

NON-DELTA 2018 PLANNING BUDGETS

**Mississippi State University
Department of Agricultural Economics
Budget Report 2017-06**

October 2017

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 2018 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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2018 Planning Budgets

Budgets for Agricultural Enterprises

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

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

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

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

Methods and Procedures

Production Practices

The production practices listed in each budget are the result of a combined effort by researchers and extension personnel to represent those practices that producers could use in a specific production system. Producers might use different practices in their own operations. If different types and quantities of operating inputs are to be used, then the budgeted expenses should be changed to more accurately reflect actual input usage. The Mississippi Agricultural Statistics Service conducts a survey of producers of major field crops in Mississippi. Data collected from producers are a part of the information used in selecting the practices included in each budget.

Committees made up of appropriate disciplines from the Mississippi Agricultural and Forestry Experiment Station, the Mississippi State University Extension Service, and the U.S. Department of Agriculture review and update the practices in the budgets every year. The updates are based on the collective judgment of the committee members. Quantities of materials and individual production practices budgeted are based on survey data from producers and/or generally accepted recommendations by committee members.

Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2017. (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.

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

where:

CRF = Capital recovery factor

IIR = Intermediate-term interest rate

TYL = Total years of life

$$\begin{aligned} CRCPY &= [(RLC - SV) \times CRF] \\ &\quad + (SV \times IIR) \end{aligned}$$

where:

CRCPY = Capital recovery charge per year

RLC = Replacement cost

SV = Salvage value (at end of useful life)

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.50	2.3000	3.45	_____
Ethephon 6E	pt	2.88	2.3125	6.66	_____
Tribufos 6lb	pt	10.54	0.5000	5.27	_____
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	18.98	1.4000	26.57	_____
UAN (32%)	gal	1.17	28.9332	33.85	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.55	0.5000	5.78	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.80	2.0000	27.60	_____
Diuron	pt	3.90	1.6000	6.24	_____
INSECTICIDES					
Acephate 90%	lb	7.43	1.7500	13.00	_____
Bidrin 8EC	oz	1.17	0.2000	0.23	_____
Centric 40WG	oz	5.38	2.0000	10.76	_____
Incidental Pest Trt	acre	\$22.00	1.0000	22.00	_____
SEED/PLANTS					
Cotton Seed B2XF	thous	3.00	45.0000	135.00	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.07	32.0000	2.24	_____
ADJUVANTS					
Surfactant	pt	3.28	0.4000	1.31	_____
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	46.00	0.6660	30.64	_____
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	13.51	0.9288	12.56	_____
Self-Propelled	hour	13.51	0.3397	4.61	_____
HAND LABOR					
Implements	hour	9.06	0.3579	3.24	_____
Self-Propelled	hour	9.06	0.2560	2.32	_____
UNALLOCATED LABOR					
hour	13.50	1.0149	13.71	_____	
DIESEL FUEL					
Tractors	gal	1.80	9.0841	16.35	_____
Self-Propelled	gal	1.80	4.6559	8.42	_____
REPAIR & MAINTENANCE					
Implements	acre	10.43	1.0000	10.43	_____
Tractors	acre	5.01	1.0000	5.01	_____
Self-Propelled	acre	14.23	1.0000	14.23	_____
INTEREST ON OP. CAP.	acre	12.43	1.0000	12.43	-----
TOTAL DIRECT EXPENSES				621.72	_____
FIXED EXPENSES					
Implements	acre	16.13	1.0000	16.13	_____
Tractors	acre	31.62	1.0000	31.62	_____
Self-Propelled	acre	60.80	1.0000	60.80	_____
TOTAL FIXED EXPENSES				108.55	-----
TOTAL SPECIFIED EXPENSES				730.27	_____

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Cotton Lint	lb	0.66	1000.0000	660.00	_____
Cotton Seed	lb	0.10	1350.0000	135.00	_____

TOTAL INCOME				795.00	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	15.38	1.0000	15.38	_____
GINNING	acre	110.00	1.0000	110.00	_____
FERTILIZERS	acre	60.43	1.0000	60.43	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	77.58	1.0000	77.58	_____
INSECTICIDES	acre	45.99	1.0000	45.99	_____
SEED/PLANTS	acre	135.00	1.0000	135.00	_____
GROWTH REGULATORS	acre	2.24	1.0000	2.24	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.64	1.0000	30.64	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.6139	5.56	_____
OPERATOR LABOR	hour	13.51	1.2686	17.17	_____
UNALLOCATED LABOR	hour	13.50	1.0149	13.71	_____
DIESEL FUEL	gal	1.80	13.7400	24.77	_____
REPAIR & MAINTENANCE	acre	29.67	1.0000	29.67	_____
INTEREST ON OP. CAP.	acre	12.43	1.0000	12.43	_____

TOTAL DIRECT EXPENSES				621.72	_____
RETURNS ABOVE DIRECT EXPENSES				173.28	_____
TOTAL FIXED EXPENSES				108.55	_____

TOTAL SPECIFIED EXPENSES				730.27	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				64.73	_____

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALLOC 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					1.4000				
Bed-Paratill 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	14.4666	0.07	0.07	0.11	0.06
UAN (32%)	gal									
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
Cotton Seed B2XF	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				
Glyphosate 3lbs a.e.	oz					32.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e.	oz					32.0000				
Bidrin 8EC	oz					0.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Jun	14.4666	0.07	0.07	0.11	0.06
UAN (32%)	gal									
Spray (Direct/Layby)	8R-38	MFWD 190	0.066	1.00	Jul		0.06	0.06	0.10	0.05
Diuron	pt					1.6000				
Glyphosate 3lbs a.e.	oz					32.0000				
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
Incidental Pest Trt \$22	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							1.26	0.92	1.88	1.01

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33				0.16	3.49	3.49
Lime (Spread)	ton	30.64				1.46	32.10	32.10
Custom Apply Fert	acre	7.50				0.36	7.86	7.86
Potash (60% K2O)	cwt	26.57				1.26	27.83	27.83
Bed-Paratill Fold	8R-38		1.42	2.03	1.96	0.26	5.67	5.50
Bed/Disk (Hipper) Rd	8R-38		0.65	0.34	0.90	0.09	1.98	1.64
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.03	1.01	1.20
Clarity	pt	5.78				0.18	5.96	5.96
Glyphosate 3lbs a.e	oz	4.48				0.14	4.62	4.62
Surfactant	pt	0.66				0.02	0.68	0.68
Fert Appl (Liquid)	8R-38		1.37	1.37	2.24	0.14	5.12	3.71
UAN (32%)	gal	16.93				0.47	17.40	17.40
Row Cond Rigid	26'		1.05	0.55	1.46	0.07	3.13	3.00
Plant - Folding	8R-38		1.31	1.70	2.50	0.13	5.64	5.03
Cotton Seed B2XF	thous	135.00				3.21	138.21	138.21
Cotton Seed Trt.	acre	20.00				0.48	20.48	20.48
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.02	1.00	1.20
Gramoxone SL 2.0	oz	7.20				0.17	7.37	7.37
Cotoran	pt	12.84				0.30	13.14	13.14
Surfactant	pt	0.66				0.02	0.68	0.68
Cotton Consultant	acre	8.00				0.19	8.19	8.19
Eradication	acre	1.00				0.02	1.02	1.02
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.02	1.00	1.20
Dual Magnum	pt	13.80				0.33	14.13	14.13
Glyphosate 3lbs a.e	oz	4.48				0.11	4.59	4.59
Acephate 90%	lb	1.86				0.04	1.90	1.90
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.02	1.00	1.20
Dual Magnum	pt	13.80				0.33	14.13	14.13
Glyphosate 3lbs a.e	oz	4.48				0.11	4.59	4.59
Bidrin 8EC	oz	0.23				0.01	0.24	0.24
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.02	1.00	1.20
Centric 40WG	oz	10.76				0.21	10.97	10.97
Mepiquat Chloride	oz	1.12				0.02	1.14	1.14
Fert Appl (Liquid)	8R-38		1.37	1.37	2.24	0.10	5.08	3.71
UAN (32%)	gal	16.93				0.34	17.27	17.27
Spray (Direct/Layby)	8R-38		1.18	0.70	1.92	0.06	3.86	2.69
Diuron	pt	6.24				0.10	6.34	6.34
Glyphosate 3lbs a.e	oz	4.48				0.07	4.55	4.55
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.02	1.00	1.20
Mepiquat Chloride	oz	1.12				0.02	1.14	1.14
Acephate 90%	lb	5.57				0.09	5.66	5.66
Incidental Pest								
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.02	1.00	1.20
Incidental Pest Trt \$22	acre	22.00				0.35	22.35	22.35
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.01	0.99	1.20
Acephate 90%	lb	5.57				0.07	5.64	5.64
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.01	0.99	1.20
Thidiazuron 4lb	oz	3.45				0.03	3.48	3.48
Ethepron 6E	pt	5.76				0.05	5.81	5.81
Sprayer 600-750gal	60' 175hp		0.14	0.09	0.26		0.49	0.60
Tribufos 6lb	pt	5.27				0.04	5.31	5.31
Ethepron 6E	pt	0.90				0.01	0.91	0.91
Cotton Picker	6R-38(355)		5.67	12.52	5.75	0.09	24.03	49.40
Boll Buggy	6R-38(355)		3.03	2.24	4.19	0.04	9.50	8.54
Module Builder	6R-38(355)		3.03	2.42	5.75	0.04	11.24	8.91
Gin & Haul	lb	110.00				0.44	110.44	110.44
Stalk Shredder-Flail	15'		1.94	2.72	2.68	0.03	7.37	5.02
TOTALS		518.41	24.77	29.67	36.44	0.00	12.43	621.72
								108.55
								730.27

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

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	795.00
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.38	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	26.57	0.00	0.00	0.00	0.00	16.93	0.00	16.93	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	10.26	0.00	56.60	0.00	10.72	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.09	10.76	27.57	5.57	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	135.00	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	1.12	1.12	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.64	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	2.86	0.00	0.00	0.00	0.51	2.24	5.49	2.75	2.94	0.51	0.77	18.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.07	0.00	0.00	0.00	0.29	1.37	3.23	1.66	1.76	0.29	0.43	13.67
REPAIR & MAINTENANCE	2.37	0.00	0.00	0.00	0.18	1.37	2.79	1.55	1.06	0.18	0.27	19.90
INTEREST ON OP. CAP.	3.59	0.00	0.00	0.00	0.37	0.61	5.58	0.69	0.73	0.08	0.14	0.64
TOTAL DIRECT EXPENSES	78.93	0.00	0.00	0.00	12.27	22.52	240.44	35.46	45.90	6.63	16.99	162.58
NET INCOME	-78.93	0.00	0.00	0.00	-12.27	-22.52	-240.44	-35.46	-45.90	-6.63	-16.99	632.42
NET INCOME TO DATE	-78.93	-78.93	-78.93	-78.93	-91.20	-113.72	-354.16	-389.62	-435.52	-442.15	-459.14	173.28

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.49	0.52	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.79	0.82
PERCENT	YIELD	UNIT	dollars										
50	500.00	lb	-184 -292	-167 -276	-151 -259	-134 -243	-118 -226	-101 -210	-85 -193	-68 -177	-52 -160	-35 -144	-19 -127
60	600.00	lb	-145 -254	-125 -234	-105 -214	-86 -194	-66 -174	-46 -155	-26 -135	-6 -115	12 -95	32 -75	52 -56
70	700.00	lb	-107 -215	-83 -192	-60 -169	-37 -146	-14 -123	8 -100	31 -77	54 -53	77 -30	100 -7	123 15
80	800.00	lb	-68 -177	-42 -150	-15 -124	10 -97	36 -71	63 -45	89 -18	116 7	142 34	168 60	195 86
90	900.00	lb	-30 -138	-0 -109	29 -79	58 -49	88 -19	118 9	148 39	177 69	207 98	237 128	266 158
100	1000.00	lb	8 -100	41 -67	74 -34	107 -1	140 31	173 64	206 97	239 130	272 163	305 196	338 229
110	1100.00	lb	46 -61	83 -25	119 10	155 47	191 83	228 119	264 155	300 192	337 228	373 264	409 301
120	1200.00	lb	85 -23	124 16	164 55	203 95	243 135	283 174	322 214	362 253	401 293	441 333	481 372
130	1300.00	lb	123 15	166 57	209 100	252 143	295 186	338 229	381 272	423 315	466 358	509 401	552 444
140	1400.00	lb	162 53	208 99	254 145	300 192	346 238	393 284	439 330	485 376	531 423	577 469	624 515
150	1500.00	lb	200 92	250 141	299 191	349 240	398 290	448 339	497 389	547 438	596 488	646 537	695 587

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 2017 input prices.

Table 2.A Estimated costs per acre
 Cotton, 8R-38" solid, no-till
 B2XF variety, Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
HARVEST AIDS							
Thidiazuron 4lb	oz	1.50	2.3000	3.45	_____		
Ethephon 6E	pt	2.88	2.3125	6.66	_____		
Tribufos 6lb	pt	10.54	0.5000	5.27	_____		
GINNING							
Gin & Haul	lb	0.11	900.0000	99.00	_____		
FERTILIZERS							
Potash (60% K2O)	cwt	18.98	1.4000	26.57	_____		
UAN (32%)	gal	1.17	18.4000	21.53	_____		
FUNGICIDES							
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____		
HERBICIDES							
Clarity	pt	11.55	0.5000	5.78	_____		
Glyphosate 3lbs a.e.	oz	0.14	128.0000	17.92	_____		
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____		
Cotoran	pt	6.42	2.0000	12.84	_____		
Dual Magnum	pt	13.80	2.0000	27.60	_____		
Diuron	pt	3.90	1.6000	6.24	_____		
INSECTICIDES							
Acephate 90%	lb	7.43	1.7500	13.00	_____		
Bidrin 8EC	oz	1.17	0.2000	0.23	_____		
Centric 40WG	oz	5.38	2.0000	10.76	_____		
Incidental Pest Trt \$22	acre	22.00	1.0000	22.00	_____		
SEED/PLANTS							
Cotton Seed B2XF	thous	3.00	45.0000	135.00	_____		
GROWTH REGULATORS							
Mepiquat Chloride	oz	0.07	32.0000	2.24	_____		
ADJUVANTS							
Surfactant	pt	3.28	0.4000	1.31	_____		
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	46.00	0.6660	30.64	_____		
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	13.51	0.7365	9.96	_____		
Self-Propelled	hour	13.51	0.3397	4.61	_____		
HAND LABOR							
Implements	hour	9.06	0.3222	2.91	_____		
Self-Propelled	hour	9.06	0.2560	2.32	_____		
UNALLOCATED LABOR							
	hour	13.50	0.8610	11.63	_____		
DIESEL FUEL							
Tractors	gal	1.80	7.2030	12.97	_____		
Self-Propelled	gal	1.80	4.6559	8.42	_____		
REPAIR & MAINTENANCE							
Implements	acre	7.94	1.0000	7.94	_____		
Tractors	acre	3.97	1.0000	3.97	_____		
Self-Propelled	acre	14.23	1.0000	14.23	_____		
INTEREST ON OP. CAP.	acre	11.58	1.0000	11.58	_____		
<hr/>							
TOTAL DIRECT EXPENSES				585.62	_____		
FIXED EXPENSES							
Implements	acre	12.30	1.0000	12.30	_____		
Tractors	acre	25.07	1.0000	25.07	_____		
Self-Propelled	acre	60.80	1.0000	60.80	_____		
<hr/>							
TOTAL FIXED EXPENSES				98.17	_____		
<hr/>							
TOTAL SPECIFIED EXPENSES				683.79	_____		

Note: Cost of production estimates are based on 2017 input prices.

Table 2.B Summary of estimated costs and returns per acre
 Cotton, 8R-38" solid, no-till
 B2XF variety, Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Cotton Lint	lb	0.66	900.0000	594.00	_____
Cotton Seed	lb	0.10	1215.0000	121.50	_____

TOTAL INCOME				715.50	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	15.38	1.0000	15.38	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	48.10	1.0000	48.10	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	77.58	1.0000	77.58	_____
INSECTICIDES	acre	45.99	1.0000	45.99	_____
SEED/PLANTS	acre	135.00	1.0000	135.00	_____
GROWTH REGULATORS	acre	2.24	1.0000	2.24	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.64	1.0000	30.64	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5782	5.23	_____
OPERATOR LABOR	hour	13.51	1.0763	14.57	_____
UNALLOCATED LABOR	hour	13.50	0.8610	11.63	_____
DIESEL FUEL	gal	1.80	11.8590	21.39	_____
REPAIR & MAINTENANCE	acre	26.14	1.0000	26.14	_____
INTEREST ON OP. CAP.	acre	11.58	1.0000	11.58	_____

TOTAL DIRECT EXPENSES				585.62	_____
RETURNS ABOVE DIRECT EXPENSES				129.88	_____
TOTAL FIXED EXPENSES				98.17	_____

TOTAL SPECIFIED EXPENSES				683.79	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				31.71	_____

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	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					1.4000				
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
NT Plant-Folding	8R-38	MFWD 190	0.077	1.00	May			0.07	0.07	0.15
Cotton Seed B2XF	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
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Jun			0.07	0.07	0.11
UAN (32%)	gal					18.4000				
Spray (Direct/Layby)	8R-38	MFWD 190	0.066	1.00	Jun			0.06	0.06	0.10
Diuron	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
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\$22	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				
Ethepron 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				
Ethepron 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	0.13
Module Builder	6R-38 (355)	MFWD 190	0.172	1.00	Oct			0.17	0.17	0.34
Gin & Haul	lb					900.0000				
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct			0.11	0.11	0.11
TOTALS								1.07	0.73	1.65
										0.86

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.16	3.49
Lime (Spread)	ton	30.64					1.46	32.10
Custom Apply Fert	acre	7.50					0.36	7.86
Potash (60% K2O)	cwt	26.57					1.26	27.83
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.03	1.01
Clarity	pt	5.78					0.18	5.96
Glyphosate 3lbs a.e	oz	4.48					0.14	4.62
Surfactant	pt	0.66					0.02	0.68
Row Cond Rigid	26'		1.05	0.55	1.46		0.07	3.13
NT Plant-Folding	8R-38		1.37	1.91	2.59		0.14	6.01
Cotton Seed B2XF	thous	135.00					3.21	138.21
Cotton Seed Trt.	acre	20.00					0.48	20.48
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Gramoxone SL 2.0	oz	7.20					0.17	7.37
Cotoran	pt	12.84					0.30	13.14
Surfactant	pt	0.66					0.02	0.68
Cotton Consultant	acre	8.00					0.19	8.19
Eradication	acre	1.00					0.02	1.02
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Glyphosate 3lbs a.e	oz	4.48					0.11	4.59
Dual Magnum	pt	13.80					0.33	14.13
Acephate 90%	lb	1.86					0.04	1.90
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Dual Magnum	pt	13.80					0.33	14.13
Glyphosate 3lbs a.e	oz	4.48					0.11	4.59
Bidrin 8EC	oz	0.23					0.01	0.24
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Centric 40WG	oz	10.76					0.21	10.97
Mepiquat Chloride	oz	1.12					0.02	1.14
Fert Appl (Liquid)	8R-38		1.37	1.37	2.24		0.10	5.08
UAN (32%)	gal	21.53					0.43	21.96
Spray (Direct/Layby)	8R-38		1.18	0.70	1.92		0.08	3.88
Diuron	pt	6.24					0.12	6.36
Glyphosate 3lbs a.e	oz	4.48					0.09	4.57
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Mepiquat Chloride	oz	1.12					0.02	1.14
Acephate 90%	lb	5.57					0.09	5.66
Incidental Pest								
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Incidental Pest Trt \$22	acre	22.00					0.35	22.35
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99
Acephate 90%	lb	5.57					0.07	5.64
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99
Thidiazuron 4lb	oz	3.45					0.03	3.48
Ethepron 6E	pt	5.76					0.05	5.81
Sprayer 600-750gal	60' 175hp		0.14	0.09	0.26			0.49
Tribufos 6lb	pt	5.27					0.04	5.31
Ethepron 6E	pt	0.90					0.01	0.91
Cotton Picker	6R-38(355)		5.67	12.52	5.75		0.09	24.03
Boll Buggy	6R-38(355)		3.03	2.24	4.19		0.04	9.50
Module Builder	6R-38(355)		3.03	2.42	5.75		0.04	11.24
Gin & Haul	lb	99.00					0.39	99.39
Stalk Shredder-Flail	15'		1.94	2.72	2.68		0.03	7.37
TOTALS		495.08	21.39	26.14	31.43	0.00	11.58	585.62
								98.17
								683.79

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

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	715.50
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.38	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	26.57	0.00	0.00	0.00	0.00	0.00	0.00	21.53	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	10.26	0.00	56.60	10.72	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.09	10.76	27.57	5.57	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	135.00	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	1.12	1.12	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.64	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	0.51	0.00	5.58	4.67	1.02	0.51	0.77	18.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.29	0.00	3.29	2.84	0.58	0.29	0.43	13.67
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.18	0.00	3.00	2.25	0.36	0.18	0.27	19.90
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.37	0.00	5.59	1.07	0.50	0.08	0.14	0.59
TOTAL DIRECT EXPENSES	71.28	0.00	0.00	0.00	12.27	0.00	240.81	54.96	31.15	6.63	16.99	151.53
NET INCOME	-71.28	0.00	0.00	0.00	-12.27	0.00	-240.81	-54.96	-31.15	-6.63	-16.99	563.97
NET INCOME TO DATE	-71.28	-71.28	-71.28	-71.28	-83.55	-83.55	-324.36	-379.32	-410.47	-417.10	-434.09	129.88

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.49	0.52	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.79	0.82
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-191 -289	-176 -274	-161 -260	-147 -245	-132 -230	-117 -215	-102 -200	-87 -185	-72 -171	-58 -156	-43 -141
60	540.00	lb	-157 -255	-139 -237	-121 -219	-103 -201	-85 -183	-67 -166	-50 -148	-32 -130	-14 -112	3 -94	21 -77
70	630.00	lb	-122 -220	-101 -199	-80 -179	-60 -158	-39 -137	-18 -116	2 -95	23 -75	43 -54	64 -33	85 -12
80	720.00	lb	-87 -186	-64 -162	-40 -138	-16 -114	7 -90	30 -67	54 -43	78 -19	102 4	125 27	149 51
90	810.00	lb	-53 -151	-26 -124	0 -97	26 -71	53 -44	80 -17	107 8	133 35	160 62	187 89	214 115
100	900.00	lb	-18 -116	11 -87	40 -57	70 -27	100 2	129 31	159 61	189 91	218 120	248 150	278 180
110	990.00	lb	15 -82	48 -49	81 -16	114 15	146 48	179 81	212 113	244 146	277 179	310 211	342 244
120	1080.00	lb	50 -47	86 -11	121 23	157 59	193 94	228 130	264 166	300 201	335 237	371 273	407 308
130	1170.00	lb	85 -12	123 25	162 64	201 102	239 141	278 180	316 218	355 257	394 295	432 334	471 373
140	1260.00	lb	119 21	161 63	202 104	244 146	286 187	327 229	369 271	410 312	452 354	494 395	535 437
150	1350.00	lb	154 56	198 100	243 145	288 189	332 234	377 279	421 323	466 368	510 412	555 457	599 501

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 2017 input prices.

Table 3.A Estimated costs per acre
 Cotton, 12R-38" solid, conservation tillage
 B2XF variety, Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.50	2.3000	3.45	_____
Ethephon 6E	pt	2.88	2.3125	6.66	_____
Tribufos 6lb	pt	10.54	0.5000	5.27	_____
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	18.98	1.4000	26.57	_____
UAN (32%)	gal	1.17	28.9332	33.85	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.55	0.5000	5.78	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.80	2.0000	27.60	_____
Diuron	pt	3.90	1.6000	6.24	_____
INSECTICIDES					
Acephate 90%	lb	7.43	1.7500	13.00	_____
Bidrin 8EC	oz	1.17	0.2000	0.23	_____
Centric 40WG	oz	5.38	2.0000	10.76	_____
Incidental Pest Trt	acre	\$22	22.00	22.00	_____
SEED/PLANTS					
Cotton Seed B2XF	thous	3.00	45.0000	135.00	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.07	32.0000	2.24	_____
ADJUVANTS					
Surfactant	pt	3.28	0.4000	1.31	_____
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	46.00	0.6660	30.64	_____
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	13.51	0.4268	5.77	_____
Self-Propelled	hour	13.51	0.3397	4.61	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2560	2.32	_____
UNALLOCATED LABOR					
	hour	13.51	0.6133	8.29	_____
DIESEL FUEL					
Tractors	gal	1.80	4.7451	8.54	_____
Self-Propelled	gal	1.80	5.9419	10.73	_____
REPAIR & MAINTENANCE					
Implements	acre	6.90	1.0000	6.90	_____
Tractors	acre	2.67	1.0000	2.67	_____
Self-Propelled	acre	22.31	1.0000	22.31	_____
INTEREST ON OP. CAP.	acre	12.19	1.0000	12.19	_____
TOTAL DIRECT EXPENSES					
				603.85	_____
FIXED EXPENSES					
Implements	acre	9.70	1.0000	9.70	_____
Tractors	acre	16.84	1.0000	16.84	_____
Self-Propelled	acre	92.67	1.0000	92.67	_____
TOTAL FIXED EXPENSES					
				119.21	_____
TOTAL SPECIFIED EXPENSES					
				723.06	_____

Note: Cost of production estimates are based on 2017 input prices.

Table 3.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, conservation tillage
 B2XF variety, Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Cotton Lint	lb	0.66	1000.0000	660.00	_____
Cotton Seed	lb	0.10	1350.0000	135.00	_____

TOTAL INCOME				795.00	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	15.38	1.0000	15.38	_____
GINNING	acre	110.00	1.0000	110.00	_____
FERTILIZERS	acre	60.43	1.0000	60.43	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	77.58	1.0000	77.58	_____
INSECTICIDES	acre	45.99	1.0000	45.99	_____
SEED/PLANTS	acre	135.00	1.0000	135.00	_____
GROWTH REGULATORS	acre	2.24	1.0000	2.24	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.64	1.0000	30.64	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3796	3.43	_____
OPERATOR LABOR	hour	13.51	0.7666	10.38	_____
UNALLOCATED LABOR	hour	13.51	0.6133	8.29	_____
DIESEL FUEL	gal	1.80	10.6871	19.27	_____
REPAIR & MAINTENANCE	acre	31.88	1.0000	31.88	_____
INTEREST ON OP. CAP.	acre	12.19	1.0000	12.19	_____

TOTAL DIRECT EXPENSES				603.85	_____
RETURNS ABOVE DIRECT EXPENSES				191.15	_____
TOTAL FIXED EXPENSES				119.21	_____

TOTAL SPECIFIED EXPENSES				723.06	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				71.94	_____

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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						1.4000				
Bed-Paratill 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
Cotton Seed B2XF	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						1.0000				
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				
Glyphosate 3lbs a.e.	oz						32.0000				
Acephate 90%	lb						0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May				0.01	0.02	0.01
Dual Magnum	pt						1.0000				
Glyphosate 3lbs a.e.	oz						32.0000				
Bidrin 8EC	oz						0.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun				0.01	0.02	0.01
Centric 40WG	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
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	Jul			0.04	0.04	0.06	0.03
Diuron	pt						1.6000				
Glyphosate 3lbs a.e.	oz						32.0000				
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\$22	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			
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		1000.0000		0.11	0.11	0.11
TOTALS									0.76	0.42	1.14
											0.61

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.16	3.49	3.49
Lime (Spread)	ton	30.64					1.46	32.10	32.10
Custom Apply Fert	acre	7.50					0.36	7.86	7.86
Potash (60% K2O)	cwt	26.57					1.26	27.83	27.83
Bed-Paratill Fold	12R-38		1.12	1.69	1.31		0.20	4.32	4.55
Bed/Disk (Hipper)	12R-38		0.51	0.34	0.60		0.07	1.52	1.50
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.03	1.01	1.20
Clarity	pt	5.78					0.18	5.96	5.96
Glyphosate 3lbs a.e	oz	4.48					0.14	4.62	4.62
Surfactant	pt	0.66					0.02	0.68	0.68
Fert Appl (Liquid)	12R-38		1.08	0.99	1.49		0.10	3.66	2.88
UAN (32%)	gal	16.93					0.47	17.40	17.40
Row Cond Folding	38'		0.85	0.54	0.99		0.06	2.44	2.82
Plant - Folding	12R-38		1.03	1.71	1.66		0.10	4.50	4.69
Cotton Seed B2XF	thous	135.00					3.21	138.21	138.21
Cotton Seed Trt.	acre	20.00					0.48	20.48	20.48
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Gramoxone SL 2.0	oz	7.20					0.17	7.37	7.37
Cotoran	pt	12.84					0.30	13.14	13.14
Surfactant	pt	0.66					0.02	0.68	0.68
Cotton Consultant	acre	8.00					0.19	8.19	8.19
Eradication	acre	1.00					0.02	1.02	1.02
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Dual Magnum	pt	13.80					0.33	14.13	14.13
Glyphosate 3lbs a.e	oz	4.48					0.11	4.59	4.59
Acephate 90%	lb	1.86					0.04	1.90	1.90
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Dual Magnum	pt	13.80					0.33	14.13	14.13
Glyphosate 3lbs a.e	oz	4.48					0.11	4.59	4.59
Bidrin 8EC	oz	0.23					0.01	0.24	0.24
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Centric 40WG	oz	10.76					0.21	10.97	10.97
Mepiquat Chloride	oz	1.12					0.02	1.14	1.14
Fert Appl (Liquid)	12R-38		1.08	0.99	1.49		0.07	3.63	2.88
UAN (32%)	gal	16.93					0.34	17.27	17.27
Spray (Direct/Layby)	12R-38		0.93	0.59	1.28		0.04	2.84	2.20
Diuron	pt	6.24					0.10	6.34	6.34
Glyphosate 3lbs a.e	oz	4.48					0.07	4.55	4.55
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Mepiquat Chloride	oz	1.12					0.02	1.14	1.14
Acephate 90%	lb	5.57					0.09	5.66	5.66
Incidental Pest									
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Incidental Pest Trt \$22	acre	22.00					0.35	22.35	22.35
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Acephate 90%	lb	5.57					0.07	5.64	5.64
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Thidiazuron 4lb	oz	3.45					0.03	3.48	3.48
Ethepron 6E	pt	5.76					0.05	5.81	5.81
Sprayer 600-750gal	60' 175hp		0.14	0.09	0.26			0.49	0.60
Tribufos 6lb	pt	5.27					0.04	5.31	5.31
Ethepron 6E	pt	0.90					0.01	0.91	0.91
Cotton Picker/Module	6R-38(500)		7.98	20.60	5.75		0.14	34.47	81.27
Gin & Haul	lb	110.00					0.44	110.44	110.44
Stalk Shredder-Flail	15'		1.94	2.72	2.68		0.03	7.37	5.02
TOTALS		518.41	19.27	31.88	22.10	0.00	12.19	603.85	119.21
									723.06

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

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	795.00
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.38	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	26.57	0.00	0.00	0.00	0.00	16.93	0.00	16.93	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	10.26	0.00	56.60	0.00	10.72	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.09	10.76	27.57	5.57	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	135.00	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	1.12	1.12	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.64	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	1.91	0.00	0.00	0.00	0.51	1.49	4.18	2.00	2.30	0.51	0.77	8.43
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.63	0.00	0.00	0.00	0.29	1.08	2.75	1.37	1.51	0.29	0.43	9.92
REPAIR & MAINTENANCE	2.03	0.00	0.00	0.00	0.18	0.99	2.79	1.17	0.95	0.18	0.27	23.32
INTEREST ON OP. CAP.	3.51	0.00	0.00	0.00	0.37	0.57	5.54	0.66	0.71	0.08	0.14	0.61
TOTAL DIRECT EXPENSES	77.12	0.00	0.00	0.00	12.27	21.06	238.61	34.01	44.88	6.63	16.99	152.28
NET INCOME	-77.12	0.00	0.00	0.00	-12.27	-21.06	-238.61	-34.01	-44.88	-6.63	-16.99	642.72
NET INCOME TO DATE	-77.12	-77.12	-77.12	-77.12	-89.39	-110.45	-349.06	-383.07	-427.95	-434.58	-451.57	191.15

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.49	0.52	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.79	0.82
PERCENT	YIELD	UNIT	dollars										
50	500.00	lb	-166 -285	-149 -268	-133 -252	-116 -235	-100 -219	-83 -202	-67 -186	-50 -169	-34 -153	-17 -136	-1 -120
60	600.00	lb	-127 -246	-107 -227	-88 -207	-68 -187	-48 -167	-28 -147	-8 -128	10 -108	30 -88	50 -68	70 -48
70	700.00	lb	-89 -208	-66 -185	-43 -162	-19 -139	3 -116	26 -92	49 -69	72 -46	95 -23	118 -0	141 22
80	800.00	lb	-50 -169	-24 -143	2 -117	28 -90	54 -64	81 -37	107 -11	134 14	160 41	186 67	213 94
90	900.00	lb	-12 -131	17 -101	47 -72	76 -42	106 -12	136 16	165 46	195 76	225 106	254 135	284 165
100	1000.00	lb	26 -93	59 -60	92 -27	125 5	158 38	191 71	224 104	257 137	290 170	323 203	356 236
110	1100.00	lb	64 -54	100 -18	137 17	173 54	209 90	246 126	282 163	318 199	355 235	391 272	427 308
120	1200.00	lb	103 -16	142 23	182 63	221 102	261 142	301 181	340 221	380 261	419 300	459 340	499 379
130	1300.00	lb	141 22	184 65	227 108	270 151	313 193	356 236	398 279	441 322	484 365	527 408	570 451
140	1400.00	lb	179 60	226 106	272 153	318 199	364 245	410 291	457 337	503 384	549 430	595 476	641 522
150	1500.00	lb	218 99	267 148	317 198	366 247	416 297	465 346	515 396	564 445	614 495	663 544	713 594

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 2017 input prices.

Table 4.A Estimated costs per acre
 Cotton, 12R-38" solid, no-till
 B2XF variety, Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb					
Ethephon 6E	oz	1.50	2.3000	3.45	_____
Tribufos 6lb	pt	2.88	2.3125	6.66	_____
	pt	10.54	0.5000	5.27	_____
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	18.98	1.4000	26.57	_____
UAN (32%)	gal	1.17	18.4000	21.53	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.55	0.5000	5.78	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.80	2.0000	27.60	_____
Diuron	pt	3.90	1.6000	6.24	_____
INSECTICIDES					
Acephate 90%	lb	7.43	1.7500	13.00	_____
Bidrin 8EC	oz	1.17	0.2000	0.23	_____
Centric 40WG	oz	5.38	2.0000	10.76	_____
Incidental Pest Trt	acre	\$22	22.00	22.00	_____
SEED/PLANTS					
Cotton Seed B2XF	thous	3.00	45.0000	135.00	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.07	32.0000	2.24	_____
ADJUVANTS					
Surfactant	pt	3.28	0.4000	1.31	_____
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	46.00	0.6660	30.64	_____
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	13.51	0.2987	4.04	_____
Self-Propelled	hour	13.51	0.3397	4.61	_____
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.2560	2.32	_____
UNALLOCATED LABOR					
	hour	13.50	0.5108	6.90	_____
DIESEL FUEL					
Tractors	gal	1.80	3.2620	5.88	_____
Self-Propelled	gal	1.80	5.9419	10.73	_____
REPAIR & MAINTENANCE					
Implements	acre	4.92	1.0000	4.92	_____
Tractors	acre	1.83	1.0000	1.83	_____
Self-Propelled	acre	22.31	1.0000	22.31	_____
INTEREST ON OP. CAP.	acre	11.46	1.0000	11.46	_____

TOTAL DIRECT EXPENSES				570.98	_____
FIXED EXPENSES					
Implements	acre	6.52	1.0000	6.52	_____
Tractors	acre	11.55	1.0000	11.55	_____
Self-Propelled	acre	92.67	1.0000	92.67	_____

TOTAL FIXED EXPENSES				110.74	_____

TOTAL SPECIFIED EXPENSES				681.72	_____

Note: Cost of production estimates are based on 2017 input prices.

Table 4.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, no-till
 B2XF variety, Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Cotton Lint	lb	0.66	900.0000	594.00	_____
Cotton Seed	lb	0.10	1215.0000	121.50	_____

TOTAL INCOME				715.50	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	15.38	1.0000	15.38	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	48.10	1.0000	48.10	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	77.58	1.0000	77.58	_____
INSECTICIDES	acre	45.99	1.0000	45.99	_____
SEED/PLANTS	acre	135.00	1.0000	135.00	_____
GROWTH REGULATORS	acre	2.24	1.0000	2.24	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.64	1.0000	30.64	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3558	3.22	_____
OPERATOR LABOR	hour	13.51	0.6385	8.65	_____
UNALLOCATED LABOR	hour	13.50	0.5108	6.90	_____
DIESEL FUEL	gal	1.80	9.2040	16.61	_____
REPAIR & MAINTENANCE	acre	29.06	1.0000	29.06	_____
INTEREST ON OP. CAP.	acre	11.46	1.0000	11.46	_____

TOTAL DIRECT EXPENSES				570.98	_____
RETURNS ABOVE DIRECT EXPENSES				144.52	_____
TOTAL FIXED EXPENSES				110.74	_____

TOTAL SPECIFIED EXPENSES				681.72	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				33.78	_____

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

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					1.4000				
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
NT Plant-Folding	12R-38	MFWD 225	0.051	1.00	May			0.05	0.05	0.04
Cotton Seed B2XF	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
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun			0.05	0.05	0.07
UAN (32%)	gal					18.4000				0.04
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun			0.04	0.04	0.06
Diuron	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
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\$22	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	0.08
TOTALS								0.63	0.29	0.99
										0.51

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.16	3.49	3.49
Lime (Spread)	ton	30.64					1.46	32.10	32.10
Custom Apply Fert	acre	7.50					0.36	7.86	7.86
Potash (60% K2O)	cwt	26.57					1.26	27.83	27.83
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.03	1.01	1.20
Clarity	pt	5.78					0.18	5.96	5.96
Glyphosate 3lbs a.e	oz	4.48					0.14	4.62	4.62
Surfactant	pt	0.66					0.02	0.68	0.68
Row Cond Folding	38'		0.85	0.54	0.99		0.06	2.44	2.82
NT Plant-Folding	12R-38		1.08	1.91	1.73		0.11	4.83	5.15
Cotton Seed B2XF	thous	135.00					3.21	138.21	138.21
Cotton Seed Trt.	acre	20.00					0.48	20.48	20.48
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Gramoxone SL 2.0	oz	7.20					0.17	7.37	7.37
Cotoran	pt	12.84					0.30	13.14	13.14
Surfactant	pt	0.66					0.02	0.68	0.68
Cotton Consultant	acre	8.00					0.19	8.19	8.19
Eradication	acre	1.00					0.02	1.02	1.02
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Glyphosate 3lbs a.e	oz	4.48					0.11	4.59	4.59
Dual Magnum	pt	13.80					0.33	14.13	14.13
Acephate 90%	lb	1.86					0.04	1.90	1.90
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Dual Magnum	pt	13.80					0.33	14.13	14.13
Glyphosate 3lbs a.e	oz	4.48					0.11	4.59	4.59
Bidrin 8EC	oz	0.23					0.01	0.24	0.24
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Centric 40WG	oz	10.76					0.21	10.97	10.97
Mepiquat Chloride	oz	1.12					0.02	1.14	1.14
Fert Appl (Liquid)	12R-38		1.08	0.99	1.49		0.07	3.63	2.88
UAN (32%)	gal	21.53					0.43	21.96	21.96
Spray (Direct/Layby)	12R-38		0.93	0.59	1.28		0.06	2.86	2.20
Diuron	pt	6.24					0.12	6.36	6.36
Glyphosate 3lbs a.e	oz	4.48					0.09	4.57	4.57
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Mepiquat Chloride	oz	1.12					0.02	1.14	1.14
Acephate 90%	lb	5.57					0.09	5.66	5.66
Incidental Pest									
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Incidental Pest Trt \$22	acre	22.00					0.35	22.35	22.35
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Acephate 90%	lb	5.57					0.07	5.64	5.64
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Thidiazuron 4lb	oz	3.45					0.03	3.48	3.48
Ethepron 6E	pt	5.76					0.05	5.81	5.81
Sprayer 600-750gal	60' 175hp		0.14	0.09	0.26			0.49	0.60
Tribufos 6lb	pt	5.27					0.04	5.31	5.31
Ethepron 6E	pt	0.90					0.01	0.91	0.91
Cotton Picker/Module	6R-38(500)		7.98	20.60	5.75		0.14	34.47	81.27
Gin & Haul	lb	99.00					0.39	99.39	99.39
Stalk Shredder-Flail	15'		1.94	2.72	2.68		0.03	7.37	5.02
TOTALS		495.08	16.61	29.06	18.77	0.00	11.46	570.98	110.74
									681.72

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

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	715.50
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.38	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	26.57	0.00	0.00	0.00	0.00	0.00	0.00	21.53	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	10.26	0.00	56.60	10.72	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.09	10.76	27.57	5.57	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	135.00	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	1.12	1.12	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.64	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	0.51	0.00	4.25	3.28	1.02	0.51	0.77	8.43
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	0.29	0.00	2.80	2.30	0.58	0.29	0.43	9.92
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.18	0.00	2.99	1.76	0.36	0.18	0.27	23.32
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.37	0.00	5.55	1.02	0.50	0.08	0.14	0.56
TOTAL DIRECT EXPENSES	71.28	0.00	0.00	0.00	12.27	0.00	238.94	52.49	31.15	6.63	16.99	141.23
NET INCOME	-71.28	0.00	0.00	0.00	-12.27	0.00	-238.94	-52.49	-31.15	-6.63	-16.99	574.27
NET INCOME TO DATE	-71.28	-71.28	-71.28	-71.28	-83.55	-83.55	-322.49	-374.98	-406.13	-412.76	-429.75	144.52

Note: Cost of production estimates are based on 2017 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
 B2XF variety, Non-Delta Area, Mississippi, 2018

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.49	0.52	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.79	0.82
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-177 -287	-162 -272	-147 -258	-132 -243	-117 -228	-102 -213	-87 -198	-73 -183	-58 -168	-43 -154	-28 -139
60	540.00	lb	-142 -253	-124 -235	-106 -217	-88 -199	-71 -181	-53 -164	-35 -146	-17 -128	0 -110	17 -92	35 -74
70	630.00	lb	-107 -218	-87 -197	-66 -176	-45 -156	-24 -135	-3 -114	16 -93	37 -73	58 -52	79 -31	100 -10
80	720.00	lb	-73 -183	-49 -160	-25 -136	-1 -112	21 -88	45 -65	69 -41	93 -17	116 6	140 29	164 53
90	810.00	lb	-38 -149	-11 -122	14 -95	41 -69	68 -42	95 -15	121 11	148 37	175 64	201 91	228 117
100	900.00	lb	-3 -114	25 -85	55 -55	85 -25	114 4	144 33	174 63	203 93	233 122	263 152	293 182
110	990.00	lb	30 -80	63 -47	95 -14	128 17	161 50	193 83	226 115	259 148	291 181	324 213	357 246
120	1080.00	lb	65 -45	100 -9	136 25	172 61	207 97	243 132	279 168	314 203	350 239	386 275	421 310
130	1170.00	lb	99 -10	138 27	177 66	215 104	254 143	292 182	331 220	370 259	408 297	447 336	485 375
140	1260.00	lb	134 23	176 65	217 106	259 148	300 190	342 231	383 273	425 314	467 356	508 397	550 439
150	1350.00	lb	169 58	213 102	258 147	302 191	347 236	391 281	436 325	480 370	525 414	570 459	614 503

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 2017 input prices.

Table 5.A Estimated costs per acre
 Cotton, 12R-38" solid, conservation tillage
 B2XF, pivot irrigated, 7.5 ac.-in., Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.50	2.3000	3.45	_____
Ethephon 6E	pt	2.88	2.3125	6.66	_____
Tribufos 6lb	pt	10.54	0.5000	5.27	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	18.98	1.4000	26.57	_____
UAN (32%)	gal	1.17	28.9332	33.85	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.55	0.5000	5.78	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.80	2.0000	27.60	_____
Diuron	pt	3.90	1.6000	6.24	_____
INSECTICIDES					
Acephate 90%	lb	7.43	1.7500	13.00	_____
Bidrin 8EC	oz	1.17	0.2000	0.23	_____
Centric 40WG	oz	5.38	2.0000	10.76	_____
Incidental Pest Trt	acre	\$22	22.00	22.00	_____
SEED/PLANTS					
Cotton Seed B2XF	thous	3.00	45.0000	135.00	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.07	32.0000	2.24	_____
ADJUVANTS					
Surfactant	pt	3.28	0.4000	1.31	_____
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	46.00	0.6660	30.64	_____
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	13.51	0.4268	5.77	_____
Self-Propelled	hour	13.51	0.3397	4.61	_____
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	0.2560	2.32	_____
UNALLOCATED LABOR					
hour	13.51	0.6133	8.29	_____	
DIESEL FUEL					
Tractors	gal	1.80	4.7451	8.54	_____
Self-Propelled	gal	1.80	5.9419	10.73	_____
1/4-mi. Pivot Irr.	gal	1.80	11.2011	20.16	_____
REPAIR & MAINTENANCE					
implements	acre	6.90	1.0000	6.90	_____
Tractors	acre	2.67	1.0000	2.67	_____
Self-Propelled	acre	22.31	1.0000	22.31	_____
1/4-mi. Pivot Irr.	acre	21.65	1.0000	21.65	_____
INTEREST ON OP. CAP.	acre	13.05	1.0000	13.05	_____
TOTAL DIRECT EXPENSES				670.36	_____
FIXED EXPENSES					
implements	acre	9.70	1.0000	9.70	_____
Tractors	acre	16.84	1.0000	16.84	_____
Self-Propelled	acre	92.67	1.0000	92.67	_____
1/4-mi. Pivot Irr.	acre	74.43	1.0000	74.43	_____
TOTAL FIXED EXPENSES				193.64	_____
TOTAL SPECIFIED EXPENSES				864.00	_____

Note: Cost of production estimates are based on 2017 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
 B2XF, pivot irrigated, 7.5 ac.-in., Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Cotton Lint	lb	0.66	1200.0000	792.00	_____
Cotton Seed	lb	0.10	1620.0000	162.00	_____

TOTAL INCOME				954.00	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	15.38	1.0000	15.38	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	60.43	1.0000	60.43	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	77.58	1.0000	77.58	_____
INSECTICIDES	acre	45.99	1.0000	45.99	_____
SEED/PLANTS	acre	135.00	1.0000	135.00	_____
GROWTH REGULATORS	acre	2.24	1.0000	2.24	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.64	1.0000	30.64	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3796	3.43	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	13.51	0.7666	10.38	_____
UNALLOCATED LABOR	hour	13.51	0.6133	8.29	_____
DIESEL FUEL	gal	1.80	21.8882	39.43	_____
REPAIR & MAINTENANCE	acre	53.53	1.0000	53.53	_____
INTEREST ON OP. CAP.	acre	13.05	1.0000	13.05	_____

TOTAL DIRECT EXPENSES				670.36	_____
RETURNS ABOVE DIRECT EXPENSES				283.64	_____
TOTAL FIXED EXPENSES				193.64	_____

TOTAL SPECIFIED EXPENSES				864.00	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				90.00	_____

Note: Cost of production estimates are based on 2017 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
 B2XF, pivot irrigated, 7.5 ac.-in., Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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						1.4000				
Bed-Paratill 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
Cotton Seed B2XF	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						1.0000				
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				
Glyphosate 3lbs a.e	oz						32.0000				
Acephate 90%	lb						0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May				0.01	0.02	0.01
Dual Magnum	pt						1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Bidrin 8EC	oz						0.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun				0.01	0.02	0.01
Centric 40WG	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
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	Jul			0.04	0.04	0.06	0.03
Diuron	pt						1.6000				
Glyphosate 3lbs a.e	oz						32.0000				
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\$22	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			
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		1200.0000		0.11	0.11	0.08
1/4-mi. Pivot Irr.	acre						1.0000	Jan		0.20	
TOTALS									0.76	0.42	1.34
											0.61

Note: Cost of production estimates are based on 2017 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
 B2XF, pivot irrigated, 7.5 ac.-in., Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.16	3.49
Lime (Spread)	ton	30.64					1.46	32.10
Custom Apply Fert	acre	7.50					0.36	7.86
Potash (60% K2O)	cwt	26.57					1.26	27.83
Bed-Paratill Fold	12R-38		1.12	1.69	1.31		0.20	4.32
Bed/Disk (Hipper)	12R-38		0.51	0.34	0.60		0.07	1.52
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.03	1.01
Clarity	pt	5.78					0.18	5.96
Glyphosate 3lbs a.e	oz	4.48					0.14	4.62
Surfactant	pt	0.66					0.02	0.68
Fert Appl (Liquid)	12R-38		1.08	0.99	1.49		0.10	3.66
UAN (32%)	gal	16.93					0.47	17.40
Row Cond Folding	38'		0.85	0.54	0.99		0.06	2.44
Plant - Folding	12R-38		1.03	1.71	1.66		0.10	4.50
Cotton Seed B2XF	thous	135.00					3.21	138.21
Cotton Seed Trt.	acre	20.00					0.48	20.48
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Gramoxone SL 2.0	oz	7.20					0.17	7.37
Cotoran	pt	12.84					0.30	13.14
Surfactant	pt	0.66					0.02	0.68
Cotton Consultant	acre	8.00					0.19	8.19
Eradication	acre	1.00					0.02	1.02
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Dual Magnum	pt	13.80					0.33	14.13
Glyphosate 3lbs a.e	oz	4.48					0.11	4.59
Acephate 90%	lb	1.86					0.04	1.90
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Dual Magnum	pt	13.80					0.33	14.13
Glyphosate 3lbs a.e	oz	4.48					0.11	4.59
Bidrin 8EC	oz	0.23					0.01	0.24
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Centric 40WG	oz	10.76					0.21	10.97
Mepiquat Chloride	oz	1.12					0.02	1.14
Fert Appl (Liquid)	12R-38		1.08	0.99	1.49		0.07	3.63
UAN (32%)	gal	16.93					0.34	17.27
Spray (Direct/Layby)	12R-38		0.93	0.59	1.28		0.04	2.84
Diuron	pt	6.24					0.10	6.34
Glyphosate 3lbs a.e	oz	4.48					0.07	4.55
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
Mepiquat Chloride	oz	1.12					0.02	1.14
Acephate 90%	lb	5.57					0.09	5.66
Incidental Pest								
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00
IncidentalPestTrt\$22	acre	22.00					0.35	22.35
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99
Acephate 90%	lb	5.57					0.07	5.64
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99
Thidiazuron 4lb	oz	3.45					0.03	3.48
Ethephon 6E	pt	5.76					0.05	5.81
Sprayer 600-750gal	60' 175hp		0.14	0.09	0.26			0.49
Tribufos 6lb	pt	5.27					0.04	5.31
Ethephon 6E	pt	0.90					0.01	0.91
Cotton Picker/Module	6R-38(500)		7.98	20.60	5.75		0.14	34.47
Gin & Haul	lb	132.00					0.52	132.52
Stalk Shredder-Flail	15'		1.94	2.72	2.68		0.03	7.37
1/4-mi. Pivot Irr.	acre		20.16	21.65	1.84		0.78	44.43
TOTALS		540.41	39.43	53.53	23.94	0.00	13.05	670.36
								193.64
								864.00

Note: Cost of production estimates are based on 2017 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
 B2XF, pivot irrigated, 7.5 ac.-in., Non-Delta Area, Mississippi, 2018

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	954.00
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.38	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	26.57	0.00	0.00	0.00	0.00	16.93	0.00	16.93	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	10.26	0.00	56.60	0.00	10.72	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.09	10.76	27.57	5.57	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	135.00	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	1.12	1.12	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.64	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	1.91	0.00	0.00	0.00	0.51	1.49	5.52	2.15	2.50	0.66	0.77	8.43
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.63	0.00	0.00	0.00	0.29	1.08	2.75	7.42	9.57	6.34	0.43	9.92
REPAIR & MAINTENANCE	2.03	0.00	0.00	0.00	0.18	0.99	2.79	19.55	2.82	1.58	0.27	23.32
INTEREST ON OP. CAP.	3.51	0.00	0.00	0.00	0.37	0.57	5.58	1.15	0.87	0.17	0.14	0.69
TOTAL DIRECT EXPENSES	77.12	0.00	0.00	0.00	12.27	21.06	239.99	59.08	55.17	14.32	16.99	174.36
NET INCOME	-77.12	0.00	0.00	0.00	-12.27	-21.06	-239.99	-59.08	-55.17	-14.32	-16.99	779.64
NET INCOME TO DATE	-77.12	-77.12	-77.12	-77.12	-89.39	-110.45	-350.44	-409.52	-464.69	-479.01	-496.00	283.64

Note: Cost of production estimates are based on 2017 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
 B2XF, pivot irrigated, 7.5 ac.-in., Non-Delta Area, Mississippi, 2018

PRODUCT		75	80	85	90	95	100	105	110	115	120	125	PERCENT		
													PRODUCT	PRICE	
Cotton Lint		0.49	0.52	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.79	0.82			
PERCENT YIELD UNIT															dollars
50	600.00	lb	-145 -338	-125 -318	-105 -299	-85 -279	-65 -259	-46 -239	-26 -219	-6 -200	13 -180	33 -160	52 -140		
60	720.00	lb	-98 -292	-75 -268	-51 -245	-27 -221	-3 -197	19 -173	43 -150	67 -126	91 -102	114 -78	138 -54		
70	840.00	lb	-52 -246	-25 -218	2 -191	30 -163	58 -135	85 -107	113 -80	141 -52	168 -24	196 3	224 30		
80	960.00	lb	-6 -200	25 -168	56 -136	88 -105	120 -73	151 -41	183 -10	215 21	246 53	278 84	310 116		
90	1080.00	lb	39 -154	75 -118	110 -82	146 -47	182 -11	217 24	253 59	288 95	324 130	360 166	395 202		
100	1200.00	lb	85 -108	125 -68	164 -28	204 10	244 50	283 90	323 129	362 169	402 208	442 248	481 288		
110	1320.00	lb	131 -61	175 -18	218 25	262 68	306 112	349 155	393 199	436 243	480 286	523 330	567 373		
120	1440.00	lb	177 -15	225 31	272 79	320 126	368 174	415 221	463 269	510 316	558 364	605 411	653 459		
130	1560.00	lb	224 30	275 81	327 133	378 184	430 236	481 287	532 339	584 390	635 442	687 493	738 545		
140	1680.00	lb	270 76	325 132	381 187	436 242	491 298	547 353	602 409	658 464	713 520	769 575	824 630		
150	1800.00	lb	316 122	375 182	435 241	494 300	553 360	613 419	672 479	732 538	791 597	850 657	910 716		

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 2017 input prices.

Table 6.A Estimated costs per acre
 Soybeans, double crop after wheat, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.75	0.8700	16.31	_____
Potash (60% K2O)	cwt	18.98	1.3300	25.24	_____
FUNGICIDES					
CruiserMaxx	oz	4.25	1.6000	6.80	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Boundary	pt	11.20	2.0000	22.40	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.43	0.7500	5.57	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.78	6.4000	4.99	_____
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.51	50.0000	75.50	_____
ADJUVANTS					
Surfactant	pt	3.28	0.6000	1.97	_____
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	46.00	0.3330	15.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	13.51	0.1171	1.58	_____
Harvesters	hour	13.51	0.1021	1.38	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
hour	13.57	0.1886	2.56	_____	
DIESEL FUEL					
Tractors	gal	1.80	1.3567	2.44	_____
Harvesters	gal	1.80	1.3935	2.51	_____
REPAIR & MAINTENANCE					
Implements	acre	3.12	1.0000	3.12	_____
Tractors	acre	0.77	1.0000	0.77	_____
Harvesters	acre	3.49	1.0000	3.49	_____
INTEREST ON OP. CAP.	acre	7.12	1.0000	7.12	_____
TOTAL DIRECT EXPENSES					
				330.11	_____
FIXED EXPENSES					
Implements	acre	5.40	1.0000	5.40	_____
Tractors	acre	4.85	1.0000	4.85	_____
Harvesters	acre	13.77	1.0000	13.77	_____
TOTAL FIXED EXPENSES					
				24.02	_____
TOTAL SPECIFIED EXPENSES					
				354.13	_____

Note: Cost of production estimates are based on 2017 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.90	50.0000	495.00	_____
TOTAL INCOME				495.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
FERTILIZERS	acre	41.55	1.0000	41.55	_____
FUNGICIDES	acre	26.05	1.0000	26.05	_____
HERBICIDES	acre	47.14	1.0000	47.14	_____
INSECTICIDES	acre	37.04	1.0000	37.04	_____
SEED/PLANTS	acre	75.50	1.0000	75.50	_____
ADJUVANTS	acre	1.97	1.0000	1.97	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	13.51	0.2193	2.96	_____
UNALLOCATED LABOR	hour	13.57	0.1886	2.56	_____
DIESEL FUEL	gal	1.80	2.7503	4.95	_____
REPAIR & MAINTENANCE	acre	7.38	1.0000	7.38	_____
INTEREST ON OP. CAP.	acre	7.12	1.0000	7.12	_____
TOTAL DIRECT EXPENSES				330.11	_____
RETURNS ABOVE DIRECT EXPENSES				164.89	_____
TOTAL FIXED EXPENSES				24.02	_____
TOTAL SPECIFIED EXPENSES				354.13	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				140.87	_____

Note: Cost of production estimates are based on 2017 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	INPUT OVER MTH	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
Soybean Seed RR2	lb					50.0000			0.05
CruiserMaxx	oz					1.6000			
Optimize	oz					1.4000			
Boundary	pt					2.0000			
Gramoxone SL 2.0	oz					48.0000			
Surfactant	pt					0.4000			
Spray (Broadcast)	60'	MFWD	225	0.028	1.00 Jul		0.02	0.02	0.04
Glyphosate 3lbs a.e	oz					32.0000			0.02
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
Haul Soybeans	bu					50.0000			0.08
Grain Cart Soybean	700 bu	MFWD	225	0.021	1.00 Oct		0.02	0.02	0.02
TOTALS							0.21	0.21	0.30
									0.18

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.16	3.49
Lime (Spread)	ton	15.32					0.73	16.05
Custom Apply Fert	acre	7.50					0.36	7.86
Phosphorus (46% P2O5)	cwt	16.31					0.77	17.08
Potash (60% K2O)	cwt	25.24					1.20	26.44
Soybeans Consultant	acre	6.50					0.15	6.65
Plant & Pre-Folding	12R-30			1.41	2.23	2.31		6.22
Soybean Seed RR2	lb	75.50					1.49	76.99
CruiserMaxx	oz	6.80					0.13	6.93
Optimize	oz	3.00					0.06	3.06
Boundary	pt	22.40					0.44	22.84
Gramoxone SL 2.0	oz	7.20					0.14	7.34
Surfactant	pt	1.31					0.03	1.34
Spray (Broadcast)	60'			0.59	0.43	0.84		1.45
Glyphosate 3lbs a.e	oz	4.48					0.07	4.55
Prefix	pt	13.06					0.21	13.27
App by Air (5 gal)	appl	6.50					0.08	6.58
Quadris Top SBX	oz	19.25					0.23	19.48
Surfactant	pt	0.33						0.33
App by Air (5 gal)	appl	6.50					0.08	6.58
Acephate 90SP	lb	5.57					0.07	5.64
App by Air (5 gal)	appl	6.50					0.08	6.58
Prevathon	oz	18.48					0.22	18.70
Surfactant	pt	0.33						0.33
Bifenthrin	oz	4.99					0.06	5.05
Incidental Pest								
App by Air (5 gal)	appl	6.50					0.05	6.55
IncidentalPestTrt \$8	acre	8.00					0.06	8.06
Header -Soybean	25' Flex			2.51	4.37	2.57		15.10
Haul Soybeans	bu	13.50					0.05	13.55
Grain Cart Soybean	700 bu			0.44	0.35	0.54		1.25
TOTALS		304.40	4.95	7.38	6.26	0.00	7.12	330.11
								24.02
								354.13

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

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	495.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	6.50	0.00
FERTILIZERS	41.55	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	6.80	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.60	17.54	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.04	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.66	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	15.32	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	3.00	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	0.00	0.00	2.31	0.84	0.00	0.00	3.11
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	1.41	0.59	0.00	0.00	2.95
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.43	0.00	0.00	4.72
INTEREST ON OP. CAP.	3.22	0.00	0.00	0.00	0.00	0.00	0.15	2.41	0.31	0.82	0.11	0.10
TOTAL DIRECT EXPENSES	70.92	0.00	0.00	0.00	0.00	0.00	6.65	124.57	19.71	69.27	14.61	24.38
NET INCOME	-70.92	0.00	0.00	0.00	0.00	0.00	-6.65	-124.57	-19.71	-69.27	-14.61	470.62
NET INCOME TO DATE	-70.92	-70.92	-70.92	-70.92	-70.92	-70.92	-77.57	-202.14	-221.85	-291.12	-305.73	164.89

Note: Cost of production estimates are based on 2017 input prices.

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

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a 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, RR, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Soybeans		7.42	7.92	8.41	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37	
PERCENT YIELD UNIT													
50	25.00	bu	-137 -161	-125 -149	-112 -136	-100 -124	-88 -112	-75 -99	-63 -87	-51 -75	-38 -62	-26 -50	-13 -37
60	30.00	bu	-101 -125	-87 -111	-72 -96	-57 -81	-42 -66	-27 -51	-12 -36	2 -22	16 -7	31 7	46 22
70	35.00	bu	-66 -90	-48 -72	-31 -55	-14 -38	3 -20	20 -3	37 13	55 31	72 48	89 65	107 83
80	40.00	bu	-30 -54	-10 -34	9 -14	29 4	48 24	68 44	88 64	108 84	128 103	147 123	167 143
90	45.00	bu	5 -18	27 3	49 25	72 48	94 70	116 92	139 115	161 137	183 159	205 181	228 204
100	50.00	bu	41 17	65 41	90 66	115 91	140 116	164 140	189 165	214 190	239 215	263 239	288 264
110	55.00	bu	76 52	104 80	131 107	158 134	185 161	213 189	240 216	267 243	294 270	321 297	349 325
120	60.00	bu	112 88	142 118	172 148	201 177	231 207	261 237	290 266	320 296	350 326	379 355	409 385
130	65.00	bu	148 124	180 156	212 188	244 220	277 253	309 285	341 317	373 349	405 381	438 414	470 446
140	70.00	bu	184 160	218 194	253 229	288 264	322 298	357 333	392 368	426 402	461 437	496 472	530 506
150	75.00	bu	219 195	257 233	294 270	331 307	368 344	405 381	442 418	479 455	516 492	554 530	591 567

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 2017 input prices.

Table 7.A Estimated costs per acre
 Soybeans, full-season, RR, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
CUSTOM SPRAY							
App by Air (5 gal)	appl	6.50	2.0000	13.00	_____		
HARVEST AIDS							
Gramoxone SL	oz	0.15	16.0000	2.40	_____		
FERTILIZERS							
Phosphorus (46% P2O5)	cwt	18.75	0.6600	12.38	_____		
Potash (60% K2O)	cwt	18.98	1.0000	18.98	_____		
FUNGICIDES							
CruiserMaxx	oz	4.25	1.6000	6.80	_____		
HERBICIDES							
Glyphosate 3lbs a.e.	oz	0.14	96.0000	13.44	_____		
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____		
Boundary	pt	11.20	2.0000	22.40	_____		
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____		
Prefix	pt	6.53	2.0000	13.06	_____		
INSECTICIDES							
Acephate 90SP	lb	7.43	0.7500	5.57	_____		
SEED/PLANTS							
Soybean Seed RR2	lb	1.51	50.0000	75.50	_____		
ADJUVANTS							
Surfactant	pt	3.28	0.6000	1.97	_____		
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	46.00	0.3330	15.32	_____		
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	13.51	0.3128	4.23	_____		
Harvesters	hour	13.51	0.1021	1.38	_____		
HAND LABOR							
Implements	hour	9.06	0.1051	0.96	_____		
UNALLOCATED LABOR							
hour	13.49	0.3734	5.04	_____			
DIESEL FUEL							
Tractors	gal	1.80	3.0592	5.52	_____		
Harvesters	gal	1.80	1.3935	2.51	_____		
REPAIR & MAINTENANCE							
Implements	acre	4.69	1.0000	4.69	_____		
Tractors	acre	1.68	1.0000	1.68	_____		
Harvesters	acre	3.49	1.0000	3.49	_____		
INTEREST ON OP. CAP.	acre	7.22	1.0000	7.22	_____		
<hr/>							
TOTAL DIRECT EXPENSES				278.48	_____		
FIXED EXPENSES							
Implements	acre	9.30	1.0000	9.30	_____		
Tractors	acre	10.65	1.0000	10.65	_____		
Harvesters	acre	13.77	1.0000	13.77	_____		
<hr/>							
TOTAL FIXED EXPENSES				33.72	_____		
<hr/>							
TOTAL SPECIFIED EXPENSES				312.20	_____		

Note: Cost of production estimates are based on 2017 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
			dollars	dollars	
INCOME					
Soybeans	bu	9.90	43.0000	425.70	_____
TOTAL INCOME				425.70	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.00	1.0000	13.00	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	31.36	1.0000	31.36	_____
FUNGICIDES	acre	6.80	1.0000	6.80	_____
HERBICIDES	acre	60.90	1.0000	60.90	_____
INSECTICIDES	acre	5.57	1.0000	5.57	_____
SEED/PLANTS	acre	75.50	1.0000	75.50	_____
ADJUVANTS	acre	1.97	1.0000	1.97	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
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	13.51	0.4149	5.61	_____
UNALLOCATED LABOR	hour	13.49	0.3734	5.04	_____
DIESEL FUEL	gal	1.80	4.4528	8.03	_____
REPAIR & MAINTENANCE	acre	9.86	1.0000	9.86	_____
INTEREST ON OP. CAP.	acre	7.22	1.0000	7.22	_____
TOTAL DIRECT EXPENSES				278.48	_____
RETURNS ABOVE DIRECT EXPENSES				147.22	_____
TOTAL FIXED EXPENSES				33.72	_____
TOTAL SPECIFIED EXPENSES				312.20	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				113.50	_____

Note: Cost of production estimates are based on 2017 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.16	3.49
Lime (Spread)	ton	15.32					0.73	16.05
Custom Apply Fert	acre	7.50					0.36	7.86
Phosphorus (46% P2O5)	cwt	12.38					0.59	12.97
Potash (60% K2O)	cwt	18.98					0.90	19.88
Disk Harrow	24'		1.44	1.38	2.11		0.23	5.16
Field Cultivate Fld	24'			1.10	0.79	1.60	0.17	3.66
App by Air (5 gal)	appl	6.50					0.18	6.68
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60
2,4-D Amine 4	pt	4.80					0.13	4.93
Plant - Folding	12R-30			1.11	1.83	2.18	0.12	5.24
Soybean Seed RR2	lb	75.50					1.79	77.29
CruiserMaxx	oz	6.80					0.16	6.96
Boundary	pt	22.40					0.53	22.93
Gramoxone SL 2.0	oz	7.20					0.17	7.37
Surfactant	pt	1.31					0.03	1.34
Spray (Broadcast)	60'		0.50	0.39	0.85		0.03	1.77
Glyphosate 3lbs a.e	oz	4.48					0.09	4.57
Prefix	pt	13.06					0.26	13.32
Soybeans Consultant	acre	6.50					0.13	6.63
Spray (Broadcast)	60'		0.50	0.39	0.85		0.03	1.77
Glyphosate 3lbs a.e	oz	4.48					0.09	4.57
Spray (Broadcast)	60'		0.50	0.39	0.85		0.01	1.75
Acephate 90SP	lb	5.57					0.04	5.61
App by Air (5 gal)	appl	6.50					0.05	6.55
Gramoxone SL	oz	2.40					0.02	2.42
Surfactant	pt	0.66					0.01	0.67
Header -Soybean	25' Flex		2.51	4.37	2.62		0.04	9.54
Haul Soybeans	bu	11.61					0.05	11.66
Grain Cart Soybean	700 bu		0.37	0.32	0.55		1.24	1.09
TOTALS		241.76	8.03	9.86	11.61	0.00	7.22	278.48
								33.72
								312.20

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

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	425.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00
FERTILIZERS	31.36	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	6.80	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.28	29.60	22.02	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	75.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.00	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.61
CUSTOM LIME	15.32	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	3.71	0.00	0.00	0.00	0.00	0.00	2.18	1.70	0.00	0.00	0.85	3.17
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	2.54	0.00	0.00	0.00	0.00	0.00	1.11	1.00	0.00	0.00	0.50	2.88
REPAIR & MAINTENANCE	2.17	0.00	0.00	0.00	0.00	0.00	1.83	0.78	0.00	0.00	0.39	4.69
INTEREST ON OP. CAP.	3.14	0.00	0.00	0.00	0.00	0.43	2.80	0.63	0.00	0.00	0.13	0.09
TOTAL DIRECT EXPENSES	69.07	0.00	0.00	0.00	0.00	16.21	121.13	32.63	0.00	0.00	17.00	22.44
NET INCOME	-69.07	0.00	0.00	0.00	0.00	-16.21	-121.13	-32.63	0.00	0.00	-17.00	403.26
NET INCOME TO DATE	-69.07	-69.07	-69.07	-69.07	-69.07	-85.28	-206.41	-239.04	-239.04	-239.04	-256.04	147.22

Note: Cost of production estimates are based on 2017 input prices.

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

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a 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, RR, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Soybeans		7.42	7.92	8.41	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37	
-----PRODUCT PRICE-----													
PERCENT	YIELD	UNIT	-----dollars-----										
50	21.50	bu	-113 -146	-102 -136	-91 -125	-81 -114	-70 -104	-59 -93	-49 -82	-38 -72	-27 -61	-17 -50	-6 -40
60	25.80	bu	-82 -115	-69 -103	-56 -90	-43 -77	-31 -64	-18 -52	-5 -39	7 -26	19 -13	32 -1	45 11
70	30.10	bu	-51 -85	-36 -70	-21 -55	-6 -40	8 -25	23 -10	37 4	52 19	67 33	82 48	97 63
80	34.40	bu	-20 -54	-3 -37	13 -20	30 -3	47 13	64 30	81 47	98 64	115 81	132 98	149 115
90	38.70	bu	10 -23	29 -4	48 14	67 33	86 52	105 72	124 91	144 110	163 129	182 148	201 167
100	43.00	bu	40 7	62 28	83 49	104 70	125 92	147 113	168 134	189 156	211 177	232 198	253 219
110	47.30	bu	71 37	94 61	118 84	141 108	165 131	188 154	212 178	235 201	258 225	282 248	305 271
120	51.60	bu	102 68	127 94	153 119	178 145	204 170	230 196	255 221	281 247	306 272	332 298	357 324
130	55.90	bu	133 99	160 127	188 154	216 182	243 210	271 237	299 265	326 293	354 320	382 348	409 376
140	60.20	bu	163 130	193 159	223 189	253 219	283 249	312 279	342 308	372 338	402 368	432 398	461 428
150	64.50	bu	194 160	226 192	258 224	290 256	322 288	354 320	386 352	418 384	450 416	481 448	513 480

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 2017 input prices.

Table 8.A Estimated costs per acre
 Soybeans, full-season, RR, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.75	0.6600	12.38	_____
Potash (60% K2O)	cwt	18.98	1.0000	18.98	_____
FUNGICIDES					
CruiserMaxx	oz	4.25	1.6000	6.80	_____
HERBICIDES					
Glyphosate 3lbs a.e.	oz	0.14	96.0000	13.44	_____
Select Max	pt	12.64	1.0000	12.64	_____
Fierce	oz	7.54	3.5000	26.39	_____
Gramoxone SL 2.0	oz	0.15	96.0000	14.40	_____
Boundary	pt	11.20	2.0000	22.40	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Dimilin 2L	oz	1.45	1.0000	1.45	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Baythroid XL	oz	2.65	1.0650	2.82	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.51	50.0000	75.50	_____
ADJUVANTS					
Surfactant	pt	3.28	1.4500	4.76	_____
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	46.00	0.3330	15.32	_____
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	13.51	0.4647	6.27	_____
Harvesters	hour	13.51	0.1021	1.38	_____
HAND LABOR					
implements	hour	9.06	0.1523	1.38	_____
UNALLOCATED LABOR					
hour	hour	13.48	0.5102	6.88	_____
DIESEL FUEL					
Tractors	gal	1.80	4.6579	8.40	_____
Harvesters	gal	1.80	1.3935	2.51	_____
REPAIR & MAINTENANCE					
implements	acre	6.17	1.0000	6.17	_____
Tractors	acre	2.58	1.0000	2.58	_____
Harvesters	acre	3.49	1.0000	3.49	_____
INTEREST ON OP. CAP.	acre	6.95	1.0000	6.95	_____
TOTAL DIRECT EXPENSES				341.85	_____
FIXED EXPENSES					
implements	acre	11.91	1.0000	11.91	_____
Tractors	acre	16.27	1.0000	16.27	_____
Harvesters	acre	13.77	1.0000	13.77	_____
TOTAL FIXED EXPENSES				41.95	_____
TOTAL SPECIFIED EXPENSES				383.80	_____

Note: Cost of production estimates are based on 2017 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
			dollars	dollars	
INCOME					
Soybeans	bu	9.90	40.0000	396.00	_____
TOTAL INCOME				396.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	31.36	1.0000	31.36	_____
FUNGICIDES	acre	6.80	1.0000	6.80	_____
HERBICIDES	acre	102.33	1.0000	102.33	_____
INSECTICIDES	acre	22.75	1.0000	22.75	_____
SEED/PLANTS	acre	75.50	1.0000	75.50	_____
ADJUVANTS	acre	4.75	1.0000	4.75	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
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	13.51	0.5669	7.65	_____
UNALLOCATED LABOR	hour	13.48	0.5102	6.88	_____
DIESEL FUEL	gal	1.80	6.0515	10.91	_____
REPAIR & MAINTENANCE	acre	12.24	1.0000	12.24	_____
INTEREST ON OP. CAP.	acre	6.95	1.0000	6.95	_____
TOTAL DIRECT EXPENSES				341.85	_____
RETURNS ABOVE DIRECT EXPENSES				54.15	_____
TOTAL FIXED EXPENSES				41.95	_____
TOTAL SPECIFIED EXPENSES				383.80	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				12.20	_____

Note: Cost of production estimates are based on 2017 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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
Field Cultivate Fld	24'	MFWD	190	0.062	1.00	Oct			0.06	0.06	0.06
Bed/Lister-Roll-Fold	12R-30	MFWD	225	0.062	1.00	Oct			0.06	0.06	0.06
Spray (Broadcast)	60'	MFWD	190	0.028	1.00	Feb			0.02	0.02	0.04
Glyphosate 3lbs a.e	oz						32.0000				
Select Max	pt						1.0000				
Surfactant	pt						0.4000				
Custom Apply Fert	acre				1.00	Apr	1.0000				
Phosphorus(46% P205)	cwt						0.6600				
Potash (60% K2O)	cwt						1.0000				
Spray (Broadcast)	60'	MFWD	190	0.028	1.00	Apr			0.02	0.02	0.04
Fierce	oz						3.5000				
Gramoxone SL 2.0	oz						48.0000				
Surfactant	pt						0.4000				
Soybeans Consultant	acre				1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD	190	0.067	1.00	May			0.06	0.06	0.13
Soybean Seed 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
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
Glyphosate 3lbs a.e	oz						32.0000				
Spray (Broadcast)	60'	MFWD	190	0.028	0.50	Jul			0.01	0.01	0.02
Dimilin 2L	oz						1.0000				
Surfactant	pt						0.0500				
Spray (Broadcast)	60'	MFWD	190	0.028	1.00	Aug			0.02	0.02	0.04
Prevathon	oz						14.0000				
Spray (Broadcast)	60'	MFWD	190	0.028	0.50	Aug			0.01	0.01	0.02
Baythroid XL	oz						1.0650				
App by Air (5 gal)	appl				1.00	Sep	1.0000				
Gramoxone SL	oz						16.0000				
Surfactant	pt						0.2000				
Header -Soybean	25' Flex	265 hp		0.102	1.00	Oct			0.10	0.10	0.10
Haul Soybeans	bu						40.0000				
Grain Cart Soybean	700 bu	MFWD	190	0.021	1.00	Oct			0.02	0.02	0.02

TOTALS							0.56	0.56	0.71	0.51	

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33				0.01	3.34	3.34
Lime (Spread)	ton	15.32				0.06	15.38	15.38
Disk Harrow	24'		1.44	1.38	2.11	0.02	4.95	4.78
Field Cultivate Fld	24'		1.10	0.79	1.60	0.01	3.50	4.03
Bed/Lister-Roll-Fold	12R-30		1.30	0.87	1.60	0.01	3.78	3.79
Spray (Broadcast)	60'		0.50	0.39	0.85	0.06	1.80	1.24
Glyphosate 3lbs a.e	oz	4.48				0.16	4.64	4.64
Select Max	pt	12.64				0.45	13.09	13.09
Surfactant	pt	1.31				0.05	1.36	1.36
Custom Apply Fert	acre	7.50				0.21	7.71	7.71
Phosphorus (46% P2O5)	cwt	12.38				0.34	12.72	12.72
Potash (60% K2O)	cwt	18.98				0.53	19.51	19.51
Spray (Broadcast)	60'		0.50	0.39	0.85	0.05	1.79	1.24
Fierce	oz	26.39				0.73	27.12	27.12
Gramoxone SL 2.0	oz	7.20				0.20	7.40	7.40
Surfactant	pt	1.31				0.04	1.35	1.35
Soybeans Consultant	acre	6.50				0.15	6.65	6.65
Plant & Pre-Folding	12R-30		1.19	2.16	2.34	0.14	5.83	5.72
Soybean Seed RR2	lb	75.50				1.79	77.29	77.29
CruiserMaxx	oz	6.80				0.16	6.96	6.96
Boundary	pt	22.40				0.53	22.93	22.93
Gramoxone SL 2.0	oz	7.20				0.17	7.37	7.37
Surfactant	pt	1.31				0.03	1.34	1.34
Spray (Broadcast)	60'		0.50	0.39	0.85	0.04	1.78	1.24
Glyphosate 3lbs a.e	oz	4.48				0.11	4.59	4.59
Prefix	pt	13.06				0.31	13.37	13.37
Spray (Broadcast)	60'		0.50	0.39	0.85	0.03	1.77	1.24
Glyphosate 3lbs a.e	oz	4.48				0.09	4.57	4.57
Spray (Broadcast)	60'		0.25	0.20	0.42	0.01	0.88	0.62
Dimilin 2L	oz	1.45				0.02	1.47	1.47
Surfactant	pt	0.16					0.16	0.16
Spray (Broadcast)	60'		0.50	0.39	0.85	0.02	1.76	1.24
Prevathon	oz	18.48				0.22	18.70	18.70
Spray (Broadcast)	60'		0.25	0.20	0.42	0.01	0.88	0.62
Baythroid XL	oz	2.82				0.03	2.85	2.85
App by Air (5 gal)	appl	6.50				0.05	6.55	6.55
Gramoxone SL	oz	2.40				0.02	2.42	2.42
Surfactant	pt	0.66				0.01	0.67	0.67
Header -Soybean	25' Flex		2.51	4.37	2.62	0.04	9.54	15.10
Haul Soybeans	bu	10.80				0.04	10.84	10.84
Grain Cart Soybean	700 bu		0.37	0.32	0.55		1.24	1.09
TOTALS		295.84	10.91	12.24	15.91	0.00	6.95	341.85
								41.95
								383.80

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

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	396.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	31.36	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	6.80	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	17.12	0.00	33.59	47.14	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	1.45	21.30	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	75.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.31	0.00	1.31	1.31	0.00	0.16	0.00	0.66	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.32
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	0.85	0.00	0.85	3.19	0.85	0.42	1.27	0.00	8.48
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.50	0.00	0.50	1.69	0.50	0.25	0.75	0.00	6.72
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.39	0.00	0.39	2.55	0.39	0.20	0.59	0.00	7.73
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.72	0.00	2.10	3.43	0.12	0.03	0.28	0.08	0.19
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	20.89	0.00	77.60	148.11	6.34	2.51	24.19	9.64	52.57
NET INCOME	0.00	0.00	0.00	-20.89	0.00	-77.60	-148.11	-6.34	-2.51	-24.19	-9.64	343.43
NET INCOME TO DATE	0.00	0.00	0.00	-20.89	-20.89	-98.49	-246.60	-252.94	-255.45	-279.64	-289.28	54.15

Note: Cost of production estimates are based on 2017 input prices.

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

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a 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, RR, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

PRODUCT	PERCENT	75	80	85	90	95	100	105	110	115	120	125	PRODUCT PRICE						
													7.42	7.92	8.41	8.91	9.40	9.90	10.39
PERCENT	YIELD	UNIT	dollars																
	50	20.00	bu	-187 -229	-178 -219	-168 -210	-158 -200	-148 -190	-138 -180	-128 -170	-118 -160	-108 -150	-98 -140	-88 -130					
	60	24.00	bu	-159 -201	-147 -189	-135 -177	-123 -165	-111 -153	-99 -141	-88 -129	-76 -118	-64 -106	-52 -94	-40 -82					
	70	28.00	bu	-130 -172	-116 -158	-102 -144	-89 -131	-75 -117	-61 -103	-47 -89	-33 -75	-19 -61	-5 -47	7 -34					
	80	32.00	bu	-102 -144	-86 -128	-70 -112	-54 -96	-38 -80	-22 -64	-7 -48	8 -33	24 -17	40 -1	56 14					
	90	36.00	bu	-73 -115	-55 -97	-37 -79	-20 -61	-2 -44	15 -26	33 -8	51 9	69 27	86 44	104 62					
	100	40.00	bu	-44 -86	-25 -67	-5 -47	14 -27	34 -7	54 12	73 32	93 51	113 71	133 91	153 111					
	110	44.00	bu	-16 -58	5 -36	27 -14	49 7	70 28	92 50	114 72	136 94	158 116	179 137	201 159					
	120	48.00	bu	12 -29	36 -5	59 17	83 41	107 65	131 89	154 112	178 136	202 160	226 184	249 208					
	130	52.00	bu	40 -0	66 24	92 50	118 76	143 102	169 127	195 153	221 179	246 204	272 230	298 256					
	140	56.00	bu	69 27	97 55	125 83	152 110	180 138	208 166	235 193	263 221	291 249	319 277	346 304					
	150	60.00	bu	98 56	127 85	157 115	187 145	217 175	246 204	276 234	306 264	335 293	365 323	395 353					

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 2017 input prices.

Table 9.A Estimated costs per acre
 Soybeans, double crop after wheat, RR, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	18.75	0.8700	16.31	_____
Potash (60% K2O)	cwt	18.98	1.3300	25.24	_____
FUNGICIDES					
CruiserMaxx	oz	4.25	1.6000	6.80	_____
HERBICIDES					
Boundary	pt	11.20	2.0000	22.40	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e.	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.43	0.7500	5.57	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.78	6.4000	4.99	_____
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.51	50.0000	75.50	_____
ADJUVANTS					
Surfactant	pt	3.28	0.5000	1.64	_____
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	46.00	0.3330	15.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	13.51	0.1171	1.58	_____
Harvesters	hour	13.51	0.1021	1.38	_____
HAND LABOR					
implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
hour	13.57	0.1886	2.56	_____	
DIESEL FUEL					
Tractors	gal	1.80	1.3567	2.44	_____
Harvesters	gal	1.80	1.3935	2.51	_____
REPAIR & MAINTENANCE					
implements	acre	3.12	1.0000	3.12	_____
Tractors	acre	0.77	1.0000	0.77	_____
Harvesters	acre	3.49	1.0000	3.49	_____
INTEREST ON OP. CAP.	acre	6.79	1.0000	6.79	_____
TOTAL DIRECT EXPENSES				296.95	_____
FIXED EXPENSES					
implements	acre	5.40	1.0000	5.40	_____
Tractors	acre	4.85	1.0000	4.85	_____
Harvesters	acre	13.77	1.0000	13.77	_____
TOTAL FIXED EXPENSES				24.02	_____
TOTAL SPECIFIED EXPENSES				320.97	_____

Note: Cost of production estimates are based on 2017 input price.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second 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, RR, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	9.90	25.0000	247.50	_____
TOTAL INCOME				247.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
FERTILIZERS	acre	41.55	1.0000	41.55	_____
FUNGICIDES	acre	6.80	1.0000	6.80	_____
HERBICIDES	acre	47.14	1.0000	47.14	_____
INSECTICIDES	acre	37.04	1.0000	37.04	_____
SEED/PLANTS	acre	75.50	1.0000	75.50	_____
ADJUVANTS	acre	1.64	1.0000	1.64	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	13.51	0.2193	2.96	_____
UNALLOCATED LABOR	hour	13.57	0.1886	2.56	_____
DIESEL FUEL	gal	1.80	2.7503	4.95	_____
REPAIR & MAINTENANCE	acre	7.38	1.0000	7.38	_____
INTEREST ON OP. CAP.	acre	6.79	1.0000	6.79	_____
TOTAL DIRECT EXPENSES				296.95	_____
RETURNS ABOVE DIRECT EXPENSES				-49.45	_____
TOTAL FIXED EXPENSES				24.02	_____
TOTAL SPECIFIED EXPENSES				320.97	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-73.47	_____

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

Table 9.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, RR, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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
Soybean Seed RR2	lb						50.0000				
CruiserMaxx	oz						1.6000				
Optimize	oz						1.4000				
Boundary	pt						2.0000				
Gramoxone SL 2.0	oz						48.0000				
Surfactant	pt						0.4000				
Spray (Broadcast)	60'	MFWD	225	0.028	1.00	Jul			0.02	0.02	0.04
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
Haul Soybeans	bu						25.0000				
Grain Cart Soybean	700 bu	MFWD	225	0.021	1.00	Oct			0.02	0.02	0.02
TOTALS									0.21	0.21	0.30
											0.18

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST			
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33					0.16	3.49	3.49		
Lime (Spread)	ton	15.32					0.73	16.05	16.05		
Custom Apply Fert	acre	7.50					0.36	7.86	7.86		
Phosphorus (46% P2O5)	cwt	16.31					0.77	17.08	17.08		
Potash (60% K2O)	cwt	25.24					1.20	26.44	26.44		
Soybeans Consultant	acre	6.50					0.15	6.65	6.65		
Plant & Pre-Folding	12R-30			1.41	2.23	2.31		0.12	6.07	6.22	12.29
Soybean Seed RR2	lb	75.50					1.49	76.99	76.99		
CruiserMaxx	oz	6.80					0.13	6.93	6.93		
Optimize	oz	3.00					0.06	3.06	3.06		
Boundary	pt	22.40					0.44	22.84	22.84		
Gramoxone SL 2.0	oz	7.20					0.14	7.34	7.34		
Surfactant	pt	1.31					0.03	1.34	1.34		
Spray (Broadcast)	60'			0.59	0.43	0.84		0.03	1.89	1.45	3.34
Glyphosate 3lbs a.e	oz	4.48					0.07	4.55	4.55		
Prefix	pt	13.06					0.21	13.27	13.27		
App by Air (5 gal)	appl	6.50					0.08	6.58	6.58		
Acephate 90SP	lb	5.57					0.07	5.64	5.64		
App by Air (5 gal)	appl	6.50					0.08	6.58	6.58		
Prevathon	oz	18.48					0.22	18.70	18.70		
Surfactant	pt	0.33						0.33	0.33		
Bifenthrin	oz	4.99					0.06	5.05	5.05		
Incidental Pest											
App by Air (5 gal)	appl	6.50					0.05	6.55	6.55		
IncidentalPestTrt \$8	acre	8.00					0.06	8.06	8.06		
Header -Soybean	25' Flex			2.51	4.37	2.57		0.04	9.49	15.10	24.59
Haul Soybeans	bu	6.75						0.03	6.78	6.78	
Grain Cart Soybean	700 bu			0.44	0.35	0.54		0.01	1.34	1.25	2.59
TOTALS		271.57	4.95	7.38	6.26	0.00	6.79	296.95	24.02	320.97	

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, RR, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

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	247.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	6.50	0.00
FERTILIZERS	41.55	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	6.80	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.60	17.54	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.04	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.33	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	15.32	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	3.00	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	0.00	0.00	2.31	0.84	0.00	0.00	3.11
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	1.41	0.59	0.00	0.00	2.95
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.43	0.00	0.00	4.72
INTEREST ON OP. CAP.	3.22	0.00	0.00	0.00	0.00	0.00	0.15	2.41	0.31	0.51	0.11	0.08
TOTAL DIRECT EXPENSES	70.92	0.00	0.00	0.00	0.00	0.00	6.65	124.57	19.71	42.88	14.61	17.61
NET INCOME	-70.92	0.00	0.00	0.00	0.00	0.00	-6.65	-124.57	-19.71	-42.88	-14.61	229.89
NET INCOME TO DATE	-70.92	-70.92	-70.92	-70.92	-70.92	-70.92	-77.57	-202.14	-221.85	-264.73	-279.34	-49.45

Note: Cost of production estimates are based on 2017 input prices.

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

* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, RR, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

PRODUCT	PERCENT	PERCENT												
		75	80	85	90	95	100	105	110	115	120	125		
Soybeans		7.42	7.92	8.41	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37		
<hr/>														
PERCENT	YIELD	UNIT	dollars											
50	12.50	bu	-200	-194	-188	-182	-175	-169	-163	-157	-151	-145	-138	
			-224	-218	-212	-206	-200	-193	-187	-181	-175	-169	-162	
60	15.00	bu	-182	-175	-168	-160	-153	-145	-138	-130	-123	-116	-108	
			-206	-199	-192	-184	-177	-169	-162	-154	-147	-140	-132	
70	17.50	bu	-164	-156	-147	-138	-130	-121	-113	-104	-95	-87	-78	
			-188	-180	-171	-163	-154	-145	-137	-128	-119	-111	-102	
80	20.00	bu	-147	-137	-127	-117	-107	-97	-87	-77	-67	-57	-48	
			-171	-161	-151	-141	-131	-121	-111	-101	-91	-82	-72	
90	22.50	bu	-129	-118	-106	-95	-84	-73	-62	-51	-40	-28	-17	
			-153	-142	-130	-119	-108	-97	-86	-75	-64	-52	-41	
100	25.00	bu	-111	-98	-86	-74	-61	-49	-37	-24	-12	0	12	
			-135	-122	-110	-98	-85	-73	-61	-48	-36	-23	-11	
110	27.50	bu	-93	-79	-66	-52	-38	-25	-11	1	15	29	42	
			-117	-103	-90	-76	-63	-49	-35	-22	-8	5	18	
120	30.00	bu	-75	-60	-45	-31	-16	-1	13	28	43	58	72	
			-99	-84	-69	-55	-40	-25	-10	4	19	34	48	
130	32.50	bu	-57	-41	-25	-9	6	22	38	54	71	87	103	
			-81	-65	-49	-33	-17	-1	14	30	47	63	79	
140	35.00	bu	-39	-22	-5	12	29	46	64	81	98	116	133	
			-63	-46	-29	-11	5	22	40	57	74	92	109	
150	37.50	bu	-21	-3	15	33	52	70	89	108	126	145	163	
			-45	-27	-8	9	28	46	65	84	102	121	139	

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 2017 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	18.75	0.8700	16.31	_____
Potash (60% K2O)	cwt	18.98	1.3300	25.24	_____
FUNGICIDES					
CruiserMaxx	oz	4.25	1.6000	6.80	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Boundary	pt	11.20	2.0000	22.40	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e.	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.43	0.7500	5.57	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.78	6.4000	4.99	_____
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.47	50.0000	73.50	_____
ADJUVANTS					
Surfactant	pt	3.28	0.6000	1.97	_____
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	46.00	0.3330	15.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	13.51	0.1171	1.58	_____
Harvesters	hour	13.51	0.1021	1.38	_____
HAND LABOR					
implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
hour	hour	13.57	0.1886	2.56	_____
DIESEL FUEL					
Tractors	gal	1.80	1.3567	2.44	_____
Harvesters	gal	1.80	1.3935	2.51	_____
REPAIR & MAINTENANCE					
implements	acre	3.12	1.0000	3.12	_____
Tractors	acre	0.77	1.0000	0.77	_____
Harvesters	acre	3.49	1.0000	3.49	_____
INTEREST ON OP. CAP.	acre	7.08	1.0000	7.08	_____
TOTAL DIRECT EXPENSES				328.07	_____
FIXED EXPENSES					
implements	acre	5.40	1.0000	5.40	_____
Tractors	acre	4.85	1.0000	4.85	_____
Harvesters	acre	13.77	1.0000	13.77	_____
TOTAL FIXED EXPENSES				24.02	_____
TOTAL SPECIFIED EXPENSES				352.09	_____

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

Table 10.B Summary of estimated costs and returns per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.90	50.0000	495.00	_____
TOTAL INCOME				495.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
FERTILIZERS	acre	41.55	1.0000	41.55	_____
FUNGICIDES	acre	26.05	1.0000	26.05	_____
HERBICIDES	acre	47.14	1.0000	47.14	_____
INSECTICIDES	acre	37.04	1.0000	37.04	_____
SEED/PLANTS	acre	73.50	1.0000	73.50	_____
ADJUVANTS	acre	1.97	1.0000	1.97	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	13.51	0.2193	2.96	_____
UNALLOCATED LABOR	hour	13.57	0.1886	2.56	_____
DIESEL FUEL	gal	1.80	2.7503	4.95	_____
REPAIR & MAINTENANCE	acre	7.38	1.0000	7.38	_____
INTEREST ON OP. CAP.	acre	7.08	1.0000	7.08	_____
TOTAL DIRECT EXPENSES				328.07	_____
RETURNS ABOVE DIRECT EXPENSES				166.93	_____
TOTAL FIXED EXPENSES				24.02	_____
TOTAL SPECIFIED EXPENSES				352.09	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				142.91	_____

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

Table 10.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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				
Optimize	oz						1.4000				
Boundary	pt						2.0000				
Gramoxone SL 2.0	oz						48.0000				
Surfactant	pt						0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	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

TOTALS							0.21	0.21	0.30	0.18	

Note: Cost of production estimates are based on 2017 input prices.

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

Table 10.D Estimated costs for field operations, per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.16	3.49
Lime (Spread)	ton	15.32					0.73	16.05
Custom Apply Fert	acre	7.50					0.36	7.86
Phosphorus (46% P2O5)	cwt	16.31					0.77	17.08
Potash (60% K2O)	cwt	25.24					1.20	26.44
Soybeans Consultant	acre	6.50					0.15	6.65
Plant & Pre-Folding	12R-30			1.41	2.23	2.31		6.22
Soybean Seed RR2X	lb	73.50					1.45	74.95
CruiserMaxx	oz	6.80					0.13	6.93
Optimize	oz	3.00					0.06	3.06
Boundary	pt	22.40					0.44	22.84
Gramoxone SL 2.0	oz	7.20					0.14	7.34
Surfactant	pt	1.31					0.03	1.34
Spray (Broadcast)	60'		0.59	0.43	0.84		0.03	1.89
Glyphosate 3lbs a.e.	oz	4.48					0.07	4.55
Prefix	pt	13.06					0.21	13.27
App by Air (5 gal)	appl	6.50					0.08	6.58
Quadris Top SBX	oz	19.25					0.23	19.48
Surfactant	pt	0.33						0.33
App by Air (5 gal)	appl	6.50					0.08	6.58
Acephate 90SP	lb	5.57					0.07	5.64
App by Air (5 gal)	appl	6.50					0.08	6.58
Prevathon	oz	18.48					0.22	18.70
Surfactant	pt	0.33						0.33
Bifenthrin	oz	4.99					0.06	5.05
Incidental Pest								
App by Air (5 gal)	appl	6.50					0.05	6.55
IncidentalPestTrt \$8	acre	8.00					0.06	8.06
Header -Soybean	25' Flex		2.51	4.37	2.57		0.04	9.49
Haul Soybeans	bu	13.50					0.05	13.55
Grain Cart Soybean	700 bu		0.44	0.35	0.54		0.01	1.34
TOTALS		302.40	4.95	7.38	6.26	0.00	7.08	328.07
								24.02
								352.09

Note: Cost of production estimates are based on 2017 input prices.

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

Table 10.E Estimated monthly income and expense flows per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

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	495.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	6.50	0.00
FERTILIZERS	41.55	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	6.80	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.60	17.54	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.04	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	73.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.66	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	15.32	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	3.00	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	0.00	0.00	2.31	0.84	0.00	0.00	3.11
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	1.41	0.59	0.00	0.00	2.95
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.43	0.00	0.00	4.72
INTEREST ON OP. CAP.	3.22	0.00	0.00	0.00	0.00	0.00	0.15	2.37	0.31	0.82	0.11	0.10
TOTAL DIRECT EXPENSES	70.92	0.00	0.00	0.00	0.00	0.00	6.65	122.53	19.71	69.27	14.61	24.38
NET INCOME	-70.92	0.00	0.00	0.00	0.00	0.00	-6.65	-122.53	-19.71	-69.27	-14.61	470.62
NET INCOME TO DATE	-70.92	-70.92	-70.92	-70.92	-70.92	-70.92	-77.57	-200.10	-219.81	-289.08	-303.69	166.93

Note: Cost of production estimates are based on 2017 input prices.

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

* Lease costs are based on hourly usage costs.

Table 10.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2018

PRODUCT		75	80	85	90	95	100	105	110	115	120	125	PERCENT		
													PRODUCT	PRICE	
Soybeans		7.42	7.92	8.41	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37			
PERCENT	YIELD	UNIT	dollars												
50	25.00	bu	-135 -159	-123 -147	-110 -134	-98 -122	-86 -110	-73 -97	-61 -85	-49 -73	-36 -60	-24 -48	-11 -35		
60	30.00	bu	-99 -123	-85 -109	-70 -94	-55 -79	-40 -64	-25 -49	-10 -34	4 -19	18 -5	33 9	48 24		
70	35.00	bu	-64 -88	-46 -70	-29 -53	-12 -36	5 -18	22 -1	39 15	57 33	74 50	91 67	109 85		
80	40.00	bu	-28 -52	-8 -32	11 -12	31 7	50 26	70 46	90 66	110 86	130 106	149 125	169 145		
90	45.00	bu	7 -16	29 5	51 27	74 50	96 72	118 94	141 117	163 139	185 161	207 183	230 206		
100	50.00	bu	43 19	67 43	92 68	117 93	142 118	166 142	191 167	216 192	241 217	265 241	290 266		
110	55.00	bu	78 54	106 82	133 109	160 136	187 163	215 191	242 218	269 245	296 272	323 299	351 327		
120	60.00	bu	114 90	144 120	174 150	203 179	233 209	263 239	292 268	322 298	352 328	382 358	411 387		
130	65.00	bu	150 126	182 158	214 190	247 222	279 255	311 287	343 319	375 351	407 383	440 416	472 448		
140	70.00	bu	186 162	220 196	255 231	290 266	324 300	359 335	394 370	428 404	463 439	498 474	532 508		
150	75.00	bu	222 198	259 235	296 272	333 309	370 346	407 383	444 420	481 457	519 495	556 532	593 569		

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 2017 input prices.

Table 11.A Estimated costs per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	2.0000	13.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.75	0.6600	12.38	_____
Potash (60% K2O)	cwt	18.98	1.0000	18.98	_____
FUNGICIDES					
CruiserMaxx	oz	4.25	1.6000	6.80	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Boundary	pt	11.20	2.0000	22.40	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.43	0.7500	5.57	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.47	50.0000	73.50	_____
ADJUVANTS					
Surfactant	pt	3.28	0.6000	1.97	_____
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	46.00	0.3330	15.32	_____
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	13.51	0.3128	4.23	_____
Harvesters	hour	13.51	0.1021	1.38	_____
HAND LABOR					
Implements	hour	9.06	0.1051	0.96	_____
UNALLOCATED LABOR					
hour	hour	13.49	0.3734	5.04	_____
DIESEL FUEL					
Tractors	gal	1.80	3.0592	5.52	_____
Harvesters	gal	1.80	1.3935	2.51	_____
REPAIR & MAINTENANCE					
Implements	acre	4.69	1.0000	4.69	_____
Tractors	acre	1.68	1.0000	1.68	_____
Harvesters	acre	3.49	1.0000	3.49	_____
INTEREST ON OP. CAP.	acre	7.18	1.0000	7.18	_____

TOTAL DIRECT EXPENSES				276.44	_____
FIXED EXPENSES					
Implements	acre	9.30	1.0000	9.30	_____
Tractors	acre	10.65	1.0000	10.65	_____
Harvesters	acre	13.77	1.0000	13.77	_____

TOTAL FIXED EXPENSES				33.72	_____
TOTAL SPECIFIED EXPENSES					
				310.16	_____

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

Table 11.B Summary of estimated costs and returns per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
			dollars	dollars	
INCOME					
Soybeans	bu	9.90	43.0000	425.70	-----
TOTAL INCOME				425.70	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.00	1.0000	13.00	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	31.36	1.0000	31.36	_____
FUNGICIDES	acre	6.80	1.0000	6.80	_____
HERBICIDES	acre	60.90	1.0000	60.90	_____
INSECTICIDES	acre	5.57	1.0000	5.57	_____
SEED/PLANTS	acre	73.50	1.0000	73.50	_____
ADJUVANTS	acre	1.97	1.0000	1.97	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
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	13.51	0.4149	5.61	_____
UNALLOCATED LABOR	hour	13.49	0.3734	5.04	_____
DIESEL FUEL	gal	1.80	4.4528	8.03	_____
REPAIR & MAINTENANCE	acre	9.86	1.0000	9.86	_____
INTEREST ON OP. CAP.	acre	7.18	1.0000	7.18	_____
TOTAL DIRECT EXPENSES				276.44	_____
RETURNS ABOVE DIRECT EXPENSES				149.26	_____
TOTAL FIXED EXPENSES				33.72	_____
TOTAL SPECIFIED EXPENSES				310.16	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				115.54	_____

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

Table 11.C Estimated resource use for field operations, per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

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
Field Cultivate Fld	24'	MFWD 190	0.062	1.00	Oct			0.06	0.06	0.06
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
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
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
Glyphosate 3lbs a.e	oz					32.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Aug			0.02	0.02	0.04
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
Haul Soybeans	bu					43.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Sep			0.02	0.02	0.02

TOTALS								0.41	0.41	0.52
										0.37

Note: Cost of production estimates are based on 2017 input prices.

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

Table 11.D Estimated costs for field operations, per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.16	3.49
Lime (Spread)	ton	15.32					0.73	16.05
Custom Apply Fert	acre	7.50					0.36	7.86
Phosphorus (46% P2O5)	cwt	12.38					0.59	12.97
Potash (60% K2O)	cwt	18.98					0.90	19.88
Disk Harrow	24'		1.44	1.38	2.11		0.23	5.16
Field Cultivate Fld	24'			1.10	0.79	1.60	0.17	3.66
App by Air (5 gal)	appl	6.50					0.18	6.68
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60
2,4-D Amine 4	pt	4.80					0.13	4.93
Plant - Folding	12R-30			1.11	1.83	2.18	0.12	5.24
Soybean Seed RR2X	lb	73.50					1.75	75.25
CruiserMaxx	oz	6.80					0.16	6.96
Boundary	pt	22.40					0.53	22.93
Gramoxone SL 2.0	oz	7.20					0.17	7.37
Surfactant	pt	1.31					0.03	1.34
Spray (Broadcast)	60'		0.50	0.39	0.85		0.03	1.77
Glyphosate 3lbs a.e	oz	4.48					0.09	4.57
Prefix	pt	13.06					0.26	13.32
Soybeans Consultant	acre	6.50					0.13	6.63
Spray (Broadcast)	60'		0.50	0.39	0.85		0.03	1.77
Glyphosate 3lbs a.e	oz	4.48					0.09	4.57
Spray (Broadcast)	60'		0.50	0.39	0.85		0.01	1.75
Acephate 90SP	lb	5.57					0.04	5.61
App by Air (5 gal)	appl	6.50					0.05	6.55
Gramoxone SL	oz	2.40					0.02	2.42
Surfactant	pt	0.66					0.01	0.67
Header -Soybean	25' Flex		2.51	4.37	2.62		0.04	9.54
Haul Soybeans	bu	11.61					0.05	11.66
Grain Cart Soybean	700 bu		0.37	0.32	0.55		1.24	1.09
TOTALS		239.76	8.03	9.86	11.61	0.00	7.18	276.44
								33.72
								310.16

Note: Cost of production estimates are based on 2017 input prices.

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

Table 11.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

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	425.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00
FERTILIZERS	31.36	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	6.80	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.28	29.60	22.02	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	73.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.00	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.61
CUSTOM LIME	15.32	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	3.71	0.00	0.00	0.00	0.00	0.00	2.18	1.70	0.00	0.00	0.85	3.17
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	2.54	0.00	0.00	0.00	0.00	0.00	1.11	1.00	0.00	0.00	0.50	2.88
REPAIR & MAINTENANCE	2.17	0.00	0.00	0.00	0.00	0.00	1.83	0.78	0.00	0.00	0.39	4.69
INTEREST ON OP. CAP.	3.14	0.00	0.00	0.00	0.00	0.43	2.76	0.63	0.00	0.00	0.13	0.09
TOTAL DIRECT EXPENSES	69.07	0.00	0.00	0.00	0.00	16.21	119.09	32.63	0.00	0.00	17.00	22.44
NET INCOME	-69.07	0.00	0.00	0.00	0.00	-16.21	-119.09	-32.63	0.00	0.00	-17.00	403.26
NET INCOME TO DATE	-69.07	-69.07	-69.07	-69.07	-69.07	-85.28	-204.37	-237.00	-237.00	-237.00	-254.00	149.26

Note: Cost of production estimates are based on 2017 input prices.

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

* Lease costs are based on hourly usage costs.

Table 11.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Soybeans		7.42	7.92	8.41	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37	
PERCENT	YIELD	UNIT	dollars										
50	21.50	bu	-110 -144	-100 -134	-89 -123	-79 -112	-68 -102	-57 -91	-47 -80	-36 -70	-25 -59	-15 -48	-4 -38
60	25.80	bu	-80 -113	-67 -101	-54 -88	-41 -75	-29 -62	-16 -50	-3 -37	9 -24	21 -11	34 1	47 13
70	30.10	bu	-49 -83	-34 -68	-19 -53	-4 -38	10 -23	25 -8	39 6	54 21	69 36	84 50	99 65
80	34.40	bu	-18 -52	-1 -35	15 -18	32 -1	49 15	66 32	83 49	100 66	117 83	134 100	151 117
90	38.70	bu	12 -21	31 -2	50 16	69 35	88 54	107 74	127 93	146 112	165 131	184 150	203 169
100	43.00	bu	42 9	64 30	85 51	106 72	127 94	149 115	170 136	191 158	213 179	234 200	255 221
110	47.30	bu	73 39	97 63	120 86	143 110	167 133	190 156	214 180	237 203	260 227	284 250	307 274
120	51.60	bu	104 70	129 96	155 121	180 147	206 172	232 198	257 223	283 249	308 274	334 300	359 326
130	55.90	bu	135 101	162 129	190 156	218 184	245 212	273 239	301 267	328 295	356 322	384 350	411 378
140	60.20	bu	165 132	195 161	225 191	255 221	285 251	314 281	344 310	374 340	404 370	434 400	463 430
150	64.50	bu	196 162	228 194	260 226	292 258	324 290	356 322	388 354	420 386	452 418	483 450	515 482

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 2017 input prices.

Table 12.A Estimated costs per acre
 Soybeans, full-season, RR2X, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
			dollars		dollars
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	18.75	0.6600	12.38	_____
Potash (60% K2O)	cwt	18.98	1.0000	18.98	_____
FUNGICIDES					
CruiserMaxx	oz	4.25	1.6000	6.80	_____
HERBICIDES					
Glyphosate 3lbs a.e.	oz	0.14	96.0000	13.44	_____
Select Max	pt	12.64	1.0000	12.64	_____
Fierce	oz	7.54	3.5000	26.39	_____
Gramoxone SL 2.0	oz	0.15	96.0000	14.40	_____
Boundary	pt	11.20	2.0000	22.40	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Dimilin 2L	oz	1.45	1.0000	1.45	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Baythroid XL	oz	2.65	1.0650	2.82	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.47	50.0000	73.50	_____
ADJUVANTS					
Surfactant	pt	3.28	1.4500	4.76	_____
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	46.00	0.3330	15.32	_____
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	13.51	0.4647	6.27	_____
Harvesters	hour	13.51	0.1021	1.38	_____
HAND LABOR					
Implements	hour	9.06	0.1523	1.38	_____
UNALLOCATED LABOR					
hour	13.48	0.5102	6.88	_____	
DIESEL FUEL					
Tractors	gal	1.80	4.6579	8.40	_____
Harvesters	gal	1.80	1.3935	2.51	_____
REPAIR & MAINTENANCE					
Implements	acre	6.17	1.0000	6.17	_____
Tractors	acre	2.58	1.0000	2.58	_____
Harvesters	acre	3.49	1.0000	3.49	_____
INTEREST ON OP. CAP.	acre	6.91	1.0000	6.91	_____
TOTAL DIRECT EXPENSES					
				339.81	_____
FIXED EXPENSES					
Implements	acre	11.91	1.0000	11.91	_____
Tractors	acre	16.27	1.0000	16.27	_____
Harvesters	acre	13.77	1.0000	13.77	_____
TOTAL FIXED EXPENSES					
				41.95	_____
TOTAL SPECIFIED EXPENSES					
				381.76	_____

Note: Cost of production estimates are based on 2017 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.90	40.0000	396.00	_____
TOTAL INCOME				396.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	31.36	1.0000	31.36	_____
FUNGICIDES	acre	6.80	1.0000	6.80	_____
HERBICIDES	acre	102.33	1.0000	102.33	_____
INSECTICIDES	acre	22.75	1.0000	22.75	_____
SEED/PLANTS	acre	73.50	1.0000	73.50	_____
ADJUVANTS	acre	4.75	1.0000	4.75	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
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	13.51	0.5669	7.65	_____
UNALLOCATED LABOR	hour	13.48	0.5102	6.88	_____
DIESEL FUEL	gal	1.80	6.0515	10.91	_____
REPAIR & MAINTENANCE	acre	12.24	1.0000	12.24	_____
INTEREST ON OP. CAP.	acre	6.91	1.0000	6.91	_____
TOTAL DIRECT EXPENSES				339.81	_____
RETURNS ABOVE DIRECT EXPENSES				56.19	_____
TOTAL FIXED EXPENSES				41.95	_____
TOTAL SPECIFIED EXPENSES				381.76	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				14.24	_____

Note: Cost of production estimates are based on 2017 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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-Fold	12R-30	MFWD	225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Spray (Broadcast)	60'	MFWD	190	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz						32.0000				
Select Max	pt						1.0000				
Surfactant	pt						0.4000				
Custom Apply Fert	acre				1.00	Apr	1.0000				
Phosphorus(46% P205)	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	32.0000		0.02	0.02	0.04
Glyphosate 3lbs a.e	oz										0.02
Spray (Broadcast)	60'	MFWD	190	0.028	0.50	Jul		0.01	0.01	0.02	0.01
Dimilin 2L	oz						1.0000				
Surfactant	pt						0.0500				
Spray (Broadcast)	60'	MFWD	190	0.028	1.00	Aug		0.02	0.02	0.04	0.02
Prevathon	oz						14.0000				
Spray (Broadcast)	60'	MFWD	190	0.028	0.50	Aug		0.01	0.01	0.02	0.01
Baythroid XL	oz						1.0650				
App by Air (5 gal)	appl				1.00	Sep	1.0000				
Gramoxone SL	oz						16.0000				
Surfactant	pt						0.2000				
Header -Soybean	25' Flex	265 hp		0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu						40.0000				
Grain Cart Soybean	700 bu	MFWD	190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS								0.56	0.56	0.71	0.51

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.01	3.34
Lime (Spread)	ton	15.32					0.06	15.38
Disk Harrow	24'		1.44	1.38	2.11		0.02	4.95
Field Cultivate Fld	24'		1.10	0.79	1.60		0.01	3.50
Bed/Lister-Roll-Fold	12R-30		1.30	0.87	1.60		0.01	3.78
Spray (Broadcast)	60'		0.50	0.39	0.85		0.06	1.80
Glyphosate 3lbs a.e.	oz	4.48					0.16	4.64
Select Max	pt	12.64					0.45	13.09
Surfactant	pt	1.31					0.05	1.36
Custom Apply Fert	acre	7.50					0.21	7.71
Phosphorus (46% P2O5)	cwt	12.38					0.34	12.72
Potash (60% K2O)	cwt	18.98					0.53	19.51
Spray (Broadcast)	60'		0.50	0.39	0.85		0.05	1.79
Fierce	oz	26.39					0.73	27.12
Gramoxone SL 2.0	oz	7.20					0.20	7.40
Surfactant	pt	1.31					0.04	1.35
Soybeans Consultant	acre	6.50					0.15	6.65
Plant & Pre-Folding	12R-30		1.19	2.16	2.34		0.14	5.83
Soybean Seed RR2X	lb	73.50					1.75	75.25
CruiserMaxx	oz	6.80					0.16	6.96
Boundary	pt	22.40					0.53	22.93
Gramoxone SL 2.0	oz	7.20					0.17	7.37
Surfactant	pt	1.31					0.03	1.34
Spray (Broadcast)	60'		0.50	0.39	0.85		0.04	1.78
Glyphosate 3lbs a.e.	oz	4.48					0.11	4.59
Prefix	pt	13.06					0.31	13.37
Spray (Broadcast)	60'		0.50	0.39	0.85		0.03	1.77
Glyphosate 3lbs a.e.	oz	4.48					0.09	4.57
Spray (Broadcast)	60'		0.25	0.20	0.42		0.01	0.88
Dimilin 2L	oz	1.45					0.02	1.47
Surfactant	pt	0.16						0.16
Spray (Broadcast)	60'		0.50	0.39	0.85		0.02	1.76
Prevathon	oz	18.48					0.22	18.70
Spray (Broadcast)	60'		0.25	0.20	0.42		0.01	0.88
Baythroid XL	oz	2.82					0.03	2.85
App by Air (5 gal)	appl	6.50					0.05	6.55
Gramoxone SL	oz	2.40					0.02	2.42
Surfactant	pt	0.66					0.01	0.67
Header -Soybean	25' Flex		2.51	4.37	2.62		0.04	9.54
Haul Soybeans	bu	10.80					0.04	10.84
Grain Cart Soybean	700 bu		0.37	0.32	0.55			1.24
TOTALS		293.84	10.91	12.24	15.91	0.00	6.91	339.81
								41.95
								381.76

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

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	396.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	31.36	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	6.80	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	17.12	0.00	33.59	47.14	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	1.45	21.30	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	73.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.31	0.00	1.31	1.31	0.00	0.16	0.00	0.66	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.32
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	0.85	0.00	0.85	3.19	0.85	0.42	1.27	0.00	8.48
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.50	0.00	0.50	1.69	0.50	0.25	0.75	0.00	6.72
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.39	0.00	0.39	2.55	0.39	0.20	0.59	0.00	7.73
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.72	0.00	2.10	3.39	0.12	0.03	0.28	0.08	0.19
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	20.89	0.00	77.60	146.07	6.34	2.51	24.19	9.64	52.57
NET INCOME	0.00	0.00	0.00	-20.89	0.00	-77.60	-146.07	-6.34	-2.51	-24.19	-9.64	343.43
NET INCOME TO DATE	0.00	0.00	0.00	-20.89	-20.89	-98.49	-244.56	-250.90	-253.41	-277.60	-287.24	56.19

Note: Cost of production estimates are based on 2017 input prices.

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

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a 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, 2018

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Soybeans		7.42	7.92	8.41	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37	
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-185 -227	-175 -217	-166 -208	-156 -198	-146 -188	-136 -178	-126 -168	-116 -158	-106 -148	-96 -138	-86 -128
60	24.00	bu	-157 -199	-145 -187	-133 -175	-121 -163	-109 -151	-97 -139	-85 -127	-74 -116	-62 -104	-50 -92	-38 -80
70	28.00	bu	-128 -170	-114 -156	-100 -142	-87 -129	-73 -115	-59 -101	-45 -87	-31 -73	-17 -59	-3 -45	9 -32
80	32.00	bu	-100 -141	-84 -126	-68 -110	-52 -94	-36 -78	-20 -62	-5 -46	10 -31	26 -15	42 0	58 16
90	36.00	bu	-71 -113	-53 -95	-35 -77	-17 -59	-0 -42	17 -24	35 -6	53 11	71 29	88 47	106 64
100	40.00	bu	-42 -84	-23 -64	-3 -45	16 -25	36 -5	56 14	75 34	95 53	115 73	135 93	155 113
110	44.00	bu	-14 -56	7 -34	29 -12	51 9	72 30	94 52	116 74	138 96	160 118	181 139	203 161
120	48.00	bu	14 -27	38 -3	61 19	85 43	109 67	133 91	156 115	180 138	204 162	228 186	252 210
130	52.00	bu	43 1	68 26	94 52	120 78	145 104	171 129	197 155	223 181	248 207	274 232	300 258
140	56.00	bu	71 29	99 57	127 85	154 112	182 140	210 168	237 196	265 223	293 251	321 279	348 306
150	60.00	bu	100 58	129 88	159 117	189 147	219 177	248 206	278 236	308 266	337 295	367 325	397 355

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 2017 input prices.

Table 13.A Estimated costs per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.75	0.8700	16.31	_____
Potash (60% K2O)	cwt	18.98	1.3300	25.24	_____
FUNGICIDES					
CruiserMaxx	oz	4.25	1.6000	6.80	_____
HERBICIDES					
Boundary	pt	11.20	2.0000	22.40	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.43	0.7500	5.57	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.78	6.4000	4.99	_____
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.47	50.0000	73.50	_____
ADJUVANTS					
Surfactant	pt	3.28	0.5000	1.64	_____
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	46.00	0.3330	15.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	13.51	0.1171	1.58	_____
Harvesters	hour	13.51	0.1021	1.38	_____
HAND LABOR					
implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
DIESEL FUEL					
Tractors	gal	1.80	1.3567	2.44	_____
Harvesters	gal	1.80	1.3935	2.51	_____
REPAIR & MAINTENANCE					
implements	acre	3.12	1.0000	3.12	_____
Tractors	acre	0.77	1.0000	0.77	_____
Harvesters	acre	3.49	1.0000	3.49	_____
INTEREST ON OP. CAP.	acre	6.75	1.0000	6.75	_____
TOTAL DIRECT EXPENSES				294.91	_____
FIXED EXPENSES					
implements	acre	5.40	1.0000	5.40	_____
Tractors	acre	4.85	1.0000	4.85	_____
Harvesters	acre	13.77	1.0000	13.77	_____
TOTAL FIXED EXPENSES				24.02	_____
TOTAL SPECIFIED EXPENSES				318.93	_____

Note: Cost of production estimates are based on 2017 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.90	25.0000	247.50	_____
TOTAL INCOME				247.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
FERTILIZERS	acre	41.55	1.0000	41.55	_____
FUNGICIDES	acre	6.80	1.0000	6.80	_____
HERBICIDES	acre	47.14	1.0000	47.14	_____
INSECTICIDES	acre	37.04	1.0000	37.04	_____
SEED/PLANTS	acre	73.50	1.0000	73.50	_____
ADJUVANTS	acre	1.64	1.0000	1.64	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	13.51	0.2193	2.96	_____
UNALLOCATED LABOR	hour	13.57	0.1886	2.56	_____
DIESEL FUEL	gal	1.80	2.7503	4.95	_____
REPAIR & MAINTENANCE	acre	7.38	1.0000	7.38	_____
INTEREST ON OP. CAP.	acre	6.75	1.0000	6.75	_____
TOTAL DIRECT EXPENSES				294.91	_____
RETURNS ABOVE DIRECT EXPENSES				-47.41	_____
TOTAL FIXED EXPENSES				24.02	_____
TOTAL SPECIFIED EXPENSES				318.93	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-71.43	_____

Note: Cost of production estimates are based on 2017 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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
Soybean Seed RR2X	lb						50.0000				
CruiserMaxx	oz						1.6000				
Optimize	oz						1.4000				
Boundary	pt						2.0000				
Gramoxone SL 2.0	oz						48.0000				
Surfactant	pt						0.4000				
Spray (Broadcast)	60'	MFWD	225	0.028	1.00	Jul			0.02	0.02	0.04
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
Haul Soybeans	bu						25.0000				
Grain Cart Soybean	700 bu	MFWD	225	0.021	1.00	Oct			0.02	0.02	0.02
TOTALS									0.21	0.21	0.30
											0.18

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Soil Test	acre	3.33					0.16	3.49
Lime (Spread)	ton	15.32					0.73	16.05
Custom Apply Fert	acre	7.50					0.36	7.86
Phosphorus (46% P2O5)	cwt	16.31					0.77	17.08
Potash (60% K2O)	cwt	25.24					1.20	26.44
Soybeans Consultant	acre	6.50					0.15	6.65
Plant & Pre-Folding	12R-30			1.41	2.23	2.31		6.22
Soybean Seed RR2X	lb	73.50					1.45	74.95
CruiserMaxx	oz	6.80					0.13	6.93
Optimize	oz	3.00					0.06	3.06
Boundary	pt	22.40					0.44	22.84
Gramoxone SL 2.0	oz	7.20					0.14	7.34
Surfactant	pt	1.31					0.03	1.34
Spray (Broadcast)	60'		0.59	0.43	0.84		0.03	1.89
Glyphosate 3lbs a.e	oz	4.48					0.07	4.55
Prefix	pt	13.06					0.21	13.27
App by Air (5 gal)	appl	6.50					0.08	6.58
Acephate 90SP	lb	5.57					0.07	5.64
App by Air (5 gal)	appl	6.50					0.08	6.58
Prevathon	oz	18.48					0.22	18.70
Surfactant	pt	0.33						0.33
Bifenthrin	oz	4.99					0.06	5.05
Incidental Pest								
App by Air (5 gal)	appl	6.50					0.05	6.55
IncidentalPestTrt \$8	acre	8.00					0.06	8.06
Header -Soybean	25' Flex		2.51	4.37	2.57		0.04	9.49
Haul Soybeans	bu	6.75					0.03	6.78
Grain Cart Soybean	700 bu		0.44	0.35	0.54		0.01	1.34
TOTALS		269.57	4.95	7.38	6.26	0.00	6.75	294.91
								24.02
								318.93

Note: Cost of production estimates are based on 2017 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

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	247.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	6.50	0.00
FERTILIZERS	41.55	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	6.80	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.60	17.54	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.04	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	73.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.33	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	15.32	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	3.00	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	0.00	0.00	2.31	0.84	0.00	0.00	3.11
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	1.41	0.59	0.00	0.00	2.95
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.43	0.00	0.00	4.72
INTEREST ON OP. CAP.	3.22	0.00	0.00	0.00	0.00	0.00	0.15	2.37	0.31	0.51	0.11	0.08
TOTAL DIRECT EXPENSES	70.92	0.00	0.00	0.00	0.00	0.00	6.65	122.53	19.71	42.88	14.61	17.61
NET INCOME	-70.92	0.00	0.00	0.00	0.00	0.00	-6.65	-122.53	-19.71	-42.88	-14.61	229.89
NET INCOME TO DATE	-70.92	-70.92	-70.92	-70.92	-70.92	-70.92	-77.57	-200.10	-219.81	-262.69	-277.30	-47.41

Note: Cost of production estimates are based on 2017 input prices.

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

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a 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, 2018

PRODUCT	PERCENT	75	80	85	90	95	100	105	110	115	120	125	PRODUCT PRICE									
													7.42	7.92	8.41	8.91	9.40	9.90	10.39	10.89	11.38	11.88
PERCENT	YIELD	UNIT	dollars																			
	50	12.50 bu	-198	-192	-186	-180	-173	-167	-161	-155	-149	-143	-136									
			-222	-216	-210	-204	-197	-191	-185	-179	-173	-167	-160									
	60	15.00 bu	-180	-173	-165	-158	-151	-143	-136	-128	-121	-113	-106									
			-204	-197	-189	-182	-175	-167	-160	-152	-145	-138	-130									
	70	17.50 bu	-162	-154	-145	-136	-128	-119	-110	-102	-93	-84	-76									
			-186	-178	-169	-160	-152	-143	-134	-126	-117	-108	-100									
	80	20.00 bu	-145	-135	-125	-115	-105	-95	-85	-75	-65	-55	-46									
			-169	-159	-149	-139	-129	-119	-109	-99	-89	-79	-70									
	90	22.50 bu	-127	-116	-104	-93	-82	-71	-60	-49	-38	-26	-15									
			-151	-140	-128	-117	-106	-95	-84	-73	-62	-50	-39									
	100	25.00 bu	-109	-96	-84	-72	-59	-47	-35	-22	-10	2	14									
			-133	-120	-108	-96	-83	-71	-59	-46	-34	-21	-9									
	110	27.50 bu	-91	-77	-64	-50	-36	-23	-9	3	17	31	44									
			-115	-101	-88	-74	-60	-47	-33	-20	-6	7	20									
	120	30.00 bu	-73	-58	-43	-28	-14	0	15	30	45	60	74									
			-97	-82	-67	-52	-38	-23	-8	6	21	36	50									
	130	32.50 bu	-55	-39	-23	-7	8	24	40	56	73	89	105									
			-79	-63	-47	-31	-15	0	16	32	49	65	81									
	140	35.00 bu	-37	-20	-3	14	31	48	66	83	100	118	135									
			-61	-44	-27	-9	7	24	42	59	76	94	111									
	150	37.50 bu	-19	-1	17	35	54	72	91	110	128	147	165									
			-43	-25	-6	11	30	48	67	86	104	123	141									

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 2017 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	18.75	0.8700	16.31	
Potash (60% K2O)	cwt	18.98	1.3300	25.24	
FUNGICIDES					
CruiserMaxx	oz	4.25	1.6000	6.80	
Quadris Top SBX	oz	2.75	7.0000	19.25	
HERBICIDES					
Boundary	pt	11.20	2.0000	22.40	
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	
Liberty 280	oz	0.60	29.0000	17.40	
Dual Magnum	pt	13.80	1.0000	13.80	
INSECTICIDES					
Acephate 90SP	lb	7.43	0.7500	5.57	
Prevathon	oz	1.32	14.0000	18.48	
Bifenthrin	oz	0.78	6.4000	4.99	
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	
SEED/PLANTS					
Soybean Seed LL	lb	1.28	50.0000	64.00	
ADJUVANTS					
Surfactant	pt	3.28	0.6000	1.97	
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	46.00	0.3330	15.32	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	13.51	0.1171	1.58	
Harvesters	hour	13.51	0.1021	1.38	
HAND LABOR					
implements	hour	9.06	0.0817	0.74	
UNALLOCATED LABOR					
hour	hour	13.57	0.1886	2.56	
DIESEL FUEL					
Tractors	gal	1.80	1.3567	2.44	
Harvesters	gal	1.80	1.3935	2.51	
REPAIR & MAINTENANCE					
implements	acre	3.12	1.0000	3.12	
Tractors	acre	0.77	1.0000	0.77	
Harvesters	acre	3.49	1.0000	3.49	
INTEREST ON OP. CAP.	acre	7.12	1.0000	7.12	
TOTAL DIRECT EXPENSES				332.27	
FIXED EXPENSES					
implements	acre	5.40	1.0000	5.40	
Tractors	acre	4.85	1.0000	4.85	
Harvesters	acre	13.77	1.0000	13.77	
TOTAL FIXED EXPENSES				24.02	
TOTAL SPECIFIED EXPENSES				356.29	

Note: Cost of production estimates are based on 2017 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
			dollars	dollars	
INCOME					
Soybeans	bu	9.90	50.0000	495.00	_____
TOTAL INCOME				495.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
FERTILIZERS	acre	41.55	1.0000	41.55	_____
FUNGICIDES	acre	26.05	1.0000	26.05	_____
HERBICIDES	acre	60.80	1.0000	60.80	_____
INSECTICIDES	acre	37.04	1.0000	37.04	_____
SEED/PLANTS	acre	64.00	1.0000	64.00	_____
ADJUVANTS	acre	1.97	1.0000	1.97	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	13.51	0.2193	2.96	_____
UNALLOCATED LABOR	hour	13.57	0.1886	2.56	_____
DIESEL FUEL	gal	1.80	2.7503	4.95	_____
REPAIR & MAINTENANCE	acre	7.38	1.0000	7.38	_____
INTEREST ON OP. CAP.	acre	7.12	1.0000	7.12	_____
TOTAL DIRECT EXPENSES				332.27	_____
RETURNS ABOVE DIRECT EXPENSES				162.73	_____
TOTAL FIXED EXPENSES				24.02	_____
TOTAL SPECIFIED EXPENSES				356.29	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				138.71	_____

Note: Cost of production estimates are based on 2017 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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
Soybean Seed LL	lb						50.0000				
CruiserMaxx	oz						1.6000				
Optimize	oz						1.4000				
Boundary	pt						2.0000				
Gramoxone SL 2.0	oz						48.0000				
Surfactant	pt						0.4000				
Spray (Broadcast)	60'	MFWD	225	0.028	1.00	Jul			0.02	0.02	0.04
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
Haul Soybeans	bu						50.0000				
Grain Cart Soybean	700 bu	MFWD	225	0.021	1.00	Oct			0.02	0.02	0.02
TOTALS									0.21	0.21	0.30
											0.18

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Soil Test	acre	3.33					0.16	3.49
Lime (Spread)	ton	15.32					0.73	16.05
Custom Apply Fert	acre	7.50					0.36	7.86
Phosphorus (46% P2O5)	cwt	16.31					0.77	17.08
Potash (60% K2O)	cwt	25.24					1.20	26.44
Soybeans Consultant	acre	6.50					0.15	6.65
Plant & Pre-Folding	12R-30			1.41	2.23	2.31		6.22
Soybean Seed LL	lb	64.00					1.27	65.27
CruiserMaxx	oz	6.80					0.13	6.93
Optimize	oz	3.00					0.06	3.06
Boundary	pt	22.40					0.44	22.84
Gramoxone SL 2.0	oz	7.20					0.14	7.34
Surfactant	pt	1.31					0.03	1.34
Spray (Broadcast)	60'			0.59	0.43	0.84		1.45
Liberty 280	oz	17.40					0.28	17.68
Dual Magnum	pt	13.80					0.22	14.02
App by Air (5 gal)	appl	6.50					0.08	6.58
Quadris Top SBX	oz	19.25					0.23	19.48
Surfactant	pt	0.33						0.33
App by Air (5 gal)	appl	6.50					0.08	6.58
Acephate 90SP	lb	5.57					0.07	5.64
App by Air (5 gal)	appl	6.50					0.08	6.58
Prevathon	oz	18.48					0.22	18.70
Surfactant	pt	0.33						0.33
Bifenthrin	oz	4.99					0.06	5.05
Incidental Pest								
App by Air (5 gal)	appl	6.50					0.05	6.55
IncidentalPestTrt \$8	acre	8.00					0.06	8.06
Header -Soybean	25' Flex			2.51	4.37	2.57		15.10
Haul Soybeans	bu	13.50					0.05	13.55
Grain Cart Soybean	700 bu			0.44	0.35	0.54		1.25
TOTALS		306.56	4.95	7.38	6.26	0.00	7.12	332.27
								24.02
								356.29

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

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	495.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	6.50	0.00
FERTILIZERS	41.55	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	6.80	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.60	31.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.04	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.66	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	15.32	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	3.00	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	0.00	0.00	2.31	0.84	0.00	0.00	3.11
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	1.41	0.59	0.00	0.00	2.95
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.43	0.00	0.00	4.72
INTEREST ON OP. CAP.	3.22	0.00	0.00	0.00	0.00	0.00	0.15	2.19	0.53	0.82	0.11	0.10
TOTAL DIRECT EXPENSES	70.92	0.00	0.00	0.00	0.00	0.00	6.65	112.85	33.59	69.27	14.61	24.38
NET INCOME	-70.92	0.00	0.00	0.00	0.00	0.00	-6.65	-112.85	-33.59	-69.27	-14.61	470.62
NET INCOME TO DATE	-70.92	-70.92	-70.92	-70.92	-70.92	-70.92	-77.57	-190.42	-224.01	-293.28	-307.89	162.73

Note: Cost of production estimates are based on 2017 input prices.

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

Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a 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, 2018

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.42	7.92	8.41	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37
<hr/>													
PERCENT	YIELD	UNIT	dollars										
50	25.00	bu	-139 -163	-127 -151	-115 -139	-102 -126	-90 -114	-77 -102	-65 -89	-53 -77	-40 -64	-28 -52	-16 -40
60	30.00	bu	-104 -128	-89 -113	-74 -98	-59 -83	-44 -68	-29 -53	-15 -39	-0 -24	14 -9	29 5	44 20
70	35.00	bu	-68 -92	-51 -75	-33 -57	-16 -40	0 -23	18 -5	35 11	52 28	70 46	87 63	104 80
80	40.00	bu	-32 -56	-12 -36	7 -16	26 2	46 22	66 42	86 62	106 82	125 101	145 121	165 141
90	45.00	bu	3 -20	25 1	47 23	70 46	92 68	114 90	136 112	159 135	181 157	203 179	225 201
100	50.00	bu	38 14	63 39	88 64	113 89	137 113	162 138	187 163	212 188	236 212	261 237	286 262
110	55.00	bu	74 50	101 77	129 105	156 132	183 159	210 186	238 214	265 241	292 268	319 295	347 322
120	60.00	bu	110 86	140 116	169 145	199 175	229 205	259 235	288 264	318 294	348 324	377 353	407 383
130	65.00	bu	146 122	178 154	210 186	242 218	274 250	307 283	339 315	371 347	403 379	435 411	468 444
140	70.00	bu	182 158	216 192	251 227	286 261	320 296	355 331	389 365	424 400	459 435	493 469	528 504
150	75.00	bu	217 193	254 230	292 268	329 305	366 342	403 379	440 416	477 453	514 490	551 527	589 565

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 2017 input prices.

Table 15.A Estimated costs per acre
 Soybeans, full-season, LL, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
CUSTOM SPRAY							
App by Air (5 gal)	appl	6.50	2.0000	13.00	_____		
HARVEST AIDS							
Gramoxone SL	oz	0.15	16.0000	2.40	_____		
FERTILIZERS							
Phosphorus(46% P2O5)	cwt	18.75	0.6600	12.38	_____		
Potash (60% K2O)	cwt	18.98	1.0000	18.98	_____		
FUNGICIDES							
CruiserMaxx	oz	4.25	1.6000	6.80	_____		
HERBICIDES							
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____		
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____		
Boundary	pt	11.20	2.0000	22.40	_____		
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____		
Liberty 280	oz	0.60	58.0000	34.80	_____		
Dual Magnum	pt	13.80	1.0000	13.80	_____		
Zidua	oz	9.05	1.5000	13.58	_____		
INSECTICIDES							
Acephate 90SP	lb	7.43	0.7500	5.57	_____		
SEED/PLANTS							
Soybean Seed LL	lb	1.28	50.0000	64.00	_____		
ADJUVANTS							
Surfactant	pt	3.28	0.6000	1.97	_____		
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	46.00	0.3330	15.32	_____		
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	13.51	0.3128	4.23	_____		
Harvesters	hour	13.51	0.1021	1.38	_____		
HAND LABOR							
Implements	hour	9.06	0.1051	0.96	_____		
UNALLOCATED LABOR							
hour	13.49	0.3734	5.04	_____			
DIESEL FUEL							
Tractors	gal	1.80	3.0592	5.52	_____		
Harvesters	gal	1.80	1.3935	2.51	_____		
REPAIR & MAINTENANCE							
Implements	acre	4.69	1.0000	4.69	_____		
Tractors	acre	1.68	1.0000	1.68	_____		
Harvesters	acre	3.49	1.0000	3.49	_____		
INTEREST ON OP. CAP.	acre	7.73	1.0000	7.73	_____		
<hr/>							
TOTAL DIRECT EXPENSES				307.65	_____		
FIXED EXPENSES							
Implements	acre	9.30	1.0000	9.30	_____		
Tractors	acre	10.65	1.0000	10.65	_____		
Harvesters	acre	13.77	1.0000	13.77	_____		
<hr/>							
TOTAL FIXED EXPENSES				33.72	_____		
<hr/>							
TOTAL SPECIFIED EXPENSES				341.37	_____		

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

Table 15.B Summary of estimated costs and returns per acre
 Soybeans, full-season, LL, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	9.90	43.0000	425.70	_____
TOTAL INCOME				425.70	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.00	1.0000	13.00	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	31.36	1.0000	31.36	_____
FUNGICIDES	acre	6.80	1.0000	6.80	_____
HERBICIDES	acre	101.06	1.0000	101.06	_____
INSECTICIDES	acre	5.57	1.0000	5.57	_____
SEED/PLANTS	acre	64.00	1.0000	64.00	_____
ADJUVANTS	acre	1.97	1.0000	1.97	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.61	1.0000	11.61	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
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	13.51	0.4149	5.61	_____
UNALLOCATED LABOR	hour	13.49	0.3734	5.04	_____
DIESEL FUEL	gal	1.80	4.4528	8.03	_____
REPAIR & MAINTENANCE	acre	9.86	1.0000	9.86	_____
INTEREST ON OP. CAP.	acre	7.73	1.0000	7.73	_____
TOTAL DIRECT EXPENSES				307.65	_____
RETURNS ABOVE DIRECT EXPENSES				118.05	_____
TOTAL FIXED EXPENSES				33.72	_____
TOTAL SPECIFIED EXPENSES				341.37	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				84.33	_____

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

Table 15.C Estimated resource use for field operations, per acre
 Soybeans, full-season, LL, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

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

TOTALS						0.41	0.41	0.52	0.37	

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Soil Test	acre	3.33					0.16	3.49
Lime (Spread)	ton	15.32					0.73	16.05
Custom Apply Fert	acre	7.50					0.36	7.86
Phosphorus (46% P2O5)	cwt	12.38					0.59	12.97
Potash (60% K2O)	cwt	18.98					0.90	19.88
Disk Harrow	24'		1.44	1.38	2.11		0.23	5.16
Field Cultivate Fld	24'			1.10	0.79	1.60	0.17	3.66
App by Air (5 gal)	appl	6.50					0.18	6.68
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60
2,4-D Amine 4	pt	4.80					0.13	4.93
Plant - Folding	12R-30			1.11	1.83	2.18	0.12	5.24
Soybean Seed LL	lb	64.00					1.52	65.52
CruiserMaxx	oz	6.80					0.16	6.96
Boundary	pt	22.40					0.53	22.93
Gramoxone SL 2.0	oz	7.20					0.17	7.37
Surfactant	pt	1.31					0.03	1.34
Spray (Broadcast)	60'		0.50	0.39	0.85		0.03	1.77
Liberty 280	oz	17.40					0.34	17.74
Dual Magnum	pt	13.80					0.27	14.07
Soybeans Consultant	acre	6.50					0.13	6.63
Spray (Broadcast)	60'		0.50	0.39	0.85		0.03	1.77
Liberty 280	oz	17.40					0.34	17.74
Zidua	oz	13.58					0.27	13.85
Spray (Broadcast)	60'		0.50	0.39	0.85		0.01	1.75
Acephate 90SP	lb	5.57					0.04	5.61
App by Air (5 gal)	appl	6.50					0.05	6.55
Gramoxone SL	oz	2.40					0.02	2.42
Surfactant	pt	0.66					0.01	0.67
Header -Soybean	25' Flex		2.51	4.37	2.62		0.04	9.54
Haul Soybeans	bu	11.61					0.05	11.66
Grain Cart Soybean	700 bu		0.37	0.32	0.55			1.24
TOTALS		270.42	8.03	9.86	11.61	0.00	7.73	307.65
								33.72
								341.37

Note: Cost of production estimates are based on 2017 input prices.

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second 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, 2018

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	425.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00
FERTILIZERS	31.36	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	6.80	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.28	29.60	62.18	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	5.57	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.00	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.61
CUSTOM LIME	15.32	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	3.71	0.00	0.00	0.00	0.00	0.00	2.18	1.70	0.00	0.00	0.85	3.17
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	2.54	0.00	0.00	0.00	0.00	0.00	1.11	1.00	0.00	0.00	0.50	2.88
REPAIR & MAINTENANCE	2.17	0.00	0.00	0.00	0.00	0.00	1.83	0.78	0.00	0.00	0.39	4.69
INTEREST ON OP. CAP.	3.14	0.00	0.00	0.00	0.00	0.43	2.53	1.41	0.00	0.00	0.13	0.09
TOTAL DIRECT EXPENSES	69.07	0.00	0.00	0.00	0.00	16.21	109.36	73.57	0.00	0.00	17.00	22.44
NET INCOME	-69.07	0.00	0.00	0.00	0.00	-16.21	-109.36	-73.57	0.00	0.00	-17.00	403.26
NET INCOME TO DATE	-69.07	-69.07	-69.07	-69.07	-69.07	-85.28	-194.64	-268.21	-268.21	-268.21	-285.21	118.05

Note: Cost of production estimates are based on 2017 input prices.

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

* Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, LL, April planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Soybeans		7.42	7.92	8.41	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37	
PERCENT YIELD UNIT													
		dollars											
50	21.50	bu	-142 -175	-131 -165	-120 -154	-110 -143	-99 -133	-88 -122	-78 -112	-67 -101	-57 -90	-46 -80	-35 -69
60	25.80	bu	-111 -145	-98 -132	-85 -119	-73 -106	-60 -94	-47 -81	-34 -68	-22 -55	-9 -42	3 -30	16 -17
70	30.10	bu	-80 -114	-65 -99	-50 -84	-35 -69	-21 -54	-6 -39	8 -24	23 -10	38 4	53 19	68 34
80	34.40	bu	-49 -83	-32 -66	-15 -49	1 -32	18 -15	35 1	52 18	69 35	86 52	103 69	120 86
90	38.70	bu	-19 -52	0 -33	19 -14	38 4	57 23	76 42	95 62	114 81	134 100	153 119	172 138
100	43.00	bu	11 -22	32 -0	54 20	75 41	96 63	118 84	139 105	160 126	181 148	203 169	224 190
110	47.30	bu	42 8	65 32	89 55	112 78	136 102	159 125	182 149	206 172	229 195	253 219	276 242
120	51.60	bu	73 39	98 64	124 90	149 116	175 141	200 167	226 192	251 218	277 243	303 269	328 294
130	55.90	bu	103 70	131 97	159 125	186 153	214 180	242 208	269 236	297 263	325 291	352 319	380 346
140	60.20	bu	134 100	164 130	194 160	224 190	253 220	283 249	313 279	343 309	373 339	402 369	432 398
150	64.50	bu	165 131	197 163	229 195	261 227	293 259	325 291	356 323	388 355	420 387	452 419	484 450

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 2017 input prices.

Table 16.A Estimated costs per acre
 Soybeans, full-season, LL, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
CUSTOM SPRAY							
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____		
HARVEST AIDS							
Gramoxone SL	oz	0.15	16.0000	2.40	_____		
FERTILIZERS							
Phosphorus(46% P2O5)	cwt	18.75	0.6600	12.38	_____		
Potash (60% K2O)	cwt	18.98	1.0000	18.98	_____		
FUNGICIDES							
CruiserMaxx	oz	4.25	1.6000	6.80	_____		
HERBICIDES							
Glyphosate 3lbs a.e.	oz	0.14	32.0000	4.48	_____		
Select Max	pt	12.64	1.0000	12.64	_____		
Fierce	oz	7.54	3.5000	26.39	_____		
Gramoxone SL 2.0	oz	0.15	96.0000	14.40	_____		
Boundary	pt	11.20	2.0000	22.40	_____		
Liberty 280	oz	0.60	58.0000	34.80	_____		
Dual Magnum	pt	13.80	1.0000	13.80	_____		
Zidua	oz	9.05	1.5000	13.58	_____		
INSECTICIDES							
Dimilin 2L	oz	1.45	1.0000	1.45	_____		
Prevathon	oz	1.32	14.0000	18.48	_____		
Baythroid XL	oz	2.65	1.0650	2.82	_____		
SEED/PLANTS							
Soybean Seed LL	lb	1.28	50.0000	64.00	_____		
ADJUVANTS							
Surfactant	pt	3.28	1.4500	4.76	_____		
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	46.00	0.3330	15.32	_____		
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	13.51	0.4647	6.27	_____		
Harvesters	hour	13.51	0.1021	1.38	_____		
HAND LABOR							
Implements	hour	9.06	0.1523	1.38	_____		
UNALLOCATED LABOR							
hour	13.48	0.5102	6.88	_____			
DIESEL FUEL							
Tractors	gal	1.80	4.6579	8.40	_____		
Harvesters	gal	1.80	1.3935	2.51	_____		
REPAIR & MAINTENANCE							
Implements	acre	6.17	1.0000	6.17	_____		
Tractors	acre	2.58	1.0000	2.58	_____		
Harvesters	acre	3.49	1.0000	3.49	_____		
INTEREST ON OP. CAP.	acre	7.52	1.0000	7.52	_____		
<hr/>							
TOTAL DIRECT EXPENSES				371.08	_____		
FIXED EXPENSES							
Implements	acre	11.91	1.0000	11.91	_____		
Tractors	acre	16.27	1.0000	16.27	_____		
Harvesters	acre	13.77	1.0000	13.77	_____		
<hr/>							
TOTAL FIXED EXPENSES				41.95	_____		
<hr/>							
TOTAL SPECIFIED EXPENSES				413.03	_____		

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

Table 16.B Summary of estimated costs and returns per acre
 Soybeans, full-season, LL, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.90	40.0000	396.00	_____
TOTAL INCOME				396.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
HARVEST AIDS	acre	2.40	1.0000	2.40	_____
FERTILIZERS	acre	31.36	1.0000	31.36	_____
FUNGICIDES	acre	6.80	1.0000	6.80	_____
HERBICIDES	acre	142.49	1.0000	142.49	_____
INSECTICIDES	acre	22.75	1.0000	22.75	_____
SEED/PLANTS	acre	64.00	1.0000	64.00	_____
ADJUVANTS	acre	4.75	1.0000	4.75	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
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	13.51	0.5669	7.65	_____
UNALLOCATED LABOR	hour	13.48	0.5102	6.88	_____
DIESEL FUEL	gal	1.80	6.0515	10.91	_____
REPAIR & MAINTENANCE	acre	12.24	1.0000	12.24	_____
INTEREST ON OP. CAP.	acre	7.52	1.0000	7.52	_____
TOTAL DIRECT EXPENSES				371.08	_____
RETURNS ABOVE DIRECT EXPENSES				24.92	_____
TOTAL FIXED EXPENSES				41.95	_____
TOTAL SPECIFIED EXPENSES				413.03	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-17.03	_____

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

Table 16.C Estimated resource use for field operations, per acre
 Soybeans, full-season, LL, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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-Fold	12R-30	MFWD 225	0.062	1.00	Oct			0.06	0.06	0.06	0.05
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Feb			0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e.	oz						32.0000				
Select Max	pt						1.0000				
Surfactant	pt						0.4000				
Custom Apply Fert	acre			1.00	Apr		1.0000				
Phosphorus (46% P2O5)	cwt						0.6600				
Potash (60% K2O)	cwt						1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr			0.02	0.02	0.04	0.02
Fierce	oz						3.5000				
Gramoxone SL 2.0	oz						48.0000				
Surfactant	pt						0.4000				
Soybeans Consultant	acre			1.00	May		1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May			0.06	0.06	0.13	0.06
Soybean Seed 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	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	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						1.0000				
Gramoxone SL	oz						16.0000				
Surfactant	pt						0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct			0.10	0.10	0.10	0.09
Haul Soybeans	bu						40.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct			0.02	0.02	0.02	0.01

TOTALS							0.56	0.56	0.71	0.51	

Note: Cost of production estimates are based on 2017 input prices.

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

Table 16.D Estimated costs for field operations, per acre
 Soybeans, full-season, LL, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33				0.01	3.34	3.34
Lime (Spread)	ton	15.32				0.06	15.38	15.38
Disk Harrow	24'		1.44	1.38	2.11	0.02	4.95	4.78
Field Cultivate Fld	24'		1.10	0.79	1.60	0.01	3.50	4.03
Bed/Lister-Roll-Fold	12R-30		1.30	0.87	1.60	0.01	3.78	3.79
Spray (Broadcast)	60'		0.50	0.39	0.85	0.06	1.80	1.24
Glyphosate 3lbs a.e	oz	4.48				0.16	4.64	4.64
Select Max	pt	12.64				0.45	13.09	13.09
Surfactant	pt	1.31				0.05	1.36	1.36
Custom Apply Fert	acre	7.50				0.21	7.71	7.71
Phosphorus (46% P2O5)	cwt	12.38				0.34	12.72	12.72
Potash (60% K2O)	cwt	18.98				0.53	19.51	19.51
Spray (Broadcast)	60'		0.50	0.39	0.85	0.05	1.79	1.24
Fierce	oz	26.39				0.73	27.12	27.12
Gramoxone SL 2.0	oz	7.20				0.20	7.40	7.40
Surfactant	pt	1.31				0.04	1.35	1.35
Soybeans Consultant	acre	6.50				0.15	6.65	6.65
Plant & Pre-Folding	12R-30		1.19	2.16	2.34	0.14	5.83	5.72
Soybean Seed LL	lb	64.00				1.52	65.52	65.52
CruiserMaxx	oz	6.80				0.16	6.96	6.96
Boundary	pt	22.40				0.53	22.93	22.93
Gramoxone SL 2.0	oz	7.20				0.17	7.37	7.37
Surfactant	pt	1.31				0.03	1.34	1.34
Spray (Broadcast)	60'		0.50	0.39	0.85	0.04	1.78	1.24
Liberty 280	oz	17.40				0.41	17.81	17.81
Dual Magnum	pt	13.80				0.33	14.13	14.13
Spray (Broadcast)	60'		0.50	0.39	0.85	0.03	1.77	1.24
Liberty 280	oz	17.40				0.34	17.74	17.74
Zidua	oz	13.58				0.27	13.85	13.85
Spray (Broadcast)	60'		0.25	0.20	0.42	0.01	0.88	0.62
Dimilin 2L	oz	1.45				0.02	1.47	1.47
Surfactant	pt	0.16					0.16	0.16
Spray (Broadcast)	60'		0.50	0.39	0.85	0.02	1.76	1.24
Prevathon	oz	18.48				0.22	18.70	18.70
Spray (Broadcast)	60'		0.25	0.20	0.42	0.01	0.88	0.62
Baythroid XL	oz	2.82				0.03	2.85	2.85
App by Air (5 gal)	appl	6.50				0.05	6.55	6.55
Gramoxone SL	oz	2.40				0.02	2.42	2.42
Surfactant	pt	0.66				0.01	0.67	0.67
Header -Soybean	25' Flex		2.51	4.37	2.62	0.04	9.54	15.10
Haul Soybeans	bu	10.80				0.04	10.84	10.84
Grain Cart Soybean	700 bu		0.37	0.32	0.55		1.24	1.09
TOTALS		324.50	10.91	12.24	15.91	0.00	7.52	371.08
								41.95
								413.03

Note: Cost of production estimates are based on 2017 input prices.

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

Table 16.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, LL, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

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	396.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	31.36	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	6.80	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	17.12	0.00	33.59	60.80	30.98	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	1.45	21.30	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.31	0.00	1.31	1.31	0.00	0.16	0.00	0.66	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.32
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	0.85	0.00	0.85	3.19	0.85	0.42	1.27	0.00	8.48
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.50	0.00	0.50	1.69	0.50	0.25	0.75	0.00	6.72
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.39	0.00	0.39	2.55	0.39	0.20	0.59	0.00	7.73
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.72	0.00	2.10	3.48	0.64	0.03	0.28	0.08	0.19
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	20.89	0.00	77.60	150.32	33.36	2.51	24.19	9.64	52.57
NET INCOME	0.00	0.00	0.00	-20.89	0.00	-77.60	-150.32	-33.36	-2.51	-24.19	-9.64	343.43
NET INCOME TO DATE	0.00	0.00	0.00	-20.89	-20.89	-98.49	-248.81	-282.17	-284.68	-308.87	-318.51	24.92

Note: Cost of production estimates are based on 2017 input prices.

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

* Lease costs are based on hourly usage costs.

Table 16.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, LL, May planted, 12R 30"
 Non-Delta Area, Mississippi, 2018

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Soybeans		7.42	7.92	8.41	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37	
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-217 -259	-207 -249	-197 -239	-187 -229	-177 -219	-167 -209	-157 -199	-147 -189	-137 -179	-128 -170	-118 -160
60	24.00	bu	-188 -230	-176 -218	-164 -206	-152 -194	-141 -182	-129 -171	-117 -159	-105 -147	-93 -135	-81 -123	-69 -111
70	28.00	bu	-159 -201	-146 -188	-132 -174	-118 -160	-104 -146	-90 -132	-76 -118	-62 -104	-49 -90	-35 -77	-21 -63
80	32.00	bu	-131 -173	-115 -157	-99 -141	-83 -125	-67 -109	-52 -94	-36 -78	-20 -62	-4 -46	11 -30	27 -14
90	36.00	bu	-102 -144	-84 -126	-67 -109	-49 -91	-31 -73	-13 -55	4 -37	22 -19	39 -2	57 15	75 33
100	40.00	bu	-74 -116	-54 -96	-34 -76	-14 -56	5 -36	24 -17	44 2	64 22	84 42	104 62	123 81
110	44.00	bu	-45 -87	-23 -65	-1 -43	19 -22	41 -0	63 21	85 43	106 65	128 86	150 108	172 130
120	48.00	bu	-16 -58	6 -35	30 -11	54 12	78 36	101 60	125 83	149 107	173 131	196 155	220 178
130	52.00	bu	11 -30	37 -4	63 21	88 47	114 72	140 98	166 124	191 149	217 175	243 201	269 227
140	56.00	bu	40 -1	68 26	95 53	123 81	151 109	178 137	206 164	234 192	262 220	289 247	317 275
150	60.00	bu	69 27	98 56	128 86	158 116	187 145	217 175	247 205	276 234	306 264	336 294	366 324

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 2017 input prices.

Table 17.A Estimated costs per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	18.75	0.8700	16.31	
Potash (60% K2O)	cwt	18.98	1.3300	25.24	
FUNGICIDES					
CruiserMaxx	oz	4.25	1.6000	6.80	
HERBICIDES					
Boundary	pt	11.20	2.0000	22.40	
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	
Liberty 280	oz	0.60	29.0000	17.40	
Dual Magnum	pt	13.80	1.0000	13.80	
INSECTICIDES					
Acephate 90SP	lb	7.43	0.7500	5.57	
Prevathon	oz	1.32	14.0000	18.48	
Bifenthrin	oz	0.78	6.4000	4.99	
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	
SEED/PLANTS					
Soybean Seed LL	lb	1.28	50.0000	64.00	
ADJUVANTS					
Surfactant	pt	3.28	0.5000	1.64	
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	46.00	0.3330	15.32	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	13.51	0.1171	1.58	
Harvesters	hour	13.51	0.1021	1.38	
HAND LABOR					
implements	hour	9.06	0.0817	0.74	
UNALLOCATED LABOR					
hour	13.57	0.1886	2.56		
DIESEL FUEL					
Tractors	gal	1.80	1.3567	2.44	
Harvesters	gal	1.80	1.3935	2.51	
REPAIR & MAINTENANCE					
implements	acre	3.12	1.0000	3.12	
Tractors	acre	0.77	1.0000	0.77	
Harvesters	acre	3.49	1.0000	3.49	
INTEREST ON OP. CAP.	acre	6.79	1.0000	6.79	
TOTAL DIRECT EXPENSES				299.11	
FIXED EXPENSES					
implements	acre	5.40	1.0000	5.40	
Tractors	acre	4.85	1.0000	4.85	
Harvesters	acre	13.77	1.0000	13.77	
TOTAL FIXED EXPENSES				24.02	
TOTAL SPECIFIED EXPENSES				323.13	

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

Table 17.B Summary of estimated costs and returns per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
			dollars	dollars	
INCOME					
Wheat	bu	4.71	65.0000	306.15	_____
Soybeans	bu	9.90	25.0000	247.50	_____
TOTAL INCOME				553.65	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
FERTILIZERS	acre	41.55	1.0000	41.55	_____
FUNGICIDES	acre	6.80	1.0000	6.80	_____
HERBICIDES	acre	60.80	1.0000	60.80	_____
INSECTICIDES	acre	37.04	1.0000	37.04	_____
SEED/PLANTS	acre	64.00	1.0000	64.00	_____
ADJUVANTS	acre	1.64	1.0000	1.64	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	13.51	0.2193	2.96	_____
UNALLOCATED LABOR	hour	13.57	0.1886	2.56	_____
DIESEL FUEL	gal	1.80	2.7503	4.95	_____
REPAIR & MAINTENANCE	acre	7.38	1.0000	7.38	_____
INTEREST ON OP. CAP.	acre	6.79	1.0000	6.79	_____
TOTAL DIRECT EXPENSES				299.11	_____
RETURNS ABOVE DIRECT EXPENSES				254.54	_____
TOTAL FIXED EXPENSES				24.02	_____
TOTAL SPECIFIED EXPENSES				323.13	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				230.52	_____

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

Table 17.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

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					
Optimize	oz					1.4000					
Boundary	pt					2.0000					
Gramoxone SL 2.0	oz					48.0000					
Surfactant	pt					0.4000					
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	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 2017 input prices.

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

Table 17.D Estimated costs for field operations, per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Soil Test	acre	3.33					0.16	3.49
Lime (Spread)	ton	15.32					0.73	16.05
Custom Apply Fert	acre	7.50					0.36	7.86
Phosphorus (46% P2O5)	cwt	16.31					0.77	17.08
Potash (60% K2O)	cwt	25.24					1.20	26.44
Soybeans Consultant	acre	6.50					0.15	6.65
Plant & Pre-Folding	12R-30			1.41	2.23	2.31		6.22
Soybean Seed LL	lb	64.00					1.27	65.27
CruiserMaxx	oz	6.80					0.13	6.93
Optimize	oz	3.00					0.06	3.06
Boundary	pt	22.40					0.44	22.84
Gramoxone SL 2.0	oz	7.20					0.14	7.34
Surfactant	pt	1.31					0.03	1.34
Spray (Broadcast)	60'			0.59	0.43	0.84		1.45
Liberty 280	oz	17.40					0.28	17.68
Dual Magnum	pt	13.80					0.22	14.02
App by Air (5 gal)	appl	6.50					0.08	6.58
Acephate 90SP	lb	5.57					0.07	5.64
App by Air (5 gal)	appl	6.50					0.08	6.58
Prevathon	oz	18.48					0.22	18.70
Surfactant	pt	0.33						0.33
Bifenthrin	oz	4.99					0.06	5.05
Incidental Pest								
App by Air (5 gal)	appl	6.50					0.05	6.55
IncidentalPestTrt \$8	acre	8.00					0.06	8.06
Header -Soybean	25' Flex			2.51	4.37	2.57		15.10
Haul Soybeans	bu	6.75					0.03	6.78
Grain Cart Soybean	700 bu			0.44	0.35	0.54		1.25
TOTALS		273.73	4.95	7.38	6.26	0.00	6.79	299.11
								24.02
								323.13

Note: Cost of production estimates are based on 2017 input prices.

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

Table 17.E Estimated monthly income and expense flows per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

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	306.15	0.00	0.00	0.00	247.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	6.50	0.00
FERTILIZERS	41.55	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	6.80	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.60	31.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.04	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.33	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	15.32	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	3.00	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	0.00	0.00	2.31	0.84	0.00	0.00	3.11
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	1.41	0.59	0.00	0.00	2.95
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.43	0.00	0.00	4.72
INTEREST ON OP. CAP.	3.22	0.00	0.00	0.00	0.00	0.00	0.15	2.19	0.53	0.51	0.11	0.08
TOTAL DIRECT EXPENSES	70.92	0.00	0.00	0.00	0.00	0.00	6.65	112.85	33.59	42.88	14.61	17.61
NET INCOME	-70.92	0.00	0.00	0.00	0.00	0.00	-6.65	193.30	-33.59	-42.88	-14.61	229.89
NET INCOME TO DATE	-70.92	-70.92	-70.92	-70.92	-70.92	-70.92	-77.57	115.73	82.14	39.26	24.65	254.54

Note: Cost of production estimates are based on 2017 input prices.

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

* Lease costs are based on hourly usage costs.

Table 17.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2018

PRODUCT	PERCENT	75	80	85	90	95	100	105	110	115	120	125	PRODUCT PRICE									
													3.53	3.76	4.00	4.23	4.47	4.71	4.94	5.18	5.41	5.65
PERCENT	YIELD	UNIT	dollars																			
Wheat			66	74	81	89	97	104	112	120	127	135	143									
			42	50	57	65	73	80	88	96	103	111	119									
50	32.50	bu	88	98	107	116	125	134	143	153	162	171	180									
			64	74	83	92	101	110	119	129	138	147	156									
60	39.00	bu	111	121	132	143	154	164	175	186	196	207	218									
			87	97	108	119	129	140	151	162	172	183	194									
70	45.50	bu	133	145	157	170	182	194	206	219	231	243	255									
			109	121	133	146	158	170	182	195	207	219	231									
80	52.00	bu	155	169	183	197	210	224	238	252	265	279	293									
			131	145	159	173	186	200	214	228	241	255	269									
90	58.50	bu	178	193	208	223	239	254	269	285	300	315	331									
			153	169	184	199	215	230	245	261	276	291	307									
100	65.00	bu	200	217	233	250	267	284	301	318	334	351	368									
			176	193	209	226	243	260	277	294	310	327	344									
110	71.50	bu	222	240	259	277	296	314	332	351	369	387	406									
			198	216	235	253	272	290	308	327	345	363	382									
120	78.00	bu	244	264	284	304	324	344	364	384	404	423	443									
			220	240	260	280	300	320	340	360	380	399	419									
130	84.50	bu	267	288	309	331	352	374	395	417	438	460	481									
			243	264	285	307	328	350	371	393	414	435	457									
140	91.00	bu	289	312	335	358	381	404	427	450	473	496	519									
			265	288	311	334	357	380	403	426	449	472	495									

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

Note: Cost of production estimates are based on 2017 input prices.

Table 18.A Estimated costs per acre
 Corn, stale seedbed, RR seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES		dollars		dollars	
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	
App by Air (3 gal)	appl	5.00	1.2000	6.00	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	18.75	1.6300	30.56	
Potash (60% K2O)	cwt	18.98	1.2500	23.73	
UAN + Sulfur (28%)	gal	1.31	48.5856	63.65	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Clarity	pt	11.55	0.5000	5.78	
Select Max	pt	12.64	1.0000	12.64	
Atrazine 4L	pt	2.12	4.0000	8.48	
Halex GT	pt	7.80	3.6000	28.08	
INSECTICIDES					
Bifenthrin	oz	0.78	1.2804	1.00	
Intrepid 2F	oz	2.00	4.0000	8.00	
SEED/PLANTS					
Corn Seed RR2	thous	3.24	28.0000	90.72	
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	46.00	0.6660	30.64	
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	13.51	0.4823	6.51	
Harvesters	hour	13.51	0.1277	1.73	
Self-Propelled	hour	13.51	0.0176	0.24	
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	
Self-Propelled	hour	9.06	0.0088	0.08	
UNALLOCATED LABOR					
	hour	13.48	0.5649	7.62	
DIESEL FUEL					
Tractors	gal	1.80	4.2208	7.60	
Harvesters	gal	1.80	1.7419	3.14	
Self-Propelled	gal	1.80	0.1586	0.29	
REPAIR & MAINTENANCE					
Implements	acre	8.51	1.0000	8.51	
Tractors	acre	2.31	1.0000	2.31	
Harvesters	acre	4.36	1.0000	4.36	
Self-Propelled	acre	0.18	1.0000	0.18	
INTEREST ON OP. CAP.	acre	11.50	1.0000	11.50	
TOTAL DIRECT EXPENSES				431.57	
FIXED EXPENSES					
Implements	acre	12.74	1.0000	12.74	
Tractors	acre	14.52	1.0000	14.52	
Harvesters	acre	17.22	1.0000	17.22	
Self-Propelled	acre	1.20	1.0000	1.20	
TOTAL FIXED EXPENSES				45.68	
TOTAL SPECIFIED EXPENSES				477.25	

Note: Cost of production estimates are based on 2017 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, RR seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	3.76	170.0000	639.20	_____
TOTAL INCOME				639.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	12.50	1.0000	12.50	_____
FERTILIZERS	acre	117.94	1.0000	117.94	_____
HERBICIDES	acre	59.46	1.0000	59.46	_____
INSECTICIDES	acre	9.00	1.0000	9.00	_____
SEED/PLANTS	acre	90.72	1.0000	90.72	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	30.64	1.0000	30.64	_____
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	13.51	0.6277	8.48	_____
UNALLOCATED LABOR	hour	13.48	0.5649	7.62	_____
DIESEL FUEL	gal	1.80	6.1215	11.03	_____
REPAIR & MAINTENANCE	acre	15.36	1.0000	15.36	_____
INTEREST ON OP. CAP.	acre	11.50	1.0000	11.50	_____
TOTAL DIRECT EXPENSES				431.57	_____
RETURNS ABOVE DIRECT EXPENSES				207.63	_____
TOTAL FIXED EXPENSES				45.68	_____
TOTAL SPECIFIED EXPENSES				477.25	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				161.95	_____

Note: Cost of production estimates are based on 2017 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, RR seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALLOC 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-30/40	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					1.0000				
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					1.0000				
App by Air (3 gal)	appl					0.20	May	0.2000		
Bifenthrin	oz					1.2804				
App by Air (3 gal)	appl					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 2017 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, RR seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33				0.16	3.49	3.49
Lime (Spread)	ton	30.64				1.46	32.10	32.10
Spin Spreader	5 ton		0.66	0.49	1.46	0.12	2.73	1.86
Phosphorus (46% P2O5)	cwt	30.56				1.45	32.01	32.01
Potash (60% K2O)	cwt	23.73				1.13	24.86	24.86
Disk Heavy	20'		1.53	1.53	2.49	0.26	5.81	5.17
Bed/Disk w/roller	8R-30/40		1.48	1.07	2.41	0.24	5.20	4.47
App by Air (5 gal)	appl	6.50				0.21	6.71	6.71
Glyphosate 3lbs a.e.	oz	4.48				0.14	4.62	4.62
Clarity	pt	5.78				0.18	5.96	5.96
Select Max	pt	12.64				0.40	13.04	13.04
Plant - Rigid	12R-30		0.99	1.67	2.18	0.13	4.97	4.52
Corn Seed RR2	thous	90.72				2.51	93.23	93.23
Custom Apply Fert	acre	7.50				0.18	7.68	7.68
UAN + Sulfur (28%)	gal	19.39				0.46	19.85	19.85
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.53	0.02	1.02	1.20
Atrazine 4L	pt	8.48				0.20	8.68	8.68
Halex GT	pt	28.08				0.67	28.75	28.75
Fert Appl (Liquid)	12R-30		1.24	1.43	2.38	0.10	5.15	3.55
UAN + Sulfur (28%)	gal	44.26				0.88	45.14	45.14
Corn Consultant	acre	6.00				0.12	6.12	6.12
App by Air (3 gal)	appl	1.00				0.02	1.02	1.02
Bifenthrin	oz	1.00				0.02	1.02	1.02
App by Air (3 gal)	appl	5.00				0.08	5.08	5.08
Intrepid 2F	oz	8.00				0.13	8.13	8.13
Header - Corn	8R-30		3.14	6.32	3.28	0.05	12.79	20.17
Grain Cart Corn	500 bu		0.40	0.28	0.65	0.01	1.34	1.05
Haul Corn	bu	39.10				0.15	39.25	39.25
Stalk Shredder Flex	20'		1.30	2.39	2.11	0.02	5.82	3.69
TOTALS		376.19	11.03	15.36	17.49	0.00	11.50	431.57
								45.68
								477.25

Note: Cost of production estimates are based on 2017 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, RR seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2018

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	639.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1.00	5.00	0.00	0.00	0.00
FERTILIZERS	54.29	0.00	0.00	0.00	0.00	0.00	19.39	44.26	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.90	0.00	36.56	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	1.00	8.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	90.72	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	30.64	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	6.36	0.00	0.00	0.00	0.00	2.18	0.53	2.38	0.00	0.00	0.00	6.04
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	3.67	0.00	0.00	0.00	0.00	0.99	0.29	1.24	0.00	0.00	0.00	4.84
REPAIR & MAINTENANCE	3.09	0.00	0.00	0.00	0.00	1.67	0.18	1.43	0.00	0.00	0.00	8.99
INTEREST ON OP. CAP.	4.82	0.00	0.00	0.00	0.93	2.64	1.53	1.14	0.21	0.00	0.00	0.23
TOTAL DIRECT EXPENSES	106.20	0.00	0.00	0.00	30.33	98.20	65.98	58.45	13.21	0.00	0.00	59.20
NET INCOME	-106.20	0.00	0.00	0.00	-30.33	-98.20	-65.98	-58.45	-13.21	0.00	0.00	580.00
NET INCOME TO DATE	-106.20	-106.20	-106.20	-106.20	-136.53	-234.73	-300.71	-359.16	-372.37	-372.37	-372.37	207.63

Note: Cost of production estimates are based on 2017 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, RR seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2018

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Corn	PRODUCT PRICE												
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-172 -217	-156 -201	-140 -185	-124 -169	-108 -154	-92 -138	-76 -122	-60 -106	-44 -90	-28 -74	-12 -58
60	102.00	bu	-128 -173	-109 -154	-89 -135	-70 -116	-51 -97	-32 -78	-13 -58	6 -39	25 -20	44 -1	63 17
70	119.00	bu	-84 -129	-61 -107	-39 -85	-17 -62	5 -40	27 -18	50 4	72 26	94 49	117 71	139 93
80	136.00	bu	-40 -85	-14 -60	10 -34	36 -9	62 16	87 41	113 67	138 93	164 118	189 144	215 169
90	153.00	bu	3 -41	32 -13	61 15	90 44	118 73	147 101	176 130	205 159	233 188	262 217	291 245
100	170.00	bu	47 2	79 34	111 66	143 98	175 129	207 161	239 193	271 225	303 257	335 289	367 321
110	187.00	bu	91 46	127 81	162 116	197 151	232 186	267 221	302 257	337 292	373 327	408 362	443 397
120	204.00	bu	135 90	174 128	212 166	250 205	289 243	327 281	365 320	404 358	442 396	481 435	519 473
130	221.00	bu	179 134	221 175	262 217	304 258	346 300	387 341	429 383	470 425	512 466	553 508	595 549
140	238.00	bu	223 178	268 222	313 267	358 312	402 357	447 401	492 446	537 491	581 536	626 580	671 625
150	255.00	bu	267 222	315 270	363 318	411 366	459 413	507 461	555 509	603 557	651 605	699 653	747 701

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 2017 input prices.

Table 19.A Estimated costs per acre
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
 Non-Delta Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES					
COSTS					
dollars					
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	18.75	1.6300	30.56	_____
Potash (60% K2O)	cwt	18.98	1.2500	23.73	_____
Fert 10-34-0	gal	2.59	4.2919	11.12	_____
UAN (32%)	gal	1.17	45.2080	52.89	_____
HERBICIDES					
Glyphosate 3lbs a.e.	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.55	0.5000	5.78	_____
Select Max	pt	12.64	1.0000	12.64	_____
Atrazine 4L	pt	2.12	4.0000	8.48	_____
Halex GT	pt	7.80	3.6000	28.08	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.63	28.0000	101.64	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6660	30.64	_____
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	13.51	0.4165	5.63	_____
Harvesters	hour	13.51	0.1277	1.73	_____
HAND LABOR					
Implements	hour	9.06	0.2283	2.06	_____
UNALLOCATED LABOR					
hour	hour	13.49	0.4898	6.61	_____
DIESEL FUEL					
Tractors	gal	1.80	3.6449	6.57	_____
Harvesters	gal	1.80	1.7419	3.14	_____
REPAIR & MAINTENANCE					
Implements	acre	7.50	1.0000	7.50	_____
Tractors	acre	1.99	1.0000	1.99	_____
Harvesters	acre	4.36	1.0000	4.36	_____
INTEREST ON OP. CAP.	acre	10.17	1.0000	10.17	_____
TOTAL DIRECT EXPENSES				414.73	_____
FIXED EXPENSES					
Implement	acre	9.99	1.0000	9.99	_____
Tractors	acre	12.54	1.0000	12.54	_____
Harvesters	acre	17.22	1.0000	17.22	_____
TOTAL FIXED EXPENSES				39.75	_____
TOTAL SPECIFIED EXPENSES				454.48	_____

Note: Cost of production estimates are based on 2017 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	3.76	170.0000	639.20	_____
TOTAL INCOME				639.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
FERTILIZERS	acre	118.30	1.0000	118.30	_____
HERBICIDES	acre	59.46	1.0000	59.46	_____
SEED/PLANTS	acre	101.64	1.0000	101.64	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	30.64	1.0000	30.64	_____
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	13.51	0.5442	7.36	_____
UNALLOCATED LABOR	hour	13.49	0.4898	6.61	_____
DIESEL FUEL	gal	1.80	5.3869	9.71	_____
REPAIR & MAINTENANCE	acre	13.85	1.0000	13.85	_____
INTEREST ON OP. CAP.	acre	10.17	1.0000	10.17	_____
TOTAL DIRECT EXPENSES				414.73	_____
RETURNS ABOVE DIRECT EXPENSES				224.47	_____
TOTAL FIXED EXPENSES				39.75	_____
TOTAL SPECIFIED EXPENSES				454.48	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				184.72	_____

Note: Cost of production estimates are based on 2017 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, 2018

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
Phosphorus(46% P2O5)	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
Corn Seed BtRR	thous					28.0000				
Fert 10-34-0	gal					4.2919				
Spray (Broadcast)	27'	MFWD 170	0.062	1.00	Apr			0.06	0.06	0.09
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
UAN (32%)	gal					45.2080				
Corn Consultant	acre			1.00	May	1.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep			0.12	0.12	0.12
Grain Cart Corn	500 bu	MFWD 170	0.025	1.00	Sep			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

TOTALS								0.54	0.54	0.77
										0.48

Note: Cost of production estimates are based on 2017 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33							0.16	3.49	3.49
Lime (Spread)	ton	30.64							1.46	32.10	32.10
App by Air (5 gal)	appl	6.50							0.21	6.71	6.71
Glyphosate 3lbs a.e	oz	4.48							0.14	4.62	4.62
Clarity	pt	5.78							0.18	5.96	5.96
Select Max	pt	12.64							0.40	13.04	13.04
Spin Spreader	5 ton		0.66	0.49	1.46				0.07	2.68	1.86
Phosphorus(46% P2O5)	cwt	30.56							0.85	31.41	31.41
Potash (60% K2O)	cwt	23.73							0.66	24.39	24.39
NT Plant&Pre-Rigid	8R-30		1.67	2.37	3.68				0.21	7.93	6.74
Corn Seed BtRR	thous	101.64							2.82	104.46	104.46
Fert 10-34-0	gal	11.12							0.31	11.43	11.43
Spray (Broadcast)	27'		0.99	0.46	1.89				0.08	3.42	2.08
Atrazine 4L	pt	8.48							0.20	8.68	8.68
Halex GT	pt	28.08							0.67	28.75	28.75
Fert Appl (Liquid)	8R-30		1.55	1.54	2.96				0.14	6.19	4.16
UAN (32%)	gal	52.89							1.26	54.15	54.15
Corn Consultant	acre	6.00							0.12	6.12	6.12
Header - Corn	8R-30		3.14	6.32	3.28				0.05	12.79	20.17
Grain Cart Corn	500 bu		0.40	0.28	0.65				0.01	1.34	1.05
Haul Corn	bu	39.10							0.15	39.25	39.25
Stalk Shredder Flex	20'		1.30	2.39	2.11				0.02	5.82	3.69
TOTALS		364.97	9.71	13.85	16.03	0.00	10.17	414.73	39.75	454.48	

Note: Cost of production estimates are based on 2017 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, 2018

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	639.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	65.41	52.89	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.90	0.00	36.56	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	101.64	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	30.64	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	5.14	4.85	0.00	0.00	0.00	0.00	6.04
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	2.33	2.54	0.00	0.00	0.00	0.00	4.84
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	2.86	2.00	0.00	0.00	0.00	0.00	8.99
INTEREST ON OP. CAP.	1.62	0.00	0.00	0.00	0.93	4.92	2.35	0.12	0.00	0.00	0.00	0.23
TOTAL DIRECT EXPENSES	35.59	0.00	0.00	0.00	30.33	182.30	101.19	6.12	0.00	0.00	0.00	59.20
NET INCOME	-35.59	0.00	0.00	0.00	-30.33	-182.30	-101.19	-6.12	0.00	0.00	0.00	580.00
NET INCOME TO DATE	-35.59	-35.59	-35.59	-35.59	-65.92	-248.22	-349.41	-355.53	-355.53	-355.53	-355.53	224.47

Note: Cost of production estimates are based on 2017 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, 2018

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.82	3.00	3.19	3.38	3.57	3.76	3.94	4.13	4.32	4.51	4.70
PERCENT YIELD UNIT dollars													
50	85.00	bu	-155 -195	-139 -179	-123 -163	-107 -147	-91 -131	-75 -115	-59 -99	-43 -83	-27 -67	-11 -51	4 -35
60	102.00	bu	-111 -151	-92 -131	-73 -112	-53 -93	-34 -74	-15 -55	3 -36	22 -16	42 2	61 21	80 40
70	119.00	bu	-67 -107	-45 -84	-22 -62	-0 -40	22 -17	44 4	66 27	89 49	111 71	133 94	156 116
80	136.00	bu	-23 -63	2 -37	27 -11	53 13	78 39	104 64	130 90	155 115	181 141	206 167	232 192
90	153.00	bu	20 -19	49 9	78 38	106 67	135 95	164 124	193 153	222 182	250 211	279 239	308 268
100	170.00	bu	64 24	96 56	128 88	160 120	192 152	224 184	256 216	288 248	320 280	352 312	384 344
110	187.00	bu	108 68	143 104	178 139	214 174	249 209	284 244	319 279	354 315	389 350	425 385	460 420
120	204.00	bu	152 112	191 151	229 189	267 228	306 266	344 304	382 343	421 381	459 419	497 458	536 496
130	221.00	bu	196 156	238 198	279 240	321 281	362 323	404 364	446 406	487 447	529 489	570 530	612 572
140	238.00	bu	240 200	285 245	330 290	374 335	419 379	464 424	509 469	553 514	598 558	643 603	688 648
150	255.00	bu	284 244	332 292	380 340	428 388	476 436	524 484	572 532	620 580	668 628	716 676	764 724

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 2017 input prices.

Table 20.A Estimated costs per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
CUSTOM SPRAY							
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____		
FERTILIZERS							
Phosphorus (46% P2O5)	cwt	18.75	1.3000	24.38	_____		
Potash (60% K2O)	cwt	18.98	1.0000	18.98	_____		
UAN + Sulfur (28%)	gal	1.31	38.2883	50.16	_____		
HERBICIDES							
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____		
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____		
Select Max	pt	12.64	1.0000	12.64	_____		
Lexar	pt	7.96	6.0000	47.76	_____		
INSECTICIDES							
Sivanto Prime	oz	2.55	8.0000	20.40	_____		
Karate Z	oz	2.74	1.5000	4.11	_____		
Prevathon	oz	1.32	14.0000	18.48	_____		
SEED/PLANTS							
Sorghum Concept+ Po	lb	3.92	4.5000	17.64	_____		
ADJUVANTS							
Surfactant	pt	3.28	0.3000	0.98	_____		
HAULING							
Haul Sorghum	bu	0.25	100.0000	25.00	_____		
CUSTOM LIME							
Lime (Spread)	ton	46.00	0.6660	30.64	_____		
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	13.51	0.3120	4.22	_____		
Harvesters	hour	13.51	0.1021	1.38	_____		
Self-Propelled	hour	13.51	0.0661	0.90	_____		
HAND LABOR							
Implements	hour	9.06	0.1442	1.31	_____		
Self-Propelled	hour	9.06	0.0330	0.30	_____		
UNALLOCATED LABOR	hour	13.51	0.4322	5.84	_____		
DIESEL FUEL							
Tractors	gal	1.80	2.7303	4.91	_____		
Harvesters	gal	1.80	1.3935	2.51	_____		
Self-Propelled	gal	1.80	0.8505	1.55	_____		
REPAIR & MAINTENANCE							
Implements	acre	4.74	1.0000	4.74	_____		
Tractors	acre	1.49	1.0000	1.49	_____		
Harvesters	acre	3.49	1.0000	3.49	_____		
Self-Propelled	acre	0.90	1.0000	0.90	_____		
INTEREST ON OP. CAP.	acre	7.54	1.0000	7.54	_____		
<hr/>							
TOTAL DIRECT EXPENSES				337.36	_____		
FIXED EXPENSES							
Implements	acre	9.31	1.0000	9.31	_____		
Tractors	acre	9.39	1.0000	9.39	_____		
Harvesters	acre	13.77	1.0000	13.77	_____		
Self-Propelled	acre	5.90	1.0000	5.90	_____		
<hr/>							
TOTAL FIXED EXPENSES				38.37	_____		
<hr/>							
TOTAL SPECIFIED EXPENSES				375.73	_____		

Note: Cost of production estimates are based on 2017 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Grain Sorghum	bu	3.57	100.0000	357.00	_____
TOTAL INCOME				357.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
FERTILIZERS	acre	93.52	1.0000	93.52	_____
HERBICIDES	acre	69.68	1.0000	69.68	_____
INSECTICIDES	acre	42.99	1.0000	42.99	_____
SEED/PLANTS	acre	17.64	1.0000	17.64	_____
ADJUVANTS	acre	0.98	1.0000	0.98	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	30.64	1.0000	30.64	_____
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	13.51	0.4803	6.50	_____
UNALLOCATED LABOR	hour	13.51	0.4322	5.84	_____
DIESEL FUEL	gal	1.80	4.9745	8.97	_____
REPAIR & MAINTENANCE	acre	10.62	1.0000	10.62	_____
INTEREST ON OP. CAP.	acre	7.54	1.0000	7.54	_____
TOTAL DIRECT EXPENSES				337.36	_____
RETURNS ABOVE DIRECT EXPENSES				19.64	_____
TOTAL FIXED EXPENSES				38.37	_____
TOTAL SPECIFIED EXPENSES				375.73	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-18.73	_____

Note: Cost of production estimates are based on 2017 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, 2018

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
App by Air (5 gal)	appl				Feb	1.0000				0.07
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
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
Plant - Folding	12R-30	MFWD 170	0.062	1.00	Apr			0.06	0.06	0.12
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					1.0000				
Fert Appl (Liquid)	12R-30	MFWD 170	0.078	1.00	May			0.07	0.07	0.11
UAN + Sulfur (28%)	gal					38.2883				0.07
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
Haul Sorghum	bu					100.0000				0.09
TOTALS								0.48	0.41	0.65
										0.43

Note: Cost of production estimates are based on 2017 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33				0.16	3.49	3.49
Lime (Spread)	ton	30.64				1.46	32.10	32.10
Disk Harrow	24'		1.29	1.33	2.11	0.21	4.94	4.45
App by Air (5 gal)	appl	6.50				0.21	6.71	6.71
Glyphosate 3lbs a.e	oz	4.48				0.14	4.62	4.62
2,4-D Amine 4	pt	4.80				0.15	4.95	4.95
Select Max	pt	12.64				0.40	13.04	13.04
Surfactant	pt	0.98				0.03	1.01	1.01
Spin Spreader	5 ton		0.66	0.49	1.46	0.06	2.67	1.86
Phosphorus(46% P2O5)	cwt	24.38				0.58	24.96	24.96
Potash (60% K2O)	cwt	18.98				0.45	19.43	19.43
Field Cultivate Fld	32'		0.73	0.67	1.20	0.06	2.66	3.30
Plant - Folding	12R-30		0.99	1.79	2.18	0.12	5.08	4.75
Sorghum Concept+ Po	lb	17.64				0.42	18.06	18.06
Sprayer 800gal	80' 250hp		0.31	0.18	0.40	0.02	0.91	1.18
Lexar	pt	47.76				1.13	48.89	48.89
Sorghum Consultant	acre	6.00				0.12	6.12	6.12
Fert Appl (Liquid)	12R-30		1.24	1.43	2.38	0.10	5.15	3.55
UAN + Sulfur (28%)	gal	50.16				0.99	51.15	51.15
Sprayer 800gal	80' 250hp		0.31	0.18	0.40	0.01	0.90	1.18
Sivanto Prime	oz	10.20				0.16	10.36	10.36
Sprayer 800gal	80' 250hp		0.31	0.18	0.40	0.01	0.90	1.18
Karate Z	oz	4.11				0.05	4.16	4.16
Sprayer 800gal	80' 250hp		0.31	0.18	0.40	0.01	0.90	1.18
Prevathon	oz	18.48				0.22	18.70	18.70
Sprayer 800gal	80' 250hp		0.31	0.18	0.40	0.01	0.90	1.18
Sivanto Prime	oz	10.20				0.12	10.32	10.32
Header Wheat/Sorghum	25' Rigid		2.51	4.01	2.62	0.04	9.18	14.56
Haul Sorghum	bu	25.00				0.10	25.10	25.10
TOTALS		296.28	8.97	10.62	13.95	0.00	7.54	337.36
								38.37
								375.73

Note: Cost of production estimates are based on 2017 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, 2018

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	357.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	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	43.36	50.16	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.92	0.00	47.76	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	10.20	32.79	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	17.64	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.98	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	30.64	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	2.11	0.00	0.00	0.00	0.00	5.24	2.38	0.40	1.20	0.00	2.62
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	1.29	0.00	0.00	0.00	0.00	2.69	1.24	0.31	0.93	0.00	2.51
REPAIR & MAINTENANCE	0.00	1.33	0.00	0.00	0.00	0.00	3.13	1.43	0.18	0.54	0.00	4.01
INTEREST ON OP. CAP.	1.62	0.21	0.00	0.00	0.93	0.00	2.84	1.21	0.17	0.42	0.00	0.14
TOTAL DIRECT EXPENSES	35.59	4.94	0.00	0.00	30.33	0.00	122.66	62.42	11.26	35.88	0.00	34.28
NET INCOME	-35.59	-4.94	0.00	0.00	-30.33	0.00	-122.66	-62.42	-11.26	-35.88	0.00	322.72
NET INCOME TO DATE	-35.59	-40.53	-40.53	-40.53	-70.86	-70.86	-193.52	-255.94	-267.20	-303.08	-303.08	19.64

Note: Cost of production estimates are based on 2017 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, 2018

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
PRODUCT PRICE													
Grain Sorghum		2.67	2.85	3.03	3.21	3.39	3.57	3.74	3.92	4.10	4.28	4.46	
dollars													
PERCENT	YIELD	UNIT											
50	50.00	bu	-190 -229	-182 -220	-173 -211	-164 -202	-155 -193	-146 -184	-137 -175	-128 -166	-119 -157	-110 -148	-101 -140
60	60.00	bu	-166 -205	-155 -194	-145 -183	-134 -172	-123 -162	-113 -151	-102 -140	-91 -130	-80 -119	-70 -108	-59 -97
70	70.00	bu	-142 -180	-129 -168	-117 -155	-104 -143	-92 -130	-79 -118	-67 -105	-54 -93	-42 -80	-29 -68	-17 -55
80	80.00	bu	-118 -156	-103 -142	-89 -127	-75 -113	-61 -99	-46 -85	-32 -70	-18 -56	-3 -42	10 -27	24 -13
90	90.00	bu	-93 -132	-77 -116	-61 -100	-45 -84	-29 -67	-13 -51	2 -35	18 -19	34 -3	50 12	66 28
100	100.00	bu	-69 -107	-51 -90	-33 -72	-16 -54	1 -36	19 -18	37 -0	55 16	73 34	91 52	108 70
110	110.00	bu	-45 -83	-25 -64	-6 -44	13 -24	33 -5	52 14	72 34	92 53	111 73	131 93	151 112
120	120.00	bu	-21 -59	0 -38	21 -16	43 4	64 26	86 47	107 69	128 90	150 111	171 133	193 154
130	130.00	bu	3 -35	26 -11	49 11	72 34	96 57	119 80	142 104	165 127	188 150	212 173	235 196
140	140.00	bu	27 -10	52 14	77 39	102 64	127 89	152 114	177 139	202 164	227 189	252 213	277 238
150	150.00	bu	51 13	78 40	105 66	132 93	158 120	185 147	212 173	239 200	265 227	292 254	319 281

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 2017 input prices.

Table 21.A Estimated costs per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES					
CUSTOME SPRAY					
App by Air (5 gal)	appl	6.50	2.0000	13.00	_____
App by Air (3 gal)	appl	5.00	1.0000	5.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	18.75	1.0000	18.75	_____
Potash (60% K2O)	cwt	18.98	0.7500	14.24	_____
Fert 41-0-0-4	cwt	13.50	3.0480	41.15	_____
FUNGICIDES					
CruiserMaxx	oz	4.25	4.5000	19.13	_____
Prosaro	oz	5.57	8.0000	44.56	_____
HERBICIDES					
Axiom	oz	1.92	10.0000	19.20	_____
Harmony Extra SG	oz	13.79	0.7500	10.34	_____
Axial XL	oz	1.17	16.4000	19.19	_____
INSECTICIDES					
Karate Z	oz	2.74	1.5000	4.11	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.29	90.0000	26.10	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	3.0480	21.34	_____
HAULING					
Haul Wheat	bu	0.26	70.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6660	30.64	_____
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	13.51	0.2648	3.58	_____
Harvesters	hour	13.51	0.1021	1.38	_____
HAND LABOR					
Implements	hour	9.06	0.1363	1.23	_____
UNALLOCATED LABOR					
hour	hour	13.45	0.2936	3.95	_____
DIESEL FUEL					
Tractors	gal	1.80	2.3178	4.17	_____
Harvesters	gal	1.80	1.3935	2.51	_____
REPAIR & MAINTENANCE					
Implements	acre	3.52	1.0000	3.52	_____
Tractors	acre	1.26	1.0000	1.26	_____
Harvesters	acre	3.49	1.0000	3.49	_____
INTEREST ON OP. CAP.	acre	8.48	1.0000	8.48	_____
TOTAL DIRECT EXPENSES					
				347.34	_____
FIXED EXPENSES					
Implements	acre	7.79	1.0000	7.79	_____
Tractors	acre	7.97	1.0000	7.97	_____
Harvesters	acre	13.77	1.0000	13.77	_____
TOTAL FIXED EXPENSES					
				29.53	_____
TOTAL SPECIFIED EXPENSES					
				376.87	_____

Note: Cost of production estimates are based on 2017 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Wheat	bu	4.71	70.0000	329.70	_____
TOTAL INCOME				329.70	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	18.00	1.0000	18.00	_____
FERTILIZERS	acre	74.13	1.0000	74.13	_____
FUNGICIDES	acre	63.69	1.0000	63.69	_____
HERBICIDES	acre	48.73	1.0000	48.73	_____
INSECTICIDES	acre	4.11	1.0000	4.11	_____
SEED/PLANTS	acre	26.10	1.0000	26.10	_____
CUSTOM FERTILIZE	acre	21.34	1.0000	21.34	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	30.64	1.0000	30.64	_____
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	13.51	0.3670	4.96	_____
UNALLOCATED LABOR	hour	13.45	0.2936	3.95	_____
DIESEL FUEL	gal	1.80	3.7114	6.68	_____
REPAIR & MAINTENANCE	acre	8.27	1.0000	8.27	_____
INTEREST ON OP. CAP.	acre	8.48	1.0000	8.48	_____
TOTAL DIRECT EXPENSES				347.34	_____
RETURNS ABOVE DIRECT EXPENSES				-17.64	_____
TOTAL FIXED EXPENSES				29.53	_____
TOTAL SPECIFIED EXPENSES				376.87	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-47.17	_____

Note: Cost of production estimates are based on 2017 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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					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					Mar	1.5240				
Fert 41-0-0-4	cwt						1.5240				
App by Air (5 gal)	appl					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 2017 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33							0.13	3.46	3.46
Lime (Spread)	ton	30.64							1.21	31.85	31.85
Disk Harrow	24'		1.29	1.33	1.99				0.18	4.79	4.45
Spin Spreader	5 ton		0.66	0.49	1.40				0.10	2.65	1.86
Phosphorus (46% P2O5)	cwt	18.75							0.74	19.49	19.49
Potash (60% K2O)	cwt	14.24							0.56	14.80	14.80
Field Cultivate Fld	32'		0.73	0.67	1.13				0.10	2.63	3.30
Grain Drill	20'		1.49	1.77	3.14				0.23	6.63	5.36
Wheat Seed Private	lb	26.10							0.93	27.03	27.03
CruiserMaxx	oz	19.13							0.68	19.81	19.81
Wheat Consultant	acre	5.50							0.20	5.70	5.70
App by Air (5 gal)	appl	6.50							0.21	6.71	6.71
Axiom	oz	19.20							0.61	19.81	19.81
App by Air (3 gal)	appl	5.00							0.10	5.10	5.10
Karate Z	oz	4.11							0.08	4.19	4.19
Harmony Extra SG	oz	10.34							0.20	10.54	10.54
Axial XL	oz	19.19							0.38	19.57	19.57
App Fert by Air	cwt	10.67							0.21	10.88	10.88
Fert 41-0-0-4	cwt	20.57							0.41	20.98	20.98
App Fert by Air	cwt	10.67							0.17	10.84	10.84
Fert 41-0-0-4	cwt	20.57							0.33	20.90	20.90
App by Air (5 gal)	appl	6.50							0.08	6.58	6.58
Prosaro	oz	44.56							0.53	45.09	45.09
Header Wheat/Sorghum	25' Rigid		2.51	4.01	2.48				0.04	9.04	14.56
Haul Wheat	bu	18.20							0.07	18.27	18.27
TOTALS		313.77	6.68	8.27	10.14	0.00	8.48	347.34	29.53	376.87	

Note: Cost of production estimates are based on 2017 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, 2018

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	329.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	0.00	6.50	0.00	0.00
FERTILIZERS	0.00	0.00	32.99	0.00	0.00	0.00	0.00	20.57	20.57	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	19.13	0.00	0.00	0.00	0.00	0.00	44.56	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	19.20	0.00	0.00	29.53	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.11	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	26.10	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	10.67	10.67	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	30.64	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	4.52	3.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	2.68	1.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.51
REPAIR & MAINTENANCE	0.00	0.00	2.49	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.01
INTEREST ON OP. CAP.	0.00	0.00	3.02	2.04	0.82	0.00	0.00	1.38	0.50	0.61	0.00	0.11
TOTAL DIRECT EXPENSES	0.00	0.00	79.67	59.17	26.52	0.00	0.00	71.26	31.74	51.67	0.00	27.31
NET INCOME	0.00	0.00	-79.67	-59.17	-26.52	0.00	0.00	-71.26	-31.74	-51.67	0.00	302.39
NET INCOME TO DATE	0.00	0.00	-79.67	-138.84	-165.36	-165.36	-165.36	-236.62	-268.36	-320.03	-320.03	-17.64

Note: Cost of production estimates are based on 2017 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, 2018

PRODUCT		75	80	85	90	95	100	105	110	115	120	125	PERCENT		
													PRODUCT PRICE		
Wheat		3.53	3.76	4.00	4.23	4.47	4.71	4.94	5.18	5.41	5.65	5.88			
PERCENT	YIELD	UNIT											dollars		
50	35.00	bu	-214 -244	-206 -235	-198 -227	-189 -219	-181 -211	-173 -202	-165 -194	-156 -186	-148 -178	-140 -169	-132 -161		
60	42.00	bu	-191 -221	-181 -211	-171 -201	-161 -191	-152 -181	-142 -171	-132 -161	-122 -151	-112 -142	-102 -132	-92 -122		
70	49.00	bu	-168 -198	-157 -186	-145 -175	-134 -163	-122 -152	-111 -140	-99 -129	-87 -117	-76 -105	-64 -94	-53 -82		
80	56.00	bu	-145 -175	-132 -162	-119 -149	-106 -135	-93 -122	-79 -109	-66 -96	-53 -83	-40 -69	-27 -56	-13 -43		
90	63.00	bu	-122 -152	-108 -137	-93 -122	-78 -107	-63 -93	-48 -78	-33 -63	-19 -48	-4 -33	10 -18	25 -4		
100	70.00	bu	-100 -129	-83 -113	-67 -96	-50 -80	-34 -63	-17 -47	-1 -30	15 -14	31 2	48 18	64 35		
110	77.00	bu	-77 -106	-59 -88	-40 -70	-22 -52	-4 -34	13 -16	31 2	49 20	67 38	86 56	104 74		
120	84.00	bu	-54 -83	-34 -64	-14 -44	5 -24	24 -4	44 15	64 34	84 54	103 74	123 94	143 114		
130	91.00	bu	-31 -60	-9 -39	11 -18	32 3	54 24	75 46	97 67	118 89	140 110	161 131	182 153		
140	98.00	bu	-8 -37	14 -14	37 8	60 31	83 54	106 77	130 100	153 123	176 146	199 169	222 192		
150	105.00	bu	14 -15	39 9	63 34	88 59	113 83	138 108	162 133	187 158	212 182	236 207	261 232		

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 2017 input prices.

Table 22.A Estimated costs per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
FUNGICIDES							
Bravo Weather Stick	pt	6.56	5.5000	36.08	_____		
Aframe	oz	1.96	36.0000	70.56	_____		
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____		
HERBICIDES							
Glyphosate 3lbs a.e	pt	2.25	4.0000	9.00	_____		
Dual II Magnum	pt	14.83	1.0000	14.83	_____		
Valor SX	oz	4.57	3.0000	13.71	_____		
Storm	pt	11.41	1.5000	17.12	_____		
Cadre	oz	3.54	4.0000	14.16	_____		
Butyrac 200 (2,4-DB)	pt	4.34	2.0000	8.68	_____		
Select Max	pt	12.64	1.0000	12.64	_____		
INSECTICIDES							
Admire Pro	oz	1.70	9.0000	15.30	_____		
Acephate 90%	lb	7.43	0.1375	1.02	_____		
SEED/PLANTS							
Peanut Seed	lb	0.84	125.0000	105.00	_____		
ADJUVANTS							
Crop Oil Conc. (Veg.)	pt	2.61	6.0000	15.66	_____		
CLEANING							
Cleaning Peanuts	ton	18.00	1.5300	27.54	_____		
DRYING							
Dry Peanuts	ton	24.00	1.0800	25.92	_____		
CUSTOM LIME							
Lime (Spread)	ton	46.00	0.3330	15.32	_____		
INOCULANT							
Optimize LIFT	oz	0.59	14.8000	8.73	_____		
SOIL TEST							
Soil Test	acre	10.00	0.3330	3.33	_____		
OPERATOR LABOR							
Tractors	hour	13.51	1.6246	21.96	_____		
Self-Propelled	hour	13.51	0.1983	2.70	_____		
HAND LABOR							
Implements	hour	9.06	0.1207	1.09	_____		
Self-Propelled	hour	9.06	0.0991	0.90	_____		
UNALLOCATED LABOR							
hour	13.50	1.4583	19.70				
DIESEL FUEL							
Tractors	gal	1.80	17.5722	31.64	_____		
Self-Propelled	gal	1.80	1.7850	3.26	_____		
REPAIR & MAINTENANCE							
Implements	acre	11.39	1.0000	11.39	_____		
Tractors	acre	9.87	1.0000	9.87	_____		
Self-Propelled	acre	2.03	1.0000	2.03	_____		
INTEREST ON OP. CAP.	acre	6.77	1.0000	6.77	_____		
			-----	-----			
TOTAL DIRECT EXPENSES				531.02	_____		
FIXED EXPENSES							
Implements	acre	38.28	1.0000	38.28	_____		
Tractors	acre	62.11	1.0000	62.11	_____		
Self-Propelled	acre	13.50	1.0000	13.50	_____		
			-----	-----			
TOTAL FIXED EXPENSES				113.89	_____		
			-----	-----			
TOTAL SPECIFIED EXPENSES				644.91	_____		

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	385.00	1.8000	693.00	-----
TOTAL INCOME				693.00	-----
DIRECT EXPENSES					
FUNGICIDES	acre	111.75	1.0000	111.75	-----
HERBICIDES	acre	90.14	1.0000	90.14	-----
INSECTICIDES	acre	16.32	1.0000	16.32	-----
SEED/PLANTS	acre	105.00	1.0000	105.00	-----
ADJUVANTS	acre	15.66	1.0000	15.66	-----
CLEANING	acre	27.54	1.0000	27.54	-----
DRYING	acre	25.92	1.0000	25.92	-----
CUSTOM LIME	acre	15.32	1.0000	15.32	-----
INOCULANT	acre	8.73	1.0000	8.73	-----
SOIL TEST	acre	3.33	1.0000	3.33	-----
HAND LABOR	hour	9.06	0.2199	1.99	-----
OPERATOR LABOR	hour	13.51	1.8229	24.66	-----
UNALLOCATED LABOR	hour	13.50	1.4583	19.70	-----
DIESEL FUEL	gal	1.80	19.3573	34.90	-----
REPAIR & MAINTENANCE	acre	23.29	1.0000	23.29	-----
INTEREST ON OP. CAP.	acre	6.77	1.0000	6.77	-----
TOTAL DIRECT EXPENSES				531.02	-----
RETURNS ABOVE DIRECT EXPENSES				161.98	-----
TOTAL FIXED EXPENSES				113.89	-----
TOTAL SPECIFIED EXPENSES				644.91	-----
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				48.09	-----

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2018

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 II 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
Aframe	oz					18.0000				
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
Aframe	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					1.0800				
Cleaning Peanuts	ton					1.5300				
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 2017 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, 1.8 ton (3600 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----										
Soil Test	acre	3.33					0.08	3.41		3.41
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20	2.20
Glyphosate 3lbs a.e.	pt	9.00					0.21	9.21		9.21
Lime (Spread)	ton	15.32					0.36	15.68		15.68
Bed-Rip/Disk Fold.	8R-38		1.29	0.53	1.78		0.07	3.67	3.13	6.80
Peanut Plt&Pre Rigid	8R-38		2.13	2.39	4.03		0.17	8.72	7.45	16.17
Peanut Seed	lb	105.00					2.08	107.08		107.08
Optimize LIFT	oz	8.73					0.17	8.90		8.90
Admire Pro	oz	15.30					0.30	15.60		15.60
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20	2.20
Dual II Magnum	pt	14.83					0.29	15.12		15.12
Valor SX	oz	13.71					0.27	13.98		13.98
Sprayer 600-750gal	60' 175hp		0.07	0.05	0.13			0.25	0.30	0.55
Acephate 90%	lb	1.02					0.02	1.04		1.04
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20	2.20
Storm	pt	17.12					0.27	17.39		17.39
Cadre	oz	14.16					0.22	14.38		14.38
Butyrac 200 (2,4-DB)	pt	4.34					0.07	4.41		4.41
Crop Oil Conc.(Veg.)	pt	5.22					0.08	5.30		5.30
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20	2.20
Bravo Weather Stick	pt	9.84					0.16	10.00		10.00
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20	2.19
Aframe	oz	35.28					0.42	35.70		35.70
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20	2.19
Butyrac 200 (2,4-DB)	pt	4.34					0.05	4.39		4.39
Crop Oil Conc.(Veg.)	pt	5.22					0.06	5.28		5.28
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20	2.19
Select Max	pt	12.64					0.15	12.79		12.79
Crop Oil Conc.(Veg.)	pt	5.22					0.06	5.28		5.28
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20	2.19
Bravo Weather Stick	pt	6.56					0.08	6.64		6.64
Tebuconazole 3.6	oz	5.11					0.06	5.17		5.17
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20	2.19
Aframe	oz	35.28					0.28	35.56		35.56
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20	2.19
Bravo Weather Stick	pt	9.84					0.08	9.92		9.92
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51			0.98	1.20	2.18
Bravo Weather Stick	pt	9.84					0.04	9.88		9.88
Peanut Dig/Invertor	4R-38		3.28	2.39	4.53		0.04	10.24	7.99	18.23
Peanut Harvester	4R-38		19.48	13.39	22.73		0.22	55.82	67.70	123.52
Dry Peanuts	ton	25.92					0.10	26.02		26.02
Cleaning Peanuts	ton	27.54					0.11	27.65		27.65
Peanut Dump Cart	6-Row		5.46	2.56	7.54		0.06	15.62	14.12	29.74
TOTALS		419.71	34.90	23.29	46.35	0.00	6.77	531.02	113.89	644.91

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2018

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	693.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.84	46.95	45.12	9.84
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.00	28.54	35.62	16.98	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	16.32	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.22	10.44	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	27.54
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.92
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.32	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	8.73	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	0.51	6.45	1.02	2.04	1.02	35.31
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	0.29	3.78	0.58	1.16	0.58	28.51
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.18	3.15	0.36	0.72	0.36	18.52
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.67	3.39	0.84	0.92	0.38	0.57
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.30	175.36	53.48	79.21	47.46	146.21
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.30	-175.36	-53.48	-79.21	-47.46	546.79
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.30	-204.66	-258.14	-337.35	-384.81	161.98

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2018

PRODUCT	PERCENT	75	80	85	90	95	100	105	110	115	120	125	PRODUCT PRICE									
													288.75	308.00	327.25	346.50	365.75	385.00	404.25	423.50	442.75	462.00
PERCENT	YIELD	UNIT	dollars																			
Peanut Runner			-244 -358	-226 -340	-209 -323	-192 -306	-175 -288	-157 -271	-140 -254	-123 -236	-105 -219	-88 -202	-71 -184									
50	0.90	ton	-197 -311	-176 -290	-156 -270	-135 -249	-114 -228	-93 -207	-72 -186	-52 -166	-31 -145	-10 -124	10 -103									
60	1.08	ton	-151 -264	-126 -240	-102 -216	-78 -192	-54 -167	-29 -143	-5 -119	18 -95	42 -70	67 -46	91 -22									
70	1.26	ton	-104 -218	-76 -190	-49 -162	-21 -135	6 -107	34 -79	61 -52	89 -24	117 3	144 31	172 58									
80	1.44	ton	-57 -171	-26 -140	4 -109	35 -78	66 -47	98 -15	129 15	160 46	191 77	222 108	253 140									
90	1.62	ton	-11 -125	23 -90	58 -55	92 -21	127 13	161 48	196 82	231 117	265 152	300 186	335 221									
100	1.80	ton	35 -78	73 -40	111 -2	149 35	187 73	225 112	264 150	302 188	340 226	378 264	416 302									
110	1.98	ton	81 -31	123 9	165 51	206 92	248 134	289 175	331 217	373 259	414 300	456 342	497 383									
120	2.16	ton	128 14	173 59	218 104	263 149	308 194	353 239	398 284	443 329	488 375	533 420	579 465									
130	2.34	ton	175 61	223 109	272 158	320 206	369 255	417 303	466 352	514 400	563 449	611 497	660 546									
140	2.52	ton	221 107	273 159	325 211	377 263	429 315	481 367	533 419	585 471	637 523	689 575	741 627									

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 2017 input prices.

Table 23.A Estimated costs per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.56	5.5000	36.08	_____
Aframe	oz	1.96	36.0000	70.56	_____
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	2.25	4.0000	9.00	_____
Dual II Magnum	pt	14.83	1.0000	14.83	_____
Valor SX	oz	4.57	3.0000	13.71	_____
Storm	pt	11.41	1.5000	17.12	_____
Cadre	oz	3.54	4.0000	14.16	_____
Butyrac 200 (2,4-DB)	pt	4.34	2.0000	8.68	_____
Select Max	pt	12.64	1.0000	12.64	_____
INSECTICIDES					
Admire Pro	oz	1.70	9.0000	15.30	_____
Acephate 90%	lb	7.43	0.1375	1.02	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	125.0000	105.00	_____
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	2.61	6.0000	15.66	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.5300	27.54	_____
DRYING					
Dry Peanuts	ton	24.00	1.0800	25.92	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3330	15.32	_____
INOCULANT					
Optimize LIFT	oz	0.59	14.8000	8.73	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	13.51	1.6876	22.80	_____
Self-Propelled	hour	13.51	0.1983	2.70	_____
HAND LABOR					
Implements	hour	9.06	0.1527	1.38	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
hour	13.50	1.5087	20.38		_____
DIESEL FUEL					
Tractors	gal	1.80	18.0359	32.47	_____
Self-Propelled	gal	1.80	1.7850	3.26	_____
REPAIR & MAINTENANCE					
Implements	acre	11.87	1.0000	11.87	_____
Tractors	acre	10.12	1.0000	10.12	_____
Self-Propelled	acre	2.03	1.0000	2.03	_____
INTEREST ON OP. CAP.	acre	6.87	1.0000	6.87	_____

TOTAL DIRECT EXPENSES				534.49	_____
FIXED EXPENSES					
Implements	acre	36.61	1.0000	36.61	_____
Tractors	acre	63.64	1.0000	63.64	_____
Self-Propelled	acre	13.50	1.0000	13.50	_____

TOTAL FIXED EXPENSES				113.75	_____

TOTAL SPECIFIED EXPENSES				648.24	_____

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	385.00	1.8000	693.00	-----
TOTAL INCOME				693.00	-----
DIRECT EXPENSES					
FUNGICIDES	acre	111.75	1.0000	111.75	-----
HERBICIDES	acre	90.14	1.0000	90.14	-----
INSECTICIDES	acre	16.32	1.0000	16.32	-----
SEED/PLANTS	acre	105.00	1.0000	105.00	-----
ADJUVANTS	acre	15.66	1.0000	15.66	-----
CLEANING	acre	27.54	1.0000	27.54	-----
DRYING	acre	25.92	1.0000	25.92	-----
CUSTOM LIME	acre	15.32	1.0000	15.32	-----
INOCULANT	acre	8.73	1.0000	8.73	-----
SOIL TEST	acre	3.33	1.0000	3.33	-----
HAND LABOR	hour	9.06	0.2519	2.28	-----
OPERATOR LABOR	hour	13.51	1.8859	25.50	-----
UNALLOCATED LABOR	hour	13.50	1.5087	20.38	-----
DIESEL FUEL	gal	1.80	19.8209	35.73	-----
REPAIR & MAINTENANCE	acre	24.02	1.0000	24.02	-----
INTEREST ON OP. CAP.	acre	6.87	1.0000	6.87	-----
TOTAL DIRECT EXPENSES				534.49	-----
RETURNS ABOVE DIRECT EXPENSES				158.51	-----
TOTAL FIXED EXPENSES				113.75	-----
TOTAL SPECIFIED EXPENSES				648.24	-----
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				44.76	-----

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2018

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-30	MFWD 190	0.139	1.00	May		0.13	0.13	0.13	0.11
Peanut Plt&Pre Rigid	8R-30	MFWD 190	0.152	1.00	May		0.15	0.15	0.30	0.12
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 II 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
Aframe	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
Aframe	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-30	MFWD 190	0.235	1.00	Sep		0.23	0.23	0.23	0.18
Peanut Harvester	4R-30	MFWD 225	0.849	1.00	Sep		0.85	0.85	0.85	0.68
Dry Peanuts	ton					1.0800				
Cleaning Peanuts	ton					1.5300				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24

TOTALS						1.88	1.68	2.13	1.50	

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.08	3.41	3.41
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Glyphosate 3lbs a.e.	pt	9.00					0.21	9.21	9.21
Lime (Spread)	ton	15.32					0.36	15.68	15.68
Bed-Rip/Disk Rigid	8R-30		2.45	0.97	3.38		0.13	6.93	5.76
Peanut Plt&Pre Rigid	8R-30		2.69	3.25	5.09		0.22	11.25	9.84
Peanut Seed	lb	105.00					2.08	107.08	107.08
Optimize LIFT	oz	8.73					0.17	8.90	8.90
Admire Pro	oz	15.30					0.30	15.60	15.60
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Dual II Magnum	pt	14.83					0.29	15.12	15.12
Valor SX	oz	13.71					0.27	13.98	13.98
Sprayer 600-750gal	60' 175hp		0.07	0.05	0.13			0.25	0.30
Acephate 90%	lb	1.02					0.02	1.04	1.04
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Storm	pt	17.12					0.27	17.39	17.39
Cadre	oz	14.16					0.22	14.38	14.38
Butyrac 200 (2,4-DB)	pt	4.34					0.07	4.41	4.41
Crop Oil Conc.(Veg.)	pt	5.22					0.08	5.30	5.30
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Bravo Weather Stick	pt	9.84					0.16	10.00	10.00
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Aframe	oz	35.28					0.42	35.70	35.70
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Butyrac 200 (2,4-DB)	pt	4.34					0.05	4.39	4.39
Crop Oil Conc.(Veg.)	pt	5.22					0.06	5.28	5.28
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Select Max	pt	12.64					0.15	12.79	12.79
Crop Oil Conc.(Veg.)	pt	5.22					0.06	5.28	5.28
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Bravo Weather Stick	pt	6.56					0.08	6.64	6.64
Tebuconazole 3.6	oz	5.11					0.06	5.17	5.17
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Aframe	oz	35.28					0.28	35.56	35.56
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Bravo Weather Stick	pt	9.84					0.08	9.92	9.92
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51			0.98	1.20
Bravo Weather Stick	pt	9.84					0.04	9.88	9.88
Peanut Dig/Invertor	4R-30		4.15	3.03	5.74		0.05	12.97	10.12
Peanut Harvester	4R-30		17.72	12.18	20.67		0.20	50.77	60.41
Dry Peanuts	ton	25.92					0.10	26.02	26.02
Cleaning Peanuts	ton	27.54					0.11	27.65	27.65
Peanut Dump Cart	6-Row		5.46	2.56	7.54		0.06	15.62	14.12
TOTALS		419.71	35.73	24.02	48.16	0.00	6.87	534.49	113.75
									648.24

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2018

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	693.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.84	46.95	45.12	9.84
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.00	28.54	35.62	16.98	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	16.32	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.22	10.44	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	27.54
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.92
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.32	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	8.73	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	0.51	9.11	1.02	2.04	1.02	34.46
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	0.29	5.50	0.58	1.16	0.58	27.62
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.18	4.45	0.36	0.72	0.36	17.95
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.67	3.50	0.84	0.92	0.38	0.56
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.30	181.15	53.48	79.21	47.46	143.89
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.30	-181.15	-53.48	-79.21	-47.46	549.11
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.30	-210.45	-263.93	-343.14	-390.60	158.51

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2018

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Peanut Runner		288.75	308.00	327.25	346.50	365.75	385.00	404.25	423.50	442.75	462.00	481.25	
PERCENT	YIELD	UNIT	dollars										
50	0.90	ton	-247	-230	-213	-195	-178	-161	-143	-126	-109	-91	-74
			-361	-344	-326	-309	-292	-274	-257	-240	-222	-205	-188
60	1.08	ton	-201	-180	-159	-138	-118	-97	-76	-55	-34	-14	6
			-314	-294	-273	-252	-231	-210	-190	-169	-148	-127	-107
70	1.26	ton	-154	-130	-106	-81	-57	-33	-9	15	39	63	87
			-268	-244	-219	-195	-171	-147	-122	-98	-74	-50	-25
80	1.44	ton	-107	-80	-52	-24	2	30	58	86	113	141	169
			-221	-193	-166	-138	-110	-83	-55	-27	0	27	55
90	1.62	ton	-61	-30	1	32	63	94	125	156	188	219	250
			-175	-143	-112	-81	-50	-19	12	43	74	105	136
100	1.80	ton	-14	19	54	89	123	158	193	227	262	297	331
			-128	-93	-59	-24	10	44	79	114	148	183	218
110	1.98	ton	31	69	108	146	184	222	260	298	336	374	413
			-81	-43	-5	32	70	108	146	184	223	261	299
120	2.16	ton	78	120	161	203	244	286	327	369	411	452	494
			-35	6	47	89	131	172	214	255	297	338	380
130	2.34	ton	125	170	215	260	305	350	395	440	485	530	575
			11	56	101	146	191	236	281	326	371	416	461
140	2.52	ton	171	220	268	317	365	414	462	511	559	608	656
			57	106	154	203	251	300	349	397	446	494	543
150	2.70	ton	218	270	322	374	426	478	530	582	634	686	738
			104	156	208	260	312	364	416	468	520	572	624

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 2017 input prices.

Table 24.A Estimated costs per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
FUNGICIDES							
Bravo Weather Stick	pt	6.56	5.5000	36.08	_____		
Aframe	oz	1.96	36.0000	70.56	_____		
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____		
HERBICIDES							
Glyphosate 3lbs a.e.	pt	2.25	4.0000	9.00	_____		
Dual II Magnum	pt	14.83	1.0000	14.83	_____		
Valor SX	oz	4.57	3.0000	13.71	_____		
Storm	pt	11.41	1.5000	17.12	_____		
Cadre	oz	3.54	4.0000	14.16	_____		
Butyrac 200 (2,4-DB)	pt	4.34	2.0000	8.68	_____		
Select Max	pt	12.64	1.0000	12.64	_____		
INSECTICIDES							
Admire Pro	oz	1.70	9.0000	15.30	_____		
Acephate 90%	lb	7.43	0.1375	1.02	_____		
SEED/PLANTS							
Peanut Seed	lb	0.84	125.0000	105.00	_____		
ADJUVANTS							
Crop Oil Conc.(Veg.)	pt	2.61	6.0000	15.66	_____		
CLEANING							
Cleaning Peanuts	ton	18.00	1.5300	27.54	_____		
DRYING							
Dry Peanuts	ton	24.00	1.0800	25.92	_____		
CUSTOM LIME							
Lime (Spread)	ton	46.00	0.3330	15.32	_____		
INOCULANT							
Optimize LIFT	oz	0.59	14.8000	8.73	_____		
SOIL TEST							
Soil Test	acre	10.00	0.3330	3.33	_____		
OPERATOR LABOR							
Tractors	hour	13.51	1.1856	16.02	_____		
Self-Propelled	hour	13.51	0.1983	2.70	_____		
HAND LABOR							
Implements	hour	9.06	0.0804	0.73	_____		
Self-Propelled	hour	9.06	0.0991	0.90	_____		
UNALLOCATED LABOR							
hour	13.51	1.1072	14.96	_____			
DIESEL FUEL							
Tractors	gal	1.80	12.8051	23.05	_____		
Self-Propelled	gal	1.80	1.7850	3.26	_____		
REPAIR & MAINTENANCE							
Implements	acre	8.97	1.0000	8.97	_____		
Tractors	acre	7.18	1.0000	7.18	_____		
Self-Propelled	acre	2.03	1.0000	2.03	_____		
INTEREST ON OP. CAP.	acre	6.64	1.0000	6.64	_____		

TOTAL DIRECT EXPENSES				506.15	_____		
FIXED EXPENSES							
Implements	acre	31.91	1.0000	31.91	_____		
Tractors	acre	45.25	1.0000	45.25	_____		
Self-Propelled	acre	13.50	1.0000	13.50	_____		

TOTAL FIXED EXPENSES				90.66	_____		

TOTAL SPECIFIED EXPENSES				596.81	_____		

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	385.00	1.8000	693.00	_____
TOTAL INCOME				693.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	111.75	1.0000	111.75	_____
HERBICIDES	acre	90.14	1.0000	90.14	_____
INSECTICIDES	acre	16.32	1.0000	16.32	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
ADJUVANTS	acre	15.66	1.0000	15.66	_____
CLEANING	acre	27.54	1.0000	27.54	_____
DRYING	acre	25.92	1.0000	25.92	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
INOCULANT	acre	8.73	1.0000	8.73	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
OPERATOR LABOR	hour	13.51	1.3840	18.72	_____
UNALLOCATED LABOR	hour	13.51	1.1072	14.96	_____
DIESEL FUEL	gal	1.80	14.5901	26.31	_____
REPAIR & MAINTENANCE	acre	18.18	1.0000	18.18	_____
INTEREST ON OP. CAP.	acre	6.64	1.0000	6.64	_____
TOTAL DIRECT EXPENSES				506.15	_____
RETURNS ABOVE DIRECT EXPENSES				186.85	_____
TOTAL FIXED EXPENSES				90.66	_____
TOTAL SPECIFIED EXPENSES				596.81	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				96.19	_____

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2018

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 II 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
Aframe	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
Aframe	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					1.0800				
Cleaning Peanuts	ton					1.5300				
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 2017 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, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33				0.08	3.41		3.41
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.02	1.00	1.20	2.20
Glyphosate 3lbs a.e.	pt	9.00				0.21	9.21		9.21
Lime (Spread)	ton	15.32				0.36	15.68		15.68
Bed-Rip/Disk Fold.	12R-38		0.96	0.43	1.12	0.05	2.56	2.53	5.09
Peanut Plt&Pre Fold.	12R-38		1.42	2.88	2.69	0.14	7.13	7.42	14.55
Peanut Seed	lb	105.00				2.08	107.08		107.08
Optimize LIFT	oz	8.73				0.17	8.90		8.90
Admire Pro	oz	15.30				0.30	15.60		15.60
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.02	1.00	1.20	2.20
Dual II Magnum	pt	14.83				0.29	15.12		15.12
Valor SX	oz	13.71				0.27	13.98		13.98
Sprayer 600-750gal	60' 175hp		0.07	0.05	0.13		0.25	0.30	0.55
Acephate 90%	lb	1.02				0.02	1.04		1.04
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.02	1.00	1.20	2.20
Storm	pt	17.12				0.27	17.39		17.39
Cadre	oz	14.16				0.22	14.38		14.38
Butyrac 200 (2,4-DB)	pt	4.34				0.07	4.41		4.41
Crop Oil Conc.(Veg.)	pt	5.22				0.08	5.30		5.30
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.02	1.00	1.20	2.20
Bravo Weather Stick	pt	9.84				0.16	10.00		10.00
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.01	0.99	1.20	2.19
Aframe	oz	35.28				0.42	35.70		35.70
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.01	0.99	1.20	2.19
Butyrac 200 (2,4-DB)	pt	4.34				0.05	4.39		4.39
Crop Oil Conc.(Veg.)	pt	5.22				0.06	5.28		5.28
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.01	0.99	1.20	2.19
Select Max	pt	12.64				0.15	12.79		12.79
Crop Oil Conc.(Veg.)	pt	5.22				0.06	5.28		5.28
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.01	0.99	1.20	2.19
Bravo Weather Stick	pt	6.56				0.08	6.64		6.64
Tebuconazole 3.6	oz	5.11				0.06	5.17		5.17
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.01	0.99	1.20	2.19
Aframe	oz	35.28				0.28	35.56		35.56
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51	0.01	0.99	1.20	2.19
Bravo Weather Stick	pt	9.84				0.08	9.92		9.92
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.98	1.20	2.18
Bravo Weather Stick	pt	9.84				0.04	9.88		9.88
Peanut Dig/Invertor	6R-38		2.18	1.62	3.02	0.03	6.85	5.82	12.67
Peanut Harvester	6R-38		13.03	8.66	15.20	0.15	37.04	47.27	84.31
Dry Peanuts	ton	25.92				0.10	26.02		26.02
Cleaning Peanuts	ton	27.54				0.11	27.65		27.65
Peanut Dump Cart	6-Row		5.46	2.56	7.54	0.06	15.62	14.12	29.74
TOTALS		419.71	26.31	18.18	35.31	0.00	6.64	506.15	90.66
									596.81

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2018

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	693.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.84	46.95	45.12	9.84
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.00	28.54	35.62	16.98	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	16.32	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.22	10.44	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	27.54
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.92
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.32	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	8.73	0.00	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	0.51	4.45	1.02	2.04	1.02	26.27
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	0.29	2.74	0.58	1.16	0.58	20.96
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.18	3.54	0.36	0.72	0.36	13.02
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.67	3.34	0.84	0.92	0.38	0.49
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.30	172.66	53.48	79.21	47.46	124.04
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.30	-172.66	-53.48	-79.21	-47.46	568.96
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.30	-201.96	-255.44	-334.65	-382.11	186.85

Note: Cost of production estimates are based on 2017 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, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2018

PRODUCT	PERCENT	YIELD	UNIT	PERCENT										
				75	80	85	90	95	100	105	110	115	120	125
Peanut Runner				288.75	308.00	327.25	346.50	365.75	385.00	404.25	423.50	442.75	462.00	481.25
PERCENT YIELD UNIT -----dollars-----														
50	0.90	ton		-219 -310	-202 -292	-184 -275	-167 -258	-150 -240	-132 -223	-115 -206	-98 -188	-80 -171	-63 -154	-46 -136
60	1.08	ton		-172 -263	-152 -242	-131 -221	-110 -201	-89 -180	-68 -159	-48 -138	-27 -117	-6 -97	14 -76	35 -55
70	1.26	ton		-126 -216	-101 -192	-77 -168	-53 -144	-29 -119	-4 -95	19 -71	43 -47	67 -22	92 1	116 25
80	1.44	ton		-79 -170	-51 -142	-24 -114	3 -87	31 -59	58 -31	86 -3	114 23	142 51	169 79	197 106
90	1.62	ton		-33 -123	-1 -92	29 -61	60 -30	91 1	122 32	154 63	185 94	216 125	247 156	278 188
100	1.80	ton		13 -77	48 -42	82 -7	117 26	152 61	186 96	221 130	256 165	290 200	325 234	360 269
110	1.98	ton		60 -30	98 7	136 45	174 83	212 122	250 160	288 198	327 236	365 274	403 312	441 350
120	2.16	ton		106 16	148 57	189 99	231 140	273 182	314 224	356 265	397 307	439 348	481 390	522 431
130	2.34	ton		153 62	198 107	243 152	288 197	333 242	378 287	423 333	468 378	513 423	558 468	603 513
140	2.52	ton		200 109	248 157	297 206	345 254	394 303	442 351	491 400	539 448	588 497	636 545	685 594
150	2.70	ton		246 155	298 207	350 259	402 311	454 363	506 415	558 467	610 519	662 571	714 623	766 675

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 2017 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
FUNGICIDES							
Bravo Weather Stick	pt	6.56	5.5000	36.08			
Aframe	oz	1.96	36.0000	70.56			
Tebuconazole 3.6	oz	0.71	7.2000	5.11			
HERBICIDES							
Glyphosate 3lbs a.e	pt	2.25	4.0000	9.00			
Dual II Magnum	pt	14.83	1.0000	14.83			
Valor SX	oz	4.57	3.0000	13.71			
Storm	pt	11.41	1.5000	17.12			
Cadre	oz	3.54	4.0000	14.16			
Butyrac 200 (2,4-DB)	pt	4.34	2.0000	8.68			
Select Max	pt	12.64	1.0000	12.64			
INSECTICIDES							
Admire Pro	oz	1.70	9.0000	15.30			
Acephate 90%	lb	7.43	0.1375	1.02			
IRRIGATION SUPPLIES							
Roll-Out Pipe	ft	0.25	33.0000	8.25			
SEED/PLANTS							
Peanut Seed	lb	0.84	125.0000	105.00			
ADJUVANTS							
Crop Oil Conc. (Veg.)	pt	2.61	6.0000	15.66			
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	46.00	0.3330	15.32			
INOCULANT							
Optimize LIFT	oz	0.59	14.8000	8.73			
SOIL TEST							
Soil Test	acre	10.00	0.3330	3.33			
OPERATOR LABOR							
Tractors	hour	13.51	1.2642	17.08			
Self-Propelled	hour	13.51	0.1983	2.70			
IRRIGATE LABOR							
Special Labor	hour	9.06	0.3250	2.96			
Implementations	hour	9.06	0.0625	0.57			
HAND LABOR							
Implementations	hour	9.06	0.0804	0.73			
Self-Propelled	hour	9.06	0.0991	0.90			
UNALLOCATED LABOR							
hour		13.51	1.1072	14.96			
DIESEL FUEL							
Tractors	gal	1.80	13.5313	24.37			
Self-Propelled	gal	1.80	1.7850	3.26			
Irrigate Peanuts	gal	1.80	9.7755	17.60			
REPAIR & MAINTENANCE							
Implementations	acre	9.17	1.0000	9.17			
Tractors	acre	7.57	1.0000	7.57			
Self-Propelled	acre	2.03	1.0000	2.03			
Irrigate Peanuts	acre	6.88	1.0000	6.88			
INTEREST ON OP. CAP.	acre	7.31	1.0000	7.31			
<hr/>							
TOTAL DIRECT EXPENSES				557.93			
FIXED EXPENSES							
Implementations	acre	32.93	1.0000	32.93			
Tractors	acre	47.76	1.0000	47.76			
Self-Propelled	acre	13.50	1.0000	13.50			
Irrigate Peanuts	acre	53.42	1.0000	53.42			
<hr/>							
TOTAL FIXED EXPENSES				147.61			
<hr/>							
TOTAL SPECIFIED EXPENSES				705.54			
<hr/>							

Note: Cost of production estimates are based on 2017 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	385.00	2.2000	847.00	_____
TOTAL INCOME				847.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	111.75	1.0000	111.75	_____
HERBICIDES	acre	90.14	1.0000	90.14	_____
INSECTICIDES	acre	16.32	1.0000	16.32	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
ADJUVANTS	acre	15.66	1.0000	15.66	_____
CLEANING	acre	33.66	1.0000	33.66	_____
DRYING	acre	31.68	1.0000	31.68	_____
CUSTOM LIME	acre	15.32	1.0000	15.32	_____
INOCULANT	acre	8.73	1.0000	8.73	_____
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	13.51	1.4625	19.78	_____
UNALLOCATED LABOR	hour	13.51	1.1072	14.96	_____
DIESEL FUEL	gal	1.80	25.0919	45.23	_____
REPAIR & MAINTENANCE	acre	25.65	1.0000	25.65	_____
INTEREST ON OP. CAP.	acre	7.31	1.0000	7.31	_____
TOTAL DIRECT EXPENSES				557.93	_____
RETURNS ABOVE DIRECT EXPENSES				289.07	_____
TOTAL FIXED EXPENSES				147.61	_____
TOTAL SPECIFIED EXPENSES				705.54	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				141.46	_____

Note: Cost of production estimates are based on 2017 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, 2018

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 II 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
Aframe	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
Aframe	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					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 2017 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.08	3.41	3.41
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Glyphosate 3lbs a.e.	pt	9.00					0.21	9.21	9.21
Lime (Spread)	ton	15.32					0.36	15.68	15.68
Bed-Rip/Disk Fold.	12R-38		0.96	0.43	1.12		0.05	2.56	2.53
Peanut Plt&Pre Fold.	12R-38		1.42	2.88	2.69		0.14	7.13	7.42
Peanut Seed	lb	105.00					2.08	107.08	107.08
Optimize LIFT	oz	8.73					0.17	8.90	8.90
Admire Pro	oz	15.30					0.30	15.60	15.60
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Dual II Magnum	pt	14.83					0.29	15.12	15.12
Valor SX	oz	13.71					0.27	13.98	13.98
Sprayer 600-750gal	60' 175hp		0.07	0.05	0.13			0.25	0.30
Acephate 90%	lb	1.02					0.02	1.04	1.04
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Storm	pt	17.12					0.27	17.39	17.39
Cadre	oz	14.16					0.22	14.38	14.38
Butyrac 200 (2,4-DB)	pt	4.34					0.07	4.41	4.41
Crop Oil Conc.(Veg.)	pt	5.22					0.08	5.30	5.30
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.02	1.00	1.20
Bravo Weather Stick	pt	9.84					0.16	10.00	10.00
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Aframe	oz	35.28					0.42	35.70	35.70
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Butyrac 200 (2,4-DB)	pt	4.34					0.05	4.39	4.39
Crop Oil Conc.(Veg.)	pt	5.22					0.06	5.28	5.28
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Select Max	pt	12.64					0.15	12.79	12.79
Crop Oil Conc.(Veg.)	pt	5.22					0.06	5.28	5.28
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Bravo Weather Stick	pt	6.56					0.08	6.64	6.64
Tebuconazole 3.6	oz	5.11					0.06	5.17	5.17
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Aframe	oz	35.28					0.28	35.56	35.56
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51		0.01	0.99	1.20
Bravo Weather Stick	pt	9.84					0.08	9.92	9.92
Sprayer 600-750gal	60' 175hp		0.29	0.18	0.51			0.98	1.20
Bravo Weather Stick	pt	9.84					0.04	9.88	9.88
Peanut Dig/Invertor	6R-38		2.18	1.62	3.02		0.03	6.85	5.82
Peanut Harvester	6R-38		13.03	8.66	15.20		0.15	37.04	47.27
Dry Peanuts	ton	31.68					0.13	31.81	31.81
Cleaning Peanuts	ton	33.66					0.13	33.79	33.79
Peanut Dump Cart	6-Row		5.46	2.56	7.54		0.06	15.62	14.12
Irrigate Peanuts	acre	8.25	18.92	7.47	4.59		0.62	39.85	56.95
TOTALS		439.84	45.23	25.65	39.90	0.00	7.31	557.93	147.61
									705.54

Note: Cost of production estimates are based on 2017 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, 2018

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	847.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.84	46.95	45.12	9.84
HERBICIDES	0.00	0.00	0.00	0.00	0.00	9.00	28.54	35.62	16.98	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	16.32	0.00	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.22	10.44	0.00	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.66
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.68
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.32	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	8.73	0.00	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	0.51	0.00	0.00	0.00	0.00	0.00	0.74	6.79	1.25	2.50	1.84	26.27
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	0.67	0.00	0.00	0.00	0.00	0.00	0.29	3.09	4.98	9.96	5.28	20.96
REPAIR & MAINTENANCE	0.31	0.00	0.00	0.00	0.00	0.00	0.18	6.65	1.34	2.68	1.47	13.02
INTEREST ON OP. CAP.	0.07	0.00	0.00	0.00	0.00	0.00	0.68	3.62	0.93	1.04	0.43	0.54
TOTAL DIRECT EXPENSES	1.56	0.00	0.00	0.00	0.00	0.00	29.54	186.99	59.18	90.55	54.14	135.97
NET INCOME	-1.56	0.00	0.00	0.00	0.00	0.00	-29.54	-186.99	-59.18	-90.55	-54.14	711.03
NET INCOME TO DATE	-1.56	-1.56	-1.56	-1.56	-1.56	-1.56	-31.10	-218.09	-277.27	-367.82	-421.96	289.07

Note: Cost of production estimates are based on 2017 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, 2018

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Peanut Runner		288.75	308.00	327.25	346.50	365.75	385.00	404.25	423.50	442.75	462.00	481.25	
PERCENT	YIELD	UNIT	dollars										
50	1.10	ton	-207	-186	-165	-143	-122	-101	-80	-59	-38	-16	4
			-355	-333	-312	-291	-270	-249	-228	-206	-185	-164	-143
60	1.32	ton	-150	-125	-99	-74	-48	-23	1	27	52	78	103
			-298	-272	-247	-221	-196	-171	-145	-120	-94	-69	-44
70	1.54	ton	-93	-63	-34	-4	25	54	84	113	143	173	202
			-241	-211	-181	-152	-122	-92	-63	-33	-4	25	55
80	1.76	ton	-36	-2	31	65	98	132	166	200	234	268	302
			-184	-150	-116	-82	-48	-14	19	52	86	120	154
90	1.98	ton	20	58	96	134	172	210	249	287	325	363	401
			-127	-89	-51	-12	25	63	101	139	177	215	253
100	2.20	ton	77	119	162	204	246	289	331	373	416	458	500
			-70	-27	14	56	99	141	183	226	268	310	353
110	2.42	ton	134	180	227	274	320	367	413	460	506	553	600
			-13	33	79	126	173	219	266	312	359	405	452
120	2.64	ton	191	242	292	343	394	445	496	546	597	648	699
			43	94	145	196	246	297	348	399	450	501	551
130	2.86	ton	248	303	358	413	468	523	578	633	688	743	798
			100	155	210	265	320	375	430	485	541	596	651
140	3.08	ton	305	364	423	483	542	601	660	720	779	838	898
			157	216	276	335	394	454	513	572	631	691	750
150	3.30	ton	362	425	489	552	616	679	743	806	870	933	997
			214	278	341	405	468	532	595	659	722	786	849

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 2017 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, 2018

Item Name	Size	Purchase	Annual	Useful	Fuel	Labor	Fuel	R&M	Total	Fixed	Total
		Price	Use	Life	Use				Direct		Cost
		dollars	hours	years	gal/hr				-----\$/hour-----		
Combine (250-299 hp)	265 hp	328,000	300	8	13.64	13.51	24.55	34.16	72.22	134.81	207.04
Combine (300-349 hp)	325 hp	355,000	300	8	16.73	13.51	30.11	36.97	80.60	145.91	226.51
Combine (350-399 hp)	355 hp	354,000	300	8	18.27	13.51	32.88	36.87	83.27	145.50	228.77
Combine (400-449 hp)	425 hp	413,000	300	8	21.87	13.51	39.37	43.02	95.90	169.75	265.65
Combine (450-499hp)	475 hp	427,000	300	8	24.44	13.51	44.00	44.47	101.99	175.50	277.50
Tractor(20-39hp)CB	MFWD 30	28,300	600	8	1.54	13.51	2.77	0.88	17.17	5.32	22.49
Tractor(20-39hp)RB	MFWD 30	20,000	600	8	1.54	13.51	2.77	0.62	16.91	3.76	20.67
Tractor(40-59hp)CB	2WD 50	32,300	600	8	2.57	13.51	4.63	1.00	19.15	6.07	25.22
Tractor(40-59hp)CB	MFWD 50	39,500	600	8	2.57	13.51	4.63	1.23	19.37	7.42	26.80
Tractor(40-59hp)RB	2WD 50	21,100	600	8	2.57	13.51	4.63	0.65	18.80	3.96	22.76
Tractor(40-59hp)RB	MFWD 50	24,800	600	8	2.57	13.51	4.63	0.77	18.91	4.66	23.58
Tractor(60-89hp)CB	2WD 75	49,300	600	8	3.86	13.51	6.94	1.54	21.99	9.27	31.27
Tractor(60-89hp)CB	MFWD 75	52,500	600	8	3.86	13.51	6.94	1.64	22.09	9.87	31.97
Tractor(60-89hp)RB	2WD 75	33,100	600	8	3.86	13.51	6.94	1.03	21.49	6.22	27.71
Tractor(60-89hp)RB	MFWD 75	37,800	600	8	3.86	13.51	6.94	1.18	21.63	7.10	28.74
Tractor(90-119hp)CB	2WD 105	66,300	600	8	5.40	13.51	9.72	2.07	25.31	12.46	37.77
Tractor(90-119hp)CB	MFWD 105	76,100	600	8	5.40	13.51	9.72	2.37	25.61	14.31	39.92
Tractor(90-119hp)RB	2WD 105	60,300	600	8	5.40	13.51	9.72	1.88	25.12	11.33	36.46
Tractor(90-119hp)RB	MFWD 105	67,800	600	8	5.40	13.51	9.72	2.11	25.35	12.75	38.10
Tractor(120-139hp)CB	2WD 130	103,000	600	8	6.69	13.51	12.04	3.21	28.77	19.36	48.14
Tractor(120-139hp)CB	MFWD 130	113,000	600	8	6.69	13.51	12.04	3.53	29.08	21.25	50.33
Tractor(140-159hp)CB	MFWD 150	131,000	600	8	7.72	13.51	13.89	4.09	31.50	24.63	56.13
Tractor(160-179hp)CB	MFWD 170	153,000	600	8	8.75	13.51	15.75	4.78	34.04	30.10	64.14
Tractor(180-199hp)CB	MFWD 190	173,000	600	8	9.77	13.51	17.60	5.40	36.51	34.04	70.56
Tractor(200-249hp)CB	MFWD 225	210,000	600	8	11.58	13.51	20.84	6.56	40.91	41.32	82.24
Tractor(250-349hp)CB	4WD 300	285,000	600	8	15.44	13.51	27.79	8.90	50.21	56.08	106.29
Tractor(250-349hp)CB	MFWD 300	272,000	600	8	15.44	13.51	27.79	8.50	49.80	53.52	103.32
Tractor(250-349hp)CB	Track 300	318,000	600	8	15.44	13.51	27.79	9.93	51.24	62.57	113.81
Tractor(350-449hp)	Track 400	341,000	600	8	20.58	13.51	37.06	10.65	61.22	67.10	128.32
Tractor(350-449hp)CB	4WD 400	331,000	600	8	20.58	13.51	37.06	10.34	60.91	65.13	126.04
Tractor(450-550hp)CB	4WD 500	367,000	600	8	25.73	13.51	46.32	11.46	71.30	72.21	143.52
Tractor(450-550hp)CB	Track 500	445,000	600	8	25.73	13.51	46.32	13.90	73.74	87.56	161.30
Utility Vehicle	800 CC	10,000	200	8	0.70	13.51	1.47	1.56	16.54	6.16	22.70
Utility Vehicle	900 CC	12,600	200	8	1.00	13.51	2.10	1.96	17.57	7.76	25.34
Utility Vehicle-mule	600 CC	8,340	200	8	0.50	13.51	1.05	1.30	15.86	5.14	21.00

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

CB = Cab, RB = Roll Bar

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 2018

Item Name	Size	Purchase	Annual	Useful	Fuel	Perf	Labor	Fuel	R&M	Total	Fixed	Total	
		Price	Use	Life	Use	Rate				Direct		Cost	
		dollars	hours	years	gal/hr	hr/ac	\$/acre-----						
Cotton Picker	4R-38(250)	268,000	200	8	12.86	0.257	5.81	5.97	10.79	22.58	42.59	65.17	
Cotton Picker	4R-38(350)	351,000	200	8	18.01	0.257	5.81	8.35	14.13	28.31	55.78	84.09	
Cotton Picker	4R2x1(350)	357,000	200	8	18.01	0.172	3.88	5.58	9.61	19.08	37.92	57.01	
Cotton Picker	6R-30(355)	465,000	200	8	18.27	0.218	4.92	7.17	15.85	27.96	62.56	90.53	
Cotton Picker	6R-38(355)	465,000	200	8	18.27	0.172	3.88	5.66	12.51	22.07	49.39	71.47	
Cotton Picker/Modu	4R-38(365)	536,000	200	8	20.58	0.257	5.81	9.55	21.58	36.96	85.18	122.14	
Cotton Picker/Modu	6R-30(500)	764,000	200	8	25.73	0.218	4.92	10.11	26.05	41.08	102.80	143.89	
Cotton Picker/Module	6R-38(500)	765,000	200	8	25.73	0.172	3.88	7.98	20.59	32.46	81.26	113.73	
Dry Applicator SP	70'300cuft	306,000	350	8	16.98	0.015	0.27	0.46	0.24	0.98	1.62	2.61	
Sprayer	600-750gal	60' 175hp	193,000	350	8	9.00	0.017	0.31	0.28	0.18	0.78	1.19	1.98
Sprayer	600-825gal	80' 175hp	202,000	350	8	11.81	0.013	0.23	0.28	0.14	0.66	0.94	1.60
Sprayer	600-825gal	90' 250hp	279,000	350	8	12.73	0.011	0.21	0.26	0.17	0.65	1.15	1.81
Sprayer	800gal	100' 250hp	280,000	350	8	14.15	0.010	0.19	0.26	0.15	0.61	1.04	1.66
Sprayer	800gal	80' 250hp	254,000	350	8	12.86	0.013	0.23	0.30	0.17	0.72	1.18	1.90
Sprayer	1000-1400gal	90' 275hp	299,000	350	8	14.15	0.010	0.19	0.26	0.16	0.62	1.11	1.74
Sprayer	1000gal	100' 300hp	310,000	350	8	15.44	0.010	0.19	0.29	0.17	0.66	1.15	1.81
Sprayer	1200+gal	120' 300hp	334,000	350	8	15.44	0.008	0.15	0.24	0.15	0.56	1.03	1.59
xxCotton Picker/Modu	6R-38(365)	536,000	200	8	20.58	0.172	3.88	6.38	14.43	24.70	56.94	81.64	

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, 2018

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total Imp.	--Fixed--	Total Cost						
									Imp.	P.U.	Direct									
				dollars	hours	years	hr/ac		\$/acre											
Bed-Paratill	Fold 8R-38	MFWD 225	54,400	150	12	0.080	1.09	1.68	1.58	0.52	4.89	2.75	3.33	10.98						
Bed-Paratill	Fold 8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.72	1.12	1.34	0.35	3.54	2.32	2.22	8.09						
Bed-Paratill	Fold 12R-38	MFWD 225	69,100	150	12	0.053	0.72	1.12	1.34	0.35	3.54	2.32	2.22	8.09						
Bed-Paratill	Rigid 4R-30	MFWD 225	12,300	150	12	0.204	2.76	4.25	0.90	1.34	9.26	1.57	8.44	19.28						
Bed-Paratill	Rigid 4R-38	MFWD 225	12,300	150	12	0.160	2.17	3.35	0.71	1.05	7.29	1.23	6.64	15.18						
Bed-Paratill	Rigid 6R-30	MFWD 225	17,300	150	12	0.136	1.84	2.83	0.85	0.89	6.42	1.47	5.62	13.53						
Bed-Paratill	Rigid 6R-38	MFWD 225	17,200	150	12	0.107	1.45	2.24	0.66	0.70	5.06	1.15	4.44	10.67						
Bed-Paratill	Rigid 8R-30	MFWD 225	22,600	150	12	0.102	1.38	2.12	0.83	0.67	5.01	1.44	4.22	10.68						
Bed-Paratill	Rigid 8R-38	MFWD 225	22,600	150	12	0.080	1.09	1.68	0.65	0.52	3.96	1.14	3.33	8.44						
Bed-Paratill	w/rol 4R-30	MFWD 225	17,900	150	12	0.204	2.76	4.25	1.32	1.34	9.68	2.29	8.44	20.41						
Bed-Paratill	w/rol 4R-38	MFWD 225	17,900	150	12	0.160	2.17	3.35	1.03	1.05	7.62	1.80	6.64	16.07						
Bed-Paratill	w/rol 6R-38	MFWD 225	25,200	150	12	0.107	1.45	2.24	0.97	0.70	5.37	1.69	4.44	11.52						
Bed-Rip/Disk	Fold. 8R-38	MFWD 190	36,900	300	20	0.073	0.98	1.28	0.13	0.39	2.80	0.63	2.48	5.93						
Bed-Rip/Disk	Fold. 12R-30	MFWD 225	56,600	300	20	0.061	0.83	1.28	0.17	0.40	2.69	0.82	2.54	6.06						
Bed-Rip/Disk	Fold. 12R-38	MFWD 225	56,600	300	20	0.046	0.62	0.96	0.13	0.30	2.02	0.62	1.91	4.55						
Bed-Rip/Disk	Rigid 4R-30	MFWD 190	17,300	300	20	0.184	2.49	3.25	0.15	0.99	6.91	0.75	6.29	13.96						
Bed-Rip/Disk	Rigid 4R-38	MFWD 190	17,300	300	20	0.146	1.98	2.58	0.12	0.79	5.48	0.60	4.99	11.08						
Bed-Rip/Disk	Rigid 6R-38	MFWD 190	23,900	300	20	0.097	1.31	1.71	0.11	0.52	3.66	0.55	3.31	7.53						
Bed-Rip/Disk	Rigid 8R-30	MFWD 190	31,300	300	20	0.139	1.87	2.44	0.21	0.75	5.29	1.03	4.73	11.05						
Bed-Rip/Disk	Rigid 8R-38	MFWD 190	31,300	300	20	0.073	0.98	1.28	0.11	0.39	2.78	0.54	2.48	5.81						
Bed-Rip/Disk	Rigid 6R-30	MFWD 190	23,900	300	20	0.123	1.66	2.16	0.14	0.66	4.64	0.69	4.19	9.54						
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	24,600	150	12	0.107	1.45	2.24	0.95	0.70	5.35	1.65	4.44	11.45						
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	32,700	150	12	0.080	1.09	1.68	0.95	0.52	4.25	1.65	3.33	9.25						
Bed/Disk (Hipper)	4R-38	MFWD 150	9,200	160	10	0.147	1.99	2.05	0.33	0.60	4.99	0.89	3.63	9.52						
Bed/Disk (Hipper)	6R-30	MFWD 170	15,100	160	10	0.125	1.68	1.96	0.47	0.59	4.72	1.24	3.76	9.73						
Bed/Disk (Hipper)	6R-38	MFWD 170	13,000	160	10	0.098	1.33	1.55	0.32	0.47	3.67	0.84	2.97	7.49						
Bed/Disk (Hipper)	8R-30	MFWD 190	14,400	160	10	0.093	1.26	1.65	0.33	0.50	3.76	0.89	3.19	7.84						
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	29,200	160	10	0.049	0.66	0.86	0.36	0.26	2.16	0.95	1.67	4.79						
Bed/Disk (Hipper)	12R-30	MFWD 225	28,400	160	10	0.062	0.84	1.30	0.44	0.41	3.00	1.17	2.58	6.75						
Bed/Disk (Hipper)	12R-38	MFWD 225	29,200	160	10	0.049	0.66	1.02	0.36	0.32	2.37	0.95	2.03	5.36						
Bed/Disk (Hipper)	16R40	MFWD 300	47,000	160	10	0.035	0.47	0.98	0.41	0.30	2.17	1.09	1.89	5.16						
Bed/Disk (Hipper) F1	8R-38	MFWD 190	20,000	160	10	0.074	1.00	1.30	0.37	0.40	3.07	0.97	2.52	6.57						
Bed/Disk (Hipper) Rd	8R-38	MFWD 190	15,600	160	10	0.074	1.00	1.30	0.28	0.40	2.99	0.76	2.52	6.28						
Bed/Disk w/roller	8R-30/40	MFWD 190	26,600	160	10	0.093	1.26	1.65	0.62	0.50	4.04	1.64	3.19	8.88						
Bed/Disk w/roller	12R-30/40	MFWD 225	44,300	160	10	0.062	0.84	1.30	0.69	0.41	3.24	1.82	2.58	7.66						
Bed/Disk w/roller	8R-38	MFWD 190	26,600	160	10	0.074	1.00	1.30	0.49	0.40	3.19	1.30	2.52	7.02						
Bed/Lister	4R-38	MFWD 150	18,200	160	8	0.228	3.08	3.17	0.97	0.93	8.16	3.06	5.62	16.86						
Bed/Lister	6R-38	MFWD 150	19,100	160	8	0.120	1.62	1.67	0.53	0.49	4.32	1.69	2.96	8.97						
Bed/Lister	8R-30	MFWD 190	23,100	160	8	0.114	1.54	2.01	0.61	0.61	4.78	1.94	3.88	10.62						
Bed/Lister	8R-38	MFWD 190	23,400	160	8	0.090	1.21	1.58	0.49	0.48	3.79	1.55	3.07	8.42						
Bed/Lister	8R-38 2x1	MFWD 190	46,700	160	8	0.060	0.81	1.05	0.65	0.32	2.85	2.07	2.04	6.96						
Bed/Lister	12R-38	MFWD 225	46,700	160	8	0.060	0.81	1.25	0.65	0.39	3.11	2.07	2.48	7.67						
Bed/Lister	16R-30	MFWD 225	58,100	160	8	0.035	0.47	0.73	0.47	0.23	1.91	1.50	1.45	4.87						
Bed/Lister	16R40	MFWD 300	60,900	160	8	0.043	0.58	1.19	0.61	0.36	2.76	1.93	2.30	7.00						
Bed/Lister-Roll-Fold	8R-38	MFWD 190	24,300	160	10	0.074	1.00	1.30	0.45	0.40	3.15	1.18	2.52	6.86						
Bed/Lister-Roll-Fold	12R-30	MFWD 225	29,200	160	10	0.062	0.84	1.30	0.45	0.41	3.01	1.20	2.58	6.80						
Bed/Lister-Roll-Fold	12R-38	MFWD 225	33,700	160	10	0.049	0.66	1.02	0.41	0.32	2.43	1.09	2.03	5.57						
Bed/Lister-Roll-Fold	16R-30	MFWD 225	34,800	160	10	0.046	0.63	0.97	0.40	0.30	2.32	1.07	1.93	5.34						
Bed/Lister-Roll-Rig.	8R-38	MFWD 190	20,300	160	10	0.074	1.00	1.30	0.37	0.40	3.08	0.99	2.52	6.59						
Blade-Box	6'-7'	MFWD 105	1,180	200	20	0.020	0.27	0.19	0.01	0.04	0.51	0.00	0.25	0.78						
Blade-Box	8'-10'	MFWD 105	3,700	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Blade-Scraper	6'-7'	MFWD 105	1,190	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Blade-Scraper	8'-10'	MFWD 105	3,550	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Boll Buggy	4R-38 (250)	MFWD 190	30,500	200	10	0.257	3.48	4.53	1.96	1.39	11.37	3.99	8.77	24.15						
Boll Buggy	4R-38 (350)	MFWD 190	30,500	200	10	0.257	3.48	4.53	1.96	1.39	11.37	3.99	8.77	24.15						
Boll Buggy	4R2x1 (350)	MFWD 190	30,500	200	10	0.172	2.32	3.03	1.31	0.93	7.60	2.67	5.86	16.14						
Boll Buggy	6R-30 (355)	MFWD 190	30,500	200	10	0.218	2.94	3.84	1.66	1.17	9.63	3.38	7.42	20.44						
Boll Buggy	6R-38 (355)	MFWD 190	30,500	200	10	0.172	2.32	3.03	1.31	0.93	7.60	2.67	5.86	16.14						
Chisel Plow-Folding	24'	MFWD 190	39,300	150	12	0.076	1.03	1.34	1.08	0.41	3.87	1.88	2.60	8.36						
Chisel Plow-Folding	32'	MFWD 225	51,000	150	12	0.057	0.78	1.20	1.06	0.37	3.42	1.84	2.38	7.66						
Chisel Plow-Folding	42'	MFWD 225	61,600	150	12	0.044	0.59	0.91	0.97	0.28	2.78	1.69	1.81	6.29						
Chisel Plow-Folding	50'	MFWD 225	80,300	150	10	0.036	0.49	0.77	1.28	0.24	2.79	2.09	1.52	6.41						
Chisel Plow-Folding	61'	MFWD 225	90,200	150	12	0.030	0.40	0.63	0.98	0.19	2.22	1.71	1.25	5.19						
Chisel Plow-Rigid	10'	MFWD 170	6,600	150	12	0.184	2.49	2.91	0.44	0.88	6.73	0.76	5.56	13.06						
Chisel Plow-Rigid	15'	2WD 130	11,600	150	12	0.123	1.66	1.48	0.51	0.39	4.06	0.89	2.38	7.34						
Chisel Plow-Rigid	20'	MFWD 225	11,200	150	12	0.102	1.38	2.14	0.41	0.67	4.61	0.72	4.24	9.58						
Chisel Plow-Rigid	24'	MFWD 190	11,700	150	12	0.077	1.04	1.35	0.32	0.41	3.13	0.56	2.62	6.32						
Cultivate	4R-30	2WD 105	12,100	150	10	0.206	2.78	2.00	0.66	0.42	5.88	1.75	2.57	10.21						
Cultivate	4R-38	2WD 105	12,200	150	10	0.162	2.19	1.57	0.52	0.30	4.60	1.39	1.84	7.84						
Cultivate	6R-30	MFWD 150	16,300	150	10	0.137	1.85	1.91	0.59	0.56	4.92	1.57	3.38	9.89						
Cultivate	6R-38	MFWD 150	17,200	150	10	0.108	1.46	1.50	0.49	0.44	3.91	1.31	2.67	7.90						
Cultivate	8R-30	MFWD 190	20,600	150	10	0.103	1.39	1.81	0.56	0.55	4.33	1.49	3.51	9.34						
Cultivate	8R-38																			

Appendix Table 3. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2018 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total Imp.	Total P.U.	Total Cost
									Imp.	P.U.	Direct			
				dollars	hours	years	hr/ac		\$/acre-----					
Cultivate	12R-30	MFWD 225	36,200	150	10	0.068	0.92	1.43	0.66	0.45	3.47	1.75	2.84	8.07
Cultivate	12R-38	MFWD 225	37,500	150	10	0.054	0.73	1.13	0.54	0.35	2.76	1.43	2.24	6.44
Cultivate	16R-30	MFWD 225	47,800	150	10	0.051	0.69	1.07	0.65	0.33	2.76	1.73	2.13	6.63
Cultivate & Post	4R-30	2WD 105	17,500	150	10	0.220	3.96	2.14	1.02	0.41	7.55	2.71	2.49	12.75
Cultivate & Post	4R-38	2WD 105	17,600	150	10	0.173	3.12	1.68	0.81	0.32	5.94	2.14	1.96	10.06
Cultivate & Post	6R-30	MFWD 150	21,700	150	10	0.146	2.64	2.03	0.84	0.60	6.13	2.24	3.61	11.98
Cultivate & Post	6R-38	MFWD 150	22,600	150	10	0.115	2.08	1.60	0.69	0.47	4.86	1.84	2.85	9.56
Cultivate & Post	8R-30	MFWD 190	26,000	150	10	0.110	1.98	1.93	0.76	0.59	5.27	2.01	3.74	11.03
Cultivate & Post	8R-38	MFWD 190	27,000	150	10	0.086	1.56	1.53	0.62	0.47	4.19	1.65	2.96	8.80
Cultivate & Post	8R-38 2x1	MFWD 190	44,500	150	10	0.057	1.04	1.01	0.68	0.31	3.06	1.81	1.97	6.84
Cultivate & Post	10R-30	MFWD 225	32,000	150	10	0.088	1.58	1.83	0.75	0.57	4.75	1.98	3.63	10.37
Cultivate & Post	12R-30	MFWD 225	41,500	150	10	0.073	1.32	1.52	0.81	0.48	4.14	2.14	3.03	9.31
Cultivate & Post	12R-38	MFWD 225	44,500	150	10	0.057	1.04	1.20	0.68	0.37	3.31	1.81	2.39	7.52
Cultivate & Post	16R-30	MFWD 225	54,900	150	10	0.055	0.99	1.14	0.80	0.36	3.30	2.12	2.27	7.70
Disk & Incorporate	14'	2WD 130	30,100	200	10	0.149	2.69	1.80	1.35	0.48	6.33	2.37	2.89	11.61
Disk & Incorporate	20'	MFWD 190	44,500	180	10	0.092	1.24	1.62	1.37	0.49	4.74	2.41	3.14	10.30
Disk & Incorporate	24'	MFWD 190	46,900	200	10	0.087	1.57	1.53	1.22	0.47	4.81	2.16	2.97	9.94
Disk & Incorporate	28'	MFWD 225	55,500	200	10	0.074	1.34	1.55	1.24	0.49	4.64	2.19	3.09	9.93
Disk & Incorporate	32'	MFWD 225	61,000	200	10	0.065	1.18	1.36	1.19	0.42	4.17	2.11	2.70	8.99
Disk Harrow	14'	2WD 130	24,800	180	10	0.140	1.89	1.68	0.96	0.45	5.00	2.04	2.71	9.76
Disk Harrow	20'	MFWD 190	39,200	180	10	0.098	1.32	1.72	1.06	0.53	4.65	2.25	3.34	10.25
Disk Harrow	24'	MFWD 190	41,500	180	10	0.081	1.10	1.44	0.94	0.44	3.93	1.99	2.78	8.71
Disk Harrow	28'	MFWD 225	50,100	180	10	0.070	0.94	1.46	0.97	0.46	3.84	2.06	2.89	8.80
Disk Harrow	32'	MFWD 225	55,700	180	10	0.061	0.82	1.27	0.94	0.40	3.46	2.00	2.53	8.00
Disk Harrow	42'	MFWD 225	96,300	180	10	0.046	0.63	0.97	1.25	0.30	3.16	2.64	1.93	7.74
Disk Harrow 40-100hp	14'	2WD 75	14,900	180	10	0.140	1.89	0.97	0.58	0.14	3.59	1.22	0.87	5.69
Disk Heavy	14'	MFWD 150	24,800	180	10	0.145	1.97	2.02	1.00	0.59	5.60	2.12	3.59	11.32
Disk Heavy	20'	MFWD 170	39,200	180	10	0.097	1.31	1.53	1.05	0.46	4.37	2.23	2.92	9.54
Disk Heavy	28'	MFWD 190	50,100	180	10	0.075	1.02	1.33	1.05	0.40	3.81	2.22	2.57	8.61
Disk Ripper	15'	MFWD 225	45,200	180	10	0.136	1.84	2.83	1.71	0.89	7.28	3.61	5.62	16.52
Ditcher		2WD 130	5,700	200	10	0.020	0.27	0.24	0.04	0.06	0.62	0.06	0.38	1.06
Ditcher (1m/160a)		2WD 130	5,700	200	10	0.009	0.12	0.11	0.02	0.03	0.29	0.02	0.18	0.50
Fert Appl (Liquid)	4R-38	MFWD 150	12,900	150	8	0.154	2.79	2.14	1.33	0.63	6.90	1.50	3.81	12.21
Fert Appl (Liquid)	6R-30	MFWD 170	16,300	150	8	0.130	2.36	2.06	1.42	0.62	6.47	1.60	3.94	12.02
Fert Appl (Liquid)	6R-38	MFWD 170	15,600	150	8	0.103	1.86	1.62	1.07	0.49	5.06	1.21	3.11	9.38
Fert Appl (Liquid)	8R-30	MFWD 190	16,300	150	8	0.098	1.77	1.72	1.06	0.53	5.09	1.20	3.34	9.64
Fert Appl (Liquid)	8R-38	MFWD 190	18,400	150	8	0.077	1.40	1.36	0.95	0.41	4.13	1.07	2.64	7.85
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	19,700	150	8	0.051	0.93	0.90	0.67	0.27	2.80	0.76	1.75	5.32
Fert Appl (Liquid)	12R-30	MFWD 225	20,000	150	8	0.078	1.41	1.63	1.04	0.51	4.61	1.18	3.24	9.04
Fert Appl (Liquid)	12R-38	MFWD 225	19,000	150	8	0.051	0.93	1.07	0.65	0.33	3.00	0.73	2.13	5.87
Field Cult & Inc	42'	MFWD 225	59,700	100	10	0.037	0.68	0.78	0.56	0.24	2.28	2.38	1.56	6.22
Field Cult & Inc	50'	MFWD 225	72,000	100	10	0.031	0.57	0.66	0.57	0.20	2.01	2.41	1.31	5.73
Field Cult & Inc Fld	24'	MFWD 170	34,500	100	10	0.066	1.19	1.04	0.57	0.31	3.12	2.40	1.99	7.52
Field Cult & Inc Fld	32'	MFWD 190	43,800	100	10	0.049	0.89	0.87	0.54	0.26	2.57	2.29	1.68	6.56
Field Cult & Inc Rdg	12'	2WD 150	15,800	100	10	0.132	2.38	1.83	0.52	0.44	5.19	2.20	2.68	10.08
Field Cultivate Fld	24'	MFWD 170	29,100	100	10	0.062	0.84	0.98	0.45	0.29	2.57	1.91	1.87	6.35
Field Cultivate Fld	32'	MFWD 190	38,500	100	10	0.046	0.63	0.82	0.44	0.25	2.15	1.89	1.58	5.63
Field Cultivate Fld	42'	MFWD 225	52,600	100	10	0.035	0.48	0.74	0.46	0.23	1.92	1.97	1.46	5.36
Field Cultivate Fld	50'	MFWD 225	62,100	100	10	0.029	0.40	0.62	0.46	0.19	1.68	1.95	1.23	4.87
Field Cultivate Rdg	12'	2WD 150	10,400	100	10	0.124	1.68	1.72	0.32	0.41	4.15	1.36	2.52	8.04
Grain Cart Corn	500 bu	MFWD 190	24,000	200	12	0.025	0.34	0.44	0.16	0.13	1.08	0.28	0.86	2.23
Grain Cart Corn	700 bu	MFWD 190	36,700	200	12	0.025	0.34	0.44	0.25	0.13	1.17	0.43	0.86	2.47
Grain Cart Corn	1000 bu	MFWD 225	45,700	200	12	0.025	0.34	0.52	0.31	0.16	1.34	0.54	1.04	2.93
Grain Cart Rice	500 bu	MFWD 190	24,000	200	12	0.062	0.84	1.10	0.40	0.33	2.68	0.70	2.12	5.52
Grain Cart Rice	700 bu	MFWD 190	36,700	200	12	0.055	0.74	0.96	0.54	0.29	2.55	0.94	1.87	5.37
Grain Cart Rice	1000 bu	MFWD 190	45,700	200	12	0.045	0.61	0.80	0.56	0.24	2.24	0.98	1.56	4.78
Grain Cart Soybean	500 bu	MFWD 190	24,000	200	12	0.025	0.34	0.44	0.16	0.13	1.09	0.28	0.86	2.25
Grain Cart Soybean	700 bu	MFWD 190	36,700	200	12	0.021	0.28	0.37	0.21	0.11	0.98	0.36	0.72	2.07
Grain Cart Soybean	1000 bu	MFWD 190	45,700	200	12	0.021	0.28	0.37	0.26	0.11	1.03	0.45	0.72	2.21
Grain Cart Wht/Sor	500 bu	MFWD 190	24,000	200	12	0.025	0.34	0.44	0.16	0.13	1.09	0.28	0.86	2.25
Grain Cart Wht/Sor	700 bu	MFWD 190	36,700	200	12	0.021	0.28	0.37	0.21	0.11	0.98	0.36	0.72	2.07
Grain Cart Wht/Sor	1000 bu	MFWD 190	45,700	200	12	0.021	0.28	0.37	0.26	0.11	1.03	0.45	0.72	2.21
Grain Drill	10'	2WD 130	26,700	150	8	0.188	4.25	2.27	1.88	0.60	9.02	3.61	3.65	16.28
Grain Drill	12'	2WD 130	25,200	150	8	0.157	3.54	1.89	1.48	0.50	7.43	2.84	3.04	13.31
Grain Drill	15'	MFWD 150	31,800	150	8	0.125	2.83	1.74	1.49	0.51	6.59	2.86	3.09	12.56
Grain Drill	20'	MFWD 170	37,300	150	8	0.094	2.12	1.48	1.31	0.45	5.38	2.52	2.83	10.74
Grain Drill	24'	MFWD 190	63,000	150	8	0.078	1.77	1.38	1.85	0.42	5.43	3.55	2.67	11.66
Grain Drill	30'	MFWD 225	59,500	150	8	0.062	1.41	1.31	1.40	0.41	4.54	2.68	2.59	9.82
Grain Drill	35'	MFWD 225	90,600	150	8	0.053	1.21	1.12	1.83	0.35	4.52	3.50	2.22	10.25
Grain Drill & Pre	10'	2WD 130	32,000	150	8	0.203	4.58	2.44	2.43	0.65	10.12	4.66	3.93	18.71
Grain Drill & Pre	12'	2WD 130	30,600	150	8	0.169	3.81	2.03	1.94	0.54	8.34	3.71	3.27	15.33
Grain Drill & Pre	15'	MFWD 150	37,200	150	8	0.135	3.05	1.88	1.88	0.55	7.37	3.61	3.33	14.32
Grain Drill & Pre	20'	MFWD 170	42,700	150	8	0.101	2.29	1.59	1.62	0.48	6.00	3.11	3.05	12.16

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2018 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---			Total	--Fixed--		Total
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	Cost	
			dollars	hours	years	hr/ac			\$/acre						
Grain Drill & Pre	24'	MFWD 190	68,400	150	8	0.084	1.90	1.48	2.17	0.45	6.02	4.15	2.88	13.06	
Grain Drill & Pre	30'	MFWD 225	64,800	150	8	0.067	1.52	1.41	1.64	0.44	5.02	3.14	2.79	10.97	
Grain Drill & Pre	35'	MFWD 225	96,000	150	8	0.058	1.30	1.20	2.08	0.38	4.98	3.99	2.39	11.38	
Grain Drill & Pre T	8R-38	MFWD 225	49,600	150	8	0.062	1.41	1.31	1.16	0.41	4.31	2.23	2.59	9.14	
Harrow - Rigid	21'	2WD 150	6,750	200	10	0.073	0.99	1.02	0.17	0.24	2.45	0.26	1.50	4.21	
Harrow - Folding	24'	MFWD 190	12,800	200	10	0.064	0.87	1.13	0.28	0.34	2.65	0.43	2.20	5.29	
Harrow - Folding	30'	MFWD 190	15,400	200	10	0.051	0.69	0.91	0.27	0.27	2.16	0.42	1.76	4.35	
Harrow - Folding	40'	MFWD 190	19,200	200	10	0.038	0.52	0.68	0.26	0.20	1.67	0.39	1.32	3.39	
Harrow - Folding	48'	MFWD 225	23,000	200	10	0.032	0.43	0.67	0.26	0.21	1.58	0.39	1.33	3.31	
Harrow - Rigid	13'	2WD 130	4,950	200	10	0.119	1.61	1.43	0.20	0.38	3.64	0.31	2.31	6.27	
Header - Corn	6R-30	265 hp	47,300	300	8	0.170	2.30	4.18	2.01	5.81	14.31	3.02	22.95	40.29	
Header - Corn	6R-38	265 hp	47,700	300	8	0.134	1.81	3.30	1.60	4.59	11.31	2.41	18.12	31.84	
Header - Corn	8R-30	265 hp	61,500	300	8	0.127	1.72	3.13	1.96	4.36	11.18	2.95	17.21	31.35	
Header - Corn	8R-38	325 hp	62,100	300	8	0.100	1.36	3.04	1.56	3.73	9.70	2.35	14.73	26.79	
Header - Corn	12R-20	325 hp	94,400	300	8	0.127	1.72	3.84	3.01	4.72	13.30	4.53	18.63	36.47	
Header - Corn	12R-30	325 hp	96,300	300	8	0.085	1.15	2.56	2.04	3.14	8.91	3.08	12.42	24.41	
Header - Draper (CL)	25' Rigid	265 hp	58,800	300	8	0.203	2.74	4.98	2.73	6.93	17.40	4.28	27.37	49.06	
Header - Draper (CL)	30' Rigid	325 hp	67,900	300	8	0.169	2.28	5.09	2.63	6.25	16.27	4.12	24.69	45.08	
Header - Draper (CL)	36' Rigid	355 hp	72,000	300	8	0.141	1.90	4.63	2.32	5.20	14.07	3.64	20.51	38.23	
Header - Draper (CL)	40' Rigid	425 hp	76,300	30	8	0.126	1.71	4.99	22.19	5.46	34.36	34.73	21.54	90.64	
Header - Draper (SL)	25' Rigid	325 hp	58,800	300	8	0.176	2.37	5.30	2.37	6.50	16.55	3.71	25.68	45.94	
Header - Draper (SL)	30' Rigid	325 hp	67,900	300	8	0.146	1.98	4.41	2.28	5.42	14.10	3.57	21.40	39.07	
Header - Draper (SL)	36' Rigid	355 hp	72,000	300	8	0.122	1.65	4.01	2.01	4.50	12.19	3.15	17.78	33.13	
Header - Drapper	40' Rigid	425 hp	76,300	30	8	0.110	1.48	4.33	19.23	4.73	29.78	30.10	18.67	78.55	
Header - Rice (CL)	25' Rigid	325 hp	64,400	300	8	0.253	3.42	7.64	4.08	9.38	24.54	6.14	37.03	67.73	
Header - Rice (CL)	30' Rigid	325 hp	74,100	300	8	0.211	2.85	6.37	3.91	7.82	20.96	5.89	30.86	57.73	
Header - Rice (SL)	25' Rigid	325 hp	64,400	300	8	0.220	2.97	6.62	3.54	8.13	21.27	5.32	32.10	58.70	
Header - Rice (SL)	30' Rigid	325 hp	74,100	300	8	0.183	2.47	5.52	3.39	6.77	18.17	5.10	26.74	50.03	
Header - RiceStrp(CL)	20'	265 hp	49,100	300	8	0.253	3.42	6.23	3.11	8.67	21.45	4.68	34.22	60.36	
Header - RiceStrp(CL)	24'	325 hp	54,500	300	8	0.211	2.85	6.37	2.88	7.82	19.93	4.33	30.86	55.13	
Header - RiceStrp(CL)	32'	325 hp	59,900	300	8	0.158	2.14	4.77	2.37	5.86	15.16	3.57	23.14	41.88	
Header - RiceStrp(SL)	20'	265 hp	49,100	300	8	0.220	2.97	5.40	2.70	7.51	18.59	4.06	29.65	52.31	
Header - RiceStrp(SL)	24'	325 hp	54,500	300	8	0.183	2.47	5.52	2.49	6.77	17.27	3.75	26.74	47.78	
Header - RiceStrp(SL)	32'	325 hp	59,900	300	8	0.137	1.85	4.14	2.05	5.08	13.14	3.09	20.06	36.30	
Header - Soybean	22' Flex	265 hp	32,400	300	8	0.116	1.56	2.85	0.94	3.96	9.32	1.41	15.65	26.39	
Header - Soybean	25' Flex	325 hp	34,600	300	8	0.102	1.38	3.07	0.88	3.77	9.11	1.32	14.90	25.35	
Header - Soybean	30' Flex	325 hp	41,400	300	8	0.085	1.15	2.56	0.88	3.14	7.74	1.32	12.42	21.49	
Header - Soybean	35' Flex	355 hp	46,700	300	8	0.072	0.98	2.40	0.85	2.69	6.92	1.28	10.61	18.82	
Header - Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.56	2.85	0.57	3.96	8.96	0.86	15.65	25.47	
Header - Wheat/Sorghum	25' Rigid	325 hp	20,500	300	8	0.102	1.38	3.07	0.52	3.77	8.75	0.78	14.90	24.45	
Header - Wheat/Sorghum	30' Rigid	325 hp	23,600	300	8	0.085	1.15	2.56	0.50	3.14	7.36	0.75	12.42	20.54	
Land Plane	50'x16'	MFWD 190	14,300	200	10	0.151	2.04	2.66	0.43	0.81	5.97	1.14	5.16	12.28	
Levee Pull & Seed	8 Blade	MFWD 170	10,400	100	10	0.003	0.04	0.05	0.00	0.01	0.12	0.03	0.10	0.27	
Levee Pull (1m/80a)	8 blade	MFWD 170	7,180	100	10	0.003	0.04	0.05	0.00	0.01	0.12	0.02	0.10	0.26	
Levee Splitter (1/80)	32"	MFWD 150	7,180	100	10	0.004	0.05	0.05	0.00	0.01	0.13	0.03	0.10	0.27	
Module Builder	4R-38 (250)	MFWD 190	34,700	200	10	0.257	5.81	4.53	2.23	1.39	13.98	4.54	8.77	27.30	
Module Builder	4R-38 (350)	MFWD 190	34,700	200	10	0.257	5.81	4.53	2.23	1.39	13.98	4.54	8.77	27.30	
Module Builder	4R2x1 (350)	MFWD 190	34,700	200	10	0.172	3.88	3.03	1.49	0.93	9.34	3.03	5.86	18.25	
Module Builder	6R-30 (355)	MFWD 190	34,700	200	10	0.218	4.92	3.84	1.89	1.17	11.84	3.85	7.42	23.12	
Module Builder	6R-38 (355)	MFWD 190	34,700	200	10	0.172	3.88	3.03	1.49	0.93	9.34	3.03	5.86	18.25	
NT Grain Drill	10'	2WD 130	35,100	150	8	0.235	5.31	2.83	3.10	0.75	12.02	5.93	4.56	22.52	
NT Grain Drill	12'	2WD 130	42,200	150	8	0.163	3.69	1.97	2.59	0.52	8.78	4.95	3.17	16.90	
NT Grain Drill	15'	MFWD 150	49,200	150	8	0.130	2.95	1.81	2.41	0.53	7.72	4.62	3.22	15.57	
NT Grain Drill	20'	MFWD 170	66,300	150	8	0.098	2.21	1.54	2.44	0.46	6.67	4.67	2.95	14.30	
NT Grain Drill	24'	MFWD 190	75,600	150	8	0.081	1.84	1.44	2.32	0.44	6.05	4.43	2.78	13.27	
NT Grain Drill	30'	MFWD 225	89,000	150	8	0.065	1.47	1.36	2.18	0.42	5.45	4.18	2.70	12.34	
NT Grain Drill & Pre	10'	2WD 130	40,400	150	8	0.211	4.77	2.54	3.20	0.68	11.20	6.13	4.09	21.43	
NT Grain Drill & Pre	12'	2WD 130	47,500	150	8	0.176	3.97	2.12	3.13	0.56	9.80	6.00	3.41	19.23	
NT Grain Drill & Pre	15'	MFWD 150	54,600	150	8	0.141	3.18	1.95	2.88	0.57	8.60	5.52	3.47	17.60	
NT Grain Drill & Pre	20'	MFWD 170	71,600	150	8	0.105	2.38	1.66	2.83	0.50	7.39	5.43	3.18	16.01	
NT Grain Drill & Pre	24'	MFWD 190	81,000	150	8	0.088	1.98	1.55	2.67	0.47	6.69	5.12	3.00	14.81	
NT Grain Drill & Pre	30'	MFWD 225	94,300	150	8	0.070	1.59	1.46	2.49	0.46	6.01	4.76	2.91	13.70	
NT Plant&Pre-Folding	8R-38	MFWD 170	56,700	150	8	0.083	1.88	1.31	1.77	0.39	5.38	3.40	2.51	11.29	
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	88,200	150	8	0.055	1.25	0.87	1.84	0.26	4.24	3.52	1.67	9.43	
NT Plant&Pre-Folding	12R-20	MFWD 190	72,100	150	8	0.105	2.38	1.86	2.85	0.57	7.68	5.47	3.60	16.75	
NT Plant&Pre-Folding	12R-30	MFWD 190	77,500	150	8	0.070	1.59	1.24	2.04	0.38	5.26	3.91	2.40	11.58	
NT Plant&Pre-Folding	12R-38	MFWD 190	88,200	150	8	0.055	1.25	0.97	1.84	0.30	4.37	3.52	1.89	9.79	
NT Plant&Pre-Folding	16R-30	MFWD 190	114,000	150	8	0.052	1.19	0.93	2.26	0.28	4.67	4.32	1.80	10.79	
NT Plant&Pre-Folding	23R-15	MFWD 190	150,000	150	8	0.073	1.65	1.29	4.13	0.39	7.47	7.90	2.50	17.88	
NT Plant&Pre-Folding	24R-15	MFWD 225	153,000	150	8	0.070	1.59	1.46	4.04	0.46	7.56	7.73	2.91	18.22	
NT Plant&Pre-Folding	24R-20	MFWD 190	162,000	150	8	0.052	1.19	0.93	3.21	0.28	5.62	6.14	1.80	13.56	
NT Plant&Pre-Folding	24R-30	MFWD 190	188,000	150	8	0.035	0.79	0.62	2.48	0.19	4.09	4.75	1.20	10.04	

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2018 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Imp.	--Fixed--	Total Cost	
									Imp.	P.U.	Direct	P.U.		
				dollars	hours	years	hr/ac		-----\$/acre-----					
NT Plant&Pre-Folding	31R-15	MFWD 225	181,000	150	8	0.054	1.23	1.13	3.71	0.35	6.44	7.09	2.25	15.79
NT Plant&Pre-Folding	32R-15	MFWD 225	197,000	150	8	0.052	1.19	1.10	3.90	0.34	6.54	7.47	2.18	16.20
NT Plant&Pre-Rigid	4R-30	2WD 130	28,200	150	8	0.211	4.77	2.54	2.23	0.68	10.24	4.27	4.09	18.61
NT Plant&Pre-Rigid	4R-38	2WD 130	30,800	150	8	0.166	3.75	2.00	1.92	0.53	8.22	3.68	3.22	15.13
NT Plant&Pre-Rigid	6R-30	MFWD 150	39,300	150	8	0.141	3.18	1.95	2.07	0.57	7.79	3.97	3.47	15.24
NT Plant&Pre-Rigid	6R-38	MFWD 150	36,200	150	8	0.111	2.51	1.54	1.51	0.45	6.02	2.89	2.74	11.66
NT Plant&Pre-Rigid	8R-30	MFWD 170	46,900	150	8	0.105	2.38	1.66	1.86	0.50	6.41	3.55	3.18	13.16
NT Plant&Pre-Rigid	8R-38	MFWD 170	43,200	150	8	0.083	1.88	1.31	1.35	0.39	4.95	2.59	2.51	10.06
NT Plant&Pre-Rigid	10R-30	MFWD 190	51,900	150	8	0.084	1.90	1.48	1.64	0.45	5.50	3.15	2.88	11.53
NT Plant&Pre-Rigid	11R-15	MFWD 170	56,000	150	8	0.143	3.24	2.26	3.02	0.68	9.22	5.78	4.33	19.33
NT Plant&Pre-Rigid	11R-20	MFWD 170	51,400	150	8	0.115	2.60	1.82	2.22	0.55	7.21	4.26	3.48	14.95
NT Plant&Pre-Rigid	12R-20	MFWD 190	57,700	150	8	0.105	2.38	1.86	2.28	0.57	7.10	4.37	3.60	15.08
NT Plant&Pre-Rigid	12R-30	MFWD 190	72,400	150	8	0.070	1.59	1.24	1.91	0.38	5.12	3.66	2.40	11.19
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	63,000	150	8	0.097	2.20	2.03	2.30	0.63	7.17	4.40	4.02	15.60
NT Plant&Pre-Rigid	15R-15	MFWD 190	71,300	150	8	0.113	2.55	1.99	3.02	0.61	8.18	5.78	3.85	17.81
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	162,000	150	8	0.055	1.25	1.16	3.38	0.36	6.16	6.46	2.30	14.93
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	117,000	150	8	0.083	1.88	1.74	3.66	0.54	7.84	7.01	3.45	18.31
NT Plant-Folding	8R-38	MFWD 170	51,300	150	8	0.077	1.75	1.22	1.49	0.37	4.84	2.85	2.33	10.03
NT Plant-Folding	8R-38 2x1	MFWD 170	81,200	150	8	0.051	1.16	0.81	1.57	0.24	3.80	3.01	1.55	8.36
NT Plant-Folding	12R-20	MFWD 190	66,700	150	8	0.098	2.21	1.72	2.45	0.53	6.93	4.69	3.34	14.97
NT Plant-Folding	12R-30	MFWD 190	70,400	150	8	0.065	1.47	1.15	1.72	0.35	4.71	3.30	2.22	10.24
NT Plant-Folding	12R-38	MFWD 190	81,200	150	8	0.051	1.16	0.90	1.57	0.27	3.92	3.01	1.75	8.70
NT Plant-Folding	16R-30	MFWD 190	107,000	150	8	0.049	1.10	0.86	1.97	0.26	4.20	3.76	1.67	9.65
NT Plant-Folding	23R-15	MFWD 190	143,000	150	8	0.068	1.53	1.20	3.65	0.36	6.76	6.99	2.32	16.08
NT Plant-Folding	24R-15	MFWD 225	146,000	150	8	0.065	1.47	1.36	3.58	0.42	6.85	6.85	2.70	16.42
NT Plant-Folding	24R-20	MFWD 190	155,000	150	8	0.049	1.10	0.86	2.85	0.26	5.09	5.46	1.67	12.22
NT Plant-Folding	24R-30	MFWD 190	171,000	150	8	0.032	0.73	0.57	2.09	0.17	3.59	4.01	1.11	8.72
NT Plant-Folding	31R-15	MFWD 225	163,000	150	8	0.050	1.14	1.05	3.10	0.33	5.63	5.93	2.09	13.67
NT Plant-Folding	32R-15	MFWD 225	180,000	150	8	0.049	1.10	1.02	3.31	0.32	5.76	6.34	2.02	14.13
NT Plant-Rigid	4R-30	2WD 130	22,900	150	8	0.196	4.43	2.36	1.68	0.63	9.11	3.22	3.80	16.14
NT Plant-Rigid	4R-38	2WD 130	25,500	150	8	0.154	3.49	1.86	1.47	0.49	7.33	2.82	2.99	13.15
NT Plant-Rigid	6R-30	MFWD 150	34,000	150	8	0.130	2.95	1.81	1.66	0.53	6.98	3.19	3.22	13.40
NT Plant-Rigid	6R-38	MFWD 150	30,900	150	8	0.103	2.33	1.43	1.19	0.42	5.39	2.29	2.54	10.22
NT Plant-Rigid	8R-30	MFWD 170	41,600	150	8	0.098	2.21	1.54	1.53	0.46	5.76	2.93	2.95	11.65
NT Plant-Rigid	8R-38	MFWD 170	37,800	150	8	0.077	1.75	1.22	1.10	0.37	4.44	2.10	2.33	8.88
NT Plant-Rigid	10R-30	MFWD 190	46,500	150	8	0.078	1.77	1.38	1.37	0.42	4.95	2.62	2.67	10.24
NT Plant-Rigid	11R-15	MFWD 170	50,700	150	8	0.133	3.01	2.10	2.54	0.63	8.29	4.85	4.02	17.18
NT Plant-Rigid	11R-20	MFWD 170	46,100	150	8	0.107	2.42	1.69	1.85	0.51	6.48	3.54	3.23	13.26
NT Plant-Rigid	12R-20	MFWD 190	52,300	150	8	0.098	2.21	1.72	1.92	0.53	6.40	3.68	3.34	13.43
NT Plant-Rigid	12R-30	MFWD 190	65,400	150	8	0.065	1.47	1.15	1.60	0.35	4.59	3.07	2.22	9.89
NT Plant-Rigid	13R-18/20	MFWD 225	57,600	150	8	0.090	2.05	1.89	1.96	0.59	6.50	3.75	3.75	14.02
NT Plant-Rigid	15R-15	MFWD 190	64,300	150	8	0.105	2.37	1.84	2.53	0.56	7.32	4.84	3.57	15.74
NT Plant-TwinRow	12R-30/40	MFWD 225	144,000	150	8	0.051	1.16	1.07	2.79	0.33	5.37	5.33	2.13	12.84
NT Plant-TwinRow	8R-30/40	MFWD 225	112,000	150	8	0.077	1.75	1.61	3.26	0.50	7.14	6.23	3.20	16.58
Peanut Cond.& Lifter	6-Row	MFWD 190	13,300	300	20	0.100	1.35	1.76	0.22	0.54	3.87	0.32	3.40	7.60
Peanut Conditioner	6-Row	MFWD 190	15,300	300	20	0.100	1.35	1.76	0.30	0.54	3.95	0.33	3.40	7.69
Peanut Dig/Invertor	4R-30	MFWD 190	29,800	300	15	0.235	3.18	4.15	1.74	1.27	10.36	2.09	8.02	20.48
Peanut Dig/Invertor	4R-38	MFWD 190	29,800	300	15	0.186	2.51	3.27	1.38	1.00	8.18	1.65	6.33	16.17
Peanut Dig/Invertor	6R-38	MFWD 190	43,400	300	15	0.124	1.67	2.18	0.94	0.67	5.47	1.60	4.22	11.30
Peanut Dump Cart	6-Row	MFWD 190	48,500	300	20	0.310	4.18	5.45	0.87	1.67	12.19	3.56	10.55	26.31
Peanut Harvester	4R-30	MFWD 225	137,000	300	20	0.849	11.48	17.71	6.59	5.57	41.37	25.27	35.12	101.78
Peanut Harvester	4R-38	MFWD 225	137,000	300	20	0.934	12.62	19.48	7.25	6.13	45.49	29.08	38.62	113.20
Peanut Harvester	6R-38	MFWD 225	151,000	300	20	0.625	8.44	13.02	4.56	4.10	30.13	21.43	25.82	77.40
Peanut Lifter	6-Row	MFWD 225	6,500	300	20	0.100	1.35	2.08	0.13	0.65	4.22	0.14	4.13	8.49
Peanut Plt&Pre Fold.	12R-38	MFWD 190	81,200	150	8	0.080	1.81	1.41	2.44	0.43	6.11	4.68	2.73	13.53
Peanut Plt&Pre Rigid	8R-30	MFWD 190	42,300	150	8	0.152	3.44	2.68	2.42	0.82	9.38	4.63	5.20	19.22
Peanut Plt&Pre Rigid	8R-38	MFWD 190	38,500	150	8	0.120	2.72	2.12	1.74	0.65	7.24	3.33	4.11	14.69
Pipe Spool 160ac	1/4m roll	2WD 130	3,600	15	12	0.003	0.09	0.03	0.00	0.01	0.15	0.07	0.06	0.28
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.18	0.04	0.00	0.01	0.24	0.00	0.07	0.32
Plant & Pre-Folding	8R-38	MFWD 170	52,000	150	8	0.080	1.81	1.26	1.56	0.38	5.02	2.99	2.41	10.43
Plant & Pre-Folding	8R-38 2x1	MFWD 170	81,200	150	8	0.053	1.20	0.84	1.62	0.25	3.93	3.11	1.60	8.65
Plant & Pre-Folding	12R-20	MFWD 190	65,100	150	8	0.101	2.29	1.78	2.47	0.54	7.10	4.74	3.45	15.30
Plant & Pre-Folding	12R-30	MFWD 190	70,500	150	8	0.067	1.52	1.19	1.78	0.36	4.87	3.42	2.30	10.60
Plant & Pre-Folding	12R-38	MFWD 190	81,200	150	8	0.053	1.20	0.94	1.62	0.28	4.06	3.11	1.81	8.99
Plant & Pre-Folding	16R-30	MFWD 190	105,000	150	8	0.050	1.14	0.89	1.99	0.27	4.31	3.82	1.72	9.86
Plant & Pre-Folding	23R-15	MFWD 190	137,000	150	8	0.070	1.59	1.24	3.62	0.38	6.83	6.92	2.40	16.16
Plant & Pre-Folding	24R-15	MFWD 225	139,000	150	8	0.067	1.52	1.41	3.52	0.44	6.91	6.74	2.79	16.45
Plant & Pre-Folding	24R-20	MFWD 190	148,000	150	8	0.050	1.14	0.89	2.81	0.27	5.13	5.38	1.72	12.25
Plant & Pre-Folding	24R-30	MFWD 190	174,000	150	8	0.033	0.76	0.59	2.20	0.18	3.75	4.22	1.15	9.12
Plant & Pre-Folding	31R-15	MFWD 225	163,000	150	8	0.052	1.18	1.09	3.20	0.34	5.82	6.13	2.16	14.13
Plant & Pre-Folding	32R-15	MFWD 225	179,000	150	8	0.050	1.14	1.05	3.40	0.33	5.94	6.51	2.09	14.56
Plant & Pre-Rigid	4R-30	2WD 130	25,900	150	8	0.203	4.58	2.44	1.97	0.65	9.65	3.77	3.93	17.36
Plant &														

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2018 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---		Total	--Fixed--		Total
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	Cost
			dollars	hours	years	hr/ac			\$/acre					
Plant & Pre-Rigid	8R-38	MFWD 170	38,500	150	8	0.080	1.81	1.26	1.15	0.38	4.61	2.21	2.41	9.25
Plant & Pre-Rigid	10R-30	MFWD 190	46,000	150	8	0.081	1.83	1.42	1.40	0.43	5.10	2.68	2.76	10.54
Plant & Pre-Rigid	11R-15	MFWD 170	49,600	150	8	0.148	3.34	2.33	2.75	0.70	9.14	5.27	4.46	18.88
Plant & Pre-Rigid	11R-20	MFWD 170	45,000	150	8	0.110	2.50	1.74	1.87	0.53	6.65	3.58	3.34	13.57
Plant & Pre-Rigid	12R-20	MFWD 190	50,700	150	8	0.101	2.29	1.78	1.93	0.54	6.55	3.69	3.45	13.70
Plant & Pre-Rigid	12R-30	MFWD 190	65,400	150	8	0.067	1.52	1.19	1.66	0.36	4.74	3.17	2.30	10.22
Plant & Pre-Rigid	13R-18/20	MFWD 225	55,400	150	8	0.093	2.11	1.95	1.94	0.61	6.62	3.71	3.86	14.20
Plant & Pre-Rigid	15R-15	MFWD 190	62,600	150	8	0.108	2.45	1.91	2.54	0.58	7.49	4.87	3.69	16.07
Plant & Pre-TwinRow	12R-30/40	MFWD 225	148,000	150	8	0.053	1.20	1.11	2.96	0.35	5.63	5.67	2.20	13.51
Plant & Pre-TwinRow	8R-30/40	MFWD 225	108,000	150	8	0.080	1.81	1.67	3.25	0.52	7.26	6.21	3.31	16.79
Plant - Folding	8R-38	MFWD 170	46,600	150	8	0.074	1.68	1.17	1.30	0.35	4.51	2.49	2.24	9.25
Plant - Folding	8R-38 2x1	MFWD 170	74,200	150	8	0.049	1.11	0.78	1.38	0.23	3.51	2.64	1.49	7.65
Plant - Folding	12R-20	MFWD 190	59,700	150	8	0.094	2.12	1.65	2.11	0.50	6.40	4.03	3.20	13.65
Plant - Folding	12R-30	MFWD 190	63,400	150	8	0.062	1.41	1.10	1.49	0.33	4.35	2.85	2.13	9.35
Plant - Folding	12R-38	MFWD 190	74,200	150	8	0.049	1.11	0.87	1.38	0.26	3.64	2.64	1.68	7.97
Plant - Folding	16R-30	MFWD 190	97,900	150	8	0.047	1.06	0.82	1.73	0.25	3.87	3.31	1.60	8.79
Plant - Folding	23R-15	MFWD 190	130,000	150	8	0.065	1.47	1.15	3.19	0.35	6.17	6.10	2.22	14.51
Plant - Folding	24R-15	MFWD 225	132,000	150	8	0.062	1.41	1.31	3.11	0.41	6.25	5.95	2.59	14.80
Plant - Folding	24R-20	MFWD 190	141,000	150	8	0.047	1.06	0.82	2.49	0.25	4.64	4.76	1.60	11.01
Plant - Folding	24R-30	MFWD 190	156,000	150	8	0.031	0.70	0.55	1.83	0.16	3.27	3.51	1.06	7.85
Plant - Folding	31R-15	MFWD 225	145,000	150	8	0.048	1.09	1.01	2.64	0.31	5.08	5.06	2.01	12.16
Plant - Folding	32R-15	MFWD 225	161,000	150	8	0.047	1.06	0.98	2.84	0.30	5.20	5.44	1.94	12.59
Plant - Rigid	4R-30	2WD 130	20,500	150	8	0.188	4.25	2.27	1.44	0.60	8.58	2.77	3.65	15.00
Plant - Rigid	4R-38	2WD 130	23,100	150	8	0.148	3.35	1.78	1.28	0.47	6.90	2.46	2.87	12.24
Plant - Rigid	6R-30	MFWD 150	30,500	150	8	0.125	2.83	1.74	1.43	0.51	6.53	2.75	3.09	12.38
Plant - Rigid	6R-38	MFWD 150	27,400	150	8	0.099	2.24	1.37	1.01	0.40	5.04	1.95	2.44	9.44
Plant - Rigid	8R-30	MFWD 170	36,900	150	8	0.094	2.12	1.48	1.30	0.45	5.36	2.49	2.83	10.70
Plant - Rigid	8R-38	MFWD 170	33,100	150	8	0.074	1.68	1.17	0.92	0.35	4.13	1.76	2.24	8.15
Plant - Rigid	10R-30	MFWD 190	40,700	150	8	0.075	1.70	1.32	1.15	0.40	4.58	2.20	2.56	9.35
Plant - Rigid	11R-15	MFWD 170	44,200	150	8	0.137	3.10	2.16	2.28	0.65	8.21	4.36	4.14	16.72
Plant - Rigid	11R-20	MFWD 170	39,600	150	8	0.103	2.32	1.62	1.53	0.49	5.97	2.92	3.10	12.00
Plant - Rigid	12R-20	MFWD 190	45,300	150	8	0.094	2.12	1.65	1.60	0.50	5.89	3.06	3.20	12.17
Plant - Rigid	12R-30	MFWD 190	58,300	150	8	0.062	1.41	1.10	1.37	0.33	4.23	2.62	2.13	9.00
Plant - Rigid	13R-18/20	MFWD 225	50,000	150	8	0.086	1.96	1.81	1.62	0.57	5.97	3.11	3.59	12.68
Plant - Rigid	15R-15	2WD 150	55,500	150	8	0.094	2.12	1.31	1.96	0.31	5.71	3.75	1.91	11.38
Plant - TwinRow	12R-30/40	MFWD 225	130,000	150	8	0.049	1.11	1.03	2.41	0.32	4.89	4.62	2.05	11.57
Plant - TwinRow	8R-30/40	MFWD 225	102,000	150	8	0.074	1.68	1.55	2.85	0.48	6.57	5.45	3.07	15.10
Roller/Cultipacker	12'	2WD 130	6,910	300	12	0.124	1.68	1.49	0.20	0.40	3.78	0.27	2.41	6.47
Roller/Cultipacker	20'	MFWD 150	17,000	300	12	0.074	1.00	1.03	0.29	0.30	2.65	0.41	1.83	4.90
Roller/Cultipacker	30'	MFWD 170	19,100	300	12	0.049	0.67	0.78	0.22	0.23	1.91	0.30	1.49	3.72
Roller/Cultipacker	38'	MFWD 225	21,300	300	12	0.039	0.53	0.81	0.19	0.25	1.80	0.27	1.62	3.70
Roller/Stubble	20'	2WD 50	13,500	300	12	0.074	1.00	0.34	0.23	0.04	1.64	0.32	0.29	2.26
Roller/Stubble	32'	MFWD 225	22,800	300	12	0.046	0.63	0.97	0.25	0.30	2.16	0.34	1.92	4.43
Rotary Cutter	7'	MFWD 130	4,760	185	10	0.168	2.27	2.02	0.64	0.59	5.54	0.45	3.57	9.58
Rotary Cutter	12'	2WD 150	11,600	185	10	0.098	1.32	1.36	0.92	0.33	3.94	0.65	1.99	6.59
Rotary Cutter-Flex	15'	MFWD 150	19,700	185	10	0.078	1.06	1.09	1.25	0.32	3.73	0.88	1.93	6.54
Rotary Cutter-Flex	20'	MFWD 150	27,700	185	10	0.058	0.79	0.81	1.32	0.24	3.17	0.93	1.45	5.56
Row Cond & Inc-Fold.	26'	MFWD 190	24,700	100	10	0.063	1.14	1.11	0.39	0.34	2.99	1.65	2.16	6.81
Row Cond & Inc-Fold.	38'	MFWD 225	33,200	100	10	0.043	0.78	0.90	0.36	0.28	2.33	1.52	1.79	5.65
Row Cond & Inc-Rigid	13'	2WD 130	14,600	100	10	0.126	2.28	1.52	0.46	0.40	4.69	1.95	2.45	9.10
Row Cond & Inc-Rigid	21'	2WD 170	18,400	100	10	0.078	1.41	1.23	0.36	0.29	3.30	1.52	1.83	6.67
Row Cond & Inc-Rigid	26'	MFWD 190	20,700	100	10	0.026	0.48	0.46	0.13	0.14	1.23	0.58	0.90	2.71
Row Cond Folding	26'	MFWD 225	19,300	100	10	0.059	0.80	1.24	0.28	0.39	2.73	1.21	2.46	6.41
Row Cond Folding	38'	MFWD 225	26,100	100	10	0.040	0.55	0.85	0.26	0.26	1.93	1.12	1.68	4.75
Row Cond Rigid	13'	2WD 130	9,260	100	10	0.119	1.61	1.43	0.27	0.38	3.71	1.16	2.31	7.19
Row Cond Rigid	21'	2WD 170	13,000	100	10	0.073	0.99	1.16	0.24	0.27	2.67	1.01	1.73	5.42
Row Cond Rigid	26'	MFWD 190	15,400	100	10	0.059	0.80	1.05	0.22	0.32	2.41	0.97	2.03	5.41
Row Cond./Roll-Fold.	26'	MFWD 190	26,800	160	10	0.072	0.97	1.26	0.48	0.38	3.11	1.27	2.45	6.84
Row Cond./Roll-Fold.	30'	MFWD 190	35,600	160	10	0.062	0.84	1.10	0.55	0.33	2.83	1.46	2.12	6.43
Row Cond./Roll-Fold.	40'	MFWD 225	29,400	160	10	0.046	0.63	0.97	0.34	0.30	2.26	0.91	1.93	5.11
Row Cond./Roll-Rigid	21'	MFWD 190	23,000	160	10	0.089	1.20	1.57	0.51	0.48	3.77	1.35	3.03	8.17
Row Cond./Roll-Rigid	26'	MFWD 190	25,800	160	10	0.072	0.97	1.26	0.46	0.38	3.09	1.22	2.45	6.78
Spray Spreader	5 ton	MFWD 190	12,400	100	8	0.042	0.94	0.74	0.29	0.22	2.21	0.58	1.43	4.23
Spray (ATV Ropewick)	75"	800 CC	700	200	8	0.260	4.69	0.38	0.08	0.40	5.57	0.10	1.60	7.27
Spray (ATV)	12' / 17'	800 CC	2,280	200	8	0.112	2.03	0.16	0.12	0.17	2.49	0.14	0.69	3.33
Spray (ATV)	20'	800 CC	1,700	200	8	0.084	1.52	0.12	0.06	0.13	1.85	0.08	0.52	2.45
Spray (Band)	27' Fold	MFWD 170	5,350	200	8	0.062	1.13	0.98	0.15	0.29	2.57	0.18	1.88	4.65
Spray (Band)	40' Fold	MFWD 170	7,050	200	8	0.042	0.76	0.66	0.13	0.20	1.77	0.16	1.27	3.21
Spray (Band)	50' Fold	MFWD 170	11,200	200	8	0.033	0.61	0.53	0.17	0.16	1.48	0.21	1.01	2.71
Spray (Band)	53' Fold	MFWD 170	9,940	200	8	0.031	0.57	0.50	0.14	0.15	1.38	0.17	0.96	2.52
Spray (Band)	60' Fold	MFWD 170	17,800	200	8	0.028	0.50	0.44	0.23	0.13	1.32	0.28	0.84	2.45
Spray (Bcast/HB)	13' Rigid	MFWD 150	6,600	200	8	0.130	2.34	1.80	0.40	0.53	5.09	0.48	3.20	8.78
Spray (Bcast/HB)	20' Rigid	MFWD 150	7,700	200	8	0.084	1.52	1.17	0.30	0.34	3.35	0.36	2.08	5.80
Spray (Bcast/HB)	27' Fold	MFWD 170	11,000	200	8	0.062	1.13	0.98	0.32	0.29	2.74	0.3		

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2018 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---		Total	--Fixed--	Total	
			Price	Use	Life	Rate		Imp.	P.U.	Direct	Imp.	P.U.	Cost	
			dollars	hours	years	hr/ac				\$/acre				
Spray (Bcast/HB)	40' Fold	MFWD 170	17,500	200	8	0.042	0.76	0.66	0.34	0.20	1.97	0.41	1.27	3.67
Spray (Broadcast)	27'	MFWD 170	5,350	200	8	0.062	1.13	0.98	0.15	0.29	2.57	0.18	1.88	4.65
Spray (Broadcast)	40'	MFWD 170	7,050	200	8	0.042	0.76	0.66	0.13	0.20	1.77	0.16	1.27	3.21
Spray (Broadcast)	50'	MFWD 170	11,200	200	8	0.033	0.61	0.53	0.17	0.16	1.48	0.21	1.01	2.71
Spray (Spot)	53'	MFWD 170	9,940	200	8	0.031	0.57	0.50	0.14	0.15	1.38	0.17	0.96	2.52
Spray (Spot)	60'	MFWD 225	17,800	200	8	0.028	0.50	0.58	0.23	0.18	1.51	0.28	1.16	2.96
Stalk Shredder	14'	MFWD 150	12,100	200	10	0.117	1.59	1.63	1.24	0.48	4.96	0.75	2.90	8.61
Stalk Shredder Flex	20'	MFWD 150	27,700	200	10	0.082	1.11	1.14	1.99	0.33	4.59	1.20	2.03	7.83
Stalk Shredder-Flail	12'	MFWD 150	21,800	200	10	0.137	1.85	1.91	2.62	0.56	6.95	1.58	3.38	11.92
Stalk Shredder-Flail	15'	MFWD 150	22,100	200	10	0.110	1.48	1.52	2.12	0.45	5.59	1.28	2.70	9.58
Stalk Shredder-Flail	18'	MFWD 150	27,100	200	10	0.091	1.23	1.27	2.17	0.37	5.06	1.31	2.25	8.63
Stalk Shredder-Flail	20'	MFWD 150	27,500	200	10	0.082	1.11	1.14	1.98	0.33	4.58	1.19	2.03	7.81
Stalk Shredder-Flail	25'	MFWD 150	36,700	200	10	0.066	0.89	0.91	2.11	0.27	4.19	1.27	1.62	7.10
Strip Till	8R-38	MFWD 225	37,700	150	10	0.061	0.83	1.28	1.00	0.40	3.52	1.63	2.54	7.71
Strip Till	12R-30	MFWD 225	59,700	150	10	0.061	0.83	1.28	1.59	0.40	4.11	2.59	2.54	9.25
Strip Till	12R-40	MFWD 225	64,800	150	10	0.046	0.62	0.96	1.29	0.30	3.18	2.10	1.91	7.20
Subsoiler	3 shank	MFWD 190	4,550	100	15	0.204	2.76	3.59	0.30	1.10	7.77	0.76	6.95	15.49
Subsoiler	4 shank	MFWD 225	8,900	100	15	0.153	2.07	3.20	0.45	1.00	6.74	1.12	6.34	14.21
Subsoiler	5 shank	MFWD 225	12,100	100	15	0.122	1.65	2.55	0.49	0.80	5.50	1.22	5.05	11.77
Subsoiler low-till	4 shank	MFWD 225	10,800	100	15	0.153	2.07	3.20	0.55	1.00	6.83	1.36	6.34	14.55
Subsoiler low-till	6 shank	MFWD 225	17,100	100	15	0.102	1.38	2.12	0.58	0.67	4.76	1.44	4.22	10.42
Subsoiler low-till	8 shank	MFWD 225	17,300	100	15	0.076	1.03	1.59	0.44	0.50	3.57	1.09	3.16	7.82

Notes:

Labor: Includes labor from Power unit plus additional labor from the implement.

Total Direct: Does not include interest on operating capital.

HB = Hooded Boom, HD = Hooded Direct

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2018

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE		
dollars					dollars		
ADJUVANTS							
Agri-Dex	pt	2.38	Cotton Seed Trt.	acre	20.00		
Class Act NG	pt	2.38	CruiserMaxx	oz	4.25		
Crop Oil Conc.(Pet.)	pt	2.74	Dithane F-45	qt	7.81		
Crop Oil Conc.(Veg.)	pt	2.61	Enable 2F	oz	1.97		
Dyne-A-Pak	pt	4.73	Headline EC	oz	2.63		
Herbimax	pt	1.88	Manzate 75 DF	lb	4.86		
Induce	pt	3.31	Moncut 70 DF	lb	32.81		
MSO	pt	2.61	Propimax EC	pt	12.64		
Penetrator Plus	pt	3.50	Prosaro	oz	5.57		
Prime Oil	pt	2.35	Provost	oz	2.43		
Surfactant	pt	3.28	Quadris	oz	2.14		
CLEANING							
Cleaning Peanuts	ton	18.00	Quadris Top	oz	2.55		
CROP CONSULTANT							
Corn Consultant	acre	6.00	Quadris Top SBX	oz	2.75		
Cotton Consultant	acre	8.00	Quilt	pt	18.55		
Peanut Consultant	acre	9.25	Quilt XCEL	pt	25.43		
Rice Consultant	acre	8.00	Ridomil Gold	oz	6.42		
Sorghum Consultant	acre	6.00	Rovral 4F	pt	14.90		
Soybeans Consultant	acre	6.50	Stratego	pt	17.50		
Wheat Consultant	acre	5.50	Stratego YLD	oz	4.28		
CUSTOM FERTILIZE							
App Fert by Air	cwt	7.00	Tilt 3.6 EC	oz	0.75		
App Fert by Air(Mi	appl	7.00	Tilt/ Bravo SE	oz	0.41		
Custom Apply Fert	acre	7.50	Uniform	oz	4.63		
CUSTOM LIME							
Lime (Spread)	ton	46.00	GINNING				
CUSTOM PLANT							
Custom Plant	acre	7.50	Gin & Haul	lb	0.11		
Custom Plant Air	cwt	7.00	GROWTH REGULATORS				
CUSTOM SPRAY							
App by Air (3 gal)	appl	5.00	Mepex	oz	0.08		
App by Air (5 gal)	appl	6.50	Mepichlor 4.2%	oz	0.07		
App by Air (10 gal)	appl	9.00	Mepiquat	oz	0.07		
Custom Spray Ground	acre	7.00	Pentia	pt	6.46		
DRYING							
Dry Corn	bu	0.19	Stance	oz	1.25		
Dry Grain Sorghum	cwt	0.25	HARVEST AIDS				
Dry Peanuts	ton	24.00	Adios	oz	1.29		
Dry Rice	bu	0.40	Aim 2EC	oz	5.65		
ERADICATION FEE							
Eradication	acre	1.00	Def/Folex	pt	10.54		
FERTILIZERS							
Agrotain Ultra	pt	9.00	Defol 5	gal	5.39		
Amm Sulfate (21% N)	cwt	13.43	Ethepron 6E	pt	2.88		
Boron Plus	pt	3.69	Finish 6	pt	9.61		
DAP	cwt	21.52	Folex 6EC	pt	10.54		
Fert 10-34-0	cwt	22.25	Freefall SC	oz	1.50		
Fert 10-34-0	gal	2.59	Ginstar EC	pt	26.44		
Fert 11-37-0	cwt	23.05	Gramoxone SL	oz	0.15		
Fert 33-0-0-12S	cwt	18.00	Sharpen	oz	6.45		
Fert 41-0-0-4	cwt	13.50	Sodium Chlorate 5L	gal	5.39		
Lime	ton	46.00	SuperBoll	oz	0.19		
NBPT	pt	9.00	Thidiazuron 4lb	oz	1.50		
Phosphorus (46% P2O5)	cwt	18.75	Tribufos 6lb	pt	10.54		
Potash (60% K2O)	cwt	18.98	HAULING				
Sulfur Plus	pt	2.62	Haul Corn	bu	0.23		
UAN (32% N)	cwt	10.50	Haul Peanuts	ton	14.50		
UAN (32%)	gal	1.17	Haul Rice	bu	0.35		
UAN + Sulfur (28%)	cwt	11.75	Haul Sorghum	bu	0.25		
UAN + Sulfur (28%)	gal	1.31	Haul Soybeans	bu	0.27		
Urea, Solid (46% N)	cwt	14.19	Haul Wheat	bu	0.26		
Zinc Plus	pt	2.99	HERBICIDES				
FUNGICIDES							
Aframe	oz	1.96	2,4-D Amine 4	pt	2.40		
Alfa Guard	lb	1.48	AAatrex 4L	pt	2.12		
Allegiance Flowable	pt	48.89	AAatrex NINE-O	lb	3.96		
Apron Maxx RTA	oz	0.84	Accent Q	oz	21.51		
Artisan	oz	1.00	Aim	oz	5.65		
Bravo Weather Stick	pt	6.56	Assure II	oz	0.74		
Captan 50 WP	lb	4.93	Atrazine 4L	pt	2.12		
(continued)							

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2018 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Bolero	pt	7.73	Regiment	oz	44.90
Boundary	pt	11.20	Remedy Ultra	pt	9.60
Butyrac 175 (2,4-D)	pt	3.29	RiceBeaux	pt	5.86
Butyrac 200 (2,4-DB)	pt	4.34	Riceshot	pt	3.86
Cadre	oz	3.54	Ricestar HT	pt	24.35
Canopy	oz	2.74	Roundup Power Max	oz	0.17
Caparol	pt	4.60	Roundup PowerMax	pt	2.72
Capreno	oz	7.13	Roundup WeatherMax	oz	0.26
Clarity	pt	11.55	Roundup WeatherMax	pt	4.46
Classic	oz	17.18	Scepter 70 DG	oz	4.48
Clearpath	lb	61.26	Select Max	pt	12.64
Cobra	oz	1.72	Sequence	pt	5.95
Command 3ME	pt	19.93	Sharpen	oz	6.45
Corvus	oz	7.29	Simazine	pt	2.54
Cotoran	pt	6.42	Stalwart	pt	4.52
Cotton Pro	pt	3.52	Stam 80 EDF	lb	9.61
Credit Extra	pt	2.17	Stam M4	qt	7.80
Dicamba	pt	12.00	Staple LX	oz	7.63
Direx	pt	3.99	Steadfast	oz	12.26
Diuron	pt	3.90	Storm	pt	11.41
Diuron 80 DF	lb	5.09	Strada Pro	oz	7.27
Diuron 80%	lb	5.09	Strongarm	oz	56.42
Dual II Magnum	pt	14.83	Superwham	qt	9.18
Dual Magnum	pt	13.80	Surpass EC	qt	26.36
Duet	pt	5.35	Synchrony XP	oz	12.71
Envoke	oz	102.89	Touchdown Total	qt	5.16
Expert	pt	4.39	Treflan	pt	3.52
Facet L	pt	15.25	Tricor DF	lb	15.82
Fierce	oz	7.54	Trifluralin	pt	3.52
Finesse	oz	16.06	Ultra Blazer	pt	10.31
Flexstar	pt	8.41	Valor SX	oz	4.57
Fusilade DX	oz	1.00	Valor XLT	oz	5.00
Glyphosate 3lbs a.e	pt	2.25	Zidua	oz	9.05
Glyphosate 3lbs a.e	oz	0.14	INOCULANT		
Glystar Plus	pt	2.17	Optimize	oz	2.14
Goal 2XL	pt	9.89	Optimize LIFT	oz	0.59
Gramoxone SL 2.0	oz	0.15	Vault	oz	1.73
Grasp Xtra	oz	1.53	INSECTICIDES		
Halex GT	pt	7.80	Abamectin .15EC	oz	0.96
Halomax	oz	21.44	Acephate 90%	lb	7.43
Harmony Extra SG	oz	13.79	Acephate 90SP	lb	7.43
Harness XTRA	pt	9.45	Acramite-4SC	oz	1.71
Impact	oz	24.90	Admire Pro	oz	1.70
Leadoff	oz	5.82	Asana .66 XL	oz	0.58
Lexar	pt	7.96	Baythroid XL	oz	2.65
Liberty 280	oz	0.60	Belt	oz	7.90
Linex	pt	9.28	Bidrin 8EC	oz	1.17
Londax	oz	18.08	Bifenthrin	oz	0.78
Lorox	lb	24.12	Bifenture 2EC	pt	12.36
Metribuzin 75	lb	15.87	Brigade EC	pt	11.85
MSMA 6.6	pt	2.90	Capture LFR	oz	2.28
MSMA6 Plus	pt	3.63	Carbaryl 4L	pt	5.85
Newpath	oz	3.83	Carbine 50WG	oz	5.93
Osprey	oz	3.61	Centric 40WG	oz	5.38
Outlook	pt	17.47	Comite 11	pt	8.45
Paraquat	oz	0.28	Confirm 2F	oz	2.06
Parazone 3SL	oz	0.28	Diamond .83EC	pt	22.36
Permit	oz	22.43	Diamond .83EC	oz	1.40
Poast	pt	12.77	Dimethoate 4E	pt	5.31
Prefix	pt	6.53	Dimilin 2L	oz	1.45
Prowl 3.3 EC	pt	6.07	Dipel DF	lb	13.13
Pursuit	oz	3.51	Dipel ES	pt	4.89
Quinstar 4L	oz	1.60	Endigo ZC	pt	24.86
Raptor	oz	4.38	Force 3G	lb	6.03
RealmQ	oz	4.97	Gaucho 600	oz	2.35
RebelEx	oz	2.67	Hero	pt	25.77
Reflex	pt	6.52	Imidacloprid 4F	oz	0.78

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2018 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
dollars					dollars
Imidan 70 WSB	oz	0.67	Peanut Seed	lb	0.84
IncidentalPestTrt \$8	acre	8.00	Rice Clearfield	lb	0.95
IncidentalPestTrt\$22	acre	22.00	Rice Clrfld Hyb Trt	lb	5.55
IncidentalPestTrt\$30	acre	30.00	Rice Conv Hyb Trt	lb	5.66
Intrepid 2F	oz	2.00	Rice Seed CF(Levees)	lb	0.95
Intruder 70WSP	oz	9.71	Rice Seed CFH(Levee)	lb	1.78
Karate Z	oz	2.74	Rice Seed Conv.	lb	0.28
Lambda	oz	1.04	Rice Seed Cv(Levees)	lb	0.28
Lannate LV	pt	10.88	Rice Seed CvH(Levee)	lb	1.66
Leverage 2.7	oz	2.17	Rice Seed Trt/Insect	lbseed	0.23
Lorsban 15G	lb	2.35	Sorghum Concept	lb	2.57
Lorsban 4E	pt	6.10	Sorghum Concept+ Po	lb	3.92
Macho	oz	0.62	Soybean Seed LL	lb	1.28
Malathion 5E	pt	4.09	Soybean Seed RR2	lb	1.51
Malathion 8E	pt	5.50	Soybean Seed RR2X	lb	1.47
Mustang Max	oz	1.34	Wheat Seed Private	lb	0.29
Nuprid 4F	oz	0.88	SOIL TEST		
Oberon 4 SC	pt	59.84	Soil Test	acre	10.00
Pounce 25WP	lb	14.13	SURVEY & MARK LEVEES		
Prevathon	oz	1.32	Survey & Mark Levees	acre	4.50
Radiant	oz	6.82	Survey & Mark Levees	acre	4.50
Sevin 4F	pt	6.24	TECHNOLOGY FEE		
Sevin XLR Plus	qt	13.23	W3RF Cot Tech Fee	thous	1.45
Sivanto Prime	oz	2.55			
Transform WG	oz	8.18			
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25			
SEED/PLANTS					
Corn Seed BtRR	thous	3.63			
Corn Seed Conv.	thous	2.89			
Corn Seed RR2	thous	3.24			
Cotton Seed GLB2	thous	3.10			
Cotton Seed W3RF	thous	0.73			

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2018

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	1.80
Gasoline	gal	2.10
LP Gas	gal	1.65
INTEREST RATES		
Short-term	%	4.75
Intermediate-term	%	5.00

Appendix Table 6. Labor types, wage rates and unallocated labor multipliers for crop enterprises, Mississippi, 2018

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	13.51
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, 2018

Crop	unit	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '18	3.96	-0.20	3.76	2.10	3.76
Cotton Lint	lb	Dec '18	0.6788	-0.0181	0.6607	0.52	0.6607
Cottonseed	lb						0.10 ^f
Grain Sorghum	bu				3.57	2.02	3.57
Peanuts	ton				385.00	355.00	385.00
Soybeans	bu	Nov '18	9.83	+0.07	9.90	5.21	9.90
Rice	bu	Nov '18	5.17	-0.27	4.90	2.96	4.90
Wheat	bu	Jul '18	4.88	-0.17	4.71	2.76	4.71

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2017 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 2017 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 2017 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2017 Farm-stored Loan Rate for long grain rough rice. National 2018 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 2007-2016.

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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST		
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.27		0.01	0.28	0.28	
Maintenance										
IRRIGATE LABOR	hour				1.07		0.03	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			0.27	13.75	54.09	67.84
Well & Pump, 1/4 CP	each			3.50			0.07	3.57	10.35	13.92
Engine, 1/4 CP, 65	each								9.99	9.99
June Irr. 3app@.75"	ac-in	6.05	1.40			0.15	7.60		7.60	
July Irr. 4app@.75"	ac-in	8.06	1.87			0.16	10.09		10.09	
Aug Irr. 3app@.75"	ac-in	6.05	1.40			0.09	7.54		7.54	
TOTALS		0.00	20.16	21.65	1.84	0.00	0.78	44.43	74.43	118.86

Note: Cost of production estimates are based on 2017 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, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----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			0.27	13.75	54.09
Well & Pump, 1/4 CP	each		3.50			0.07	3.57	10.35
Engine, 1/4 CP, 65	each							9.99
June Irr. 3app@.75"	ac-in	6.05	1.40			0.15	7.60	7.60
July Irr. 4app@.75"	ac-in	8.06	1.87			0.16	10.09	10.09
Aug Irr. 3app@.75"	ac-in	6.05	1.40			0.09	7.54	7.54
TOTALS		0.00	20.16	21.65	1.84	0.00	0.78	44.43
								74.43
								118.86

Note: Cost of production estimates are based on 2017 input prices.

Appendix Table 10. Estimated costs for field operations, per acre
 Peanuts irrigated with a roll-out pipe
 160-acre system, 12 ac-in., Delta Area, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST			
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Land Plane	50'x16'		0.67	0.31	0.51		0.07	1.56	1.58	3.14	
Set Up Engine											
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24	
Ditcher (1m/160a)			0.15	0.06	0.13		0.01	0.35	0.31	0.66	
Roll-Out Pipe	ft	8.25					0.16	8.41		8.41	
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.20	0.09	0.40		0.01	0.70	0.66	1.36	
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		0.30	0.13	0.59		0.01	1.03	0.98	2.01	
Land Forming (\$450)	each								31.93	31.93	
Well & Pump, Furrow	each				2.96			0.06	3.02	8.74	11.76
Main Line Pipe	each								4.32	4.32	
Engine, RPF, PNUT	each								8.43	8.43	
1st July Irrigation	ac-in		4.40	0.98			0.09	5.47		5.47	
2nd Aug Irrigation	ac-in		4.40	0.98			0.06	5.44		5.44	
2nd Aug Irrigation	ac-in		4.40	0.98			0.06	5.44		5.44	
1st Sep Irrigation	ac-in		4.40	0.98			0.04	5.42		5.42	
TOTALS		8.25	18.92	7.47	4.59	0.00	0.62	39.85	56.95	96.80	

Note: Cost of production estimates are based on 2017 input prices.

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