-52	-40	-28
110	27.50	bu	-102	-89	-76	-63	-49	-36	-23	-10	2	16	29
			-130	-117	-104	-91	-77	-64	-51	-38	-25	-11	1
120	30.00	bu	-85	-71	-56	-42	-27	-13	0	15	29	44	58
			-113	-98	-84	-70	-55	-41	-26	-12	1	16	30
130	32.50	bu	-68	-52	-36	-21	-5	9	25	41	56	72	87
			-96	-80	-64	-49	-33	-18	-2	13	28	44	59
140	35.00	bu	-50	-33	-17	-0	16	33	50	66	83	100	117
			-78	-61	-45	-28	-11	5	22	38	55	72	89
150	37.50	bu	-33	-15	2	20	38	56	74	92	110	128	146
			-61	-43	-25	-7	10	28	46	64	82	100	118

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 2019 input prices.

Table 18.A Estimated costs per acre
Corn, stale seedbed, RR2 seed, 12-row 30",
170 bu yield goal, Non-Delta, Mississippi, 2020

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	18.11	1.6300	29.52	_________
Potash (60% K2O)	cwt	27.50	1.2500	34.38	_________
UAN + Sulfur (28%)	gal	1.39	56.0263	77.88	_________
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Clarity	pt	11.60	0.5000	5.80	_________
Select Max	pt	10.87	1.0000	10.87	_________
Atrazine 4L	pt	2.09	4.0000	8.36	_________
Halex GT	pt	6.24	3.6000	22.46	_________
INSECTICIDES					
Bifenthrin	oz	0.82	1.2804	1.05	_________
Intrepid 2F	oz	2.15	4.0000	8.60	_________
SEED/PLANTS					
Corn Seed RR2	thous	3.50	28.0000	98.00	_________
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	43.00	0.6660	28.64	_________
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	15.22	0.4823	7.36	_________
Harvesters	hour	15.22	0.1277	1.94	_________
Self-Propelled	hour	15.22	0.0176	0.27	_________
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_________
Self-Propelled	hour	9.06	0.0088	0.08	_________
UNALLOCATED LABOR	hour	15.22	0.5649	8.60	_________
DIESEL FUEL					
Tractors	gal	2.30	4.2208	9.72	_________
Harvesters	gal	2.30	1.7419	4.01	_________
Self-Propelled	gal	2.30	0.1586	0.36	_________
REPAIR & MAINTENANCE					
Implements	acre	9.15	1.0000	9.15	_________
Tractors	acre	2.32	1.0000	2.32	_________
Harvesters	acre	4.68	1.0000	4.68	_________
Self-Propelled	acre	0.20	1.0000	0.20	_________
INTEREST ON OP. CAP.	acre	13.65	1.0000	13.65	_________
TOTAL DIRECT EXPENSES				463.22	_________
FIXED EXPENSES					
Implements	acre	14.83	1.0000	14.83	_________
Tractors	acre	15.90	1.0000	15.90	_________
Harvesters	acre	19.87	1.0000	19.87	_________
Self-Propelled	acre	1.44	1.0000	1.44	_________
TOTAL FIXED EXPENSES				52.04	_________
TOTAL SPECIFIED EXPENSES				515.26	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 18.B Summary of estimated costs and returns per acre
Corn, stale seedbed, RR2 seed, 12-row 30",
170 bu yield goal, Non-Delta, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.86	170.0000	656.20	_________

TOTAL INCOME				656.20	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.60	1.0000	13.60	_________
FERTILIZERS	acre	141.78	1.0000	141.78	_________
HERBICIDES	acre	51.97	1.0000	51.97	_________
INSECTICIDES	acre	9.65	1.0000	9.65	_________
SEED/PLANTS	acre	98.00	1.0000	98.00	_________
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_________
HAULING	acre	39.10	1.0000	39.10	_________
CUSTOM LIME	acre	28.64	1.0000	28.64	_________
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	15.22	0.6277	9.57	_________
UNALLOCATED LABOR	hour	15.22	0.5649	8.60	_________
DIESEL FUEL	gal	2.30	6.1215	14.09	_________
REPAIR & MAINTENANCE	acre	16.35	1.0000	16.35	_________
INTEREST ON OP. CAP.	acre	13.65	1.0000	13.65	_________

TOTAL DIRECT EXPENSES				463.22	_________
RETURNS ABOVE DIRECT EXPENSES				192.98	_________
TOTAL FIXED EXPENSES				52.04	_________

TOTAL SPECIFIED EXPENSES				515.26	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				140.94	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 18.C Estimated resource use for field operations, per acre
Corn, stale seedbed, RR2 seed, 12-row 30",
170 bu yield goal, Non-Delta, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-------------hours------------			
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 170	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	20'	MFWD 170	0.097	1.00	Oct		0.09	0.09	0.09	0.08
Bed/Disk w/roller	8R-30	MFWD 170	0.093	1.00	Oct		0.09	0.09	0.09	0.08
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 170	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					14.8018				
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 170	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	gal					33.7838				
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 170	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					170.0000				
Stalk Shredder Flex	20'	MFWD 170	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.62	0.61	0.78	0.56

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 18.D Estimated costs for field operations, per acre
Corn, stale seedbed, RR2 seed, 12-row 30",
170 bu yield goal, Non-Delta, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Spin Spreader	5 ton		0.85	0.51	1.60		0.16	3.12	2.06	5.18
Phosphorus(46% P2O5)	cwt	29.52					1.55	31.07		31.07
Potash (60% K2O)	cwt	34.38					1.80	36.18		36.18
Disk Heavy	20'		1.96	1.69	2.81		0.34	6.80	6.01	12.81
Bed/Disk w/roller	8R-30		1.89	1.11	2.71		0.30	6.01	5.00	11.01
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Clarity	pt	5.80					0.20	6.00		6.00
Select Max	pt	10.87					0.38	11.25		11.25
Plant - Rigid	12R-30		1.27	1.71	2.39		0.16	5.53	5.03	10.56
Corn Seed RR2	thous	98.00					3.00	101.00		101.00
Custom Apply Fert	acre	7.50					0.20	7.70		7.70
UAN + Sulfur (28%)	gal	26.84					0.70	27.54		27.54
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.59		0.03	1.18	1.44	2.62
Atrazine 4L	pt	8.36					0.22	8.58		8.58
Halex GT	pt	22.46					0.59	23.05		23.05
Fert Appl (Liquid)	12R-30		1.58	1.59	2.64		0.13	5.94	4.07	10.01
UAN + Sulfur (28%)	gal	51.04					1.12	52.16		52.16
Corn Consultant	acre	6.00					0.13	6.13		6.13
App by Air (3 gal)	appl	1.10					0.02	1.12		1.12
Bifenthrin	oz	1.05					0.02	1.07		1.07
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Intrepid 2F	oz	8.60					0.15	8.75		8.75
Header - Corn	8R-30		4.01	6.66	3.69		0.06	14.42	23.11	37.53
Grain Cart Corn	500 bu		0.51	0.30	0.74		0.01	1.56	1.17	2.73
Haul Corn	bu	39.10					0.17	39.27		39.27
Stalk Shredder Flex	20'		1.66	2.58	2.39		0.03	6.66	4.15	10.81
TOTALS		399.57	14.09	16.35	19.56	0.00	13.65	463.22	52.04	515.26

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 18.E Estimated monthly income and expense flows per acre
Corn, stale seedbed, RR2 seed, 12-row 30",
170 bu yield goal, Non-Delta, Mississippi, 2020

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	656.20
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	63.90	0.00	0.00	0.00	0.00	0.00	26.84	51.04	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.15	0.00	30.82	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	1.05	8.60	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	98.00	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	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	28.64	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	7.12	0.00	0.00	0.00	0.00	2.39	0.59	2.64	0.00	0.00	0.00	6.82
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.70	0.00	0.00	0.00	0.00	1.27	0.36	1.58	0.00	0.00	0.00	6.18
REPAIR & MAINTENANCE	3.31	0.00	0.00	0.00	0.00	1.71	0.20	1.59	0.00	0.00	0.00	9.54
INTEREST ON OP. CAP.	5.82	0.00	0.00	0.00	0.99	3.16	1.74	1.42	0.25	0.00	0.00	0.27
TOTAL DIRECT EXPENSES	116.82	0.00	0.00	0.00	29.14	106.53	68.05	66.42	14.35	0.00	0.00	61.91
NET INCOME	-116.82	0.00	0.00	0.00	-29.14	-106.53	-68.05	-66.42	-14.35	0.00	0.00	594.29
NET INCOME TO DATE	-116.82	-116.82	-116.82	-116.82	-145.96	-252.49	-320.54	-386.96	-401.31	-401.31	-401.31	192.98

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* Lease costs are based on hourly usage costs.

Table 18.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, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.89	3.08	3.28	3.47	3.66	3.86	4.05	4.24	4.43	4.63	4.82
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-197	-181	-164	-148	-131	-115	-99	-82	-66	-49	-33
			-249	-233	-216	-200	-183	-167	-151	-134	-118	-101	-85
60	102.00	bu	-152	-132	-112	-93	-73	-53	-34	-14	5	24	44
			-204	-184	-164	-145	-125	-105	-86	-66	-46	-27	-7
70	119.00	bu	-106	-83	-61	-38	-15	7	30	53	76	99	122
			-158	-136	-113	-90	-67	-44	-21	1	24	47	70
80	136.00	bu	-61	-35	-9	17	43	69	95	122	148	174	200
			-113	-87	-61	-34	-8	17	43	70	96	122	148
90	153.00	bu	-16	13	42	72	101	131	160	190	219	249	278
			-68	-38	-9	20	49	79	108	138	167	197	226
100	170.00	bu	28	61	94	127	160	192	225	258	291	324	357
			-23	9	42	75	108	140	173	206	239	272	304
110	187.00	bu	74	110	146	182	218	254	290	326	362	399	435
			22	58	94	130	166	202	238	274	310	346	383
120	204.00	bu	119	158	198	237	276	316	355	395	434	473	513
			67	106	146	185	224	264	303	343	382	421	461
130	221.00	bu	164	207	250	292	335	378	420	463	506	548	591
			112	155	198	240	283	326	368	411	453	496	539
140	238.00	bu	210	256	301	347	393	439	485	531	577	623	669
			158	203	249	295	341	387	433	479	525	571	617
150	255.00	bu	255	304	353	403	452	501	550	599	649	698	747
			203	252	301	350	400	449	498	547	597	646	695

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 2019 input prices.

Table 19.A Estimated costs per acre
Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
Non-Delta Areas, Mississippi, 2020

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	22.64	1.6300	36.90	_________
Potash (60% K2O)	cwt	27.50	1.2500	34.38	_________
Fert 10-34-0	gal	2.90	5.0000	14.50	_________
UAN (32%)	gal	1.51	43.8348	66.19	_________
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
Clarity	pt	11.60	0.5000	5.80	_________
Select Max	pt	10.87	1.0000	10.87	_________
Atrazine 4L	pt	2.09	4.0000	8.36	_________
Halex GT	pt	6.24	3.6000	22.46	_________
INSECTICIDES					
Bifenthrin	oz	0.82	6.4020	5.25	_________
SEED/PLANTS					
Corn Seed BtRR	thous	3.50	28.0000	98.00	_________
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_________
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_________
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	15.22	0.4165	6.34	_________
Harvesters	hour	15.22	0.1277	1.94	_________
HAND LABOR					
Implements	hour	9.06	0.2283	2.06	_________
UNALLOCATED LABOR	hour	15.25	0.4898	7.47	_________
DIESEL FUEL					
Tractors	gal	2.30	3.6449	8.39	_________
Harvesters	gal	2.30	1.7419	4.01	_________
REPAIR & MAINTENANCE					
Implements	acre	8.22	1.0000	8.22	_________
Tractors	acre	2.01	1.0000	2.01	_________
Harvesters	acre	4.68	1.0000	4.68	_________
INTEREST ON OP. CAP.	acre	12.10	1.0000	12.10	_________

TOTAL DIRECT EXPENSES				453.98	_________
FIXED EXPENSES					
Implements	acre	11.94	1.0000	11.94	_________
Tractors	acre	13.74	1.0000	13.74	_________
Harvesters	acre	19.87	1.0000	19.87	_________

TOTAL FIXED EXPENSES				45.55	_________

TOTAL SPECIFIED EXPENSES				499.53	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 19.B Summary of estimated costs and returns per acre
Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
Non-Delta Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.86	170.0000	656.20	_________

TOTAL INCOME				656.20	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	12.50	1.0000	12.50	_________
FERTILIZERS	acre	151.97	1.0000	151.97	_________
HERBICIDES	acre	51.97	1.0000	51.97	_________
INSECTICIDES	acre	5.25	1.0000	5.25	_________
SEED/PLANTS	acre	98.00	1.0000	98.00	_________
HAULING	acre	39.10	1.0000	39.10	_________
CUSTOM LIME	acre	28.64	1.0000	28.64	_________
CROP CONSULTANT	acre	6.00	1.0000	6.00	_________
SOIL TEST	acre	3.33	1.0000	3.33	_________
HAND LABOR	hour	9.06	0.2283	2.06	_________
OPERATOR LABOR	hour	15.22	0.5442	8.28	_________
UNALLOCATED LABOR	hour	15.25	0.4898	7.47	_________
DIESEL FUEL	gal	2.30	5.3869	12.40	_________
REPAIR & MAINTENANCE	acre	14.91	1.0000	14.91	_________
INTEREST ON OP. CAP.	acre	12.10	1.0000	12.10	_________

TOTAL DIRECT EXPENSES				453.98	_________
RETURNS ABOVE DIRECT EXPENSES				202.22	_________
TOTAL FIXED EXPENSES				45.55	_________

TOTAL SPECIFIED EXPENSES				499.53	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				156.67	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 19.C Estimated resource use for field operations, per acre
Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
Non-Delta Areas, Mississippi, 2020

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 170	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	8R-30	MFWD 170	0.105	1.00	Mar		0.10	0.10	0.21	0.09
Corn Seed BtRR	thous					28.0000				
Fert 10-34-0	gal					5.0000				
Spray (Broadcast)	27'	MFWD 170	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)	8R-30	MFWD 170	0.098	1.00	Apr		0.09	0.09	0.14	0.08
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 170	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					170.0000				
Stalk Shredder Flex	20'	MFWD 170	0.082	1.00	Sep		0.08	0.08	0.08	0.07
							-------	-------	-------	-------
TOTALS							0.54	0.54	0.77	0.48

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 19.D Estimated costs for field operations, per acre
Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
Non-Delta Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Clarity	pt	5.80					0.20	6.00		6.00
Select Max	pt	10.87					0.38	11.25		11.25
Spin Spreader	5 ton		0.85	0.51	1.60		0.09	3.05	2.06	5.11
DAP	cwt	36.90					1.13	38.03		38.03
Potash (60% K2O)	cwt	34.38					1.05	35.43		35.43
NT Plant&Pre-Rigid	8R-30		2.13	2.66	4.02		0.27	9.08	7.99	17.07
Corn Seed BtRR	thous	98.00					3.00	101.00		101.00
Fert 10-34-0	gal	14.50					0.44	14.94		14.94
Spray (Broadcast)	27'		1.26	0.52	2.09		0.10	3.97	2.35	6.32
Atrazine 4L	pt	8.36					0.22	8.58		8.58
Halex GT	pt	22.46					0.59	23.05		23.05
Fert Appl (Liquid)	8R-30		1.98	1.68	3.28		0.18	7.12	4.72	11.84
UAN (32%)	gal	66.19					1.74	67.93		67.93
Corn Consultant	acre	6.00					0.13	6.13		6.13
App by Air (3 gal)	appl	5.50					0.12	5.62		5.62
Bifenthrin	oz	5.25					0.11	5.36		5.36
Header - Corn	8R-30		4.01	6.66	3.69		0.06	14.42	23.11	37.53
Grain Cart Corn	500 bu		0.51	0.30	0.74		0.01	1.56	1.17	2.73
Haul Corn	bu	39.10					0.17	39.27		39.27
Stalk Shredder Flex	20'		1.66	2.58	2.39		0.03	6.66	4.15	10.81
TOTALS		396.76	12.40	14.91	17.81	0.00	12.10	453.98	45.55	499.53

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 19.E Estimated monthly income and expense flows per acre
Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
Non-Delta Areas, Mississippi, 2020

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	656.20
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	85.78	66.19	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.15	0.00	30.82	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	5.25	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	98.00	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	39.10
CUSTOM LIME	28.64	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	5.62	5.37	0.00	0.00	0.00	0.00	6.82
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	2.98	3.24	0.00	0.00	0.00	0.00	6.18
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	3.17	2.20	0.00	0.00	0.00	0.00	9.54
INTEREST ON OP. CAP.	1.67	0.00	0.00	0.00	0.99	5.98	2.83	0.36	0.00	0.00	0.00	0.27
TOTAL DIRECT EXPENSES	33.64	0.00	0.00	0.00	29.14	201.53	110.65	17.11	0.00	0.00	0.00	61.91
NET INCOME	-33.64	0.00	0.00	0.00	-29.14	-201.53	-110.65	-17.11	0.00	0.00	0.00	594.29
NET INCOME TO DATE	-33.64	-33.64	-33.64	-33.64	-62.78	-264.31	-374.96	-392.07	-392.07	-392.07	-392.07	202.22

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* Lease costs are based on hourly usage costs.

Table 19.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, 2020

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.89	3.08	3.28	3.47	3.66	3.86	4.05	4.24	4.43	4.63	4.82
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-188	-171	-155	-139	-122	-106	-89	-73	-57	-40	-24
			-233	-217	-201	-184	-168	-151	-135	-118	-102	-86	-69
60	102.00	bu	-142	-123	-103	-83	-64	-44	-24	-5	14	34	53
			-188	-168	-149	-129	-109	-90	-70	-50	-31	-11	8
70	119.00	bu	-97	-74	-51	-28	-5	17	40	63	86	109	131
			-143	-120	-97	-74	-51	-28	-5	17	40	63	86
80	136.00	bu	-52	-26	0	26	52	78	105	131	157	183	210
			-97	-71	-45	-19	7	33	59	85	112	138	164
90	153.00	bu	-7	22	51	81	110	140	170	199	229	258	288
			-52	-23	6	35	65	94	124	154	183	213	242
100	170.00	bu	38	70	103	136	169	202	235	267	300	333	366
			-7	25	58	91	123	156	189	222	255	287	320
110	187.00	bu	83	119	155	191	227	263	300	336	372	408	444
			37	73	110	146	182	218	254	290	326	362	398
120	204.00	bu	128	168	207	246	286	325	364	404	443	483	522
			83	122	161	201	240	280	319	358	398	437	476
130	221.00	bu	174	216	259	301	344	387	429	472	515	557	600
			128	171	213	256	299	341	384	427	469	512	555
140	238.00	bu	219	265	311	357	403	448	494	540	586	632	678
			173	219	265	311	357	403	449	495	541	587	633
150	255.00	bu	264	313	363	412	461	510	559	609	658	707	756
			219	268	317	366	415	465	514	563	612	661	711

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 2019 input prices.

Table 20.A Estimated costs per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

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					
Phosphorus(46% P2O5)	cwt	18.11	1.3000	23.54	_________
Potash (60% K2O)	cwt	27.50	1.0000	27.50	_________
UAN + Sulfur (28%)	gal	1.39	38.2883	53.22	_________
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_________
2,4-D Amine 4	pt	2.73	2.0000	5.46	_________
Select Max	pt	10.87	1.0000	10.87	_________
Lexar	pt	7.67	6.0000	46.02	_________
INSECTICIDES					
Sivanto Prime	oz	2.54	8.0000	20.32	_________
Karate Z	oz	2.48	1.5000	3.72	_________
Prevathon	oz	1.12	14.0000	15.68	_________
SEED/PLANTS					
Sorghum Concept+ Po	lb	3.94	4.5000	17.73	_________
ADJUVANTS					
Surfactant	pt	5.31	0.3000	1.59	_________
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_________
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_________
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	15.22	0.3120	4.76	_________
Harvesters	hour	15.22	0.1021	1.56	_________
Self-Propelled	hour	15.22	0.0661	1.00	_________
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_________
Self-Propelled	hour	9.06	0.0330	0.30	_________
UNALLOCATED LABOR	hour	15.22	0.4322	6.58	_________
DIESEL FUEL					
Tractors	gal	2.30	2.7303	6.29	_________
Harvesters	gal	2.30	1.3935	3.21	_________
Self-Propelled	gal	2.30	0.8505	1.95	_________
REPAIR & MAINTENANCE					
Implements	acre	5.23	1.0000	5.23	_________
Tractors	acre	1.51	1.0000	1.51	_________
Harvesters	acre	3.75	1.0000	3.75	_________
Self-Propelled	acre	1.00	1.0000	1.00	_________
INTEREST ON OP. CAP.	acre	8.53	1.0000	8.53	_________

TOTAL DIRECT EXPENSES				347.08	_________
FIXED EXPENSES					
Implements	acre	11.11	1.0000	11.11	_________
Tractors	acre	10.29	1.0000	10.29	_________
Harvesters	acre	15.90	1.0000	15.90	_________
Self-Propelled	acre	7.20	1.0000	7.20	_________

TOTAL FIXED EXPENSES				44.50	_________

TOTAL SPECIFIED EXPENSES				391.58	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 20.B Summary of estimated costs and returns per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Grain Sorghum	bu	3.67	100.0000	367.00	_________

TOTAL INCOME				367.00	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_________
FERTILIZERS	acre	104.26	1.0000	104.26	_________
HERBICIDES	acre	66.83	1.0000	66.83	_________
INSECTICIDES	acre	39.72	1.0000	39.72	_________
SEED/PLANTS	acre	17.73	1.0000	17.73	_________
ADJUVANTS	acre	1.59	1.0000	1.59	_________
HAULING	acre	25.00	1.0000	25.00	_________
CUSTOM LIME	acre	28.64	1.0000	28.64	_________
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	15.22	0.4803	7.32	_________
UNALLOCATED LABOR	hour	15.22	0.4322	6.58	_________
DIESEL FUEL	gal	2.30	4.9745	11.45	_________
REPAIR & MAINTENANCE	acre	11.49	1.0000	11.49	_________
INTEREST ON OP. CAP.	acre	8.53	1.0000	8.53	_________

TOTAL DIRECT EXPENSES				347.08	_________
RETURNS ABOVE DIRECT EXPENSES				19.92	_________
TOTAL FIXED EXPENSES				44.50	_________

TOTAL SPECIFIED EXPENSES				391.58	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-24.58	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 20.C Estimated resource use for field operations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

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	24'	MFWD 170	0.081	1.00	Nov		0.08	0.08	0.08	0.07
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.3000				
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Apr		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.3000				
Potash (60% K2O)	cwt					1.0000				
Field Cultivate Fld	32'	MFWD 170	0.046	1.00	Apr		0.04	0.04	0.04	0.04
Plant - Folding	12R-30	MFWD 170	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 170	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							0.48	0.41	0.65	0.43

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 20.D Estimated costs for field operations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Disk Harrow	24'		1.65	1.41	2.37		0.26	5.69	5.02	10.71
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.59					0.06	1.65		1.65
Spin Spreader	5 ton		0.85	0.51	1.60		0.08	3.04	2.06	5.10
Phosphorus(46% P2O5)	cwt	23.54					0.62	24.16		24.16
Potash (60% K2O)	cwt	27.50					0.72	28.22		28.22
Field Cultivate Fld	32'		0.94	0.73	1.35		0.08	3.10	3.84	6.94
Plant - Folding	12R-30		1.27	1.96	2.39		0.15	5.77	5.53	11.30
Sorghum Concept+ Po	lb	17.73					0.47	18.20		18.20
Sprayer 800gal	80' 250hp		0.39	0.20	0.44		0.03	1.06	1.44	2.50
Lexar	pt	46.02					1.21	47.23		47.23
Sorghum Consultant	acre	6.00					0.13	6.13		6.13
Fert Appl (Liquid)	12R-30		1.58	1.59	2.64		0.13	5.94	4.07	10.01
UAN + Sulfur (28%)	gal	53.22					1.16	54.38		54.38
Sprayer 800gal	80' 250hp		0.39	0.20	0.44		0.02	1.05	1.44	2.49
Sivanto Prime	oz	10.16					0.18	10.34		10.34
Sprayer 800gal	80' 250hp		0.39	0.20	0.44		0.01	1.04	1.44	2.48
Karate Z	oz	3.72					0.05	3.77		3.77
Sprayer 800gal	80' 250hp		0.39	0.20	0.44		0.01	1.04	1.44	2.48
Prevathon	oz	15.68					0.21	15.89		15.89
Sprayer 800gal	80' 250hp		0.39	0.20	0.44		0.01	1.04	1.44	2.48
Sivanto Prime	oz	10.16					0.13	10.29		10.29
Header Wheat/Sorghum	25' Rigid		3.21	4.29	2.96		0.05	10.51	16.78	27.29
Haul Sorghum	bu	25.00					0.11	25.11		25.11
TOTALS		300.10	11.45	11.49	15.51	0.00	8.53	347.08	44.50	391.58

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 20.E Estimated monthly income and expense flows per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

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	367.00
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	51.04	53.22	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	20.81	0.00	46.02	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	10.16	29.56	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	17.73	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.59	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	28.64	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	2.37	0.00	0.00	0.00	0.00	5.78	2.64	0.44	1.32	0.00	2.96
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	1.65	0.00	0.00	0.00	0.00	3.45	1.58	0.39	1.17	0.00	3.21
REPAIR & MAINTENANCE	0.00	1.41	0.00	0.00	0.00	0.00	3.40	1.59	0.20	0.60	0.00	4.29
INTEREST ON OP. CAP.	1.67	0.26	0.00	0.00	1.04	0.00	3.36	1.42	0.20	0.42	0.00	0.16
TOTAL DIRECT EXPENSES	33.64	5.69	0.00	0.00	30.44	0.00	130.78	66.45	11.39	33.07	0.00	35.62
NET INCOME	-33.64	-5.69	0.00	0.00	-30.44	0.00	-130.78	-66.45	-11.39	-33.07	0.00	331.38
NET INCOME TO DATE	-33.64	-39.33	-39.33	-39.33	-69.77	-69.77	-200.55	-267.00	-278.39	-311.46	-311.46	19.92

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* Lease costs are based on hourly usage costs.

Table 20.F Estimated returns for various price/yield combinations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Grain Sorghum			2.75	2.93	3.11	3.30	3.48	3.67	3.85	4.03	4.22	4.40	4.58
PERCENT	YIELD	UNIT	dollars										
50	50.00	bu	-196	-187	-178	-169	-160	-151	-141	-132	-123	-114	-105
			-241	-232	-223	-213	-204	-195	-186	-177	-168	-158	-149
60	60.00	bu	-171	-160	-149	-138	-127	-116	-105	-94	-83	-72	-61
			-216	-205	-194	-183	-172	-161	-150	-139	-128	-117	-106
70	70.00	bu	-146	-134	-121	-108	-95	-82	-69	-56	-44	-31	-18
			-191	-178	-165	-152	-139	-127	-114	-101	-88	-75	-62
80	80.00	bu	-121	-107	-92	-77	-63	-48	-33	-19	-4	10	24
			-166	-151	-136	-122	-107	-92	-78	-63	-48	-34	-19
90	90.00	bu	-96	-80	-63	-47	-30	-14	2	18	35	51	68
			-141	-124	-108	-91	-75	-58	-42	-25	-9	7	23
100	100.00	bu	-71	-53	-35	-16	1	19	38	56	74	93	111
			-116	-97	-79	-61	-42	-24	-6	12	30	48	67
110	110.00	bu	-46	-26	-6	13	33	54	74	94	114	134	155
			-91	-71	-50	-30	-10	9	29	49	70	90	110
120	120.00	bu	-21	0	22	44	66	88	110	132	154	176	198
			-66	-44	-22	-0	21	43	65	87	109	131	153
130	130.00	bu	3	27	50	74	98	122	146	170	194	217	241
			-41	-17	6	30	54	77	101	125	149	173	197
140	140.00	bu	28	53	79	105	130	156	182	208	233	259	285
			-16	9	35	60	86	112	137	163	189	214	240
150	150.00	bu	53	80	108	135	163	190	218	245	273	300	328
			8	36	63	91	118	146	173	201	228	256	283

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 2019 input prices.

Table 21.A Estimated costs per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

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					
Phosphorus(46% P2O5)	cwt	18.11	1.0000	18.11	_________
Potash (60% K2O)	cwt	27.50	0.7500	20.63	_________
Fert 41-0-0-4	cwt	18.60	3.0480	56.69	_________
FUNGICIDES					
CruiserMaxx	oz	4.18	4.5000	18.81	_________
Prosaro	oz	2.45	8.0000	19.60	_________
HERBICIDES					
Axiom	oz	1.84	10.0000	18.40	_________
Harmony Extra SG	oz	13.81	0.7500	10.36	_________
Axial XL	oz	1.21	16.4000	19.84	_________
INSECTICIDES					
Karate Z	oz	2.48	1.5000	3.72	_________
SEED/PLANTS					
Wheat Seed Private	lb	0.24	90.0000	21.60	_________
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	43.00	0.6660	28.64	_________
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	15.22	0.2648	4.04	_________
Harvesters	hour	15.22	0.1021	1.56	_________
HAND LABOR					
Implements	hour	9.06	0.1363	1.23	_________
UNALLOCATED LABOR	hour	15.22	0.2936	4.47	_________
DIESEL FUEL					
Tractors	gal	2.30	2.3178	5.34	_________
Harvesters	gal	2.30	1.3935	3.21	_________
REPAIR & MAINTENANCE					
Implements	acre	3.75	1.0000	3.75	_________
Tractors	acre	1.29	1.0000	1.29	_________
Harvesters	acre	3.75	1.0000	3.75	_________
INTEREST ON OP. CAP.	acre	9.47	1.0000	9.47	_________
TOTAL DIRECT EXPENSES				343.91	_________
FIXED EXPENSES					
Implements	acre	9.08	1.0000	9.08	_________
Tractors	acre	8.74	1.0000	8.74	_________
Harvesters	acre	15.90	1.0000	15.90	_________
TOTAL FIXED EXPENSES				33.72	_________
TOTAL SPECIFIED EXPENSES				377.63	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 21.B Summary of estimated costs and returns per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	4.24	70.0000	296.80	_________

TOTAL INCOME				296.80	_________
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_________
FERTILIZERS	acre	95.44	1.0000	95.44	_________
FUNGICIDES	acre	38.41	1.0000	38.41	_________
HERBICIDES	acre	48.60	1.0000	48.60	_________
INSECTICIDES	acre	3.72	1.0000	3.72	_________
SEED/PLANTS	acre	21.60	1.0000	21.60	_________
CUSTOM FERTILIZE	acre	22.86	1.0000	22.86	_________
HAULING	acre	18.20	1.0000	18.20	_________
CUSTOM LIME	acre	28.64	1.0000	28.64	_________
CROP CONSULTANT	acre	5.50	1.0000	5.50	_________
SOIL TEST	acre	3.33	1.0000	3.33	_________
HAND LABOR	hour	9.06	0.1363	1.23	_________
OPERATOR LABOR	hour	15.22	0.3670	5.60	_________
UNALLOCATED LABOR	hour	15.22	0.2936	4.47	_________
DIESEL FUEL	gal	2.30	3.7114	8.55	_________
REPAIR & MAINTENANCE	acre	8.79	1.0000	8.79	_________
INTEREST ON OP. CAP.	acre	9.47	1.0000	9.47	_________

TOTAL DIRECT EXPENSES				343.91	_________
RETURNS ABOVE DIRECT EXPENSES				-47.11	_________
TOTAL FIXED EXPENSES				33.72	_________

TOTAL SPECIFIED EXPENSES				377.63	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-80.83	_________

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 21.C Estimated resource use for field operations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

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	24'	MFWD 170	0.081	1.00	Sep		0.08	0.08	0.08	0.06
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Sep		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.0000				
Potash (60% K2O)	cwt					0.7500				
Field Cultivate Fld	32'	MFWD 170	0.046	1.00	Sep		0.04	0.04	0.04	0.03
Grain Drill	20'	MFWD 170	0.094	1.00	Oct		0.09	0.09	0.18	0.07
Wheat Seed Private	lb					90.0000				
CruiserMaxx	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							0.36	0.36	0.50	0.29

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 21.D Estimated costs for field operations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.15	3.48		3.48
Lime (Spread)	ton	28.64					1.25	29.89		29.89
Disk Harrow	24'		1.65	1.41	2.25		0.23	5.54	5.02	10.56
Spin Spreader	5 ton		0.85	0.51	1.53		0.13	3.02	2.06	5.08
Phosphorus(46% P2O5)	cwt	18.11					0.79	18.90		18.90
Potash (60% K2O)	cwt	20.63					0.90	21.53		21.53
Field Cultivate Fld	32'		0.94	0.73	1.28		0.13	3.08	3.84	6.92
Grain Drill	20'		1.90	1.85	3.44		0.28	7.47	6.02	13.49
Wheat Seed Private	lb	21.60					0.85	22.45		22.45
CruiserMaxx	oz	18.81					0.74	19.55		19.55
Wheat Consultant	acre	5.50					0.22	5.72		5.72
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Axiom	oz	18.40					0.64	19.04		19.04
App by Air (3 gal)	appl	5.50					0.12	5.62		5.62
Karate Z	oz	3.72					0.08	3.80		3.80
Harmony Extra SG	oz	10.36					0.23	10.59		10.59
Axial XL	oz	19.84					0.43	20.27		20.27
App Fert by Air	cwt	11.43					0.25	11.68		11.68
Fert 41-0-0-4	cwt	28.35					0.62	28.97		28.97
App Fert by Air	cwt	11.43					0.20	11.63		11.63
Fert 41-0-0-4	cwt	28.35					0.50	28.85		28.85
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Prosaro	oz	19.60					0.26	19.86		19.86
Header Wheat/Sorghum	25' Rigid		3.21	4.29	2.80		0.05	10.35	16.78	27.13
Haul Wheat	bu	18.20					0.08	18.28		18.28
TOTALS		305.80	8.55	8.79	11.30	0.00	9.47	343.91	33.72	377.63

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 21.E Estimated monthly income and expense flows per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

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	296.80
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	38.74	0.00	0.00	0.00	0.00	28.35	28.35	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	18.81	0.00	0.00	0.00	0.00	0.00	19.60	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	18.40	0.00	0.00	30.20	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.72	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	21.60	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	28.64	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	5.06	3.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80
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	3.44	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.21
REPAIR & MAINTENANCE	0.00	0.00	2.65	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.29
INTEREST ON OP. CAP.	0.00	0.00	3.58	2.09	0.89	0.00	0.00	1.73	0.70	0.35	0.00	0.13
TOTAL DIRECT EXPENSES	0.00	0.00	85.44	55.19	26.29	0.00	0.00	80.93	40.48	26.95	0.00	28.63
NET INCOME	0.00	0.00	-85.44	-55.19	-26.29	0.00	0.00	-80.93	-40.48	-26.95	0.00	268.17
NET INCOME TO DATE	0.00	0.00	-85.44	-140.63	-166.92	-166.92	-166.92	-247.85	-288.33	-315.28	-315.28	-47.11

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* Lease costs are based on hourly usage costs.

Table 21.F Estimated returns for various price/yield combinations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Wheat			3.18	3.39	3.60	3.81	4.02	4.24	4.45	4.66	4.87	5.08	5.30
PERCENT	YIELD	UNIT	dollars										
50	35.00	bu	-223	-216	-208	-201	-193	-186	-178	-171	-164	-156	-149
			-257	-249	-242	-234	-227	-220	-212	-205	-197	-190	-182
60	42.00	bu	-203	-194	-185	-176	-167	-158	-149	-140	-131	-122	-113
			-236	-227	-218	-210	-201	-192	-183	-174	-165	-156	-147
70	49.00	bu	-182	-172	-161	-151	-141	-130	-120	-109	-99	-89	-78
			-216	-205	-195	-185	-174	-164	-153	-143	-133	-122	-112
80	56.00	bu	-162	-150	-138	-126	-114	-102	-90	-79	-67	-55	-43
			-195	-184	-172	-160	-148	-136	-124	-112	-100	-89	-77
90	63.00	bu	-141	-128	-115	-101	-88	-74	-61	-48	-34	-21	-8
			-175	-162	-148	-135	-122	-108	-95	-81	-68	-55	-41
100	70.00	bu	-121	-106	-91	-76	-61	-47	-32	-17	-2	12	27
			-155	-140	-125	-110	-95	-80	-65	-51	-36	-21	-6
110	77.00	bu	-100	-84	-68	-51	-35	-19	-2	13	29	46	62
			-134	-118	-101	-85	-69	-52	-36	-20	-4	12	28
120	84.00	bu	-80	-62	-44	-27	-9	8	26	44	62	79	97
			-114	-96	-78	-60	-42	-25	-7	10	28	46	63
130	91.00	bu	-60	-40	-21	-2	17	36	55	75	94	113	132
			-93	-74	-55	-35	-16	2	22	41	60	79	99
140	98.00	bu	-39	-18	1	22	43	64	85	105	126	147	168
			-73	-52	-31	-10	9	30	51	72	92	113	134
150	105.00	bu	-19	3	25	47	69	92	114	136	158	181	203
			-52	-30	-8	13	36	58	80	102	125	147	169

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 2019 input prices.

Table 22.A Estimated costs per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.35	5.5000	34.92	_________
Abound	oz	0.98	36.0000	35.28	_________
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_________
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Valor SX	oz	4.28	3.0000	12.84	_________
Storm	pt	11.58	1.5000	17.37	_________
Cadre	oz	3.10	4.0000	12.40	_________
Butyrac 200 (2,4-DB)	pt	3.49	2.0000	6.98	_________
Select Max	pt	10.87	1.0000	10.87	_________
INSECTICIDES					
Admire Pro	oz	1.33	9.0000	11.97	_________
Acephate 90%	lb	7.17	0.1375	0.99	_________
SEED/PLANTS					
Peanut Seed	lb	0.89	125.0000	111.25	_________
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	3.22	6.0000	19.32	_________
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	43.00	0.3330	14.32	_________
INOCULANT					
Optimize LIFT	oz	0.51	14.8000	7.55	_________
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_________
OPERATOR LABOR					
Tractors	hour	15.22	1.6246	24.72	_________
Self-Propelled	hour	15.22	0.1983	3.04	_________
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_________
Self-Propelled	hour	9.06	0.0991	0.90	_________
UNALLOCATED LABOR	hour	15.18	1.4583	22.14	_________
DIESEL FUEL					
Tractors	gal	2.30	17.5722	40.41	_________
Self-Propelled	gal	2.30	1.7850	4.05	_________
REPAIR & MAINTENANCE					
Implements	acre	12.60	1.0000	12.60	_________
Tractors	acre	10.70	1.0000	10.70	_________
Self-Propelled	acre	2.25	1.0000	2.25	_________
INTEREST ON OP. CAP.	acre	7.05	1.0000	7.05	_________

TOTAL DIRECT EXPENSES				507.28	_________
FIXED EXPENSES					
Implements	acre	48.17	1.0000	48.17	_________
Tractors	acre	72.84	1.0000	72.84	_________
Self-Propelled	acre	16.20	1.0000	16.20	_________

TOTAL FIXED EXPENSES				137.21	_________

TOTAL SPECIFIED EXPENSES				644.49	_________

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 22.B Summary of estimated costs and returns per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

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	73.72	1.0000	73.72	_________
HERBICIDES	acre	79.36	1.0000	79.36	_________
INSECTICIDES	acre	12.96	1.0000	12.96	_________
SEED/PLANTS	acre	111.25	1.0000	111.25	_________
ADJUVANTS	acre	19.32	1.0000	19.32	_________
CLEANING	acre	29.16	1.0000	29.16	_________
DRYING	acre	27.36	1.0000	27.36	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
INOCULANT	acre	7.55	1.0000	7.55	_________
SOIL TEST	acre	3.33	1.0000	3.33	_________
HAND LABOR	hour	9.06	0.2199	1.99	_________
OPERATOR LABOR	hour	15.22	1.8229	27.76	_________
UNALLOCATED LABOR	hour	15.18	1.4583	22.14	_________
DIESEL FUEL	gal	2.30	19.3573	44.46	_________
REPAIR & MAINTENANCE	acre	25.55	1.0000	25.55	_________
INTEREST ON OP. CAP.	acre	7.05	1.0000	7.05	_________

TOTAL DIRECT EXPENSES				507.28	_________
RETURNS ABOVE DIRECT EXPENSES				252.72	_________
TOTAL FIXED EXPENSES				137.21	_________

TOTAL SPECIFIED EXPENSES				644.49	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				115.51	_________

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 22.C Estimated resource use for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

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.	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Plt&Pre Rigid	8R-38	MFWD 190	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 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 22.D Estimated costs for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.09	3.42		3.42
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Glyphosate 3lbs a.e	pt	8.64					0.23	8.87		8.87
Lime (Spread)	ton	14.32					0.38	14.70		14.70
Bed-Rip/Disk Fold.	8R-38		1.64	0.61	2.00		0.09	4.34	3.90	8.24
Peanut Plt&Pre Rigid	8R-38		2.72	2.73	4.40		0.22	10.07	9.07	19.14
Peanut Seed	lb	111.25					2.43	113.68		113.68
Optimize LIFT	oz	7.55					0.17	7.72		7.72
Admire Pro	oz	11.97					0.26	12.23		12.23
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Dual Magnum	pt	10.26					0.22	10.48		10.48
Valor SX	oz	12.84					0.28	13.12		13.12
Sprayer 600-750gal	60' 175hp		0.09	0.05	0.14		0.01	0.29	0.36	0.65
Acephate 90%	lb	0.99					0.02	1.01		1.01
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Storm	pt	17.37					0.30	17.67		17.67
Cadre	oz	12.40					0.22	12.62		12.62
Butyrac 200 (2,4-DB)	pt	3.49					0.06	3.55		3.55
Crop Oil Conc.(Veg.)	pt	6.44					0.11	6.55		6.55
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bravo Weather Stick	pt	9.52					0.17	9.69		9.69
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Abound	oz	17.64					0.23	17.87		17.87
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Butyrac 200 (2,4-DB)	pt	3.49					0.05	3.54		3.54
Crop Oil Conc.(Veg.)	pt	6.44					0.08	6.52		6.52
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Select Max	pt	10.87					0.14	11.01		11.01
Crop Oil Conc.(Veg.)	pt	6.44					0.08	6.52		6.52
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Bravo Weather Stick	pt	6.35					0.08	6.43		6.43
Tebuconazole 3.6	oz	3.53					0.05	3.58		3.58
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Abound	oz	17.64					0.15	17.79		17.79
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Bravo Weather Stick	pt	9.52					0.08	9.60		9.60
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56			1.12	1.44	2.56
Bravo Weather Stick	pt	9.52					0.04	9.56		9.56
Peanut Dig/Invertor	4R-38		4.19	2.61	5.10		0.05	11.95	9.46	21.41
Peanut Harvester	4R-38		24.89	14.57	25.60		0.28	65.34	81.73	147.07
Dry Peanuts	ton	27.36					0.12	27.48		27.48
Cleaning Peanuts	ton	29.16					0.13	29.29		29.29
Peanut Dump Cart	6-Row		6.97	2.78	8.49		0.08	18.32	16.85	35.17
TOTALS		378.33	44.46	25.55	51.89	0.00	7.05	507.28	137.21	644.49

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 22.E Estimated monthly income and expense flows per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

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	9.52	27.52	27.16	9.52
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	23.10	33.26	14.36	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.25	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	6.44	12.88	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	14.32	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	7.55	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	0.56	7.10	1.12	2.24	1.12	39.75
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	0.36	4.81	0.72	1.44	0.72	36.41
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	3.59	0.40	0.80	0.40	20.16
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.73	3.72	0.90	0.75	0.25	0.70
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	28.14	174.08	52.36	59.99	29.65	163.06
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-174.08	-52.36	-59.99	-29.65	596.94
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-202.22	-254.58	-314.57	-344.22	252.72

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.
* Lease costs are based on hourly usage costs.

Table 22.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, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
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	-193	-174	-155	-136	-117	-98	-79	-60	-41	-22	-3
			-331	-312	-293	-274	-255	-236	-217	-198	-179	-160	-141
60	1.14	ton	-142	-119	-96	-74	-51	-28	-5	17	39	62	85
			-279	-256	-234	-211	-188	-165	-142	-120	-97	-74	-51
70	1.33	ton	-91	-64	-38	-11	15	41	68	94	121	148	174
			-228	-201	-175	-148	-122	-95	-68	-42	-15	10	37
80	1.52	ton	-39	-9	20	51	81	112	142	172	203	233	264
			-177	-146	-116	-85	-55	-25	5	35	66	96	126
90	1.71	ton	11	45	79	113	148	182	216	250	284	319	353
			-125	-91	-57	-23	10	45	79	113	147	181	216
100	1.90	ton	62	100	138	176	214	252	290	328	366	404	442
			-74	-36	1	39	77	115	153	191	229	267	305
110	2.09	ton	114	155	197	239	281	323	364	406	448	490	532
			-23	18	60	102	144	185	227	269	311	353	394
120	2.28	ton	165	210	256	302	347	393	438	484	530	575	621
			28	73	119	164	210	256	301	347	392	438	484
130	2.47	ton	216	266	315	364	414	463	513	562	611	661	710
			79	128	178	227	277	326	375	425	474	524	573
140	2.66	ton	268	321	374	427	480	534	587	640	693	746	800
			130	184	237	290	343	396	450	503	556	609	662
150	2.85	ton	319	376	433	490	547	604	661	718	775	832	889
			182	239	296	353	410	467	524	581	638	695	752

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 2019 input prices.

Table 23.A Estimated costs per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.35	5.5000	34.92	_________
Abound	oz	0.98	36.0000	35.28	_________
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_________
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Valor SX	oz	4.28	3.0000	12.84	_________
Storm	pt	11.58	1.5000	17.37	_________
Cadre	oz	3.10	4.0000	12.40	_________
Butyrac 200 (2,4-DB)	pt	3.49	2.0000	6.98	_________
Select Max	pt	10.87	1.0000	10.87	_________
INSECTICIDES					
Admire Pro	oz	1.33	9.0000	11.97	_________
Acephate 90%	lb	7.17	0.1375	0.99	_________
SEED/PLANTS					
Peanut Seed	lb	0.89	125.0000	111.25	_________
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	3.22	6.0000	19.32	_________
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	43.00	0.3330	14.32	_________
INOCULANT					
Optimize LIFT	oz	0.51	29.6000	15.10	_________
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_________
OPERATOR LABOR					
Tractors	hour	15.22	1.6246	24.72	_________
Self-Propelled	hour	15.22	0.1983	3.04	_________
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_________
Self-Propelled	hour	9.06	0.0991	0.90	_________
UNALLOCATED LABOR	hour	15.18	1.4583	22.14	_________
DIESEL FUEL					
Tractors	gal	2.30	17.5722	40.41	_________
Self-Propelled	gal	2.30	1.7850	4.05	_________
REPAIR & MAINTENANCE					
Implements	acre	15.67	1.0000	15.67	_________
Tractors	acre	10.70	1.0000	10.70	_________
Self-Propelled	acre	2.25	1.0000	2.25	_________
INTEREST ON OP. CAP.	acre	7.27	1.0000	7.27	_________
TOTAL DIRECT EXPENSES				518.12	_________
FIXED EXPENSES					
Implements	acre	54.37	1.0000	54.37	_________
Tractors	acre	72.84	1.0000	72.84	_________
Self-Propelled	acre	16.20	1.0000	16.20	_________
TOTAL FIXED EXPENSES				143.41	_________
TOTAL SPECIFIED EXPENSES				661.53	_________

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 23.B Summary of estimated costs and returns per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

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	73.72	1.0000	73.72	_________
HERBICIDES	acre	79.36	1.0000	79.36	_________
INSECTICIDES	acre	12.96	1.0000	12.96	_________
SEED/PLANTS	acre	111.25	1.0000	111.25	_________
ADJUVANTS	acre	19.32	1.0000	19.32	_________
CLEANING	acre	29.16	1.0000	29.16	_________
DRYING	acre	27.36	1.0000	27.36	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
INOCULANT	acre	15.10	1.0000	15.10	_________
SOIL TEST	acre	3.33	1.0000	3.33	_________
HAND LABOR	hour	9.06	0.2199	1.99	_________
OPERATOR LABOR	hour	15.22	1.8229	27.76	_________
UNALLOCATED LABOR	hour	15.18	1.4583	22.14	_________
DIESEL FUEL	gal	2.30	19.3573	44.46	_________
REPAIR & MAINTENANCE	acre	28.62	1.0000	28.62	_________
INTEREST ON OP. CAP.	acre	7.27	1.0000	7.27	_________

TOTAL DIRECT EXPENSES				518.12	_________
RETURNS ABOVE DIRECT EXPENSES				241.88	_________
TOTAL FIXED EXPENSES				143.41	_________

TOTAL SPECIFIED EXPENSES				661.53	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				98.47	_________

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 23.C Estimated resource use for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

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 Rigid	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Ptlt&PreTwin	8R-30/40	MFWD 190	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 2019 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 23.D Estimated costs for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.09	3.42		3.42
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Glyphosate 3lbs a.e	pt	8.64					0.23	8.87		8.87
Lime (Spread)	ton	14.32					0.38	14.70		14.70
Bed-Rip/Disk Rigid	8R-38		1.64	0.54	2.00		0.09	4.27	3.53	7.80
Peanut Ptlt&PreTwin	8R-30/40		2.72	5.87	4.40		0.28	13.27	15.64	28.91
Peanut Seed	lb	111.25					2.43	113.68		113.68
Optimize LIFT	oz	15.10					0.33	15.43		15.43
Admire Pro	oz	11.97					0.26	12.23		12.23
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Dual Magnum	pt	10.26					0.22	10.48		10.48
Valor SX	oz	12.84					0.28	13.12		13.12
Sprayer 600-750gal	60' 175hp		0.09	0.05	0.14		0.01	0.29	0.36	0.65
Acephate 90%	lb	0.99					0.02	1.01		1.01
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Storm	pt	17.37					0.30	17.67		17.67
Cadre	oz	12.40					0.22	12.62		12.62
Butyrac 200 (2,4-DB)	pt	3.49					0.06	3.55		3.55
Crop Oil Conc.(Veg.)	pt	6.44					0.11	6.55		6.55
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bravo Weather Stick	pt	9.52					0.17	9.69		9.69
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Abound	oz	17.64					0.23	17.87		17.87
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Butyrac 200 (2,4-DB)	pt	3.49					0.05	3.54		3.54
Crop Oil Conc.(Veg.)	pt	6.44					0.08	6.52		6.52
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Select Max	pt	10.87					0.14	11.01		11.01
Crop Oil Conc.(Veg.)	pt	6.44					0.08	6.52		6.52
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Bravo Weather Stick	pt	6.35					0.08	6.43		6.43
Tebuconazole 3.6	oz	3.53					0.05	3.58		3.58
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Abound	oz	17.64					0.15	17.79		17.79
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Bravo Weather Stick	pt	9.52					0.08	9.60		9.60
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56			1.12	1.44	2.56
Bravo Weather Stick	pt	9.52					0.04	9.56		9.56
Peanut Dig/Invertor	4R-38		4.19	2.61	5.10		0.05	11.95	9.46	21.41
Peanut Harvester	4R-38		24.89	14.57	25.60		0.28	65.34	81.73	147.07
Dry Peanuts	ton	27.36					0.12	27.48		27.48
Cleaning Peanuts	ton	29.16					0.13	29.29		29.29
Peanut Dump Cart	6-Row		6.97	2.78	8.49		0.08	18.32	16.85	35.17
TOTALS		385.88	44.46	28.62	51.89	0.00	7.27	518.12	143.41	661.53

Note: Cost of production estimates are based on 2019 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 23.E Estimated monthly income and expense flows per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

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	9.52	27.52	27.16	9.52
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	23.10	33.26	14.36	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.25	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	6.44	12.88	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	14.32	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	15.10	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	0.56	7.10	1.12	2.24	1.12	39.75
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	0.36	4.81	0.72	1.44	0.72	36.41
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	6.66	0.40	0.80	0.40	20.16
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.73	3.94	0.90	0.75	0.25	0.70
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	28.14	184.92	52.36	59.99	29.65	163.06
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-184.92	-52.36	-59.99	-29.65	596.94
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-213.06	-265.42	-325.41	-355.06	241.88

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.
* Lease costs are based on hourly usage costs.

Table 23.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

			PERCENT									
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE									
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	-204	-185	-166	-147	-128	-109	-90	-71	-52	-33	-14
			-348	-329	-310	-291	-272	-253	-234	-215	-196	-177	-158
60	1.14	ton	-153	-130	-107	-85	-62	-39	-16	6	28	51	74
			-296	-274	-251	-228	-205	-182	-160	-137	-114	-91	-68
70	1.33	ton	-102	-75	-48	-22	4	30	57	84	110	137	163
			-245	-218	-192	-165	-139	-112	-85	-59	-32	-6	20
80	1.52	ton	-50	-20	10	40	70	101	131	162	192	222	253
			-194	-163	-133	-102	-72	-42	-11	18	49	79	109
90	1.71	ton	0	34	68	103	137	171	205	239	274	308	342
			-142	-108	-74	-40	-6	28	62	96	130	164	199
100	1.90	ton	51	89	127	165	203	241	279	317	355	393	431
			-91	-53	-15	22	60	98	136	174	212	250	288
110	2.09	ton	103	145	186	228	270	312	354	395	437	479	521
			-40	1	43	85	126	168	210	252	294	335	377
120	2.28	ton	154	200	245	291	336	382	428	473	519	564	610
			11	56	102	147	193	239	284	330	375	421	467
130	2.47	ton	205	255	304	354	403	452	502	551	601	650	699
			62	111	161	210	260	309	358	408	457	507	556
140	2.66	ton	257	310	363	416	469	523	576	629	682	735	789
			113	166	220	273	326	379	432	486	539	592	645
150	2.85	ton	308	365	422	479	536	593	650	707	764	821	878
			165	222	279	336	393	450	507	564	621	678	735

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 2019 input prices.

Table 24.A Estimated costs per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.35	5.5000	34.92	_________
Abound	oz	0.98	36.0000	35.28	_________
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_________
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Valor SX	oz	4.28	3.0000	12.84	_________
Storm	pt	11.58	1.5000	17.37	_________
Cadre	oz	3.10	4.0000	12.40	_________
Butyrac 200 (2,4-DB)	pt	3.49	2.0000	6.98	_________
Select Max	pt	10.87	1.0000	10.87	_________
INSECTICIDES					
Admire Pro	oz	1.33	9.0000	11.97	_________
Acephate 90%	lb	7.17	0.1375	0.99	_________
SEED/PLANTS					
Peanut Seed	lb	0.89	125.0000	111.25	_________
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	3.22	6.0000	19.32	_________
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	43.00	0.3330	14.32	_________
INOCULANT					
Optimize LIFT	oz	0.51	14.8000	7.55	_________
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_________
OPERATOR LABOR					
Tractors	hour	15.22	1.1856	18.04	_________
Self-Propelled	hour	15.22	0.1983	3.04	_________
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_________
Self-Propelled	hour	9.06	0.0991	0.90	_________
UNALLOCATED LABOR	hour	15.16	1.1072	16.79	_________
DIESEL FUEL					
Tractors	gal	2.30	12.8051	29.45	_________
Self-Propelled	gal	2.30	1.7850	4.05	_________
REPAIR & MAINTENANCE					
Implements	acre	9.78	1.0000	9.78	_________
Tractors	acre	7.79	1.0000	7.79	_________
Self-Propelled	acre	2.25	1.0000	2.25	_________
INTEREST ON OP. CAP.	acre	6.87	1.0000	6.87	_________
TOTAL DIRECT EXPENSES				478.02	_________
FIXED EXPENSES					
Implements	acre	39.67	1.0000	39.67	_________
Tractors	acre	53.08	1.0000	53.08	_________
Self-Propelled	acre	16.20	1.0000	16.20	_________
TOTAL FIXED EXPENSES				108.95	_________
TOTAL SPECIFIED EXPENSES				586.97	_________

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 24.B Summary of estimated costs and returns per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

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	73.72	1.0000	73.72	_________
HERBICIDES	acre	79.36	1.0000	79.36	_________
INSECTICIDES	acre	12.96	1.0000	12.96	_________
SEED/PLANTS	acre	111.25	1.0000	111.25	_________
ADJUVANTS	acre	19.32	1.0000	19.32	_________
CLEANING	acre	29.16	1.0000	29.16	_________
DRYING	acre	27.36	1.0000	27.36	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
INOCULANT	acre	7.55	1.0000	7.55	_________
SOIL TEST	acre	3.33	1.0000	3.33	_________
HAND LABOR	hour	9.06	0.1795	1.63	_________
OPERATOR LABOR	hour	15.22	1.3840	21.08	_________
UNALLOCATED LABOR	hour	15.16	1.1072	16.79	_________
DIESEL FUEL	gal	2.30	14.5901	33.50	_________
REPAIR & MAINTENANCE	acre	19.82	1.0000	19.82	_________
INTEREST ON OP. CAP.	acre	6.87	1.0000	6.87	_________
TOTAL DIRECT EXPENSES				478.02	_________
RETURNS ABOVE DIRECT EXPENSES				281.98	_________
TOTAL FIXED EXPENSES				108.95	_________
TOTAL SPECIFIED EXPENSES				586.97	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				173.03	_________

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 24.C Estimated resource use for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

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 190	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
TOTALS							1.38	1.18	1.56	1.10

Note: Cost of production estimates are based on 2019 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 24.D Estimated costs for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		---DIRECT COST---								
		---dollars---								
Soil Test	acre	3.33					0.09	3.42		3.42
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Glyphosate 3lbs a.e	pt	8.64					0.23	8.87		8.87
Lime (Spread)	ton	14.32					0.38	14.70		14.70
Bed-Rip/Disk Fold.	12R-38		1.23	0.49	1.26		0.07	3.05	3.08	6.13
Peanut Plt&Pre Fold.	12R-38		1.81	3.15	2.93		0.17	8.06	8.83	16.89
Peanut Seed	lb	111.25					2.43	113.68		113.68
Optimize LIFT	oz	7.55					0.17	7.72		7.72
Admire Pro	oz	11.97					0.26	12.23		12.23
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Dual Magnum	pt	10.26					0.22	10.48		10.48
Valor SX	oz	12.84					0.28	13.12		13.12
Sprayer 600-750gal	60' 175hp		0.09	0.05	0.14		0.01	0.29	0.36	0.65
Acephate 90%	lb	0.99					0.02	1.01		1.01
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Storm	pt	17.37					0.30	17.67		17.67
Cadre	oz	12.40					0.22	12.62		12.62
Butyrac 200 (2,4-DB)	pt	3.49					0.06	3.55		3.55
Crop Oil Conc.(Veg.)	pt	6.44					0.11	6.55		6.55
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bravo Weather Stick	pt	9.52					0.17	9.69		9.69
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Abound	oz	17.64					0.23	17.87		17.87
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Butyrac 200 (2,4-DB)	pt	3.49					0.05	3.54		3.54
Crop Oil Conc.(Veg.)	pt	6.44					0.08	6.52		6.52
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Select Max	pt	10.87					0.14	11.01		11.01
Crop Oil Conc.(Veg.)	pt	6.44					0.08	6.52		6.52
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Bravo Weather Stick	pt	6.35					0.08	6.43		6.43
Tebuconazole 3.6	oz	3.53					0.05	3.58		3.58
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Abound	oz	17.64					0.15	17.79		17.79
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Bravo Weather Stick	pt	9.52					0.08	9.60		9.60
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56			1.12	1.44	2.56
Bravo Weather Stick	pt	9.52					0.04	9.56		9.56
Peanut Dig/Invertor	6R-38		2.79	1.74	3.40		0.03	7.96	6.88	14.84
Peanut Harvester	6R-38		16.65	9.41	17.12		0.19	43.37	57.11	100.48
Dry Peanuts	ton	27.36					0.12	27.48		27.48
Cleaning Peanuts	ton	29.16					0.13	29.29		29.29
Peanut Dump Cart	6-Row		6.97	2.78	8.49		0.08	18.32	16.85	35.17
TOTALS		378.33	33.50	19.82	39.50	0.00	6.87	478.02	108.95	586.97

Note: Cost of production estimates are based on 2019 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 24.E Estimated monthly income and expense flows per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

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	9.52	27.52	27.16	9.52
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	23.10	33.26	14.36	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.25	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	6.44	12.88	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	14.32	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	7.55	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	0.56	4.89	1.12	2.24	1.12	29.57
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	0.36	3.49	0.72	1.44	0.72	26.77
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	3.89	0.40	0.80	0.40	14.13
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.73	3.65	0.90	0.75	0.25	0.59
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	28.14	170.78	52.36	59.99	29.65	137.10
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-170.78	-52.36	-59.99	-29.65	622.90
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-198.92	-251.28	-311.27	-340.92	281.98

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.
* Lease costs are based on hourly usage costs.

Table 24.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
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	-164	-145	-126	-107	-88	-69	-50	-31	-12	6	25
			-273	-254	-235	-216	-197	-178	-159	-140	-121	-102	-83
60	1.14	ton	-113	-90	-67	-44	-22	0	23	46	69	91	114
			-222	-199	-176	-153	-131	-108	-85	-62	-39	-17	5
70	1.33	ton	-61	-35	-8	17	44	71	97	124	150	177	204
			-170	-144	-117	-91	-64	-37	-11	15	41	68	95
80	1.52	ton	-10	19	50	80	110	141	171	202	232	262	293
			-119	-89	-58	-28	1	32	62	93	123	153	184
90	1.71	ton	40	74	109	143	177	211	245	280	314	348	382
			-68	-34	0	34	68	102	136	171	205	239	273
100	1.90	ton	91	129	167	205	243	281	319	357	395	433	471
			-16	21	59	97	135	173	211	249	287	325	363
110	2.09	ton	143	185	226	268	310	352	394	435	477	519	561
			34	76	117	159	201	243	285	326	368	410	452
120	2.28	ton	194	240	285	331	377	422	468	513	559	605	650
			85	131	176	222	268	313	359	404	450	496	541
130	2.47	ton	245	295	344	394	443	492	542	591	641	690	739
			136	186	235	285	334	383	433	482	532	581	630
140	2.66	ton	297	350	403	456	510	563	616	669	722	776	829
			188	241	294	347	401	454	507	560	613	667	720
150	2.85	ton	348	405	462	519	576	633	690	747	804	861	918
			239	296	353	410	467	524	581	638	695	752	809

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 2019 input prices.

Table 25.A Estimated costs per acre
Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.35	5.5000	34.92	_________
Abound	oz	0.98	36.0000	35.28	_________
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_________
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_________
Dual Magnum	pt	10.26	1.0000	10.26	_________
Valor SX	oz	4.28	3.0000	12.84	_________
Storm	pt	11.58	1.5000	17.37	_________
Cadre	oz	3.10	4.0000	12.40	_________
Butyrac 200 (2,4-DB)	pt	3.49	2.0000	6.98	_________
Select Max	pt	10.87	1.0000	10.87	_________
INSECTICIDES					
Admire Pro	oz	1.33	9.0000	11.97	_________
Acephate 90%	lb	7.17	0.1375	0.99	_________
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_________
SEED/PLANTS					
Peanut Seed	lb	0.89	125.0000	111.25	_________
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	3.22	6.0000	19.32	_________
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	43.00	0.3330	14.32	_________
INOCULANT					
Optimize LIFT	oz	0.51	14.8000	7.55	_________
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_________
OPERATOR LABOR					
Tractors	hour	15.22	1.2642	19.24	_________
Self-Propelled	hour	15.22	0.1983	3.04	_________
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	15.16	1.1072	16.79	_________
DIESEL FUEL					
Tractors	gal	2.30	13.5313	31.12	_________
Self-Propelled	gal	2.30	1.7850	4.05	_________
Irrigate Peanuts	gal	2.30	9.7755	22.48	_________
REPAIR & MAINTENANCE					
Implements	acre	9.98	1.0000	9.98	_________
Tractors	acre	8.21	1.0000	8.21	_________
Self-Propelled	acre	2.25	1.0000	2.25	_________
Irrigate Peanuts	acre	6.88	1.0000	6.88	_________
INTEREST ON OP. CAP.	acre	7.68	1.0000	7.68	_________

TOTAL DIRECT EXPENSES				531.95	_________
FIXED EXPENSES					
Implements	acre	41.11	1.0000	41.11	_________
Tractors	acre	55.94	1.0000	55.94	_________
Self-Propelled	acre	16.20	1.0000	16.20	_________
Irrigate Peanuts	acre	60.69	1.0000	60.69	_________

TOTAL FIXED EXPENSES				173.94	_________

TOTAL SPECIFIED EXPENSES				705.89	_________

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 25.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, 2020

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	73.72	1.0000	73.72	_________
HERBICIDES	acre	79.36	1.0000	79.36	_________
INSECTICIDES	acre	12.96	1.0000	12.96	_________
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_________
SEED/PLANTS	acre	111.25	1.0000	111.25	_________
ADJUVANTS	acre	19.32	1.0000	19.32	_________
CLEANING	acre	33.66	1.0000	33.66	_________
DRYING	acre	31.68	1.0000	31.68	_________
CUSTOM LIME	acre	14.32	1.0000	14.32	_________
INOCULANT	acre	7.55	1.0000	7.55	_________
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	15.22	1.4625	22.28	_________
UNALLOCATED LABOR	hour	15.16	1.1072	16.79	_________
DIESEL FUEL	gal	2.30	25.0919	57.65	_________
REPAIR & MAINTENANCE	acre	27.32	1.0000	27.32	_________
INTEREST ON OP. CAP.	acre	7.68	1.0000	7.68	_________
TOTAL DIRECT EXPENSES				531.95	_________
RETURNS ABOVE DIRECT EXPENSES				348.05	_________
TOTAL FIXED EXPENSES				173.94	_________
TOTAL SPECIFIED EXPENSES				705.89	_________
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				174.11	_________

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 25.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, 2020

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 190	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	
TOTALS							1.46	1.26	2.02	1.10

Note: Cost of production estimates are based on 2019 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 25.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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.09	3.42		3.42
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Glyphosate 3lbs a.e	pt	8.64					0.23	8.87		8.87
Lime (Spread)	ton	14.32					0.38	14.70		14.70
Bed-Rip/Disk Fold.	12R-38		1.23	0.49	1.26		0.07	3.05	3.08	6.13
Peanut Plt&Pre Fold.	12R-38		1.81	3.15	2.93		0.17	8.06	8.83	16.89
Peanut Seed	lb	111.25					2.43	113.68		113.68
Optimize LIFT	oz	7.55					0.17	7.72		7.72
Admire Pro	oz	11.97					0.26	12.23		12.23
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Dual Magnum	pt	10.26					0.22	10.48		10.48
Valor SX	oz	12.84					0.28	13.12		13.12
Sprayer 600-750gal	60' 175hp		0.09	0.05	0.14		0.01	0.29	0.36	0.65
Acephate 90%	lb	0.99					0.02	1.01		1.01
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Storm	pt	17.37					0.30	17.67		17.67
Cadre	oz	12.40					0.22	12.62		12.62
Butyrac 200 (2,4-DB)	pt	3.49					0.06	3.55		3.55
Crop Oil Conc.(Veg.)	pt	6.44					0.11	6.55		6.55
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bravo Weather Stick	pt	9.52					0.17	9.69		9.69
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Abound	oz	17.64					0.23	17.87		17.87
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Butyrac 200 (2,4-DB)	pt	3.49					0.05	3.54		3.54
Crop Oil Conc.(Veg.)	pt	6.44					0.08	6.52		6.52
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Select Max	pt	10.87					0.14	11.01		11.01
Crop Oil Conc.(Veg.)	pt	6.44					0.08	6.52		6.52
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Bravo Weather Stick	pt	6.35					0.08	6.43		6.43
Tebuconazole 3.6	oz	3.53					0.05	3.58		3.58
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Abound	oz	17.64					0.15	17.79		17.79
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Bravo Weather Stick	pt	9.52					0.08	9.60		9.60
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56			1.12	1.44	2.56
Bravo Weather Stick	pt	9.52					0.04	9.56		9.56
Peanut Dig/Invertor	6R-38		2.79	1.74	3.40		0.03	7.96	6.88	14.84
Peanut Harvester	6R-38		16.65	9.41	17.12		0.19	43.37	57.11	100.48
Dry Peanuts	ton	31.68					0.14	31.82		31.82
Cleaning Peanuts	ton	33.66					0.15	33.81		33.81
Peanut Dump Cart	6-Row		6.97	2.78	8.49		0.08	18.32	16.85	35.17
Irrigate Peanuts	acre	7.92	24.15	7.50	4.73		0.77	45.07	64.99	110.06
TOTALS		395.07	57.65	27.32	44.23	0.00	7.68	531.95	173.94	705.89

Note: Cost of production estimates are based on 2019 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 25.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, 2020

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	9.52	27.52	27.16	9.52
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	23.10	33.26	14.36	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	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	111.25	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	6.44	12.88	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	14.32	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	7.55	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	0.58	0.00	0.00	0.00	0.00	0.00	0.79	7.26	1.35	2.70	1.98	29.57
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	0.85	0.00	0.00	0.00	0.00	0.00	0.36	3.93	6.34	12.68	6.72	26.77
REPAIR & MAINTENANCE	0.30	0.00	0.00	0.00	0.00	0.00	0.20	7.02	1.38	2.76	1.53	14.13
INTEREST ON OP. CAP.	0.09	0.00	0.00	0.00	0.00	0.00	0.74	3.95	1.02	0.93	0.32	0.63
TOTAL DIRECT EXPENSES	1.82	0.00	0.00	0.00	0.00	0.00	28.38	184.94	59.31	73.83	37.71	145.96
NET INCOME	-1.82	0.00	0.00	0.00	0.00	0.00	-28.38	-184.94	-59.31	-73.83	-37.71	734.04
NET INCOME TO DATE	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-30.20	-215.14	-274.45	-348.28	-385.99	348.05

Note: Cost of production estimates are based on 2019 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 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.
* Lease costs are based on hourly usage costs.

Table 25.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, 2020

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
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	-169	-147	-125	-103	-81	-59	-37	-15	6	28	50
			-343	-321	-299	-277	-255	-233	-211	-189	-167	-145	-123
60	1.32	ton	-109	-83	-56	-30	-4	22	48	75	101	127	154
			-283	-257	-230	-204	-178	-151	-125	-98	-72	-46	-19
70	1.54	ton	-50	-19	11	42	72	103	134	165	196	226	257
			-224	-193	-162	-131	-101	-70	-39	-8	22	52	83
80	1.76	ton	9	44	79	114	149	185	220	255	290	325	361
			-164	-129	-94	-59	-23	11	46	81	116	152	187
90	1.98	ton	68	108	147	187	227	266	306	345	385	425	464
			-105	-65	-26	13	53	92	132	171	211	251	290
100	2.20	ton	128	172	216	260	304	348	392	436	480	524	568
			-45	-1	42	86	130	174	218	262	306	350	394
110	2.42	ton	187	235	284	332	381	429	477	526	574	623	671
			13	61	110	158	207	255	303	352	400	449	497
120	2.64	ton	246	299	352	405	458	510	563	616	669	722	774
			72	125	178	231	284	336	389	442	495	548	600
130	2.86	ton	306	363	420	477	535	592	649	706	763	821	878
			132	189	246	304	361	418	475	532	590	647	704
140	3.08	ton	365	427	488	550	612	673	735	796	858	920	981
			191	253	315	376	438	499	561	623	684	746	807
150	3.30	ton	425	491	557	623	689	755	821	887	953	1019	1085
			251	317	383	449	515	581	647	713	779	845	911

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 2019 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, 2020

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	352,000	300	8	13.64	15.22	31.37	36.66	83.25	155.57	238.83
Combine (300-349 hp)	325 hp	383,000	300	8	16.73	15.22	38.47	39.89	93.59	169.27	262.87
Combine (350-399 hp)	355 hp	395,000	300	8	18.27	15.22	42.02	41.14	98.38	174.58	272.96
Combine (400-449 hp)	425 hp	425,000	300	8	21.87	15.22	50.31	44.27	109.80	187.84	297.64
Combine (450-499hp)	475 hp	455,000	300	8	24.44	15.22	56.23	47.39	118.84	201.09	319.94
Tractor(20-39hp)CB	MFWD 30	30,000	600	8	1.54	15.22	3.55	0.93	19.70	6.12	25.83
Tractor(20-39hp)RB	MFWD 30	20,800	600	8	1.54	15.22	3.55	0.65	19.42	4.24	23.67
Tractor(40-59hp)CB	2WD 50	30,400	600	8	2.57	15.22	5.91	0.95	22.08	6.21	28.29
Tractor(40-59hp)CB	MFWD 50	40,300	600	8	2.57	15.22	5.91	1.25	22.39	8.23	30.63
Tractor(40-59hp)RB	2WD 50	21,600	600	8	2.57	15.22	5.91	0.67	21.81	4.41	26.22
Tractor(40-59hp)RB	MFWD 50	27,500	600	8	2.57	15.22	5.91	0.85	21.99	5.61	27.61
Tractor(60-89hp)CB	2WD 75	50,200	600	8	3.86	15.22	8.87	1.56	25.66	10.25	35.92
Tractor(60-89hp)CB	MFWD 75	56,800	600	8	3.86	15.22	8.87	1.77	25.87	11.60	37.47
Tractor(60-89hp)RB	2WD 75	35,800	600	8	3.86	15.22	8.87	1.11	25.21	7.31	32.53
Tractor(60-89hp)RB	MFWD 75	42,000	600	8	3.86	15.22	8.87	1.31	25.41	8.58	33.99
Tractor(90-119hp)CB	2WD 105	69,300	600	8	5.40	15.22	12.43	2.16	29.81	14.15	43.97
Tractor(90-119hp)CB	MFWD 105	88,100	600	8	5.40	15.22	12.43	2.75	30.40	17.99	48.40
Tractor(90-119hp)RB	2WD 105	62,300	600	8	5.40	15.22	12.43	1.94	29.59	12.72	42.32
Tractor(90-119hp)RB	MFWD 105	69,700	600	8	5.40	15.22	12.43	2.17	29.82	14.23	44.06
Tractor(120-139hp)CB	2WD 130	110,000	600	8	6.69	15.22	15.39	3.43	34.04	22.47	56.52
Tractor(120-139hp)CB	MFWD 130	125,000	600	8	6.69	15.22	15.39	3.90	34.51	25.53	60.05
Tractor(140-159hp)	2WD 150	108,000	600	8	7.72	15.22	17.75	3.37	36.35	22.06	58.41
Tractor(140-159hp)CB	MFWD 150	140,000	600	8	7.72	15.22	17.75	4.37	37.35	28.60	65.95
Tractor(160-179hp)CB	MFWD 170	155,000	600	8	8.75	15.22	20.12	4.84	40.18	32.95	73.14
Tractor(180-199hp)CB	MFWD 190	189,000	600	8	9.77	15.22	22.49	5.90	43.61	40.18	83.80
Tractor(200-249hp)CB	MFWD 225	227,000	600	8	11.58	15.22	26.63	7.09	48.95	48.27	97.22
Tractor(250-349hp)CB	4WD 300	298,000	600	8	15.44	15.22	35.51	9.31	60.04	63.36	123.41
Tractor(250-349hp)CB	MFWD 300	301,000	600	8	15.44	15.22	35.51	9.40	60.14	64.00	124.14
Tractor(250-349hp)CB	Track 300	327,000	600	8	15.44	15.22	35.51	10.21	60.95	69.53	130.48
Tractor(350-449hp)	Track 400	426,000	600	8	20.58	15.22	47.35	13.31	75.88	90.58	166.47
Tractor(350-449hp)CB	4WD 400	342,000	600	8	20.58	15.22	47.35	10.68	73.26	72.72	145.98
Tractor(450-550hp)CB	4WD 500	412,000	600	8	25.73	15.22	59.19	12.87	87.28	87.60	174.89
Tractor(450-550hp)CB	Track 500	466,000	600	8	25.73	15.22	59.19	14.56	88.97	99.09	188.06
Utility Vehicle	800 CC	12,200	200	8	0.70	15.22	1.54	1.90	18.66	8.08	26.75
Utility Vehicle	900 CC	15,800	200	8	1.00	15.22	2.20	2.46	19.88	10.47	30.36

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, 2020

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	----------------$/acre-----------------					
Cotton Picker	4R-38(250)	268,000	200	8	12.86	0.257	6.25	7.62	10.79	24.68	45.80	70.48
Cotton Picker	4R-38(350)	351,000	200	8	18.01	0.257	6.25	10.68	14.13	31.07	59.98	91.06
Cotton Picker	4R2x1(350)	357,000	200	8	18.01	0.172	4.18	7.13	9.61	20.93	40.78	61.71
Cotton Picker	6R-30(355)	465,000	200	8	18.27	0.218	5.29	9.17	15.85	30.32	67.28	97.61
Cotton Picker	6R-38(355)	465,000	200	8	18.27	0.172	4.18	7.24	12.51	23.94	53.11	77.06
Cotton Picker/Modu	4R-38(365)	536,000	200	8	20.58	0.257	6.25	12.20	21.58	40.05	91.60	131.65
Cotton Picker/Module	6R-30(500)	776,000	200	8	25.73	0.218	5.29	12.91	26.46	44.68	112.28	156.96
Cotton Picker/Module	6R-38(500)	808,000	200	8	25.73	0.172	4.18	10.19	21.75	36.13	92.30	128.43
Dry Applicator SP	70'300cuft	344,000	350	8	16.98	0.015	0.29	0.59	0.27	1.16	1.96	3.13
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.34	0.36	0.20	0.91	1.44	2.35
Sprayer 600-825gal	80' 175hp	215,000	350	8	11.81	0.013	0.26	0.35	0.15	0.77	1.07	1.84
Sprayer 600-825gal	90' 250hp	316,000	350	8	12.73	0.011	0.23	0.34	0.19	0.77	1.40	2.18
Sprayer 800gal	100' 250hp	317,000	350	8	14.15	0.010	0.20	0.34	0.17	0.73	1.27	2.00
Sprayer 800gal	80' 250hp	287,000	350	8	12.86	0.013	0.26	0.39	0.20	0.85	1.43	2.29
Sprayer 1000-1400gal	90' 275hp	316,000	350	8	14.15	0.010	0.20	0.34	0.17	0.73	1.26	1.99
Sprayer 1000gal	100' 300hp	357,000	350	8	15.44	0.010	0.20	0.37	0.20	0.78	1.43	2.21
Sprayer 1200+gal	120' 300hp	376,000	350	8	15.44	0.008	0.17	0.31	0.17	0.66	1.25	1.91

Notes:
Labor: includes allocated labor plus any additional labor from self-propelled machine.
Direct: Does not include interest on operating capital.

Appendix Table 3. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	----------------------$/acre---------------------							
Bed-Rip/Disk Fold.	8R-38	MFWD 190	48,700	300	20	0.073	1.11	1.64	0.17	0.43	3.36	0.96	2.93	7.26
Bed-Rip/Disk Fold.	12R-30	MFWD 225	67,900	300	20	0.061	0.93	1.64	0.20	0.43	3.22	1.13	2.97	7.32
Bed-Rip/Disk Fold.	12R-38	MFWD 225	67,900	300	20	0.046	0.70	1.23	0.15	0.32	2.41	0.84	2.23	5.49
Bed-Rip/Disk Rigid	4R-30	MFWD 190	21,400	300	20	0.184	2.81	4.15	0.19	1.09	8.26	1.06	7.42	16.76
Bed-Rip/Disk Rigid	4R-38	MFWD 190	21,400	300	20	0.146	2.23	3.30	0.15	0.86	6.55	0.84	5.89	13.30
Bed-Rip/Disk Rigid	6R-30	MFWD 190	29,800	300	20	0.123	1.87	2.77	0.18	0.72	5.55	0.99	4.95	11.50
Bed-Rip/Disk Rigid	6R-38	MFWD 190	39,800	300	20	0.097	1.48	2.18	0.19	0.57	4.43	1.04	3.91	9.39
Bed-Rip/Disk Rigid	8R-30	MFWD 190	39,800	300	20	0.139	2.11	3.12	0.27	0.82	6.33	1.49	5.58	13.42
Bed-Rip/Disk Rigid	8R-38	MFWD 190	29,800	300	20	0.073	1.11	1.64	0.10	0.43	3.29	0.58	2.93	6.82
Bed-Subsoil Fold	8R-38	MFWD 225	48,700	150	12	0.080	1.22	2.15	1.42	0.57	5.37	2.71	3.89	11.98
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	67,900	150	12	0.053	0.81	1.43	1.31	0.38	3.95	2.51	2.59	9.06
Bed-Subsoil Fold	12R-38	MFWD 225	67,900	150	12	0.053	0.81	1.43	1.31	0.38	3.95	2.51	2.59	9.06
Bed-Subsoil Rigid	4R-30	MFWD 225	21,400	150	12	0.204	3.10	5.44	1.57	1.44	11.58	3.01	9.86	24.45
Bed-Subsoil Rigid	4R-38	MFWD 225	21,400	150	12	0.160	2.44	4.28	1.24	1.14	9.11	2.37	7.76	19.25
Bed-Subsoil Rigid	6R-30	MFWD 225	29,800	150	12	0.136	2.07	3.62	1.46	0.96	8.13	2.79	6.57	17.50
Bed-Subsoil Rigid	6R-38	MFWD 225	29,800	150	12	0.107	1.63	2.86	1.15	0.76	6.42	2.20	5.19	13.82
Bed-Subsoil Rigid	8R-30	MFWD 225	39,800	150	12	0.102	1.55	2.72	1.46	0.72	6.46	2.80	4.93	14.20
Bed-Subsoil Rigid	8R-38	MFWD 225	39,800	150	12	0.080	1.22	2.15	1.16	0.57	5.11	2.21	3.89	11.22
Bed/Disk (Hipper)	4R-38	MFWD 150	9,200	160	10	0.147	2.24	2.62	0.33	0.64	5.85	0.97	4.22	11.05
Bed/Disk (Hipper)	6R-38	MFWD 170	15,200	160	10	0.098	1.50	1.98	0.37	0.47	4.34	1.07	3.25	8.67
Bed/Disk (Hipper)	8R-30	MFWD 190	19,500	160	10	0.093	1.42	2.10	0.45	0.55	4.54	1.31	3.76	9.62
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	37,400	160	10	0.049	0.75	1.10	0.46	0.29	2.61	1.32	1.98	5.92
Bed/Disk (Hipper)	12R-30	MFWD 225	34,500	160	10	0.062	0.95	1.66	0.53	0.44	3.59	1.54	3.01	8.16
Bed/Disk (Hipper)	12R-38	MFWD 225	37,400	160	10	0.049	0.75	1.31	0.46	0.35	2.87	1.32	2.38	6.58
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	27,200	160	10	0.074	1.12	1.66	0.50	0.43	3.73	1.44	2.97	8.16
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	21,000	160	10	0.074	1.12	1.66	0.38	0.43	3.62	1.11	2.97	7.71
Bed/Lister-Roll-Fo	8R-38	MFWD 190	24,300	160	10	0.095	1.45	2.15	0.58	0.56	4.76	1.67	3.85	10.29
Bed/Lister-Roll-Fo	12R-30	MFWD 225	36,175	160	10	0.080	1.23	2.15	0.73	0.57	4.69	2.10	3.90	10.69
Bed/Lister-Roll-Fo	12R-38	MFWD 225	35,700	160	10	0.063	0.97	1.70	0.56	0.45	3.69	1.63	3.08	8.41
Bed/Lister-Roll-Fo	16R-30	MFWD 225	40,400	160	10	0.060	0.92	1.61	0.61	0.43	3.58	1.76	2.92	8.27
Bed/Lister-Roll-Ri	8R-38	MFWD 190	24,300	160	10	0.095	1.45	2.15	0.58	0.56	4.76	1.67	3.85	10.29
Blade-Box	6'-7'	MFWD 105	1,620	200	20	0.020	0.30	0.24	0.01	0.04	0.61	0.01	0.28	0.91
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-Scraper	6'-7'	MFWD 105	1,330	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	4,100	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	3.92	5.79	1.96	1.52	13.20	4.37	10.36	27.94
Boll Buggy	4R-38(350)	MFWD 190	30,500	200	10	0.257	3.92	5.79	1.96	1.52	13.20	4.37	10.36	27.94
Boll Buggy	4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.62	3.87	1.31	1.01	8.82	2.92	6.92	18.67
Boll Buggy	6R-30(355)	MFWD 190	30,500	200	10	0.218	3.32	4.90	1.66	1.28	11.18	3.70	8.77	23.65
Boll Buggy	6R-38(355)	MFWD 190	30,500	200	10	0.172	2.62	3.87	1.31	1.01	8.82	2.92	6.92	18.67
Chisel Plow-Folding	24'	MFWD 190	42,200	150	12	0.076	1.16	1.71	1.16	0.45	4.49	2.22	3.07	9.79
Chisel Plow-Folding	32'	MFWD 225	54,200	150	12	0.057	0.87	1.53	1.13	0.40	3.95	2.15	2.78	8.90
Chisel Plow-Folding	42'	MFWD 225	65,100	150	12	0.044	0.66	1.17	1.03	0.31	3.18	1.97	2.12	7.28
Chisel Plow-Folding	50'	MFWD 225	85,200	150	12	0.036	0.56	0.98	1.13	0.26	2.94	2.17	1.78	6.90
Chisel Plow-Folding	61'	MFWD 225	97,700	150	12	0.030	0.46	0.80	1.06	0.21	2.55	2.04	1.46	6.05
Chisel Plow-Rigid	10'	MFWD 170	7,790	150	12	0.184	2.81	3.72	0.52	0.89	7.94	0.99	6.09	15.03
Chisel Plow-Rigid	15'	2WD 130	14,700	150	12	0.123	1.87	1.89	0.65	0.42	4.85	1.24	2.76	8.86
Chisel Plow-Rigid	20'	MFWD 225	12,000	150	12	0.102	1.56	2.73	0.44	0.72	5.47	0.84	4.95	11.28
Cultivate	4R-30	2WD 105	14,600	150	10	0.206	3.13	2.56	0.80	0.44	6.95	2.30	2.92	12.18
Cultivate	4R-38	2WD 105	14,200	150	10	0.162	2.47	2.01	0.61	0.31	5.42	1.76	2.06	9.25
Cultivate	6R-30	MFWD 150	18,500	150	10	0.137	2.09	2.44	0.67	0.60	5.81	1.94	3.93	11.69
Cultivate	6R-38	MFWD 150	19,300	150	10	0.108	1.65	1.92	0.55	0.47	4.61	1.60	3.10	9.32
Cultivate	8R-30	MFWD 190	24,200	150	10	0.103	1.56	2.31	0.66	0.60	5.16	1.91	4.14	11.22
Cultivate	8R-38	MFWD 190	27,300	150	10	0.073	1.12	1.65	0.53	0.43	3.74	1.54	2.96	8.25
Cultivate	8R-38 2x1	MFWD 190	39,300	150	10	0.054	0.82	1.22	0.56	0.32	2.93	1.63	2.18	6.75
Cultivate	12R-30	MFWD 225	45,600	150	10	0.068	1.04	1.83	0.83	0.48	4.20	2.40	3.31	9.92
Cultivate	12R-38	MFWD 225	44,600	150	10	0.054	0.82	1.44	0.64	0.38	3.30	1.85	2.62	7.77
Cultivate	16R-30	MFWD 225	58,400	150	10	0.051	0.78	1.37	0.80	0.36	3.32	2.30	2.48	8.12
Cultivate & Post	4R-30	2WD 105	21,900	150	10	0.220	4.34	2.73	1.28	0.42	8.79	3.69	2.80	15.28
Cultivate & Post	4R-38	2WD 105	21,600	150	10	0.173	3.42	2.15	0.99	0.33	6.90	2.86	2.20	11.98
Cultivate & Post	6R-30	MFWD 150	25,900	150	10	0.146	2.89	2.60	1.01	0.64	7.15	2.91	4.19	14.26
Cultivate & Post	6R-38	MFWD 150	26,600	150	10	0.115	2.28	2.05	0.82	0.50	5.67	2.36	3.31	11.34
Cultivate & Post	8R-30	MFWD 190	31,500	150	10	0.110	2.17	2.47	0.92	0.64	6.22	2.65	4.42	13.29
Cultivate & Post	8R-38	MFWD 190	34,700	150	10	0.086	1.71	1.95	0.80	0.51	4.99	2.31	3.49	10.79
Cultivate & Post	8R-38 2x1	MFWD 190	47,900	150	10	0.057	1.14	1.30	0.73	0.34	3.52	2.12	2.32	7.97
Cultivate & Post	12R-30	MFWD 225	52,900	150	10	0.073	1.44	1.95	1.03	0.52	4.95	2.97	3.53	11.46
Cultivate & Post	12R-38	MFWD 225	53,200	150	10	0.057	1.14	1.54	0.82	0.41	3.91	2.36	2.79	9.07
Cultivate & Post	16R-30	MFWD 225	61,700	150	10	0.055	1.08	1.46	0.90	0.39	3.84	2.60	2.65	9.10
Disk & Incorporate	14'	2WD 130	33,200	200	10	0.149	2.95	2.30	1.49	0.51	7.26	2.85	3.36	13.48
Disk & Incorporate	20'	MFWD 190	75,700	200	10	0.092	1.40	2.07	2.09	0.54	6.13	4.02	3.71	13.86
Disk & Incorporate	24'	MFWD 190	51,800	200	10	0.087	1.72	1.96	1.35	0.51	5.56	2.59	3.50	11.66
Disk & Incorporate	28'	MFWD 225	61,200	200	10	0.074	1.47	1.99	1.37	0.53	5.37	2.63	3.61	11.62
Disk & Incorporate	32'	MFWD 225	66,900	200	10	0.065	1.29	1.74	1.31	0.46	4.81	2.51	3.16	10.49
Disk Harrow	14'	2WD 130	25,900	180	10	0.140	2.13	2.15	1.00	0.48	5.78	2.32	3.15	11.26
Disk Harrow	20'	MFWD 190	45,000	180	10	0.098	1.49	2.20	1.22	0.58	5.51	2.82	3.94	12.28
Disk Harrow	24'	MFWD 190	44,400	180	10	0.081	1.24	1.84	1.00	0.48	4.57	2.32	3.28	10.19
Disk Harrow	28'	MFWD 225	53,800	180	10	0.070	1.06	1.86	1.04	0.49	4.48	2.41	3.38	10.27
Disk Harrow	32'	MFWD 225	59,500	180	10	0.061	0.93	1.63	1.01	0.43	4.01	2.33	2.96	9.31

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	----------------------$/acre							---------------------
Disk Harrow	42'	MFWD 225	98,700	180	10	0.046	0.71	1.24	1.28	0.33	3.57	2.94	2.25	8.77
Disk Harrow 40-100hp	14'	2WD 75	16,700	180	10	0.140	2.13	1.24	0.65	0.15	4.18	1.49	1.02	6.71
Disk Heavy	14'	MFWD 150	25,900	180	10	0.145	2.22	2.59	1.05	0.63	6.50	2.41	4.17	13.09
Disk Heavy	20'	MFWD 190	45,000	180	10	0.097	1.48	2.18	1.21	0.57	5.46	2.79	3.91	12.16
Disk Heavy	28'	MFWD 225	53,800	180	10	0.075	1.15	2.01	1.13	0.53	4.83	2.60	3.65	11.08
Disk Ripper	15'	MFWD 225	49,200	180	10	0.136	2.07	3.62	1.86	0.96	8.52	4.28	6.57	19.38
Ditcher		2WD 130	6,100	200	10	0.020	0.30	0.30	0.04	0.06	0.72	0.07	0.44	1.24
Ditcher (1m/160a)		2WD 130	6,100	200	10	0.009	0.14	0.14	0.02	0.03	0.34	0.03	0.21	0.58
Fert Appl (Liquid)	4R-38	MFWD 150	12,900	150	8	0.154	3.05	2.74	1.33	0.67	7.80	1.63	4.42	13.86
Fert Appl (Liquid)	6R-30	MFWD 170	18,500	150	8	0.130	2.58	2.63	1.61	0.63	7.47	1.97	4.31	13.76
Fert Appl (Liquid)	6R-38	MFWD 170	18,500	150	8	0.103	2.04	2.08	1.27	0.50	5.89	1.56	3.40	10.86
Fert Appl (Liquid)	8R-30	MFWD 190	18,400	150	8	0.098	1.93	2.20	1.20	0.58	5.93	1.47	3.94	11.35
Fert Appl (Liquid)	8R-38	MFWD 190	19,000	150	8	0.077	1.53	1.74	0.98	0.45	4.72	1.20	3.12	9.04
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	21,600	150	8	0.051	1.02	1.16	0.74	0.30	3.23	0.91	2.07	6.22
Fert Appl (Liquid)	12R-30	MFWD 225	23,100	150	8	0.078	1.55	2.09	1.20	0.55	5.41	1.48	3.79	10.68
Fert Appl (Liquid)	12R-38	MFWD 225	21,600	150	8	0.051	1.02	1.37	0.74	0.36	3.50	0.91	2.49	6.91
Field Cult & Inc	42'	MFWD 225	67,100	100	10	0.037	0.74	1.00	0.63	0.26	2.65	2.91	1.82	7.39
Field Cult & Inc	50'	MFWD 225	81,500	100	10	0.031	0.62	0.84	0.64	0.22	2.34	2.97	1.53	6.84
Field Cult & Inc Fld	24'	MFWD 170	37,900	100	10	0.066	1.30	1.33	0.62	0.32	3.58	2.88	2.17	8.64
Field Cult & Inc Fld	32'	MFWD 190	51,500	100	10	0.049	0.97	1.11	0.63	0.29	3.02	2.93	1.99	7.95
Field Cult & Inc Rdg	12'	2WD 150	19,600	100	10	0.132	2.61	2.34	0.64	0.44	6.05	2.97	2.91	11.94
Field Cultivate Fld	24'	MFWD 170	30,600	100	10	0.062	0.94	1.25	0.47	0.30	2.97	2.18	2.05	7.21
Field Cultivate Fld	32'	MFWD 190	42,900	100	10	0.046	0.71	1.04	0.50	0.27	2.53	2.30	1.87	6.71
Field Cultivate Fld	42'	MFWD 225	58,400	100	10	0.035	0.54	0.94	0.51	0.25	2.25	2.38	1.71	6.36
Field Cultivate Fld	50'	MFWD 225	67,800	100	10	0.029	0.45	0.79	0.50	0.21	1.96	2.32	1.44	5.73
Field Cultivate Rdg	12'	2WD 150	12,300	100	10	0.124	1.89	2.20	0.38	0.41	4.90	1.75	2.74	9.41
Grain Cart Corn	500 bu	MFWD 190	25,700	200	12	0.025	0.38	0.56	0.17	0.14	1.27	0.33	1.01	2.63
Grain Cart Corn	700 bu	MFWD 190	37,300	200	12	0.025	0.38	0.56	0.25	0.14	1.35	0.48	1.01	2.86
Grain Cart Corn	1000 bu	MFWD 225	54,700	200	12	0.025	0.38	0.67	0.37	0.17	1.61	0.71	1.22	3.54
Grain Cart Rice	500 bu	MFWD 190	25,700	200	12	0.062	0.95	1.40	0.43	0.36	3.16	0.83	2.51	6.50
Grain Cart Rice	700 bu	MFWD 190	37,300	200	12	0.055	0.83	1.23	0.55	0.32	2.95	1.06	2.21	6.22
Grain Cart Rice	1000 bu	MFWD 190	54,700	200	12	0.045	0.69	1.03	0.67	0.27	2.67	1.29	1.84	5.81
Grain Cart Soybean	500 bu	MFWD 190	25,700	200	12	0.025	0.38	0.57	0.17	0.15	1.28	0.33	1.02	2.65
Grain Cart Soybean	700 bu	MFWD 190	37,300	200	12	0.021	0.32	0.47	0.21	0.12	1.14	0.40	0.85	2.40
Grain Cart Soybean	1000 bu	MFWD 190	54,700	200	12	0.021	0.32	0.47	0.31	0.12	1.24	0.60	0.85	2.69
Grain Cart Wht/Sor	500 bu	MFWD 190	25,700	200	12	0.025	0.38	0.57	0.17	0.15	1.28	0.33	1.02	2.65
Grain Cart Wht/Sor	700 bu	MFWD 190	37,300	200	12	0.021	0.32	0.47	0.21	0.12	1.14	0.40	0.85	2.40
Grain Cart Wht/Sor	1000 bu	MFWD 190	54,700	200	12	0.021	0.32	0.47	0.31	0.12	1.24	0.60	0.85	2.69
Grain Drill	10'	2WD 130	28,000	150	8	0.188	4.57	2.90	1.97	0.64	10.10	4.13	4.23	18.48
Grain Drill	12'	2WD 130	27,500	150	8	0.157	3.81	2.41	1.62	0.54	8.39	3.38	3.53	15.31
Grain Drill	15'	MFWD 150	33,100	150	8	0.125	3.05	2.23	1.56	0.54	7.39	3.26	3.59	14.25
Grain Drill	20'	MFWD 170	39,400	150	8	0.094	2.28	1.89	1.39	0.45	6.03	2.91	3.10	12.05
Grain Drill	24'	MFWD 190	65,600	150	8	0.078	1.90	1.76	1.93	0.46	6.07	4.03	3.15	13.26
Grain Drill	30'	MFWD 225	63,800	150	8	0.062	1.52	1.67	1.50	0.44	5.15	3.14	3.03	11.32
Grain Drill	35'	MFWD 225	91,000	150	8	0.053	1.30	1.43	1.83	0.38	4.96	3.84	2.60	11.40
Grain Drill & Pre	10'	2WD 130	35,400	150	8	0.203	4.93	3.12	2.69	0.69	11.45	5.63	4.56	21.64
Grain Drill & Pre	12'	2WD 130	34,800	150	8	0.169	4.10	2.60	2.20	0.58	9.50	4.61	3.80	17.92
Grain Drill & Pre	15'	MFWD 150	40,400	150	8	0.135	3.28	2.40	2.05	0.59	8.33	4.28	3.87	16.49
Grain Drill & Pre	20'	MFWD 170	46,700	150	8	0.101	2.46	2.04	1.77	0.49	6.77	3.71	3.34	13.84
Grain Drill & Pre	24'	MFWD 190	73,000	150	8	0.084	2.05	1.90	2.31	0.49	6.77	4.84	3.40	15.01
Grain Drill & Pre	30'	MFWD 225	71,200	150	8	0.067	1.64	1.80	1.80	0.48	5.73	3.77	3.26	12.77
Grain Drill & Pre	35'	MFWD 225	98,300	150	8	0.058	1.40	1.54	2.13	0.41	5.50	4.47	2.80	12.77
Grain Drill & Pre T	8R-38	MFWD 225	51,900	150	8	0.062	1.52	1.67	1.22	0.44	4.86	2.55	3.03	10.46
Harrow - Folding	24'	MFWD 190	13,700	200	10	0.064	0.98	1.45	0.31	0.38	3.13	0.50	2.60	6.24
Harrow - Folding	30'	MFWD 190	14,800	200	10	0.051	0.78	1.16	0.26	0.30	2.52	0.44	2.08	5.04
Harrow - Folding	40'	MFWD 190	20,200	200	10	0.038	0.59	0.87	0.27	0.22	1.96	0.45	1.56	3.97
Harrow - Folding	48'	MFWD 225	24,900	200	10	0.032	0.49	0.86	0.28	0.22	1.86	0.46	1.56	3.89
Header - Corn	6R-30	265 hp	50,800	300	8	0.170	2.59	5.34	2.16	6.24	16.33	3.53	26.49	46.36
Header - Corn	6R-38	265 hp	51,400	300	8	0.134	2.04	4.21	1.72	4.92	12.91	2.82	20.91	36.65
Header - Corn	8R-30	265 hp	62,000	300	8	0.127	1.94	4.00	1.97	4.68	12.61	3.23	19.86	35.71
Header - Corn	8R-38	325 hp	67,000	300	8	0.100	1.53	3.88	1.69	4.02	11.14	2.76	17.09	30.99
Header - Corn	12R-20	325 hp	102,000	300	8	0.127	1.94	4.91	3.25	5.09	15.20	5.32	21.61	42.15
Header - Corn	12R-30	325 hp	103,000	300	8	0.085	1.29	3.27	2.19	3.39	10.16	3.58	14.41	28.15
Header - Draper (CL)	25' Rigid	265 hp	61,400	300	8	0.203	3.09	6.37	2.85	7.44	19.76	4.88	31.59	56.24
Header - Draper (CL)	30' Rigid	325 hp	71,500	300	8	0.169	2.57	6.51	2.77	6.75	18.61	4.74	28.64	52.00
Header - Draper (CL)	36' Rigid	355 hp	75,800	300	8	0.141	2.14	5.92	2.44	5.80	16.32	4.18	24.62	45.13
Header - Draper (CL)	40' Rigid	425 hp	80,300	300	8	0.126	1.93	6.38	2.33	5.61	16.27	3.99	23.84	44.10
Header - Draper (SL)	25' Rigid	325 hp	61,400	300	8	0.176	2.67	6.77	2.47	7.02	18.94	4.23	29.79	52.97
Header - Draper (SL)	30' Rigid	325 hp	71,500	300	8	0.146	2.23	5.64	2.40	5.85	16.13	4.10	24.82	45.06
Header - Draper (SL)	36' Rigid	355 hp	75,800	300	8	0.122	1.86	5.13	2.12	5.02	14.14	3.63	21.33	39.11
Header - Drapper	40' Rigid	425 hp	80,300	300	8	0.110	1.67	5.53	2.02	4.86	14.10	3.46	20.66	38.22
Header -RiceStrp(CL)	20'	265 hp	50,000	300	8	0.253	3.86	7.96	3.17	9.30	24.30	5.18	39.49	68.98
Header -RiceStrp(CL)	24'	325 hp	55,400	300	8	0.211	3.21	8.13	2.92	8.43	22.72	4.78	35.80	63.32
Header -RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.41	6.10	2.41	6.32	17.26	3.94	26.85	48.05
Header -RiceStrp(SL)	20'	265 hp	50,000	300	8	0.220	3.34	6.90	2.75	8.06	21.06	4.49	34.22	59.78
Header -RiceStrp(SL)	24'	325 hp	55,400	300	8	0.183	2.79	7.05	2.53	7.31	19.69	4.14	31.03	54.88
Header -RiceStrp(SL)	32'	325 hp	60,800	300	8	0.137	2.09	5.29	2.09	5.48	14.95	3.41	23.27	41.65

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	---------------------$/acre---------------------							
Header -Soybean	22' Flex	265 hp	33,500	300	8	0.116	1.76	3.64	0.97	4.25	10.63	1.58	18.06	30.29
Header -Soybean	25' Flex	325 hp	35,900	300	8	0.102	1.55	3.93	0.91	4.07	10.47	1.49	17.29	29.27
Header -Soybean	30' Flex	325 hp	42,400	300	8	0.085	1.29	3.27	0.90	3.39	8.87	1.47	14.41	24.75
Header -Soybean	35' Flex	355 hp	48,700	300	8	0.072	1.11	3.06	0.88	3.00	8.06	1.45	12.74	22.26
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.76	3.64	0.57	4.25	10.24	0.93	18.06	29.24
Header Wheat/Sorghum	25' Rigid	325 hp	21,000	300	8	0.102	1.55	3.93	0.53	4.07	10.09	0.87	17.29	28.27
Header Wheat/Sorghum	30' Rigid	325 hp	25,700	300	8	0.085	1.29	3.27	0.54	3.39	8.51	0.89	14.41	23.82
Land Plane	50'x16'	MFWD 190	10,800	200	10	0.151	2.30	3.41	0.32	0.89	6.94	0.94	6.09	13.97
Levee Pull & Seed	8 Blade	MFWD 170	9,000	100	10	0.003	0.05	0.07	0.00	0.01	0.14	0.03	0.11	0.30
Levee Pull (1m/80a)	8 blade	MFWD 170	8,160	100	10	0.003	0.05	0.07	0.00	0.01	0.14	0.03	0.11	0.30
Levee Splitter (1/80	32"	MFWD 150	8,160	100	10	0.004	0.06	0.07	0.00	0.01	0.16	0.03	0.11	0.32
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	6.25	5.79	2.23	1.52	15.81	4.97	10.36	31.15
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	6.25	5.79	2.23	1.52	15.81	4.97	10.36	31.15
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	4.18	3.87	1.49	1.01	10.57	3.32	6.92	20.82
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	5.29	4.90	1.89	1.28	13.39	4.21	8.77	26.37
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	4.18	3.87	1.49	1.01	10.57	3.32	6.92	20.82
NT Grain Drill	10'	2WD 130	34,100	150	8	0.235	5.72	3.62	3.01	0.81	13.17	6.30	5.29	24.77
NT Grain Drill	12'	2WD 130	46,100	150	8	0.163	3.97	2.51	2.82	0.56	9.88	5.91	3.67	19.47
NT Grain Drill	15'	MFWD 150	55,500	150	8	0.130	3.17	2.32	2.72	0.57	8.80	5.69	3.74	18.24
NT Grain Drill	20'	MFWD 170	65,100	150	8	0.098	2.38	1.97	2.39	0.47	7.23	5.01	3.23	15.48
NT Grain Drill	24'	MFWD 190	90,400	150	8	0.081	1.98	1.84	2.77	0.48	7.08	5.79	3.28	16.17
NT Grain Drill	30'	MFWD 225	103,000	150	8	0.065	1.58	1.74	2.52	0.46	6.32	5.28	3.16	14.77
NT Grain Drill & Pre	10'	2WD 130	41,500	150	8	0.211	5.13	3.25	3.29	0.72	12.41	6.88	4.75	24.04
NT Grain Drill & Pre	12'	2WD 130	53,400	150	8	0.176	4.28	2.71	3.53	0.60	11.12	7.37	3.96	22.46
NT Grain Drill & Pre	15'	MFWD 150	62,900	150	8	0.141	3.42	2.50	3.32	0.61	9.87	6.95	4.03	20.85
NT Grain Drill & Pre	20'	MFWD 170	72,500	150	8	0.105	2.56	2.12	2.87	0.51	8.08	6.01	3.48	17.58
NT Grain Drill & Pre	24'	MFWD 190	97,800	150	8	0.088	2.14	1.98	3.23	0.52	7.87	6.75	3.54	18.17
NT Grain Drill & Pre	30'	MFWD 225	110,700	150	8	0.070	1.71	1.87	2.92	0.50	7.01	6.11	3.40	16.53
NT Plant&Pre-Folding	8R-38	MFWD 170	67,100	150	8	0.083	2.03	1.68	2.10	0.40	6.22	4.39	2.75	13.37
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	99,600	150	8	0.055	1.35	1.12	2.07	0.26	4.82	4.34	1.83	11.00
NT Plant&Pre-Folding	12R-20	MFWD 190	83,300	150	8	0.105	2.56	2.37	3.30	0.62	8.87	6.90	4.25	20.03
NT Plant&Pre-Folding	12R-30	MFWD 190	89,600	150	8	0.070	1.71	1.58	2.36	0.41	6.08	4.95	2.83	13.86
NT Plant&Pre-Folding	12R-38	MFWD 190	99,600	150	8	0.055	1.35	1.25	2.07	0.32	5.01	4.34	2.23	11.59
NT Plant&Pre-Folding	16R-30	MFWD 190	129,000	150	8	0.052	1.28	1.18	2.55	0.31	5.34	5.34	2.12	12.81
NT Plant&Pre-Folding	23R-15	MFWD 190	163,000	150	8	0.073	1.78	1.65	4.48	0.43	8.35	9.38	2.95	20.69
NT Plant&Pre-Folding	24R-20	MFWD 190	182,000	150	8	0.052	1.28	1.18	3.60	0.31	6.39	7.54	2.12	16.06
NT Plant&Pre-Folding	24R-30	MFWD 190	208,000	150	8	0.035	0.85	0.79	2.75	0.20	4.60	5.74	1.41	11.77
NT Plant&Pre-Folding	31R-15	MFWD 225	194,000	150	8	0.054	1.32	1.45	3.97	0.38	7.14	8.31	2.63	18.09
NT Plant&Pre-Folding	32R-15	MFWD 225	210,000	150	8	0.052	1.28	1.40	4.16	0.37	7.23	8.70	2.55	18.48
NT Plant&Pre-Rigid	4R-30	2WD 130	34,600	150	8	0.211	5.13	3.25	2.74	0.72	11.86	5.73	4.75	22.35
NT Plant&Pre-Rigid	4R-38	2WD 130	35,600	150	8	0.166	4.04	2.56	2.22	0.57	9.40	4.64	3.74	17.79
NT Plant&Pre-Rigid	6R-30	MFWD 150	43,700	150	8	0.141	3.42	2.50	2.31	0.61	8.85	4.83	4.03	17.72
NT Plant&Pre-Rigid	6R-38	MFWD 150	42,900	150	8	0.111	2.70	1.97	1.79	0.48	6.95	3.74	3.18	13.88
NT Plant&Pre-Rigid	8R-30	MFWD 170	54,300	150	8	0.105	2.56	2.12	2.15	0.51	7.36	4.50	3.48	15.35
NT Plant&Pre-Rigid	8R-38	MFWD 170	51,700	150	8	0.083	2.03	1.68	1.62	0.40	5.73	3.38	2.75	11.88
NT Plant&Pre-Rigid	11R-15	MFWD 170	63,600	150	8	0.143	3.49	2.89	3.43	0.69	10.51	7.17	4.74	22.43
NT Plant&Pre-Rigid	11R-20	MFWD 170	62,900	150	8	0.115	2.80	2.32	2.72	0.55	8.41	5.69	3.80	17.92
NT Plant&Pre-Rigid	12R-20	MFWD 190	65,900	150	8	0.105	2.56	2.37	2.61	0.62	8.18	5.46	4.25	17.90
NT Plant&Pre-Rigid	12R-30	MFWD 190	79,300	150	8	0.070	1.71	1.58	2.09	0.41	5.81	4.38	2.83	13.02
NT Plant&Pre-Rigid	15R-15	MFWD 190	80,900	150	8	0.113	2.74	2.54	3.43	0.66	9.39	7.17	4.54	21.11
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	154,000	150	8	0.055	1.35	1.48	3.21	0.39	6.44	6.71	2.68	15.85
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	123,000	150	8	0.083	2.03	2.22	3.85	0.59	8.70	8.06	4.03	20.80
NT Plant-Folding	8R-38	MFWD 170	59,700	150	8	0.077	1.88	1.56	1.73	0.37	5.56	3.63	2.55	11.75
NT Plant-Folding	8R-38 2x1	MFWD 170	91,000	150	8	0.051	1.25	1.04	1.76	0.25	4.30	3.68	1.70	9.70
NT Plant-Folding	12R-20	MFWD 190	75,900	150	8	0.098	2.38	2.20	2.79	0.58	7.96	5.84	3.94	17.75
NT Plant-Folding	12R-30	MFWD 190	81,000	150	8	0.065	1.58	1.47	1.98	0.38	5.43	4.15	2.63	12.22
NT Plant-Folding	12R-38	MFWD 190	91,000	150	8	0.051	1.25	1.16	1.76	0.30	4.48	3.68	2.07	10.25
NT Plant-Folding	16R-30	MFWD 190	120,000	150	8	0.049	1.19	1.10	2.20	0.29	4.79	4.61	1.97	11.38
NT Plant-Folding	23R-15	MFWD 190	155,000	150	8	0.068	1.65	1.53	3.96	0.40	7.55	8.28	2.74	18.58
NT Plant-Folding	24R-20	MFWD 190	174,000	150	8	0.049	1.19	1.10	3.20	0.29	5.79	6.69	1.97	14.46
NT Plant-Folding	24R-30	MFWD 190	194,000	150	8	0.032	0.79	0.73	2.38	0.19	4.10	4.97	1.31	10.40
NT Plant-Folding	31R-15	MFWD 225	185,000	150	8	0.050	1.23	1.35	3.52	0.36	6.46	7.36	2.45	16.27
NT Plant-Folding	32R-15	MFWD 225	201,000	150	8	0.049	1.19	1.30	3.70	0.34	6.55	7.73	2.37	16.65
NT Plant-Rigid	4R-30	2WD 130	27,200	150	8	0.196	4.76	3.02	2.00	0.67	10.47	4.18	4.41	19.07
NT Plant-Rigid	4R-38	2WD 130	28,200	150	8	0.154	3.75	2.38	1.63	0.53	8.30	3.41	3.47	15.19
NT Plant-Rigid	6R-30	MFWD 150	36,300	150	8	0.130	3.17	2.32	1.78	0.57	7.86	3.72	3.74	15.33
NT Plant-Rigid	6R-38	MFWD 150	35,600	150	8	0.103	2.51	1.83	1.38	0.45	6.17	2.88	2.95	12.01
NT Plant-Rigid	8R-30	MFWD 170	46,900	150	8	0.098	2.38	1.97	1.72	0.47	6.56	3.61	3.23	13.41
NT Plant-Rigid	8R-38	MFWD 170	44,300	150	8	0.077	1.88	1.56	1.28	0.37	5.11	2.69	2.55	10.36
NT Plant-Rigid	11R-15	MFWD 170	56,200	150	8	0.133	3.24	2.68	2.81	0.64	9.39	5.88	4.40	19.68
NT Plant-Rigid	11R-20	MFWD 170	55,500	150	8	0.107	2.60	2.16	2.23	0.51	7.52	4.66	3.53	15.72
NT Plant-Rigid	12R-20	MFWD 190	58,600	150	8	0.098	2.38	2.20	2.15	0.58	7.33	4.51	3.94	15.78
NT Plant-Rigid	12R-30	MFWD 190	70,700	150	8	0.065	1.58	1.47	1.73	0.38	5.18	3.62	2.63	11.44
NT Plant-Rigid	15R-15	MFWD 190	72,300	150	8	0.105	2.55	2.36	2.84	0.62	8.38	5.95	4.22	18.55
NT Plant-TwinRow	12R-30/40	MFWD 225	145,000	150	8	0.051	1.25	1.37	2.81	0.36	5.80	5.87	2.49	14.17
NT Plant-TwinRow	8R-30/40	MFWD 225	115,000	150	8	0.077	1.88	2.06	3.34	0.55	7.85	6.99	3.74	18.59
Peanut Cond.& Lifter	6-Row	MFWD 190	14,400	300	20	0.100	1.52	2.24	0.24	0.59	4.60	0.40	4.01	9.02
Peanut Conditioner	6-Row	MFWD 190	16,900	300	20	0.100	1.52	2.24	0.33	0.59	4.69	0.42	4.01	9.14
Peanut Dig/Invertor	4R-30	MFWD 190	32,500	300	15	0.235	3.58	5.30	1.90	1.39	12.19	2.51	9.47	24.18
Peanut Dig/Invertor	4R-38	MFWD 190	32,500	300	15	0.186	2.83	4.18	1.50	1.09	9.62	1.98	7.48	19.09

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	---------------------$/acre---------------------							
Peanut Dig/Invertor	6R-38	MFWD 190	46,500	300	15	0.124	1.88	2.79	1.01	0.73	6.42	1.89	4.98	13.30
Peanut Dump Cart	6-Row	MFWD 190	52,400	300	20	0.310	4.71	6.97	0.94	1.83	14.46	4.38	12.45	31.31
Peanut Harvester	4R-30	MFWD 225	150,000	300	20	0.849	12.93	22.64	7.22	6.02	48.83	32.18	41.02	122.04
Peanut Harvester	4R-38	MFWD 225	150,000	300	20	0.934	14.22	24.89	7.94	6.62	53.69	36.62	45.11	135.42
Peanut Harvester	6R-38	MFWD 225	165,000	300	20	0.625	9.51	16.64	4.98	4.43	35.57	26.94	30.16	92.68
Peanut Lifter	6-Row	MFWD 225	7,160	300	20	0.100	1.52	2.66	0.14	0.70	5.04	0.18	4.82	10.05
Peanut Plt&Pre Fold.	12R-38	MFWD 190	88,900	150	8	0.080	1.95	1.80	2.68	0.47	6.91	5.60	3.23	15.75
Peanut Plt&Pre Rigid	8R-30	MFWD 190	47,100	150	8	0.152	3.70	3.43	2.69	0.90	10.74	5.64	6.14	22.52
Peanut Plt&Pre Rigid	8R-38	MFWD 190	44,600	150	8	0.120	2.93	2.71	2.01	0.71	8.38	4.22	4.85	17.45
Peanut Plt&Pre Twin	8R-30/40	MFWD 190	114,000	150	8	0.120	2.93	2.71	5.16	0.71	11.52	10.79	4.85	27.17
Pipe Spool 160ac	1/4m roll	2WD 130	5,400	15	12	0.003	0.10	0.04	0.00	0.01	0.17	0.11	0.07	0.35
Pipe Trailer 1m/160a	30'	2WD 130	2,700	100	15	0.003	0.19	0.05	0.00	0.01	0.26	0.00	0.08	0.35
Plant & Pre-Folding	8R-38	MFWD 170	59,900	150	8	0.080	1.94	1.61	1.80	0.38	5.75	3.76	2.64	12.17
Plant & Pre-Folding	8R-38 2x1	MFWD 170	88,900	150	8	0.053	1.29	1.07	1.78	0.25	4.41	3.72	1.76	9.89
Plant & Pre-Folding	12R-20	MFWD 190	72,600	150	8	0.101	2.46	2.28	2.76	0.59	8.11	5.77	4.08	17.97
Plant & Pre-Folding	12R-30	MFWD 190	78,900	150	8	0.067	1.64	1.52	2.00	0.39	5.56	4.18	2.72	12.47
Plant & Pre-Folding	12R-38	MFWD 190	88,900	150	8	0.053	1.29	1.20	1.78	0.31	4.59	3.72	2.14	10.46
Plant & Pre-Folding	16R-30	MFWD 190	115,000	150	8	0.050	1.23	1.14	2.18	0.29	4.86	4.57	2.04	11.48
Plant & Pre-Folding	23R-15	MFWD 190	143,000	150	8	0.070	1.71	1.58	3.78	0.41	7.49	7.90	2.83	18.23
Plant & Pre-Folding	24R-20	MFWD 190	161,000	150	8	0.050	1.23	1.14	3.06	0.29	5.73	6.40	2.04	14.18
Plant & Pre-Folding	24R-30	MFWD 190	186,000	150	8	0.033	0.82	0.76	2.36	0.19	4.14	4.93	1.36	10.43
Plant & Pre-Folding	31R-15	MFWD 225	166,000	150	8	0.052	1.27	1.39	3.26	0.37	6.31	6.82	2.53	15.66
Plant & Pre-Folding	32R-15	MFWD 225	181,000	150	8	0.050	1.23	1.35	3.44	0.36	6.39	7.20	2.45	16.04
Plant & Pre-Rigid	4R-30	2WD 130	31,000	150	8	0.203	4.93	3.12	2.36	0.69	11.11	4.93	4.56	20.61
Plant & Pre-Rigid	4R-38	2WD 130	32,000	150	8	0.159	3.88	2.46	1.91	0.54	8.81	4.01	3.59	16.41
Plant & Pre-Rigid	6R-30	MFWD 150	38,300	150	8	0.135	3.28	2.40	1.94	0.59	8.22	4.06	3.87	16.16
Plant & Pre-Rigid	6R-38	MFWD 150	37,600	150	8	0.106	2.59	1.89	1.50	0.46	6.46	3.14	3.05	12.67
Plant & Pre-Rigid	8R-30	MFWD 170	47,100	150	8	0.101	2.46	2.04	1.79	0.49	6.79	3.74	3.34	13.88
Plant & Pre-Rigid	8R-38	MFWD 170	44,600	150	8	0.080	1.94	1.61	1.34	0.38	5.29	2.80	2.64	10.74
Plant & Pre-Rigid	11R-15	MFWD 170	53,800	150	8	0.148	3.59	2.98	2.99	0.71	10.29	6.25	4.88	21.42
Plant & Pre-Rigid	11R-20	MFWD 170	53,000	150	8	0.110	2.69	2.23	2.20	0.53	7.67	4.60	3.65	15.93
Plant & Pre-Rigid	12R-20	MFWD 190	55,200	150	8	0.101	2.46	2.28	2.10	0.59	7.45	4.39	4.08	15.92
Plant & Pre-Rigid	12R-30	MFWD 190	68,600	150	8	0.067	1.64	1.52	1.74	0.39	5.30	3.63	2.72	11.66
Plant & Pre-Rigid	15R-15	MFWD 190	67,500	150	8	0.108	2.63	2.44	2.74	0.64	8.46	5.74	4.36	18.58
Plant & Pre-TwinRow	12R-30/40	MFWD 225	143,000	150	8	0.053	1.29	1.42	2.86	0.37	5.96	5.98	2.57	14.53
Plant & Pre-TwinRow	8R-30/40	MFWD 225	116,000	150	8	0.080	1.94	2.13	3.49	0.56	8.14	7.29	3.87	19.32
Plant - Folding	8R-38	MFWD 170	52,600	150	8	0.074	1.80	1.49	1.47	0.36	5.14	3.07	2.45	10.66
Plant - Folding	8R-38 2x1	MFWD 170	80,200	150	8	0.049	1.20	0.99	1.49	0.24	3.93	3.11	1.63	8.69
Plant - Folding	12R-20	MFWD 190	65,200	150	8	0.094	2.28	2.12	2.30	0.55	7.27	4.81	3.78	15.88
Plant - Folding	12R-30	MFWD 190	70,300	150	8	0.062	1.52	1.41	1.65	0.37	4.96	3.46	2.52	10.95
Plant - Folding	12R-38	MFWD 190	80,200	150	8	0.049	1.20	1.11	1.49	0.29	4.10	3.11	1.99	9.21
Plant - Folding	16R-30	MFWD 190	10,600	150	8	0.047	1.14	1.06	0.18	0.27	2.67	0.39	1.89	4.95
Plant - Folding	23R-15	MFWD 190	134,000	150	8	0.065	1.58	1.47	3.29	0.38	6.73	6.87	2.63	16.24
Plant - Folding	24R-20	MFWD 190	152,000	150	8	0.047	1.14	1.06	2.68	0.27	5.17	5.61	1.89	12.68
Plant - Folding	24R-30	MFWD 190	178,000	150	8	0.031	0.76	0.70	2.09	0.18	3.75	4.38	1.26	9.40
Plant - Folding	31R-15	MFWD 225	157,000	150	8	0.048	1.18	1.29	2.86	0.34	5.69	5.99	2.35	14.04
Plant - Folding	32R-15	MFWD 225	173,000	150	8	0.047	1.14	1.25	3.05	0.33	5.79	6.39	2.27	14.46
Plant - Rigid	4R-30	2WD 130	23,600	150	8	0.188	4.57	2.90	1.66	0.64	9.79	3.48	4.23	17.52
Plant - Rigid	4R-38	2WD 130	24,700	150	8	0.148	3.60	2.28	1.37	0.51	7.77	2.87	3.33	13.98
Plant - Rigid	6R-30	MFWD 150	30,900	150	8	0.125	3.05	2.23	1.45	0.54	7.29	3.04	3.59	13.93
Plant - Rigid	6R-38	MFWD 150	30,200	150	8	0.099	2.40	1.76	1.12	0.43	5.73	2.34	2.83	10.91
Plant - Rigid	8R-30	MFWD 170	39,800	150	8	0.094	2.28	1.89	1.40	0.45	6.05	2.94	3.10	12.10
Plant - Rigid	8R-38	MFWD 170	37,200	150	8	0.074	1.80	1.49	1.03	0.36	4.71	2.17	2.45	9.33
Plant - Rigid	11R-15	MFWD 170	46,400	150	8	0.137	3.34	2.77	2.39	0.66	9.17	5.00	4.53	18.71
Plant - Rigid	11R-20	MFWD 170	45,700	150	8	0.103	2.50	2.07	1.76	0.49	6.84	3.69	3.39	13.92
Plant - Rigid	12R-20	MFWD 190	47,900	150	8	0.094	2.28	2.12	1.69	0.55	6.66	3.54	3.78	13.99
Plant - Rigid	12R-30	MFWD 190	60,000	150	8	0.062	1.52	1.41	1.41	0.37	4.72	2.95	2.52	10.20
Plant - Rigid	15R-15	2WD 150	58,900	150	8	0.094	2.28	1.67	2.08	0.31	6.36	4.35	2.08	12.79
Plant - TwinRow	12R-30/40	MFWD 225	134,000	150	8	0.049	1.20	1.32	2.49	0.35	5.37	5.21	2.39	12.97
Plant - TwinRow	8R-30/40	MFWD 225	108,000	150	8	0.074	1.80	1.98	3.01	0.52	7.34	6.30	3.59	17.24
Roller/Cultipacker	20'	MFWD 150	15,800	300	12	0.074	1.13	1.32	0.27	0.32	3.06	0.41	2.13	5.62
Roller/Cultipacker	30'	MFWD 170	19,400	300	12	0.049	0.75	1.00	0.22	0.24	2.22	0.34	1.64	4.21
Roller/Cultipacker	38'	MFWD 225	21,800	300	12	0.039	0.59	1.04	0.20	0.27	2.12	0.30	1.89	4.32
Roller/Stubble	20'	2WD 50	13,800	300	12	0.074	1.13	0.44	0.24	0.05	1.87	0.36	0.32	2.56
Roller/Stubble	32'	MFWD 225	23,300	300	12	0.046	0.71	1.24	0.25	0.33	2.54	0.38	2.25	5.17
Rotary Cutter	7'	MFWD 130	5,280	185	10	0.168	2.56	2.59	0.72	0.65	6.53	0.55	4.29	11.38
Rotary Cutter	12'	2WD 150	12,100	185	10	0.098	1.49	1.74	0.96	0.33	4.53	0.73	2.16	7.43
Rotary Cutter-Flex	15'	MFWD 150	22,100	185	10	0.078	1.19	1.39	1.40	0.34	4.34	1.07	2.24	7.66
Rotary Cutter-Flex	20'	MFWD 150	29,900	185	10	0.058	0.89	1.04	1.42	0.25	3.62	1.09	1.68	6.41
Row Cond & Inc-Fold.	26'	MFWD 190	28,500	100	10	0.063	1.25	1.42	0.45	0.37	3.50	2.07	2.55	8.13
Row Cond & Inc-Fold.	38'	MFWD 225	38,200	100	10	0.043	0.85	1.15	0.41	0.30	2.73	1.90	2.09	6.73
Row Cond & Inc-Rigid	13'	2WD 130	16,900	100	10	0.126	2.50	1.95	0.53	0.43	5.43	2.46	2.85	10.75
Row Cond & Inc-Rigid	21'	2WD 170	20,800	100	10	0.078	1.55	1.58	0.40	0.29	3.83	1.87	1.98	7.70
Row Cond & Inc-Rigid	26'	MFWD 190	24,000	100	10	0.026	0.52	0.59	0.15	0.15	1.44	0.73	1.06	3.24
Row Cond Folding	26'	MFWD 225	21,100	100	10	0.059	0.90	1.59	0.31	0.42	3.23	1.44	2.88	7.57
Row Cond Folding	38'	MFWD 225	29,600	100	10	0.040	0.62	1.08	0.30	0.28	2.30	1.39	1.97	5.66
Row Cond Rigid	13'	2WD 130	9,540	100	10	0.119	1.81	1.83	0.28	0.41	4.35	1.31	2.68	8.34
Row Cond Rigid	21'	2WD 170	13,400	100	10	0.073	1.12	1.48	0.24	0.27	3.13	1.13	1.87	6.14
Row Cond Rigid	26'	MFWD 190	16,700	100	10	0.059	0.90	1.34	0.24	0.35	2.85	1.14	2.40	6.40
Row Cond./Roll-Fold.	26'	MFWD 190	19,800	160	10	0.072	1.09	1.62	0.35	0.42	3.50	1.02	2.89	7.42

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Row Cond./Roll-Fold.	40'	MFWD 225	26,700	160	10	0.046	0.71	1.24	0.31	0.33	2.60	0.89	2.26	5.77
Spin Spreader	5 ton	MFWD 190	12,900	100	8	0.042	1.02	0.94	0.30	0.24	2.52	0.66	1.69	4.87
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	5.14	0.40	0.08	0.49	6.12	0.11	2.10	8.34
Spray (ATV)	20'	800 CC	1,690	200	8	0.084	1.67	0.13	0.06	0.16	2.02	0.08	0.68	2.80
Spray (Band)	27' Fold	MFWD 170	7,400	200	8	0.062	1.23	1.26	0.21	0.30	3.02	0.28	2.06	5.37
Spray (Band)	40' Fold	MFWD 170	8,600	200	8	0.042	0.83	0.85	0.17	0.20	2.06	0.22	1.39	3.68
Spray (Band)	50' Fold	MFWD 170	13,700	200	8	0.033	0.66	0.68	0.21	0.16	1.73	0.28	1.11	3.13
Spray (Band)	60' Fold	MFWD 170	15,600	200	8	0.028	0.55	0.56	0.20	0.13	1.46	0.26	0.92	2.66
Spray (Bcast/HB)	13' Rigid	MFWD 150	6,900	200	8	0.130	2.57	2.31	0.42	0.56	5.87	0.55	3.72	10.14
Spray (Bcast/HB)	20' Rigid	MFWD 150	8,100	200	8	0.084	1.67	1.50	0.32	0.37	3.86	0.42	2.42	6.70
Spray (Bcast/HB)	27' Fold	MFWD 170	15,400	200	8	0.062	1.23	1.26	0.45	0.30	3.25	0.59	2.06	5.91
Spray (Bcast/HB)	27' Rigid	MFWD 170	9,800	200	8	0.062	1.23	1.26	0.28	0.30	3.09	0.37	2.06	5.53
Spray (Bcast/HB)	30' Fold	MFWD 170	18,930	200	8	0.056	1.11	1.13	0.50	0.27	3.02	0.65	1.85	5.53
Spray (Bcast/HB)	40' Fold	MFWD 170	22,000	200	8	0.042	0.83	0.85	0.43	0.20	2.32	0.57	1.39	4.29
Spray (Broadcast)	27'	MFWD 170	7,400	200	8	0.062	1.23	1.26	0.21	0.30	3.02	0.28	2.06	5.37
Spray (Broadcast)	40'	MFWD 170	8,600	200	8	0.042	0.83	0.85	0.17	0.20	2.06	0.22	1.39	3.68
Spray (Broadcast)	50'	MFWD 170	13,700	200	8	0.033	0.66	0.68	0.21	0.16	1.73	0.28	1.11	3.13
Spray (Broadcast)	60'	MFWD 170	15,600	200	8	0.028	0.55	0.56	0.20	0.13	1.46	0.26	0.92	2.66
Spray (Direct/Hood)	8R-30	MFWD 170	20,400	200	8	0.084	1.67	1.70	0.80	0.40	4.59	1.05	2.78	8.44
Spray (Direct/Hood)	8R-38	MFWD 170	21,900	200	8	0.066	1.32	1.34	0.68	0.32	3.67	0.89	2.20	6.78
Spray (Direct/Hood)	12R-30	MFWD 170	25,300	200	8	0.056	1.11	1.13	0.66	0.27	3.19	0.87	1.85	5.92
Spray (Direct/Hood)	12R-38	MFWD 170	27,100	200	8	0.044	0.87	0.89	0.56	0.21	2.55	0.73	1.46	4.76
Spray (Direct/Layby)	8R-30	MFWD 170	11,300	200	8	0.084	1.67	1.70	0.44	0.40	4.23	0.58	2.78	7.60
Spray (Direct/Layby)	8R-38	MFWD 170	11,300	200	8	0.066	1.32	1.34	0.35	0.32	3.34	0.46	2.20	6.01
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	14,900	200	8	0.044	0.87	0.89	0.31	0.21	2.30	0.40	1.46	4.17
Spray (Direct/Layby)	12R-30	MFWD 170	14,900	200	8	0.056	1.11	1.13	0.39	0.27	2.91	0.51	1.85	5.29
Spray (Direct/Layby)	12R-38	MFWD 170	14,900	200	8	0.044	0.87	0.89	0.31	0.21	2.30	0.40	1.46	4.17
Spray (Direct/Layby)	16R-20	MFWD 225	22,300	200	8	0.062	1.23	1.66	0.65	0.44	4.00	0.85	3.02	7.88
Spray (Levee Leaper)	50'	MFWD 225	13,200	200	8	0.033	0.66	0.90	0.20	0.24	2.01	0.27	1.63	3.92
Spray (Pull Type)	60'	MFWD 225	40,700	200	8	0.028	0.55	0.75	0.53	0.20	2.04	0.70	1.36	4.11
Spray (Pull Type)	80'	MFWD 225	52,500	200	8	0.021	0.41	0.56	0.52	0.15	1.65	0.68	1.02	3.35
Spray (Pull Type)	90'	2WD 50	53,200	200	8	0.018	0.37	0.11	0.46	0.01	0.96	0.61	0.08	1.66
Spray (Pull Type)	120'	MFWD 225	80,900	200	8	0.014	0.27	0.37	0.53	0.10	1.28	0.69	0.68	2.66
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.084	1.67	1.90	0.16	0.49	4.23	0.21	3.40	7.85
Spray (Spot)	27'	MFWD 170	7,400	200	8	0.062	1.23	1.26	0.21	0.30	3.02	0.28	2.06	5.37
Spray (Spot)	40'	MFWD 170	8,600	200	8	0.042	0.83	0.85	0.17	0.20	2.06	0.22	1.39	3.68
Spray (Spot)	50'	MFWD 170	13,700	200	8	0.033	0.66	0.68	0.21	0.16	1.73	0.28	1.11	3.13
Spray (Spot)	60'	MFWD 225	15,600	200	8	0.028	0.55	0.75	0.20	0.20	1.71	0.26	1.36	3.34
Stalk Shredder	14'	MFWD 150	14,500	200	10	0.117	1.79	2.09	1.49	0.51	5.89	0.98	3.37	10.25
Stalk Shredder Flex	20'	MFWD 150	30,200	200	10	0.082	1.25	1.46	2.18	0.36	5.26	1.43	2.35	9.05
Stalk Shredder-Flail	12'	MFWD 150	20,500	200	10	0.137	2.09	2.44	2.46	0.60	7.60	1.62	3.93	13.15
Stalk Shredder-Flail	15'	MFWD 150	23,800	200	10	0.110	1.67	1.95	2.29	0.48	6.39	1.50	3.14	11.05
Stalk Shredder-Flail	18'	MFWD 150	28,900	200	10	0.091	1.39	1.62	2.31	0.40	5.74	1.52	2.62	9.88
Stalk Shredder-Flail	20'	MFWD 150	30,100	200	10	0.082	1.25	1.46	2.17	0.36	5.25	1.42	2.35	9.04
Stalk Shredder-Flail	25'	MFWD 150	45,300	200	10	0.066	1.00	1.17	2.61	0.28	5.08	1.71	1.88	8.68
Subsoiler	3 shank	MFWD 190	5,920	100	15	0.204	3.10	4.59	0.40	1.20	9.31	1.11	8.21	18.64
Subsoiler	4 shank	MFWD 225	9,830	100	15	0.153	2.33	4.09	0.50	1.08	8.02	1.38	7.41	16.82
Subsoiler	5 shank	MFWD 225	13,900	100	15	0.122	1.86	3.25	0.56	0.86	6.55	1.56	5.90	14.02
Subsoiler low-till	6 shank	MFWD 225	15,300	100	15	0.102	1.55	2.72	0.52	0.72	5.52	1.43	4.93	11.89
Subsoiler low-till	8 shank	MFWD 225	22,000	100	15	0.076	1.16	2.03	0.56	0.54	4.30	1.54	3.69	9.55

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, 2020

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Artisan	oz	0.23
Agri-Dex	pt	2.43	Avaris	oz	1.65
AMS SuperMax	pt	3.81	Avicta Complete Bean	oz	3.65
Class Act NG	pt	2.44	Bravo Weather Stick	pt	6.35
Crop Oil Conc.(Pet.)	pt	3.00	Captan 50 WP	lb	4.28
Crop Oil Conc.(Veg.)	pt	3.22	Convoy	oz	0.78
Dyne-A-Pak	pt	5.45	Cotton Seed Trt.	acre	20.00
Fire-Zone	pt	3.07	CruiserMaxx	oz	4.18
Herbimax	pt	3.48	Echo	oz	0.41
Induce	pt	3.41	Elatus	oz	2.94
MSO	pt	3.55	Headline EC	oz	2.63
Penetrator Plus	pt	2.70	Miravis Top	oz	1.27
Surfactant	pt	5.31	Prior Xemium	oz	4.53
CLEANING			Propimax EC	pt	11.69
Cleaning Peanuts	ton	18.00	Prosaro	oz	2.45
CROP CONSULTANT			Provost Optimum	lb	1.64
Corn Consultant	acre	6.00	Quadris	oz	1.63
Cotton Consultant	acre	8.00	Quadris Top	oz	2.33
Peanut Consultant	acre	9.25	Quadris Top SBX	oz	2.36
Rice Consultant	acre	8.00	Quilt	pt	17.06
Sorghum Consultant	acre	6.00	Quilt XCEL	pt	23.43
Soybeans Consultant	acre	6.50	Stratego	pt	23.43
Wheat Consultant	acre	5.50	Stratego YLD	oz	3.51
CUSTOM FERTILIZE			Tebuconazole	oz	0.49
App Fert by Air	cwt	7.50	Tilt 3.6 EC	oz	0.72
App Fert by Air(Mi	appl	7.50	Tilt/ Bravo SE	oz	1.00
Custom Apply Fert	acre	7.50	Trivapro	oz	1.53
CUSTOM LIME			GINNING		
Lime (Spread)	ton	43.00	Gin & Haul	lb	0.11
CUSTOM PLANT			GROWTH REGULATORS		
Custom Plant	acre	7.50	Mepex	oz	0.07
Custom Plant Air	cwt	7.50	Mepichlor 4.2%	oz	0.08
CUSTOM SPRAY			Mepiquat Chloride	oz	0.10
App by Air (3 gal)	appl	5.50	Mepstar 6	oz	0.39
App by Air (5 gal)	appl	7.00	Palisade	oz	1.28
App by Air (10 gal)	appl	9.00	Pentia	oz	0.85
Custom Spray Ground	acre	7.00	Pix Ultra	oz	0.21
DRYING			Stance	oz	1.23
Dry Corn	bu	0.19	Veto	oz	0.06
Dry Grain Sorghum	cwt	0.25	HARVEST AIDS		
Dry Peanuts	ton	24.00	Adios	oz	0.93
Dry Rice	bu	0.40	Aim 2EC	oz	5.68
ERADICATION FEE			Boll Buster	oz	0.18
Eradication	acre	1.00	Def/Folex	pt	8.61
FERTILIZERS			Defol 5	gal	6.54
Agrotain Ultra	pt	8.36	Display	oz	10.13
Amm Sulfate (21% N)	cwt	17.46	Ethephon 6E	pt	2.90
Boron Plus	pt	4.52	Finish 6	pt	9.37
DAP	cwt	22.64	Folex 6EC	pt	8.61
Fert 10-34-0	cwt	24.78	Freefall SC	oz	1.18
Fert 10-34-0	gal	2.90	Ginstar EC	pt	21.44
Fert 11-37-0	cwt	29.40	Gramoxone SL	oz	0.17
Fert 41-0-0-4	cwt	18.60	Sharpen	oz	5.66
Lime	ton	32.97	Sodium Chlorate 5L	gal	6.54
NBPT	pt	7.97	SuperBoll	oz	0.19
Phosphorus(46% P2O5)	cwt	18.11	Thidiazuron 4lb	oz	1.18
Potash (60% K2O)	cwt	27.50	Tribufos 6lb	pt	8.61
Sulfur Plus	pt	2.62	Vacate	oz	1.60
UAN (32% N)	cwt	13.62	HAULING		
UAN (32%)	gal	1.51	Haul Corn	bu	0.23
UAN + Sulfur (28%)	cwt	12.55	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	gal	1.39	Haul Rice	bu	0.35
Urea, Solid (46% N)	cwt	20.22	Haul Sorghum	bu	0.25
Zinc Plus	pt	2.99	Haul Soybeans	bu	0.27
FUNGICIDES			Haul Wheat	bu	0.26
Abound	oz	0.98	HERBICIDES		
Alfa Guard	lb	1.82	2,4-D Ester	pt	3.28
Approach Prima	pt	31.96	2,4-D Amine 4	pt	2.73
Apron Maxx RTA	oz	1.66	AAtrex 4L	pt	2.24

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2020 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
	dollars			dollars	
Accent Q	oz	17.67	Halomax	oz	19.90
Acuron	oz	2.22	Harmony Extra SG	oz	13.81
Aim	oz	5.68	Helmet	oz	4.15
Anthem Flex	oz	2.67	Hero	pt	25.77
Anthem Maxx	oz	4.90	Huskie	oz	0.84
Armezon Pro	oz	1.16	Impact	oz	1.24
Atrazine 4L	pt	2.09	Intimidator	oz	0.59
Atrazine 90DF	lb	7.52	Leadoff	oz	5.15
Authority First	oz	4.50	League	oz	4.51
Authority Elite	pt	14.03	Lexar	pt	7.67
Authority Maxx	lb	49.72	Liberty 280	oz	0.49
Authority MTZ	lb	32.08	Loyant	oz	2.21
Avatar	pt	7.87	Makaze	oz	0.14
Avenger	pt	9.89	Metolachlor	pt	4.87
Axial XL	oz	1.21	Metribuzin 4L	pt	9.30
Axiom	oz	1.84	Metribuzin 75	lb	18.75
Banvel	pt	15.04	MSMA	pt	3.97
Barrage	pt	5.43	Newpath	oz	3.73
Basagran	pt	5.43	Oberon	oz	3.75
Boundary	pt	8.84	Obey	oz	0.91
Brake	oz	1.72	Osprey	oz	3.24
Broadaxe	pt	16.41	Outlook	pt	16.38
Broadhead	lb	58.21	Panther Pro	oz	3.35
Bucaneer Plus	pt	2.37	Parallel	pt	4.64
Buctril	pt	4.28	Paraquat	oz	0.19
Butyrac 200 (2,4-DB)	pt	3.49	Parazone 3SL	oz	0.19
Cadre	oz	3.10	Permit	oz	21.22
Canopy	oz	2.13	Permit Plus	oz	20.60
Caparol	pt	4.59	PowerFlex	oz	6.71
Capreno	oz	4.75	Prefix	pt	5.69
Cinch	pt	16.06	Provisia	oz	0.83
Cinch ATZ	pt	5.20	Prowl 3.3 EC	pt	5.30
Clarity	pt	11.60	Python WDG	oz	15.10
Classic	oz	14.02	Quelex	oz	7.00
Clearpath	lb	57.57	RealmQ	oz	4.66
Clethomine 2E	oz	0.50	RebelEx	oz	2.68
Clincher SF	oz	2.32	Reflex	pt	5.87
Cobra	oz	1.71	Regiment	oz	42.66
Command 3ME	pt	16.09	Resicore	oz	0.55
Corvus	oz	6.65	Resource	oz	1.72
Cotoran	pt	5.85	RiceBeaux	pt	5.79
Cotton Pro	pt	3.75	Riceshot	pt	3.92
Declare	oz	1.64	Ricestar HT	pt	24.04
Dicamba	pt	5.66	Ringside	pt	4.17
Direx	pt	3.01	Roundup Power Max	oz	0.20
Diuron	pt	3.53	Roundup PowerMax	pt	3.20
Dual II Magnum	pt	12.63	Roundup PowerMax ii	oz	0.20
Dual Magnum	pt	10.26	Roundup Pro	pt	0.20
Duet	pt	5.39	Scepter 70 DG	oz	4.50
Endigo	oz	1.80	Select Max	pt	10.87
Engenia	oz	0.83	Sencor/Tricor.Metrib	oz	5.45
Envive	oz	0.53	Sequence	pt	5.16
Envoke	oz	106.65	Sharpen	oz	5.66
Facet L	pt	13.61	Sinister	pt	14.61
Fierce	oz	7.44	Sonic	oz	4.63
Fierce XLT	oz	6.66	Stalwart	pt	3.95
Finesse	oz	14.38	Stam 80 EDF	lb	9.32
Firestorm	pt	5.97	Stam M4	qt	7.91
First Rate	oz	40.12	Staple LX	oz	1.95
Flexstar	pt	9.11	Storm	pt	11.58
Flexstar GT	pt	4.44	Strada	oz	6.65
Fusilade DX	oz	1.06	Strada Pro	oz	6.86
Gambit	oz	16.96	Strada XT2	pt	3.20
Glyphosate 3lbs a.e	pt	2.16	Superwham	qt	9.27
Glyphosate 3lbs a.e	oz	0.14	Suprend	lb	10.14
Goal 2XL	pt	7.77	SureStart II	oz	0.67
Gramoxone SL 2.0	oz	0.17	Surveil	oz	0.72
Grandstand R	pt	18.26	Synchrony XP	oz	11.72
Grasp	oz	12.03	Tempest	oz	1.84
Grasp Xtra	oz	1.68	Touchdown Total	qt	5.23
Halex GT	pt	6.24			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2020 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
			Lambda	oz	1.71
Treflan	pt	3.37	Lannate LV	pt	9.85
Trifluralin	pt	3.36	Macho	oz	0.53
Triflurex	pt	3.66	Malathion 5E	pt	8.16
Ultra Blazer	pt	10.69	Malathion 8E	pt	5.50
Valor EZ	oz	4.43	Mustang Max	oz	1.33
Valor SX	oz	4.28	Nuprid 4F	oz	0.89
Valor XLT	oz	4.90	Orthene 90	lb	15.98
Vamos	pt	6.49	Permethrin	oz	0.63
Verdict	oz	1.72	Portal XLO	oz	0.88
Veritas	pt	7.49	Pounce 25WP	lb	18.08
Villain	pt	5.24	Prevathon	oz	1.12
Volunteer	pt	10.63	Radiant	oz	6.28
Warrant	pt	4.02	Sevin 4F	pt	6.22
XtendiMax	oz	0.49	Sevin XLR Plus	qt	15.09
Zidua DF	oz	8.23	Sivanto Prime	oz	2.54
Zidua SC	oz	5.75	Straffer Max	oz	9.61
INOCULANT			Tempest	oz	1.82
Inoculant -Soybean	acre	1.55	Transform WG	oz	7.38
Optimize LIFT	oz	0.51	Up-Cyde	oz	0.43
INSECTICIDES			Warrior ZT	oz	2.57
Abamectin .15EC	oz	1.67	Zeal	oz	17.50
Acephate 90%	lb	7.17	IRRIGATION SUPPLIES		
Acephate 90SP	lb	7.59	Roll-Out Pipe	ft	0.24
Admire Pro	oz	1.33	SEED/PLANTS		
Agri-Mek	oz	2.96	Corn Seed BtRR	thous	3.50
Asana .66 XL	oz	0.48	Corn Seed RR2	thous	3.50
Avenger	oz	0.70	Corn Seed VT2P	thous	3.62
Baythroid XL	oz	1.06	Corn Seed Op Leptra	thous	4.39
Belt	oz	7.50	Cotton Seed B3XF	thous	2.32
Besiege	oz	1.93	Cotton Seed W3FE	thous	2.37
Bidrin 8EC	oz	1.28	Cot.Seed B3XF/W3FE	thous	2.34
Bifenthrin	oz	0.82	Peanut Seed	lb	0.84
Bifenture 2EC	oz	0.81	Rice Clearfield	lb	0.95
Brigade EC	pt	14.70	Rice Clrfld Hyb Trt	lb	6.10
Capture LFR	oz	2.36	Rice Conv Hyb Trt	lb	6.15
Centric 40WG	oz	4.89	Rice Seed CF(Levees)	lb	0.95
Cypermethrin	oz	0.55	Rice Seed CFH(Levee)	lb	2.67
Declare	oz	1.87	Rice Seed Conv.	lb	0.28
Diamond .83EC	oz	1.31	Rice Seed Cv(Levees)	lb	0.28
Dimethoate 4E	pt	5.37	Rice Seed CvH(Levee)	lb	1.93
Dimilin 2L	oz	1.91	Rice Seed Provisia	lb	1.08
Force 3G	lb	7.23	Rice Seed Trt/Insect	lbseed	0.29
Gaucho 600	oz	2.36	Sorghum Concept+ Po	lb	3.96
Imidacloprid 4F	oz	0.62	Soybean Seed LL	lb	1.27
Imidan 70 WSB	oz	0.71	Soybean Seed RR2	lb	1.39
IncidentalPestTrt $8	acre	8.00	Soybean Seed RR2X	lb	1.32
IncidentalPestTrt$15	acre	15.00	Wheat Seed Private	lb	0.24
IncidentalPestTrt$22	acre	22.00	SOIL TEST		
IncidentalPestTrt$30	acre	30.00	Soil Test	acre	10.00
Intrepid 2F	oz	2.15	SURVEY & MARK LEVEES		
Intruder 70WSP	oz	9.05	Survey & Mark Levees	acre	4.50
Karate Z	oz	2.48			

Appendix Table 5. Estimated fuel prices and interest rates, Mississippi, 2020

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	2.30
Gasoline	gal	2.20
INTEREST RATES		
Short-term	%	5.25
Intermediate-term	%	6.25

Appendix Table 6. Labor types, wage rates and unallocated labor Multipliers for crop enterprises, Mississippi, 2020

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	15.22
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, 2020

Crop	uni	Futures Contrac Month	Futures Contract Price[a]	Basis[b]	Forward Contract Price[c]	Loan Rate[d]	Budget Price[e]
Corn	bu	Dec '20	4.06	-0.20	3.86	2.35	3.86
Cotton Lint	lb	Dec '20	0.6447	-0.0158	0.6289	0.52	0.6289
Cottonseed	lb						0.10[f]
Grain Sorghum	bu				3.67	2.27	3.67
Peanuts	ton				400.00	370.00	400.00
Soybeans	bu	Nov '20	9.62	-0.02	9.60	6.41	9.60
Rice	bu	Nov '20	5.32	-0.37	4.95	3.20	4.95
Wheat	bu	Jul '20	4.39	-0.15	4.24	3.35	4.24

a Average of the daily closing futures contract prices during the first 5 trading days in October 2019 for the stated contract months.

b Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 2019 for corn, soybeans and wheat at Greenville, MS. Rice basis is a weekly average price for river point delivery. June harvest delivery for wheat. September harvest delivery for corn, rice and soybeans. October harvest delivery for cotton.

c The forward contract price for corn, cotton, rice, soybeans and wheat is the futures contract price plus the basis. The forward contract price for grain sorghum is 95% of the forward contract price for corn. The forward contract price for peanuts is an estimate from a poll of Extension Peanut Marketing Specialists.

d Average Mississippi County CCC Loan Rate for 2019 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2018 Farm-stored Loan Rate for long grain rough rice. National 2019 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.

e Price used in MSU Extension Service Planning Budgets.

f Cottonseed price is the average marketing year price over the years 2008-2018.

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., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Maintenance										
IRRIGATE LABOR	hour				1.07		0.03	1.10		1.10
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			0.29	13.77	59.97	73.74
Well & Pump, 1/4 CP	each			3.50			0.08	3.58	11.69	15.27
Engine, 1/4 CP, 65	each								11.07	11.07
June Irr. 3app@.75"	ac-in		7.73	1.40			0.20	9.33		9.33
July Irr. 4app@.75"	ac-in		10.31	1.87			0.21	12.39		12.39
Aug Irr. 3app@.75"	ac-in		7.73	1.40			0.12	9.25		9.25
TOTALS		0.00	25.77	21.65	1.84	0.00	0.94	50.20	82.73	132.93

Note: Cost of production estimates are based on 2019 input prices.

Appendix Table 9. Estimated costs for field operations, per acre
Irrigation with a 1/4-mile center pivot system
135-acre system, 7.5 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Maintenance										
IRRIGATE LABOR	hour				1.07		0.03	1.10		1.10
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			0.29	13.77	59.97	73.74
Well & Pump, 1/4 CP	each			3.50			0.08	3.58	11.69	15.27
Engine, 1/4 CP, 65	each								11.07	11.07
June Irr. 3app@.75"	ac-in		7.73	1.40			0.20	9.33		9.33
July Irr. 4app@.75"	ac-in		10.31	1.87			0.21	12.39		12.39
Aug Irr. 3app@.75"	ac-in		7.73	1.40			0.12	9.25		9.25
TOTALS		0.00	25.77	21.65	1.84	0.00	0.94	50.20	82.73	132.93

Note: Cost of production estimates are based on 2019 input prices.

Appendix Table 10. Estimated costs for field operations, per acre
Peanuts irrigatied with a roll-out **pipe**
160-acre system, 12 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Land Plane	50'x16'		0.85	0.30	0.58		0.09	1.82	1.76	3.58
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.19	0.07	0.14		0.01	0.41	0.34	0.75
Roll-Out Pipe	ft	7.92					0.17	8.09		8.09
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.10	0.42		0.02	0.79	0.88	1.67
IRRIGATE LABOR	hour				1.81		0.04	1.85		1.85
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.38	0.15	0.63		0.01	1.17	1.32	2.49
Land Forming ($450)	each								36.04	36.04
Well & Pump, Furrow	each			2.96			0.06	3.02	9.86	12.88
Main Line Pipe	each								5.45	5.45
Engine, RPF, PNUT	each								9.34	9.34
1st July Irrigation	ac-in		5.62	0.98			0.12	6.72		6.72
2nd Aug Irrigation	ac-in		5.62	0.98			0.09	6.69		6.69
2nd Aug Irrigation	ac-in		5.62	0.98			0.09	6.69		6.69
1st Sep Irrigation	ac-in		5.62	0.98			0.06	6.66		6.66
TOTALS		7.92	24.15	7.50	4.73	0.00	0.77	45.07	64.99	110.06

Note: Cost of production estimates are based on 2019 input prices.

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